EXPORT PRICE LIST 2023/2024



GEMAS was established on 23.09.1993 by the iniative of Mr. İBRAHİM ÜSTÜNES who is currently the general manager of the company. In our region, GEMAS is a leader manufacturing company; having 1500 m² office, 20000 m² indoor production facility + warehouse and over 400 employees. The company has a continuous tendency of growth by means of the deep experience of engineering and manufacturing in the swimming pool sector.

GEMAS has a very wide range of products, manufactured under ISO 9001-2000 quality management system approved by TUV Sud; namely:

Roto-Molded, Injected and Blow Molded Thermoplastic, Bobbin Wound and FRP Sand Filters, Multiport Valves, Self-priming Pumps, Skimmers, Underwater Lights, Transformers, Inlets, Main Drains, Ladders, Diving Boards, Overflow Gratings, Automatic pH and Redox Controllers, Salt Chlorinators, Cleaners and Cleaning Accessories, UPVC Fittings and Valves, Olympic Pool Accessories, Heaters and Fountain Nozzles,

GEMAS Group has structured GEMPAS Pazarlama Lojistik A.S. company, based in Izmir, oppointed to run all sales, marketing and distribution activities of the group national and international. GEMPAS operates with 3000 sqm central warehouse in ITOB, same industrial zone with GEMAS factory, 3 sales shops around Turkey and 2 international subsidiaries Bulgaria and Dubai.

Group also includes another production company STAR Water Technology. Star is dedicated to produce high quality PVC pressure fittings and valves with FITVALF brand.

GEMAS Group with its production and distribution companies; are ready to provide high quality swimming pool products with competitive prices and very high customer satisfaction.



| 01 02 | Pumps Sand Filters | 13 32 |
|----------|--|-----------------------------------|
| 03 | Poolside Equipment In-Pool Materials | 77 100 |
| 05 06 | Electrical Equipment Disinfection Systems | 119 168 |
| 07 | Pool Chemicals Test Kits | 191 201 |
| 09 | Cleaning Equipment Heating Equipment | 205 223 |
| 11 12 | Water Attractions Winter Pool Covers | 235253 |
| 13 14 | Valves, Unions and Fittings Olympic Pool Accessories | 257 277 |
| | Spa & Sauna Equipment | 291 298 |
| 16 | Fountain Nozzles & Submersible Pumps | 307 334 |
| 17 | Concrete and Liner Pools & Pool Building Materials | 347 |

WE HAVE EXPANDED OUR IZMIR FACTORY!... We are at your service with our new sales organization...

We have optimised our production by increasing capacity at our Izmir Factory with 20000 m² production area and 1500 m² office area on 15 acres of land.

Our factory is located in ITOB Organized Industrial Zone between Menderes and Torbal in ¿zmir.

Our new sales organization "GEMPAS PAZARLAMA" started its operations in Izmir ITOB with a 3000 m² main warehouse.

All our domestic branches and international subsidiaries operate within the new sales organization with a total of 3500 m² closed warehouse space.



Istanbul Head Office





Izmir Factory



Istanbul Warehouse



Antalya Branch Office



Gempas Pazarlama - Izmir Center



Bodrum Branch Office



Gemas MEA, Dubai





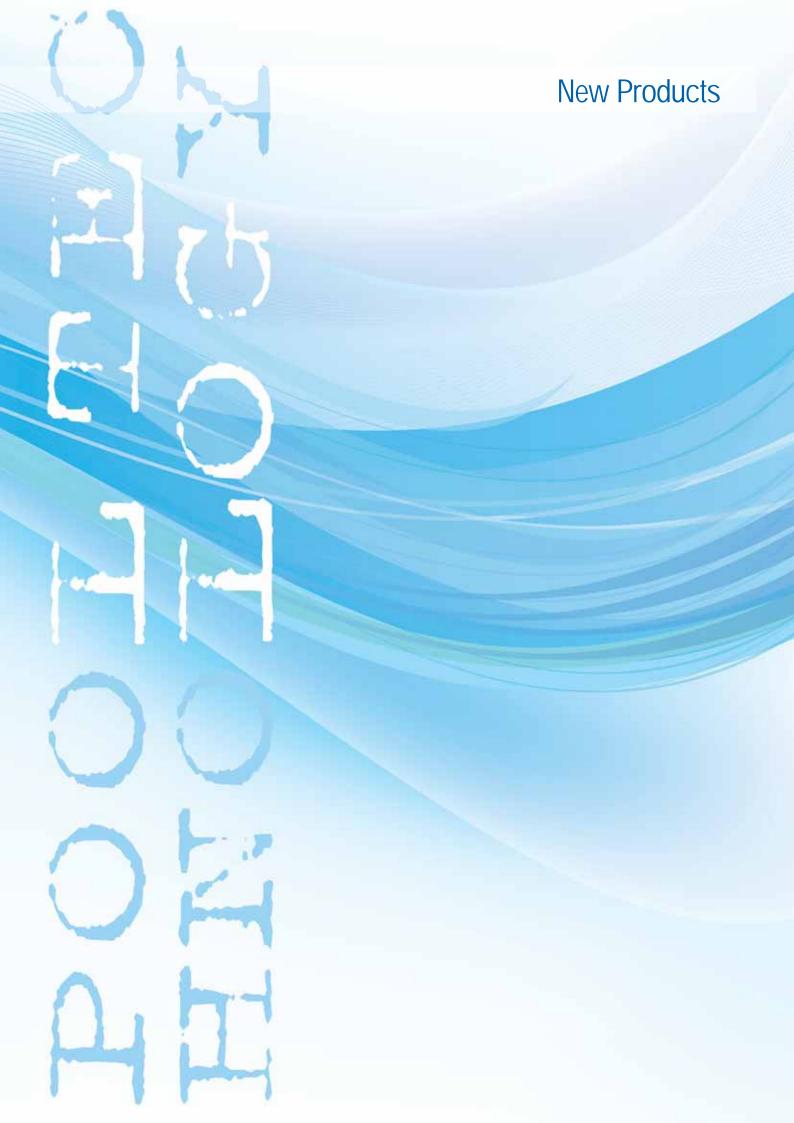
GEMPAS PAZARLAMA LOJISTIK TICARET A.S. BANK ACCOUNT

• HALKBANK IBAN No:

TR29 0001 2009 7290 0058 0001 94 (€) TR21 0001 2009 7290 0053 0001 82 (\$) SWIFT CODE: TRHBTR2AXXX

• GARANTI BANK IBAN No:

TR73 0006 2000 4480 0009 0719 05 (€) TR03 0006 2000 4480 0009 0719 04 (\$) SWIFT CODE: TGBATRISXXX



New Products







2023 September

GEMAS "DRIFTER"

Self-priming Pool Pumps

4 GEMAS "DRIFTER-R"

15

Self-priming Pool Pumps





48

GEMAS "Seljuk" BL

High Rate Sand Filter •Ø500 •Ø630 •Ø710

32 GEMAS "Monocon"

49

Pool Sand Filters • Ø 500 • Ø 630 • Ø 710 • Ø 830 • Ø 900 • Ø 1000 • Ø 1200



Palletized Filtration
System



GEMAS Glass Filtration Media

75







Elevated Wide Mouth Skimmer



Lux-Elevated Wide Mouth Skimmer

114

105



Wall Inlet for **Concrete Pools**

1 1/2" Slip to be glued inside Ø 50 mm (10 atm) pipe.



Suction Inlet for Concrete Pools

Slip to be glued inside Ø 50 mm (10atm) pipe.









Floor Inlet - Adjustable 106 Eccentric Floor Inlet

114

104

2" Male Threaded Ø 63 slip

2" Ø 63 slip

New Products













122

Massive Inox Inlets

Full Body made of Stainless Steel, 2" Threaded

109

"MAXI-Clicker"

131

Underwater Lights for Concrete Pools and Liner Pools



127

138



GEMAS POOL DIRECTOR 168

Automatic pH - Redox Controller

"MAXI-Clicker-INOX"

Underwater Lights for Concrete Pools and Liner Pools St. Steel



168

GEMAS Peristaltic
Dosing Pump

17C

GEMAS POOL DIRECTOR ECO.

Automatic pH - Redox Controller Complete with peristaltic dosing pumps.

> 10 g/h 15 g/h 20 g/h 30 g/h 50 g/h



w/automatic pH control + dosing pump



w/automatic pH + redox control + dosing pump



Puritron GSCN Salt-Water Chlorinators

175











185

Flocculant & Algicide "MULTIFLOCK C"



Flocculant "CLEARFLOCK GEL"

196



GEMAS "HEAVY-DUTY 215 FLEX" POOL CLEANER

Manual Pool Cleaners - Liner

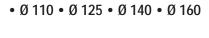


GEMAS PVC BUTTERFLY VALVES



Ergonomic Seperator Tensioner

284





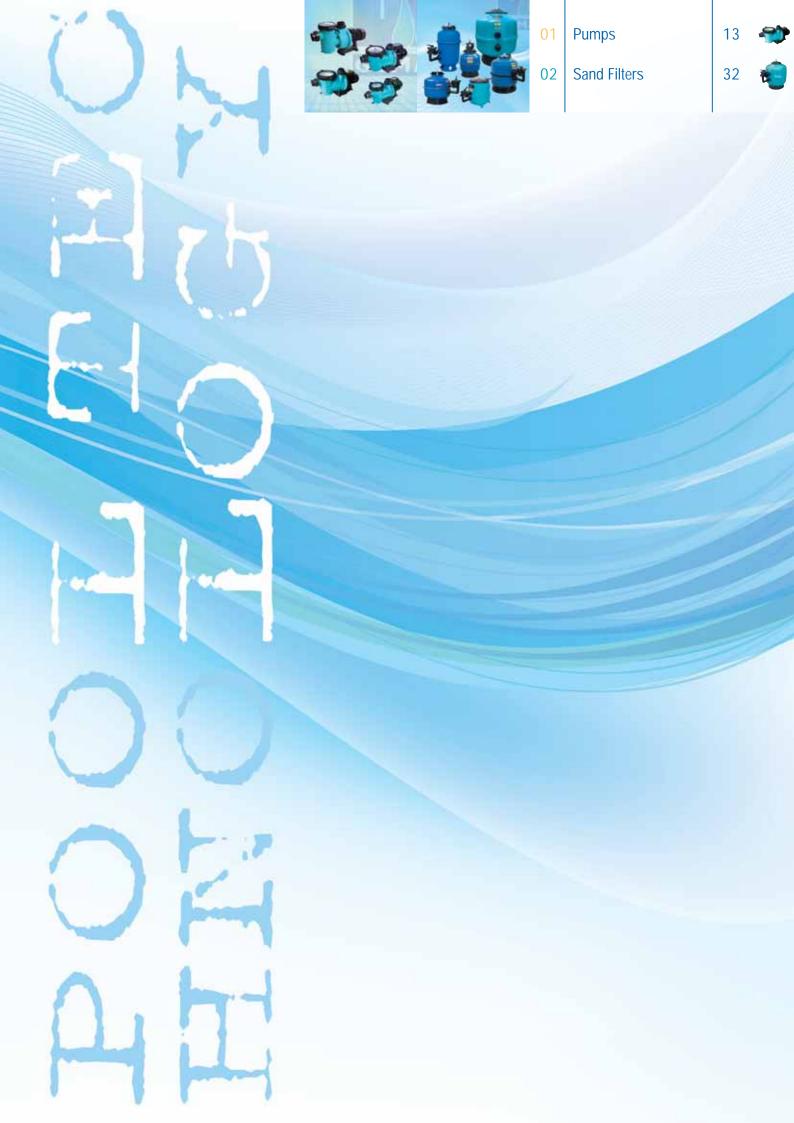




Massive Stainless Steel Body - Underwater Lights

342





Diagonal Walant Valuma

Self-priming Pool Pumps

GEMAS "DRIFTER" Self-priming, thermoplastic body pump with monoblock prefilter. Connections are with slip unions (Ø50 or Ø63) or female threaded (2"). Pump shaft is stainless steel.

Easy opening lid with 40° rotation. Transparent 'Xylex' cover option for high chemical resistance against cracks. 3 I pre-filter basket much larger than its equivalent. Pump connection fittings can be tightened and opened with 50 mm Fitvalf Ball Valve handle.

Co-axial pump connections facilitates convenience for replacemend of many different branded pumps in the market.

AVAILABLE FOR SALE ON SEPTEMBER 2023.



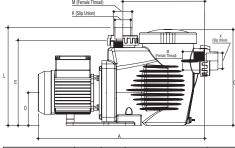


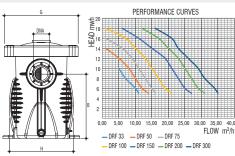
2" Female Connection

| D | escription | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------|---------------------------|-------------|----------------|---------------|--------------------------|
| • DF | RF-33M 1/3 HP, Monophase | 0111DRF33M | 1 | 10,980 | 0,038 |
| • DF | RF-50M 1/2 HP, Monophase | 0111DRF50M | 1 | 12,195 | 0,038 |
| • DF | RF-80M 3/4 HP, Monophase | 0111DRF75M | 1 | 13,081 | 0,038 |
| • DF | RF-80T 3/4 HP, Triphase | 0111DRF75T | 1 | 12,485 | 0,038 |
| • DF | RF-100M 1 HP, Monophase | 0111DRF100M | 1 | 13,765 | 0,038 |
| • DF | RF-100T 1 HP, Triphase | 0111DRF100T | 1 | 13,100 | 0,038 |
| • DF | RF-150M 1,5 HP, Monophase | 0111DRF150M | 1 | 16,680 | 0,038 |
| • DF | RF-150T 1,5 HP, Triphase | 0111DRF150T | 1 | 15,460 | 0,038 |
| • DF | RF-200M 2,0 HP, Monophase | 0111DRF200M | 1 | 18,530 | 0,038 |
| • DF | RF-200T 2,0 HP, Triphase | 0111DRF200T | 1 | 16,760 | 0,038 |
| • DF | RF-300M 3,0 HP, Monophase | 0111DRF300M | 1 | 18,530 | 0,038 |
| • DF | RF-300T 3,0 HP, Triphase | 0111DRF300T | 1 | 16,760 | 0,038 |
| | | | - | EDEODMANOE OU | DVEO. |



Ø50 or Ø63 Slip Connection Self Coupling







Wide and Clear View on Prefilter Lid

| | CON- DEN- | l A | MPERES | 3 | | | | HEAD | mwh | | | | | | | |
|------------|--------------|------|--------|---------------|------|-------|-------|-----------|-------|-------|-------|-------|-------|--|--|--|
| PUMP TYPE | HP | SER | l 11 | II | ı | 5 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | | | |
| | | (μF) | 220 V | 220 V 380 V | | | | FLOW m³/h | | | | | | | | |
| DRF-33M | 0,33 | 12,5 | 2,70 | - | - | 11,00 | 10,00 | 7,00 | 5,00 | - | - | - | - | | | |
| DRF-50M | 0,50 | 14 | 2,60 | - | - | 14,00 | 12,00 | 10,00 | 8,00 | 5,00 | 1,00 | - | - | | | |
| DRF-80T/M | 0,75 | 14 | 3,50 | 2,60 | 1,45 | 16,00 | 15,00 | 13,00 | 11,00 | 9,00 | 6,00 | 1,00 | - | | | |
| DRF-100T/M | 1 | 20 | 4,60 | 3,30 | 1,90 | 21,00 | 19,00 | 17,00 | 15,00 | 13,00 | 10,00 | 7,00 | 1,00 | | | |
| DRF-150T/M | 1,5 | 25 | 6,40 | 4,70 | 2,70 | 27,00 | 25,00 | 23,00 | 21,00 | 19,00 | 15,00 | 11,00 | 6,00 | | | |
| DRF-200T/M | 2 | 30 | 8,70 | 6,00 | 3,50 | 31,00 | 29,00 | 27,00 | 25,00 | 23,00 | 20,00 | 17,00 | 12,00 | | | |
| DRF-300T/M | 3 | 30 | 8,70 | 6,00 | 3,50 | 35,00 | 34,00 | 31,00 | 29,00 | 26,00 | 23,00 | 21,00 | 16,00 | | | |
| | | | | | | | | | | | | | | | | |



Stainless steel motor shaft

| PUMP TYPE | | DIMENSIONS | | | | | | | | | | | | Net Weight (Kg) | | Weight (g) |
|------------|------|------------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--------|--------------------|--------|---------------|
| | K | K | M | Α | В | С | D | Е | F | G | Н | L | Mo. | Tri. | Mo. | Tri. |
| DRF-33M | Ø50 | Ø50 | 2" | 520 | 206 | 307 | 105 | 271 | 262 | 236 | 205 | 313 | 10,029 | - | 10,980 | - |
| DRF-50M | Ø50 | Ø50 | 2" | 550 | 206 | 307 | 105 | 271 | 262 | 236 | 205 | 313 | 11,245 | - | 12,195 | - |
| DRF-80T/M | Ø50 | Ø50 | 2" | 550 | 206 | 307 | 105 | 271 | 262 | 236 | 205 | 313 | 12,331 | 11,535 | 13,081 | 12,485 |
| DRF-100T/M | Ø50 | Ø50 | 2" | 560 | 206 | 307 | 105 | 271 | 262 | 236 | 205 | 313 | 12,815 | 12,151 | 13,765 | 13,100 |
| DRF-150T/M | Ø 63 | Ø63 | 2" | 580 | 206 | 307 | 105 | 271 | 262 | 236 | 205 | 313 | 15,729 | 14,509 | 16,680 | 15,460 |
| DRF-200T/M | Ø 63 | Ø63 | 2" | 580 | 206 | 307 | 105 | 271 | 262 | 236 | 205 | 313 | 17,579 | 15,811 | 18,530 | 16,760 |
| DRF-300T/M | Ø 63 | Ø63 | 2" | 580 | 206 | 307 | 105 | 271 | 262 | 236 | 205 | 313 | 17,579 | 15,811 | 18,530 | 16,760 |

| SUCTION PIPE DI | IIVIENSIONS | | | | | | |
|-----------------|----------------|-----------------|-------------|-----------------|----------------|-------------|-------------|
| PUMP TYPE | DRF-33M | DRF-50M | DRF-80T/M | DRF-100T/M | DRF-150T/M | DRF-200T/M | DRF-300T/M |
| Ø SUCTION PIPE | 1 1/2"(Ø50 mm) | 1 1/2" (Ø50 mm) | 2" (Ø63 mm) | 2 1/2" (Ø75 mm) | 2 1/2"(Ø75 mm) | 3" (Ø90 mm) | 3" (Ø90 mm) |

PS: It is recommended to use conical reduction at the suction line of the pump.



2850 rpm



Self-priming Pool Pumps

GEMAS "STREAMER 2010" Self-priming, thermoplastic body Monoblock Pool Pump; complete with pre-filter. Models of 1 HP and below - suction Ø is 1.5" and discharge Ø is 2". Models of 1,5 HP and above - both suction and discharge Ø are 2". Connection unions are compatible with Fitvalf d50 ball valve handle. Easy opening lid with 40° rotation. Optional "Xylex" lid for aggressive chemical resistance. Large pre-filter basket. 2850 rpm - IP55 motor. Pump shaft is stainless steel.

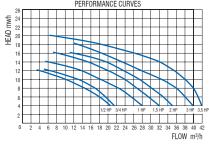
| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------------------|--------------|----------------|--------------|--------------------------|
| •STRN-50M 1/2 HP, Monophase | 0111STRN50M | 1 | 11,514 | 0,051 |
| • STRN-80M 3/4 HP, Monophase | 0111STRN75M | 1 | 12,484 | 0,051 |
| • STRN-80T 3/4 HP, Triphase | 0111STRN75T | 1 | 11,750 | 0,051 |
| •STRN-100M 1 HP, Monophase | 0111STRN100M | 1 | 13,609 | 0,051 |
| •STRN-100T 1 HP, Triphase | 0111STRN100T | 1 | 12,244 | 0,051 |
| •STRN-150M 1,5 HP, Monophase | 0111STRN150M | 1 | 16,344 | 0,051 |
| •STRN-150T 1,5 HP, Triphase | 0111STRN150T | 1 | 15,669 | 0,051 |
| •STRN-200M 2,0 HP, Monophase | 0111STRN200M | 1 | 18,404 | 0,051 |
| • STRN-200T 2,0 HP, Triphase | 0111STRN200T | 1 | 17,534 | 0,051 |
| •STRN-300M 3,0 HP, Monophase | 0111STRN300M | 1 | 18,404 | 0,051 |
| •STRN-300T 3,0 HP, Triphase | 0111STRN300T | 1 | 17,534 | 0,051 |
| •STRN-350M 3,5 HP, Monophase | 0111STRN350M | 1 | 21,704 | 0,054 |
| • STRN-350T 3,5 HP, Triphase | 0111STRN350T | 1 | 20,384 | 0,054 |
| | | | | |

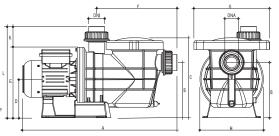


Easy access lid



Wide and clear view on prefilter lid Made of polycarbonate





Coupling compatible with d50 Fitvalf ball valve handle

| CON- DEN- | | | | | AMPERES | | | | HE | AD mwh | | | | |
|--------------|------|------|-------|-------|---------|-------|-------|-------|-------|---------|-------|-------|-------|------|
| PUMP TYPE | HP | SER | l II | II | I | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 |
| | | (μF) | 220 V | 220 V | 380 V | | | | FLC | OW m³/h | | | | |
| STRN-50T/M | 0,50 | 14 | 2,60 | - | - | 20,50 | 18,00 | 14,30 | 10,00 | 4,00 | - | - | - | - |
| STRN-80T/M | 0,75 | 14 | 3,50 | 2,50 | 1,45 | 21,70 | 19,50 | 17,00 | 13,00 | 6,00 | - | - | - | - |
| STRN-100T/M | 1 | 20 | 4,60 | 3,30 | 1,90 | 28,00 | 25,70 | 22,50 | 18,00 | 13,90 | 6,00 | - | - | - |
| STRN-150T/M | 1,5 | 25 | 6,40 | 4,70 | 2,70 | 32,00 | 29,70 | 26,50 | 24,00 | 20,00 | 15,50 | 8,00 | - | - |
| STRN-200T/M | 2 | 30 | 8,70 | 6,00 | 3,50 | 35,00 | 33,00 | 30,00 | 27,50 | 23,80 | 19,50 | 12,00 | - | - |
| STRN-300T/M | 3 | 30 | 8,70 | 6,00 | 3,50 | 40,00 | 38,00 | 36,00 | 32,40 | 27,60 | 23,20 | 18,50 | 13,00 | - |
| STRN-350T/M | 3,5 | 65 | 12,30 | 7,65 | 4,40 | 42,00 | 41,00 | 40,00 | 38,00 | 35,50 | 32,00 | 26,40 | 18,50 | 7,10 |



| PUMP TYPE | | | | | DIM | IENS | 10 N S | | | | | | Net Weight (Kg) | | Gross Weight (Kg) | |
|-------------|-------|-------|-----|----|-----|------|--------|-----|-----|-----|-----|-----|--------------------|--------|----------------------|--------|
| | DNA | DNI | Α | K | В | С | D | Е | F | G | Н | ı | Mo. | Tri. | Mo. | Tri. |
| STRN-50T/M | 11/2" | 11/2" | 610 | 80 | 215 | 310 | 160 | 275 | 320 | 292 | 245 | 355 | 10,290 | - | 11,514 | - |
| STRN-80T/M | 2" | 11/2" | 610 | 80 | 215 | 310 | 145 | 275 | 320 | 292 | 245 | 355 | 11,234 | - | 12,484 | - |
| STRN-100T/M | 2" | 11/2" | 610 | 80 | 215 | 310 | 145 | 275 | 320 | 292 | 245 | 355 | 12,360 | 11,000 | 13,609 | 12,244 |
| STRN-150T/M | 2" | 2" | 630 | 80 | 215 | 310 | 160 | 275 | 320 | 292 | 245 | 355 | 15,095 | 14,420 | 16,344 | 15,669 |
| STRN-200T/M | 2" | 2" | 630 | 80 | 215 | 310 | 145 | 275 | 320 | 292 | 245 | 355 | 17,150 | 16,280 | 18,404 | 17,534 |
| STRN-300T/M | 2" | 2" | 630 | 80 | 215 | 310 | 145 | 275 | 320 | 292 | 245 | 355 | 17,150 | 16,280 | 18,404 | 17,534 |
| STRN-350T/M | 2" | 2" | 670 | 80 | 215 | 310 | 145 | 275 | 320 | 292 | 245 | 355 | 20,450 | 19,130 | 21,704 | 20,384 |



Stainless steel motor shaft

SUCTION PIPE DIMENSIONS

| PUMP TYPE | STRN-50T/M | STRN-80T/M | STRN-100T/M | STRN-150T/M | STRN-200T/M | STRN-300T/M | STRN-350T/M |
|----------------|----------------|-------------|-----------------|-----------------|-------------|-------------|--------------|
| Ø SUCTION PIPE | 1 1/2"(Ø50 mm) | 2" (Ø63 mm) | 2 1/2" (Ø75 mm) | 2 1/2" (Ø75 mm) | 3" (Ø90 mm) | 3" (Ø90 mm) | 4" (Ø110 mm) |

PS: It is recommended to use conical reduction at the suction line of the pump.

2850 rpm

Self-priming Pool Pumps

GEMAS "STREAMER MINI"

Self-priming, thermoplastic body Monoblock Pool Pump; complete with pre-filter. Pump shaft in stainless steel. Suction & Discharge 1 1/2". 2850 rpm - IP 55 Motor. Connections are with unions compatible with Fitvalf d50 Ball Valve. Easy opening lid with 40° rotation. "Xylex" lid option against aggressive chemicals.





Easy access lid





Coupling compatible with d50 Fitvalf ball valve handle

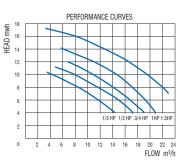


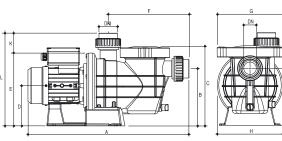
Noryl impeller



Stainless steel motor shaft

| Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------|--|---|---|
| 0111STRM33M | 1 | 10,980 | 0,037 |
| 0111STRM50M | 1 | 11,140 | 0,037 |
| 0111STRM80M | 1 | 13,200 | 0,037 |
| 0111STRM80T | 1 | 13,000 | 0,037 |
| 0111STRM100M | 1 | 12,800 | 0,037 |
| 0111STRM100T | 1 | 11,620 | 0,037 |
| 0111STRM150M | 1 | 12,800 | 0,037 |
| 0111STRM150T | 1 | 11,620 | 0,037 |
| | 0111STRM33M 0111STRM50M 0111STRM80M 0111STRM80T 0111STRM100M 0111STRM100T 0111STRM150M | Code box 0111STRM33M 1 0111STRM50M 1 0111STRM80M 1 0111STRM80T 1 0111STRM100M 1 0111STRM100T 1 0111STRM150M 1 | Code box Kg 0111STRM33M 1 10,980 0111STRM50M 1 11,140 0111STRM80M 1 13,200 0111STRM80T 1 13,000 0111STRM100M 1 12,800 0111STRM100T 1 11,620 0111STRM150M 1 12,800 |





| | CON- DEN- | А | MPERES | 3 | | | | HE | AD mwh | | | | | |
|--------------|--------------|-------------|---------|------|------|-------|-------|-------|--------|---------|-------|-------|-------|---|
| PUMP TYPE H | | DEN- SER | 11 11 | | 4 | 6 | 8 | 10 | 11 | 12 | 14 | 16 | 17 | |
| | | (μF) | 220 V | | | | | | FLC |)W m³/h | | | | |
| STRM-0,33M | 0,33 | 12,50 | 2,70 | - | - | 14,10 | 11,60 | 8,30 | 4,00 | - | - | - | - | - |
| STRM-0,50M | 0,50 | 14,00 | 2,60 | - | - | 17,20 | 14,90 | 11,40 | 7,90 | 4,80 | - | - | - | - |
| STRM-0,80T/M | 0,75 | 14,00 | 3,50 | 2,50 | 1,45 | 18,90 | 16,70 | 13,50 | 10,80 | 9,00 | 6,80 | - | - | - |
| STRM-1,00T/M | 1,00 | 14,00 | 3,50 | 2,50 | 1,45 | 20,80 | 19,30 | 17,10 | 14,90 | 13,20 | 10,50 | 6,00 | - | - |
| STRM-1,50T/M | 1,50 | 20,00 | 4,60 | 3,30 | 1,90 | 26,00 | 24,80 | 22,00 | 19,50 | 18,00 | 16,50 | 12,50 | 15,00 | - |

| PUMP TYPE | | | | | DIM | 1ENS | 10 N S | | | | | | | Net Weight Gross Weight (Kg) (Kg) | | | |
|--------------|-------|-------|-----|----|-----|------|--------|-----|-----|-----|-----|-----|--------|-----------------------------------|--------|--------|--|
| 1000 1112 | DNA | DNI | Α | K | В | С | D | Е | F | G | Н | L | Mo. | Tri. | Mo. | Tri. | |
| STRM-0,33M | 11/2" | 11/2" | 510 | 70 | 175 | 265 | 140 | 240 | 255 | 210 | 210 | 315 | 9,980 | - | 10,980 | - | |
| STRM-0,50M | 11/2" | 11/2" | 540 | 70 | 175 | 265 | 140 | 240 | 255 | 210 | 210 | 315 | 10,140 | - | 11,140 | - | |
| STRM-0,80T/M | 11/2" | 11/2" | 540 | 70 | 175 | 265 | 140 | 240 | 255 | 210 | 210 | 315 | 12,200 | - | 13,200 | 13,000 | |
| STRM-1,00T/M | 11/2" | 11/2" | 540 | 70 | 175 | 265 | 140 | 240 | 255 | 210 | 210 | 315 | 11,800 | 10,620 | 12,800 | 11,620 | |
| STRM-1,50T/M | 11/2" | 11/2" | 540 | 70 | 175 | 265 | 140 | 240 | 255 | 210 | 210 | 315 | 11,800 | 10,620 | 12,800 | 11,620 | |

SUCTION PIPE DIMENSIONS

| 000 | | | | | |
|----------------|----------------|----------------|-------------|-------------|-----------------|
| PUMP TYPE | STRM-33M | STRM-50M | STRM-80T/M | STRM-100T/M | STRM-150T/M |
| Ø SUCTION PIPE | 1 1/2"(Ø50 mm) | 1 1/2"(Ø50 mm) | 2" (Ø63 mm) | 2" (Ø63 mm) | 2 1/2" (Ø75 mm) |

PS: It is recommended to use conical reduction at the suction line of the pump.



Description

2850 rpm

Pumps for Swimming Pools

"Saving Energy"

Weight

Κġ

Volume

 m^3

Self-priming - Variable **Speed Pumps**

GEMAS "RANGER" Self-priming, thermoplastic body pump with monoblock pre-filter. Connections are with unions; 1,5 HP model - suction Ø is 1,5" and discharge Ø is 2". 3 HP Model both suction and discharge Ø are 2". Pump shaft is stainless steel. Easy opening lid with 40° rotation. Transparent "Xylex" cover option with high chemical resistance against cracks.

4,5 I pre-filter basket much larger thanits equivalents. Pump connection fittings can be tightened and opened with 50 mm Fitvalf Ball Valve Handle. Three cycles, Possibility to choose between 1400-2850 cycles.

Code

Factory settings: 1st cycle - 2100 rpm, 2nd cycle - 2400 rpm, 3rd cycle - 2850 rpm. Permanent Magnet - IP55 motor. Cable connection is available for speed control from the external panel. Motors are singlephase input. It has soft start and stop features.

Pieces/

hox



| •RN-150M 1,5 HP | , Monophase | 0111RN150M | 1 | 14,000 | 0,051 |
|-----------------|------------------------|--------------|---|--------|----------|
| •RN-300M 3,0 HP | , Monophase | 0111RN300M | 1 | 19,050 | 0,051 |
| | MOTOR PERFORMANCE CURN | 1 1 P P O du | | † † | G DNA |
| | | FLOW m3/h | | | |

| | | | | FL | .OW m³/h | ı | | | | | | | | | | |
|-----------|-----|-------|-----------|-------|----------|-------|-------|-------|--------|----------|-------|------|------|----|----|------|
| HEAD mwh | | | | | | | | | | | | | | | | |
| PUMP TYPE | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 17,5 |
| RN-150M | 1,5 | | FLOW m³/h | | | | | | | | | | | | | |
| 2100 rpm | | 18,25 | 15,85 | 13,35 | 10,11 | 3,43 | - | - | - | - | - | - | - | - | - | - |
| 2400 rpm | | - | - | 19,06 | 17,05 | 14,40 | 11,88 | 5,55 | - | - | - | - | - | - | - | - |
| 2850 rpm | | - | - | 24,15 | 23,30 | 22,00 | 20,90 | 19,50 | 17,37 | 15,30 | 11,50 | 6,40 | 2,40 | - | - | - |
| | | | | | | | | А | MPERE: | S II 220 | V | | | | | |
| 2100 rpm | | 2,50 | 2,40 | 2,20 | 2,20 | 1,60 | 1,30 | - | - | - | - | - | - | - | - | - |
| 2400 rpm | | - | - | 3,50 | 3,50 | 3,40 | 3,00 | 2,40 | 1,70 | - | - | - | - | - | - | - |

6,00 5,90 5,90 5,80 5,90 5,60 5,40 4,90 4,10 3,30 2,90

| | | | HEAD mwh | | | | | | | | | | | | |
|-----------|-----|-------|-----------|-------|-------|-------|-------|-------|-----------|-------|-------|-------|------|------|------|
| PUMP TYPE | | 7 | 8 | 9 | 10 | 11 | 12 | 14 | 15 | 15,5 | 16 | 18 | 20 | 21 | 21,5 |
| RN-300M | 3,0 | | FLOW m³/h | | | | | | | | | | | | |
| 2100 rpm | | 22,50 | 19,50 | 17,50 | 15,00 | 11,00 | 6,50 | - | - | - | - | - | - | - | - |
| 2400 rpm | | - | - | 25,00 | 22,00 | 19,00 | 17,50 | 11,00 | 2,00 | - | - | - | - | - | - |
| 2850 rpm | | - | - | - | 30,00 | 28,50 | 28,00 | 24,00 | - | - | 21,00 | 19,00 | 7,50 | 4,00 | - |
| | | | | | | | | AMPE | ERES II 2 | 220 V | | | | | |
| 2100 rpm | | 7,00 | 6,70 | 6,50 | 5,90 | 5,20 | 4,40 | - | - | - | - | - | - | - | - |
| 2400 rpm | | - | - | 10,30 | 9,30 | - | 8,50 | 7,00 | 5,30 | 5,00 | - | - | - | - | - |
| 2850 rpm | | - | - | - | 14,60 | - | 14,60 | 14,60 | - | - | 14,60 | 13,20 | 9,90 | 8,40 | 8,00 |

| PUMP TYPE | | | | | | DIMEN | ISIONS | | | | | | Net Weight (Kg) | Gross Weight (Kg) |
|-----------|-----|-------|-----|----|-----|-------|--------|-----|-----|-----|-----|-----|--------------------|----------------------|
| | DNA | DNI | Α | K | В | С | D | E | F | G | Н | -1 | Monophase | Monophase |
| RN-150M | 2" | 11/2" | 615 | 80 | 215 | 310 | 160 | 275 | 320 | 292 | 245 | 355 | 11,650 | 14,000 |
| RN-300M | 2" | 2" | 730 | 80 | 205 | 310 | 160 | 275 | 320 | 292 | 245 | 355 | 17,400 | 19,050 |

SUCTION PIPE DIMENSIONS

| PUMP TYPE | RN-150M | RN-300M |
|----------------|-----------------|-------------|
| Ø SUCTION PIPE | 2 1/2" (Ø75 mm) | 3" (Ø90 mm) |

PS: It is recommended to use conical reduction at the suction line of the pump.

Example: 3 HP pump running at 2000 rpm saves approximately 50E per month.



2100/2400/2850 rpm

Speed controlled



Easy access lid



Wide and clear view on prefilter lid Made of polycarbonate



Coupling compatible with d50 Fitvalf ball valve handle



Stainless steel motor shaft



ISAVER - Pool Pump Frequency Inverter

"New Inverter Technology"





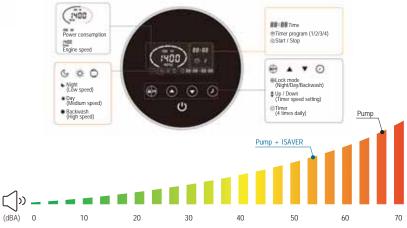
GEMAS "ISAVER". The first "Touch Screen" frequency inverter manufactured in the pool industry. By adjusting the running speed of the pool pump, it delivers significant electricity savings and silent operation. In addition, it allows automatic operation adjustment with different cycles in 4 different time intervals during the day. Consumption power values corresponding to the revolutions set are displayed on the screen. It is also possible to adjust the speed during operation. There are different models of the device for three-phase and single-phase motors as shown in the table below. Max. capacity is 2,2 kW. There are dry contacts inside the device for different types of external controls.

PROVIDES SIGNIFICANT ENERGY SAVING.

| De | scription | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----|--------------|--------------|----------------|--------------|--------------------------|
| • | ISAVER 1100 | 0111INV1100 | 1 | | |
| • | ISAVER 1100C | 0111INV1100C | 1 | | |
| • | ISAVER 2200 | 0111INV2200 | 1 | | |
| • | ISAVER 2200C | 0111INV2200C | 1 | | |

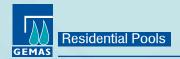


ISAVER Comparison Chart



TECHNICAL SPECIFICATIONS

| MODEL | ISAVER 1100 | ISAVER 2200 | ISAVER 1100C | ISAVER 2200C |
|-----------------|--------------|--------------|--------------|--------------|
| Operating Temp. | -10 ~ 40°C | -10 ~ 40°C | -10 ~ 40°C | -10 ~ 40°C |
| Input Power | 1ph AC | 1ph AC | 1ph AC | 1ph AC |
| Input Voltage | 220V~240V | 220V~240V | 220V~240V | 220V~240V |
| Frequency | 50 Hz | 50 Hz | 50 Hz | 50 Hz |
| Output Voltage | Mono, 0~240V | Mono, 0~240V | Tri, 0~240V | Tri, 0~240V |
| Output Power | Max 1.1kW | Max 2.2kW | Max 1.1kW | Max 2.2kW |
| Output Current | Max 6A | Max 12A | Max 4.5A | Max 8A |
| Pump Type | Monophase | Monophase | Triphase | Triphase |
| Speed Range | | 1200 - | ~ 2900 rpm | |



2850 rpm

"New Engine Technology"

Self-priming Pool Pumps

GEMAS "DRIFTER-R" Self-priming, thermoplastic body pump with monoblock prefilter. Connections are with slip unions (Ø50 or Ø63) or female threaded (2"). Pump shaft is stainless steel. Easy opening lid with 40° rotation. Transparent 'Xylex' cover option for high chemical resistance against cracks. 3 I pre-filter basket much larger than its equivalent, Water insulated including motor connection box (= stator completely embedded in resin) IP55 motor. Pump connection fittings can be tightened and opened with 50 mm Fitvalf Ball Valve handle. Co-axial pump connections facilitates convenience for replacemend of many different branded pumps in the market. AVAILABLE FOR SALE ON SEPTEMBER 2023.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------------------|--------------|----------------|--------------|--------------------------|
| • DRF-33M 1/3 HP, Monophase | 0111DRF33MR | 1 | 10,980 | 0,038 |
| • DRF-50M 1/2 HP, Monophase | 0111DRF50MR | 1 | 12,195 | 0,038 |
| • DRF-80M 3/4 HP, Monophase | 0111DRF75MR | 1 | 13,081 | 0,038 |
| • DRF-80T 3/4 HP, Triphase | 0111DRF75TR | 1 | 12,485 | 0,038 |
| • DRF-100M 1 HP, Monophase | 0111DRF100MR | 1 | 13,765 | 0,038 |
| • DRF-100T 1 HP, Triphase | 0111DRF100TR | 1 | 13,100 | 0,038 |
| • DRF-150M 1,5 HP, Monophase | 0111DRF150MR | 1 | 16,680 | 0,038 |
| • DRF-150T 1,5 HP, Triphase | 0111DRF150TR | 1 | 15,460 | 0,038 |
| • DRF-200M 2,0 HP, Monophase | 0111DRF200MR | 1 | 18,530 | 0,038 |
| • DRF-200T 2,0 HP, Triphase | 0111DRF200TR | 1 | 16,760 | 0,038 |
| • DRF-300M 3,0 HP, Monophase | 0111DRF300MR | 1 | 18,530 | 0,038 |
| • DRF-300T 3,0 HP, Triphase | 0111DRF300TR | 1 | 16,760 | 0,038 |
| | | | | |

Water insulated motor advantages:

- Strong protection in damp environments
- · Extra resistance in motor room flooding
 - · Higher efficiency
 - High wear resistance against vibration
 - Quieter motor
- 5-year warranty* *excluding bearing and capacitor

| PERFORMANCE CURVES | M (Female Thread) | G |
|--|-------------------|-----|
| E 18 16 16 16 16 16 16 16 16 16 16 16 16 16 | K (Slip Union) | DNA |
| 14 12 | Sip Union | |
| 8 | fende Tread | |
| 6 | | |
| 0,00 5,00 10,00 15,00 20,00 25,00 30,00 35,00 40,00 FLOW m ³ /h | | |
| — DRF 33 — DRF 50 — DRF 75 | | |
| — DRF 100 — DRF 150 — DRF 200 — DRF 300 | A | Н |

| | | CON- | A | MPERES | 3 | | | | HEAD I | mwh | | | | | | |
|------------|------|-------------|-------|----------|-------|-------|------------------------|-------|--------|-------|-------|-------|-------|--|--|--|
| PUMP TYPE | HP | DEN- SER | l 11 | <u>-</u> | | 5 | 6 | 8 | 10 | 12 14 | | 16 | 18 | | | |
| | | (μF) | 220 V | 220 V | 380 V | | FLOW m ³ /h | | | | | | | | | |
| DRF-33M | 0,33 | 12,5 | 2,70 | - | - | 11,00 | 10,00 | 7,00 | 5,00 | - | - | - | - | | | |
| DRF-50M | 0,50 | 14 | 2,60 | - | - | 14,00 | 12,00 | 10,00 | 8,00 | 5,00 | 1,00 | - | - | | | |
| DRF-80T/M | 0,75 | 14 | 3,50 | 2,60 | 1,45 | 16,00 | 15,00 | 13,00 | 11,00 | 9,00 | 6,00 | 1,00 | - | | | |
| DRF-100T/M | 1 | 20 | 4,60 | 3,30 | 1,90 | 21,00 | 19,00 | 17,00 | 15,00 | 13,00 | 10,00 | 7,00 | 1,00 | | | |
| DRF-150T/M | 1,5 | 25 | 6,40 | 4,70 | 2,70 | 27,00 | 25,00 | 23,00 | 21,00 | 19,00 | 15,00 | 11,00 | 6,00 | | | |
| DRF-200T/M | 2 | 30 | 8,70 | 6,00 | 3,50 | 31,00 | 29,00 | 27,00 | 25,00 | 23,00 | 20,00 | 17,00 | 12,00 | | | |
| DRF-300T/M | 3 | 30 | 8,70 | 6,00 | 3,50 | 35,00 | 34,00 | 31,00 | 29,00 | 26,00 | 23,00 | 21,00 | 16,00 | | | |

| PUMP TYPE | | | | | D | IMEN | 18101 | 1S | | | | | Net W (K | | | Weight (g) |
|------------|------|-----|----|-----|-----|------|-------|-----|-----|-----|-----|-----|-------------|--------|--------|---------------|
| | K | K | M | Α | В | С | D | Е | F | G | Н | L | Mo. | Tri. | Mo. | Tri. |
| DRF-33M | Ø50 | Ø50 | 2" | 520 | 206 | 307 | 105 | 271 | 262 | 236 | 205 | 313 | 10,029 | - | 10,980 | - |
| DRF-50M | Ø50 | Ø50 | 2" | 550 | 206 | 307 | 105 | 271 | 262 | 236 | 205 | 313 | 11,245 | - | 12,195 | - |
| DRF-80T/M | Ø50 | Ø50 | 2" | 550 | 206 | 307 | 105 | 271 | 262 | 236 | 205 | 313 | 12,331 | 11,535 | 13,081 | 12,485 |
| DRF-100T/M | Ø50 | Ø50 | 2" | 560 | 206 | 307 | 105 | 271 | 262 | 236 | 205 | 313 | 12,815 | 12,151 | 13,765 | 13,100 |
| DRF-150T/M | Ø 63 | Ø63 | 2" | 580 | 206 | 307 | 105 | 271 | 262 | 236 | 205 | 313 | 15,729 | 14,509 | 16,680 | 15,460 |
| DRF-200T/M | Ø 63 | Ø63 | 2" | 580 | 206 | 307 | 105 | 271 | 262 | 236 | 205 | 313 | 17,579 | 15,811 | 18,530 | 16,760 |
| DRF-300T/M | Ø63 | Ø63 | 2" | 580 | 206 | 307 | 105 | 271 | 262 | 236 | 205 | 313 | 17 579 | 15 811 | 18 530 | 16 760 |

580 | 206 | 307 | 105 | 271 | 262 | 236 | 205 | 313 | 17,579 | 15,811 | 18,530 | 16,760

SUCTION PIPE DIMENSIONS

| PUMP TYPE | DRF-33M | DRF-50M | DRF-80T/M | DRF-100T/M | DRF-150T/M | DRF-200T/M | DRF-300T/M |
|----------------|----------------|-----------------|-------------|----------------|----------------|-------------|-------------|
| Ø SUCTION PIPE | 1 1/2"(Ø50 mm) | 1 1/2" (Ø50 mm) | 2" (Ø63 mm) | 2 1/2"(Ø75 mm) | 2 1/2"(Ø75 mm) | 3" (Ø90 mm) | 3" (Ø90 mm) |

PS: It is recommended to use conical reduction at the suction line of the pump.





Insulated motor winding cross section



Wide and Clear View on Prefilter Lid



Large volume basket



Self-priming Insulated Motor Pumps

2850 rpm

GEMAS "STREAMER-R" Self-priming, thermoplastic body pump with monoblock pre-filter. Connection are

with unions. Model 0,5 HP - both suction and discharge Ø are 1,5". Models 0,75 HP and 1 HP - suction Ø is 1,5" and discharge Ø is 2". Models of 1,5 HP and above - both suction and discharge Ø are 2". Pump shaft is stainless steel. Easy opening lid with 40° rotation.

Transparent "Xylex" cover option for high chemical resistance against cracks. 4,5 l pre-filter basket much larger than its equivalent.

Water insulated including motor connection box (= stator completely embedded in resin) IP55 motor. Pump connection fittings can be

tightened and opened with 50 mm Fitvalf Ball Valve Handle.

Water insulated motor advantages:

- Strong protection in damp environments
- Extra resistance in motor room flooding
 - Higher efficiency
 - High wear resistance against vibration
 - Quieter motor
- 5-year warranty*
 *excluding bearing and capacitor

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------------------------|---------------|----------------|--------------|--------------------------|
| •STRN-50MR 1/2 HP, Monophase | 0111STRN50MR | 1 | 13,100 | 0,051 |
| • STRN-80RM 3/4 HP, Monophase | 0111STRN75MR | 1 | 15,200 | 0,051 |
| • STRN-80TR 3/4 HP, Triphase | 0111STRN75TR | 1 | 13,700 | 0,051 |
| •STRN-100MR 1 HP, Monophase | 0111STRN100MR | 1 | 15,650 | 0,051 |
| •STRN-100TR 1 HP, Triphase | 0111STRN100TR | 1 | 14,750 | 0,051 |
| •STRN-150MR 1,5 HP, Monophase | 0111STRN150MR | 1 | 17,950 | 0,051 |
| •STRN-150TR 1,5 HP, Triphase | 0111STRN150TR | 1 | 17,700 | 0,051 |
| • STRN-200MR 2,0 HP, Monophase | 0111STRN200MR | 1 | 18,000 | 0,051 |
| • STRN-200TR 2,0 HP, Triphase | 0111STRN200TR | 1 | 17,800 | 0,051 |
| • STRN-300MR 3,0 HP, Monophase | 0111STRN300MR | 1 | 18,100 | 0,051 |
| • STRN-300TR 3,0 HP, Triphase | 0111STRN300TR | 1 | 17,900 | 0,051 |
| • STRN-350MR 3,5 HP, Monophase | 0111STRN350MR | 1 | 23,200 | 0,054 |
| • STRN-350TR 3,5 HP, Triphase | 0111STRN350TR | 1 | 23,000 | 0,054 |

"New Engine Technology".







Water insulated electrical connection box - Monophase



Water insulated electrical connection box - Triphase

| 26 W 24 W 22 W 20 W 18 W 16 W 12 W 10 W 12 W 10 W 10 W 10 W 10 W 10 | 2 4 6 8 | PERFORMANCE CURVES 1/2 I/P 3/4 I/P 1 I/P 1.5 I/P 2 I/P 3/1 P 3.5 I/I 1/2 1/4 16 18 20 22 24 26 28 30 32 34 36 38 40 42 | G DNA |
|---|---------|--|-------|
| | | FLOW m ³ /h | |

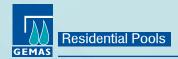
| | | | | 120 | /** 111 /11 | | | | | | | | | |
|-------------|------|-------------|-------|--------|-------------|-------|-------|-------|-------|---------|-------|-------|-------|------|
| | | CON- | А | MPERES | 3 | | | | HE | AD mwh | | | | |
| PUMP TYPE | HP | DEN- SER | | | | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 |
| | | (μF) | 220 V | | | | | | FLC | OW m³/h | | | | |
| STRN-50T/M | 0,50 | 16 | 2,73 | - | - | 20,50 | 18,00 | 14,30 | 10,00 | 4,00 | - | - | - | - |
| STRN-80T/M | 0,75 | 20 | 3,88 | 2,33 | 1,35 | 21,70 | 19,50 | 17,00 | 13,00 | 6,00 | - | - | - | - |
| STRN-100T/M | 1 | 25 | 5,15 | 3,03 | 1,75 | 28,00 | 25,70 | 22,50 | 18,00 | 13,90 | 6,00 | - | - | - |
| STRN-150T/M | 1,5 | 30 | 7,02 | 4,42 | 2,55 | 32,00 | 29,70 | 26,50 | 24,00 | 20,00 | 15,50 | 8,00 | - | - |
| STRN-200T/M | 2 | 40 | 8,60 | 5,50 | 3,50 | 35,00 | 33,00 | 30,00 | 27,50 | 23,80 | 19,50 | 12,00 | - | - |
| STRN-300T/M | 3 | 40 | 8,90 | 6,01 | 3,90 | 40,00 | 38,00 | 36,00 | 32,40 | 27,60 | 23,20 | 18,50 | 13,00 | - |
| STRN-350T/M | 3,5 | 60 | 12,60 | 8,61 | 4,98 | 42,00 | 41,00 | 40,00 | 38,00 | 35,50 | 32,00 | 26,40 | 18,50 | 7,10 |

| PUMP TYPE | | | | | DIM | ENS | IONS | | | | | | Net Weight (Kg) | | Gross Weight (Kg) | |
|---|-------|-------|-----|----|-----|-----|------|-----|-----|-----|-----|-----|--------------------|--------|----------------------|--------|
| 101111111111111111111111111111111111111 | DNA | DNI | Α | K | В | С | D | Е | F | G | Н | L | Mo. | Tri. | Mo. | Tri. |
| STRN-50T/M | 11/2" | 11/2" | 610 | 80 | 215 | 310 | 160 | 275 | 320 | 292 | 245 | 355 | 11,800 | - | 13,100 | - |
| STRN-80T/M | 2" | 11/2" | 610 | 80 | 215 | 310 | 160 | 275 | 320 | 292 | 245 | 355 | 13,900 | 12,400 | 15,200 | 13,700 |
| STRN-100T/M | 2" | 11/2" | 610 | 80 | 215 | 310 | 160 | 275 | 320 | 292 | 245 | 355 | 14,350 | 13,450 | 15,650 | 14,750 |
| STRN-150T/M | 2" | 2" | 630 | 80 | 215 | 310 | 160 | 275 | 320 | 292 | 245 | 355 | 16,650 | 16,400 | 17,950 | 17,700 |
| STRN-200T/M | 2" | 2" | 630 | 80 | 215 | 310 | 160 | 275 | 320 | 292 | 245 | 355 | - | 16,500 | 18,000 | 17,800 |
| STRN-300T/M | 2" | 2" | 630 | 80 | 215 | 310 | 160 | 275 | 320 | 292 | 245 | 355 | - | 16,600 | 18,100 | 17,900 |
| STRN-350T/M | 2" | 2" | 670 | 80 | 215 | 310 | 160 | 275 | 320 | 292 | 245 | 355 | - | 21,500 | 23,200 | 23,000 |

SUCTION PIPE DIMENSIONS

| PUMP TYPE | STRN-50T/M | STRN-80T/M | STRN-100T/M | STRN-150T/M | STRN-200T/M | STRN-300T/M | STRN-350T/M |
|----------------|----------------|-------------|-----------------|-----------------|-------------|-------------|--------------|
| Ø SUCTION PIPE | 1 1/2"(Ø50 mm) | 2" (Ø63 mm) | 2 1/2" (Ø75 mm) | 2 1/2" (Ø75 mm) | 3" (Ø90 mm) | 3" (Ø90 mm) | 4" (Ø110 mm) |

PS: It is recommended to use conical reduction at the suction line of the pump.



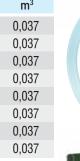
2850 rpm

Self-priming Insulated Motor Pumps

GEMAS "STREAMER-R MINI" "New Engine Technology" Self-priming, thermoplastic

body pump with monoblock prefilter. Connections are with unions; 1 1/2" (50mm). Pump shaft is stainless steel. Easy opening lid with 40° rotation. Transparent 'Xvlex' cover option for high chemical resistance against cracks. 4,5 l pre-filter basket much larger than its equivalent. Water insulated including motor connection box (= stator completely embedded in resin) IP55 motor. Pump connection fittings can be tightened and opened with 50 mm Fitvalf Ball Valve.

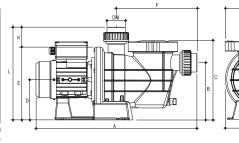
| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------------------------|---------------|----------------|--------------|--------------------------|
| •STRM-33MR 1/3 HP, Monophase | 0111STRM33MR | 1 | 10,980 | 0,037 |
| • STRM-50MR 1/2 HP, Monophase | 0111STRM50MR | 1 | 11,140 | 0,037 |
| • STRM-80MR 3/4 HP, Monophase | 0111STRM80MR | 1 | 13,200 | 0,037 |
| •STRM-80TR 3/4 HP, Triphase | 0111STRM80TR | 1 | 13,000 | 0,037 |
| •STRM-100MR 1 HP, Monophase | 0111STRM100MR | 1 | 12,800 | 0,037 |
| •STRM-100TR 1 HP, Triphase | 0111STRM100TR | 1 | 11,620 | 0,037 |
| •STRM-150MR 1,5 HP, Monophase | 0111STRM150MR | 1 | 12,800 | 0,037 |
| •STRM-150TR 1,5 HP, Triphase | 0111STRM150TR | 1 | 11,620 | 0,037 |
| | | | | |

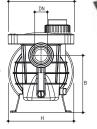




Insulated motor winding cross section

| <u> </u> | PERFORMANCE CURVES |
|----------|---|
| HEAD mwh | |
| E . | |
| | |
| 12 | |
| 10 | |
| 8 | |
| 6 | |
| 4 | 1/3 HP 1/2 HP 3/4 HP 1HP 1.5HP |
| 2 | |
| | |
| 0 | 2 4 6 8 10 12 14 16 18 20 22 24 FLOW m ³ /h |
| | 1257 111/11 |





Coupling compatible with d50 Fitvalf ball valve handle

| | | CON- | A | MPERES | 3 | | | | HE | AD mwh | | | | |
|--------------|------|-------------|-------|--------|-------|-------|-------|-------|-------|---------|-------|-------|-------|----|
| PUMP TYPE | HP | DEN- SER | | | | 4 | 6 | 8 | 10 | 11 | 12 | 14 | 16 | 17 |
| | | (μF) | 220 V | 220 V | 380 V | | | | FLO | OW m³/h | | | | |
| STRM-0,33M | 0,33 | 16 | 2,50 | - | - | 14,10 | 11,60 | 8,30 | 4,00 | - | - | - | - | - |
| STRM-0,50M | 0,50 | 20 | 2,70 | 2,33 | - | 17,20 | 14,90 | 11,40 | 7,90 | 4,80 | - | - | - | 1 |
| STRM-0,80T/M | 0,75 | 25 | 3,40 | 3,03 | 1,44 | 18,90 | 16,70 | 13,50 | 10,80 | 9,00 | 6,80 | - | - | 1 |
| STRM-1,00T/M | 1,00 | 30 | 3,60 | 4,42 | 1,46 | 20,80 | 19,30 | 17,10 | 14,90 | 13,20 | 10,50 | 6,00 | - | 1 |
| STRM-1,50T/M | 1,50 | 30 | 5,15 | 4,60 | 2,30 | 26,00 | 24,80 | 22,00 | 19,50 | 18,00 | 16,50 | 12,50 | 15,00 | - |

| PUMP TYPE | | | | | DIM | IENS | 10 N S | | | | | | | Net Weight (Kg) | | Weight (g) |
|--------------|-------|-------|-----|----|-----|------|--------|-----|-----|-----|-----|-----|--------|--------------------|--------|---------------|
| TOWN THE | DNA | DNI | Α | K | В | С | D | Е | F | G | Н | L | Mo. | Tri. | Mo. | Tri. |
| STRM-0,33M | 11/2" | 11/2" | 510 | 70 | 175 | 265 | 140 | 240 | 255 | 210 | 210 | 315 | 9,980 | - | 10,980 | - |
| STRM-0,50M | 11/2" | 11/2" | 540 | 70 | 175 | 265 | 140 | 240 | 255 | 210 | 210 | 315 | 10,140 | - | 11,140 | - |
| STRM-0,80T/M | 11/2" | 11/2" | 540 | 70 | 175 | 265 | 140 | 240 | 255 | 210 | 210 | 315 | 12,200 | - | 13,200 | 13,000 |
| STRM-1,00T/M | 11/2" | 11/2" | 540 | 70 | 175 | 265 | 140 | 240 | 255 | 210 | 210 | 315 | 11,800 | 10,620 | 12,800 | 11,620 |
| STRM-1,50T/M | 11/2" | 11/2" | 540 | 70 | 175 | 265 | 140 | 240 | 255 | 210 | 210 | 315 | 11,800 | 10,620 | 12,800 | 11,620 |



Stainless steel motor shaft

SUCTION PIPE DIMENSIONS

| PUMP TYPE | STRM-33M | STRM-50M | STRM-80T/M | STRM-100T/M | STRM-150T/M |
|----------------|----------------|----------------|-------------|-------------|-----------------|
| Ø SUCTION PIPE | 1 1/2"(Ø50 mm) | 1 1/2"(Ø50 mm) | 2" (Ø63 mm) | 2" (Ø63 mm) | 2 1/2" (Ø75 mm) |





Noryl impeller

Self-priming Pumps

GEMAS "PUMPEX 2010"

Self-priming, thermoplastic body Monoblock Pool Pump; complete with pre-filter. Suction 1 1/2"-.

Discharge 2"; bigger sizes both 2". Connections are with unions. Easy opening lid with 40° turninig. "Xylex" lid option against aggressive chemicals. Larger basket. 2850 rpm - IP 55 Motor. Pump shaft in stainless steel.





Wide and clear view on prefilter lid Made of polycarbonate



Large volume basket

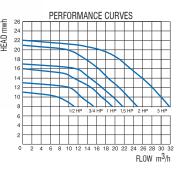


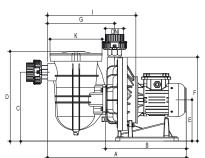
Stainless steel motor shaft



Noryl impeller

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------------------------------|------------|----------------|--------------|--------------------------|
| • PUMPEX-50M 0,50 HP, Monophase | 0111PX50M | 1 | 18,120 | 0,096 |
| • PUMPEX-75M 0,75 HP, Monophase | 0111PX75M | 1 | 20,320 | 0,096 |
| • PUMPEX-75T 0,75 HP, Triphase | 0111PX75T | 1 | 19,120 | 0,096 |
| • PUMPEX-100M 1 HP, Monophase | 0111PX100M | 1 | 20,320 | 0,096 |
| • PUMPEX-100T 1 HP, Triphase | 0111PX100T | 1 | 19,120 | 0,096 |
| • PUMPEX-150M 1,5 HP, Monophase | 0111PX150M | 1 | 20,120 | 0,096 |
| • PUMPEX-150T 1,5 HP, Triphase | 0111PX150T | 1 | 21,120 | 0,096 |
| • PUMPEX-200M 2 HP, Monophase | 0111PX200M | 1 | 25,120 | 0,096 |
| • PUMPEX-200T 2 HP, Triphase | 0111PX200T | 1 | 23,120 | 0,096 |
| • PUMPEX-300M 3 HP, Monophase | 0111PX300M | 1 | 26,120 | 0,096 |
| • PUMPEX-300T 3 HP, Triphase | 0111PX300T | 1 | 26,120 | 0,096 |





| DNA H |
|----------|
| |
| |
| |
| |
| |

| | | CON- | | | | | HEAD mwh | | | | | | | | |
|-----------|------|-------------|-------|-------|------|-------|----------|-------|-------|-------|-------|-------|-------|----|----|
| PUMP TYPE | HP | DEN- SER | " | | | | | 8 | 10 | 12 | 14 | 15 | 16 | 18 | 20 |
| | | (μF) | 220 V | 220 V | | | | | FLOW | m³/h | | | | | |
| PX-50M | 0,50 | 13 | 2,60 | - | - | 11,14 | 7,25 | - | - | - | - | - | - | | |
| PX-75T/M | 0,75 | 20 | 3,80 | 3,70 | - | 15,33 | 12,64 | 10,00 | - | - | - | - | - | | |
| PX-100T/M | 1 | 25 | 4,95 | 3,11 | 1,80 | 19,43 | 17,00 | 14,84 | 11,00 | 8,89 | - | - | - | | |
| PX-150T/M | 1,5 | 30 | 7,80 | 4,41 | 2,55 | 21,65 | 19,47 | 17,12 | 14,57 | 13,30 | 11,36 | - | - | | |
| PX-200T/M | 2 | 40 | 9,90 | 5,88 | 3,40 | 24,80 | 22,90 | 20,90 | 18,40 | 17,50 | 16,40 | 13,60 | 9,60 | | |
| PX-300T/M | 3 | 40 | - | 8,00 | 4,90 | 32,00 | 30,00 | 28,00 | 26,00 | 25,00 | 23,50 | 21,00 | 17,00 | | |

| PUMP TYPE | | DIMENSIONS | | | | | | | | | | | | Net Weight (Kg) | | Gross Weight (Kg) | |
|-----------|-----|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--------------------|--------|----------------------|--------|
| 1000 7112 | DNA | DNI | Α | В | С | D | Е | F | G | 1 | Н | J | K | Mo. | Tri. | Mo. | Tri. |
| PX-50M | 2" | 2" | 730 | 375 | 295 | 384 | 185 | 355 | 390 | 490 | 292 | 315 | 225 | 16,500 | - | 18,120 | - |
| PX-75T/M | 2" | 2" | 730 | 375 | 295 | 384 | 185 | 355 | 390 | 490 | 292 | 315 | 225 | 17,420 | - | 20,320 | 19,120 |
| PX-100T/M | 2" | 2" | 730 | 375 | 295 | 384 | 185 | 355 | 390 | 490 | 292 | 315 | 225 | 18,620 | 17,420 | 20,320 | 19,120 |
| PX-150T/M | 2" | 2" | 750 | 395 | 295 | 384 | 185 | 355 | 390 | 490 | 292 | 315 | 225 | 18,520 | 19,420 | 20,120 | 21,120 |
| PX-200T/M | 2" | 2" | 750 | 395 | 295 | 384 | 185 | 355 | 390 | 490 | 292 | 315 | 225 | 23,420 | 21,420 | 25,120 | 23,120 |
| PX-300T/M | 2" | 2" | 750 | 395 | 295 | 384 | 185 | 355 | 390 | 490 | 292 | 315 | 225 | 24,120 | 24,420 | 26,120 | 26,120 |

SUCTION PIPE DIMENSIONS

| PUMP TYPE | PX-75T/M | PX-100T/M | PX-150T/M | PX-200T/M | PX-300T/M |
|----------------|----------------|-------------|-------------|----------------|-------------|
| Ø SUCTION PIPE | 1 1/2"(Ø50 mm) | 2" (Ø63 mm) | 2" (Ø63 mm) | 2 1/2" (Ø75 mm | 3" (Ø90 mm) |

PS: It is recommended to use conical reduction at the suction line of the pump.



2850 rpm

Self-priming Pumps

GEMAS "STREAMER MICRO"

Self-priming, thermoplastic body Monoblock Pool Pump; complete with pre-filter. Suction & Discharge 1 1/2". Connections are with unions. 2850 rpm - IP 55 Motor.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------------------------|--------------|----------------|--------------|--------------------------|
| • STR-250MIC 1/3 HP, Monophase | 0111STRMIC30 | 1 | 11,880 | 0,051 |
| •STR-370MIC 1/2 HP, Monophase | 0111STRMIC40 | 1 | 12,850 | 0,051 |

| | | CONDENSER | AMPERES | | | | HEAD mwh | | | | | |
|------------|------|-----------|---------|------------------------|------|------|----------|------|------|----|--|--|
| PUMP TYPE | HP | (μF) | | 6 | 7 | 8 | 9 | 10 | 13 | 14 | | |
| | | • ′ | 220 V | FLOW m ³ /h | | | | | | | | |
| STR-250MIC | 0,33 | - | 1,20 | 5,70 | 5,10 | 4,30 | 3,50 | 1,50 | - | - | | |
| STR-370MIC | 0,50 | - | 2,20 | 7,50 | 7,00 | 6,50 | 5,90 | 5,20 | 2,10 | - | | |



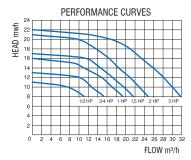
With union connection

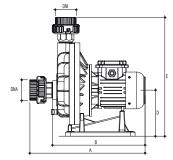
GEMAS "PUMPEX-JET".

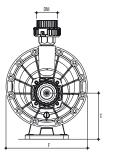
Counter current pump. Suction 2", Discharge 1 1/2". Connections are with unions. Pump shaft in stainless steel. IP55 motor.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------------------------|-------------|----------------|--------------|--------------------------|
| • PUMPEXJ-50M 0,50 HP, Monophase | 0111PXJ50M | 1 | 16,000 | 0,066 |
| • PUMPEXJ-75M 0,75 HP, Monophase | 0111PXJ75M | 1 | 17,000 | 0,066 |
| • PUMPEXJ-75T 0,75 HP, Triphase | 0111PXJ75T | 1 | 16,000 | 0,066 |
| • PUMPEXJ-100M 1 HP, Monophase | 0111PXJ100M | 1 | 17,000 | 0,066 |
| • PUMPEXJ-100T 1 HP, Triphase | 0111PXJ100T | 1 | 16,000 | 0,066 |
| • PUMPEXJ-150M 1,5 HP, Monophase | 0111PXJ150M | 1 | 17,000 | 0,066 |
| • PUMPEXJ-150T 1,5 HP, Triphase | 0111PXJ150T | 1 | 18,000 | 0,066 |
| • PUMPEXJ-200M 2 HP, Monophase | 0111PXJ200M | 1 | 22,000 | 0,066 |
| • PUMPEXJ-200T 2 HP, Triphase | 0111PXJ200T | 1 | 21,000 | 0,066 |
| • PUMPEXJ-300M 3 HP, Monophase | 0111PXJ300M | 1 | 22,000 | 0,066 |
| • PUMPEXJ-300T 3 HP, Triphase | 0111PXJ300T | 1 | 21,000 | 0,066 |









| | PUMP TYPE HP SER II | | MPERES | 3 | | HEAD mwh | | | | | | | |
|------------|---------------------|------|--------|------|-------|----------|-------|-------|-------|-------|-------|-------|-------|
| PUMP TYPE | | | | | | | 10 | 12 | 14 | 15 | 16 | 18 | 20 |
| | | (μF) | 220 V | | 380 V | | | | FLOW | m³/h | | | |
| PXJ-50M | 0,50 | 13 | 2,60 | - | - | 11,14 | 7,25 | - | - | - | - | - | - |
| PXJ-75T/M | 0,75 | 20 | 3,80 | 3,70 | - | 15,33 | 12,64 | 10,00 | - | - | - | - | - |
| PXJ-100T/M | 1 | 25 | 4,95 | 3,11 | 1,80 | 19,43 | 17,00 | 14,84 | 11,00 | 8,89 | - | - | - |
| PXJ-150T/M | 1,5 | 30 | 7,80 | 4,41 | 2,55 | 21,65 | 19,47 | 17,12 | 14,57 | 13,30 | 11,36 | - | - |
| PXJ-200T/M | 2 | 40 | 9,90 | 5,88 | 3,40 | 24,80 | 22,90 | 20,90 | 18,40 | 17,50 | 16,40 | 13,60 | 9,60 |
| PX-300T/M | 3 | 40 | - | 8,00 | 4,90 | 32,00 | 30,00 | 28,00 | 26,00 | 25,00 | 23,50 | 21,00 | 17,00 |

| PUMP TYPE | | | | D | Net W (K | | Gross Weight (Kg) | | | | | |
|------------|-----|-----|-----|-----|-------------|-----|----------------------|-----|--------|--------|--------|--------|
| | DNA | DNI | Α | В | С | D | Е | F | Mo. | Tri. | Mo. | Tri. |
| PXJ-50M | 2" | 2" | 470 | 375 | 185 | 185 | 460 | 315 | 16,500 | - | 18,120 | - |
| PXJ-75T/M | 2" | 2" | 470 | 375 | 185 | 185 | 460 | 315 | 17,420 | - | 20,320 | 19,120 |
| PXJ-100T/M | 2" | 2" | 470 | 375 | 185 | 185 | 460 | 315 | 18,620 | 17,420 | 20,320 | 19,120 |
| PXJ-150T/M | 2" | 2" | 490 | 395 | 185 | 185 | 460 | 315 | 18,520 | 19,420 | 20,120 | 21,120 |
| PXJ-200T/M | 2" | 2" | 490 | 395 | 185 | 185 | 460 | 315 | 23,420 | 21,420 | 25,120 | 23,120 |
| PXJ-300T/M | 2" | 2" | 490 | 395 | 185 | 185 | 460 | 315 | 24,120 | 24,420 | 26,120 | 26,120 |

| TYPE | Packing Dimentions (mm) |
|---------------------------------------|-------------------------|
| PXJ - 50 / 75 / 100 / 150 / 200 / 300 | 560 x 360 x 400 |



Cross section of impeller system.



Self-priming Pool Pumps

GEMAS "FLOODER"

Self-priming, thermoplastic body Commercial Pool Pump; complete with 20 I pre-filter.

Suction and Discharge 4" (Ø110). Connections are with slip unions. Pump shaft in stainless steel. 2850 rpm - IP55 Motor.





Stainless steel motor shaft

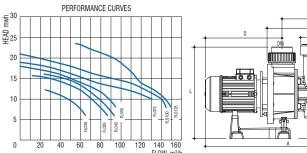
| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------------------------|------------|----------------|--------------|--------------------------|
| •3 HP, Monophase, FLO 300M | 0111FL030M | 1 | 33,250 | |
| •3 HP, Triphase, FLO 300T | 0111FL030 | 1 | 32,250 | |
| •3,5 HP, Monophase, FLO 350M | 0111FL035M | 1 | 33,250 | |
| •3,5 HP, Triphase, FLO 350T | 0111FL035 | 1 | 32,250 | |
| •4,5 HP, Triphase, FLO 450T | 0111FL045 | 1 | 35,350 | |
| •5,5 HP, Triphase, FLO 550T | 0111FL055 | 1 | 42,100 | |
| •7,5 HP, Triphase, FLO 750T | 0111FL075 | 1 | 49,950 | |
| •10 HP, Triphase, FLO 1000T | 0111FL0100 | 1 | 56,100 | |
| •12,5 HP, Triphase, FLO 1250T | 0111FL0125 | 1 | 56,100 | |

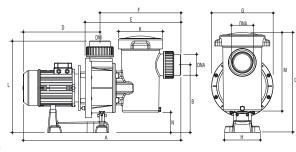
PS: * All models could be coupled with larger capacity pre-filters upon request.

** In cases of High Pressure due to pool depth, a polyester pre-filter is preferred. See stock code 013209 - FR Polyester Pre Filter.



Noryl impeller







d.110 slip connection

| | | CONDEN- | | AMPERES | | | | | HEAD mwh | | | |
|-----------|-----|---------|-------|---------|-------|--------|-------|-------|------------------------|-------|-------|-------|
| PUMP TYPE | HP | SER | II | II | | 6 | 8 | 10 | 12 | 14 | 16 | 17 |
| | | (μF) | 220 V | 230 V | 380 V | | | | FLOW m ³ /h | | | |
| 0111FL030 | 3,0 | - | - | 10,40 | 6,00 | 65,00 | 56,50 | 47,00 | 25,00 | | - | - |
| 0111FL035 | 3,5 | - | - | 10,40 | 6,00 | 86,00 | 78,00 | 70,00 | 60,00 | 45,00 | 12,00 | - |
| 0111FL045 | 4,5 | - | - | 11,70 | 6,75 | 94,00 | 88,00 | 78,00 | 68,00 | 55,00 | 24,00 | - |
| 0111FL055 | 5,5 | - | - | 13,80 | 8,00 | 102,00 | 95,00 | 88,00 | 78,00 | 60,00 | 40,00 | 23,00 |

| | | CONDEN- | | AMPERES | | | | | H | IEAD mw | h | | | |
|------------|------|---------|-------|---------|-------|--------|--------|--------|--------|----------------------|--------|-------|-------|----|
| PUMP TYPE | HP | SER | | III | | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 24 | 25 |
| | | (μF) | 230 V | 400 V | 700 V | | | | Fl | OW m ³ /h | 1 | | | |
| 0111FL075 | 7,5 | - | - | 12,10 | 7,00 | 140,00 | 131,00 | 110,00 | 76,00 | 53,00 | 25,00 | - | - | - |
| 0111FL0100 | 10,0 | - | - | 15,80 | 9,20 | 145,00 | 140,00 | 126,00 | 108,00 | 75,00 | 50,00 | 18,00 | - | - |
| 0111FL0125 | 12,5 | - | - | 15,80 | 9,20 | 150,00 | 144,00 | 134,30 | 120,00 | 113,00 | 104,00 | 92,70 | 56,80 | - |

| PUMP TYPE | | | | | | D | IMENSI | ONS | | | | | | | Net Weight | Gross Weight |
|------------|-----|-----|-----|-----|-----|-----|--------|-----|-----|-----|-----|-----|-----|-----|---------------|-----------------|
| | DNA | DNI | Α | K | В | С | D | Е | F | G | Н | L | M | N | (Kg) | (Kg) |
| 0111FL030 | 4" | 4" | 890 | 265 | 415 | 590 | 400 | 573 | 485 | 358 | 210 | 550 | 467 | 115 | 30,750 | 32,250 |
| 0111FL035 | 4" | 4" | 890 | 265 | 415 | 590 | 400 | 573 | 485 | 358 | 210 | 550 | 467 | 115 | 30,750 | 32,250 |
| 0111FL045 | 4" | 4" | 890 | 265 | 415 | 590 | 400 | 573 | 485 | 358 | 210 | 550 | 467 | 115 | 33,850 | 35,350 |
| 0111FL055 | 4" | 4" | 910 | 265 | 415 | 590 | 420 | 573 | 485 | 358 | 210 | 550 | 467 | 115 | 40,600 | 42,100 |
| 0111FL075 | 4" | 4" | 910 | 265 | 415 | 590 | 420 | 573 | 485 | 358 | 210 | 550 | 467 | 115 | 48,450 | 49,950 |
| 0111FL0100 | 4" | 4" | 930 | 265 | 415 | 590 | 440 | 573 | 485 | 358 | 210 | 550 | 467 | 115 | 54,600 | 56,100 |
| 0111FL0125 | 4" | 4" | 930 | 265 | 415 | 590 | 440 | 573 | 485 | 358 | 210 | 550 | 467 | 115 | | |

SUCTION PIPE DIMENSIONS

| PUMP TYPE | 0111FL030 | 0111FL035 | 0111FL045 | 0111FL055 | 0111FL075 | 0111FL0100 | 0111FL0125 |
|----------------|----------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Ø SUCTION PIPE | 41/2"(Ø125 mm) | 5"(Ø140 mm) | 5"(Ø140 mm) | 6"(Ø160 mm) | 7"(Ø200 mm) | 7"(Ø200 mm) | 7"(Ø200 mm) |





Self-priming Pool Pumps

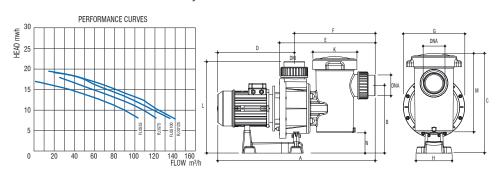
GEMAS "FLOODER"

Self-priming, thermoplastic body Commercial Pool Pump; complete with 20 I pre-filter. Suction and Discharge 4" (Ø110). Connections are with slip unions. Pump shaft in stainless steel. 1450 rpm - IP55 Motor.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------------------------|-------------|----------------|--------------|--------------------------|
| •5,5 HP, Triphase, FLOS550T | 0111FL0S55 | 1 | 42,100 | 0,213 |
| •7,5 HP, Triphase, FLOS750T | 0111FL0S75 | 1 | 49,950 | 0,213 |
| •10 HP, Triphase, FLOS1000T | 0111FL0S100 | 1 | 56,100 | 0,213 |
| •12,5 HP, Triphase, FLOS1250T | 0111FL0S125 | 1 | 56,100 | 0,213 |



^{**} In cases of High Pressure due to pool depth, a polyester pre-filter is preferred. See stock code 013209 - FR Polyester Pre Filter.



| | | CONDEN- | | AMPERES | | | | | HEAD mwh | | | |
|------------|-----|---------|-------|---------|-------|---|--------|-------|------------------------|-------|-------|----|
| PUMP TYPE | HP | SER | II | II | | 6 | 8 | 10 | 12 | 14 | 16 | 17 |
| | | (μF) | 220 V | 220 V | 380 V | | | | FLOW m ³ /h | | | |
| 0111FL0S55 | 5,5 | - | - | | | - | 105,00 | 90,00 | 70,00 | 45,00 | 15,00 | - |

| | | CONDEN- | | AMPERES | | | | | Н | EAD mwh | า | | | |
|-------------|------|---------|-------|---------|-------|--------|--------|--------|--------|---------|-------|-------|-------|-------|
| PUMP TYPE | HP | SER | | III | | 8 | 10 | 11 | 12 | 13 | 14 | 16 | 18 | 19 |
| | | (μF) | 230 V | 400 V | 700 V | | | | FI | OW m3/h | 1 | | | |
| 0111FL0S75 | 7,5 | - | - | | | 120,00 | 107,00 | 100,00 | 90,00 | 80,00 | 66,00 | 43,00 | 25,00 | 10,00 |
| 0111FL0S100 | 10,0 | - | - | | | 135,00 | 120,00 | 110,00 | 103,00 | 97,00 | 83,00 | 60,00 | 35,00 | 20,00 |
| 0111FL0S125 | 12,5 | - | - | | | 140,00 | 123,00 | | 110,00 | | 85,00 | 65,00 | 35,00 | 18,00 |

| PUMP TYPE | | | | | | [| O I M E C | NSION | ۱S | | | | | | Net Weight | Gross Weight |
|--------------|-----|-----|-----|-----|------|-----|-----------|-------|-----|-----|-----|-----|-----|-----|---------------|-----------------|
| | DNA | DNI | Α | K | В | С | D | Е | F | G | Н | L | М | N | (Kg) | (Kg) |
| 0111FL0S55 | 4" | 4" | 910 | 265 | 415 | 590 | 420 | 573 | 485 | 358 | 210 | 550 | 467 | 115 | 40,600 | 42,100 |
| 0111FL0S75 | 4" | 4" | 910 | 265 | 415 | 590 | 420 | 573 | 485 | 358 | 210 | 550 | 467 | 115 | 48,450 | 49,950 |
| 0111FL0S100 | 4" | 4" | 935 | 265 | 415 | 590 | 440 | 573 | 485 | 358 | 210 | 550 | 467 | 115 | 54,600 | 56,100 |
| 044451 00405 | 4" | 4" | 025 | OCE | 44.5 | EOO | 440 | E70 | 40E | 050 | 010 | EEO | 467 | 445 | E4 C00 | EC 100 |

| | DNA | DNI | Α | K | В | С | D | Е | F | G | Н | L | М | N | (Kg) | (Kg) |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--------|--------|
| 0111FL0S55 | 4" | 4" | 910 | 265 | 415 | 590 | 420 | 573 | 485 | 358 | 210 | 550 | 467 | 115 | 40,600 | 42,100 |
| 0111FL0S75 | 4" | 4" | 910 | 265 | 415 | 590 | 420 | 573 | 485 | 358 | 210 | 550 | 467 | 115 | 48,450 | 49,950 |
| 0111FL0S100 | 4" | 4" | 935 | 265 | 415 | 590 | 440 | 573 | 485 | 358 | 210 | 550 | 467 | 115 | 54,600 | 56,100 |
| 0111FL0S125 | 4" | 4" | 935 | 265 | 415 | 590 | 440 | 573 | 485 | 358 | 210 | 550 | 467 | 115 | 54,600 | 56,100 |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |

SUCTION PIPE DIMENSIONS

| PUMP TYPE | 0111FL0S55 | 0111FL0S75 | 0111FL0S100 | 0111FL0S125 |
|----------------|-------------|-------------|-------------|-------------|
| Ø SUCTION PIPE | 6"(Ø160 mm) | 7"(Ø200 mm) | 7"(Ø200 mm) | 7"(Ø200 mm) |



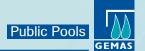
Stainless steel motor shaft



Noryl impeller



d.110 slip connection



Self-priming Pool Pumps

GEMAS "FLOODER JET"
Self-priming, thermoplastic
body Jet Pump. Suction and Discharge 4" (Ø110).
Connections are with slip union. 2850 rpm - IP 55
Motor. Pump shaft in stainless steel.





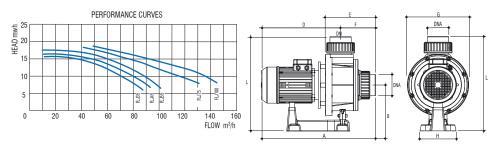
Stainless steel motor shaft

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------------------------|------------|----------------|--------------|--------------------------|
| •3 HP, Monophase, FLJ 300M | 0111FLJ30M | 1 | 27,000 | 0,150 |
| •3 HP, Triphase, FLJ 300T | 0111FLJ30 | 1 | 26,000 | 0,150 |
| •3,5 HP, Monophase, FLJ 350M | 0111FLJ35M | 1 | 27,000 | 0,150 |
| •3,5 HP, Triphase, FLJ 350T | 0111FLJ35 | 1 | 26,000 | 0,150 |
| •4,5 HP, Triphase, FLJ 450T | 0111FLJ45 | 1 | 29,900 | 0,150 |
| •5,5 HP, Triphase, FLJ 550T | 0111FLJ55 | 1 | 37,300 | 0,150 |
| •7,5 HP, Triphase, FLJ 750T | 0111FLJ75 | 1 | 45,250 | 0,150 |
| •10 HP, Triphase, FLJ 1000T | 0111FLJ100 | 1 | 51,400 | 0,150 |
| •12,5 HP, Triphase, FLJ 1250T | 0111FLJ125 | 1 | 51,400 | 0,150 |

PS: All models can be produced with Ø125 or Ø110 mm suction connection.



Noryl impeller



| | | CONDEN- | | AMPERES | | HEAD mwh | | | | | | | | | |
|-----------|-----|---------|-------|---------|-------------|----------|------------------------|-------|-------|-------|-------|-------|--|--|--|
| PUMP TYPE | HP | SER | II | II | | 6 | 8 | 10 | 12 | 14 | 16 | 17 | | | |
| | | (μF) | 220 V | 220 V | 220 V 380 V | | FLOW m ³ /h | | | | | | | | |
| 0111FLJ30 | 3,0 | - | - | | | 65,00 | 56,50 | 47,00 | 25,00 | | | | | | |
| 0111FLJ35 | 3,5 | - | - | 10,40 | 6,00 | 86,00 | 78,00 | 70,00 | 60,00 | 45,00 | 12,00 | - | | | |
| 0111FLJ45 | 4,5 | - | - | 11,70 | 6,75 | 94,00 | 88,00 | 78,00 | 68,00 | 55,00 | 24,00 | - | | | |
| 0111FLJ55 | 5,5 | - | - | 13,80 | 8,00 | 102,00 | 95,00 | 88,00 | 78,00 | 68,00 | 50,00 | 28,00 | | | |

| | | CONDEN- | | AMPERES | | | | | H | IEAD mw | h | | | |
|------------|------|---------|-------|---------|-------|--------|--------|--------|--------|----------------------|--------|--------|--------|----|
| PUMP TYPE | HP | SER | | III | | 8 | 10 | 11 | 12 | 13 | 14 | 16 | 18 | 21 |
| | | (μF) | 230 V | 400 V | 700 V | | | | Fl | OW m ³ /h | 1 | | | |
| 0111FLJ75 | 7,5 | - | - | 12,10 | 7,00 | 121,00 | 112,00 | 107,00 | 101,00 | 96,00 | 87,00 | 65,50 | 42,50 | - |
| 0111FLJ100 | 10,0 | - | - | 15,80 | 9,20 | 145,00 | 136,60 | 130,00 | 123,00 | 113,00 | 101,50 | 78,50 | 49,50 | - |
| 0111FLJ125 | | | | 15,80 | 9,20 | 150,00 | 144,00 | | 134,30 | | 120,00 | 113,00 | 104,00 | |

| PUMP TYPE | | | | | DIMENS | IONS | | | | | Net Weight | Gross Weight |
|------------|-----|-----|-----|-----|--------|------|-----|-----|-----|-----|---------------|-----------------|
| | DNA | DNI | А | В | D | E | F | G | Н | L | (Kg) | (Kg) |
| 0111FLJ30 | 4" | 4" | 600 | 268 | 395 | 293 | 205 | 358 | 210 | 550 | 25,750 | 27,000 |
| 0111FLJ35 | 4" | 4" | 600 | 268 | 395 | 293 | 205 | 358 | 210 | 550 | 25,750 | 27,000 |
| 0111FLJ45 | 4" | 4" | 600 | 268 | 395 | 293 | 205 | 358 | 210 | 550 | 28,650 | 29,900 |
| 0111FLJ55 | 4" | 4" | 620 | 268 | 415 | 293 | 205 | 358 | 210 | 550 | 36,050 | 37,300 |
| 0111FLJ75 | 4" | 4" | 620 | 268 | 415 | 293 | 205 | 358 | 210 | 550 | 44,000 | 45,250 |
| 0111FLJ100 | 4" | 4" | 640 | 268 | 435 | 293 | 205 | 358 | 210 | 550 | 50,150 | 51,400 |
| 0111FLJ125 | 4" | 4" | 640 | 268 | 435 | 293 | 205 | 358 | 210 | 550 | | |

SUCTION PIPE DIMENSIONS

| PUMP TYPE | 0111FLJ35 | 0111FLJ45 | 0111FLJ5 5 | 0111FLJ7 5 | 0111FLJ1 0 0 | 0111FLJ1 2 5 |
|----------------|-------------|-------------|-------------|--------------|--------------|--------------|
| Ø SUCTION PIPE | 5"(Ø140 mm) | 5"(Ø140 mm) | 6"(Ø160 mm) | 7" (Ø200 mm) | 7"(Ø200 mm) | 7"(Ø200 mm) |



1450 rpm





Self-priming Pool Pumps

GEMAS "FLOODER JET"

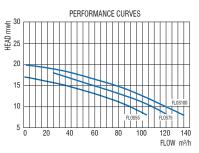
Self-priming, thermoplastic
body Jet Pump. Suction and Discharge 4" (Ø110).

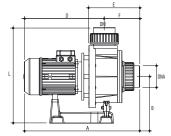
Connections are with slip union. 1450 rpm - IP 55 Motor.

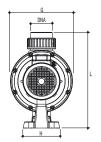
Pump shaft in stainless steel.

| Kg | Volume m ³ |
|--------|----------------------------|
| 37,300 | 0,150 |
| 45,250 | 0,150 |
| 51,400 | 0,150 |
| 51,400 | 0,150 |
| | 37,300 45,250 51,400 |

PS: All models can be produced with Ø125 or Ø110 mm suction connection.







| | CONDEN- AMPERES | | | | | | | | HEAD mwh | | | |
|------------|-----------------|-------|---------------|----|---|---|--------|------------------------|----------|-------|-------|----|
| PUMP TYPE | HP | SER | II | II | I | 6 | 8 | 10 | 12 | 14 | 16 | 17 |
| | | 220 V | 220 V 380 V | | | | | FLOW m ³ /h | | | | |
| 0111FLJS55 | 5,5 | - | - | | | - | 105,00 | 90,00 | 70,00 | 45,00 | 15,00 | - |

| | | CONDEN- | | AMPERES | | | | | H | IEAD mw | h | | | |
|-------------|------|---------|-------|---------|--|--------|-----------|--------|--------|---------|-------|-------|-------|-------|
| PUMP TYPE | HP | SER | | III | | 8 | 10 | 11 | 12 | 13 | 14 | 16 | 18 | 19 |
| | | (μF) | 230 V | | | | FLOW m³/h | | | | | | | |
| 0111FLJS75 | 7,5 | - | - | | | 120,00 | 107,00 | 100,00 | 90,00 | 80,00 | 66,00 | 43,00 | 25,00 | 10,00 |
| 0111FLJS100 | 10,0 | - | - | | | 135,00 | 120,00 | 110,00 | 103,00 | 97,00 | 83,00 | 60,00 | 35,00 | 20,00 |
| 0111FLJS125 | 12,5 | - | - | | | 140,00 | 123,00 | - | 110,00 | - | 85,00 | 65,00 | 35,00 | 18,00 |

| PUMP TYPE | | | | | DIMEN | SIONS | | | | | Net Weight | Gross Weight (Kg) | |
|-------------|-----|-----|-----|-----|-------|-------|-----|-----|-----|-----|---------------|-------------------------|--|
| | DNA | DNI | Α | В | D | Е | F | G | Н | L | (Kg) | | |
| 0111FLJS55 | 4" | 4" | 665 | 268 | 460 | 293 | 205 | 358 | 210 | 550 | 36,050 | 37,300 | |
| 0111FLJS75 | 4" | 4" | 665 | 268 | 460 | 293 | 205 | 358 | 210 | 550 | 44,000 | 45,250 | |
| 0111FLJS100 | 4" | 4" | 705 | 268 | 500 | 293 | 205 | 358 | 210 | 550 | 50,150 | 51,400 | |
| 0111FLJS125 | 4" | 4" | 705 | 268 | 500 | 293 | 205 | 358 | 210 | 550 | 50,150 | 51,400 | |

SUCTION PIPE DIMENSIONS

| 0001101411111111 | IIVILIVOIONO | | | |
|------------------|--------------|-------------|---------------|---------------|
| PUMP TYPE | 0111FLJS5 5 | 0111FLJS7 5 | 0111FLJS1 0 0 | 0111FLJS1 2 5 |
| Ø SUCTION PIPE | 6"(Ø160 mm) | 7"(Ø200 mm) | 7"(Ø200 mm) | 7"(Ø200 mm) |



Stainless steel motor shaft



Noryl impeller



Self-priming Pool Pumps

GEMAS "MEGAFLOODER"

Self-priming, thermoplastic body Commercial Pool Pump; WITHOUT PREFILTER. Pump shaft in stainless steel. 2850 rpm - IP 55 Motor.



Stainless steel motor shaft

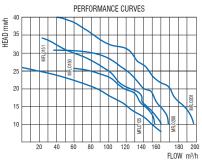


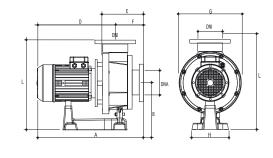
| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|------------|----------------|--------------|--------------------------|
| •12,5 HP, Triphase, MFLO 1250T | 0111MFL125 | 1 | 51,400 | |
| • 15 HP,Type I Triphase, MFLO 1500T | 0111MFL150 | 1 | 153,000 | |
| •15 HP,Type II Triphase, MFLO 1500T | 0111MFL151 | 1 | 153,000 | |
| •20 HP, Type I Triphase, MFLO 2000T | 0111MFL200 | 1 | 187,000 | |
| •20 HP, Type II Triphase, MFLO 2000T | 0111MFL201 | 1 | 187,000 | |
| • 6" Plastic Pre- Filter, 40 I | 013331 | 1 | 25,700 | |
| •5"-6" Polyester Laminated Pre-Filter, 20 I | 013217 | 1 | 16,700 | |
| • 5"-8" Polyester Laminated Pre-Filter, 65 I | 0132241 | 1 | 31,500 | |

Note: Please refer to the "Pump Pre- Filters (Strainers)" section for pre-filter options and prices.



Special polyester base for heavy weight







013331

| | | CON- | AN | /IPERE | S | | | | | | | | HEAD | mwh | | | | | | | |
|-------------|------|-------------|------|--------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|-------|
| PUMP TYPE | HP | DEN- SER | Ш | - 1 | II | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 24 | 26 | 28 | 31 | 32 | 33 | 34 | 37 | 41 |
| | | (μF) | 220V | 220V | 380V | | | | | | | | FLOW | m³/h | | | | | | | |
| 0111MFL0125 | 12,5 | - | - | - | - | 150,00 | 141,00 | 127,00 | 116,50 | 101,00 | 87,00 | 65,00 | 37,50 | | - | | - | | - | | - |
| 0111MFL0150 | 15,0 | - | - | - | - | 152,00 | 151,00 | 144,00 | 136,00 | 130,00 | 118,00 | 108,00 | 88,00 | 60,00 | | | - | | | | - |
| 0111MFL0200 | 20,0 | - | - | - | - | 169,00 | 165,00 | 161,00 | 155,00 | 150,00 | 140,00 | 134,00 | 124,00 | 114,00 | 92,00 | 36,00 | - | | | | - |
| 0111MFL0151 | 15,0 | - | - | - | - | 160,00 | 153,00 | 144,00 | 138,00 | 128,00 | 124,00 | 110,00 | 104,00 | 93,00 | 74,00 | 49,00 | 39,00 | 31,00 | 22,50 | | - |
| 0111MFL0201 | 20,0 | - | - | 1 | - | 197,00 | 185,00 | 183,00 | 177,00 | 167,00 | 160,00 | 151,00 | 143,00 | 134,00 | 123,00 | 100,00 | 90,00 | 86,00 | 78,00 | 56,00 | 18,00 |

| PUMP TYPE | | | | | DIME | NSIONS | | | | | | Net V (K | Veight (g) | Gross (K | |
|-------------|-----|-----|-----|-----|------|--------|-----|-----|-----|-----|-----|-------------|---------------|----------|------|
| | DNA | DNI | Α | В | С | D | E | F | G | Н | L | Mo. | Tri. | Mo. | Tri. |
| 0111MFL0125 | | | | | | | | | | | | | | | |
| 0111MFL0150 | 5" | 5" | 700 | 280 | - | 540 | 260 | 160 | 360 | 420 | 252 | - | 139 | - | 153 |
| 0111MFL0200 | 5" | 5" | 700 | 280 | - | 640 | 260 | 160 | 360 | 420 | 252 | - | 170 | - | 187 |
| 0111MFL0151 | 5" | 5" | 700 | 280 | - | 540 | 260 | 160 | 360 | 420 | 252 | - | 139 | - | 153 |
| 0111MFL0201 | 5" | 5" | 700 | 280 | - | 640 | 260 | 160 | 360 | 420 | 252 | - | 170 | - | 187 |



Polyester laminated pre-filter (optional)

SUCTION PIPE DIMENSIONS

| PUMP TYPE | 0111FL0125 | 0111MFL0150 | 0111MFL0200 |
|----------------|-------------|--------------|-------------|
| Ø SUCTION PIPE | 8"(Ø225 mm) | 8"(Ø225 mm) | 8"(Ø225 mm) |
| PLIMP TYPE | 0111MFL0151 | 0111MFL 0201 | |

Ø SUCTION PIPE | 8"(Ø225 mm) | 8"(Ø225 mm)

- Locking nut Transparent lid O-ring Pre filter basket Pre filter body
- Gasket for drain
- Drain plug Connection screws
- Body gasket
- 10- Body o-ring











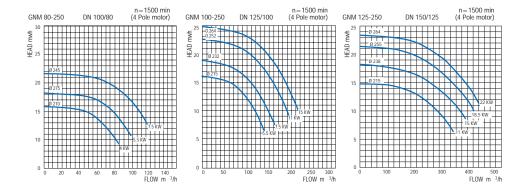
Cast Iron Pool Pumps

GEMAS "PUMPEX CAST IRON POOL PUMPS"

Cast iron body with mechanical seal and triphase motor. Shaft in Inox 420. 1450 rpm. Body for 10 bar pressure. In conformity with DIN 24255. Prefilter not included in the price.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------------------------------------|---------------------|----------------|--------------|--------------------------|
| •GNM 80-250. 70 m³/h - | 011212P | 1 | | |
| 16 mwh - 7,5 HP (5,5 kw) 4" - 3" Disc | charge - Ø 225 Fan. | | | |
| •GNM 100-250. 100 m³/h - | 011222P | 1 | | |
| 16 mwh - 10 HP (7,5 kw) 5" - 4" Disc | harge - Ø 232 Fan. | | | |
| •GNM 100-250. 150 m³/h - | 011223P | 1 | | |
| 16 mwh - 15 HP (11 kw) 5"- 4" Disch | narge - Ø 252 Fan. | | | |
| •GNM 125-250. 230 m³/h - | 011231P | 1 | | |
| 16 mwh - 20 HP (15 kw) 6" - 5" Disch | narge - Ø 238 Fan. | | | |

- 1- The pumps listed are produced upon request. Lead Time is approximately 7-15 days. Please ask price for the capacities which are not on the list.2- Bronze fan and stainless steel shaft pumps are to be considered at %30 higher price.



Pump Bases and Vibration Bricks

Pump Base made in AISI 304 quality stainless steel. Designed for pumps up to 3 HP.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| • Single | 01411 | 1 | 4,330 | 0,030 |
| • Double | 01412 | 1 | 8,320 | 0,040 |



FR Polyester Pump Base. Can be used for all Streamer and Flooder models up to 10 HP. 375 x 250 x 190 mm.

| Description | Code | Pieces/ Weight Volume box Kg m³ |
|-------------|-------|------------------------------------|
| • Single | 01413 | 1 |



Installed to reduce pump vibration.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------------|-----------|----------------|--------------|--------------------------|
| •M8, Ø30 - 25 mm | 0111STS10 | 1 | | |
| •M10, Ø50 - 35 mm | 0111STS21 | 1 | | |





Pump Pre-Filters (Strainers)



Stainless Steel Pre-Filters

AISI 304 Quality Stainless Steel Pre-filter. Lid with nuts. Connections with Loose Flange.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| •5" | 01312 | 1 | 15,000 | |
| •6" | 01313 | 1 | 17,350 | |
| •8" | 01314 | 1 | 19,450 | |

01312

Plastic Pre-Filters

Fiberglass Reinforced PP Body. 20 I and 40 I capacity. PP basket. Polycarbonate transparent lid.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-----------------------------|----------|----------------|--------------|--------------------------|
| •4" - Unions | 013311 | 1 | 9,740 | |
| •5"- Flanged | 013321 | 1 | 10,750 | |
| • Stainless Steel Prefilter | 0111FL01 | 1 | | |
| Basket AISI 304 Quality | | | | |
| •6" - Flanged - 40 l | 013331 | 1 | 25,300 | |





013321



013311

013331



FR Polyester Pre Filter

Fiber glass reinforced polyester body pre filter. Plastic prefilter basket, transparent acrylic lid, sliding flange.

| Description | Code | Pieces/ Weight Volume box Kg m ³ |
|---------------------------------------|--------|--|
| • 4" - 4,5" Suitable for Flooder Pump | 013209 | 1 |
| • 4" | 013210 | 1 |
| •6" | 013323 | 1 |



Fiber glass reinforced polyester pre filter. Sliding flange connection and 20 I capacity. Pipe connections can be produced according to demand. Basket and opening mechanism is made of stainless steel. Transparent acrylic lid. Can be used up to 160 mm connections.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|--------|----------------|--------------|--------------------------|
| • 4" | 013211 | 1 | 16,700 | 0,140 |
| • 5" | 013212 | 1 | 16,700 | 0,140 |
| •6" | 013213 | 1 | 16,700 | 0,140 |

Pump Pre-Filters (Strainers)

Fiber glass reinforced polyester pre filter. Sliding flange connection and **65** I capacity. Pipe connections can be produced according to demand. Stainless steel basket. Transparent acrylic lid. Can be used up to 225 mm connections.

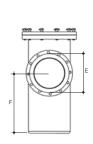
| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|--------|----------------|--------------|--------------------------|
| • 4" | 013215 | 1 | 31,500 | 0,340 |
| • 5" | 013216 | 1 | 31,500 | 0,340 |
| •6" | 013223 | 1 | 31,500 | 0,340 |
| •8" | 013229 | 1 | | |

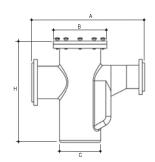


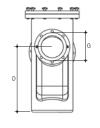
Fiber glass reinforced polyester pre filter. Sliding flange connection. Ø280, Ø315 and Ø355 has **125 I:** Ø400 and Ø450 has **285 I** capacity. AISI 304 quality stainless steel basket. Transparent acrylic lid. Can be used up to 225 mm connections.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|--------|----------------|--------------|--------------------------|
| •8"- Ø280 | 013224 | 1 | | |
| •8"- Ø315 | 013225 | 1 | | |
| •8"- Ø355 | 013226 | 1 | | |
| •8"-Ø400 | 013227 | 1 | | |
| •8"- Ø450 | 013228 | 1 | | |









| PRF-FII TFR TYPF | Code | | | | DIMENSI | ONS | | | |
|------------------|--------|------|-----|-----|---------|------|-----|------|------|
| THE TIETER THE | 0040 | А | В | С | D | E | F | G | Н |
| Ø225 - Ø280 | 013224 | | | | | | | | |
| Ø225 - Ø315 | 013225 | 1098 | 520 | 400 | 635 | Ø315 | 582 | Ø225 | 983 |
| Ø225 - Ø355 | 013226 | 1098 | 520 | 400 | 635 | Ø355 | 582 | Ø225 | 983 |
| Ø225 - Ø400 | 013227 | 1373 | 680 | 553 | 864 | Ø400 | 788 | Ø225 | 1220 |
| Ø225 - Ø450 | 013228 | 1373 | 680 | 553 | 864 | Ø400 | 788 | Ø225 | 1220 |







"Seljuk" BL High Rate Sand Filter

GEMAS "Seljuk" It is produced from high quality PP material with plastic injection technology. Upper and lower parts are combined with a special welding technique. Complete with transparent lid, multiport valve, fittings, pressure gauge and air vent. 2 years warranty. Test pressure 3,5 kg/cm², Maximum working pressure 2.5 kg/cm², Maximum filtration rate 50 m³/h/m².









Transparent Bolted Lid (Patented)



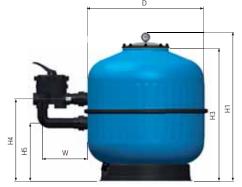






Weight Pieces/ Volume Description Code box Κğ \mathbf{m}^3 •Ø500 11/2" Multi-way Valve 021131 12,000 0,215 • Ø630 11/2" Multi-way Valve 13,350 0,325 021132 • Ø710 2" Multi-way Valve 021133 18,500 0,440

| ■ Ø500 1 ^{1/2} Multi-way Valve | 021131T | 1 | 11,514 | 0,215 |
|---|---------|---|--------|-------|
| •Ø630 11/2" Multi-way Valve | 021132T | 1 | 13,350 | 0,325 |
| •Ø710 2" Multi-way Valve | 021133T | 1 | 18,500 | 0,440 |
| | | | | |





TECHNICAL CHARACTERISTICS

| MODEL | 021131 | 021132 | 021133 | 021131T | 021132T | 021133T |
|---|--------|--------|--------|---------|---------|---------|
| D (mm) | 500 | 630 | 710 | 500 | 630 | 710 |
| H ₁ (mm) | 765 | 850 | 920 | 845 | 930 | 1030 |
| H ₂ (mm) | - | - | - | - | - | - |
| H ₃ (mm) | 665 | 750 | 820 | 665 | 750 | 820 |
| H ₄ (mm) | 430 | 475 | 510 | - | - | - |
| H ₅ (mm) | 300 | 345 | 360 | - | - | - |
| W (mm) | 260 | 260 | 295 | - | - | - |
| CONNECTIONS Ø (mm) | 1 1/2" | 1 1/2" | 2" | 1 1/2" | 1 1/2" | 2" |
| FLOW (m ³ /h) (50 m ³ /h/m ²) | 10 | 15,5 | 20 | 10 | 15,5 | 20 |
| SAND (Kg) | 100 | 150 | 250 | 100 | 150 | 250 |
| NET WEIGHT (Kg) | 12.000 | 13.350 | 18.500 | 12.000 | 13.350 | 18.500 |

021132

Plastic Injected High Rate Sand Filter!

Seljuk-BL



Made of High Quality Engineering Plastics with plastic injection technology. Upper and lower parts are combined with a special thermowelding technique. Complete with transparent lid, multiport valve, pressure gauge and air purge. Sizes; Ø500 - Ø630 - Ø710 mm.



"Pool Technology"



"Injectrone" High Rate Sand Filters

GEMAS "INJECTRONE" PLASTIC SAND FILTER.

Made of Injection plastic (PP). The upper and lower parts are joined with a special welding technique. As the bed depth is higher than other filter models, the filtration quality is considerably higher. Sand water discharge openings are available at both front and rear, installed w/discharge valve. Easy to open clear screw lid (2 cm wider than bolted lid). Complete with multiway valve, fittings, and pressure gauge. Five years body warranty. Test pressure 3,5 kg/cm², maximum operation pressure 2,5 kg/cm², Maximum filtration rate 50 m³/h/m².





| Description | Code | box | weignt Kg | volume m³ |
|---|---------|-----|--------------|--------------|
| •Ø 500 mm | 0211011 | 1 | 17,000 | 0,180 |
| 11/2" multiport side valve - 10 m3/h | | | | |
| •Ø 600 mm | 0211012 | 1 | 27,000 | 0,270 |
| 11/2" multiport side valve - 15 m ³ /h | | | | |

Transparent Screw Lid



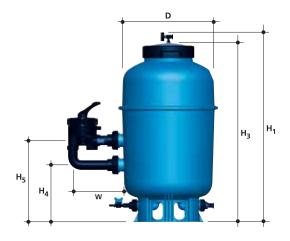
Side Multiport Valve



Water Drainage with Valve



Folding Collector Arms



TECHNICAL CHARACTERISTICS

| MODEL | 0211011 | 0211012 | |
|--------------------------|---------|---------|--|
| D (mm) | 500 | 600 | |
| H ₁ (mm) | 960 | 1030 | |
| H ₂ (mm) | - | - | |
| H ₃ (mm) | 910 | 980 | |
| H ₄ (mm) | 290 | 320 | |
| H ₅ (mm) | 415 | 445 | |
| W (mm) | 260 | 260 | |
| CONNECTIONS Ø (mm) | 1 1/2" | 1 1/2" | |
| FLOW (m³/h) (50 m³/h/m²) | 9,81 | 14,13 | |
| SAND (Kg) | 125 | 170 | |
| NET WEIGHT (Kg) | 8,000 | 11,000 | |





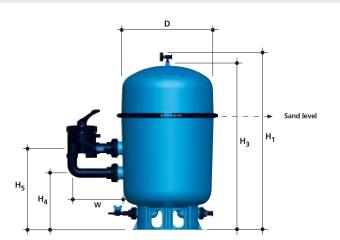
"Injectrone CL" High Rate Sand Filters

GEMAS "INJECTRONE CL" PLASTIC SAND FILTER.

It is injected with glass reinforced plastic (PA) in two parts.

Upper and lower parts are integrated with metal clamp. Since the depth of sand bed is equal to the height of the lower part, the filter sand can be easily serviced by dismantling the clamp. As the bed depth is higher than other filter models, the filtration quality is considerably higher. Sand water discharge openings are available at both front and rear, installed w/discharge valve. Complete with multi-way valve, fittings, and pressure gauge. Two years body warranty. Test pressure 3,5 kg/cm², maximum operation pressure 2,5 kg/cm², Maximum filtration rate 50 m³/h/m².

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|---------|----------------|--------------|--------------------------|
| •Ø 500 mm - 11/2" | 0211111 | 1 | 21,000 | 0,180 |
| multiport side valve - 10 m ³ /h | | | | |
| •Ø 600 mm - 11/2" | 0211112 | 1 | 31,000 | 0,270 |
| multiport side valve - 15 m ³ /h | | | | |





Metal clamp



Side Multiport Valve

D (mm) 500 600 H_1 (mm) 890 H_2 (mm) H_3 (mm) 910 840 H_4 (mm) 290 320 H_5 (mm) 415 445 260 260 W (mm) 1 1/2" CONNECTIONS Ø (mm) 1 1/2" 9,81 14,13 FLOW (m3/h) (50 m3/h/m2)

100

8,000

0211111

0211112

150 11,000

TECHNICAL CHARACTERISTICS

MODEL

SAND (Kg)

NET WEIGHT (Kg)



Water Drainage with Valve



Folding Collector Arms



"Fusion SL" **High Rate Sand Filters**

GEMAS "FUSION SL" PLASTIC SAND FILTERS.

Made of Injection Plastic (PP). The upper and lower parts are joined with a special welding technique. Easy to open clear screw lid (2 cm wider than bolted lid). Complete with multiway valve, fittings, and pressure gauge. Two years body warranty. Test pressure 3.5 kg/cm², maximum operation pressure 2,5 kg/cm²,

Maximum filtration rate 50 m³/h/m².





| | | | - |
|---|----|----------|---|
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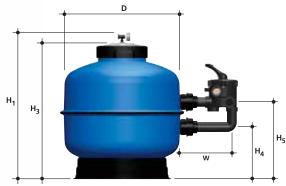
| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|-----------|----------------|--------------|--------------------------|
| •Ø 500 mm - 10 m³/h 11/2" M. Valve | 0211211S | 1 | 11,700 | 0,200 |
| •Ø 600 mm - 14 m³/h 11/2" M. Valve | 0211212S | 1 | 15,700 | 0,325 |
| | | | | |
| •Ø 500 mm - 10 m³/h 1 ^{1/2} " top M.V. | 0211211ST | 1 | 12,000 | 0,200 |
| •Ø 600 mm - 14 m³/h 11/2" top M.V. | 0211212ST | 1 | 16,000 | 0,325 |



0211212ST



0211211ST





TECHNICAL CHARACTERISTICS

| MODEL | 02112115 | 02112125 | 0211211ST | 0211212ST |
|--------------------------|----------|----------|-----------|-----------|
| D (mm) | 500 | 600 | 500 | 600 |
| H ₁ (mm) | 715 | 760 | 630 | 660 |
| H ₂ (mm) | - | - | - | - |
| H ₃ (mm) | 660 | 705 | 830 | 860 |
| H ₄ (mm) | 260 | 280 | - | - |
| H ₅ (mm) | 390 | 410 | - | - |
| W (mm) | 260 | 260 | - | - |
| CONNECTIONS Ø (mm) | 1 1/2" | 1 1/2" | 1 1/2" | 1 1/2" |
| FLOW (m³/h) (50 m³/h/m²) | 10 | 14 | 10 | 14 |
| SAND (Kg) | 75 | 100 | 75 | 100 |
| NET WEIGHT (Kg) | 7,000 | 14,000 | 7,000 | 14,000 |



Folding Collector Arms



"Filtrone" High Rate Sand Filters

GEMAS "FILTRONE" PLASTIC SAND FILTERS.

Filter shell made of PE Plastic by Rotational Moulding. One-piece body, including pressure gauge, side mounted multiport valve and air purge. Optional Transparent Bolted Lid. Two years body warranty. Test pressure 3,5 kg/cm². Max. operation pressure 2 kg/cm². Filtration rate: 50 m³/h/m².

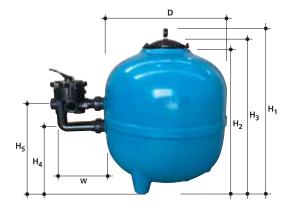
| Description | Code | eces/ oox | Weight Kg | Volume m ³ |
|--|--------|------------------|--------------|--------------------------|
| •Ø 560 mm - 12 m³/h 11/2" M. Valve | 021818 | 1 | 16,500 | 0,215 |
| •Ø 615 mm - 15 m³/h 11/2" M. Valve | 021813 | 1 | 19,500 | 0,325 |
| •Ø 760 mm - 22 m³/h 2" M. Valve | 021814 | 1 | 26,500 | 0,440 |
| •Ø 920 mm - 32 m³/h 2" M. Valve | 021815 | 1 | 37,500 | 0,790 |
| | | | | |
| •Ø 560 mm - 12 m³/h 11/2" top M.V. | 021826 | 1 | 14,500 | 0,215 |
| •Ø 615 mm - 15 m³/h 1 ^{1/2} " top M.V. | 021823 | 1 | 19,500 | 0,325 |
| •Ø 760 mm - 22 m³/h 2" top M.V. | 021824 | 1 | 24,500 | 0,440 |
| •Ø 920 mm - 32 m³/h 2" top M.V. | 021825 | 1 | 35,500 | 0,790 |

Environment friendly



Transparent Bolted Lid (Optional) (Patented)







| MODEL | 021818 | 021813 | 021814 | 021815 | 021827 | 021823 | 021824 | 021825 |
|--------------------------|---------------|----------------|---------------|--------|--------|--------|--------|--------|
| D (mm) | 560 | 615 | 760 | 920 | 560 | 615 | 760 | 920 |
| H ₁ (mm) | 730 | 805 | 925 | 1085 | 800 | 875 | 995 | 1155 |
| H ₂ (mm) | 610 | 680 | 805 | 965 | 610 | 680 | 805 | 965 |
| H ₃ (mm) | 670 | 745 | 885 | 1025 | - | - | - | - |
| H ₄ (mm) | 250 | 270 | 315 | 390 | - | - | - | - |
| H ₅ (mm) | 420 | 400 | 465 | 540 | - | - | - | - |
| W (mm) | 260 | 260 | 295 | 295 | - | - | - | - |
| CONNECTIONS Ø (mm) | 1 1/2" | 1 1/2" | 2" | 2" | 1 1/2" | 1 1/2" | 2" | 2" |
| FLOW (m³/h) (50 m³/h/m²) | 12 | 15 | 22 | 32 | 12 | 15 | 22 | 32 |
| SAND (Kg) | 100 | 150 | 250 | 450 | 100 | 150 | 250 | 450 |
| NET WEIGHT (Kg) | <i>16,500</i> | 19, 500 | <i>26,500</i> | 37,500 | 14,500 | 17,500 | 24,500 | 35,500 |





Water Drainage



"Filtrone L" High Rate Sand Filters

Environment friendly

Easy Sand Change!

GEMAS "FILTRONE L" PE PLASTIC SAND FILTERS.

Filter shell made of PE Plastic by Rotational Moulding. One-piece body, large lid of 40 cm width including pressure gauge, side mounted multiport valve and air purge. Test pressure 3,5 kg/cm². Max. operation pressure 2,5 kg/cm². Filtration rate: 50 m³/h/m³.



021815LL



021817LL

Ø 1000 Plastic Filter



Unique in the Market

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|----------|----------------|--------------|--------------------------|
| •Ø 560 mm - Large lid. | 021812LL | 1 | 21,000 | 0,215 |
| 11/2" multiport side valve - 12 m ³ /h | | | | |
| •Ø 615 mm - Large lid. | 021813LL | 1 | 23,000 | 0,325 |
| 11/2" multiport side valve - 15 m ³ /h | | | | |
| •Ø 760 mm - Large lid. | 021814LL | 1 | 30,000 | 0,440 |
| 2" multiport side valve - 22 m³/h | | | | |
| •Ø 920 mm - Large lid. | 021815LL | 1 | 48,000 | 0,790 |
| 2" multiport side valve - 32 m ³ /h | | | | |
| •Ø 1000 mm - Large lid. Without | 021817LL | 1 | 55,000 | 0,930 |
| multiport valve 21/2" - 40 m³/h | | | | |
| •Ø 1200 mm - Large lid. Without | 021816LL | 1 | 75,000 | 1,160 |
| multiport valve 21/2" - 64 m³/h | | | | |



| MODEL | 021812LL | 021813LL | 021814LL | 021815LL | 021817LL | 021816LL |
|--------------------------|----------|----------|----------|----------|----------|----------|
| D (mm) | 560 | 615 | 760 | 920 | 1000 | 1200 |
| H ₁ (mm) | 800 | 820 | 960 | 1110 | 1260 | 1310 |
| H ₂ (mm) | - | - | - | - | - | - |
| H ₃ (mm) | 740 | 760 | 900 | 1050 | 1200 | 1250 |
| H ₄ (mm) | 285 | 280 | 310 | 375 | 480 | 475 |
| H ₅ (mm) | 420 | 410 | 460 | 525 | 730 | 685 |
| W (mm) | 260 | 260 | 295 | 295 | 480 | 480 |
| CONNECTIONS Ø (mm) | 1 1/2" | 1 1/2" | 2" | 2" | 2 1/2" | 2 1/2" |
| FLOW (m³/h) (50 m³/h/m²) | 10 | 15 | 22 | 32 | 39 | 56 |
| SAND (Kg) | 100 | 125 | 250 | 450 | 700 | 1300 |
| NET WEIGHT (Kg) | 21,000 | 23,000 | 30,000 | 48,000 | 55,000 | 75,000 |



Easy Sand Change !_

Environment friendly

"Filtrone LLT" High Rate Sand Filters

GEMAS "FILTRONE LLT" PLASTIC SAND FILTERS.

Filter shell made of PE plastic by rotational molding. Wide transparent screw lid (400 mm inner diameter), complete with plastic opening handle, multi-way valve, fittings, and pressure gauge. Two years body warranty. Test pressure 3,5 kg/cm², maximum operation pressure 2,5 kg/cm², Maximum filtration rate 50 m³/h/m².

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|-----------|----------------|--------------|--------------------------|
| •Ø 615 mm - Large lid. | 021813LLT | 1 | 25,000 | 0,325 |
| 11/2" multiport side valve - 15 m ³ /h | | | | |
| •Ø 760 mm - Large lid. | 021814LLT | 1 | 32,000 | 0,440 |
| 2" multiport side valve - 22 m³/h | | | | |
| •Ø 920 mm - Large lid. | 021815LLT | 1 | 50,000 | 0,790 |
| 2" multiport side valve - 32 m³/h | | | | |
| •Ø 1000 mm - Large lid. Without | 021817LLT | 1 | 57,000 | 0,930 |
| multiport valve 21/2" - 40 m³/h | | | | |
| • Ditto, 21/2" multiport valve | 021817LTM | 1 | 57,000 | 0,930 |
| •Ø 1200 mm - Large lid. Without | 021816LLT | 1 | 77,000 | 1,160 |
| multiport valve 21/2" - 64 m³/h | | | | |
| • Ditto, 3" multiport valve | 021816LTM | 1 | 77,000 | 1,160 |
| | | | | |



Easy Open 40 cms wide Transparent Lid



021813LLT



021817LLT



| MODEL | 021812LLT | 021813LLT | 021814LLT | 021815LLT | 021817LLT | 021816LLT |
|--------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| D (mm) | 560 | 615 | 760 | 920 | 1000 | 1200 |
| H ₁ (mm) | 800 | 820 | 960 | 1110 | 1260 | 1280 |
| H ₂ (mm) | - | - | - | - | - | - |
| H ₃ (mm) | 740 | 760 | 900 | 1050 | 1200 | 1230 |
| H ₄ (mm) | 285 | 260 | 350 | 375 | 480 | 455 |
| H ₅ (mm) | 420 | 410 | 500 | 525 | 730 | 745 |
| W (mm) | 260 | 260 | 295 | 295 | 480 | 480 |
| CONNECTIONS Ø (mm) | 1 1/2" | 1 1/2" | 2" | 2" | 2 1/2" | 2 1/2" |
| FLOW (m³/h) (50 m³/h/m²) | 10 | 15 | 22 | 32 | 39 | 56 |
| SAND (Kg) | 100 | 125 | 250 | 450 | 700 | 1330 |
| NET WEIGHT (Kg) | 23,000 | 25,000 | 32,000 | 50,000 | 57,000 | 77,000 |
| | | | | | | |





"Premium" **High Rate Sand Filters**

GEMAS "PREMIUM" PE PLASTIC SAND FILTERS.

Filter shell made of PE Plastic by Rotational Moulding. One-piece body, including pressure gauge, side or top mounted multiport valve and air purge. Two years body warranty. Test pressure 3,5 kg/cm². Max. operation pressure 2,5 kg/cm². Filtration rate: 50 m³/h/m².





| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|---------------------------|----------------|--------------|--------------------------|
| Top Mounted (clamped) Multiport Valve | | | | |
| •Ø 400 mm - 6,30 m³/h | 021921 | 1 | 9,000 | 0,140 |
| •Ø 500 mm - 10,00 m³/h | 021922 | 1 | 12,000 | 0,200 |
| •Ø 615 mm - 15,00 m³/h | 021923 | 1 | 16,000 | 0,325 |
| Side Mounted Multiport Valve Including class | mped lid & side connectio | ns | | |
| •Ø 400 mm - 6,30 m³/h | 021911 | 1 | 8,700 | 0,140 |
| •Ø 500 mm - 10,00 m³/h | 021912 | 1 | 11,700 | 0,200 |
| •Ø 615 mm - 15,00 m³/h | 021913 | 1 | 15,700 | 0,325 |



Ergonomic Clamped Lid







Side Multiport Valve and Water Drainage



Folding Collector Arms

TECHNICAL CHARACTERISTICS

| | Top Mou | nted Multip | oort Valve | Side Mounted Multiport Valve | | | | | |
|-----------------------------|---------|-------------|------------|------------------------------|--------|--------|--|--|--|
| MODEL | 021921 | 021922 | 021923 | 021911 | 021912 | 021913 | | | |
| D (mm) | 400 | 500 | 615 | 400 | 500 | 615 | | | |
| H ₁ (mm) | 695 | 735 | 855 | 615 | 660 | 775 | | | |
| H ₂ (mm) | 525 | 565 | 685 | - | - | - | | | |
| H ₃ (mm) | - | - | - | 555 | 600 | 715 | | | |
| H ₄ (mm) | - | - | - | 200 | 220 | 280 | | | |
| H ₅ (mm) | - | - | - | 330 | 350 | 410 | | | |
| W (mm) | - | - | - | 260 | 260 | 260 | | | |
| W1 (mm) | - | - | - | - | - | - | | | |
| CONNECTIONS Ø (mm) | 1 1/2" | 1 1/2" | 1 1/2" | 1 1/2" | 1 1/2" | 1 1/2" | | | |
| FLOW (m³/h) (50 m³/h/m²) | 6,3 | 10 | 15 | 6,3 | 10 | 15 | | | |
| SAND (Kg) | 80 | 100 | 150 | 80 | 100 | 150 | | | |
| NET WEIGHT (Kg) | 9,000 | 12,000 | 16,000 | 8,700 | 11,700 | 15,700 | | | |

40





Deep Bed, Single / Multilayer Pool Filters

GEMAS "FILTRONE-HB" PE PLASTIC SAND FILTERS.

Filter Shell made of PE plastic by rotational moulding. One-piece body, includes pressure gauge, 11/2" side mounted multiport valve and air purge. Collector with laterals. Test pressure 3,5 kg/cm².

Max. Operation ressure 2,5 kg/m².





40 cms wide opening

Lateral Collector

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|--------------|----------------|--------------|--------------------------|
| •Ø 615 mm Large Lid, 15 m³/h | 021813LH | 1 | 31,000 | 0,444 |
| Medium deep - 11/2" multiport side valve | | | | |
| •Ø 615 mm - 11/2" multiport valve | 021813HB | 1 | 35,200 | 0,584 |
| 11 m³/h w/single layer | | | | |
| 15 m³/h w/multilayer | | | | |
| •Ø 615 mm - 11/2" multiport valve | 021813LHB | 1 | 55,000 | 0,852 |
| 11 m³/h w/single layer | | | | |
| 15 m³/h w/multilayer | | | | |
| PS: All Filtrone Models are resistant ag | ainst Ozone. | D | + | |









Side Manhole

| IECHNICAL CHA | IECHNICAL CHARACTERISTICS | | | | | | | | | |
|---|---------------------------|----------|-----------|--|--|--|--|--|--|--|
| MODEL | 021813LH | 021813HB | 021813LHB | | | | | | | |
| D (mm) | 615 | 615 | 615 | | | | | | | |
| H ₁ (mm) | 1140 | 1500 | 1530 | | | | | | | |
| H ₃ (mm) | 1080 | 1440 | 1460 | | | | | | | |
| H ₄ (mm) | 410 | 580 | 580 | | | | | | | |
| H ₅ (mm) | 280 | 710 | 710 | | | | | | | |
| W (mm) | 260 | 260 | 260 | | | | | | | |
| CONNECTIONS (Ø) | 1 1/2" | 1 1/2" | 1 1/2" | | | | | | | |
| FLOW (m ³ /h) (50 m ³ /h/m ²) | 15 | 15 | 15 | | | | | | | |
| FLOW (m³/h) (40 m³/h/m²) | 12 | 12 | 12 | | | | | | | |
| ANTHRACITE 0,8 - 1,6 mm (lt) | - | 200 | 200 | | | | | | | |
| QUARTZ SAND 0,5 - 1 mm (Kg) | 200 | 200 | 200 | | | | | | | |
| QUARTZ SAND 1 - 3 mm (Kg) | 100 | 150 | 150 | | | | | | | |
| NET WEIGHT (Kg) | 31,000 | 34,250 | 37,150 | | | | | | | |



Large Lid



Folding Collector Arms





"Turbidron-BL" Bobbin Wound Sand Filters

GEMAS "TURBIDRON BL" SAND FILTERS.

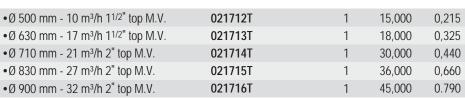
Filter shell made of ABS plastic and reinforced by fiberglass bobbin winding outside. Size Ø830 mm and above filter plastic shell is made of one piece. ROTOMOLDED PE inner shell and bobbin winding outside. Filter lid is with bolts. Complete with pressure gauge, air purge and side mounted multiport valve. Test pressure 4,0 kg/cm². Max. operation pressure 2,5 kg/cm². Filtration rate: 50 m³/h/m². 10 years shell warranty.





Transparent Bolted Lid (Optional) (Patented)

| Description | Code | box | weignt Kg | volume m³ |
|--|---------|-----|--------------|--------------|
| •Ø 500 mm - 10 m³/h 11/2" M. Valve | 021712 | 1 | 17,000 | 0,215 |
| •Ø 630 mm - 17 m³/h 11/2" M. Valve | 021713 | 1 | 20,000 | 0,325 |
| •Ø 710 mm - 21 m³/h 2" M. Valve | 021714 | 1 | 32,000 | 0,440 |
| •Ø 830 mm - 27 m³/h 2" M. Valve | 021715 | 1 | 38,000 | 0,660 |
| •Ø 900 mm - 32 m³/h 2" M. Valve | 021716 | 1 | 47,000 | 0.790 |
| •Ø 1000 mm - 40 m³/h 21/2" M. Valve | 021717M | 1 | 58,000 | 0,930 |
| •Ø 1000 mm - 40 m³/h 2 ^{1/2} " without M.V. | 021717 | 1 | 58,000 | 0,930 |
| | | | | |









| MODEL | 021712 | 021713 | 021714 | 021715 | 021716 | 021717M | 021712T | 021713T | 021714T | 021715T | 021716T |
|-----------------------------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|
| D (mm) | 500 | 630 | 710 | 830 | 900 | 1000 | 500 | 630 | 710 | 830 | 900 |
| H ₁ (mm) | 740 | 820 | 880 | 930 | 955 | 1310 | 820 | 890 | 950 | 1030 | 1055 |
| H ₂ (mm) | 630 | 710 | 770 | 820 | 845 | 1200 | 630 | 710 | 770 | 820 | 845 |
| H ₃ (mm) | 690 | 770 | 830 | 880 | 940 | 1000 | - | - | - | - | - |
| H ₄ (mm) | 300 | 325 | 350 | 350 | 400 | 500 | - | - | - | - | - |
| H ₅ (mm) | 430 | 455 | 500 | 500 | 550 | 830 | - | - | - | - | - |
| W (mm) | 260 | 260 | 295 | 295 | 295 | - | - | - | - | - | - |
| CONNECT. Ø (mm) | 1 1/2" | 1 1/2" | 2" | 2" | 2" | 2 1/2" | 1 1/2" | 1 1/2" | 2" | 2" | 2" |
| FLOW (m³/h) (50 m³/h/m²) | 10 | 14 | 21 | 27 | 32 | 40 | 10 | 14 | 21 | 27 | 32 |
| SAND (Kg) | 100 | 150 | 250 | 350 | 450 | 700 | 100 | 150 | 250 | 350 | 450 |
| NET WEIGHT (Kg) | 10,200 | 20,000 | 32,000 | 38,000 | 47,000 | 58,000 | 10,000 | 20,000 | 30,000 | 36,000 | 45,000 |



"Turbidron-CL" Bobbin Wound Sand Filters

GEMAS "TURBIDRON CL" SIDE MOUNTED SAND FILTERS.

Clamped Lid. Made of PE plastic core, fiberglass bobbin wound. Complete with pressure gauge, 11/2" side mounted multiport valve and air purge. Test pressure 4,0 kg/cm². Max. Operation pressure 2,5 kg/m². Filtration rate 50 m³/h/m².

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|---------|----------------|--------------|--------------------------|
| • Ø 400 mm -11/2" side mounted | 021311B | 1 | 7,700 | 0,145 |
| multiport valve - 6,30 m ³ /h | | | | |
| •Ø 500 mm -11/2" side mounted | 021312B | 1 | 9,200 | 0,145 |
| multiport valve - 10 m ³ /h | | | | |







GEMAS "TURBIDRON CL" MOUNTED SAND FILTERS.

Made of PE plastic shell wound by fiberglass bobbin; complete with pressure gauge and multiport valve. Max. operation pressure 2.5 kg/cm^2 . Test pressure 4.0 kg/cm^2 . Filtration rate: $50 \text{ m}^3/\text{h/m}^2$.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|---------|----------------|--------------|--------------------------|
| •Ø 400 mm -11/2" top mounted | 021321B | 1 | 8,000 | 0,145 |
| multiport valve - 6,30 m ³ /h | | | 9,500 | 0,145 |
| •Ø 500 mm -11/2" top mounted | 021322B | 1 | | |
| multiport valve - 10 m³/h | | | | |



| | Top Mounted | Multiport Valve | Side Mounted Multiport Va | |
|-----------------------------|-------------|-----------------|---------------------------|---------|
| MODEL | 021321B | 021322B | 021311B | 021312B |
| D (mm) | 400 | 500 | 400 | 500 |
| H ₁ (mm) | 815 | 940 | 670 | 800 |
| H ₂ (mm) | 580 | 705 | 580 | 705 |
| H ₃ (mm) | - | - | 610 | 740 |
| H ₄ (mm) | - | - | 240 | 300 |
| H ₅ (mm) | - | - | 385 | 440 |
| W (mm) | - | - | 260 | 260 |
| CONNECTIONS Ø (mm) | 1 1/2" | 1 1/2" | 1 1/2" | 1 1/2" |
| FLOW (m³/h) (50 m³/h/m²) | 6,30 | 10 | 6,30 | 10 |
| SAND (Kg) | 80 | 100 | 80 | 100 |
| NET WEIGHT (Kg) | 8,000 | 10,500 | 7,700 | 10,200 |



Folding Collector Arms



"Turbidron-SL" Bobbin Wound Filters

GEMAS "TURBIDRON-SL" SIDE MOUNTED POOL SAND FILTERS.

Filter shell made of smooth ABS plastic which decreases algea and bacteria cling. Complete with easy opening threaded, large and transparent lid (diameter is 2 cm larger than bolted lid), Complete with pressure gauge and side mounted multiport valve.

OPTIONAL LIGHTING TOUCHPAD BUTTON WITH BATTERY to observe inside the filter. Maximum Working Pressure 2,5 kg/cm². Test Pressure 4 kg/cm². Filtration Rate 50 m³/h/m².







Easy opening-screwed lid

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|----------|----------------|--------------|--------------------------|
| •Ø 500 mm - 10 m³/h 11/2" M.Valve | 021712S | 1 | 17,000 | 0,215 |
| •Ø 630 mm - 17 m³/h 11/2" M.Valve | 021713S | 1 | 20,000 | 0,325 |
| •Ø 710 mm - 21 m³/h 2" M.Valve | 021714S | 1 | 32,000 | 0,440 |
| •Ø 830 mm - 27 m³/h 2" M.Valve | 021715S | 1 | 38,000 | 0,660 |
| •Ø 900 mm - 32 m³/h 2" M.Valve | 021716S | 1 | 47,000 | 0.790 |
| •Ø 1000 mm - 40 m³/h 21/2" without M.V. | 021717S | 1 | 58,000 | 0,930 |
| •Ø 1000 mm - 40 m³/h 21/2" M.Valve | 021717SM | 1 | 58,000 | 0,930 |

PS: Lighting price difference 30 Euro. In case of the order please add "L" to side of the code.



LED lighting transparent lid (Optional)







| MODEL | 021712S | 021713S | 021714S | 021715S | 021716S | 021717S |
|--------------------------|---------|---------|---------|---------|---------|---------|
| D (mm) | 500 | 630 | 710 | 830 | 900 | 1000 |
| H ₁ (mm) | 750 | 865 | 920 | 910 | 1010 | 1305 |
| H ₂ (mm) | 690 | 815 | 860 | 870 | 960 | 1245 |
| H ₃ (mm) | 610 | 730 | 780 | 795 | 875 | 1185 |
| H ₄ (mm) | 300 | - | 350 | 350 | 390 | 500 |
| H ₅ (mm) | 430 | - | 500 | 500 | 540 | 830 |
| W (mm) | 260 | 260 | 295 | 295 | 295 | - |
| CONNECTIONS Ø (mm) | 1 1/2" | 1 1/2" | 2" | 2" | 2" | 2 1/2" |
| FLOW (m³/h) (50 m³/h/m²) | 10 | 14 | 21 | 27 | 32 | 40 |
| SAND (Kg) | 100 | 150 | 250 | 350 | 450 | 700 |
| NET WEIGHT (Kg) | 17,300 | 20,300 | 32,000 | 38,300 | 47,300 | 58,300 |
| | | | | | | |



"Broadex" High Rate Sand Filters

GEMAS "BROADEX" POOL SAND FILTERS.

Made of FRP. Wide transparent screw lid (400 mm inner diameter), complete with plastic opening handle, multi-way valve, fittings, and pressure gauge. Five-year body warranty.

Test pressure 3,5 kg/cm², maximum operation pressure 2,5 kg/cm², Maximum filtration rate 50 m³/h/m².

2 years shell warranty.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|-----------|----------------|--------------|--------------------------|
| •Ø 560 mm Large Lid - 11/2" | 021112LLT | 1 | 20,000 | 0,215 |
| side mounted multiport valve - 12 m³/h | | | | |
| •Ø 615 mm Large Lid - 11/2" | 021113LLT | 1 | 25,000 | 0,325 |
| side mounted multiport valve - 15 m³/h | | | | |
| •Ø 760 mm Large Lid - 2" | 021114LLT | 1 | 32,000 | 0,440 |
| side mounted multiport valve - 22 m³/h | | | | |
| •Ø 830 mm Large Lid - 2" | 021115LLT | 1 | 40,000 | 0,660 |
| side mounted multiport valve - 27 m³/h | | | | |
| •Ø 920 mm Large Lid - 2" | 021116LLT | 1 | 50,000 | 0,790 |
| side mounted multiport valve - 32 m³/h | | | | |
| •Ø 1000 mm Large Lid | 021117LLT | 1 | 70,000 | 0,930 |
| without valve, 21/2" connection - 40 m ³ /h | | | | |
| •Ø 1200 mm Large Lid | 021216LLT | 1 | 80,000 | 1,160 |



Easy openi 40 cms Wide Transparent Lid





Side Multiport Valve

TECHNICAL CHARACTERISTICS

without valve, 21/2" connection - 64 m³/h

| MODEL | 021112LLT | 021113LLT | 021114LLT | 021115LLT | 021116LLT | 021117LLT | 021216LLT |
|--------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| D (mm) | 560 | 615 | 760 | 830 | 920 | 1000 | 1200 |
| H ₁ (mm) | 800 | 830 | 960 | 1030 | 1140 | 1375 | 1280 |
| H ₂ (mm) | - | - | - | - | - | - | - |
| H ₃ (mm) | 740 | 780 | 900 | 970 | 1035 | 1325 | 1230 |
| H ₄ (mm) | 285 | 345 | 350 | 360 | 450 | 515 | 455 |
| H ₅ (mm) | 420 | 475 | 500 | 510 | 600 | 845 | 745 |
| W (mm) | 260 | 260 | 295 | 295 | 295 | 480 | 480 |
| CONNECTIONS Ø (mm) | 1 1/2" | 1 1/2" | 2" | 2" | 2" | 2 1/2" | 2 1/2" |
| FLOW (m³/h) (50 m³/h/m²) | 12,5 | 15 | 22 | 27 | 32 | 39 | 56 |
| SAND (Kg) | 100 | 125 | 250 | 350 | 450 | 725 | 1330 |
| NET WEIGHT (Kg) | 20,000 | 25,000 | 32,000 | 40,000 | 50,000 | 70,000 | 80,000 |



"Filtegra" High Rate Sand Filters

GEMAS "FILTEGRA" SAND FILTERS.

Filter Shell Made of Smooth ABS plastic which decreases algea and bacteria cling inside filter. Outer Shell is MONOBLOCK GELCOATED FR POLYESTER. UNLIKE THE UNIVERSAL LAMINATED FILTERS 2 PART BODY STRUCTURE, FILTEGRA HAS BEEN DESIGNED TO BE PRODUCED WITH A UNIQUE TECHNIQUE WHICH RESULTS A MONOBLOCK SMOOTH, GELCOATED OUTER BODY. Complete with pressure gauge and side mounted multiport valve. Maximum Working Pressure 2,5 kg/cm². Test Pressure 4 kg/cm². Filtration Rate 50 m³/h/m². **Transparent Bolted Lid (optional). 2 YEARS WARRANTY**.







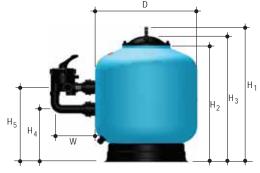


Transparent Bolted Lid (Optional) (Patented)



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|--------|----------------|--------------|--------------------------|
| •Ø 500 mm - 11/2" multiport side valve -10 m³/h | 021811 | 1 | 19,000 | 0,215 |
| \bullet Ø 630 mm - $1^{1/2}$ " multiport side valve -15 m³/h | 021812 | 1 | 23,000 | 0,325 |
| •Ø 710 mm - 2" multiport side valve - 20 m³/h | 021817 | 1 | 35,000 | 0,440 |
| | | 1 | | |
| •Ø 500 mm - 11/2" multiport top valve -10 m³/h | 021821 | 1 | 17,000 | 0,215 |
| •Ø 630 mm - 11/2" multiport top valve -15 m³/h | 021822 | 1 | 21,000 | 0,325 |
| •Ø 710 mm - 2" multiport top valve - 20 m³/h | 021827 | 1 | 33,000 | 0,440 |







Couplings compatible with d50 Fitvalf ball valve handle

Side Multiport Valve

| 120111110712 | O 117 (1) | , <u>, , , , , , , , , , , , , , , , , , </u> | | | | |
|--------------------------|------------------|---|--------|--------|--------|--------|
| MODEL | 021811 | 021812 | 021817 | 021821 | 021822 | 021827 |
| D (mm) | 500 | 630 | 710 | 500 | 630 | 710 |
| H ₁ (mm) | 750 | 820 | 890 | 820 | 890 | 960 |
| H ₂ (mm) | 640 | 710 | 780 | 630 | 710 | 770 |
| H ₃ (mm) | 700 | 760 | 840 | - | - | - |
| H ₄ (mm) | 300 | 325 | 340 | - | - | - |
| H ₅ (mm) | 430 | 455 | 490 | - | - | - |
| W (mm) | 260 | 260 | 295 | 260 | 260 | 295 |
| CONNECTIONS Ø (mm) | 1 1/2" | 1 1/2" | 2" | 1 1/2" | 1 1/2" | 2" |
| FLOW (m³/h) (50 m³/h/m²) | 10 | 15 | 20 | 10 | 15 | 20 |
| SAND (Kg) | 100 | 150 | 250 | 100 | 150 | 250 |
| NET WEIGHT (Kg) | 19,000 | 23,000 | 35,000 | 17,000 | 21,000 | 33,000 |





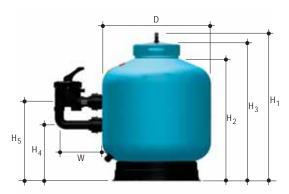
"Filtegra-SL" High Rate Sand Filters

GEMAS "FILTEGRA-SL" SAND FILTERS.

Filter Shell Made of Smooth ABS plastic which decreases algea and bacteria cling inside filter. Outer Shell is MONOBLOCK GELCOATED FR POLYESTER. UNLIKE THE UNIVERSAL LAMINATED FILTERS 2 PART BODY STRUCTURE, FILTEGRA HAS BEEN DESIGNED TO BE PRODUCED WITH A UNIQUE TECHNIQUE WHICH RESULTS A MONOBLOCK SMOOTH, GELCOATED OUTER BODY. Complete with easy opening threaded, large and transparent lid (diameter is 2 cms larger than bolted lid), pressure gauge and side mounted multiport valve. OPTIONAL LIGHTING TOUCHPAD BUTTON WITH BATTERY. Maximum Working Pressure 2,5 kg/cm². Test Pressure 4 kg/cm². Filtration Rate 50 m³/h/m². 2 YEARS SHELL WARRANTY.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|---------|----------------|--------------|--------------------------|
| •Ø 500 mm- 11/2" multiport side valve -10 m³/h | 021811S | 1 | 19,000 | 0,215 |
| •Ø 630 mm- 11/2" multiport side valve -15 m³/h | 021812S | 1 | 23,000 | 0,325 |
| •Ø 710 mm- 2" multiport side valve - 20 m³/h | 021817S | 1 | 35,000 | 0,440 |

PS: Lighting Price difference 30 Euro. In case of order please add "L" to side of the code.



| MODEL | 021811S | 021812S | 021817S |
|--------------------------|---------|---------|---------|
| D (mm) | 500 | 630 | 710 |
| H ₁ (mm) | 785 | 850 | 920 |
| H ₂ (mm) | 650 | 715 | 770 |
| H ₃ (mm) | 735 | 800 | 845 |
| H ₄ (mm) | 300 | 330 | 350 |
| H ₅ (mm) | 430 | 460 | 500 |
| W (mm) | 260 | 260 | 295 |
| CONNECTIONS Ø (mm) | 1 1/2" | 1 1/2" | 2" |
| FLOW (m³/h) (50 m³/h/m²) | 10 | 15 | 20 |
| SAND (Kg) | 100 | 150 | 250 |
| NET WEIGHT (Kg) | 19,000 | 23,000 | 35,000 |



Easy opening-screwed lid



LED lighting transparent lid (Optional)



Couplings compatible with d50 Fitvalf ball valve handle



Side Multiport Valve





"Monocon" Pool Sand Filters

GEMAS "MONOCON" POOL SAND FILTER.

Filter shell made of fiberglass reinforced polyester, complete with multi-way valve, fittings, manometer and purge. Max. operation Pressure 2,5 kg/cm². Test pressure: 3.5 kg/cm². Two years warranty. All models have side valve connection. **Both connections of the filter are on the bottom shell of the filter.** Filtration Rate: 50 m³/h/m². Transparent Bolted Lid (optional).



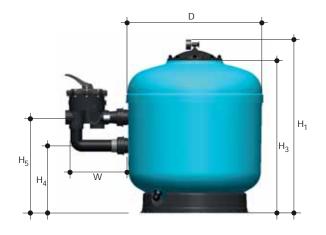


Transparent Bolted Lid (Optional)

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|--------|----------------|--------------|--------------------------|
| • Ø 500 mm - 1 ^{1/2} " M.Valve | 021141 | 1 | 17,000 | 0,215 |
| • Ø 630 mm - 1 ^{1/2} " M.Valve | 021142 | 1 | 22,800 | 0,325 |
| • Ø 710 mm - 2" M.Valve | 021143 | 1 | 30,000 | 0,470 |
| • Ø 830 mm - 2" M.Valve | 021144 | 1 | 38,600 | 0,665 |
| • Ø 900 mm - 2" M.Valve | 021145 | 1 | 46,300 | 0,905 |
| • Ø 1000 mm - 2" "W/Out M.way Valve" | 021146 | 1 | 63,200 | 1,021 |
| • Ø 1200 mm - 2" "W/Out M.way Valve" | 021147 | 1 | 78,500 | 1,460 |



021145





Side Multiport Valve

| | 117 (147 (| <u> </u> | | | | | |
|--------------------------|------------|----------|-------------|--------|--------|--------|--------|
| MODEL | 021141 | 021142 | 021143 | 021144 | 021145 | 021146 | 021147 |
| D (mm) | 500 | 630 | 710 | 830 | 900 | 1000 | 1200 |
| H ₁ (mm) | 710 | 780 | 925 | 975 | 1000 | 1350 | 1400 |
| H ₂ (mm) | - | - | - | - | - | - | - |
| H ₃ (mm) | 600 | 670 | 815 | 865 | 890 | 1240 | 1290 |
| H ₄ (mm) | 305 | 330 | 385 | 380 | 415 | 525 | 590 |
| H ₅ (mm) | 435 | 460 | 535 | 510 | 565 | 870 | 920 |
| W (mm) | 260 | 260 | 295 | 295 | 295 | - | - |
| CONNECTIONS Ø (mm) | 1 1/2" | 1 1/2" | 2" | 2" | 2" | 2 1/2" | 90 |
| FLOW (m³/h) (50 m³/h/m²) | 10 | 14 | 21 | 27 | 32 | 40 | 56 |
| SAND (Kg) | 100 | 150 | 250 | 350 | 450 | 700 | 1300 |
| NET WEIGHT (Kg) | 17,500 | 22,800 | 30,000 | 38,600 | 46,300 | 63,200 | 78,500 |
| | | | | | | | |



"Monocon" **Pool Sand Filters**

GEMAS "MONOCON" POOL SAND FILTER.

Filter shell made of fiberglass reinforced polyester, complete with multi-way valve, fittings, manometer and purge. Max. operation Pressure 2,5 kg/cm². Test pressure: 3.5 kg/cm². Two years warranty. All models have top valve connection.

Filtration Rate: 50 m³/h/m².

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|---------|----------------|--------------|--------------------------|
| • Ø 500 mm - 1 ^{1/2} " M.Valve | 021141T | 1 | 15,500 | 0,215 |
| • Ø 630 mm - 1 ^{1/2} " M.Valve | 021142T | 1 | 20,000 | 0,325 |
| • Ø 710 mm - 2" M.Valve | 021143T | 1 | | |
| • Ø 830 mm - 2" M.Valve | 021144T | 1 | | |
| • Ø 900 mm - 2" M.Valve | 021145T | 1 | | |



Top Bolted Lid (Optional)





Water Drainage

| MODEL | 021141T | 021142T | 021143T | 021144T | 021145T |
|--------------------------|---------|---------|---------|---------|---------|
| D (mm) | 500 | 630 | 710 | 830 | 900 |
| H ₁ (mm) | 780 | 850 | 1025 | 1075 | 1100 |
| H ₂ (mm) | - | - | - | - | - |
| H ₃ (mm) | 600 | 670 | 815 | 865 | 890 |
| H ₄ (mm) | - | - | - | - | - |
| H ₅ (mm) | - | - | - | - | - |
| CONNECTIONS Ø (mm) | 1 1/2" | 1 1/2" | 2" | 2" | 2" |
| FLOW (m³/h) (50 m³/h/m²) | 10 | 14 | 21 | 27 | 32 |
| SAND (Kg) | 100 | 150 | 250 | 350 | 450 |
| NET WEIGHT (Kg) | 15,500 | 20,000 | 27,200 | 35,800 | 43,500 |





"Filtrex" High Rate Sand Filters

GEMAS "FILTREX" SAND FILTERS.

Filter shell made of fiberglass reinforced laminated polyester, including pressure gauge, side mounted multiport valve and air purge. Test pressure 3,5 kg/cm². Max. operation pressure 2,5 kg/cm². Filtration rate: 50 m³/h /m². Transparent Bolted Lid (optional).





Transparent Bolted Lid (Optional)

| Description | Code | box | Weight Kg | volume m³ |
|--|----------|-----|--------------|--------------|
| • Ø 450 mm -11/2" multiport side valve-8 m³/h | 021111 | 1 | 15,400 | 0,145 |
| • Ø 500 mm -11/2" multiport side valve-10 m³/h | 021112 | 1 | 17,500 | 0,215 |
| • Ø 630 mm -11/2" multiport side valve-14 m³/h | 021113 | 1 | 22,800 | 0,325 |
| • Ø 710 mm - 2" multiport side valve-21 m³/h | 021114 | 1 | 30,000 | 0,470 |
| • Ø 830 mm - 2" multiport side valve-27 m³/h | 021115 | 1 | 38,600 | 0,665 |
| • Ø 900 mm - 2" multiport side valve-32 m³/h | 021116 | 1 | 46,300 | 0,905 |
| • Ø 1000 mm, Ø 75 Slip union connection | 021117 | 1 | 63,200 | 1,021 |
| Except multiport valve - 40 m³/h | | | | |
| • Ditto, Large Lid, - 40 m ³ /h | 021117L | 1 | 63,200 | 1,021 |
| • Ditto, Ø 75 Flange connection | 021117LF | 1 | 63,200 | 1,021 |
| | | | | |
| • Ø 450 mm -11/2" multiport top valve-8 m³/h | 021111T | 1 | 13,500 | 0,145 |
| • Ø 500 mm -11/2" multiport top valve-10 m³/h | 021112T | 1 | 15,500 | 0,215 |
| • Ø 630 mm -11/2" multiport top valve-14 m³/h | 021113T | 1 | 20,000 | 0,325 |
| • Ø 710 mm -2" multiport top valve-21 m³/h | 021114T | 1 | | |
| • Ø 830 mm -2" multiport top valve-27 m³/h | 021115T | 1 | | |
| • Ø 900 mm -2" multiport top valve-32 m³/h | 021116T | 1 | | |



Side Multiport Valve







Water Drainage

| MODEL | 021111 | 021112 | 021113 | 021114 | 021115 | 021116 | 021117 | 021111T | 021112T | 021113T |
|--------------------------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|
| D (mm) | 450 | 500 | 630 | 710 | 830 | 900 | 1000 | 450 | 500 | 630 |
| H ₁ (mm) | 700 | 710 | 780 | 925 | 975 | 1000 | 1350 | 780 | 780 | 850 |
| H ₂ (mm) | - | - | - | - | - | - | - | - | - | |
| H ₃ (mm) | 650 | 660 | 730 | 875 | 925 | 950 | 1300 | 590 | 600 | 670 |
| H ₄ (mm) | 270 | 305 | 330 | 385 | 380 | 415 | 500 | - | - | - |
| H ₅ (mm) | 400 | 435 | 460 | 505 | 510 | 565 | 880 | - | - | |
| W (mm) | 260 | 260 | 260 | 295 | 295 | 295 | - | - | - | - |
| CONNECTIONS Ø (mm) | 1 1/2" | 1 1/2" | 1 1/2" | 2" | 2" | 2" | 2 1/2" | 1 1/2" | 1 1/2" | 1 1/2" |
| FLOW (m³/h) (50 m³/h/m²) | 8 | 10 | 14 | 21 | 27 | 32 | 40 | 8 | 10 | 14 |
| SAND (Kg) | 80 | 100 | 150 | 250 | 350 | 450 | 700 | 80 | 100 | 150 |
| NET WEIGHT (Kg) | 15,400 | 17,500 | 22,800 | 30,000 | 38,600 | 46,300 | 63,200 | 13,500 | 15,500 | 20,000 |



"Neptune" High Rate Sand Filters

GEMAS "NEPTUNE" SAND FILTERS.

Filter shell made of fiberglass reinforced laminated polyester, including pressure gauge, side or top-mounted multiport valve and air purge. **Screwed lid with handle facilitates easy access,** Test pressure 3,5 kg/cm². Max. operation pressure 2,5 kg/cm². Bed depth: 0,80 m. Filtration rate: 50 m³/h/m².

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|--------|----------------|--------------|--------------------------|
| • Ø 450 mm - 1 ^{1/2} " multiport | 021211 | 1 | 14,400 | 0,145 |
| side valve - 8 m³/h | | | | |
| • Ø 500 mm - 1 ^{1/2} " multiport | 021212 | 1 | 15,550 | 0,215 |
| side valve - 10 m³/h | | | | |
| • Ø 650 mm - 1 ^{1/2} " multiport | 021213 | 1 | 22,500 | 0,325 |
| side valve - 16 m³/h | | | | |
| • Ø 800 mm - 2" multiport side | 021214 | 1 | 37,600 | 0,665 |
| valve - 24 m³/h | | | | |
| • Ø 950 mm - 2" multiport side | 021215 | 1 | 50,500 | 0,905 |
| valve - 34 m³/h | | | | |



Screwed lid





Side Multiport Valve

| ECHINICAL CH | AKACIE | KISTICS | | | |
|--------------------------|--------|---------|--------|--------|--------|
| MODEL | 021211 | 021212 | 021213 | 021214 | 021215 |
| D (mm) | 450 | 500 | 650 | 800 | 950 |
| H ₁ (mm) | 710 | 780 | 900 | 1005 | 1120 |
| H ₂ (mm) | - | - | - | - | - |
| H ₃ (mm) | 650 | 730 | 850 | 945 | 1070 |
| H ₄ (mm) | 260 | 320 | 360 | 355 | 440 |
| H ₅ (mm) | 390 | 450 | 490 | 505 | 590 |
| W (mm) | 260 | 260 | 295 | 295 | 295 |
| W1 (mm) | - | - | - | - | - |
| CONNECTIONS (Ø) | 1 1/2" | 1 1/2" | 1 1/2" | 2" | 2" |
| FLOW (m³/h) (50 m³/h/m²) | 8 | 10 | 16 | 24 | 34 |
| SAND (Kg) | 80 | 100 | 150 | 250 | 450 |
| NET WEIGHT (Kg) | 14,400 | 15,550 | 22,500 | 37,600 | 50,500 |



Water Drainage





High Bed, Single or Multi-Layer Sand Filters

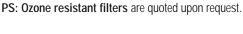
GEMAS FILTREX - HB SAND FILTERS. Filter shell made of fiberglass reinforced laminated polyester, including pressure gauge, air purge and multiport valve. Collector with laterals. Bed depth 100 cm. Test pressure 3.5 kg/cm². Max. operation pressure 2,5 kg/cm². Please ask price for 4,0 and 6,0 kg/cm² operation pressures. Sight Glass and Transparent Bolted Lid is optional.

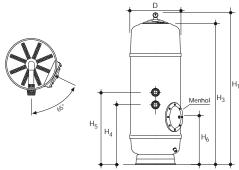


| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------------------------------------|----------|----------------|--------------|--------------------------|
| • Ø 500 mm - 11/2" multiport valve - | 021311HB | 1 | 30,000 | 0,403 |
| 7 m³/h w/single layer | | | | |
| 10 m³/h w/multilayer | | | | |
| • Ø 630 mm - 11/2" multiport valve - | 021312HB | 1 | 35,200 | 0,584 |
| 11 m³/h w/single layer | | | | |
| 15 m³/h w/multilayer | | | | |
| • Ø 710 mm - 2" multiport valve - | 021313HB | 1 | 55,000 | 0,852 |
| 14 m³/h w/single layer | | | | |
| 20 m³/h w/multilayer | | | | |
| • Ø 800 mm - 2" multiport valve - | 021314HB | 1 | 71,000 | 1,230 |
| 18 m³/h w/single layer | | | | |
| 25 m³/h w/multilayer | | | | |
| • Ø 900 mm - 2" multiport valve - | 021315HB | 1 | 78,500 | 1,420 |
| 22 m³/h w/single layer | | | | |
| 32 m³/h w/multilayer | | | | |
| • Ø 1000 mm - w/out multiport valve - | 021316HB | 1 | | |
| 32 m³/h w/single layer | | | | |
| 39 m³/h w/multilayer | | | | |



Transparent Bolted Lid (Optional)









| MODEL | 021311HB | 021312HB | 021313HB | 021314HB | 021315HB |
|------------------------------|----------|----------|----------|----------|----------|
| D (mm) | 500 | 630 | 720 | 800 | 900 |
| H ₁ (mm) | 1610 | 1510 | 1690 | 1780 | 1765 |
| H ₂ (mm) | - | - | - | - | - |
| H ₃ (mm) | 1490 | 1410 | 1530 | 1600 | 1650 |
| H ₄ (mm) | 605 | 590 | 690 | 605 | 700 |
| H ₅ (mm) | 735 | 720 | 840 | 755 | 850 |
| H ₆ (mm) | 580 | 630 | 650 | 330 | 715 |
| CONNECTIONS (Ø) | 1 1/2" | 1 1/2" | 2" | 2" | 2" |
| FLOW (m³/h) (40 m³/h/m²) | 8 | 12 | 16 | 20 | 25 |
| ANTHRACITE 0,8 - 1,6 mm (lt) | 150,000 | 200,000 | 250,000 | 320,000 | 470,000 |
| QUARTZ SAND 0,5 - 1 mm (Kg) | 275,000 | 400,000 | 250,000 | 320,000 | 750,000 |
| QUARTZ SAND 1 - 3 mm (Kg) | 100,000 | 150,000 | 215,000 | 270,000 | 420,000 |
| NET WEIGHT (Kg) | 30,000 | 35,200 | 55,000 | 71,000 | 78,500 |
| | | | | | |



"Filtrex" Filtration Units

GEMAS "FILTREX" FILTRATION UNIT.

Fiberglass reinforced polyester filter assembled on a plastic base and installed with a pool pump.

11/2" multiport valve **Top Mounted**. Interconnection piping between the pump and the filter are both included.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------------------------------------|-----------|----------------|--------------|--------------------------|
| • Ø 450 mm with Fiberglass Reinforced | 021111TFU | 1 | 34,050 | 0,440 |
| Polyester Filter, Pump 1/2 HP, Mono | | | | |
| • Ø 500 mm with Fiberglass Reinforced | 021112TFU | 1 | 36,950 | 0,460 |
| Polyester Filter, Pump 3/4 HP, Mono | | | | |
| • Ø 630 mm with Fiberglass Reinforced | 021113TFU | 1 | 39,850 | 0,808 |
| Polyester Filter, Pump 1,0 HP, Mono | | | | |



Top Bolted Lid (Optional)

GEMAS "NEPTUNE" FILTRATION UNIT. Fiberglass reinforced polyester filter assembled on a plastic base and installed with a pool pump. 11/2" multiport valve **Side Mounted**. Interconnection piping between the pump and the filter are both included.

| Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------|----------------------|--|---|
| 021211FU | 1 | 33,850 | 0,440 |
| | | | |
| 021212FU | 1 | 36,650 | 0,460 |
| | | | |
| 021213FU | 1 | 39,550 | 0,808 |
| | | | |
| | 021211FU 021212FU | Code box 021211FU 1 021212FU 1 | Code box Kg 021211FU 1 33,850 021212FU 1 36,650 |







| | ESTIMO LE STITUTO SERIO NO SER | | | | | | | | | | |
|-----------------------------|--|-------------|--------------|-------------|--------------|----------------|--|--|--|--|--|
| | Filtrex Top | Mounted Mul | tiport Valve | Neptune Sid | e Mounted Mu | ultiport Valve | | | | | |
| MODEL | 021111TFU | 021112TFU | 021113TFU | 021211FU | 021112TFU | 021113TFU | | | | | |
| D (mm) | 450 | 500 | 630 | 685 | 880 | 955 | | | | | |
| H ₁ (mm) | 585 | 610 | 685 | 770 | 800 | 890 | | | | | |
| H ₂ (mm) | 765 | 790 | 865 | 615 | 655 | 735 | | | | | |
| H ₃ (mm) | - | - | - | 710 | 740 | 830 | | | | | |
| H ₄ (mm) | - | - | - | - | - | - | | | | | |
| H ₅ (mm) | - | - | - | - | - | - | | | | | |
| W (mm) | - | - | - | - | - | - | | | | | |
| W1 (mm) | 675 | 775 | 925 | 675 | 775 | 925 | | | | | |
| CONNECTIONS Ø (mm) | 1 1/2" | 1 1/2" | 1 1/2" | 1 1/2" | 1 1/2" | 1 1/2" | | | | | |
| FLOW (m³/h) (50 m³/h/m²) | 8 | 10 | 14 | 8 | 10 | 16 | | | | | |
| SAND (Kg) | 80 | 100 | 150 | 80 | 100 | 150 | | | | | |
| NET WEIGHT (Kg) | 16,000 | 18,000 | 23,000 | 33,850 | 36,650 | 39,550 | | | | | |



021212FU



Folding Collector Arms

Plastic Body Filtration Units





"Premium" Filtration Units

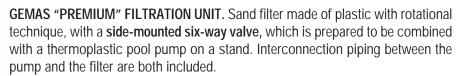
GEMAS "PREMIUM" FILTRATION UNIT.

Sand filter made of plastic with rotational technique, with a **top-mounted six-way valve**, which is prepared to be combined with a thermoplastic pool pump on a stand. Interconnection piping between the pump and the filter are both included.





| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------------------------------|----------|----------------|--------------|--------------------------|
| • Ø 400 mm with Plastic Sand Filter, | 021921FU | 1 | 25,000 | 0,150 |
| Pump 1/3 HP, Mono - Micro | | | | |
| • Ø 500 mm with Plastic Sand Filter, | 021922FU | 1 | 30,000 | 0,190 |
| Pump 1/2 HP, Mono - Micro | | | | |
| • Ø 615 mm with Plastic Sand Filter, | 021923FU | 1 | 38,000 | 0,190 |
| Pump ¾ HP, Mono - Mini | | | | |

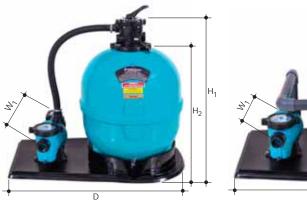


| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------------------------------|----------|----------------|--------------|--------------------------|
| • Ø 400 mm with Plastic Sand Filter, | 021911FU | 1 | 24,000 | 0,150 |
| Pump 1/3 HP, Mono - Micro | | | | |
| • Ø 500 mm with Plastic Sand Filter, | 021912FU | 1 | 29,000 | 0,190 |
| Pump 1/2 HP, Mono - Micro | | | | |
| • Ø 615 mm with Plastic Sand Filter, | 021913FU | 1 | 36,000 | 0,190 |
| Pump 3/4 HP, Mono - Mini | | | | |





Folding Collector Arms



| | Premium Top Mounted Multiport Valve | | | alve Premium Side Mounted Multiport Valv | | |
|-----------------------------|-------------------------------------|----------|----------|--|----------|----------|
| MODEL | 021921FU | 021922FU | 021923FU | 021911FU | 021912FU | 021913FU |
| D (mm) | 1120 | 1120 | 1120 | 1120 | 1120 | 1120 |
| H ₁ (mm) | 290 | 330 | 344 | 280 | 320 | 334 |
| H ₂ (mm) | 220 | 260 | 274 | 220 | 260 | 274 |
| W1 (mm) | 444 | 444 | 500 | 444 | 444 | 500 |
| CONNECTIONSØ (mm) | 1 1/2" | 1 1/2" | 1 1/2" | 1 1/2" | 1 1/2" | 1 1/2" |
| FLOW (m³/h) (50 m³/h/m²) | 8 | 10 | 15 | 8 | 10 | 15 |
| SAND (Kg) | 75 | 100 | 150 | <i>75</i> | 100 | 150 |
| NET WEIGHT (Kg) | 25,000 | 30,000 | 38,000 | 24,000 | 29,000 | 36,000 |

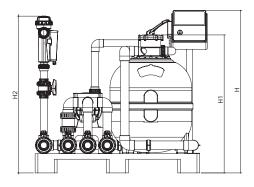


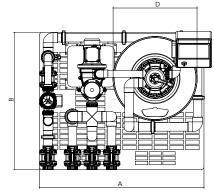
Palletized Filtration System

Completely Installed on 100 x 120 cm pallet. 3 suctions, 1 return and 1 back wash line (d63 mm). Salt Chlorinator, Electric Panel, and transformers are optional. Extra bypass connection available for auxillary unit installation such as chlorinator, heater, heat pump etc.



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|-------|----------------|--------------|--------------------------|
| • Ø 500 mm Top Filter - 3/4 HP Mini Mono Pump | 02526 | 1 | | |
| • Ø 615 mm Top Filter - 1 HP Mini Mono Pump | 02527 | 1 | | |
| • Ø 760 mm Top Filter - 1,5 HP Pump | 02528 | 1 | | |







Salt Chlorinator (Optional)

| MODEL | Α | В | D | Н | H¹ | H² |
|--|------|------|-----|------|------|------|
| D.500 Premium Filter - 3/4 HP Mini Streamer Pump | 1200 | 1000 | 500 | 1100 | 855 | 1100 |
| D.615 Premium Filter - 1 HP Mini Streamer Pump | 1200 | 1000 | 615 | 1200 | 975 | 1100 |
| D.760 Filtrone Filter - 1.5 HP Mini Streamer Pump | 1200 | 1000 | 760 | 1300 | 1195 | 1100 |



Electric Panel (Optional)



"Turbidron" Bobbin Wound Filters

ADDITIONAL OPTIONS FOR GEMAS "TURBIDRON" BOBBIN WOUND SAND FILTERS



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ | | |
|---|----------|----------------|--------------|--------------------------|--|--|
| • Round Manhole (2,5 bar) Ø 400 mm | 0217172 | 1 | | | | |
| Ditto, Transparent Lid | 0217172T | 1 | | | | |
| • Round Manhole (4 bar) Ø 400 mm | 0217182 | 1 | | | | |
| • Transparent Lid (Price difference w/ opaque) | 0217119 | | | | | |
| Sight Glass Ø 90 mm | 0217192 | 1 | | | | |
| Sight Glass Ø 125 mm | 0217202 | 1 | | | | |
| Sight Glass Ø 200 mm | 0217212 | 1 | | | | |
| Automatic Air Purge 1" | 0217222 | 1 | | | | |
| Automatic Air Purge 2" | 0217232 | 1 | | | | |
| Double Manometer Set | 0217242 | 1 | | | | |
| Double Manometer Set W/Sampling V. | 0217252 | 1 | | | | |
| Ozone Protection (Vinlyester coating) | | | | | | |
| • Sand Bed Depth = 1,5 m (Price difference w/1,0 m depth) | | | | | | |
| • Sand Bed Depth = 1,2 m (Price difference w/1,0 m | depth) | | | | | |



Cartridge Filters

GEMAS CARTRIDGE FILTER. Body made in ABS plastic. Complete with manometer and air purge connections 1 1/2" BSP threaded. Max. operation pressure: 2.5 Bar.

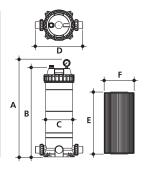
| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|-------|----------------|--------------|--------------------------|
| • AF25 Cartridge Filter - 5,5 m ³ /h | 02411 | 1 | 5,000 | 0,040 |
| • AF50 Cartridge Filter - 11,4 m³/h | 02413 | 1 | 5,500 | 0,050 |
| • AF75 Cartridge Filter - 17,0 m³/h | 02414 | 1 | 6,500 | 0,060 |
| • AF100 Cartridge Filter - 22,9 m³/h | 02415 | 1 | 7,500 | 0,070 |
| • AF150 Cartridge Filter - 33,4 m³/h | 02416 | 1 | | |
| AF200 Cartridge Filter - 40,9 m³/h | 02417 | 1 | | |

| MODEL | DIA (mm) | HEIGHT (mm) | CONNECTIONS (Inlet-Outlet) | OPER.PRESSURE (kg/cm²) | FLOW (m ³ /h) | FILTRATION CAP. |
|-------|-------------|----------------|-------------------------------|---------------------------|-----------------------------|-----------------|
| AF25 | 445 | 387 | 1/2" | 2,5 | 5,5 | ≥15 |
| AF50 | 625 | 567 | 1/2" | 2,5 | 11,4 | ≥15 |
| AF75 | 805 | 747 | 1/2" | 2,5 | 17,0 | ≥15 |
| AF100 | 985 | 927 | 2" | 2,5 | 22,9 | ≥15 |
| AF150 | 1165 | 1107 | 2" | 2,5 | 33,4 | ≥15 |
| AF200 | 1345 | 1287 | 2" | 2,5 | 40,9 | ≥15 |





| MODEL | A (mm) | B (mm) | C (mm) | D (mm) | E (mm) | F (mm) | FILTRATION AREA (m²) |
|-------|-----------|-----------|-----------|-----------|-----------|-----------|----------------------|
| AF25 | 445 | 387 | 225 | 397 | 178 | 185 | 2,25 |
| AF50 | 625 | 567 | 225 | 397 | 358 | 185 | 4,63 |
| AF75 | 805 | 747 | 225 | 397 | 537 | 185 | 7,00 |
| AF100 | 985 | 927 | 225 | 397 | 717 | 185 | 9,38 |
| AF150 | 1165 | 1107 | 225 | 397 | 896 | 185 | 13,72 |
| AF200 | 1345 | 1287 | 225 | 397 | 538x2pcs | 185 | 16,82 |



GEMAS REPLACEMENT CARTRIDGE

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------------|---------|----------------|--------------|--------------------------|
| AF25-CE Cartridge | 0241101 | 1 | | |
| AF50-CE Cartridge | 0241301 | 1 | | |
| AF75-CE Cartridge | 0241401 | 1 | | |
| AF100-CE Cartridge | 0241501 | 1 | | |
| AF150-CE Cartridge | 0241601 | 1 | | |
| AF200-CE Cartridge | 0241701 | 1 | | |







"Turbidron" Bobbin Wound Filters

2 years Parts WARRANTY

GEMAS "TURBIDRON" SAND FILTERS.

Up to size Ø 1800, filter shell made of single piece Roto MOLDED PE. Larger sizes shell made of FR Polyester shell reinforced by fiberglass bobbin winding outside. Complete with pressure gauge, air release valve of 1/2". Test pressure 4,0 kg/cm². Max. operation pressure 2,5 kg/cm². Filtration rate: 40 m³/h/m². Filtration bed depth:1,0 m (Excluding 021717E). Please ask price for 4,0 and 6,0 kg/cm² operation pressures. 2 years warranty.





| J | 2 | 1 | / | 2 | 5 | |
|---|---|---|---|---|---|--|
| | | | | | | |

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------------------------------|---------|----------------|--------------|--------------------------|
| • Ø 1200 mm - 56 m³/h, 75 mm unions | 021717E | 1 | 95,000 | |
| • Ø 1200 mm - 56 m³/h | 021725 | 1 | 110 ,000 | |
| • Ø 1400 mm - 77 m³/h | 021718 | 1 | 180,000 | |
| • Ø 1600 mm - 100 m³/h | 021719 | 1 | 240,000 | |
| • Ø 1800 mm - 127 m³/h | 021720 | 1 | 275,000 | |
| • Ø 2000 mm - 157 m³/h | 021721 | 1 | 300,000 | |
| • Ø 2200 mm - 190 m³/h | 021722 | 1 | 425,000 | |
| • Ø 2350 mm - 217 m³/h | 021727 | 1 | | |
| • Ø 2400 mm - 226 m³/h | 021723 | 1 | 535,000 | |
| • Ø 2500 mm - 245 m³/h | 021724 | 1 | | |
| • Ø 3000 mm - 245 m³/h | 021726 | 1 | | |





021721



| MODEL | 021717E | 021725 | 021718 | 021719 | 021720 | 021721 | 021722 | 021727 | 021723 | 021724 | 021726 |
|--------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|--------|
| D (mm) | 1200 | 1200 | 1400 | 1600 | 1800 | 2000 | 2200 | 2350 | 2400 | 2500 | 3000 |
| H₁ (mm) | 1410 | 1410 | 1560 | 1860 | 2050 | 2160 | 2360 | 2560 | 2660 | 2770 | 2770 |
| H ₂ (mm) | - | - | - | - | - | - | - | - | - | - | - |
| H_3 (mm) | 1350 | 1350 | 1500 | 1800 | 1990 | 2100 | 2300 | 2500 | 2600 | 2710 | 2710 |
| H ₄ (mm) | 520 | 520 | 600 | 640 | 700 | 770 | 900 | 900 | 900 | | |
| H ₅ (mm) | 880 | 880 | 950 | 1200 | 1300 | 1400 | 1530 | 1700 | 1700 | | |
| CONNECTIONS Ø (mm) | 75 | 90 | 110 | 125 | 140 | 160 | 200 | 200 | 200 | 200 | 200 |
| FLOW (m³/h) (50 m³/h/m²) | 56 | 56 | 77 | 100 | 127 | 157 | 190 | 217 | 226 | 245 | 245 |
| SAND (Kg) | 1300 | 1500 | 1950 | 2750 | 3650 | 4750 | 5700 | 6150 | 6400 | 7000 | 7000 |
| NET WEIGHT (Kg) | 95,000 | 110,000 | 180,000 | 240,000 | 275,000 | 300,000 | 425,000 | 500,000 | 535,000 | | |



Turbidron Commercial Sand Filters Design Options

| 9 | ∞ | 7 | 6 | Б | 4 | ω | 2 | _ | ~ | | 9 | ∞ | 7 | 6 | л | 4 | ω | 2 | | × | | - |
|--|--|--|--|--|--|---|---|---|--|---|--|--|--|--|--|--|---|---|---|--|---|-------|
| Filter Ø 3000 mm - 283 m ³ /h | Filter Ø 2500 mm - 196 m ³ /h | Filter Ø 2350 mm - 173 m ³ /h | Filter Ø 2200 mm - 152 m ³ /h | Filter Ø 2000 mm - 125 m ³ /h | Filter Ø 1800 mm - 100 m ³ /h | Filter Ø 1600 mm - 80 m ³ /h | Filter Ø 1400 mm - 62 m ³ /h | Filter Ø 1200 mm - 45 m ³ /h | Operation Pressure Max. 4 kg/cm² Test Pressure 6 kg/cm² Filtration Speed 40 m 3/H/m² | DESCRIPTION | Filter Ø 3000 mm - 283 m ³ /h | Filter Ø 2500 mm - 196 m ³ /h | Filter Ø 2350 mm - 173 m ³ /h | Filter Ø 2200 mm - 152 m ³ /h | Filter Ø 2000 mm - 125 m ³ /h | Filter Ø 1800 mm - 100 m ³ /h | Filter Ø 1600 mm - 80 m ³ /h | Filter Ø 1400 mm - 62 m ³ /h | Filter Ø 1200 mm - 45 m ³ /h | Operation Pressure Max. 2,5 kg/cm² Test Pressure 4 kg/cm² Filtration Speed 40 m ³/H/m² | DESCRIPTION | |
| P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | A | Bed Depth 1.0 m Lateral Distribution | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | A | Bed Depth 1.0 m Lateral Distribution | |
| P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | В | Bed Depth 1.20 m | P.A.P. P.A.P. | P.A.P. | В | Bed Depth 1.20 m | |
| P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | С | Nozzle plate distribution system | P.A.P. P.A.P. | P.A.P. | С | Nozzle plate distribution system | |
| P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | D | Circular Manhole 4 Bar Ø400 mm | P.A.P. P.A.P. | P.A.P. | D | Circular Manhole 2,5 Bar Ø400 mm | |
| P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | Z | Circular Manhole 4 Bar Ø500 mm | P.A.P. P.A.P. | P.A.P. | Z | Circular Manhole 2,5 Bar Ø500 mm | |
| P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | ш | Circular Manhole 4 Bar Ø600 mm | P.A.P. P.A.P. | P.A.P. | ш | Circular Manhole 2,5 Bar Ø600 mm | |
| P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | FI | Sight Glass 4 Bar Ø90 mm | P.A.P. P.A.P. | P.A.P. | Ŧ | Sight Glass 2,5 Bar Ø90 mm | (|
| P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | G | Sight Glass 4 Bar Ø125 mm | P.A.P. P.A.P. | P.A.P. | G | Sight Glass 2,5 Bar Ø125 mm | 70000 |
| P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | I | Sight Glass 4 Bar Ø200 mm | P.A.P. P.A.P. | P.A.P. | I | Sight Glass 2,5 Bar Ø200 mm | (|
| P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | _ | Sight Glass 4 Bar Ø250 mm | P.A.P. P.A.P. | P.A.P. | _ | Sight Glass 2,5 Bar Ø250 mm | |
| P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | _ | Automatic Air Purge 1" | P.A.P. P.A.P. | P.A.P. | ۷ | Automatic Air Purge 1" | |
| P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | ~ | Automatic Air Purge 2" | P.A.P. P.A.P. | P.A.P. | ~ | Automatic Air Purge 2" | |
| P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | Г | Double Manometer Set | P.A.P. P.A.P. | P.A.P. | Г | Double Manometer Set | |
| P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | P.A.P. | ≤ | Ozon Protection | P.A.P. P.A.P. | P.A.P. | ≤ | Ozon Protection | |



"Turbidron - Norm Plus" Deep - Bed Sand Filter

GEMAS "TURBIDRON-NORM PLUS" SAND FILTERS (According to DIN 19605 and 19643).

Filter shell made of fiberglass reinforced laminated polyester by fiberglass bobbin winding outside. Including pressure gauge, air purge and multiport valve. Collector plate with nozzles. Sight glass and side manhole at side.

Bed depth:1,20 m. Test pressure 3,5 kg/cm².

Max. operation pressure 2,5 kg/cm².

Filtration Rate: Single Layer (Quartz Sand): 30 m³/h/m².

Multilayer (Quartz Sand + Anthracite and/or zeolite): 40 m³/h/m².





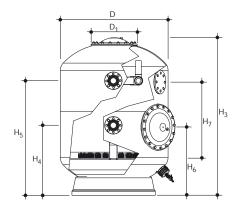
Large TOP Lid

| Description | Code | box | Kg | m ³ |
|-----------------------------------|--------|-----|----------|----------------|
| • Ø 900 mm - 19 m³/h - 25 m³/h | 021512 | 1 | 1000,000 | |
| • Ø 1000 mm - 24 m³/h - 32 m³/h | 021513 | 1 | 1300,000 | |
| • Ø 1200 mm - 37 m³/h - 49 m³/h | 021514 | 1 | 1800,000 | |
| • Ø 1400 mm - 46 m³/h - 61,5 m³/h | 021515 | 1 | 2350,000 | |
| • Ø 1600 mm - 63 m³/h - 84 m³/h | 021516 | 1 | 3300,000 | |
| • Ø 1800 mm - 76 m³/h - 101 m³/h | 021517 | 1 | 4400,000 | |
| • Ø 2000 mm- 94 m³/h - 125 m³/h | 021518 | 1 | 5700,000 | |
| • Ø 2200 mm - 114 m³/h - 152 m³/h | 021519 | 1 | 6850,000 | |
| • Ø 2350 mm - 130 m³/h - 173 m³/h | 021523 | 1 | | |
| • Ø 2400 mm - 136 m³/h - 181 m³/h | 021520 | 1 | 7700,000 | |
| • Ø 2500 mm - 147 m³/h - 196 m³/h | 021521 | 1 | 8300,000 | |
| • Ø 3000 mm - 212 m³/h - 283 m³/h | 021522 | 1 | | |

PS: Filtration rate for public pools should not exceed 40 m³/h/m².



FR Polyester Connection





Side Manhole

Nozzle Distribution System

| 120111410742 | . 011/ | | | CIOIII | | | | | | |
|--------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MODEL | 021512 | 021513 | 021514 | 021515 | 021516 | 021517 | 021518 | 021519 | 021520 | 021521 |
| D (mm) | 900 | 1000 | 1200 | 1400 | 1600 | 1800 | 2000 | 2200 | 2400 | 2500 |
| D ₁ (mm) | - | - | - | - | - | - | - | - | - | - |
| H ₃ (mm) | 1940 | 2050 | 2200 | 2380 | 2440 | 2550 | 2600 | 2600 | 2600 | 2750 |
| H ₄ (mm) | 500 | 750 | 750 | 820 | 850 | 900 | 950 | 950 | 1000 | 900 |
| H ₅ (mm) | 1450 | 1550 | 1550 | 1520 | 1550 | 1600 | 1700 | 1700 | 1750 | 1700 |
| H ₆ (mm) | 900 | 900 | 900 | 1000 | 950 | 950 | 1100 | 1000 | 1000 | 920 |
| H ₇ (mm) | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 |
| CONNECTIONS Ø (mm) | 63 | 75 | 75 | 90 | 90 | 110 | 125 | 140 | 140 | 160 |
| FLOW (m³/h) (50 m³/h/m²) | 19 | 24 | 37 | 46 | 63 | 76 | 94 | 114 | 136 | 147 |
| SAND (Kg) | 1000 | 1300 | 1800 | 2350 | 3300 | 4400 | 5700 | 6850 | 7700 | 8300 |
| | | | | | | | | | | |



"Turbidron" Bobbin Wound Horizontal Filters

Filter shell made of fiberglass reinforced laminated polyester by fiberglass bobbin winding outside. Complete with pressure gauge, 11/2" air valve and 400 mm side manhole. Test pressure 4 kg/cm². Max. operation pressure 2,5 kg/cm². Filtration rate Max. 30 m³/h/m². Pls. ask price for 4 Bar working pressure. Pls. ask price for "Dual Stack" version.

| Filtration Bed Depth 0,6 m. •Ø 1000 mm - L = 1500 mm. 34 m³/h •Ø 1000 mm - L = 2000 mm. 51 m³/h •Ø 1200 mm - L = 2000 mm. 63 m³/h •Ø 1200 mm - L = 2500 mm. 80 m³/h •Ø 1200 mm - L = 2500 mm. 80 m³/h •Ø 1400 mm - L = 2000 mm. 70 m³/h •Ø 1400 mm - L = 2500 mm. 88 m³/h •Ø 1400 mm - L = 2500 mm. 88 m³/h •Ø 1400 mm - L = 2500 mm. 88 m³/h •Ø 1400 mm - L = 2500 mm. 88 m³/h •Ø 1400 mm - L = 2500 mm. 87 m³/h •Ø 1600 mm - L = 2500 mm. 110 m³/h •Ø 1600 mm - L = 2500 mm. 105 m³/h •Ø 1600 mm - L = 3000 mm. 137 m³/h •Ø 1600 mm - L = 3000 mm. 137 m³/h •Ø 1600 mm - L = 4500 mm. 163 m³/h •Ø 1600 mm - L = 4500 mm. 190 m³/h •Ø 1800 mm - L = 3500 mm. 114 m³/h •Ø 1800 mm - L = 3500 mm. 140 m³/h •Ø 1800 mm - L = 3500 mm. 166 m³/h •Ø 1800 mm - L = 3500 mm. 166 m³/h •Ø 1800 mm - L = 3500 mm. 123 m³/h •Ø 1800 mm - L = 3500 mm. 123 m³/h •Ø 2000 mm - L = 3500 mm. 123 m³/h •Ø 2000 mm - L = 3500 mm. 123 m³/h •Ø 2000 mm - L = 3500 mm. 120 m³/h •Ø 2000 mm - L = 3500 mm. 120 m³/h •Ø 2000 mm - L = 3500 mm. 120 m³/h •Ø 2000 mm - L = 3500 mm. 120 m³/h •Ø 2000 mm - L = 3500 mm. 120 m³/h •Ø 2000 mm - L = 3500 mm. 120 m³/h •Ø 2000 mm - L = 3500 mm. 265 m³/h •Ø 2000 mm - L = 45000 mm. 265 m³/h •Ø 2000 mm - L = 3500 mm. 165 m³/h •Ø 2200 mm | Description | Code | Pieces/ box |
|--|---|----------|----------------|
| •Ø 1000 mm - L = 2000 mm. 51 m³/h •Ø 1200 mm - L = 2000 mm. 63 m³/h •Ø 1200 mm - L = 2500 mm. 80 m³/h •Ø 1200 mm - L = 2500 mm. 80 m³/h •Ø 1200 mm - L = 2500 mm. 80 m³/h •Ø 1400 mm - L = 2500 mm. 80 m³/h •Ø 1400 mm - L = 2500 mm. 88 m³/h •Ø 1400 mm - L = 2500 mm. 88 m³/h •Ø 1400 mm - L = 2500 mm. 88 m³/h •Ø 1400 mm - L = 2000 mm. 110 m³/h •Ø 1600 mm - L = 2000 mm. 105 m³/h •Ø 1600 mm - L = 2500 mm. 105 m³/h •Ø 1600 mm - L = 3000 mm. 137 m³/h •Ø 1600 mm - L = 4000 mm. 163 m³/h •Ø 1600 mm - L = 4500 mm. 190 m³/h •Ø 1600 mm - L = 4500 mm. 190 m³/h •Ø 1800 mm - L = 3500 mm. 114 m³/h •Ø 1800 mm - L = 3500 mm. 140 m³/h •Ø 1800 mm - L = 3500 mm. 166 m³/h •Ø 1800 mm - L = 3500 mm. 166 m³/h •Ø 2000 mm - L = 2500 mm. 123 m³/h •Ø 2000 mm - L = 3500 mm. 180 m³/h •Ø 2197201 1 •Ø 2000 mm - L = 3500 mm. 180 m³/h •Ø 2197211 1 •Ø 2000 mm - L = 3500 mm. 180 m³/h •Ø 2197212 1 •Ø 2000 mm - L = 3500 mm. 180 m³/h •Ø 2197213 1 •Ø 2000 mm - L = 3500 mm. 236 m³/h •Ø 2197215 1 •Ø 2000 mm - L = 3500 mm. 165 m³/h •Ø 2197215 1 •Ø 2200 mm - L = 3500 mm. 165 m³/h •Ø 2197221 1 •Ø 2200 mm - L = 3500 mm. 165 m³/h •Ø 2200 mm - L = 3500 mm. 165 m³/h •Ø 2200 mm - L = 3500 mm. 165 m³/h •Ø 2200 mm - L = 3500 mm. 197 m³/h •Ø 2200 mm - L = 3500 mm. 197 m³/h •Ø 2200 mm - L = 3500 mm. 197 m³/h •Ø 2200 mm - L = 3500 mm. 198 m³/h •Ø 2200 mm - L = 3500 mm. 197 m³/h •Ø 2200 mm - L = 3500 mm. 197 m³/h •Ø 2200 mm - L = 3500 mm. 258 m³/h •Ø 2200 mm - L = 3500 mm. 258 m³/h •Ø 2200 mm - L = 4500 mm. 258 m³/h •Ø 2200 mm - L = 4500 mm. 258 m³/h •Ø 2200 mm - L = 4500 mm. 258 m³/h •Ø 2200 mm - L = 4500 mm. 258 m³/h •Ø 2200 mm - L = 4500 mm. 258 m³/h •Ø 2200 mm - L = 4500 mm. 258 m³/h •Ø 2200 mm - L = 4500 mm. 258 m³/h •Ø 2200 mm - L = 4500 mm. 258 m³/h •Ø 2200 mm - L = 4500 mm. 258 m³/h •Ø 2200 mm - L = 4500 mm. 258 m³/h •Ø 2200 mm - L = 4500 mm. 258 m³/h •Ø 2200 mm - L = 4500 mm. 258 m³/h •Ø 2200 mm - L = 4500 mm. 258 m³/h •Ø 2200 mm - L = 5000 mm. 258 m³/h •Ø 2200 mm - L = 5000 mm. 258 m³/h •Ø 22 | Filtration Bed Depth 0,6 m. | | |
| • ∅ 1200 mm - L = 2000 mm. 63 m³/h • ∅ 1200 mm - L = 2500 mm. 80 m³/h • ∅ 1200 mm - L = 2500 mm. 80 m³/h • ∅ 1400 mm - L = 2500 mm. 80 m³/h • ∅ 1400 mm - L = 2500 mm. 88 m³/h • ∅ 1400 mm - L = 2500 mm. 88 m³/h • ∅ 1400 mm - L = 2500 mm. 88 m³/h • ∅ 1400 mm - L = 2000 mm. 70 m³/h • ∅ 1400 mm - L = 2000 mm. 87 m³/h • ∅ 1600 mm - L = 2500 mm. 105 m³/h • ∅ 1600 mm - L = 2500 mm. 105 m³/h • ∅ 1600 mm - L = 3000 mm. 137 m³/h • ∅ 1600 mm - L = 4500 mm. 163 m³/h • ∅ 1600 mm - L = 4500 mm. 190 m³/h • ∅ 1800 mm - L = 4500 mm. 190 m³/h • ∅ 1800 mm - L = 3000 mm. 140 m³/h • ∅ 1800 mm - L = 3000 mm. 140 m³/h • ∅ 1800 mm - L = 3000 mm. 140 m³/h • ∅ 1800 mm - L = 2500 mm. 191 m³/h • ∅ 2000 mm - L = 2500 mm. 123 m³/h • ∅ 2000 mm - L = 3500 mm. 180 m³/h • ∅ 2000 mm - L = 3500 mm. 180 m³/h • ∅ 2000 mm - L = 4500 mm. 209 m³/h • ∅ 2000 mm - L = 4500 mm. 236 m³/h • ∅ 2000 mm - L = 5000 mm. 137 m³/h • ∅ 2000 mm - L = 5000 mm. 165 m³/h • ∅ 2000 mm - L = 5000 mm. 165 m³/h • ∅ 2000 mm - L = 2500 mm. 177 m³/h • ∅ 2000 mm - L = 3500 mm. 180 m³/h • ∅ 2000 mm - L = 2500 mm. 197 m³/h • ∅ 2000 mm - L = 2500 mm. 197 m³/h • ∅ 2000 mm - L = 3500 mm. 197 m³/h • ∅ 2200 mm - L = 3500 mm. 197 m³/h • ∅ 2200 mm - L = 3500 mm. 197 m³/h • ∅ 2200 mm - L = 4500 mm. 229 m³/h • ∅ 2200 mm - L = 4500 mm. 229 m³/h • ∅ 2200 mm - L = 4500 mm. 228 m³/h • № 2200 mm - L = 4500 mm. 228 m³/h • № 2200 mm - L = 4500 mm. 228 m³/h • № 2200 mm - L = 4500 mm. 228 m³/h • № 2200 mm - L = 4500 mm. 228 m³/h • № 2200 mm - L = 4500 mm. 228 m³/h • № 2200 mm - L = 4500 mm. 228 m³/h • № 2200 mm - L = 5000 mm. 228 m³/h • № 2200 mm - L = 5000 mm. 228 m³/h • № 2200 mm - L = 5000 mm. 228 m³/h • № 2200 mm - L = 5000 mm. 228 m³/h • № 2200 mm - L = 5000 mm. 228 m³/h • № 2200 mm - L = 5000 mm. 228 m³/h • № 2200 mm - L = 5000 mm. 228 m³/h • № 2200 mm - L = 5000 mm. 228 m³/h • № 2200 mm - L = 5000 mm. 228 m³/h • № 2200 mm - L = 5000 mm. 228 m³/h • № 22000 mm - L = 5000 mm. 228 m³/h • № 22000 mm - L = 5000 mm. 228 m³/h • № 22000 mm - L | •Ø 1000 mm - L=1500 mm. 34 m³/h | 02197161 | 1 |
| •Ø 1200 mm - L=2500 mm. 80 m³/h Filtration Bed Depth 0,8 m. •Ø 1400 mm - L=2500 mm. 70 m³/h •Ø 1400 mm - L=2500 mm. 88 m³/h •Ø 1400 mm - L=2500 mm. 88 m³/h •Ø 1400 mm - L=2500 mm. 87 m³/h •Ø 1400 mm - L=2000 mm. 70 m³/h •Ø 1600 mm - L=2000 mm. 87 m³/h •Ø 1600 mm - L=2500 mm. 105 m³/h •Ø 1600 mm - L=3000 mm. 137 m³/h •Ø 1600 mm - L=4000 mm. 137 m³/h •Ø 1600 mm - L=4000 mm. 163 m³/h •Ø 1600 mm - L=4500 mm. 190 m³/h •Ø 1600 mm - L=4500 mm. 190 m³/h Filtration Bed Depth 1,0 m. •Ø 1800 mm - L=2500 mm. 114 m³/h •Ø 1800 mm - L=3500 mm. 114 m³/h •Ø 1800 mm - L=3500 mm. 166 m³/h •Ø 1800 mm - L=3500 mm. 166 m³/h •Ø 2000 mm - L=2500 mm. 123 m³/h •Ø 2000 mm - L=2500 mm. 123 m³/h •Ø 2000 mm - L=3500 mm. 180 m³/h •Ø 2000 mm - L=3500 mm. 180 m³/h •Ø 2000 mm - L=3500 mm. 180 m³/h •Ø 2000 mm - L=3500 mm. 180 m³/h •Ø 2000 mm - L=3500 mm. 180 m³/h •Ø 2000 mm - L=3500 mm. 180 m³/h •Ø 2000 mm - L=4500 mm. 236 m³/h •Ø 2197212 1 •Ø 2000 mm - L=4500 mm. 236 m³/h •Ø 2197215 1 •Ø 2200 mm - L=5000 mm. 165 m³/h •Ø 2200 mm - L=5000 mm. 165 m³/h •Ø 2200 mm - L=3500 mm. 16 | •Ø 1000 mm - L=2000 mm. 51 m³/h | 02197162 | 1 |
| Filtration Bed Depth 0,8 m. •Ø 1400 mm - L = 2000 mm. 70 m³/h •Ø 1400 mm - L = 2500 mm. 88 m³/h •Ø 1400 mm - L = 2000 mm. 110 m³/h •Ø 1400 mm - L = 2000 mm. 87 m³/h •Ø 1600 mm - L = 2000 mm. 87 m³/h •Ø 1600 mm - L = 2500 mm. 105 m³/h •Ø 1600 mm - L = 2500 mm. 137 m³/h •Ø 1600 mm - L = 3000 mm. 137 m³/h •Ø 1600 mm - L = 4000 mm. 163 m³/h •Ø 1600 mm - L = 4000 mm. 163 m³/h •Ø 1600 mm - L = 4500 mm. 190 m³/h •Ø 1600 mm - L = 4500 mm. 190 m³/h Filtration Bed Depth 1,0 m. •Ø 1800 mm - L = 2500 mm. 114 m³/h •Ø 1800 mm - L = 3000 mm. 140 m³/h •Ø 1800 mm - L = 3000 mm. 140 m³/h •Ø 1800 mm - L = 3500 mm. 166 m³/h •Ø 1800 mm - L = 3500 mm. 191 m³/h •Ø 2000 mm - L = 2500 mm. 123 m³/h •Ø 2000 mm - L = 2500 mm. 123 m³/h •Ø 2000 mm - L = 3500 mm. 180 m³/h •Ø 2000 mm - L = 3500 mm. 180 m³/h •Ø 2000 mm - L = 3500 mm. 180 m³/h •Ø 2000 mm - L = 4500 mm. 236 m³/h •Ø 2000 mm - L = 4500 mm. 236 m³/h •Ø 2000 mm - L = 5000 mm. 165 m³/h •Ø 2000 mm - L = 5000 mm. 165 m³/h •Ø 2200 mm - L = 2500 mm. 177 m³/h •Ø 2200 mm - L = 3500 mm. 165 m³/h •Ø 2200 mm - L = 3500 mm. 165 m³/h •Ø 2200 mm - L = 3500 mm. 165 m³/h •Ø 2200 mm - L = 3500 mm. 165 m³/h •Ø 2200 mm - L = 3500 mm. 165 m³/h •Ø 2200 mm - L = 3500 mm. 165 m³/h •Ø 2200 mm - L = 3500 mm. 177 m³/h •Ø 2200 mm - L = 3500 mm. 197 m³/h •Ø 2200 mm - L = 4500 mm. 229 m³/h •Ø 2200 mm - | •Ø 1200 mm - L=2000 mm. 63 m ³ /h | 02197171 | 1 |
| •Ø 1400 mm - L = 2000 mm. 70 m³/h •Ø 1400 mm - L = 2500 mm. 88 m³/h •Ø 1400 mm - L = 3000 mm. 110 m³/h •Ø 1600 mm - L = 2000 mm. 87 m³/h •Ø 1600 mm - L = 2500 mm. 105 m³/h •Ø 1600 mm - L = 3000 mm. 137 m³/h •Ø 1600 mm - L = 3000 mm. 137 m³/h •Ø 1600 mm - L = 4000 mm. 163 m³/h •Ø 1600 mm - L = 4500 mm. 190 m³/h •Ø 1600 mm - L = 4500 mm. 190 m³/h •Ø 1600 mm - L = 2500 mm. 114 m³/h •Ø 1800 mm - L = 2500 mm. 114 m³/h •Ø 1800 mm - L = 3000 mm. 140 m³/h •Ø 1800 mm - L = 3500 mm. 166 m³/h •Ø 1800 mm - L = 4000 mm. 191 m³/h •Ø 2000 mm - L = 2500 mm. 123 m³/h •Ø 2000 mm - L = 3500 mm. 180 m³/h •Ø 2000 mm - L = 3500 mm. 180 m³/h •Ø 2000 mm - L = 4000 mm. 209 m³/h •Ø 2000 mm - L = 4500 mm. 236 m³/h •Ø 2000 mm - L = 4500 mm. 265 m³/h •Ø 2200 mm - L = 3500 mm. 165 m³/h •Ø 2200 mm - L = 3500 mm. 197 m³/h •Ø 2200 mm - L = 3500 mm. 197 m³/h •Ø 2200 mm - L = 3500 mm. 197 m³/h •Ø 2200 mm - L = 3500 mm. 197 m³/h •Ø 2200 mm - L = 3500 mm. 197 m³/h •Ø 2200 mm - L = 3500 mm. 197 m³/h •Ø 2200 mm - L = 3500 mm. 258 m³/h •Ø 1800 mm - L = 4500 mm. 258 m³/h •Ø 2200 mm - L = 4500 mm. 258 m³/h •Ø 2200 mm - L = 4500 mm. 258 m³/h •Ø 2197225 1 •Ø 2200 mm - L = 4500 mm. 258 m³/h •Ø 2197226 1 •Ø 2200 mm - L = 5000 mm. 287 m³/h •Ø 2197226 1 •Ø 2200 mm - L = 5000 mm. 287 m³/h •Ø 2197226 | •Ø 1200 mm - L=2500 mm. 80 m³/h | 02197172 | 1 |
| •Ø 1400 mm - L = 2000 mm. 70 m³/h •Ø 1400 mm - L = 2500 mm. 88 m³/h •Ø 1400 mm - L = 3000 mm. 110 m³/h •Ø 1600 mm - L = 2000 mm. 87 m³/h •Ø 1600 mm - L = 2500 mm. 105 m³/h •Ø 1600 mm - L = 3000 mm. 137 m³/h •Ø 1600 mm - L = 3000 mm. 137 m³/h •Ø 1600 mm - L = 4000 mm. 163 m³/h •Ø 1600 mm - L = 4500 mm. 190 m³/h •Ø 1600 mm - L = 4500 mm. 190 m³/h •Ø 1600 mm - L = 2500 mm. 114 m³/h •Ø 1800 mm - L = 2500 mm. 114 m³/h •Ø 1800 mm - L = 3000 mm. 140 m³/h •Ø 1800 mm - L = 3500 mm. 166 m³/h •Ø 1800 mm - L = 4000 mm. 191 m³/h •Ø 2000 mm - L = 2500 mm. 123 m³/h •Ø 2000 mm - L = 3500 mm. 180 m³/h •Ø 2000 mm - L = 3500 mm. 180 m³/h •Ø 2000 mm - L = 4000 mm. 209 m³/h •Ø 2000 mm - L = 4500 mm. 236 m³/h •Ø 2000 mm - L = 4500 mm. 265 m³/h •Ø 2200 mm - L = 3500 mm. 165 m³/h •Ø 2200 mm - L = 3500 mm. 197 m³/h •Ø 2200 mm - L = 3500 mm. 197 m³/h •Ø 2200 mm - L = 3500 mm. 197 m³/h •Ø 2200 mm - L = 3500 mm. 197 m³/h •Ø 2200 mm - L = 3500 mm. 197 m³/h •Ø 2200 mm - L = 3500 mm. 197 m³/h •Ø 2200 mm - L = 3500 mm. 258 m³/h •Ø 1800 mm - L = 4500 mm. 258 m³/h •Ø 2200 mm - L = 4500 mm. 258 m³/h •Ø 2200 mm - L = 4500 mm. 258 m³/h •Ø 2197225 1 •Ø 2200 mm - L = 4500 mm. 258 m³/h •Ø 2197226 1 •Ø 2200 mm - L = 5000 mm. 287 m³/h •Ø 2197226 1 •Ø 2200 mm - L = 5000 mm. 287 m³/h •Ø 2197226 | | | |
| •Ø 1400 mm - L=2500 mm. 88 m³/h •Ø 1400 mm - L=3000 mm. 110 m³/h •Ø 1600 mm - L=2000 mm. 87 m³/h •Ø 1600 mm - L=2500 mm. 105 m³/h •Ø 1600 mm - L=2500 mm. 105 m³/h •Ø 1600 mm - L=3000 mm. 137 m³/h •Ø 1600 mm - L=3000 mm. 137 m³/h •Ø 1600 mm - L=4000 mm. 163 m³/h •Ø 1600 mm - L=4500 mm. 190 m³/h •Ø 1600 mm - L=4500 mm. 190 m³/h •Ø 1800 mm - L=2500 mm. 114 m³/h •Ø 1800 mm - L=3500 mm. 144 m³/h •Ø 1800 mm - L=3500 mm. 166 m³/h •Ø 1800 mm - L=3500 mm. 166 m³/h •Ø 1800 mm - L=4000 mm. 191 m³/h •Ø 2000 mm - L=2500 mm. 123 m³/h •Ø 2000 mm - L=3500 mm. 123 m³/h •Ø 2000 mm - L=3500 mm. 180 m³/h •Ø 2000 mm - L=3500 mm. 180 m³/h •Ø 2000 mm - L=4000 mm. 209 m³/h •Ø 2000 mm - L=4500 mm. 236 m³/h •Ø 2000 mm - L=5000 mm. 137 m³/h •Ø 2000 mm - L=5000 mm. 137 m³/h •Ø 2000 mm - L=5000 mm. 137 m³/h •Ø 2200 mm - L=3500 mm. 185 m³/h •Ø 2200 mm - L=3500 mm. 197 m³/h •Ø 2200 mm - L=3500 mm. 197 m³/h •Ø 2200 mm - L=3500 mm. 197 m³/h •Ø 2200 mm - L=4500 mm. 258 m³/h •Ø 1977222 1 •Ø 2200 mm - L=4500 mm. 258 m³/h •Ø 2200 mm - L=5000 mm. 258 m³/h •Ø 2200 mm - L=5000 mm. 287 m³/h •Ø 2200 mm - L=5000 mm. 287 m³/h •Ø 2200 mm - L=5000 mm. 287 m³/h •Ø 2200 mm - L=5000 mm. 287 m³/h •Ø 2200 mm - L=5000 mm. 287 m³/h •Ø 2200 mm - L=5000 mm. 287 m³/h •Ø 2200 mm - L=5000 mm. 287 m³/h •Ø 2200 mm - L=5000 mm. 287 m³/h •Ø 2200 mm - L=5000 mm. 287 m³/h •Ø 2200 mm - L=5000 mm. 287 m³/h •Ø 2200 mm - L=5000 mm. 287 m³/h •Ø 2200 mm - L=5000 mm. 287 m³/h •Ø 2200 mm - L=5000 mm. 287 m³/h •Ø 2200 mm - L=5000 mm. 287 m³/h •Ø 2200 mm - L=5000 mm. 287 m³/h | Filtration Bed Depth 0,8 m. | | |
| •Ø 1400 mm - L = 3000 mm. 110 m³/h •Ø 1600 mm - L = 2000 mm. 87 m³/h •Ø 1600 mm - L = 2500 mm. 105 m³/h •Ø 1600 mm - L = 2500 mm. 105 m³/h •Ø 1600 mm - L = 3000 mm. 137 m³/h •Ø 1600 mm - L = 4000 mm. 163 m³/h •Ø 1600 mm - L = 4500 mm. 190 m³/h •Ø 1600 mm - L = 4500 mm. 190 m³/h •Ø 1600 mm - L = 4500 mm. 190 m³/h •Ø 1800 mm - L = 2500 mm. 114 m³/h •Ø 1800 mm - L = 3500 mm. 140 m³/h •Ø 1800 mm - L = 3500 mm. 166 m³/h •Ø 1800 mm - L = 4000 mm. 191 m³/h •Ø 2000 mm - L = 2500 mm. 123 m³/h •Ø 2000 mm - L = 2500 mm. 123 m³/h •Ø 2000 mm - L = 3500 mm. 180 m³/h •Ø 2000 mm - L = 3500 mm. 180 m³/h •Ø 2000 mm - L = 3500 mm. 236 m³/h •Ø 2000 mm - L = 4000 mm. 236 m³/h •Ø 2000 mm - L = 4500 mm. 236 m³/h •Ø 2000 mm - L = 5000 mm. 137 m³/h •Ø 2000 mm - L = 3500 mm. 137 m³/h •Ø 2200 mm - L = 3500 mm. 165 m³/h •Ø 2200 mm - L = 3500 mm. 197 m³/h •Ø 2200 mm - L = 3500 mm. 197 m³/h •Ø 2200 mm - L = 3500 mm. 229 m³/h •Ø 2200 mm - L = 3500 mm. 258 m³/h •Ø 2200 mm - L = 4500 mm. 258 m³/h •Ø 2200 mm - L = 4500 mm. 258 m³/h •Ø 2200 mm - L = 4500 mm. 258 m³/h •Ø 2200 mm - L = 4500 mm. 287 m³/h | •Ø 1400 mm - L=2000 mm. 70 m³/h | 02197181 | 1 |
| •Ø 1600 mm - L=2000 mm. 87 m³/h •Ø 1600 mm - L=2500 mm. 105 m³/h •Ø 1600 mm - L=3000 mm. 137 m³/h •Ø 1600 mm - L=3000 mm. 137 m³/h •Ø 1600 mm - L=4000 mm. 163 m³/h •Ø 1600 mm - L=4500 mm. 190 m³/h •Ø 1600 mm - L=4500 mm. 190 m³/h •Ø 1800 mm - L=2500 mm. 114 m³/h •Ø 1800 mm - L=3000 mm. 140 m³/h •Ø 1800 mm - L=3500 mm. 166 m³/h •Ø 1800 mm - L=3500 mm. 166 m³/h •Ø 1800 mm - L=4000 mm. 191 m³/h •Ø 2000 mm - L=2500 mm. 123 m³/h •Ø 2000 mm - L=3000 mm. 180 m³/h •Ø 2000 mm - L=3500 mm. 180 m³/h •Ø 2000 mm - L=4500 mm. 236 m³/h •Ø 2000 mm - L=4500 mm. 265 m³/h •Ø 2000 mm - L=5000 mm. 137 m³/h •Ø 2200 mm - L=3500 mm. 165 m³/h •Ø 2200 mm - L=3500 mm. 165 m³/h •Ø 2200 mm - L=3500 mm. 197 m³/h •Ø 2200 mm - L=3500 mm. 197 m³/h •Ø 2200 mm - L=4500 mm. 229 m³/h •Ø 2200 mm - L=4500 mm. 258 m³/h •Ø 1800 mm - L=4500 mm. 258 m³/h •Ø 2200 mm - L=4500 mm. 258 m³/h •Ø 2200 mm - L=4500 mm. 258 m³/h •Ø 2200 mm - L=5000 mm. 287 m³/h •Ø 2200 mm - L=5000 mm. 287 m³/h •Ø 2200 mm - L=5000 mm. 287 m³/h •Ø 2200 mm - L=5000 mm. 287 m³/h •Ø 2200 mm - L=5000 mm. 287 m³/h •Ø 2200 mm - L=5000 mm. 287 m³/h •Ø 2200 mm - L=5000 mm. 287 m³/h •Ø 2200 mm - L=5000 mm. 287 m³/h •Ø 2200 mm - L=5000 mm. 287 m³/h •Ø 2200 mm - L=5000 mm. 287 m³/h •Ø 2200 mm - L=5000 mm. 287 m³/h •Ø 2200 mm - L=5000 mm. 287 m³/h •Ø 2200 mm - L=5000 mm. 287 m³/h •Ø 2200 mm - L=5000 mm. 287 m³/h | •Ø 1400 mm - L=2500 mm. 88 m³/h | 02197182 | 1 |
| •Ø 1600 mm - L=2500 mm. 105 m³/h •Ø 1600 mm - L=3000 mm. 137 m³/h •Ø 1600 mm - L=4000 mm. 163 m³/h •Ø 1600 mm - L=4500 mm. 190 m³/h •Ø 1600 mm - L=4500 mm. 190 m³/h Filtration Bed Depth 1,0 m. •Ø 1800 mm - L=2500 mm. 114 m³/h •Ø 1800 mm - L=3500 mm. 140 m³/h •Ø 1800 mm - L=3500 mm. 166 m³/h •Ø 1800 mm - L=3500 mm. 166 m³/h •Ø 1800 mm - L=4000 mm. 191 m³/h •Ø 2000 mm - L=2500 mm. 123 m³/h •Ø 2000 mm - L=3500 mm. 180 m³/h •Ø 2000 mm - L=3500 mm. 180 m³/h •Ø 2000 mm - L=4500 mm. 236 m³/h •Ø 2000 mm - L=5000 mm. 265 m³/h •Ø 2200 mm - L=3500 mm. 137 m³/h •Ø 2200 mm - L=3500 mm. 165 m³/h •Ø 2200 mm - L=3500 mm. 177 m³/h •Ø 2200 mm - L=3500 mm. 197 m³/h •Ø 2200 mm - L=4500 mm. 229 m³/h •Ø 2200 mm - L=3500 mm. 197 m³/h •Ø 2200 mm - L=3500 mm. 197 m³/h •Ø 2200 mm - L=4500 mm. 229 m³/h •Ø 2200 mm - L=4500 mm. 258 m³/h •Ø 2200 mm - L=4500 mm. 258 m³/h •Ø 2200 mm - L=5000 mm. 258 m³/h | •Ø 1400 mm - L=3000 mm. 110 m ³ /h | 02197183 | 1 |
| •Ø 1600 mm - L=3000 mm. 137 m³/h •Ø 1600 mm - L=4000 mm. 163 m³/h •Ø 1600 mm - L=4500 mm. 190 m³/h Piltration Bed Depth 1,0 m. •Ø 1800 mm - L=2500 mm. 114 m³/h •Ø 1800 mm - L=3500 mm. 140 m³/h •Ø 1800 mm - L=3500 mm. 166 m³/h •Ø 1800 mm - L=3500 mm. 166 m³/h •Ø 1800 mm - L=4000 mm. 191 m³/h •Ø 2000 mm - L=2500 mm. 123 m³/h •Ø 2000 mm - L=3500 mm. 180 m³/h •Ø 2000 mm - L=3500 mm. 180 m³/h •Ø 2000 mm - L=4000 mm. 209 m³/h •Ø 2000 mm - L=4500 mm. 236 m³/h •Ø 2000 mm - L=5000 mm. 137 m³/h •Ø 2200 mm - L=3500 mm. 137 m³/h •Ø 2200 mm - L=3500 mm. 137 m³/h •Ø 2200 mm - L=3500 mm. 197 m³/h •Ø 2200 mm - L=4500 mm. 229 m³/h •Ø 2200 mm - L=4500 mm. 229 m³/h •Ø 2200 mm - L=3500 mm. 197 m³/h •Ø 2200 mm - L=3500 mm. 197 m³/h •Ø 2200 mm - L=4500 mm. 229 m³/h •Ø 2200 mm - L=4500 mm. 229 m³/h •Ø 2200 mm - L=5000 mm. 258 m³/h •Ø 2200 mm - L=5000 mm. 258 m³/h •Ø 2200 mm - L=5000 mm. 258 m³/h •Ø 2200 mm - L=5000 mm. 258 m³/h •Ø 2200 mm - L=5000 mm. 258 m³/h •Ø 2200 mm - L=5000 mm. 258 m³/h •Ø 2200 mm - L=5000 mm. 258 m³/h •Ø 2200 mm - L=5000 mm. 258 m³/h •Ø 2200 mm - L=5000 mm. 258 m³/h •Ø 2200 mm - L=5000 mm. 258 m³/h •Ø 2200 mm - L=5000 mm. 258 m³/h •Ø 2200 mm - L=5000 mm. 258 m³/h •Ø 2200 mm - L=5000 mm. 258 m³/h •Ø 2200 mm - L=5000 mm. 258 m³/h | •Ø 1600 mm - L=2000 mm. 87 m³/h | 02197191 | 1 |
| •Ø 1600 mm - L=4000 mm. 163 m³/h •Ø 1600 mm - L=4500 mm. 190 m³/h Filtration Bed Depth 1,0 m. •Ø 1800 mm - L=2500 mm. 114 m³/h •Ø 1800 mm - L=3000 mm. 140 m³/h •Ø 1800 mm - L=3500 mm. 140 m³/h •Ø 1800 mm - L=3500 mm. 166 m³/h •Ø 1800 mm - L=4000 mm. 191 m³/h •Ø 2000 mm - L=2500 mm. 123 m³/h •Ø 2000 mm - L=3500 mm. 180 m³/h •Ø 2000 mm - L=3500 mm. 180 m³/h •Ø 2000 mm - L=3500 mm. 209 m³/h •Ø 2000 mm - L=4000 mm. 209 m³/h •Ø 2000 mm - L=4500 mm. 236 m³/h •Ø 2000 mm - L=5000 mm. 265 m³/h •Ø 2200 mm - L=2500 mm. 137 m³/h •Ø 2200 mm - L=3500 mm. 165 m³/h •Ø 2200 mm - L=3500 mm. 165 m³/h •Ø 2200 mm - L=3500 mm. 197 m³/h •Ø 2200 mm - L=3500 mm. 197 m³/h •Ø 2200 mm - L=3500 mm. 229 m³/h •Ø 2200 mm - L=4500 mm. 258 m³/h •Ø 2200 mm - L=4500 mm. 258 m³/h •Ø 2200 mm - L=4500 mm. 258 m³/h •Ø 2200 mm - L=5000 mm. 258 m³/h | •Ø 1600 mm - L=2500 mm. 105 m ³ /h | 02197192 | 1 |
| •Ø 1600 mm - L = 4500 mm. 190 m³/h Filtration Bed Depth 1,0 m. •Ø 1800 mm - L = 2500 mm. 114 m³/h •Ø 1800 mm - L = 3000 mm. 140 m³/h •Ø 1800 mm - L = 3500 mm. 166 m³/h •Ø 1800 mm - L = 3500 mm. 166 m³/h •Ø 1800 mm - L = 4000 mm. 191 m³/h •Ø 2000 mm - L = 2500 mm. 123 m³/h •Ø 2000 mm - L = 3500 mm. 180 m³/h •Ø 2000 mm - L = 3500 mm. 180 m³/h •Ø 2000 mm - L = 3500 mm. 180 m³/h •Ø 2000 mm - L = 4000 mm. 209 m³/h •Ø 2000 mm - L = 4500 mm. 236 m³/h •Ø 2000 mm - L = 5000 mm. 265 m³/h •Ø 2000 mm - L = 3500 mm. 137 m³/h •Ø 2200 mm - L = 3500 mm. 165 m³/h •Ø 2200 mm - L = 3500 mm. 197 m³/h •Ø 2200 mm - L = 3500 mm. 197 m³/h •Ø 2200 mm - L = 3500 mm. 229 m³/h •Ø 2200 mm - L = 4500 mm. 258 m³/h •Ø 2200 mm - L = 4500 mm. 258 m³/h •Ø 2200 mm - L = 4500 mm. 258 m³/h •Ø 2200 mm - L = 5000 mm. 258 m³/h •Ø 2200 mm - L = 5000 mm. 258 m³/h •Ø 2200 mm - L = 5000 mm. 258 m³/h •Ø 2200 mm - L = 5000 mm. 258 m³/h •Ø 2200 mm - L = 5000 mm. 258 m³/h •Ø 2200 mm - L = 5000 mm. 258 m³/h •Ø 2200 mm - L = 5000 mm. 258 m³/h •Ø 2200 mm - L = 5000 mm. 258 m³/h •Ø 2200 mm - L = 5000 mm. 258 m³/h •Ø 2200 mm - L = 5000 mm. 258 m³/h •Ø 2200 mm - L = 5000 mm. 258 m³/h •Ø 2200 mm - L = 5000 mm. 258 m³/h •Ø 2197225 1 Filtration Bed Depth 1,2 m. | •Ø 1600 mm - L=3000 mm. 137 m³/h | 02197193 | 1 |
| Filtration Bed Depth 1,0 m. •Ø 1800 mm - L = 2500 mm. 114 m³/h •Ø 1800 mm - L = 3500 mm. 140 m³/h •Ø 1800 mm - L = 3500 mm. 166 m³/h •Ø 1800 mm - L = 4000 mm. 191 m³/h •Ø 2000 mm - L = 2500 mm. 123 m³/h •Ø 2000 mm - L = 3500 mm. 180 m³/h •Ø 2000 mm - L = 3500 mm. 180 m³/h •Ø 2000 mm - L = 3500 mm. 180 m³/h •Ø 2000 mm - L = 4000 mm. 209 m³/h •Ø 2000 mm - L = 4500 mm. 236 m³/h •Ø 2000 mm - L = 5000 mm. 265 m³/h •Ø 2200 mm - L = 2500 mm. 137 m³/h •Ø 2200 mm - L = 3500 mm. 165 m³/h •Ø 2200 mm - L = 3500 mm. 165 m³/h •Ø 2200 mm - L = 3500 mm. 197 m³/h •Ø 2200 mm - L = 3500 mm. 197 m³/h •Ø 2200 mm - L = 4000 mm. 229 m³/h •Ø 2200 mm - L = 4500 mm. 258 m³/h •Ø 2200 mm - L = 4500 mm. 258 m³/h •Ø 2200 mm - L = 4500 mm. 258 m³/h •Ø 2200 mm - L = 5000 mm. 287 m³/h •Ø 2200 mm - L = 5000 mm. 287 m³/h •Ø 2200 mm - L = 5000 mm. 287 m³/h •Ø 2197225 1 Filtration Bed Depth 1,2 m. | •Ø 1600 mm - L=4000 mm. 163 m ³ /h | 02197194 | 1 |
| •Ø 1800 mm - L=2500 mm. 114 m³/h •Ø 1800 mm - L=3000 mm. 140 m³/h •Ø 1800 mm - L=3500 mm. 166 m³/h •Ø 1800 mm - L=3500 mm. 166 m³/h •Ø 1800 mm - L=4000 mm. 191 m³/h •Ø 2000 mm - L=2500 mm. 123 m³/h •Ø 2000 mm - L=3000 mm 152 m³/h •Ø 2000 mm - L=3500 mm. 180 m³/h •Ø 2000 mm - L=3500 mm. 180 m³/h •Ø 2000 mm - L=4000 mm. 209 m³/h •Ø 2000 mm - L=4500 mm. 236 m³/h •Ø 2000 mm - L=4500 mm. 265 m³/h •Ø 2000 mm - L=5000 mm. 137 m³/h •Ø 2200 mm - L=2500 mm. 165 m³/h •Ø 2200 mm - L=3500 mm. 165 m³/h •Ø 2200 mm - L=3500 mm. 197 m³/h •Ø 2200 mm - L=3500 mm. 197 m³/h •Ø 2200 mm - L=4500 mm. 258 m³/h •Ø 2200 mm - L=4500 mm. 258 m³/h •Ø 2200 mm - L=4500 mm. 258 m³/h •Ø 2200 mm - L=5000 mm. 258 m³/h •Ø 2200 mm - L=5000 mm. 258 m³/h •Ø 2200 mm - L=5000 mm. 287m³/h •Ø 2200 mm - L=5000 mm. 287m³/h •Ø 2197225 1 •Ø 111 million 1 | •Ø 1600 mm - L=4500 mm. 190 m ³ /h | 02197195 | 1 |
| •Ø 1800 mm - L=2500 mm. 114 m³/h •Ø 1800 mm - L=3000 mm. 140 m³/h •Ø 1800 mm - L=3500 mm. 166 m³/h •Ø 1800 mm - L=3500 mm. 166 m³/h •Ø 1800 mm - L=4000 mm. 191 m³/h •Ø 2000 mm - L=2500 mm. 123 m³/h •Ø 2000 mm - L=3000 mm 152 m³/h •Ø 2000 mm - L=3500 mm. 180 m³/h •Ø 2000 mm - L=3500 mm. 180 m³/h •Ø 2000 mm - L=4000 mm. 209 m³/h •Ø 2000 mm - L=4500 mm. 236 m³/h •Ø 2000 mm - L=4500 mm. 265 m³/h •Ø 2000 mm - L=5000 mm. 137 m³/h •Ø 2200 mm - L=2500 mm. 165 m³/h •Ø 2200 mm - L=3500 mm. 165 m³/h •Ø 2200 mm - L=3500 mm. 197 m³/h •Ø 2200 mm - L=3500 mm. 197 m³/h •Ø 2200 mm - L=4500 mm. 258 m³/h •Ø 2200 mm - L=4500 mm. 258 m³/h •Ø 2200 mm - L=4500 mm. 258 m³/h •Ø 2200 mm - L=5000 mm. 258 m³/h •Ø 2200 mm - L=5000 mm. 258 m³/h •Ø 2200 mm - L=5000 mm. 287m³/h •Ø 2200 mm - L=5000 mm. 287m³/h •Ø 2197225 1 •Ø 111 million 1 | | | |
| •Ø 1800 mm - L=3000 mm. 140 m³/h •Ø 1800 mm - L=3500 mm. 166 m³/h •Ø 1800 mm - L=4000 mm. 191 m³/h •Ø 2000 mm - L=2500 mm. 123 m³/h •Ø 2000 mm - L=3000 mm. 123 m³/h •Ø 2000 mm - L=3000 mm. 152 m³/h •Ø 2000 mm - L=3500 mm. 180 m³/h •Ø 2000 mm - L=3500 mm. 180 m³/h •Ø 2000 mm - L=4000 mm. 209 m³/h •Ø 2000 mm - L=4500 mm. 236 m³/h •Ø 2000 mm - L=4500 mm. 265 m³/h •Ø 2000 mm - L=5000 mm. 137 m³/h •Ø 2200 mm - L=2500 mm. 137 m³/h •Ø 2200 mm - L=3500 mm. 165 m³/h •Ø 2200 mm - L=3500 mm. 197 m³/h •Ø 2200 mm - L=3500 mm. 197 m³/h •Ø 2200 mm - L=4500 mm. 229 m³/h •Ø 2200 mm - L=4500 mm. 258 m³/h •Ø 2200 mm - L=4500 mm. 258 m³/h •Ø 2200 mm - L=5000 mm. 258 m³/h •Ø 2200 mm - L=5000 mm. 287 m³/h •Ø 2200 mm - L=5000 mm. 287 m³/h •Ø 1100 mm. 287 m³/h •Ø 2200 mm - L=5000 mm. 287 m³/h | Filtration Bed Depth 1,0 m. | | |
| •Ø 1800 mm - L = 3500 mm. 166 m³/h •Ø 1800 mm - L = 4000 mm. 191 m³/h •Ø 2000 mm - L = 2500 mm. 123 m³/h •Ø 2000 mm - L = 3500 mm. 123 m³/h •Ø 2000 mm - L = 3500 mm. 152 m³/h •Ø 2000 mm - L = 3500 mm. 180 m³/h •Ø 2000 mm - L = 4000 mm. 209 m³/h •Ø 2000 mm - L = 4500 mm. 236 m³/h •Ø 2000 mm - L = 4500 mm. 265 m³/h •Ø 2000 mm - L = 5000 mm. 137 m³/h •Ø 2200 mm - L = 2500 mm. 165 m³/h •Ø 2200 mm - L = 3500 mm. 197 m³/h •Ø 2200 mm - L = 3500 mm. 197 m³/h •Ø 2200 mm - L = 3500 mm. 258 m³/h •Ø 2200 mm - L = 4500 mm. 258 m³/h •Ø 2200 mm - L = 4500 mm. 258 m³/h •Ø 2200 mm - L = 5000 mm. 258 m³/h •Ø 2200 mm - L = 5000 mm. 258 m³/h •Ø 2200 mm - L = 5000 mm. 287m³/h •Ø 2200 mm - L = 5000 mm. 287m³/h •Ø 1100 mm. 287m³/h •Ø 2200 mm - L = 5000 mm. 287m³/h •Ø 2200 mm - L = 5000 mm. 287m³/h •Ø 2197225 1 •Ø 2200 mm - L = 5000 mm. 287m³/h •Ø 2197226 1 | •Ø 1800 mm - L=2500 mm. 114 m³/h | 02197201 | 1 |
| •Ø 1800 mm - L = 4000 mm. 191 m³/h •Ø 2000 mm - L = 2500 mm. 123 m³/h •Ø 2000 mm - L = 3000 mm. 123 m³/h •Ø 2000 mm - L = 3500 mm. 180 m³/h •Ø 2000 mm - L = 3500 mm. 180 m³/h •Ø 2000 mm - L = 4000 mm. 209 m³/h •Ø 2000 mm - L = 4500 mm. 236 m³/h •Ø 2000 mm - L = 5000 mm. 265 m³/h •Ø 2000 mm - L = 2500 mm. 137 m³/h •Ø 2200 mm - L = 2500 mm. 165 m³/h •Ø 2200 mm - L = 3000 mm. 165 m³/h •Ø 2200 mm - L = 3500 mm. 197 m³/h •Ø 2200 mm - L = 3500 mm. 197 m³/h •Ø 2200 mm - L = 4500 mm. 258 m³/h •Ø 2200 mm - L = 4500 mm. 258 m³/h •Ø 2200 mm - L = 4500 mm. 258 m³/h •Ø 2200 mm - L = 5000 mm. 287m³/h •Ø 2200 mm - L = 5000 mm. 287m³/h •Ø 1100 mm. 287m³/h •Ø 2200 mm - L = 5000 mm. 287m³/h •Ø 2200 mm - L = 5000 mm. 287m³/h •Ø 2200 mm - L = 5000 mm. 287m³/h •Ø 2200 mm - L = 5000 mm. 287m³/h •Ø 2200 mm - L = 5000 mm. 287m³/h | •Ø 1800 mm - L=3000 mm. 140 m³/h | 02197202 | 1 |
| •Ø 2000 mm - L = 2500 mm. 123 m³/h •Ø 2000 mm - L = 3000 mm 152 m³/h •Ø 2000 mm - L = 3500 mm. 180 m³/h •Ø 2000 mm - L = 4000 mm. 209 m³/h •Ø 2000 mm - L = 4500 mm. 236 m³/h •Ø 2000 mm - L = 4500 mm. 265 m³/h •Ø 2000 mm - L = 5000 mm. 137 m³/h •Ø 2200 mm - L = 2500 mm. 137 m³/h •Ø 2200 mm - L = 3000 mm. 165 m³/h •Ø 2200 mm - L = 3500 mm. 197 m³/h •Ø 2200 mm - L = 3500 mm. 229 m³/h •Ø 2200 mm - L = 4500 mm. 258 m³/h •Ø 2200 mm - L = 4500 mm. 258 m³/h •Ø 2200 mm - L = 4500 mm. 258 m³/h •Ø 2200 mm - L = 55000 mm. 287m³/h •Ø 2200 mm - L = 55000 mm. 287m³/h •Ø 2197225 1 •Ø 2200 mm - L = 4500 mm. 258 m³/h •Ø 2197226 1 •Ø 2197226 | •Ø 1800 mm - L=3500 mm. 166 m ³ /h | 02197203 | 1 |
| •Ø 2000 mm - L = 3000 mm 152 m³/h •Ø 2000 mm - L = 3500 mm. 180 m³/h •Ø 2000 mm - L = 4000 mm. 209 m³/h •Ø 2000 mm - L = 4500 mm. 236 m³/h •Ø 2000 mm - L = 4500 mm. 265 m³/h •Ø 2000 mm - L = 5000 mm. 265 m³/h •Ø 2200 mm - L = 2500 mm. 137 m³/h •Ø 2200 mm - L = 3500 mm. 165 m³/h •Ø 2200 mm - L = 3500 mm. 197 m³/h •Ø 2200 mm - L = 3500 mm. 197 m³/h •Ø 2200 mm - L = 4000 mm. 229 m³/h •Ø 2200 mm - L = 4500 mm. 258 m³/h •Ø 2200 mm - L = 4500 mm. 258 m³/h •Ø 2200 mm - L = 5000 mm. 287m³/h •Ø 2200 mm - L = 5000 mm. 287m³/h •Ø 1000 mm - 1000 mm. 287m³/h •Ø 2197226 1 •Ø 2197226 | •Ø 1800 mm - L=4000 mm. 191 m ³ /h | 02197204 | 1 |
| •Ø 2000 mm - L = 3500 mm. 180 m³/h •Ø 2000 mm - L = 4000 mm. 209 m³/h •Ø 2000 mm - L = 4500 mm. 236 m³/h •Ø 2000 mm - L = 5000 mm. 265 m³/h •Ø 2000 mm - L = 5000 mm. 137 m³/h •Ø 2200 mm - L = 2500 mm. 137 m³/h •Ø 2200 mm - L = 3000 mm. 165 m³/h •Ø 2200 mm - L = 3500 mm. 197 m³/h •Ø 2200 mm - L = 4000 mm. 229 m³/h •Ø 2200 mm - L = 4500 mm. 258 m³/h •Ø 2200 mm - L = 4500 mm. 258 m³/h •Ø 2200 mm - L = 5000 mm. 287m³/h •Ø 2200 mm - L = 5000 mm. 287m³/h •Ø 1000 mm - L = 5000 mm. 287m³/h •Ø 2197226 1 •Ø 2197226 | •Ø 2000 mm - L=2500 mm. 123 m ³ /h | 02197211 | 1 |
| •Ø 2000 mm - L=4000 mm. 209 m³/h •Ø 2000 mm - L=4500 mm. 236 m³/h •Ø 2000 mm - L=5000 mm. 265 m³/h •Ø 2200 mm - L=5000 mm. 137 m³/h •Ø 2200 mm - L=2500 mm. 137 m³/h •Ø 2200 mm - L=3000 mm. 165 m³/h •Ø 2200 mm - L=3500 mm. 197 m³/h •Ø 2200 mm - L=3500 mm. 197 m³/h •Ø 2200 mm - L=4000 mm. 229 m³/h •Ø 2200 mm - L=4500 mm. 258 m³/h •Ø 2200 mm - L=4500 mm. 258 m³/h •Ø 2200 mm - L=5000 mm. 287m³/h •Ø 1200 mm - L=5000 mm. 287m³/h •Ø 2200 mm - L=5000 mm. 287m³/h •Ø 2200 mm - L=5000 mm. 287m³/h •Ø 2200 mm - L=5000 mm. 287m³/h | •Ø 2000 mm - L=3000 mm 152 m³/h | 02197212 | 1 |
| •Ø 2000 mm - L=4500 mm. 236 m³/h •Ø 2000 mm - L=5000 mm. 265 m³/h •Ø 2200 mm - L=25000 mm. 137 m³/h •Ø 2200 mm - L=3000 mm. 165 m³/h •Ø 2200 mm - L=3000 mm. 165 m³/h •Ø 2200 mm - L=3500 mm. 197 m³/h •Ø 2200 mm - L=4500 mm. 229 m³/h •Ø 2200 mm - L=4500 mm. 258 m³/h •Ø 2200 mm - L=4500 mm. 258 m³/h •Ø 2200 mm - L=5000 mm. 287m³/h •Ø 1200 mm - L=5000 mm. 287m³/h •Ø 2200 mm - L=5000 mm. 287m³/h •Ø 2200 mm - L=5000 mm. 287m³/h •Ø 2200 mm - L=5000 mm. 287m³/h | •Ø 2000 mm - L=3500 mm. 180 m ³ /h | 02197213 | 1 |
| •Ø 2000 mm - L=5000 mm. 265 m³/h •Ø 2200 mm - L=2500 mm. 137 m³/h •Ø 2200 mm - L=3000 mm. 165 m³/h •Ø 2200 mm - L=3500 mm. 197 m³/h •Ø 2200 mm - L=3500 mm. 197 m³/h •Ø 2200 mm - L=4000 mm. 229 m³/h •Ø 2200 mm - L=4500 mm. 258 m³/h •Ø 2200 mm - L=5000 mm. 287 m³/h •Ø 2200 mm - L=5000 mm. 287 m³/h •Ø 2197225 1 Filtration Bed Depth 1,2 m. | •Ø 2000 mm - L=4000 mm. 209 m ³ /h | 02197214 | 1 |
| •Ø 2200 mm - L=2500 mm. 137 m³/h •Ø 2200 mm - L=3000 mm. 165 m³/h •Ø 2200 mm - L=3500 mm. 197 m³/h •Ø 2200 mm - L=3500 mm. 197 m³/h •Ø 2200 mm - L=4000 mm. 229 m³/h •Ø 2200 mm - L=4500 mm. 258 m³/h •Ø 2200 mm - L=5000 mm. 287m³/h •Ø 2200 mm - L=5000 mm. 287m³/h •Ø 2197225 1 Filtration Bed Depth 1,2 m. | •Ø 2000 mm - L=4500 mm. 236 m ³ /h | 02197215 | 1 |
| •Ø 2200 mm - L = 3000 mm. 165 m³/h •Ø 2200 mm - L = 3500 mm. 197 m³/h •Ø 2200 mm - L = 4000 mm. 229 m³/h •Ø 2200 mm - L = 4500 mm. 258 m³/h •Ø 2200 mm - L = 4500 mm. 258 m³/h •Ø 2200 mm - L = 5000 mm. 287m³/h •Ø 2197225 1 Filtration Bed Depth 1,2 m. | •Ø 2000 mm - L=5000 mm. 265 m ³ /h | 02197216 | 1 |
| •Ø 2200 mm - L = 3500 mm. 197 m³/h •Ø 2200 mm - L = 4000 mm. 229 m³/h •Ø 2200 mm - L = 4500 mm. 258 m³/h •Ø 2200 mm - L = 4500 mm. 258 m³/h •Ø 2200 mm - L = 5000 mm. 287m³/h •Iltration Bed Depth 1,2 m. | | 02197221 | 1 |
| •Ø 2200 mm - L = 4000 mm. 229 m³/h •Ø 2200 mm - L = 4500 mm. 258 m³/h •Ø 2200 mm - L = 5000 mm. 287m³/h •Ø 2200 mm - L = 5000 mm. 287m³/h Piltration Bed Depth 1,2 m. | •Ø 2200 mm - L=3000 mm. 165 m ³ /h | 02197222 | 1 |
| •Ø 2200 mm - L = 4500 mm. 258 m³/h •Ø 2200 mm - L = 5000 mm. 287m³/h •Ø 2200 mm - L = 5000 mm. 287m³/h Filtration Bed Depth 1,2 m. | •Ø 2200 mm - L=3500 mm. 197 m ³ /h | 02197223 | 1 |
| •Ø 2200 mm - L=5000 mm. 287m³/h 02197226 1 | •Ø 2200 mm - L=4000 mm. 229 m³/h | 02197224 | 1 |
| Filtration Bed Depth 1,2 m. | •Ø 2200 mm - L=4500 mm. 258 m³/h | 02197225 | 11 |
| C 0 4 0 0 1 0 0 0 0 0 1 0 0 0 1 0 0 0 0 0 | •Ø 2200 mm - L=5000 mm. 287m³/h | 02197226 | 1 |
| C 0 4 0 0 1 0 0 0 0 0 1 0 0 0 1 0 0 0 0 0 | Filanchian Rad Randh 1 2 mg | | |
| | • | 00407004 | |
| •Ø 2400 mm - L=3000 mm. 179 m³/h | | | |
| •Ø 2400 mm - L = 3500 mm. 214 m³/h | | | • |
| •Ø 2400 mm - L=4000 mm. 248 m³/h | | | |
| •Ø 2400 mm - L=5000 mm. 306 m³/h | | | |
| •Ø 2500 mm - L=4000 mm. 267 m³/h | | | |
| •Ø 2500 mm - L=5000 mm. 341 m³/h 02197242 1 | •Ø 2500 mm - L=5000 mm. 341 m³/h | 02197242 | 1 |







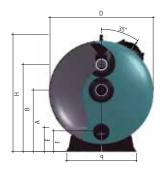
Dual Stack Assembly Detail

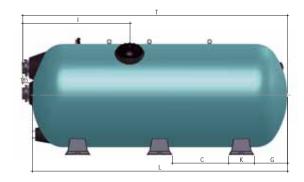




"Turbidron" Bobbin Wound Horizontal Filters







| MODEL | D (mm) | L (mm) | A (mm) | B (mm) | C (mm) | E (mm) | F (mm) | G (mm) | H (mm) | l (mm) | K (mm) | P (mm) | T (mm) | Connec. (Ø) (mm) | Flow (m³/h) (50 m³/h/m²) | Sand (Kg) | Net Weight (Kg) |
|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|---------------------|-----------------------------|--------------|--------------------|
| 02197161 | 1000 | 1500 | 600 | 850 | 400 | 300 | 250 | 300 | 1200 | 750 | 250 | 680 | 1600 | 90 | 60 | 1260 | 138 |
| 02197162 | 1000 | 2500 | 600 | 850 | 400 | 300 | 250 | 500 | 1200 | 1250 | 500 | 680 | 2600 | 125 | 100 | 2100 | 208 |
| 02197171 | 1200 | 2000 | 720 | 1020 | 300 | 330 | 250 | 350 | 1350 | 1000 | 500 | 820 | 2100 | 125 | 96 | 2016 | 216 |
| 02197172 | 1200 | 2500 | 720 | 1020 | 500 | 330 | 250 | 500 | 1350 | 1250 | 500 | 820 | 2600 | 140 | 120 | 2520 | 258 |
| 02197181 | | 2000 | 840 | 1270 | 300 | 360 | 350 | 350 | 1700 | 1000 | 500 | 950 | 2110 | 125 | 112 | 3136 | 262 |
| 02197182 | 1400 | 2500 | 840 | 1270 | 500 | 360 | 350 | 500 | 1700 | 1250 | 500 | 950 | 2610 | 140 | 140 | 3920 | 310 |
| 02197183 | 1400 | 3000 | 840 | 1270 | 800 | 360 | 350 | 600 | 1700 | 1500 | 500 | 950 | 3110 | 160 | 168 | 4704 | 359 |
| 02197191 | 1600 | 2000 | 960 | 1360 | 300 | 390 | 250 | 350 | 1870 | 1000 | 500 | 1090 | 2130 | 140 | 128 | 3584 | 310 |
| 02197192 | 1600 | 2500 | 960 | 1360 | 500 | 390 | 250 | 500 | 1870 | 1250 | 500 | 1090 | 2630 | 160 | 160 | 4480 | 366 |
| 02197193 | 1600 | 3000 | 960 | 1360 | 800 | 390 | 250 | 600 | 1870 | 1500 | 500 | 1090 | 3130 | 160 | 192 | 5376 | 421 |
| 02197194 | 1600 | 4000 | 960 | 1360 | 800 | 390 | 250 | 600 | 1870 | 1500 | 500 | 1090 | 4130 | 160 | 210 | 5940 | 561 |
| 02197195 | 1600 | 4500 | 960 | 1360 | 800 | 390 | 250 | 600 | 1870 | 1500 | 500 | 1090 | 4630 | 200 | 238 | 6730 | 631 |
| 02197201 | 1800 | 3500 | 1080 | 1530 | 500 | 420 | 300 | 500 | 2080 | 1250 | 500 | 1225 | 2670 | 160 | 180 | 6300 | 472 |
| 02197202 | 1800 | 4000 | 1080 | 1530 | 800 | 420 | 300 | 600 | 2080 | 1500 | 500 | 1225 | 3170 | 160 | 216 | 7560 | 541 |
| 02197203 | 1800 | 2500 | 1080 | 1530 | 500 | 420 | 300 | 500 | 2080 | 1750 | 500 | 1225 | 3670 | 200 | 252 | 8820 | 611 |
| 02197204 | 1800 | 3000 | 1080 | 1530 | 500 | 420 | 300 | 500 | 2080 | 2000 | 500 | 1225 | 4170 | 200 | 288 | 10080 | 680 |
| 02197211 | 2000 | 3500 | 1200 | 1700 | 500 | 450 | 400 | 500 | 2300 | 1250 | 500 | 1360 | 2690 | 160 | 200 | 7000 | 540 |
| 02197212 | 2000 | 4000 | 1200 | 1700 | 800 | 450 | 400 | 600 | 2300 | 1500 | 500 | 1360 | 3190 | 160 | 240 | 8400 | 617 |
| 02197213 | 2000 | 4500 | 1200 | 1700 | 500 | 450 | 400 | 500 | 2300 | 1750 | 500 | 1360 | 3690 | 200 | 280 | 9800 | 694 |
| 02197214 | 2000 | 5000 | 1200 | 1700 | 650 | 450 | 400 | 600 | 2300 | 2000 | 500 | 1360 | 4190 | 200 | 320 | 11200 | 771 |
| 02197215 | 2000 | 2500 | 1200 | 1700 | 900 | 450 | 400 | 600 | 2300 | 2250 | 500 | 1360 | 4690 | 225 | 360 | 12600 | 848 |
| 02197216 | 2000 | 3000 | 1200 | 1700 | 1060 | 450 | 400 | 650 | 2300 | 2100 | 500 | 1360 | 5190 | 225 | 400 | 14000 | 925 |
| 02197221 | 2200 | 3500 | 1320 | 1870 | 500 | 485 | 500 | 500 | 2470 | 1250 | 500 | 1500 | 2690 | 200 | 220 | 7700 | 673 |
| 02197222 | 2200 | 4000 | 1320 | 1870 | 800 | 485 | 500 | 600 | 2470 | 1500 | 500 | 1500 | 3190 | 200 | 264 | 9240 | 766 |
| 02197223 | 2200 | 4500 | 1320 | 1870 | 500 | 485 | 500 | 500 | 2470 | 1750 | 500 | 1500 | 3690 | 200 | 308 | 10780 | 860 |
| 02197224 | 2200 | 5000 | 1320 | 1870 | 650 | 485 | 500 | 600 | 2470 | 2000 | 500 | 1500 | 4190 | 225 | 352 | 12320 | 953 |
| 02197225 | 2200 | 3000 | 1320 | 1870 | 650 | 485 | 500 | 600 | 2470 | 2250 | 500 | 1500 | 4690 | 225 | 396 | 13860 | 1046 |
| 02197226 | 2200 | 3500 | 1320 | 1870 | 900 | 485 | 500 | 600 | 2470 | 2500 | 500 | 1500 | 5190 | 250 | 440 | 15400 | 1245 |
| 02197231 | 2400 | 4000 | 1440 | 2040 | 800 | 510 | 600 | 600 | 2400 | 1500 | 500 | 1630 | 4220 | 200 | 288 | 12096 | 935 |
| 02197232 | 2400 | 4000 | 1440 | 2040 | 500 | 510 | 600 | 500 | 2670 | 1750 | 500 | 1630 | 4220 | 200 | 336 | 14112 | 1277 |
| 02197233 | 2400 | 5000 | 1440 | 2040 | 650 | 510 | 600 | 600 | 2670 | 2000 | 500 | 1630 | 4220 | 225 | 384 | 16128 | 1413 |
| 02197241 | 2500 | | 1500 | 2125 | 650 | 540 | 600 | 600 | 2770 | 4000 | 500 | 1700 | 4220 | 225 | 400 | 16800 | 1486 |
| 02197242 | 2500 | | 1500 | 2125 | 1060 | 540 | 600 | 650 | 2770 | 5000 | 500 | 1360 | 5220 | 250 | 500 | 21000 | 1769 |
| | | | | | | | | | | | | | | | | | |



"Neptune" High Rate Sand Filters

GEMAS "NEPTUNE" COMMERCIAL SAND FILTERS.

Filter shell made of fiberglass reinforced laminated polyester, including pressure gauge, air release valve of 1/2". Test pressure 3.5 kg/cm². Max. operation pressure 2,5 kg/cm². Filtration rate: 50 m³/h/m². Filtration Depth: 1,0 m (except 021216). Counter flange is not included in price (021216).

| P. Marian and A. S. | | | | |
|---|--------|----------------|--------------|--------------------------|
| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
| •Ø 1200 mm - Connections | 021216 | 1 | 78,500 | 1,460 |
| Ø 90 mm w/loose flange. Max. 56 m³/h. | | | | |
| •Ø 1400 mm - Connections | 021217 | 1 | 145,000 | 2,350 |
| Ø 110 mm flanged. Max. 77 m ³ /h | | | | |
| •Ø 1600 mm - without valve Ø 125 mm | 021218 | 1 | 202,500 | 3,760 |
| flanged connection. Max. 100 m³/h | | | | |
| •Ø 1800 mm - without valve Ø 140 mm | 021224 | 1 | 225,000 | 5,080 |
| flanged connection. Max. 127 m³/h | | | | |
| •Ø 2000 mm - without valve Ø 160 mm | 021219 | 1 | 245,000 | 6,410 |
| flanged connection. Max. 157 m³/h | | | | |
| •Ø 2200 mm - without valve Ø 200 mm | 021220 | 1 | 425,000 | 8,900 |
| flanged connection. Max. 190 m³/h | | | | |
| •Ø 2400 mm - without valve Ø 200 mm | 021225 | 1 | 535,000 | 12,200 |
| flanged connection. Max. 226 m ³ /h | | | | |

PS: Filtration rate for public pools should not exceed 40 m³/h/m².



| MODEL | 021216 | 021216L | 021217 | 021218 | 021224 | 021219 | 021220 | 021225 |
|--------------------------|--------|---------|---------|---------|---------|---------|--------|--------|
| D (mm) | 1200 | 1200 | 1400 | 1600 | 1800 | 2000 | 2200 | 2400 |
| H ₁ (mm) | 1400 | 1400 | 1630 | 1870 | 2110 | 1940 | 2350 | 2750 |
| H ₃ (mm) | 1290 | 1340 | 1590 | 1810 | 2000 | 1880 | 2240 | 2600 |
| H ₄ (mm) | 530 | 480 | 640 | 670 | 750 | 830 | 900 | 900 |
| H ₅ (mm) | 920 | 900 | 970 | 1200 | 1370 | 1330 | 1530 | 1700 |
| CONNECTIONS Ø (mm) | 90 | 90 | 110 | 125 | 140 | 160 | 200 | 200 |
| FLOW (m³/h) (50 m³/h/m²) | 56 | 56 | 77 | 100 | 127 | 157 | 190 | 226 |
| SAND (Kg) | 1300 | 1300 | 1950 | 2750 | 3650 | 4750 | 5700 | 6600 |
| NET WEIGHT (Kg) | 78,500 | 78,500 | 145,000 | 202,500 | 225,000 | 245,000 | 425 | 535 |
| | | | | | | | | |



Loose Flange connection (021216)



021218



Water Drainage





"Filtrex - Norm Plus" Sand Filters - Deep Bed

GEMAS FILTREX - NORM PLUS SAND FILTERS According to DIN 19605 and 19643).

Filter shell made of fiberglass reinforced laminated polyester, including pressure gauge, air purge. Manufactured with collector plate with nozzles. Sight glass at side. Bed depth 120 cm. Filtration rate for single layer: 30 m³/h/m².

Test pressure 3,5 kg/cm². Max. operation pressure 2,5 kg/cm².



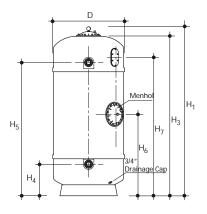


Sight Glass

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------------------------------|--------|----------------|--------------|--------------------------|
| • Ø 630 mm - 9 m³/h - 12,5 m³/h | 021411 | 1 | 52,650 | 0,630 |
| • Ø 830 mm -16 m³/h - 21,5 m³/h | 021412 | 1 | 102,000 | 1,050 |
| • Ø 1000 mm - 23,5 m³/h - 31,5 m³/h | 021413 | 1 | 135,000 | 1,880 |
| • Ø 1250 mm - 37 m³/h - 49 m³/h | 021414 | 1 | 237,400 | 2,930 |
| • Ø 1400 mm - 46 m³/h - 61,5 m³/h | 021415 | 1 | 300,000 | 3,700 |
| • Ø 1600 mm - 63 m³/h - 84 m³/h | 021416 | 1 | 355,000 | 4,800 |











Nozzle Distribution System

| IECHNICAL CHA | IKACI | EKISTIC | , <u> </u> | | | |
|------------------------------|---------|---------|------------|---------|---------|----------|
| MODEL | 021411 | 021412 | 021413 | 021414 | 021415 | 021416 |
| D (mm) | 630 | 830 | 1000 | 1250 | 1400 | 1600 |
| H ₁ (mm) | 2070 | 1960 | 2145 | 2560 | 2560 | 2500 |
| H ₂ (mm) | - | - | - | - | - | - |
| H_3 (mm) | 1950 | 1850 | 1985 | 2320 | 2380 | 2320 |
| H ₄ (mm) | 320 | 385 | 500 | 285 | 840 | 830 |
| H ₅ (mm) | 1675 | 1560 | 1625 | 2060 | 1610 | 1600 |
| H ₆ (mm) | 600 | 950 | 970 | 840 | 1000 | 1050 |
| H ₇ (mm) | 1750 | 1620 | 167 | 1550 | 1600 | 1650 |
| CONNECTIONS Ø (mm) | 1 1/2" | 2" | 2 1/2" | 3" | 4" | 4" |
| FLOW (m³/h) (40 m³/h/m²) | 12 | 22 | 31 | 49 | 61 | 80 |
| ANTHRACITE 0,8 - 1,6 mm (It) | 200,000 | 300,000 | 475,000 | 675,000 | 770,000 | 1000,000 |
| QUARTZ SAND 0,5 - 1 mm (Kg) | 200,000 | 300,000 | 475,000 | 675,000 | 770,000 | 1000,000 |
| QUARTZ SAND 1 - 3 mm (Kg) | 150,000 | 225,000 | 425,000 | 525,000 | 630,000 | 825,000 |
| NET WEIGHT (Kg) | 52,650 | 102,000 | 135,000 | 237,000 | 300,000 | 355,000 |
| | | | | | | |



"Filtrex - Norm Plus" Sand Filters - Deep Bed

GEMAS FILTREX - NORM PLUS SAND FILTERS (According to DIN 19605 and 19643).

Filter shell made of fiberglass reinforced laminated polyester, including pressure gauge, air purge. Manufactured with collector plate with nozzles.

Sight glass at side. Bed depth 120 cm. Filtration rate for single layer: 30 m³/h/m². Test pressure 3,5 kg/cm².

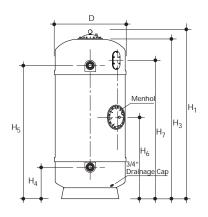
Max. operation pressure 2,5 kg/cm².

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-----------------------------------|--------|----------------|--------------|--------------------------|
| • Ø 1800 mm - 76 m³/h - 101 m³/h | 021417 | 1 | 450,000 | |
| • Ø 2000 mm- 94 m³/h - 125 m³/h | 021418 | 1 | 470,000 | |
| • Ø 2200 mm - 114 m³/h - 152 m³/h | 021419 | 1 | 685,000 | |
| • Ø 2400 mm - 136 m³/h - 181 m³/h | 021420 | 1 | 860,000 | |
| • Ø 2500 mm - 136 m³/h - 181 m³/h | 021421 | 1 | 910,000 | |



021417







Sight Glass

| MODEL | 021417 | 021418 | 021419 | 021420 | 021421 |
|------------------------------|----------|----------|----------|----------|----------|
| D (mm) | 1800 | 2000 | 2200 | 2400 | 2500 |
| H ₁ (mm) | 2510 | 2680 | 2680 | 2780 | 2710 |
| H ₂ (mm) | - | - | - | - | - |
| H ₃ (mm) | 2330 | 2500 | 2900 | 2600 | - |
| H ₄ (mm) | 800 | 980 | 850 | 970 | 1000 |
| H ₅ (mm) | 1550 | 1740 | 1630 | 1720 | 1800 |
| H ₆ (mm) | 1000 | 1100 | 950 | 1060 | 1090 |
| H ₇ (mm) | 1600 | 1790 | 1660 | 1770 | |
| CONNECTIONS Ø (mm) | 5" | 5" | 6" | 7,5" | 7,5" |
| FLOW (m³/h) (40 m³/h/m²) | 102 | 126 | 152 | 181 | 197 |
| ANTHRACITE 0,8 - 1,6 mm (lt) | 1221,000 | 1507,000 | 1821,000 | 2170,000 | 4712,000 |
| QUARTZ SAND 0,5 - 1 mm (Kg) | 3205,000 | 3951,000 | 4787,000 | 5697,000 | 6185,000 |
| QUARTZ SAND 1 - 3 mm (Kg) | 1068,000 | 1319,000 | 1596,000 | 1899,000 | 2062,000 |
| NET WEIGHT (Kg) | 450,000 | 470,000 | 685,000 | 860,000 | 910,000 |





Nozzle Distribution System



Volume

Weight

Pieces/

Valve Batteries for Commercial Filters

Description



FOR SINGLE FILTER: PVC Valve Batteries with 5 pieces of Ball/Butterfly valves complete mounted including pipe support pivots with arm clamps and anchoring system, all made in zinc-plated steel. **(Please see Battery Supports)**

Code

| | ' | | DUX | ĸy | 111 |
|---|--------------------------------|-------------------------|-----------------|----------|------------|
| | • Ø 75 Ball Valves Battery | 131117B | 1 | | |
| ı | Ø 90 Ball Valves Battery | 131118B | 1 | | |
| | Ø 110 Ball Valves Battery | 131119B | 1 | | |
| | Ø 110 Butterfly Valves Battery | 131603B | 1 | | |
| | Ø 125 Butterfly Valves Battery | 131604B | 1 | | |
| | Ø 140 Butterfly Valves Battery | 131605B | 1 | | |
| | Ø 160 Butterfly Valves Battery | 131606B | 1 | | |
| | Ø 200 Butterfly Valves Battery | 131607B | 1 | | |
| | Ø 225 Butterfly Valves Battery | 131608B | 1 | | |
| | | | | | |
| | FOR TWO FILTERS, DVC Value | Dottorios with E pissos | of Dall/Duttorf | ممالاتما | in aludina |



FOR TWO FILTERS: PVC Valve Batteries with 5 pieces of Ball/Butterfly valves including pipe support pivots with arm clamps and anchoring system, all made in zinc-plated steel. (**Please see Battery Supports**)

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------------------------|----------|----------------|--------------|--------------------------|
| Ø 110 Ball Valves Battery | 131119BD | 1 | | |
| Ø 110 Butterfly Valves Battery | 131603BD | 1 | | |
| Ø 125 Butterfly Valves Battery | 131604BD | 1 | | |
| • Ø 140 Butterfly Valves Battery | 131605BD | 1 | | |
| Ø 160 Butterfly Valves Battery | 131606BD | 1 | | |
| Ø 200 Butterfly Valves Battery | 131607BD | 1 | | |
| Ø 225 Butterfly Valves Battery | 131608BD | 1 | | |





AUTOMATIC AIR PURGE. Automatic Air Purge for filters with large lid. Made of PVC, 1" male threaded connection.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| • 1" | 02701 | 1 | | |
| • 2" | 02702 | 1 | | |



Motor Actuated Valves and Automatic Battery Sets For Filters

FOR SINGLE FILTER: Motor Actuated PVC valve batteries with ball or butterfly valves for commercial sand filters. Complete with zinc plated BAttery Support Sets and Clamp Support Systems. (Please see Valve Battery Suport Systems). The system is designed with 5 valve Groups including FILTRATION, BACKWASH, RINSE, RECIRCILATION and WASTE functions completely. DOES NOT INCLUDE CONTROL UNIT. Can be used manually in case of a power cut.



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------------------------------|--------|----------------|--------------|--------------------------|
| • Ø 630 mm - 9 m³/h - 12,5 m³/h | 021411 | 1 | 52,650 | 0,630 |
| • Ø 830 mm -16 m³/h - 21,5 m³/h | 021412 | 1 | 102,000 | 1,050 |
| • Ø 1000 mm - 23,5 m³/h - 31,5 m³/h | 021413 | 1 | 135,000 | 1,880 |
| • Ø 1250 mm - 37 m³/h - 49 m³/h | 021414 | 1 | 237,400 | 2,930 |
| • Ø 1400 mm - 46 m³/h - 61,5 m³/h | 021415 | 1 | 300,000 | 3,700 |
| • Ø 1600 mm - 63 m³/h - 84 m³/h | 021416 | 1 | 355,000 | 4,800 |



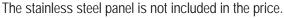
AUTOMATIC VALVE BATTERY CONTROL UNIT WITH MICROPROCESSOR:

It is designed to work with 5 valve groups (described above) with pressure and/or time controlled. It deactivates the pump in case of high pressure. It stops/starts the pump during the valve position changes.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------------------|-----------|----------------|--------------|--------------------------|
| Control Unit | 0221350P | 1 | | |
| Electronic Pressure Sensor | 0221350PS | 1 | | |
| Wifi addition | 0221350WF | 1 | | |













Valve Battery Support Systems



GEMAS VALVE BATTERY SUPPORT PIVOT SET. Made of zinc plated steel, 40x40x2,5 mm steel profile, complete with 2 pieces of stainless steel sliding pipe clamp and 2 sets of sliding fixing part; with steel footers to be fixed with 4 screws on the ground.



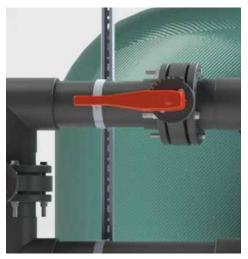
| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-----------------------------|--------|----------------|--------------|--------------------------|
| • 2 x Ø 90 Clamp - h=1,5 m | 139111 | 1 | | |
| • 2 x Ø 110 Clamp - h=1,5 m | 139112 | 1 | | |
| • 2 x Ø 125 Clamp - h=1,5 m | 139113 | 1 | | |
| • 2 x Ø 140 Clamp - h=1,5 m | 139114 | 1 | | |
| • 2 x Ø 160 Clamp - h=1,5 m | 139115 | 1 | | |
| • 2 x Ø 200 Clamp - h=1,5 m | 139116 | 1 | | |
| • 2 x Ø 225 Clamp - h=1,5 m | 139117 | 1 | | |
| • 2 x Ø 140 Clamp - h=2,0 m | 139121 | 1 | | |
| • 2 x Ø 160 Clamp - h=2,0 m | 139122 | 1 | | |
| • 2 x Ø 200 Clamp - h=2,0 m | 139123 | 1 | | |
| • 2 x Ø 225 Clamp - h=2,0 m | 139124 | 1 | | |
| | | | | |

GEMAS HORIZONTAL PIPE SUPPORT SET. Made of zinc plated steel, 40x40x2,5 mm steel profile, complete with 2 pieces of stainless steel sliding pipe clamp and 2 sets of sliding fixing part; with steel footers to be fixed with 4 screws on the ground.





| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------------------|--------|----------------|--------------|--------------------------|
| • 1 x Ø 90 Clamp - h=0,40 m | 139211 | 1 | | |
| • 1 x Ø 110 Clamp - h=0,40 m | 139212 | 1 | | |
| • 1 x Ø 125 Clamp - h=0,40 m | 139213 | 1 | | |
| • 1 x Ø 140 Clamp - h=0,40 m | 139214 | 1 | | |
| • 1 x Ø 160 Clamp - h=0,40 m | 139215 | 1 | | |
| • 1 x Ø 200 Clamp - h=0,40 m | 139216 | 1 | | |
| • 1 x Ø 225 Clamp - h=0,40 m | 139217 | 1 | | |





Detail 1 Detail 2



Valve Battery Support Systems

GEMAS VALVE BATTERY SUPPORT LANE - SINGLE.

Made of zinc plated steel, 40x40x2,5 mm steel profile. Complete with steel footers to be fixed with 4 screws on the ground. Other end with plastic cap.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------------------------|---------|----------------|--------------|--------------------------|
| • h= 2,0 m, Support Pivot | 1391112 | 1 | | |
| • h= 1,5 m, Support Pivot | 1391111 | 1 | | |
| • h= 0,4 m, Horizontal Support | 1391110 | 1 | | |



GEMAS SLIDING PIPE CLAMP FOR SUPPORT. Made of AISI 304 stainless steel.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|----------|----------------|--------------|--------------------------|
| • Ø 90 | 13911111 | 1 | | |
| • Ø 110 | 13911112 | 1 | | |
| • Ø 125 | 13911113 | 1 | | |
| • Ø 140 | 13911114 | 1 | | |
| • Ø 160 | 13911115 | 1 | | |
| • Ø 200 | 13911116 | 1 | | |
| • Ø 225 | 13911117 | 1 | | |



GEMAS SLIDING CLAMP FIXING PART.

Complete with M8 nuts and bolts. Two pieces of fixing part is necessary for each clamp.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|---------|----------------|--------------|--------------------------|
| | 1391114 | 1 | | |



GEMAS CAP FOR SUPPORT LANE. Made of plastic, black cap - 400 x 400 mm.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|---------|----------------|--------------|--------------------------|
| | 1391113 | 1 | | |





Hang-over Filtration Units



GEMAS "DECKON" HANG-OVER FILTRATION UNIT.

Hang-over Unit: Body made in UV resistant ABS plastic; complete with 23 W/12 V LED underwater light, skimmer, suction inlet, 2+1 side and bottom oriented inlets. Separated assembly of hangover unit and filter room is possible by using two different plastic covers (included).

Filtration Room: Base part made in FRP, upper frame + room cover made in UV resistant ABS plastic. Complete with sand or cartridge filter, electrical control board, pneumatic on-off switch and transformer. Machine room and Hang-over unit can be installed separately. Top covers for such application is included.



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ | | |
|----------------------------------|-------|----------------|--------------|--------------------------|--|--|
| Hang-over Unit | 02511 | 1 | 19,100 | 0,420 | | |
| Filtration Room w/Sand Filter | | | | | | |
| • Ø 400 mm Sand Filter + 1/2" HP | 02512 | 1 | 65,850 | 0,870 | | |
| Pump - 6 m ³ /h | | | | | | |
| • Ø 500 mm Sand Filter + 3/4" HP | 02513 | 1 | 67,650 | 0,870 | | |
| Pump - 10 m ³ /h | | | | | | |

PS. In case of any inquiry for Ø 615 or Ø 710 filter, this unit could be incorporated w/fitration room 02517.

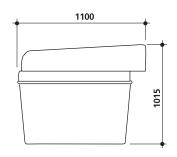
| Filtration Room w/Cartridge Filter | | |
|------------------------------------|-------|---|
| • P510 Cartridge Filter + 1/2" HP | 02514 | 1 |
| Pump - 6 m ³ /h | | |
| • P512 Cartridge Filter + 3/4" HP | 02515 | 1 |
| Pump - 10 m³/h | | |
| • P513 Cartridge Filter + 1" HP | 02516 | 1 |
| Pump - 15 m³/h | | |
| | | |

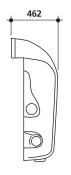


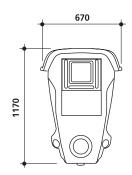
Options

| ECOSlimLED Light | 051130EO | 1 |
|------------------|------------|---|
| Chlorine Feeder | 060CLT167R | 1 |

PS. Filter media not included.















Hang-over Filtration Units

GEMAS "DECKON JET" HANG-OVER FILTRATION UNIT with COUNTER CURRENT.

Hang-over Unit: Body made of UV resistant ABS plastic; complete with 23 W/12 V LED underwater light, skimmer, suction inlet, 2+1 side and bottom oriented inlets, jet inlet, air regulator, counter current on/off pneumatic button, stainless steel handles. Separated assembly of hang-over unit and filter room is possible by using two diffe rent plastic covers (included).

Filtration Room: Base part made in FRP, upper frame + room cover made in UV resistant ABS plastic. Complete with circulation pump, 2 HP jet pump, cartridge or cartridge sand filter, electrical control board, pneumatic on/off switch and transformers. Machine room and Hang-over unit can be installed separately. Top covers for such application is included.



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|--------|----------------|--------------|--------------------------|
| Hang-over Unit | 02511J | 1 | 20,000 | 0,420 |
| | | | | |
| Filtration Room w/Sand Filter | | | | |
| \bullet Ø 400 mm Sand Filter + 1/2" HP + | 02512J | 1 | 85,850 | 0,870 |
| 2" HP Jet Pump - 6 m³/h | | | | |
| • Ø 500 mm Sand Filter + $^{3/4}$ " HP + | 02513J | 1 | 89,650 | 0,870 |
| 2" HP Jet Pump - 10 m ³ /h | | | | |

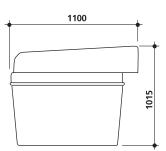
PS. In case of any inquiry for Ø 615 or Ø 710 filter, this unit could be incorporated w/fitration room 02517. Filtration Room w/Cartridge Filter

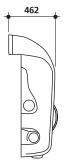
| i ilitation Room w/cartilage i ilici | | |
|---|--------|---|
| • P510 Cartridge Filter + 1/2" HP + | 02514J | 1 |
| 2" HP Jet Pump - 6 m ³ /h | | |
| • P512 Cartridge Filter + 3/4" HP + | 02515J | 1 |
| 2" HP Jet Pump - 10 m ³ /h | | |
| • P513 Cartridge Filter + 1" HP + 2" HP | 02516J | 1 |
| Jet Pump - 15 m³/h | | |
| | | |

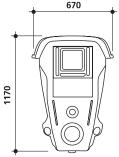
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| | | | |

| ECOSlimLED Light | 051130EO | 1 |
|------------------|------------|---|
| Chlorine Feeder | 069CLT167B | 1 |

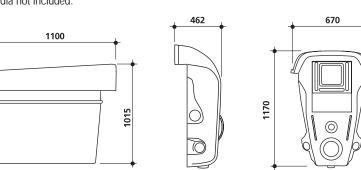
PS. Filter media not included.























Filtration Rooms



GEMAS FILTRATION ROOM

CABIN II: Body made of FRP, frame and top up made of ABS. Suitable up to Ø 500 mm size premium top mounted sand filter. Body to be mounted in the ground.

CABIN III: Body and lid made LDPE, It is produced with rotational moulding technique. Complete with double sided wall joints, water drainage and locking nuts. Max. filter size Ø 830 mm.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|---------|----------------|--------------|--------------------------|
| Cabin II | 02510 | 1 | | |
| Cabin III | 0251702 | 1 | | |





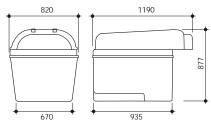


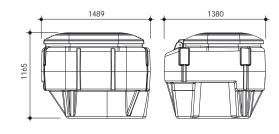
GEMAS FILTRATION UNIT WITH ROOM

Gemas Filtration Room 0251702 installed with Filtrone Sand Filter, Mini Streamer Pump. **Options:** Pool Basic Automatic pH and Redox Controller, Chlorine Feeder, HOZ-01/02 Ozone Generator, Remote Control for UW Light and Pump, Electrical Control Panel, Tranformer.



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------------------------------|-------|----------------|--------------|--------------------------|
| • Ø 615 mm Sand Filter (021713) + | 02517 | 1 | 124,000 | 1,950 |
| 3/4" HP Pump - 15 m ³ /h. | | | | |
| • Ø 710 mm Sand Filter (021814) + | 02518 | 1 | 140,000 | 1,950 |
| 1,5 HP Pump - 20 m ³ /h. | | | | |







GEMAS Multiport Valves - Manual

GEMAS VALVEX 03 - SIDE. Multiport valve, 11/2"

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------------------------------|--------|----------------|--------------|--------------------------|
| • 11/2" Threaded connections | 02400T | 1 | 1,600 | |
| • Ø 50 mm Slip connections - metric | 02400 | 1 | 1,600 | 0,008 |

GEMAS VALVEX 03 - TOP. Multiport valve - BSP threaded body for 11/2". Bolted lid connection for 2".

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------------------------------|-----------|----------------|--------------|--------------------------|
| • 11/2" Threaded connections | 02403T | 1 | 1,900 | 0,015 |
| • Ø 50 mm Slip connections - metric | 02403 | 1 | 1,900 | |
| • 2" Threaded connections | 02213029T | 1 | 3,500 | |
| • Ø 63 mm Slip connections - metric | 02213029 | 1 | 3,500 | |

GEMAS VALVEX 03 - TOP CLAMPED. Multiport valve, 11/2", clamp set not included.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------------------------------|--------|----------------|--------------|--------------------------|
| • 11/2" Threaded connections | 02404T | 1 | 1,900 | 0,015 |
| • Ø 50 mm Slip connections - metric | 02404 | 1 | 1,900 | |
| Clamp Set - (Old) | 024041 | 1 | | |
| Clamp Set - (New) | 024042 | 1 | | |

GEMAS VALVEX 04 - SIDE. Multiport valve, 2"

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|-----------|----------------|--------------|--------------------------|
| • Multiport Valve, 2" Threaded connections | 02213027T | 1 | 2,956 | 0,016 |
| • Ø 63 mm Slip connections - metric | 02213027 | 1 | 3,000 | |

GEMAS VALVEX 05 - SIDE. Multiport valve, 2 1/2".

2" multiport valve outputs are with \emptyset 75 mm sockets outside.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-----------------------------------|----------|----------------|--------------|--------------------------|
| Ø 75 mm Slip connections - metric | 02213028 | 1 | | 0,016 |

SIDE MULTIPORT VALVE. Threaded connection.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------------------------------------|------------|----------------|--------------|--------------------------|
| • 2 ^{1/2} " w/out connection | 022130001 | 1 | | |
| • 3" w/out connection | 022130002 | 1 | 8,000 | 0,050 |
| 4" w/out connection | 022380-E20 | 1 | 18,000 | 0,120 |







022380-E20



Automatic Multiway Valves



Automatic Multiway Valves; Automatic side mounted multiway valve with Pressure and Time Controller. Adjustable Backwash and Rinse periods.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|---------|----------------|--------------|--------------------------|
| • 11/2", Threaded con. | 0221310 | 1 | 4,000 | 0,033 |
| • 2", Threaded con. | 0221320 | 1 | 5,000 | 0,033 |
| Gemas, 1/2", Threaded connection | 0221311 | 1 | | |
| Gemas, 2", Threaded connection | 0221312 | 1 | | |

Filtration Media - Ouartz Sand



Ouartz Sand

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------|-------|----------------|--------------|--------------------------|
| • (0,5 - 1,0 mm) | 02312 | 1 | 25,000 | 0,040 |
| • (1,0 - 3,0 mm) | 02313 | 1 | 25,000 | 0,040 |
| • (3,0 - 5,0 mm) | 02314 | 1 | 25,000 | 0,040 |



Anthracite

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-----------------|-------|----------------|--------------|--------------------------|
| Price per liter | 02321 | 1 | 30,000 | 0,040 |

Zeolite

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-----------------|-------|----------------|--------------|--------------------------|
| Price per liter | 02331 | 1 | 25,000 | 0,050 |

PS: Zeolite is used instead of Quartz or with Quartz.

It is used to reduce Iron elements or stabilize the hardness in pool water. Should be backwashed and rinsed for 30 minutes before first operation.

costs.



GEMAS Glass Filtration Media

GEMAS GLASS FILTER-MEDIA.

Is the environmentally friendly filter media and a viable alternative to silica sand; made from glass recycled, it doesn't involve intrusive mining and the use of scarce resources.

GGFM has the green credentials, and with its superior performance is also cost effective against sand.

GGFM the Benefits Over Silica Sand

GGFM Is More Efficient:

Saving on backwashing decreases water, energy and chemical treatment

- It's angular to sub-angular particle shape and bound silica content provides a 30% improvement in turbidity removal over silica sand.
- It generally removes finer particles from water than the equivalent grade of silica sand.
- It's non porous composition means its less likely to 'clump' than silica sand.
- With superior permeability, backwashing take less time, saving water/sewer charges, energy and chemical treatment costs. **GGFM Keeps Cleaner:** It's less susceptible to bio-fouling as, unlike silica sand GGFM's particles have a smooth surface area, so bacteria can't get trapped in any cracks or flaws, which translates to less remedial action and again less chemical treatment to kill pollutants.

GGFM Requires Less Material: It's less dense than sand, requiring 15% less media to fill the equivalent filter. **GGFM Longer Life**: It therefore has a longer life span and may not need changing even when the filters are due for refurbishment.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------------------------|--------|----------------|--------------|--------------------------|
| • 0,6 mm - 1,00 mm grain thickness | 023411 | 1 | | |
| • 1 mm - 3,00 mm grain thickness | 023412 | 1 | | |
| • 3 mm - 5,00 mm grain thickness | 023413 | 1 | | |

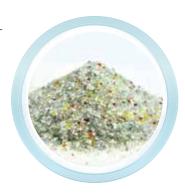


Density Comparison GGFM Against Sand

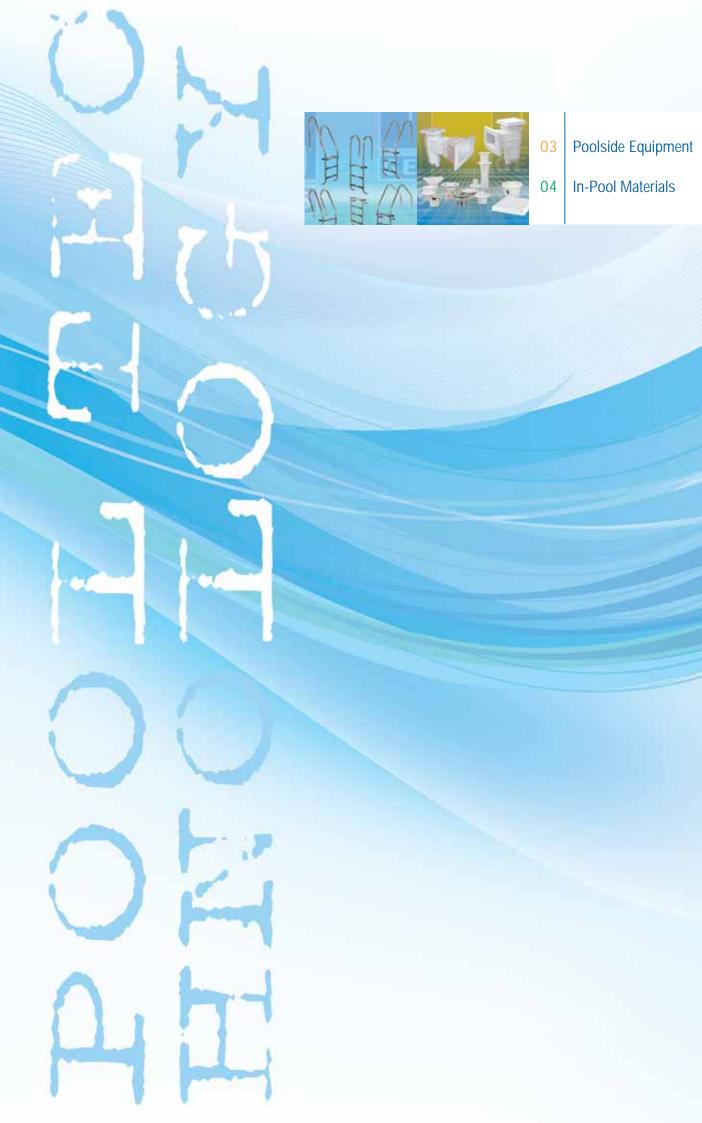
| Dia of Filter (mm) | Total Grade 1&3 Sand Required (kg) | Total Grade 1&3 GGFM GGFM Required (kg) |
|-----------------------|---------------------------------------|--|
| 600 | 150 | 130 |
| 750 | 250 | 215 |
| 900 | 450 | 385 |
| 1000 | 700 | 595 |
| 1200 | 1300 | 1100 |
| 1400 | 1950 | 1660 |
| 1600 | 2750 | 2340 |
| 1800 | 3650 | 3105 |
| 2000 | 4750 | 4040 |
| 2200 | 5700 | 4845 |
| 2400 | 6600 | 5610 |
| 2500 | 7000 | 5950 |



As GGFM is lighter than sand, it takes approximately 15% less GGFM to fill the filter bed to the same depth as sand.















Poolside Equipment





Pool Ladders



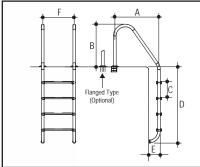




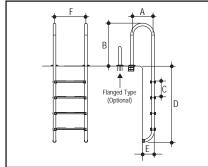
"U" MODEL COM



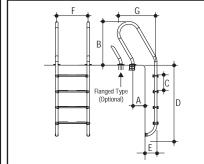
COMBINED



| Number of Treads | А | В | С | D | E | F |
|---------------------|-----|-----|-----|------|-----|-----|
| 2 | 700 | 690 | 250 | 700 | 190 | 500 |
| 3 | 700 | 690 | 250 | 950 | 190 | 500 |
| 4 | 700 | 690 | 250 | 1200 | 190 | 500 |
| 5 | 700 | 690 | 250 | 1450 | 190 | 500 |



| | Number of Treads | А | В | С | D | E | F |
|---|---------------------|-----|-----|-----|------|-----|-----|
| 1 | 2 | 330 | 670 | 250 | 700 | 190 | 500 |
| | 3 | 330 | 670 | 250 | 950 | 190 | 500 |
| | 4 | 330 | 670 | 250 | 1200 | 190 | 500 |
| | 5 | 330 | 670 | 250 | 1450 | 190 | 500 |



| Number of Treads | А | В | С | D | E | F | G |
|---------------------|-----|-----|-----|------|-----|-----|-----|
| 2 | 210 | 690 | 250 | 630 | 190 | 500 | 640 |
| 3 | 210 | 690 | 250 | 880 | 190 | 500 | 640 |
| 4 | 210 | 690 | 250 | 1130 | 190 | 500 | 640 |
| 5 | 210 | 690 | 250 | 1380 | 190 | 500 | 640 |

STANDARD 304 MODEL WITH STAINLESS STEEL TREADS.

500 mm width. Treads in AISI 304 quality stainless steel and anti-slip. Handrails made of Ø 42 mm pipe are in AISI 304 quality polished stainless steel. Complete with plastic anchors, anchor escutcheons, end caps, bolts and nuts.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------------------------------|---------|----------------|--------------|--------------------------|
| • With 2 Stainless Steel Treads | 0311111 | 1 | 10,200 | 0,122 |
| • With 3 Stainless Steel Treads | 0311112 | 1 | 11,900 | 0,122 |
| • With 4 Stainless Steel Treads | 0311113 | 1 | 13,300 | 0,122 |
| • With 5 Stainless Steel Treads | 0311114 | 1 | 14,800 | 0,139 |

U 304 MODEL WITH STAINLESS STEEL TREADS.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------------------------------|---------|----------------|--------------|--------------------------|
| • With 2 Stainless Steel Treads | 0311211 | 1 | 8,800 | 0,071 |
| • With 3 Stainless Steel Treads | 0311212 | 1 | 10,200 | 0,071 |
| With 4 Stainless Steel Treads | 0311213 | 1 | 11,800 | 0,071 |
| With 5 Stainless Steel Treads | 0311214 | 1 | 13,100 | 0,079 |

COMBINED 304 MODEL WITH STAINLESS STEEL TREADS

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------------------------------|---------|----------------|--------------|--------------------------|
| • With 2 Stainless Steel Treads | 0311311 | 1 | 9,700 | 0,118 |
| • With 3 Stainless Steel Treads | 0311312 | 1 | 11,200 | 0,118 |
| With 4 Stainless Steel Treads | 0311313 | 1 | 12,800 | 0,118 |
| With 5 Stainless Steel Treads | 0311314 | 1 | 14,300 | 0,118 |



Pool Ladders



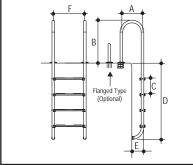
STANDARD



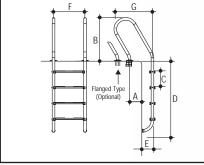


Flanged Type (Optional)

| Number of Treads | А | В | С | D | E | F |
|---------------------|-----|-----|-----|------|-----|-----|
| 2 | 700 | 690 | 250 | 700 | 190 | 500 |
| 3 | 700 | 690 | 250 | 950 | 190 | 500 |
| 4 | 700 | 690 | 250 | 1200 | 190 | 500 |
| 5 | 700 | 690 | 250 | 1450 | 190 | 500 |



| Number of Treads | А | В | С | D | E | F |
|---------------------|-----|-----|-----|------|-----|-----|
| 2 | 330 | 670 | 250 | 700 | 190 | 500 |
| 3 | 330 | 670 | 250 | 950 | 190 | 500 |
| 4 | 330 | 670 | 250 | 1200 | 190 | 500 |
| 5 | 330 | 670 | 250 | 1450 | 190 | 500 |



| Number of Treads | А | В | С | D | E | F | G |
|---------------------|-----|-----|-----|------|-----|-----|-----|
| 2 | 210 | 690 | 250 | 630 | 190 | 500 | 640 |
| 3 | 210 | 690 | 250 | 880 | 190 | 500 | 640 |
| 4 | 210 | 690 | 250 | 1130 | 190 | 500 | 640 |
| 5 | 210 | 690 | 250 | 1380 | 190 | 500 | 640 |

AISI 316 quality stainless steel and anti-slip. Handrails made of Ø 42 mm pipe are in AISI 316 quality polished stainless steel.

500 mm width. Treads in

Complete with plastic anchors, anchor escutcheons, end caps, bolts and nuts.

STANDARD 316 MODEL WITH STAINLESS STEEL TREADS.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------------------------------|---------|----------------|--------------|--------------------------|
| With 2 Stainless Steel Treads | 0312111 | 1 | 10,600 | 0,122 |
| • With 3 Stainless Steel Treads | 0312112 | 1 | 12,300 | 0,122 |
| With 4 Stainless Steel Treads | 0312113 | 1 | 13,700 | 0,122 |
| • With 5 Stainless Steel Treads | 0312114 | 1 | 15,200 | 0,139 |

U 316 MODEL WITH STAINLESS STEEL TREADS.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------------------------------|---------|----------------|--------------|--------------------------|
| • With 2 Stainless Steel Treads | 0312221 | 1 | 9,200 | 0,071 |
| • With 3 Stainless Steel Treads | 0312222 | 1 | 10,600 | 0,071 |
| With 4 Stainless Steel Treads | 0312223 | 1 | 12,200 | 0,071 |
| With 5 Stainless Steel Treads | 0312224 | 1 | 13,500 | 0,079 |

COMBINED 316 MODEL WITH STAINLESS STEEL TREADS.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------------------------|---------|----------------|--------------|--------------------------|
| With 2 Stainless Steel Treads | 0312311 | 1 | 10,100 | 0,118 |
| With 3 Stainless Steel Treads | 0312312 | 1 | 11,600 | 0,118 |
| With 4 Stainless Steel Treads | 0312313 | 1 | 13,200 | 0,118 |
| With 5 Stainless Steel Treads | 0312314 | 1 | 14,700 | 0,118 |





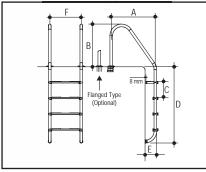
Pool Ladders - Commercial Pools

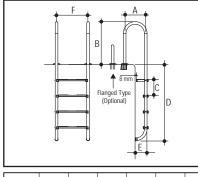


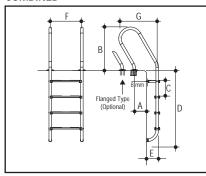












| Number of Treads | А | В | С | D | E | F |
|---------------------|-----|-----|-----|------|-----|-----|
| 2 | 700 | 690 | 250 | 700 | 190 | 500 |
| 3 | 700 | 690 | 250 | 950 | 190 | 500 |
| 4 | 700 | 690 | 250 | 1200 | 190 | 500 |
| 5 | 700 | 690 | 250 | 1450 | 190 | 500 |

| _ | _ | | | | | | | |
|---|---|---------------------|-----|-----|-----|------|-----|-----|
| | N | lumber of Treads | А | В | С | D | E | F |
| | | 2 | 330 | 670 | 250 | 700 | 190 | 500 |
| | | 3 | 330 | 670 | 250 | 950 | 190 | 500 |
| | L | 4 | 330 | 670 | 250 | 1200 | 190 | 500 |
| 1 | Г | 5 | 330 | 670 | 250 | 1450 | 190 | 500 |

| 1 | N | Number of Treads | А | В | С | D | E | F | G |
|---|---|---------------------|-----|-----|-----|------|-----|-----|-----|
| 1 | Γ | 2 | 210 | 690 | 250 | 630 | 190 | 500 | 640 |
|] | | 3 | 210 | 690 | 250 | 880 | 190 | 500 | 640 |
|] | | 4 | 210 | 690 | 250 | 1130 | 190 | 500 | 640 |
| | L | 5 | 210 | 690 | 250 | 1380 | 190 | 500 | 640 |

500 mm width. Treads in AISI 304 quality stainless steel and anti-slip. Handrails made of Ø 42 mm pipe are in AISI 304 quality polished stainless steel. Complete with plastic anchors, anchor escutcheons, end caps, bolts and nuts. Manufactured with double safety tread in accordance to EN 13451-2/AC standard.

STANDARD 304 MODEL WITH STAINLESS STEEL TREADS - FOR PUBLIC POOLS.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------------------------------|-----------|----------------|--------------|--------------------------|
| • With 2 Stainless Steel Treads | 0311111EU | 1 | 11,400 | 0,122 |
| • With 3 Stainless Steel Treads | 0311112EU | 1 | 13,100 | 0,122 |
| • With 4 Stainless Steel Treads | 0311113EU | 1 | 14,500 | 0,122 |
| With 5 Stainless Steel Treads | 0311114EU | 1 | 16,000 | 0,139 |

U 304 MODEL WITH STAINLESS STEEL TREADS - FOR PUBLIC POOLS.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------------------------------|-----------|----------------|--------------|--------------------------|
| • With 2 Stainless Steel Treads | 0311211EU | 1 | 10,000 | 0,071 |
| • With 3 Stainless Steel Treads | 0311212EU | 1 | 11,400 | 0,071 |
| With 4 Stainless Steel Treads | 0311213EU | 1 | 13,000 | 0,071 |
| • With 5 Stainless Steel Treads | 0311214EU | 1 | 14,300 | 0,079 |

COMBINED 304 MODEL WITH STAINLESS STEEL TREADS - FOR PUBLIC POOLS.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------------------------------|-----------|----------------|--------------|--------------------------|
| • With 2 Stainless Steel Treads | 0311311EU | 1 | 10,900 | 0,118 |
| • With 3 Stainless Steel Treads | 0311312EU | 1 | 12,400 | 0,118 |
| With 4 Stainless Steel Treads | 0311313EU | 1 | 14,000 | 0,118 |
| With 5 Stainless Steel Treads | 0311314EU | 1 | 15,500 | 0,118 |

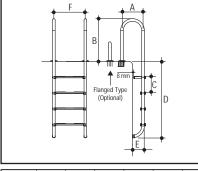


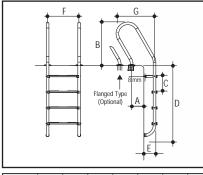
Pool Ladders - Commercial Pools











| Number of Treads | А | В | С | D | E | F |
|---------------------|-----|-----|-----|------|-----|-----|
| 2 | 700 | 690 | 250 | 700 | 190 | 500 |
| 3 | 700 | 690 | 250 | 950 | 190 | 500 |
| 4 | 700 | 690 | 250 | 1200 | 190 | 500 |
| 5 | 700 | 690 | 250 | 1450 | 190 | 500 |

| Number of Treads | A | В | С | D | E | F |
|---------------------|-----|-----|-----|-------|-----|-----|
| 2 | 330 | 670 | 250 | 700 | 190 | 500 |
| 3 | 330 | 670 | 250 | 950 | 190 | 500 |
| 4 | 330 | 670 | 250 | 1200 | 190 | 500 |
| 5 | 330 | 670 | 250 | 1/150 | 100 | 500 |

| Number of Treads | А | В | С | D | E | F | G |
|---------------------|-----|-----|-----|------|-----|-----|-----|
| 2 | 210 | 690 | 250 | 630 | 190 | 500 | 640 |
| 3 | 210 | 690 | 250 | 880 | 190 | 500 | 640 |
| 4 | 210 | 690 | 250 | 1130 | 190 | 500 | 640 |
| 5 | 210 | 690 | 250 | 1380 | 190 | 500 | 640 |

500 mm width. Treads in AISI 316 quality stainless steel and anti-slip. Handrails made of Ø 42 mm pipe are in AISI 316 quality polished stainless steel. Complete with plastic anchors, anchor escutcheons, end caps, bolts and nuts. Manufactured with double safety tread in accordance to

EN 13451-2/AC standard.

STANDARD 316 MODEL WITH STAINLESS STEEL TREADS - FOR PUBLIC POOLS.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------------------------------|-----------|----------------|--------------|--------------------------|
| • With 2 Stainless Steel Treads | 0312111EU | 1 | 11,800 | 0,122 |
| With 3 Stainless Steel Treads | 0312112EU | 1 | 13,500 | 0,122 |
| • With 4 Stainless Steel Treads | 0312113EU | 1 | 14,900 | 0,122 |
| With 5 Stainless Steel Treads | 0312114EU | 1 | 16,400 | 0,139 |

U 316 MODEL WITH STAINLESS STEEL TREADS - FOR PUBLIC POOLS.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|-----------|----------------|--------------|--------------------------|
| • With 2 Stainless Steel Treads | 0312211EU | 1 | 10,400 | 0,071 |
| • With 3 Stainless Steel Treads | 0312212EU | 1 | 11,800 | 0,071 |
| With 4 Stainless Steel Treads | 0312213EU | 1 | 13,400 | 0,071 |
| With 5 Stainless Steel Treads | 0312214EU | 1 | 14,700 | 0.079 |

COMBINED 316 MODEL WITH STAINLESS STEEL TREADS - FOR PUBLIC POOLS.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------------------------------|-----------|----------------|--------------|--------------------------|
| With 2 Stainless Steel Treads | 0312311EU | 1 | 11,300 | 0,118 |
| • With 3 Stainless Steel Treads | 0312312EU | 1 | 12,800 | 0,118 |
| With 4 Stainless Steel Treads | 0312313EU | 1 | 14,200 | 0,118 |
| With 5 Stainless Steel Treads | 0312314EU | 1 | 15,900 | 0,118 |

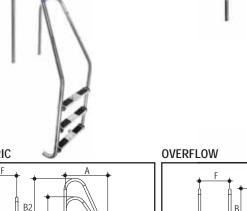
Poolside Equipment



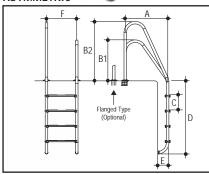


Pool Ladders

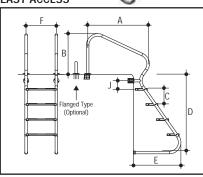








| F | ed Type ional) | A | | i c |) |
|-------|----------------|---|---|----------------|---|
| | | | E | - | |
| | | | | | |



| Number of | Α | B1 | B2 | С | D | Е | F |
|-----------|-----|-----|----------|-----|------|-----|-----|
| Treads | | | 1 B2 0 B | | | | |
| 2 | 700 | 690 | 980 | 250 | 730 | 190 | 500 |
| 3 | 700 | 690 | 980 | 250 | 980 | 190 | 500 |
| 4 | 700 | 690 | 980 | 250 | 1230 | 190 | 500 |
| _ | 700 | /00 | 000 | 250 | 1400 | 100 | EOO |

| | Number of Treads | А | В | С | D | Е | F | J |
|--|---------------------|------|-----|-----|------|-----|-----|-----|
| | 2 | 1020 | 650 | 250 | 750 | 190 | 500 | 100 |
| | 3 | 1020 | 650 | 250 | 1000 | 190 | 500 | 100 |
| | 4 | 1020 | 650 | 250 | 1250 | 190 | 500 | 100 |
| | 5 | 1020 | 650 | 250 | 1500 | 190 | 500 | 100 |

| Number of Treads | Α | В | С | D | E | F | J |
|---------------------|------|-----|-----|------|-----|-----|-----|
| 2 | 1020 | 670 | 250 | 770 | 440 | 500 | 150 |
| 3 | 1020 | 670 | 250 | 1020 | 615 | 500 | 150 |
| 4 | 1020 | 670 | 250 | 1270 | 790 | 500 | 150 |
| 5 | 1020 | 670 | 250 | 1520 | 965 | 500 | 150 |

ASYMMETRIC 304 MODEL WITH STAINLESS STEEL TREADS.

500 mm width. Treads in AISI 304 quality stainless steel and anti-slip. Handrails made of Ø 42 mm pipe are in AISI 304 quality polished stainless steel. Manufactured with double safety tread in accordance to EN 13451-2/AC standard. Complete with plastic anchors, anchor escutcheons, end caps, bolts and nuts.

| Description | Code | Pieces/ box | Weight Volume Kg m³ |
|---------------------------------|---------|----------------|------------------------|
| • With 2 Stainless Steel Treads | 0311811 | 1 | 0,247 |
| • With 3 Stainless Steel Treads | 0311812 | 1 | 0,247 |
| • With 4 Stainless Steel Treads | 0311813 | 1 | 0,247 |
| • With 5 Stainless Steel Treads | 0311814 | 1 | 0,271 |

OVERFLOW 304 MODEL WITH STAINLESS STEEL TREADS.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------------------------------|---------|----------------|--------------|--------------------------|
| • With 2 Stainless Steel Treads | 0311411 | 1 | 12,500 | 0,247 |
| • With 3 Stainless Steel Treads | 0311412 | 1 | 13,700 | 0,247 |
| • With 4 Stainless Steel Treads | 0311413 | 1 | 15,100 | 0,247 |
| • With 5 Stainless Steel Treads | 0311414 | 1 | 17,000 | 0,271 |

EASY ACCESS 304 MODEL WITH STAINLESS STEEL TREADS.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------------------------|---------|----------------|--------------|--------------------------|
| With 2 Stainless Steel Treads | 0311511 | 1 | | |
| With 3 Stainless Steel Treads | 0311512 | 1 | | |
| With 4 Stainless Steel Treads | 0311513 | 1 | | |
| With 5 Stainless Steel Treads | 0311514 | 1 | | |





Pool Ladders







| B2 B1 C C C (Optional) |
|------------------------|
|------------------------|

| E |
|---|
|---|

| Flanged Type (Optional) |
|-------------------------|
|-------------------------|

| Ξ | | | | | | | | | |
|---|---------------------|-----|-----|-----|-----|------|-----|-----|--------------|
| | Number of Treads | Α | B1 | B2 | С | D | E | F | Numb Trea |
| | 2 | 700 | 690 | 980 | 250 | 730 | 190 | 500 | 2 |
| Γ | 3 | 700 | 690 | 980 | 250 | 980 | 190 | 500 | 3 |
| | 4 | 700 | 690 | 980 | 250 | 1230 | 190 | 500 | 4 |
| | 5 | 700 | 690 | 980 | 250 | 1480 | 190 | 500 | 5 |

| 1 | Number of Treads | А | В | С | D | E | F | J |
|---|---------------------|------|-----|-----|------|-----|-----|-----|
|] | 2 | 1020 | 650 | 250 | 750 | 190 | 500 | 100 |
|] | 3 | 1020 | 650 | 250 | 1000 | 190 | 500 | 100 |
| 1 | 4 | 1020 | 650 | 250 | 1250 | 190 | 500 | 100 |
| 1 | 5 | 1020 | 650 | 250 | 1500 | 190 | 500 | 100 |

| | Number of Treads | А | В | С | D | E | F | J |
|---|---------------------|------|-----|-----|------|-----|-----|-----|
| | 2 | 1020 | 670 | 250 | 770 | 440 | 500 | 150 |
| ı | 3 | 1020 | 670 | 250 | 1020 | 615 | 500 | 150 |
| ı | 4 | 1020 | 670 | 250 | 1270 | 790 | 500 | 150 |
| ı | 5 | 1020 | 670 | 250 | 1520 | 965 | 500 | 150 |

ASYMMETRIC 316 MODEL WITH STAINLESS STEEL TREADS.

500 mm width. Treads in AISI 316 quality stainless steel and anti-slip. Handrails made of Ø 42 mm pipe are in AISI 316 quality polished stainless steel. Manufactured with double safety tread in accordance to EN 13451-2/AC standard. Complete with plastic anchors, anchor escutcheons, end caps, bolts and nuts.

| Description | Code | Pieces/ Weig box Kg | ht Volume m ³ |
|---------------------------------|---------|------------------------|-----------------------------|
| • With 2 Stainless Steel Treads | 0312811 | 1 | 0,247 |
| • With 3 Stainless Steel Treads | 0312812 | 1 | 0,247 |
| With 4 Stainless Steel Treads | 0312813 | 1 | 0,247 |
| • With 5 Stainless Steel Treads | 0312814 | 1 | 0,271 |

OVERFLOW 316 MODEL WITH STAINLESS STEEL TREADS.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------------------------------|---------|----------------|--------------|--------------------------|
| • With 2 Stainless Steel Treads | 0312411 | 1 | 12,500 | 0,247 |
| • With 3 Stainless Steel Treads | 0312412 | 1 | 13,700 | 0,247 |
| With 4 Stainless Steel Treads | 0312413 | 1 | 15,100 | 0,247 |
| With 5 Stainless Steel Treads | 0312414 | 1 | 17,000 | 0,271 |

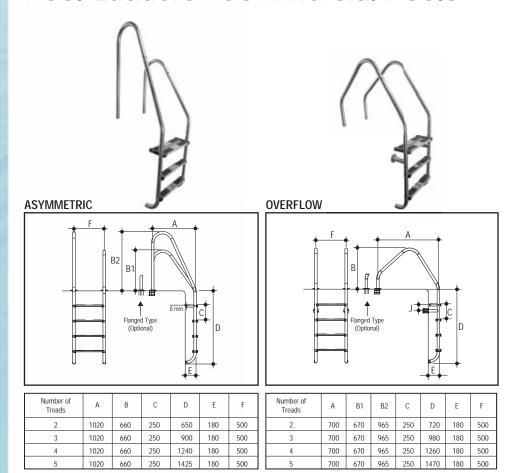
EASY ACCESS 316 MODEL WITH STAINLESS STEEL TREADS.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------------------------|---------|----------------|--------------|--------------------------|
| With 2 Stainless Steel Treads | 0312511 | 1 | | |
| With 3 Stainless Steel Treads | 0312512 | 1 | | |
| With 4 Stainless Steel Treads | 0312513 | 1 | | |
| With 5 Stainless Steel Treads | 0312514 | 1 | | |





Pool Ladders - Commercial Pools



ASYMMETRIC 304 MODEL WITH STAINLESS STEEL TREADS - FOR PUBLIC POOLS.

500 mm width. Treads in AISI 304 quality stainless steel and anti-slip. Handrails made of Ø 42 mm pipe are in AISI 304 quality polished stainless steel. Complete with plastic anchors, anchor escutcheons, end caps, bolts and nuts. Manufactured with double safety tread in accordance to EN 13451-2/AC standard.

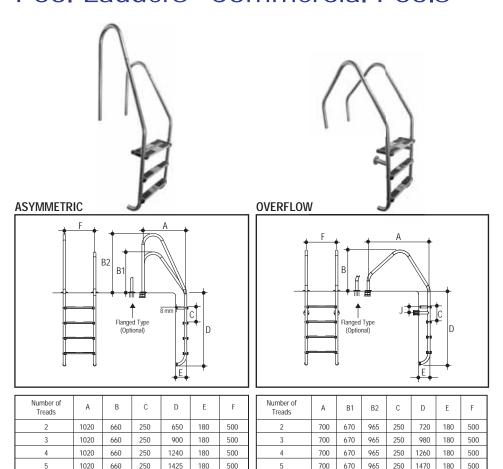
| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------------------------|-----------|----------------|--------------|--------------------------|
| With 2 Stainless Steel Treads | 0311811EU | 1 | | |
| With 3 Stainless Steel Treads | 0311812EU | 1 | | |
| With 4 Stainless Steel Treads | 0311813EU | 1 | | |
| With 5 Stainless Steel Treads | 0311814EU | 1 | | |

OVERFLOW 304 MODEL WITH STAINLESS STEEL TREADS - FOR PUBLIC POOLS.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------------------------------|-----------|----------------|--------------|--------------------------|
| • With 2 Stainless Steel Treads | 0311411EU | 1 | 13,700 | 0,247 |
| • With 3 Stainless Steel Treads | 0311412EU | 1 | 14,900 | 0,247 |
| • With 4 Stainless Steel Treads | 0311413EU | 1 | 17,300 | 0,247 |
| • With 5 Stainless Steel Treads | 0311414EU | 1 | 19,200 | 0,271 |



Pool Ladders - Commercial Pools



ASYMMETRIC 316 MODEL WITH STAINLESS STEEL TREADS - FOR PUBLIC POOLS.

500 mm width. Treads in AISI 316 quality stainless steel and anti-slip.
Handrails made of Ø 42 mm pipe are in AISI 316 quality polished stainless steel.
Complete with plastic anchors, anchor escutcheons, end caps, bolts and nuts.
Manufactured with double safety tread in accordance to EN 13451-2/AC standard.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------------------------------|-----------|----------------|--------------|--------------------------|
| • With 2 Stainless Steel Treads | 0312811EU | 1 | | |
| • With 3 Stainless Steel Treads | 0312812EU | 1 | | |
| • With 4 Stainless Steel Treads | 0312813EU | 1 | | |
| • With 5 Stainless Steel Treads | 0312814EU | 1 | | |

OVERFLOW 316 MODEL WITH STAINLESS STEEL TREADS - FOR PUBLIC POOLS.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------------------------|-----------|----------------|--------------|--------------------------|
| With 2 Stainless Steel Treads | 0312411EU | 1 | 14,100 | 0,247 |
| With 3 Stainless Steel Treads | 0312412EU | 1 | 15,300 | 0,247 |
| With 4 Stainless Steel Treads | 0312413EU | 1 | 16,700 | 0,247 |
| With 5 Stainless Steel Treads | 0312414FU | 1 | 19.600 | 0.271 |



Volume

 \mathbf{m}^3

5,000

Grab Rails for Split Model Pool Ladders

Description

Steep Grab Rail: 510 x 800 mm. Made of Ø 42 mm AISI 304 stainless steel pipe. Complete with fixing plates, gaskets, bolts and bolt plugs.

Code

03322

Pieces/

box

Pieces/

box

Weight

Κğ

Volume

5,000

Weight

Kg

5,000

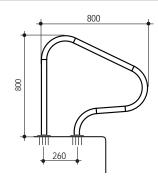


| Set of 2 | | |
|----------|-----|-----|
| | + | 510 |
| | 008 | |
| | Ϊ, | 150 |

Deep Grab Rail: 800 x 800 mm. Made of \emptyset 42 mm AISI 304 stainless steel pipe. Complete with fixing plates, gaskets, bolts and bolt plugs.



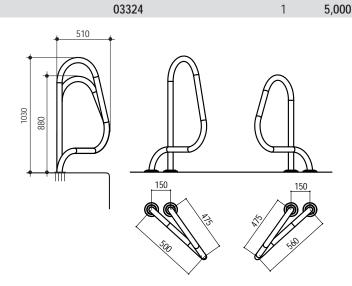
| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| Set of 2 | 03323 | 1 | 5,000 | 5,000 |



Cross Grab Rail: \emptyset 42 mm. Made of \emptyset 42 mm AISI 304 stainless steel pipe. Complete with monoblock rectangular fixing plate, gaskets, bolts and bolt plugs.

Code





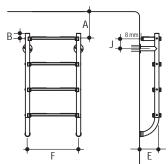


Pool Ladders

SPLIT 304 MODEL WITH STAINLESS STEEL TREADS.

500 mm width. Treads in AISI 304 quality stainless steel and anti-slip. Handrails made of \emptyset 42 mm pipe are in AISI 304 quality polished stainless steel. Complete with plastic anchors, anchor escutcheons, end caps, bolts and nuts.

| Number of Treads | A | В | С | E | F | J |
|---------------------|-----|----|-----|-----|-----|-----|
| 2 | 250 | 50 | 250 | 190 | 500 | 100 |
| 3 | 250 | 50 | 250 | 190 | 500 | 100 |
| 4 | 250 | 50 | 250 | 190 | 500 | 100 |
| 5 | 250 | 50 | 250 | 190 | 500 | 100 |



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------------------------------|---------|----------------|--------------|--------------------------|
| • With 2 Stainless Steel Treads | 0311711 | 1 | 12,500 | 0,247 |
| • With 3 Stainless Steel Treads | 0311712 | 1 | 13,700 | 0,247 |
| • With 4 Stainless Steel Treads | 0311713 | 1 | 15,100 | 0,247 |
| • With 5 Stainless Steel Treads | 0311714 | 1 | 17,000 | 0,271 |



SPLIT 316 MODEL WITH STAINLESS STEEL TREADS.

500 mm width. Treads in AISI 316 quality stainless steel and anti-slip. Handrails made of \emptyset 42 mm pipe are in AISI 316 quality polished stainless steel. Complete with plastic anchors, anchor escutcheons, end caps, bolts and nuts.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------------------------------|---------|----------------|--------------|--------------------------|
| • With 2 Stainless Steel Treads | 0312711 | 1 | 12,500 | 0,247 |
| With 3 Stainless Steel Treads | 0312712 | 1 | 13,700 | 0,247 |
| With 4 Stainless Steel Treads | 0312713 | 1 | 15,100 | 0,247 |
| With 5 Stainless Steel Treads | 0312714 | 1 | 17,000 | 0,271 |

SPLIT 304 MODEL WITH STAINLESS STEEL TREADS - FOR PUBLIC POOLS.

500 mm width. Treads in AISI 304 quality stainless steel and anti-slip. Handrails made of \emptyset 42 mm pipe are in AISI 304 quality polished stainless steel. Complete with plastic anchors, anchor escutcheons, end caps, bolts and nuts. Manufactured with double safety tread in accordance to EN 13451- 2/AC standard.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------------------------------|-----------|----------------|--------------|--------------------------|
| • With 2 Stainless Steel Treads | 0311711EU | 1 | 12,900 | 0,247 |
| • With 3 Stainless Steel Treads | 0311712EU | 1 | 14,100 | 0,247 |
| • With 4 Stainless Steel Treads | 0311713EU | 1 | 15,500 | 0,247 |
| • With 5 Stainless Steel Treads | 0311714EU | 1 | 17,400 | 0,271 |



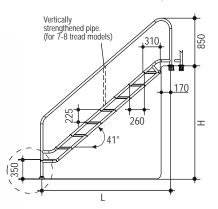


Pool Ladders for Disabled Persons



INCLINED 304 MODEL STAINLESS STEEL POOL LADDER - WIDTH=500 mm.

For easy entry and exit in to and out from leisure or hydrotherapy pools for people not requiring a hydraulic lift chair. Handrails made of \emptyset 42 mm pipe are in AISI 304 quality polished stainless steel. Complete with anti-slip stainless steel treads plastic anchors, anchor escutcheons, end caps, bolts and nuts.







| Number of Treads | Height H | Length L |
|---------------------|-------------|-------------|
| 4 | 950 - 1150 | 1290 |
| 5 | 1175 - 1375 | 1550 |
| 6 | 1400 - 1600 | 1810 |
| 7 | 1625 - 1825 | 2070 |
| 8 | 1850 - 2050 | 2330 |



| Description | Code | Pieces/ Weight box Kg | Volume m ³ |
|-------------------------------|---------|--------------------------|--------------------------|
| With 4 Stainless Steel Treads | 0311611 | 1 | |
| With 5 Stainless Steel Treads | 0311612 | 1 | |
| With 6 Stainless Steel Treads | 0311613 | 1 | |
| With 7 Stainless Steel Treads | 0311614 | 1 | |
| With 8 Stainless Steel Treads | 0311615 | 1 | |

Note: For 316 stainless steel option - add 20%

INCLINED 304 MODEL STAINLESS STEEL POOL LADDER - WIDTH=970 mm. For easy entry and exit in to and out from leisure or hydrotherapy pools for people not requiring a hydraulic lift chair. Handrails made of \emptyset 42 mm pipe are in AISI 304 quality polished stainless steel. Complete with anti-slip stainless steel treads plastic anchors, anchor escutcheons, end caps, bolts and nuts.



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------------------------------|---------|----------------|--------------|--------------------------|
| • With 4 Stainless Steel Treads | 0311621 | 1 | | |
| • With 5 Stainless Steel Treads | 0311622 | 1 | | |
| With 6 Stainless Steel Treads | 0311623 | 1 | | |
| • With 7 Stainless Steel Treads | 0311624 | 1 | | |
| With 8 Stainless Steel Treads | 0311625 | 1 | | |

Note: For 316 stainless steel option - add 20%





Poolside Equipment

Handrails for Concrete Ladders

IN-POOL HANDRAIL. Made of AISI 304 quality polished stainless steel \emptyset 42 mm pipe. Complete with fixing plates and screws.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------------|-------|----------------|--------------|--------------------------|
| • Length: 1220 mm | 03311 | 1 | 7,000 | 0,237 |
| • Length: 1524 mm | 03312 | 1 | 8,000 | 0,261 |



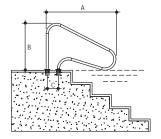
| _ | <u>.</u> L | |
|---|------------|----------|
| A | | |
| | | A |
| В | | |
| | | <u> </u> |

| L | А | В |
|------|-----|-----|
| 1220 | 800 | 680 |
| 1524 | 800 | 855 |

OUT-POOL HANDRAIL. Made of AISI 304 quality polished St. steel \emptyset 42 mm pipe. Complete with fixing plates and screws.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-----------------|-------|----------------|--------------|--------------------------|
| Length: 1250 mm | 03321 | 1 | 5,000 | 0,060 |





| А | В | С |
|------|-----|-----|
| 1250 | 850 | 200 |

LATERAL GRAB RAIL WITH FIXING PLATES. Made of AISI 304 quality polished stainless steel Ø 42 mm pipe. Complete with fixing plates and screws.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-----------------|-------|----------------|--------------|--------------------------|
| • Length: 0.5 m | 03331 | 1 | 2,000 | 0,019 |
| • Length: 1.0 m | 03332 | 1 | 3,000 | 0,037 |
| • Length: 2.0 m | 03333 | 1 | 7,500 | 0,072 |
| • Length: 2.5 m | 03334 | 1 | 9,000 | 0,089 |

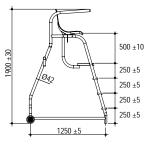


LIFEGUARD SEAT.

AISI 304 quality polished stainless steel Ø 42 mm pipe.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| Model 2 | 14671 | 1 | | |









Ladder Accessories



LADDER ANCHOR. Made of plastic for \emptyset 42 mm pipe, earth connection possible.

| Description | Code | Pieces/ Weight Volume box Kg m ³ |
|-----------------------------------|--------|--|
| • Solid plastic for Ø 42 mm pipe. | 03201 | 0,142 |
| Stainless steel anchor | 03201S | |

Note: Please place special order for "grounding plate" type.



ANCHOR ESCUTCHEON

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-----------------------------------|--------|----------------|--------------|--------------------------|
| Made of AISI 304 quality polished | 032021 | | | |
| stainless steel, price per piece | | | | |



LADDER TREADS

| | Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|--------------------------------------|---------|----------------|--------------|--------------------------|
| | Made of AISI 304 St. steel with | 032031 | 1 | | |
| | anti-slip pad for Ø 42 mm handrails, | | | | |
| | width 500 mm | | | | |
| | Ditto, Inclined | 0320311 | 1 | | |
| 1 | Made of AISI 304 St. steel with | 032032 | 1 | | |
| | anti-slip pad for Ø 38 mm handrails, | | | | |
| | width 500 mm | | | | |
| | Ditto, Inclined | 0320321 | 1 | | |
| | Double Tread.Made of AISI 304 St. | 032033 | 1 | | |
| | steel with anti-slip pad for Ø 42 mm | | | | |
| | handrails, width 500 mm | | | | |
| | Ditto, Inclined | 0320331 | 1 | | |



ARTICULATED ANCHOR

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|-------|----------------|--------------|--------------------------|
| Made of AISI 304 quality St.steel | 03210 | | 0,602 | |
| for Ø 42 mm handrails. Price per piece | | | | |



END CAP

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|-------|----------------|--------------|--------------------------|
| • Flexible for Ø 42 mm pipe. | 03204 | | | |
| Price per piece | | | | |
| • Swivel foot pad for Ø 42 mm pipe. | 03205 | | | |
| Angle can be adjusted by rotating the eye ball socket. Price per piece | | | | |

Pool lift for disabilities

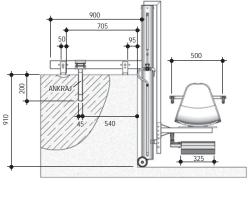
Poolside Equipment

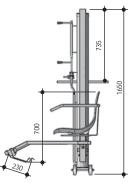
Pool Lift for Disabilities

Pool lift for disabilities: Hydraulic lift made of AISI 304 stainless steel. Garden irrigation hose has to be connected to hydraulic lift. Required minimum water pressure is 3,5 kg/cm². User friendly installation and can easily be adapted to existing pool.

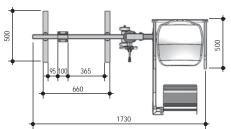
| Oser menuly installation and t | can easily be adapted to exist | ing pool. | | |
|--------------------------------|--------------------------------|----------------|--------------|--------------------------|
| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |

04101





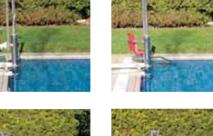


























Pool Lift for Disabilities - Stretcher



| hose has to | disabilities: Hydr be connected Userfriendly ins | to a hydraulid | lift. Required | minimum | water pr | essure is |
|-----------------|--|----------------|----------------|----------------|--------------|--------------------------|
| Description | | Code | | Pieces/ box | Weight Kg | Volume m ³ |
| Pool lift for d | isabilities - Stretcher | 04103 | | 1 | | |
| 000 ANKRI | 900 705 95 95 45 540 | 160 | | 1650 | | |
| 200 | 95 100 365 660 1645 | | 1790 | | | |
| | | | C | | | |
| | | | | | | |
| ~ | | | | | | |

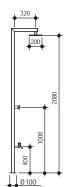


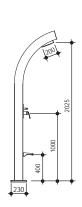
Pool Showers

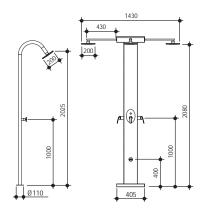
Shower Tunnels. For public pools, made of AISI 304 stainless steel. Complete with photocell and solenoid valve, associated with control column.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|----------------------------|----------------|--------------|--------------------------|
| • 3 Shower 1 arch. Width: 1,2 m | 03641 | 1 | | |
| • 5 Shower 1 arch. Width: 1,2 m | 03642 | 1 | | |
| • 2 Arched. Each arch has 3 showers | 03643 | 1 | | |
| Width:1,2 m, Lateral acrylic transparent pa | anels, Maximum height: 2,5 | m, Lenght: | 2,1 m | |
| Stainless Steel Showers | | | | |
| Single shower, box profile body | 03645 | 1 | | |
| • Same, also with foot washing tap. | 03645A | 1 | | |
| • Cobra shower, with foot washing tap. | 03648A | 1 | | |
| Single head shower, baston type. | 03647 | 1 | | |
| • 4 head shower, with foot washing tap. | 03644 | 1 | | |
| • Same, with electric heater, hot and cold | 03656 | 1 | | |
| water mixing possible. | | | | |







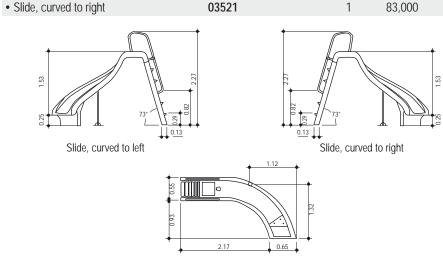




Pool Slides

SLIDES. Pool slide made of FRP. Complete with the hose system to connect to the pool supply line. Handles are AISI 304 quality stainless steel.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------------------|-------|----------------|--------------|--------------------------|
| • Slide, curved to left | 03520 | 1 | 83,000 | 2,913 |
| Slide, curved to right | 03521 | 1 | 83,000 | 2,913 |



93



Diving Boards

S - DIVING BOARD Made in laminated polyester and fiberglass.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------|-------|----------------|--------------|--------------------------|
| • Length: 1.60 m | 03410 | 1 | 23,000 | 0,107 |
| • Height: 0.35 m | | | | |
| | | | | |

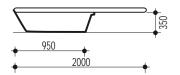




CLASSIC 200 DIVING BOARD Base and board made in laminated polyester and fiberglass.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------|-------|----------------|--------------|--------------------------|
| • Length: 2.00 m | 03420 | 1 | 29,000 | 0,196 |
| • Height: 0.35 m | | | | |
| • Width: 0.40 m | | | | |





CLASSIC 200 HR DIVING BOARD Base and board made in laminated polyester and fiberglass. Complete with stainless steel handrails.

| | Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|------------------|-------|----------------|--------------|--------------------------|
| | • Length: 2.00 m | 03430 | 1 | 39,000 | |
| | • Height: 0.35 m | | | | |
| | • Width: 0.40 m | | | | |
| | | | | | |





Complete box set including cleaning sponge and plastic gloves. Can be used for any kind of stainless steel.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|--------|----------------|--------------|--------------------------|
| • Kit 1, Rust Remover + Protector | 031001 | 1 | | |
| • Kit 2, Rust Remover + Protector + Polisher | 031002 | 1 | | |





Poolside Equipment

Overflow Grating

"MODEL 2018" Overflow Grating

Made of PP plastic; modular with a single joint. "I" shaped profile. Height: 33 mm.

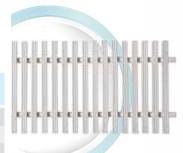
| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------------------------|---------|----------------|--------------|--------------------------|
| • Width: 20 cm (price per meter) | 0372232 | 5 m | | |
| • Width: 25 cm (price per meter) | 0372332 | 5 m | | |



MODEL 2001 OVERFLOW GRATING - DOUBLE JOINT

Made of PP plastic; modular with two joints. "I" shaped profile. Height: 25 mm. Price per meter.

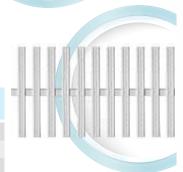
| · | | | | |
|-------------------------------|---------|----------------|--------------|--------------------------|
| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
| Classical Design Width: 20 cm | 0372221 | 10 m | 13,000 | 0,062 |
| Classical Design Width: 25 cm | 0372321 | 10 m | 13,000 | 0,062 |
| Classical Design Width: 30 cm | 0372421 | 10 m | 13,500 | |



MODEL 2001 OVERFLOW GRATING - SINGLE JOINT

Made of PP plastic; modular with single joint. "I" shaped profile. Height: 25 mm. Price per meter.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------------------------|---------|----------------|--------------|--------------------------|
| Classical Design Width: 15 cm | 0372211 | 10 m | 11,900 | 0,044 |
| Classical Design Width: 20 cm | 0372212 | 10 m | 11,500 | 0,062 |
| Classical Design Width: 25 cm | 0372312 | 10 m | 13,100 | 0,062 |



"MODEL GEMAS-FUTURO" OVERFLOW GRATING

Modular, plastic product. Adaptable to all types of pool shapes. Height: 25 mm. Price per meter.

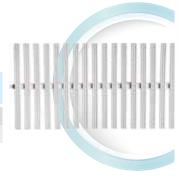
| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------------------|---------|----------------|--------------|--------------------------|
| Modular Plastic Width: 20 cm | 037321K | 10 m | 15,400 | 0,067 |



"MONOBLOCK" Overflow Grating

Single Joint. six pieces, "T" shaped plastics, grating height: 22 mm. Price per meter.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------|--------|----------------|--------------|--------------------------|
| • Width: 20 cm | 037321 | 10 m | 11,700 | 0,062 |
| • Width: 25 cm | 037331 | 10 m | 18,320 | 0,061 |





Overflow Grating



"MODEL GEMAS SQUARE" OVERFLOW GRATING

Plastic modular, single joint. "I" shaped profile. Height: 25 mm.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------------------------|----------|----------------|--------------|--------------------------|
| • Width: 20 cm (price per meter) | 0372212K | 1 | 14,000 | 0,051 |
| • Width: 25 cm (price per meter) | 0372213K | 1 | 19,050 | 0,051 |

Overflow - For Strip Led Implementation



"Model GEMAS - Transparent Squared" Overflow Grating

Made of polycarbonate, modular with single joint. "I" shaped profile. Squared upper surface. Height: 25 mm. Designed for strip LED implementation inside the overflow grating channel (It's recommended to use IP68 strip LED)

| SSEMSSOCETES | (ABBUSBOBB) |
|--------------|-------------|
| | |
| - | - |

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------------------------|-----------|----------------|--------------|--------------------------|
| • Width: 20 cm (price per meter) | 0372212KT | 1 | 14,000 | 0,051 |
| • Width: 25 cm (price per meter) | 0372213KT | 1 | 19,050 | 0,051 |

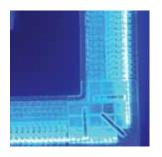








Corner Tiles for Overflow Grating



CORNER TILES 90° PLASTIC.

Corner Tile made of PP plastic for an angle of 90 Degrees.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-----------------------|---------|----------------|--------------|--------------------------|
| • 25 cm | 037431 | 20 | 9,960 | 0,048 |
| • 20 cm | 037421 | 25 | 8,800 | 0,038 |
| • 25 cm - Transparent | 037431T | 20 | | |
| • 20 cm - Transparent | 037421T | 25 | | |
| • 15 cm | 037411 | 20 | 4,438 | 0,019 |
| • 25 cm | 037434 | 20 | | |
| • 20 cm | 037433 | 25 | | |
| • 30 cm | 037413 | | | |



CORNER TILES 45° PLASTIC.

Corner Tile made of PP plastic for an angle of 45 Degrees.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-----------------------|---------|----------------|--------------|--------------------------|
| • 25 cm | 037432 | 20 | 6,950 | 0,042 |
| • 20 cm | 037422 | 20 | 4,470 | 0,028 |
| • 25 cm - Transparent | 037432T | 20 | | |
| • 20 cm - Transparent | 037422T | 20 | | |
| • 15 cm | 037412 | 10 | 1,636 | 0,008 |
| • 30 cm | 037414 | | | |

Poolside Equipment

Grating Support Profile

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------------------------------|-------|------------------|--------------|--------------------------|
| Overflow channel edging profile | 03750 | 100 m | 18,170 | 0,051 |
| • PVC, 23 x 26 mm (Price per meter) | | (2 m x 50) | | |
| • Same, 33 x 25 mm (Price per meter) | 03751 | 100 m (2 m x 50) | | |





Stainless Steel Overflow Gratings

Made of AISI 304 quality stainless steel. Length: 0,50 m monoblock grating. Standard antislip pattern.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|------------|----------------|--------------|--------------------------|
| Width: 25 cm (price per meter) - 2 pcs. | 0372221SS1 | 1 | | |



Made of AISI 316 quality stainless steel. Length: 0,50 m monoblock grating. Standard antislip pattern.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|------------|----------------|--------------|--------------------------|
| Width: 25 cm (price per meter) - 2 pcs. | 0372221SS2 | 1 | | |

NOTE: Prices are for Standard Pattern. Prices of Point and Leather Patterns are %20 higher.



Point Pattern

Stainless Steel Corner Tiles for Overflow Gratings

Corner Tiles, 90° - Stainless Steel

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-----------------------------|-----------|----------------|--------------|--------------------------|
| • 25 cm AISI 304 quality | 037421SS1 | | | |
| • 25 cm AISI 316 quality | 037421SS2 | | | |
| D A D (Disease Asia Daises) | | | | |



P.A.P. (Please Ask Price)





Grating

Leather Pattern Point Pattern

Grating



Grating And Corner Tile Detail



Strainer for Overflow Gutter Drain



Made in stainless steel adjustable to drain pipes in gutter.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------------------------------|-------|----------------|--------------|--------------------------|
| • for Ø 63 mm pipe | 03801 | 1 | | |
| • for Ø 75 mm pipe | 03802 | 1 | | |
| • for Ø 90 mm pipe | 03803 | 1 | | |
| • for Ø 110 mm pipe | 03804 | 1 | | |
| • Plastic - for up to Ø 110 mm pipe | 03811 | 1 | | |



OVERFLOW GUTTER DRAIN.

Made of white ABS plastic. 2 $\frac{1}{2}$ " male - threaded, Ø 63 mm inside. Stainless steel screws included.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| | 04150 | 50 | 11,000 | 0,067 |

Foot Bath



Foot washing bath, made of fiberglass reinforced polyester, for disinfection of feet before entering pool.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------------------|-------|----------------|--------------|--------------------------|
| • 52,50 x 37,50 x 8,75 cm | 03900 | 1 | 1,270 | 0,021 |
| • 85,00 x 65,00 x 9,00 cm | 03902 | 1 | | |
| • 120,00 x 80,00 x 9,00 cm | 03901 | 1 | | |





Poolside Equipment

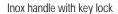
Hatch for Engine Room

Hatch for engine room: Made of FRP, plastic hinged lid complete with steel reinforcements and locking mechanism.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------|-------|----------------|--------------|--------------------------|
| • 50 x 50 cm | 03911 | 1 | 7,000 | 0,040 |
| • 75 x 75 cm | 03912 | 1 | 14,000 | 0,080 |
| • 100 x 100 cm | 03913 | 1 | 19,000 | 0,140 |

| CODE | Inner Size (cm) | Outer Size (cm) |
|-------|-----------------|-----------------|
| 03911 | 50 x 50 | 66 x 66 |
| 03912 | 75 x 75 | 88 x 88 |
| 03913 | 100 x 100 | 123 x 123 |









Double piston

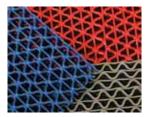
Pool Side Anti Slip MAT

Plastic anti slip MAT for pool decks. Width: 0,9 m. 15 m rolled.

| Description | Code | Pieces/ Weight Volume box Kg m³ |
|------------------------|-------|------------------------------------|
| Red. Price per meter | 03011 | 1 Roll |
| Blue. Price per meter | 03012 | 1 Roll |
| Green. Price per meter | 03013 | 1 Roll |

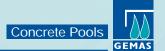


I.T.U. Olympic Pool / Istanbul





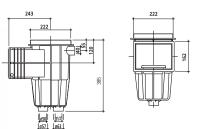


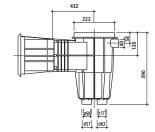


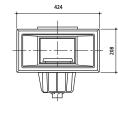
Skimmers for Concrete Pools

All skimmer models are made in ABS plastic and equipped with "suction regulator" and locking mechanism of baskets against back pressure. Skimming by "buoy float" or "floating weir". Suction port: $1\frac{1}{2}$ " female threaded (2" also possible upon request), Ø 63 mm external slip. Second port: Ø 50 mm female slip. Overflow drainage: Ø 40 mm female slip.









| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------------------|---------|----------------|--------------|--------------------------|
| Standard | | | | |
| Standard Squared Lid Skimmer | 04111 | 1 | 3,036 | 0,054 |
| Ditto, W/Floating Weir | 04111FW | 1 | 2,840 | 0,054 |



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------------------|----------|----------------|--------------|--------------------------|
| Extended Throat (+10 cm) | | | | |
| Standard Extended | 04111E | 2 | 6,372 | 0,107 |
| Ditto, W/Floating Weir | 04111EFW | 2 | 5,942 | 0,107 |



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------------------------|---------|----------------|--------------|--------------------------|
| Wide Mouth | | | | |
| Wide Mouth Squared Lid Skimmer | 04112 | 2 | 8,000 | 0,137 |
| Ditto, W/Floating Weir | 04112FW | 2 | 7,524 | 0,137 |

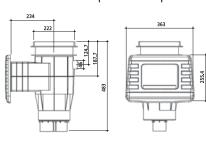


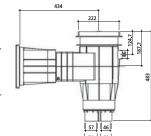
Lux-Skimmers for Concrete Pools

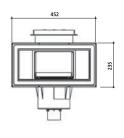
All Lux-Skimmer models are made of ABS plastic and equipped with "suction regulator" and locking mechanism of baskets against back pressure. Skimming by "buoy float" or "floating weir". Suction port: 2" female threaded. Second port: 1½" female threaded supplied with blind cap. Overflow drainage: Ø 40 mm female slip.

Additional Features:

- Child-proof decklid features safety locking mechanism.
- Extension collar allows for correction with uneven deck finishes.
- Locking basket design prevents basket floating due to back pressure.
- Locking vacuum adapter prevents adapter plate floating during suction cleaning.
- Extended throat facilitates convenient installation in the pool wall (Optional).
- Aesthetic face plate in the pool.

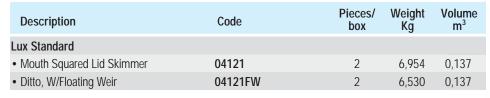








Locked basket datail





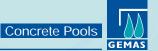
Lockable lid for child protection

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------------------|----------|----------------|--------------|--------------------------|
| Lux Extended Throat (+10 cm) | | | | |
| Lux Standard Extended | 04121E | 2 | 4,350 | 0,108 |
| Ditto, W/Floating Weir | 04121EFW | 2 | 4,150 | 0,108 |



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------------------------|---------|----------------|--------------|--------------------------|
| Lux Wide Mouth | | | | |
| Lux Wide Mouth Squared Lid Skimmer | 04122 | 2 | 4,610 | 0,108 |
| • Ditto, W/Floating Weir | 04122FW | 2 | 4,378 | 0,108 |





Elevated Wide Mouth Skimmers for Concrete Pools

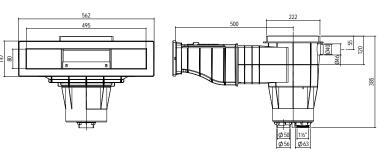
Elevated Skimmer raises the pool water level by 5 cm compared to normal skimmers.

All skimmer models are made in ABS plastic and equipped with "suction regulator" and locking mechanism of baskets against back pressure. Skimming by "buoy float" or "floating weir". Suction port: 1½" female threaded (2" also possible upon request), Ø 63 mm external slip. Second port: Ø 50 mm female slip. Overflow drainage: Ø 40 mm female slip.



Slim wide mouth for high water level

| Description | Code | Pieces/ Weight box Kg |
|--|----------|-----------------------|
| Elevated Standard Wide Mouth Skimmer | 04115FW | 1 |
| Complete Elev. Std. Wide Skimmer Anthracite - RAL 7016 | 04115FWA | 1 |
| Complete Elev. Std. Wide Skimmer Beige - RAL 1015 | 04115FWB | 1 |
| Complete Elev. Std. Wide Skimmer Gray - RAL 7004 | 04115FWG | 1 |



Lux-Elevated Wide Mouth Skimmers for Concrete Pools

All Lux-Skimmer models are made of ABS plastic and equipped with "suction regulator" and locking mechanism of baskets against back pressure. Skimming by "buoy float" or "floating weir". Suction port: 2" female threaded. Second port: 1½" female threaded supplied with blind cap. Overflow drainage: Ø 40 mm female slip.

Additional Features:

• Child-proof decklid features safety locking mechanism.

Pieces/ Weight

• Extension collar allows for correction with uneven deck finishes.

Code

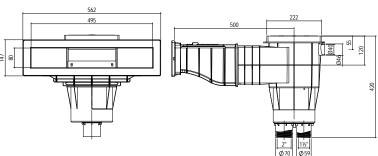
Locking basket design prevents basket floating due to back pressure.
 Locking vacuum adapter prevents adapter plate floating during suction cleaning.
 Extended throat facilitates convenient installation in the pool wall (Optional).



Description

| 2000.1511011 | 5545 | DO |
|---|----------|----|
| Elevated Standard Wide Mouth Skimmer | 04125FW | 1 |
| • Complete Elev. Lux Wide Skimmer Anthracite - RAL 7016 | 04125FWA | 1 |
| Complete Elev. Lux Wide Skimmer Beige - RAL 1015 | 04125FWB | 1 |
| Complete Elev. Lux Wide Skimmer Gray - RAL 7004 | 04125FWG | 1 |
| | | |
| 495 | 500 | |
| | 1 1 1 | |

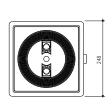


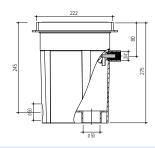




Skimmers - Level Regulator

Automatic Level Regulator. Body is made of ABS plastic. Complete with 3/8" plastic floating valve and Ø 50 mm PVC slip connection, either side or bottom alternatively.











| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-----------------------------|--------|----------------|--------------|--------------------------|
| Automatic Level Regulator | 04120 | 1 | 1,600 | 0,021 |
| Ditto, with locking decklid | 04120L | 1 | 1,650 | 0,021 |

Skimmers - Optional Parts

Face Plate for Concrete or Liner Standard Skimmer. Made of ABS plastic.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|----------|----------------|--------------|--------------------------|
| Face Plate Skimmer Standard | 0412102 | 1 | 0,300 | 0,003 |
| Face Plate Skimmer Anthracite - RAL 7016 | 0412102A | 1 | 0,300 | 0,003 |
| Face Plate Skimmer Beige - RAL 1015 | 0412102B | 1 | 0,300 | 0,003 |
| Face Plate Skimmer Gray - RAL 7004 | 0412102G | 1 | 0,300 | 0,003 |



Skimmer Extension Collar. Made of ABS plastic for 4,5 cm vertical modular extension.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|-----------|----------------|--------------|--------------------------|
| Skimmer Extension Collar | 04111E01 | 1 | 0,188 | 0,003 |
| Skimmer Extension Collar Anthracite - RAL 7016 | 04111E01A | 1 | 0,188 | 0,003 |
| Skimmer Extension Collar Beige - RAL 1015 | 04111E01B | 1 | 0,188 | 0,003 |
| Skimmer Extension Collar Gray - RAL 7004 | 04111E01G | 1 | 0,188 | 0,003 |



Skimmer Horizontal Extension. Made of ABS plastic. Compatible with all GEMAS skimmer models. Extends each model by 10,5 cm.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------------------|----------|----------------|--------------|--------------------------|
| Skimmer Horizontal Extension | 04111E10 | 1 | | |





Skimmers - Optional Parts



Skimmer Angle Horizontal Extension.

Made of ABS plastic. Compatible with all GEMAS skimmer models. Each model (models can be added together) provides 30 mm extension in the middle axis and 5° inclined pool surface adaptations designed for polyester and slope pools.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|----------|----------------|--------------|--------------------------|
| | 04111E03 | 1 | | |

Note: Full colored products can be ordered by adding "G" for Grey, "B" for Beige, "A" for Anthracite. Prices will be %10 more expensive.



Decklid with Safety Locking Mechanism. Made of ABS plastic.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|---------|----------------|--------------|--------------------------|
| | 0412101 | 1 | | |

Note: Full colored products can be ordered by adding "G" for Grey, "B" for Beige, "A" for Anthracite. Prices will be %10 more expensive.



Buoy Float. Made of ABS plastic. Complete with the ring.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|---------|----------------|--------------|--------------------------|
| | 04110BF | 1 | 0,364 | 0,006 |

PS. Designed for replacing skimmer floating weir. Releases trapped debris when the pump stops.

Return Inlets (Concrete Pools) - ABS

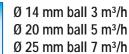
Wall Inlet for Concrete Pools. Injected of white ABS plastic v

Injected of white ABS plastic with adjustable ball for alternative discharges.











| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------------------------------|----------|----------------|--------------|--------------------------|
| • 2" Male Threaded : | 04131T | 10 | 1,000 | 0,006 |
| Ø 50 mm internal slip connection. | | | | |
| • 2" Slip to be glued inside Ø 63 mm | 04131S | 10 | 1,000 | 0,006 |
| (10 atm) pipe. | | | | |
| • 1 1/2" Slip to be glued inside | 04131S1 | | | |
| Ø 50 mm (10 atm) pipe. | | | | |
| Breaking Tool | 04131T05 | | | |
| Breaking 1001 | 01101100 | | | |

Note: Full colored products can be ordered by adding "G" for Grey, "B" for Beige, "A" for Anthracite. Prices will be %10 more expensive.



Return Inlets (Concrete Pools) - ABS

Wall Inlet for Concrete Pools, according to EU 13451-1/4.8.3 Injected of white ABS plastic with protection and adjustable ball for alternative discharges.





Ø 14 mm ball 3 m³/h Ø 20 mm ball 5 m³/h Ø 25 mm ball 7 m³/h

| 100 | |
|-----|-------|
| | ·=•) |
| 1 | |
| | |

Breaking tool

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-----------------------------------|---------|----------------|--------------|--------------------------|
| • 2" Male Threaded : | 04131TP | 10 | 1,100 | 0,006 |
| Ø 50 mm internal slip connection. | | | | |
| • 2" Slip to be glued | 04131SP | 10 | 1,060 | 0,006 |
| inside Ø 63 mm (10 atm) pipe. | | | | |

Note: Full colored products can be ordered by adding "G" for Grey, "B" for Beige, "A" for Anthracite. Prices will be %10 more expensive.



Suction Inlet for Concrete Pools.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-----------------------------------|---------|----------------|--------------|--------------------------|
| • 2" Male Threaded : | 04134T | 10 | 0,900 | 0,006 |
| Ø 50 mm internal slip connection. | | | | |
| • 2" Slip to be glued | 04134S | 10 | 0,900 | 0,006 |
| inside Ø 63 mm (10atm) pipe. | | | | |
| Slip to be glued | 04134S1 | | | |
| inside Ø 50 mm (10atm) pipe. | | | | |
| | | | | |

Note: Full colored products can be ordered by adding "G" for Grey, "B" for Beige, "A" for Anthracite. Prices will be %10 more expensive.

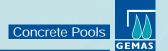


04134S1

Wall Conduit for Concrete Pools. Injected of white ABS plastic. Pipe connection side is \emptyset 63 mm externally and \emptyset 50 mm internally. Overall length is 30 cm.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|---------|----------------|--------------|--------------------------|
| • 2" Male Threaded: Pool side 2" Female thr. | 04160T | 20 | 8,700 | 0,060 |
| Ditto, with nozzle seat | 04260T1 | | | |
| Ditto, back outlet 2" Male threaded | 04160T1 | 20 | 8,700 | 0,060 |
| Ditto, with Protection plugs | 04160TP | 20 | 9,200 | 0,014 |
| Pool side for slip | 04160S | 20 | 8,700 | 0,060 |
| connection. (i.e same size with internal dia of Ø 63 mm (10atm) PVC pipe.) | | | | |





Return Inlets (Concrete Pools) - ABS







AD

04132S4 - 04133S1





041321S





Floor Inlet - Adjustable for Concrete Pools. Injected of white ABS plastic, according to EU 13451- $\frac{1}{4}$.8.3. 2" male threaded, Ø 50 mm internal slip connection. Discharge can be regulated by means of an inner lid which can be screwed up and down.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------------------------------|---------|----------------|--------------|--------------------------|
| Flat Lid - 2" Male Threaded | 04132TF | 8 | 1,430 | 0,006 |
| • Flat Lid - Slip, to be | 04132SF | 8 | 1,400 | 0,006 |
| glued inside Ø 63 mm (10 atm) pipe. | | | | |
| Conical Lid - 2" Male Threaded | 04132TC | 8 | 1,300 | 0,006 |
| Conical Lid - Slip, to be | 04132SC | 8 | 1,600 | 0,006 |
| glued inside Ø 63 mm (10 atm) pipe. | | | | |

Floor Inlet - Adjustable (AD) and Constant (CD) Discharge for Concrete Pools. Made of ABS plastic. Distributes water at an angle of 45°. All slip connections are for 10 atm PVC pipes.

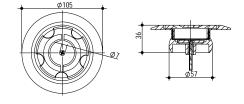
| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------------------|---------|----------------|--------------|--------------------------|
| • 2" Male Threaded - CD | 04133T | 10 | 0,930 | 0,007 |
| • Ditto, AD | 04133T4 | | | |
| • 2" Slip - CD | 04133S | 10 | 0,912 | 0,007 |
| • Ditto, AD | 04132S4 | | | |
| • 1 1/2" Slip - CD | 04133S1 | | | |

Note: Full colored products can be ordered by adding "G" for Grey, "B" for Beige, "A" for Anthracite. Prices will be %10 more expensive.

Eccentric Floor Inlet Special inlet nozzle to be installed inside \emptyset 63-10 bar PVC pipe, for inclined pool bottom.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------|---------|----------------|--------------|--------------------------|
| • 2" Slip - CD | 041331S | | | |
| • 2" Slip - AD | 041321S | | | |

Note: Full colored products can be ordered by adding "G" for Grey, "B" for Beige, "A" for Anthracite. Prices will be %10 more expencia.



Overflow Gutter Drain for Concrete Pools. Made of white ABS plastic. $2\frac{1}{2}$ " male - threaded, Ø 63 mm inside. Stainless steel screws included.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| | 04150 | 50 | 11,000 | 0,067 |

Balance Tank Basket. Made of white ABS plastic. Adjustable up to \emptyset 125 mm diameter PVC overflow pipes.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| | 04151 | 1 | | |



Junction Box

Junction Box. Made of white ABS plastic. Connections are for "05051" conduits.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| | 05040 | 8 | 2,610 | 0,016 |

Note: Full colored products can be ordered by adding "G" for Grey, "B" for Beige, "A" for Anthracite. Prices will be %10 more expensive.



Main Drains (Concrete Pools) - ABS

Circular Main Drain for Concrete Pools. Made of ABS plastic. Grille fixed w/stainless steel screws, \emptyset 50 mm female slip blind connection at the bottom for hydrostatic valve connection.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------------------------|---------|----------------|--------------|--------------------------|
| • 1½" Female Thread | 04141T1 | 1 | 0,832 | 0,013 |
| • 2" Female Thread | 04141T2 | 1 | 0,800 | 0,013 |
| • Ø 50 mm Slip Connection | 04141S1 | 1 | 0,802 | 0,013 |
| • Ø 63 mm Slip Connection | 04141S2 | 1 | 0,776 | 0,013 |
| • Ø 75 mm Slip Connection | 04141S3 | 1 | 0,784 | 0,013 |

Note: Full colored products can be ordered by adding "G" for Grey, "B" for Beige, "A" for Anthracite. Prices will be %10 more expensive.



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|----------|----------------|--------------|--------------------------|
| • 2" Female Thread | 04142T1 | 1 | 1,360 | 0,013 |
| • Ditto, but with extended thread of | 04142T1E | 1 | 1,400 | 0,013 |
| 5 cm length facilitating test plug | | | | |
| • 2½" Female Thread | 04142T2 | 1 | 1,590 | 0,013 |
| • 3" Female Thread | 04143T3 | 1 | 1,520 | 0,013 |
| Ø 63 mm Slip Connection | 04142S1 | 1 | 1,352 | 0,013 |
| Ø 75 mm Slip Connection | 04142S2 | 1 | 1,250 | 0,013 |
| Ø 90 mm Slip Connection | 04142S3 | 1 | 1,346 | 0,013 |



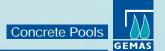
Grilles for Main Drain (Concrete Pools) - ABS

Circular Grilles. Made of ABS Plastic Circular Grille \emptyset 186-242 mm. Complete with stainless steel screws necessary to fix the frame on concrete. Max. recommended drain pipe size: \emptyset 63 mm.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|--------|----------------|--------------|--------------------------|
| | 04143C | 1 | 0,376 | 0,003 |

Note: Full colored products can be ordered by adding "G" for Grey, "B" for Beige, "A" for Anthracite. Prices will be %15 more expensive.





Grilles for Main Drain (Concrete Pools) - ABS



Squared Grilles for Main Drain for Concrete Pools.

Made of ABS Plastic Squared Grille 26,5 x 26,5 cm.Complete with fixing screws. Max. recommended drain pipe size: \emptyset 90 mm.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|---------|----------------|--------------|--------------------------|
| | 04143R1 | 1 | 0,954 | 0,003 |

Note: Full colored products can be ordered by adding "G" for Grey, "B" for Beige, "A" for Anthracite. Prices will be %15 more expensive.



Squared Grilles for Main Drain for Concrete Pools. Fiberglass reinforced polyester frame with ext. dimensions of $60 \times 60 \text{ cm}$ complete with fixing screws. Max. recommended drain pipe size : \emptyset 225 mm.

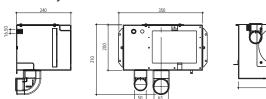
| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|---------|----------------|--------------|--------------------------|
| | 04143R2 | 1 | 4,200 | 0,015 |

St. Steel Skimmers for Concrete Pools



Stainless Steel Skimmer Body - Model 1.

Made of AISI 304 quality stainless steel. \emptyset 50 mm overflow. Skimming width: 190 mm, installation depth: 240 mm. Suction: \emptyset 63 mm PVC. Floater installation option for water level regulation. Earth connection included. Complete with skimmer strainer basket 04111SS01 and level adjustable lid 04111SS02.

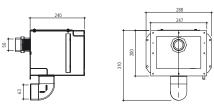


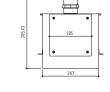
| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------------------|----------|----------------|--------------|--------------------------|
| • Model 1 | 04112SS | 1 | 6,510 | 0,040 |
| Ditto, with Floater | 04112SSF | 1 | 6,710 | 0,040 |



Stainless Steel Skimmer Body for Concrete Pool - Model 2.

Made of AISI 304 quality stainless steel. \emptyset 50 mm overflow. Skimming width: 190 mm, installation depth: 240 mm. Suction: \emptyset 63 mm PVC. Earth connection included. Complete with skimmer strainer basket 04111SS01 and level adjustable lid 04111SS02.





| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|---------|----------------|--------------|--------------------------|
| Model 2 | 04111SS | 1 | 5,250 | 0,040 |



St. Steel Skimmers for Concrete Pools

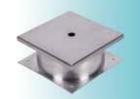
Stainless Steel Skimmer Strainer Basket for Concrete Pools. Made of AISI 304 quality stainless Steel Complete with face plate for direct removal through skimmer mouth. (Applicable to Model 1 and Model 2).

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-----------|----------------|--------------|--------------------------|
| | 04111SS01 | 1 | 2,190 | 0,020 |



Stainless Steel Level Adjustable Lid for Concrete Pools. Made of AISI 304 Stainless steel Dimensions:180 x 180 mm. Height level can be adjustable from 60 to 110 mm.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-----------|----------------|--------------|--------------------------|
| | 04111SS02 | 1 | 1,630 | 0,010 |



Stainless Steel Skimmer Flange Set for Liner Pools. Made of AISI 304 Stainless steel. Complete with 2 gaskets and bolts.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-----------|----------------|--------------|--------------------------|
| | 04211SS01 | 1 | 0,780 | 0,002 |



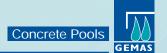
Massive Inox Inlets

Full Body made of Stainless Steel.

Ball for wall inlet is from transparent polycarbonate. SS ball is optional. Floor inlets are either adjustable (AD) or constant discharge (CD) types.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------------------------|-------------|----------------|--------------|--------------------------|
| • 304 Wall Inlet 2" Threaded | 04131TSSM | 1 | | |
| • 304 Suction Inlet 2" Threaded | 04134TSSM | 1 | | |
| • 304 Floor Inlet - CD 2" Threaded | 04133TSSM | 1 | | |
| • 304 Floor Inlet - AD 2" Threaded | 04135TSSM | 1 | | |
| | | | | |
| • 316 Return Inlet 2" Threaded | 04131TSSM01 | 1 | | |
| • 316 Suction Inlet 2" Threaded | 04134TSSM01 | 1 | | |
| • 316 Floor Inlet - CD 2" Threaded | 04133TSSM01 | 1 | | |
| • 316 Floor Inlet - AD 2" Threaded | 04135TSSM01 | 1 | | |
| | | | | |





Wall Inlet (Concrete Pools) - St. Steel Dressed



Stainless Steel Wall Inlet for Concrete Pools. Body is injected of white ABS plastic dressed with AISI 304 quality stainless steel plate. The butterfly of nozzle is made of massive stainless steel and the sphere is of acrylic transparent plastic with adjustable ball for alternative discharges.





Breaking tool



Ø 14 mm ball 3 m³/h Ø 20 mm ball 5 m³/h Ø 25 mm ball 7 m³/h

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------------------|----------|----------------|--------------|--------------------------|
| • 2" Male Threaded : Ø 50 mm | 04131TSS | 10 | 2,400 | 0,006 |
| internal slip connection | | | | |
| • 2" | 04131SSS | | | |



Stainless Steel Suction Inlet for Concrete Pools.

Body is injected of white ABS plastic dressed with AISI 304 quality stainless steel plate. The blind cap is made of massive stainless steel.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------------------|----------|----------------|--------------|--------------------------|
| • 2" Male Threaded : Ø 50 mm | 04134TSS | 10 | 3,572 | 0,007 |
| internal slip connection. | | | | |
| • 2" | 04134SSS | | | |



Floor Inlet with Chrome Painted Stainless Steel Lid - Flow Adjustable.

Flat lid of AISI 304 quality stainless steel. Body in ABS plastic.



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------------------------|-----------|----------------|--------------|--------------------------|
| • Flad Lid - 2" Male Threaded : | 04132TFSS | 8 | 2,200 | 0,006 |
| Flat Lid AISI 304 Quality St.Steel | | | | |
| • 2" | 04132SFSS | | | |



Stainless Steel Floor Inlet - Constant Flow.

Stainless Steel Floor Inlet - Constant Flow. Body in ABS plastic, front face is dressed with AISI 304 quality stainless steel sheet. The central part is solid AISI 304 quality stainless steel.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------------------------|----------|----------------|--------------|--------------------------|
| • 2" Male Threaded internal dia: | 04133TSS | 8 | 2,400 | 0,007 |
| Ø 50 mm 10 | | | | |
| • 2" | 04133SSS | | | |



Main Drains (Concrete Pools) - St. Steel

Circular Main Drain with St. Steel Grille for Concrete Pools. Body made of ABS plastic. Stainless steel grille fixed w/st. steel screws, \emptyset 50 mm female slip blind connection at the bottom for hydrostatic valve connection.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------------|-----------|----------------|--------------|--------------------------|
| • 1 1/2" Female Thread | 04141T1SS | 1 | 1,120 | 0,013 |
| • 2" Female Thread | 04141T2SS | 1 | 0,830 | 0,013 |



Grilles for Main Drain (Concrete Pools) - St. Steel

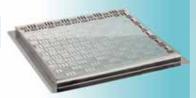
Stainless steel circular grilles. Made of AISI 304 quality stainless steel with stainless steel screws \emptyset 186 - 242 mm.

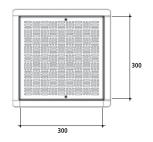
| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-----------------|---------|----------------|--------------|--------------------------|
| Circular Grille | 04143SS | 1 | 0,258 | 0,003 |

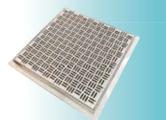


St. Steel Squared Grilles for Main Drain for Concrete Pools. Frame and grille made of AISI 304 quality stainless steel complete with fixing screws.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------------|-----------|----------------|--------------|--------------------------|
| • 200 x 200 mm (out) | 04143RSS1 | 1 | | |
| • 300 x 300 mm (out) | 04143RSS2 | 1 | | |
| • 400 x 400 mm (out) | 04143RSS3 | 1 | | |
| • 500 x 500 mm (out) | 04143RSS4 | 1 | | |
| • 600 x 600 mm (out) | 04143RSS5 | 1 | | |









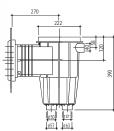


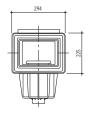


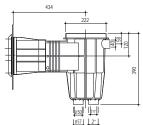
Skimmers for Liner Pools

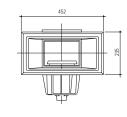


All skimmer models are made of ABS plastic and equipped with "suction regulator" and locking mechanism basket against back pressure. Skimming by "buoy float" or "floating weir". Suction port: $1\frac{1}{2}$ " female threaded (2" also possible upon request), Ø 63 mm external slip. Discharge port: Ø 50 mm female slip. Overflow drainage: Ø 40 mm female slip. Complete with flange, gaskets, stainless steel screws and front cover. Flange connections can be with brass cavities or plastic nests.











| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|----------|----------------|--------------|--------------------------|
| Standard Throat | | | | |
| Standard Squared Lid Skimmer | 04211 | 1 | 4,104 | 0,054 |
| Ditto, W/Brass Cavities | 04211B | 1 | 4,142 | 0,054 |
| Standard Squared Lid Skimmer | 04211FW | 1 | 3,820 | 0,054 |
| W/Floating Weir | | | | |
| Ditto, W/Brass Cavities | 04211BFW | 1 | 3,986 | 0,054 |



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------------------|-----------|----------------|--------------|--------------------------|
| Extension Throat (+ 10 cm) | | | | |
| Standard Squared Lid Skimmer | 04211E | 2 | 8,504 | 0,107 |
| Ditto, W/Brass Cavities | 04211EB | 2 | 8,600 | 0,107 |
| Standard Squared Lid Skimmer | 04211EFW | 2 | 8,070 | 0,107 |
| W/Floating Weir | | | | |
| Ditto, W/Brass Cavities | 04211FBFW | 2 | 8 160 | 0.107 |



| Description | Code | Pieces/ box | Weight Ka | Volume m ³ |
|--|----------|----------------|--------------|--------------------------|
| Wide Mouth | | DOX | ĸg | "" |
| | | | | |
| Wide Mouth Squared Lid Skimmer | 04212 | 2 | 9,430 | 0,135 |
| Ditto, W/Brass Cavities | 04212B | 2 | 9,678 | 0,135 |
| Wide Mouth Squared Lid Skimmer | 04212FW | 2 | 9,012 | 0,135 |
| W/Floating Weir | | | | |
| Ditto, W/Brass Cavities | 04212BFW | 2 | 9,112 | 0,135 |



Lux Skimmers for Liner Pools

All Lux-Skimmer models are made of ABS plastic and equipped with "suction regulator" and locking mechanism basket against back pressure. Skimming by "buoy float" or "floating weir". Suction port: 2" female threaded. Discharge port: $1\frac{1}{2}$ " female threaded, supplied with blind cap. Overflow drainage: Ø 40 mm female slip. Complete with flange, gaskets, stainless steel screws and front cover. Flange connections can be with brass cavities or plastic nests.

Additional Features:

- Child-proof decklid features safety locking mechanism.
- Extension collar allows for correction of uneven deck finishes.
- Locking basket design prevents basket floating due to back pressure.
- Extended throat facilitates convenient installation in the pool wall. (Optional)
- Aesthetic face plate in the pool.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------------------------|----------|----------------|--------------|--------------------------|
| Lux Standard Throat | | | | |
| • Lux Standard Squared Lid Skimmer | 04221 | 2 | 9,150 | 0,137 |
| Ditto, W/Brass Cavities | 04221B | 2 | 9,400 | 0,137 |
| • Lux Standard Squared Lid Skimmer | 04221FW | 2 | 8,720 | 0,137 |
| W/Floating Weir | | | | |
| Ditto, W/Brass Cavities | 04221BFW | 2 | 8,890 | 0,137 |



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------------------------|-----------|----------------|--------------|--------------------------|
| Lux Extension Throat (+ 10 cm) | | | | |
| Lux Standard Squared Lid Skimmer | 04221E | 1 | 5,600 | 0,110 |
| Ditto, W/Brass Cavities | 04221EB | 1 | 5,700 | 0,110 |
| Lux Standard Squared Lid Skimmer | 04221EFW | 1 | 4,350 | 0,110 |
| W/Floating Weir | | | | |
| Ditto, W/Brass Cavities | 04221EBFW | 1 | 4,500 | 0,110 |

| Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------|----------------------------|----------------------------------|--|
| | | | |
| 04222 | 1 | 5,296 | 0,110 |
| 04222B | 1 | 5,525 | 0,110 |
| 04222FW | 1 | 5,250 | 0,110 |
| | | | |
| 04222BFW | 1 | 5,370 | 0,110 |
| | 04222 04222B 04222FW | 04222 1 04222B 1 04222FW 1 | Code box Kg 04222 1 5,296 04222B 1 5,525 04222FW 1 5,250 |





Elevated Wide Mouth Skimmers for Liner Pools

Elevated Skimmer raises the pool water level by 5 cm compared to normal skimmers. All skimmer models are made of ABS plastic and equipped with "suction regulator" and locking mechanism basket against

back pressure. Skimming by "buoy float" or "floating weir". Suction port: 11/2"

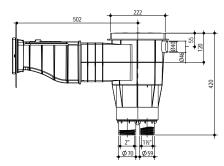
female threaded (2" also possible upon request), Ø 63 mm external slip. Discharge port: Ø 50 mm female slip. Overflow drainage: Ø 40 mm female slip. Complete with flange, gaskets, stainless steel screws and front cover.

Flange connections can be with brass cavities or plastic nests.

| Description | Code | Pieces/ Weight box Kg |
|---------------------------------|----------|--------------------------|
| Liner Pools with brass cavities | 04215BFW | 1 |
| Liner Pools wout brass cavities | 04215FW | 1 |

Note: Full colored products can be ordered by adding "A" for Anthracite, "B" for Beige, "G" for Grey. Prices will be %15 more expensive. See below RAL codes. RAL 7016 RAL 1015 RAL 7004





Liner Flange, Gasket ans Screws

Lux-Elevated Wide Mounth Skimmers for Liner Pools

All Lux-Skimmer models are made of ABS plastic and equipped with "suction regulator" and locking mechanism basket against back pressure.

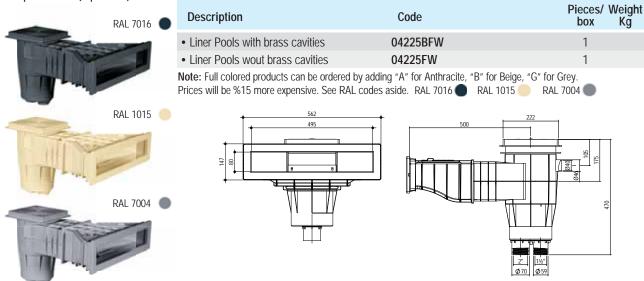
Skimming by "buoy float" or "floating weir". Suction port: 2" female threaded.

Discharge port: 11/2" female threaded, supplied with blind cap. Overflow drainage:

 \emptyset 40 mm female slip. Complete with flange, gaskets, stainless steel screws and front cover.

Flange connections can be with brass cavities or plastic nests.

Additional Features: • Child-proof decklid features safety locking mechanism. • Extension collar allows for correction with uneven deck finishes. • Locking basket design prevents basket floating due to back pressure. • Locking vacuum adapter prevents adapter plate floating during suction cleaning. • Extended throat facilitates convenient installation in the pool wall (Optional).



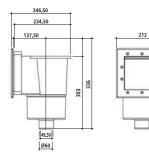


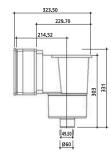
Mini Skimmers for Liner Pools

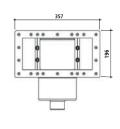
All Skimmer models are made of ABS plastic. Suction port: Female threaded 1½". Complete with vacuum adaptor, flange, gaskets and stainless steel screws.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-----------------------------------|-------|----------------|--------------|--------------------------|
| Standard Mouth Square Lid Skimmer | 04213 | 8 | 19,500 | |
| Wide Mouth Square Lid Skimmer | 04214 | 8 | 27,500 | |











Return Inlets (Liner Pools) - ABS

Wall Inlet for Liner Pools. Injected of white ABS plastic with adjustable ball for alternative discharges. Complete with flange, gaskets, stainless steel screws and front cover. Flange connections can be with brass cavities or plastic nests.





Ø 14 mm ball 3 m³/h Ø 20 mm ball 5 m³/h Ø 25 mm ball 7 m³/h

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|----------|----------------|--------------|--------------------------|
| • 2" Male threaded : | 04231T | 8 | 1,520 | 0,006 |
| Ø 50 internal slip connection. | | | | |
| Ditto, W/Brass Cavities | 04231BT | 8 | 1,682 | 0,006 |
| • 2" Male threaded : Also 2" nut included | 04231TN | | 1,800 | 0,006 |
| Ditto, W/Brass Cavities | 04231BTN | 8 | 1,934 | 0,006 |
| Breaking Tool | 04131T05 | | | |





Note: Colored products can be ordered by adding "G" for Grey, "B" for Beige, "A" for Anthracite. Prices will be %10 more expensive.

Wall Inlet for Liner Pools.

Breaking tool

Breaking tool

According to EU 13451-1/4.8.3 Injected of white ABS plastic with protection and adjustable ball for alternative discharges. Complete with flange, gaskets, stainless steel screws and front cover. Flange connections can be with brass cavities or plastic nests.





Ø 14 mm ball 3 m³/h Ø 20 mm ball 5 m³/h Ø 25 mm ball 7 m³/h

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|-----------|----------------|--------------|--------------------------|
| • 2" Male threaded : | 04231TP | 8 | 1,460 | 0,007 |
| Ø 50 internal slip connection. | | | | |
| Ditto, W/Brass Cavities | 04231BTP | 8 | 1,508 | 0,007 |
| • 2" Male threaded : Also 2" nut included | 04231TNP | 8 | 1,750 | 0,007 |
| Ditto, W/Brass Cavities | 04231BTNP | 8 | 1,806 | 0,007 |

Note: Colored products can be ordered by adding "G" for Grey, "B" for Beige, "A" for Anthracite. Prices will be %10 more expensive.





Return Inlets (Liner Pools) - ABS

Breaking tool



Specially designed for concrete-shell liner pools. Injected of white ABS plastic with adjustable ball for alternative discharges. Complete with flange, gaskets, stainless steel screws and front cover. Flange connections can be with brass cavities or plastic nests.





Ø 14 mm ball 3 m 3 /h Ø 20 mm ball 5 m 3 /h Ø 25 mm ball 7 m 3 /h

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|---------|----------------|--------------|--------------------------|
| • 2" Male threaded : Ø 50 internal slip con. | 04231C | 8 | 1,676 | 0,006 |
| Ditto, W/Brass Cavities | 04231CB | 8 | 1,718 | 0,006 |

Wall Conduit-Inlet for Liner Pools. Specially designed for concrete-shell liner pools. Injected of white ABS plastic with adjustable ball for alternative discharges. Complete with flange, gaskets, stainless steel screws, front cover and back locking nut. Flange connections can be with brass cavities or plastic nests.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------------------------|----------|----------------|--------------|--------------------------|
| • 2" Male threaded : | 04231CT | 8 | | |
| Ø 50 internal slip connection. | | | | |
| Ditto, W/Brass Cavities | 04231CNB | 8 | | |

Suction Inlet for Liner Pools,

injected of white ABS plastic. Complete with blind cap, flange, gaskets, stainless steel screws and front cover. Flange connections can be with brass cavities or plastic nests.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|----------|----------------|--------------|--------------------------|
| • 2" Male Threaded : Injected of white | 04234T | 8 | 1,500 | 0,006 |
| ABS plastic. | | | | |
| Ditto, W/Brass Cavities | 04234TB | 8 | 1,600 | 0,006 |
| • 2" Male Threaded : Injected of white | 04234TN | 8 | 1,520 | 0,006 |
| ABS plastic. Also 2" nut included. | | | | |
| Ditto, W/Brass Cavities | 04234TNB | 8 | 1,732 | 0,006 |

Note: Colored products can be ordered by adding "G" for Grey, "B" for Beige, "A" for Anthracite. Prices will be %10 more expensive.

Floor Inlet - Adjustable for liner pools.

White ABS plastic, according to EU 13451-174.8.3 regulations. 2" male threaded, Ø 50 mm internal slip connection. Adjustable flow. Complete with flange gaskets and stainless steel screws.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------------------------|----------|----------------|--------------|--------------------------|
| Flat Lid - 2" Male Threaded | 04232TF | 4 | 1,270 | 0,007 |
| Ditto, W/Brass Cavities | 04232TFB | 4 | 1,270 | 0,007 |
| Conycal Lid - 2" Male Threaded | 04232TC | 4 | 1,340 | 0,007 |
| • Ditto, W/Brass Cavities | 04232TCB | 4 | 1,308 | 0,007 |

Note: Colored products can be ordered by adding "G" for Grey, "B" for Beige, "A" for Anthracite. Prices will be %10 more expensive.

Clamping nut, 2".

White ABS plastic. 2" Femals threaded.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------------------------------|--------|----------------|--------------|--------------------------|
| Nut with gasket for wall inlets | 04237 | 35 | 1,474 | 0,006 |
| • Ditto, W/Screw Housings | 042371 | | | |













Main Drains for Liner Pools

Circular Main Drain. Made of white ABS plastic. Grille fixed with stainless steel screws, Ø 50 mm female slip blind connection at the bottom for hydrostatic valve connection. Complete with flange, stainless steel screws and gaskets. **Flange height:** 17,20 mm.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|----------|----------------|--------------|--------------------------|
| • 1 1/2" Female Thread | 04241T1 | 1 | 1,740 | 0,013 |
| Ditto, W/Brass Cavities | 04241T1B | 1 | 1,130 | 0,013 |
| • 2" Female Thread | 04241T2 | 1 | 1,134 | 0,013 |
| Ditto, W/Brass Cavities | 04241T2B | 1 | 1,572 | 0,013 |



Note: Colored products can be ordered by adding "G" for Grey, "B" for Beige, "A" for Anthracite. Prices will be %10 more expensive.

Circular Main Drain.

Made of white ABS plastic. Grille fixed with stainless steel screws, \emptyset 50 mm female slip blind connection at the bottom for hydrostatic valve connection. Complete with flange, stainless steel screws and gaskets. Flange height: 6,35 mm.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|----------|----------------|--------------|--------------------------|
| • 1 1/2" Thread | 04243T1 | 1 | 1,034 | 0,013 |
| Ditto, W/Brass Cavities | 04243T1B | 1 | 1,034 | 0,013 |
| • 2" Thread | 04243T2 | 1 | 1,072 | 0,013 |
| Ditto, W/Brass Cavities | 04243T2B | 1 | 1,072 | 0,013 |



Note: Colored products can be ordered by adding "G" for Grey, "B" for Beige, "A" for Anthracite. Prices will be %10 more expensive.

Squared Main Drain.

Made of white ABS plastic. Grille fixed with stainless steel screws, \emptyset 50 mm female slip blind connection at the bottom for hydrostatic valve connection. Complete with flange, stainless steel screws and gaskets.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|-----------|----------------|--------------|--------------------------|
| • 2" Female Thread | 04242T1 | 1 | 1,600 | 0,013 |
| Ditto, but with extended threaded | 04242T1E | 1 | 1,600 | 0,013 |
| of 5 cm length facilitating test plug | | | | |
| Ditto, W/Brass Cavities | 04242T1EB | 1 | 1,600 | 0,013 |
| • 2 1/2" Female Thread | 04242T2 | 1 | 1,606 | 0,013 |
| Ditto, W/Brass Cavities | 04242T2B | 1 | 1,606 | 0,013 |
| 3" Female Thread | 04242T3 | 1 | 1,606 | 0,013 |
| Ditto, W/Brass Cavities | 04242T3B | 1 | 1,606 | 0,013 |
| • Ø 63 mm Slip Connection | 04242A1 | 1 | 1,600 | 0,013 |
| Ditto, W/Brass Cavities | 04242A1B | 1 | 1,570 | 0,013 |
| • Ø 75 mm Slip Connection | 04242A2 | 1 | 1,570 | 0,013 |
| Ditto, W/Brass Cavities | 04242A2B | 1 | 1,570 | 0,013 |
| • Ø 90 mm Slip Connection | 04242A3 | 1 | 1,570 | 0,013 |
| Ditto, W/Brass Cavities | 04242A3B | 1 | 1,570 | 0,013 |



Note: Colored products can be ordered by adding "G" for Grey, "B" for Beige, "A" for Anthracite. Prices will be %10 more expensive.







Underwater Lights for Concrete Pools

New Generation



Underwater Light without Niche, Silicone Filled, Single Color.

Frame made of ABS Plastic. Polycarbonate light body with a choice of LED quantities and powers embedded into a special transparent silicone. Complete with epoxy PCB. 2 x 1,5 mm cable of 2,5 m length. 120° - IP68. Wall mounting is done by fixing the light directly onto the pool wall with stainless steel screws and plugs. Optional wall mounting bracket is available. 2 Year Leakage Warranty.

The light, without the frame, can be used as a replacement bulb for LED conversion of all PAR56 products available on the market. **Max. operating temperature 30°**.



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|--------|----------------|--------------|--------------------------|
| • 252 LED White - 50 W | 051140 | 1 | 1,050 | 0,005 |
| • 252 LED Daylight - 50 W | 051141 | 1 | 1,050 | 0,005 |
| • 81 LED White - 35 W Aluminium PCB | 051130 | 1 | 1,050 | 0,005 |
| • 81 LED Daylight - 35 W Aluminium PCB | 051131 | 1 | 1,050 | 0,005 |

Note: Other Single Color prices are the same. The last digit of the product code should be changed to the following - for Turquoise 2, for Blue 3, for Red 4, for Green 5.



"SlimLED" Underwater Light without Niche; Ditto, but RGB Changing Color.

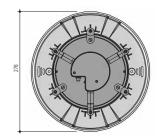
For built in PCB models there are 13 different lighting patterns.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|--------|----------------|--------------|--------------------------|
| Central Control | | | | |
| • 252 LED RGB, 36 W Aluminium PCB | 051155 | 1 | 1,050 | 0,005 |
| • 90 LED RGB-White, 36 W Aluminium PCB | 051152 | 1 | 1,050 | 0,005 |
| • 81 LED RGB, 30 W | 051157 | 1 | 1,050 | 0,005 |
| Built-in Control | | | | |
| • 252 LED RGB, 36 W Aluminium PCB | 051153 | 1 | 1,050 | 0,005 |
| • 90 LED RGB-White, 36 W Aluminium PCB | 051150 | 1 | 1,050 | 0,005 |
| • 81 LED RGB, 30 W | 051156 | 1 | 1,050 | 0,005 |

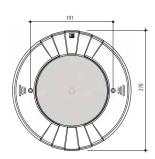




051130EY01 Optional Wall Mounting Bracket









"New Generation" Underwater Lights for Concrete Pools



"ECOSIImLED"

Underwater Light without Niche, Single Color.

Frame made of ABS or Transparent Plastic. Complete with 72 SMD LEDs: Polycarbonate light body, epoxy PCB and 2 x 0,75 mm cable of 1,5 m length. 120° - IP68. Wall mounting is done by fixing the light directly onto the pool wall with stainless steel screws and plugs. Optional wall mounting bracket is available.

The light, without the frame, can be used as a replacement bulb for LED conversion of all PAR56 products available on the market. For the transparent ABS frame order, "O" extension should be neglected at the end of related product codes.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------------------------|------------|----------------|--------------|--------------------------|
| • 72 LED White - 24 W | 051130EO | 1 | 0,835 | 0,005 |
| • 72 LED Daylight - 24 W | 051131E0 | 1 | 0,835 | 0,005 |
| • 72 LED Turquoise - 20 W | 051132E0 | 1 | 0,835 | 0,005 |
| • 72 LED Blue - 20 W | 051133E0 | 1 | 0,835 | 0,005 |
| • 72 LED Red - 20 W | 051134E0 | 1 | 0,835 | 0,005 |
| • 72 LED Green - 20 W | 051135E0 | 1 | 0,835 | 0,005 |
| Optional Wall Mounting Bracket | 051130EY01 | 1 | | |

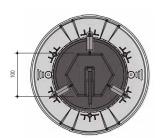


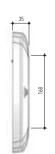
"ECOSlimLED" Underwater Light without Niche; Ditto, but RGB Changing Color.

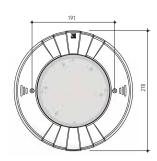
For built in PCB models there are 13 different lighting patterns.

For central PCB models there are 16 different lighting patterns. Lighting patterns are changed by remote control (optional).

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------------------------|------------|----------------|--------------|--------------------------|
| • 72 LED RGB-Built-in Control-20 W | 051150EO | 1 | 0,835 | 0,005 |
| • 72 LED RGB-Central Control-20 W | 051152EO | 1 | 0,835 | 0,005 |
| • 72 LED RGB-Self Control | 051150SCE0 | 1 | 0,835 | 0,005 |
| Optional Wall Mounting Bracket | 051130EY01 | 1 | 0,835 | 0,005 |









Transparent (Optional)





051130EY01 Optional Wall Mounting Bracket

"Flat Halogen" Underwater Light Without Niche.

Made of white ABS plastic. Light screen in transparent polycarbonate. Supplied with 100 W/12 V bulb and 2,5 m cable. Cable socket is silicone filled for protection against water leakage.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------|--------|----------------|--------------|--------------------------|
| Complete light | 051116 | 1 | 1,200 | 0,005 |



NEW! ECCOCHER!



- Patented-Bayonet "Click" Wall Mount Design Led
 - Stainless Steel Frame (AISI 304/316) Option
 - Different Colored ABS Frame Options (Grey, Beige and Anthracite)
- Easy Mount Adaptor Set for Liner Prefabricated Pool Applications
 - Mini Midi and Maxi size options
- Fountain and Landscape Led with Footed and Spike models
 versions

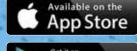


ios App











New Generation



Underwater Lights for Concrete Pools

"MAXI-Clicker"

Underwater light without niche. Single color, frame made of ABS Plastic complete with 72 SMD LED. Polycarbonate light body, epoxy PCB and 2 x 0,75 mm cable of 1.5 m length. 120° - IP68Consists of wall bracket and the light w/frame. After fixing the bracket on pool wall by means of stainless steel screws, it is very easy to fix the frame onto the bracket by a 30° clockwise turn.

Just turn & click! In order to remove it, push a screw driver on to the button gently and turn the frame 30° counter clockwise.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|---------|----------------|--------------|--------------------------|
| • 72 LED White - 35 W Aluminium PCB | 051230 | 1 | | |
| • 72 LED Daylight - 35 W Aluminium PCB | 051231 | 1 | | |
| • 72 LED Turquoise - 30 W | 051232 | 1 | | |
| • 72 LED Blue - 30 W | 051233 | 1 | | |
| • 72 LED Red - 30 W | 051234 | 1 | | |
| • 72 LED Green - 30 W | 051235 | 1 | | |
| • 72 LED White - 24 W | 0512301 | 1 | | |
| • 72 LED Daylight - 24 W | 0512311 | 1 | | |
| • 72 LED Turquoise - 20 W | 0512321 | 1 | | |
| • 72 LED Blue - 20 W | 0512331 | 1 | | |
| • 72 LED Red - 20 W | 0512341 | 1 | | |
| • 72 LED Green - 20 W | 0512351 | 1 | | |
| | | | | |

2 Year Leakage Warranty.
The light, without the frame, can be used as a replacement bulb for LED conversion of all PAR56 products available in the market.
This product is patented.



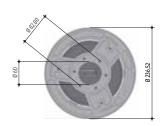
Patented Bayonet "Click" System

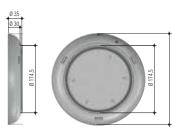
"MAXI-Clicker" Underwater Light without Niche; Ditto, but RGB Changing Color.

For built in PCB models there are 13 different lighting patterns.

For central PCB models there are 16 different lighting patterns. Lighting patterns are changed by remote control (optional). 120° - IP68.

| Description | Code | Pieces/ Weight Volume box Kg m ³ |
|--|---------|---|
| • 72 LED RGB - Built-in Control - 30 W | 051236 | 1 |
| • 72 LED RGB - Center Control - 30 W | 051237 | 1 |
| • 72 LED RGB - Built-in Control - 20 W | 0512361 | 1 |
| • 72 LED RGB - Center Control - 20 W | 0512371 | 1 |







Rear View

Volume m³



"MAXI-Clicker" Underwater Light Colored Frame

Made of ABS. Different Color options can be adapted to all Maxi-Clicker Models.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-----------------------|------------|----------------|--------------|--------------------------|
| Anthracite - RAL 7016 | 05120001A | 1 | | |
| • Beige - RAL 1015 | 05120001B | 1 | | |
| • Gray - RAL 7004 | 05120001G | 1 | | |
| Stainless Steel 304 | 051230SS01 | 1 | | |



Underwater Lights for Concrete Pools

New Generation



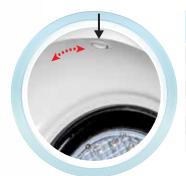
Underwater Light without Niche, Single Color.

Designed for stairs, small pools and spas. Underwater light without niche. Single color, frame made of ABS Plastic complete with 72 SMD LED. Polycarbonate light body, epoxy PCB and 2 x 0,75 mm cable of 1.5 m length.

120° - IP68. Consists of wall bracket and the light w/frame. After fixing the



bracket on pool wall by means of stainless steel screws, it is very easy to fix the frame onto the bracket by a 30° clockwise turn. Just turn & click! In order to remove it, push a screw driver on to the button gently and turn the frame 30° counter clockwise. 2 Year Leakage Warranty. The light, without the frame, can be used as a replacement bulb for LED conversion of all PAR38 products available on the market. This product is patented.



| Description | Code | Pieces/ \ box | Weight Kg | Volume m ³ |
|--------------------------|---------|---------------|--------------|--------------------------|
| • 72 LED White - 11 W | 051160E | 1 | | |
| • 72 LED Daylight - 11 W | 051161E | 1 | | |
| • 72 LED Turquoise - 8 W | 051162E | 1 | | |
| • 72 LED Blue - 8 W | 051163E | 1 | | |
| • 72 LED Red - 8 W | 051164E | 1 | | |
| • 72 LED Green - 8 W | 051165E | 1 | | |

Patented Bayonet "Click" System

"MIDI-Clicker" Underwater Light without Niche; Ditto, but RGB Changing Color.

Code

051170E

051171E

For built in PCB models there are 13 different lighting patterns.

For central PCB models there are 16 different lighting patterns. Lighting patterns are changed by remote control (optional). 120° - IP68.



| Rear V | /iew |
|--------|------|
|--------|------|

| | 82,78 |
|-----|-------|
| | |
| 165 | 3 |
| | |

• 72 LED RGB - Built-in Control -8 W

• 72 LED RGB - Central Control -8 W





Pieces/

hox

Weight

Kq

Volume

Wall Mounting Bracket

Description

Cable Conduit for Surface Mounted Lights



"Sealed Cable-Concrete Transition" Made of ABS. Complete with seal nut suitable for 2 x 0,75 mm cable passage, gasket, union and 2 stainless steel fixing screws. Can be used with all surface mounted pool lights for concrete pools.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|---------|----------------|--------------|--------------------------|
| | 0511175 | 1 | 1,882 | 0,016 |



(6

Electrical Equipments

"New Generation"



Underwater Lights for Concrete Pools

"MINI-Clicker"

Underwater Light without Niche, Single Color.

Designed for stairs, small pools and spas. Underwater light without niche. Single color, frame made of ABS Plastic complete with 36 SMD LED. Polycarbonate light body, epoxy PCB and 2 x 0,75 mm cable of

1,0 m length. 120° - IP68. Consists of wall bracket and the light w/frame. After fixing the bracket on pool wall by means of stainless steel screws, it is very easy to fix the frame onto the bracket by a 30° clockwise turn. Just turn & click! In order to remove it, push a screw driver on to the button gently and turn the frame 30° counter clockwise. 2 Year Leakage Warranty. This product is patented.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------------------|--------|----------------|--------------|--------------------------|
| • 36 LED White - 7 W | 051180 | 1 | | |
| • 36 LED Daylight - 7 W | 051181 | 1 | | |
| • 36 LED Turquoise - 5 W | 051182 | 1 | | |
| • 36 LED Blue - 5 W | 051183 | 1 | | |
| • 36 LED Red - 5 W | 051184 | 1 | | |
| • 36 LED Green - 5 W | 051185 | 1 | | |



Patented Bayonet "Click" System

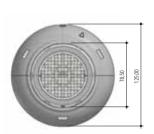
"MINI-Clicker" Underwater Light without Niche; Ditto, but RGB Changing Color.

For built in PCB models there are 13 different lighting patterns.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------------------------|--------|----------------|--------------|--------------------------|
| • 36 LED RGB-Built-in Control -5 W | 051190 | 1 | | |
| • 36 LED RGB-Central Control -5 W | 051191 | 1 | | |









Rear View



Wall Mounting Bracket



AISI 304/316

Underwater Lights for Concrete Pools - St. Steel

"SlimLED-INOX"

Underwater Light without Niche, Silicone Filled, Single Color.

Frame made of AISI 304 quality Stainless Steel. Polycarbonate light body with a choice of LED quantities and powers embedded into a special transparent silicone. Complete with Aluminium PCB. 2 x 1,5 mm cable of 2,5 m length. 120° - IP68. Wall mounting is done by screwing the wall mounting bracket directly to the pool wall. A single screw then attaches the light to the bracket making it easy to lift the light out of the pool. 2 Year Leakage Warranty. For AISI 316 quality stainless steel option, 01 should be added to the end of product codes below and 20% should be added to the price. Max. operating temperature 30°.







| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------------------|----------|----------------|--------------|--------------------------|
| • 252 LED White - 50 W | 051140SS | 1 | 1,100 | 0,005 |
| • 252 LED Daylight - 50 W | 051141SS | 1 | 1,100 | 0,005 |
| • 252 LED Turquoise - 36 W | 051142SS | 1 | 1,100 | 0,005 |
| • 252 LED Blue - 36 W | 051143SS | 1 | 1,100 | 0,005 |
| • 252 LED Red - 36 W | 051144SS | 1 | 1,100 | 0,005 |
| • 252 LED Green - 36 W | 051145SS | 1 | 1,100 | 0,005 |

"SlimLED-INOX" Underwater Light without Niche; Ditto, but RGB Changing Color. For built in PCB models there are 13 different lighting patterns.

For central PCB models there are 16 different lighting patterns. Lighting patterns are changed by remote control (optional). 120° - IP68.

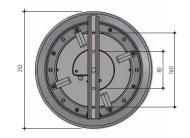


Fixing with Top Screw

Rear View

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|----------|----------------|--------------|--------------------------|
| • 252 LED RGB, 36 W - Built-in Control | 051153SS | 1 | 1,100 | 0,005 |
| • 252 LED RGB, 36 W - Centrally Control | 051155SS | 1 | 1,100 | 0,005 |

Note: For RGB 81 LED and RGB 90 LED options with stainless steel frame, please add SS to the end of the product codes on page **122 and ask for price**.









AISI 304/316

New Generation

Underwater Lights for Concrete Pools - St. Steel

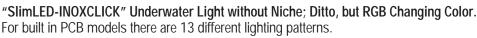
"SlimLED-INOXCLICK"

Underwater Light without Niche, Silicone Filled, Single Color.

Frame made of AISI 304 quality Stainless Steel. Polycarbonate light body with a choice of LED quantities and powers embedded into a special transparent silicone. Complete with Aluminium PCB. 2 x 1,5 mm cable of 2,5 m length. 120° - IP68. Wall mounting is done by screwing the wall mounting bracket directly to the pool wall. After the excess cable is wrapped, the light frame is easily slotted onto the mounting bracket (no screw required).

This allows for very easy removal of the light out of the pool. By means of a screw driver. 2 Year Leakage Warranty. For AISI 316 quality stainless steel option, 01 should be added to the end of the product codes below and 20% should be added to the price. Max. operating temperature 30°.

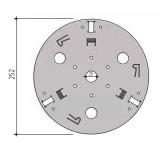
| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------------------|-----------|----------------|--------------|--------------------------|
| • 252 LED White - 50 W | 051140SSC | 1 | 1,100 | 0,005 |
| • 252 LED Daylight - 50 W | 051141SSC | 1 | 1,100 | 0,005 |
| • 252 LED Turquoise - 36 W | 051142SSC | 1 | 1,100 | 0,005 |
| • 252 LED Blue - 36 W | 051143SSC | 1 | 1,100 | 0,005 |
| • 252 LED Red - 36 W | 051144SSC | 1 | 1,100 | 0,005 |
| • 252 LED Green - 36 W | 051145SSC | 1 | 1,100 | 0,005 |



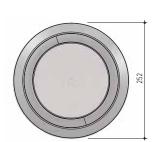
For central PCB models there are 16 different lighting patterns. Lighting patterns are changed by remote control (optional). 120° - IP68.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|-----------|----------------|--------------|--------------------------|
| • 252 LED RGB, 36 W - Built-in Control | 051153SSC | 1 | 1,100 | 0,005 |
| • 252 LED RGB, 36 W - Centrally Control | 051155SSC | 1 | 1,100 | 0,005 |

Note: For "INOXCLICK" in RGB 81 LED and RGB 90 LED please add SSC to the end of the product codes on page 122 and ask for price.











Wall Mounting Bracket



AISI 304/316

Underwater Lights for Wew Generation*
Concrete Pools - St. Steel

"MAXI-Clicker"

Underwater light without niche. Single color, frame made of AISI 304 Stainless Steel complete with 72 SMD LED. Polycarbonate light body, epoxy PCB and 2 x 0,75 mm cable of 1.5 m length. 120° - IP68. Consists of wall bracket and the light w/frame. After fixing the bracket on pool wall by means of stainless steel screws, it is very easy to fix the frame onto the bracket by a 30° clockwise turn. Just turn & click! In order to remove it, push a screw driver on to the button gently and turn the frame 30° counter clockwise. 2 Year Leakage Warranty.

The light, without the frame, can be used as a replacement bulb for LED conversion of all PAR56 products available in the market. This product is patented. For 316 quality Stainless Steel option, 01 should be added to the end of product codes below, and 20% should be added to the price.





| | Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|--|-----------|----------------|--------------|--------------------------|
| ١ | • 72 LED White - 35 W Aluminium PCB | 051230SS | 1 | | |
| ١ | • 72 LED Daylight - 35 W Aluminium PCB | 051231SS | 1 | | |
| | • 72 LED Turquoise - 30 W | 051232SS | 1 | | |
| | • 72 LED Blue - 30 W | 051233SS | 1 | | |
| ĺ | • 72 LED Red - 30 W | 051234SS | 1 | | |
| | • 72 LED Green - 30 W | 051235SS | 1 | | |
| | • 72 LED White - 24 W | 0512301SS | 1 | | |
| | • 72 LED Daylight - 24 W | 0512311SS | 1 | | |
| | • 72 LED Turquoise - 20 W | 0512321SS | 1 | | |
| | • 72 LED Blue - 20 W | 0512331SS | 1 | | |
| | • 72 LED Red - 20 W | 0512341SS | 1 | | |
| | • 72 LED Green - 20 W | 0512351SS | 1 | | |



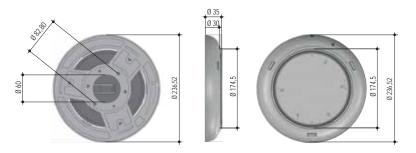
Patented Bayonet "Click" System

"MAXI-Clicker" Underwater Light without Niche; Ditto, but RGB Changing Color. For built in PCB models there are 13 different lighting patterns.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|-----------|----------------|--------------|--------------------------|
| • 72 LED RGB - Built-in Control - 30 W | 051236SS | 1 | | |
| • 72 LED RGB - Center Control - 30 W | 051237SS | 1 | | |
| • 72 LED RGB - Built-in Control - 20 W | 0512361SS | 1 | | |
| • 72 LED RGB - Center Control - 20 W | 0512371SS | 1 | | |



Rear View





AISI 304/316

"New Generation"

Underwater Lights for Concrete Pools - St. Steel



"MIDI-Clicker-INOX"

Underwater Light without Niche, Single Color.

Designed for stairs, small pools and spas. Frame made of AISI 304 quality Stainless Steel. Complete with 72 SMD LEDs: Polycarbonate light body, epoxy PCB and 2 x 0,75 mm cable of 1.5 m length. 120° - IP68Consists of wall bracket and the light w/frame. After fixing the bracket on pool wall by means of stainless steel screws, it is very easy to fix the fram onto the

bracket by a 30° clockwise turn. Just turn & click! In order to remove it,

push a screw driver on to the button gently and turn the frame 30° counter clockwise. 2 Year Leakage Warranty. The light, without the frame, can be used as a replacement bulb for LED conversion of all PAR56 products available in the market. This product is patented. For 316 quality Stainless Steel option, 01 should be added to the end of product codes below, and 20% should be added to the price.

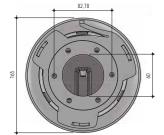
| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------------------|-----------|----------------|--------------|--------------------------|
| • 72 LED White - 11 W | 051160ESS | 1 | | |
| • 72 LED Daylight - 11 W | 051161ESS | 1 | | |
| • 72 LED Turquoise - 8 W | 051162ESS | 1 | | |
| • 72 LED Blue - 8 W | 051163ESS | 1 | | |
| • 72 LED Red - 8 W | 051164ESS | 1 | | |
| • 72 LED Green - 8 W | 051165ESS | 1 | | |



"MIDI-Clicker" Underwater Light without Niche; Ditto, but RGB Changing Color.

For built in PCB models there are 13 different lighting patterns.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------------------------------|-----------|----------------|--------------|--------------------------|
| • 72 LED RGB - Built-in Control -8 W | 051170ESS | 1 | | |
| • 72 LED RGB - Central Control -8 W | 051171ESS | 1 | | |









Patented Bayonet "Click" System



Rear View



Wall Mounting Bracket



Underwater Lights for New Generation Concrete Pools - AISI 304 St. Steel

AISI 304/316

"MINI-Clicker-INOX"

Underwater Light without Niche, Single Color.

Designed for stairs, small pools and spas. Frame made of AISI 304 quality Stainless Steel. Complete with 36 SMD LEDs: Polycarbonate light body, epoxy PCB and 2 x 0,75 mm cable of 1.5 m length 120° - IP68. Consists of wall bracket and the light w/frame. After fixing the bracket on pool wall by means of stainless steel screws, it is very easy to fix the frame onto the bracket by a 30°



(

clockwise turn. Just turn & click! In order to remove it, push a screw driver on to the button gently and turn the frame 30° counter clockwise. 2 Year Leakage Warranty. The light, without the frame, can be used as a replacement bulb for LED conversion of all PAR56 products available in the market. This product is patented. For 316 quality Stainless Steel option, 01 should be added to the end of product codes below, and 20% should be added to the price.



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------------------|----------|----------------|--------------|--------------------------|
| • 36 LED White - 7 W | 051180SS | 1 | | |
| • 36 LED Daylight - 7 W | 051181SS | 1 | | |
| • 36 LED Turquoise - 5 W | 051182SS | 1 | | |
| • 36 LED Blue - 5 W | 051183SS | 1 | | |
| • 36 LED Red - 5 W | 051184SS | 1 | | |
| • 36 LED Green - 5 W | 051185SS | 1 | | |



"MINI-Clicker" Underwater Light without Niche; Ditto, but RGB Changing Color.

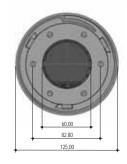
For built in PCB models there are 13 different lighting patterns.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------------------------|----------|----------------|--------------|--------------------------|
| • 36 LED RGB-Built-in Control -5 W | 051190SS | 1 | | |
| • 36 LED RGB-Central Control -5 W | 051191SS | 1 | | |

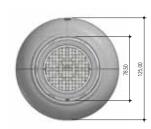




Rear View

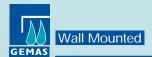








Wall Mounting Bracket



"New Generation"

Underwater Lights for Liner Pools

"SlimLED"

Underwater Light without Niche, Silicone Filled, Single Color.

Frame made of ABS Plastic. Polycarbonate light body with a choice of LED quantities and powers embedded into a special transparent silicone. Complete with epoxy PCB. 2 x 1,5 mm cable of 2,5 m length and Liner Pool Wall Mounting Kit (0521402). 120° - IP68. 2 Year Leakage Warranty.

The light, without the frame, can be used as a replacement bulb for LED conversion of all PAR56 products available on the market. Max. operatig temperature 30°.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|--------|----------------|--------------|--------------------------|
| • 252 LED White - 50 W | 052140 | 1 | 0,835 | 0,005 |
| • 252 LED Daylight - 50 W | 052141 | 1 | 0,835 | 0,005 |
| • 81 LED White - 35 W Aluminium PCB | 052130 | 1 | 0,835 | 0,005 |
| • 81 LED Daylight - 35 W Aluminium PCB | 052131 | 1 | 0,835 | 0,005 |

Note: Other Single Color prices are the same. The last digit of the product code should be changed to the following for Turquoise 2, for Blue 3, for Red 4, for Green 5.



"SlimLED" Underwater Light without Niche, Silicone Filled, RGB Changing Color.

For built in PCB models there are 13 different lighting patterns.

For central PCB models there are 16 different lighting patterns. Lighting patterns are changed by remote control (optional).

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ | | |
|--|--------|----------------|--------------|--------------------------|--|--|
| Centrally Control | | | | | | |
| • 252 LED RGB, 36 W Aluminium PCB | 052155 | 1 | 1,350 | 0,005 | | |
| • 90 LED RGB-White, 36 W Aluminium PCB | 052152 | 1 | 1,350 | 0,005 | | |
| • 81 LED RGB, 30 W | 052157 | 1 | 1,350 | 0,005 | | |
| Built-in Control | | | | | | |
| • 252 LED RGB, 36 W Aluminium PCB | 052153 | 1 | 1,350 | 0,005 | | |
| • 90 LED RGB-White, 36 W Aluminium PCB | 052150 | 1 | 1,350 | 0,005 | | |
| • 81 LED RGB, 30 W | 052156 | 1 | 1,350 | 0,005 | | |



O



051130EY01 Optional Wall Mounting Bracket

"SlimLED" Underwater Light without Niche, Silicone Filled Mounting Kits.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|-----------|----------------|--------------|--------------------------|
| • Liner panel pool mounting kit (2" with nut) | 052160E01 | 1 | 0,300 | 0,003 |
| Polyester pool mounting kit (2" with nut) | 0521403 | 1 | 0,300 | 0,003 |





Underwater Lights for Liner Pools

"New Generation"



Underwater Light without Niche, Single Color.

Frame made of ABS Plastic complete with 72 SMD LED.

Polycarbonate light body, epoxy PCB and 2 x 0,75 mm cable of 1.5 m length 120° - IP68. Consists of wall bracket and the light w/frame. After fixing the bracket on pool wall by means of stainless steel screws,

it is very easy to fix the frame onto the bracket by a 30° clockwise turn.

Just turn & click! In order to remove it, push a screw driver on to the button

gently and turn the frame 30° counter clockwise. 2 Year Leakage Warranty. The light, without the frame, can be used as a replacement bulb for LED conversion of all PAR56 products available in the market. This product is patented.







Patented Bayonet "Click" System

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|---------|----------------|--------------|--------------------------|
| • 72 LED White - 35 W Aluminium PCB | 052230 | 1 | | |
| • 72 LED Daylight - 35 W Aluminium PCB | 052231 | 1 | | |
| • 72 LED Turquoise - 30 W | 052232 | 1 | | |
| • 72 LED Blue - 30 W | 052233 | 1 | | |
| • 72 LED Red - 30 W | 052234 | 1 | | |
| • 72 LED Green - 30 W | 052235 | 1 | | |
| • 72 LED White - 24 W | 0522301 | 1 | | |
| • 72 LED Daylight - 24 W | 0522311 | 1 | | |
| • 72 LED Turquoise - 20 W | 0522321 | 1 | | |
| • 72 LED Blue - 20 W | 0522331 | 1 | | |
| • 72 LED Red - 20 W | 0522341 | 1 | | |
| • 72 LED Green - 20 W | 0522351 | 1 | | |



Rear View

"MAXI-Clicker" Underwater Light without Niche; Ditto, but RGB Changing Color.

For built in PCB models there are 13 different lighting patterns.

For central PCB models there are 16 different lighting patterns. Lighting patterns are changed by remote control (optional).

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|---------|----------------|--------------|--------------------------|
| • 72 LED RGB - Built-in Control - 30 W | 052236 | 1 | | |
| • 72 LED RGB - Center Control - 30 W | 052237 | 1 | | |
| • 72 LED RGB - Built-in Control - 20 W | 0522361 | 1 | | |
| • 72 LED RGB - Center Control - 20 W | 0522371 | 1 | | |



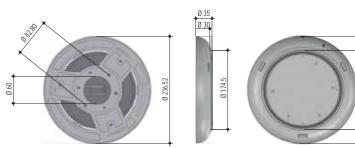
052160E01

MAXI-Clicker" Underwater Light without Niche, Mounting Kits.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|-----------|----------------|--------------|--------------------------|
| • Liner panel pool mounting kit (2" with nut) | 052160E01 | 1 | 0,300 | 0,003 |
| Polyester pool mounting kit (2" with nut) | 05223003 | 1 | 0,300 | 0,003 |



05223003



"New Generation"

Underwater Lights for Liner Pools

"MIDI-Clicker"

Underwater Light without Niche, Single Color.

Designed for stairs, small pools and spas. Frame made of ABS Plastic.
Complete with 72 SMD LEDs: Polycarbonate light body, epoxy PCB and 2 x 0,75 mm cable of 1 m length and Liner Pool Wall Mounting Kit (0521402).

120° - IP68. Consists of wall bracket and the light w/frame. After fixing the bracket on pool wall by means of stainless steel screws, it is very easy to fix the frame onto

the bracket by a 30° clockwise turn. Just turn & click! In order to remove it, push a screw driver on to the buttongently and turn the frame 30° counter clockwise. 2 Year Leakage Warranty.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------------------|---------|----------------|--------------|--------------------------|
| • 72 LED White - 11 W | 052160E | 1 | | |
| • 72 LED Daylight - 11 W | 052161E | 1 | | |
| • 72 LED Turquoise - 8 W | 052162E | 1 | | |
| • 72 LED Blue - 8 W | 052163E | 1 | | |
| • 72 LED Red - 8 W | 052164E | 1 | | |
| • 72 LED Green - 8 W | 052165E | 1 | | |



"MIDI-Clicker" Underwater Light without Niche; Ditto, but RGB Changing Color.

For built in PCB models there are 13 different lighting patterns.

For central PCB models there are 16 different lighting patterns. Lighting patterns are changed by remote control (optional). 120° - IP68.

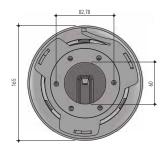
| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------------------------------|---------|----------------|--------------|--------------------------|
| • 72 LED RGB - Built-in Control -8 W | 052170E | 1 | | |
| • 72 LED RGB - Central Control -8 W | 052171E | 1 | | |



Patented Bayonet "Click" System

"MIDI-Clicker" Underwater Light without Niche Mounting Kits.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|-----------|----------------|--------------|--------------------------|
| • Liner panel pool mounting kit (2" with nut) | 052160E01 | 1 | 0,300 | 0,003 |
| Polyester pool mounting kit (2" with nut) | 052160E03 | 1 | 0,300 | 0,003 |











052160E03



Underwater Lights for Liner Pools

"New Generation"



Underwater Light without Niche, Single Color.

Designed for stairs, small pools and spas. Underwater light without niche. Single color, frame made of ABS Plastic complete with 36 SMD LED. Polycarbonate light body, epoxy PCB and 2 x 0,75 mm cable of 1,0 m length. 120° - IP68. Consists of wall bracket and the light w/frame. After fixing th

bracket on pool wall by means of stainless steel screws, it is very easy to

Description

fix the frame onto the bracket by a 30° clockwise turn. Just turn & click! In order to remove it, push a screw driver on to the button gently and turn the frame 30° counter clockwise. 2 Year Leakage Warranty. This product is patented.



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------------------|--------|----------------|--------------|--------------------------|
| • 36 LED White - 7 W | 052180 | 1 | | |
| • 36 LED Daylight - 7 W | 052181 | 1 | | |
| • 36 LED Turquoise - 5 W | 052182 | 1 | | |
| • 36 LED Blue - 5 W | 052183 | 1 | | |
| • 36 LED Red - 5 W | 052184 | 1 | | |
| • 36 LED Green - 5 W | 052185 | 1 | | |



Patented Bayonet "Click" System

"MINI-Clicker" Underwater Light without Niche; Ditto, but RGB Changing Color.

For built in PCB models there are 13 different lighting patterns.

For central PCB models there are 16 different lighting patterns. Lighting patterns are changed by remote control (optional). 120° - IP68.

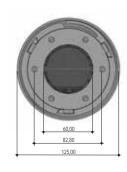
| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------------------------|--------|----------------|--------------|--------------------------|
| • 36 LED RGB-Built-in Control -5 W | 052190 | 1 | | |
| • 36 LED RGB-Central Control -5 W | 052191 | 1 | | |

"MINI-Clicker" Underwater Light without Niche, Mounting Kits.



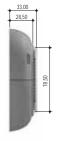






• Liner panel pool mounting kit (2" with nut)

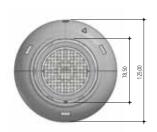
• Polyester pool mounting kit (2" with nut)



Code

052160E01

052180E03



Pieces/

box

Weight

Kg

0.300

0,300

Volume

 \mathbf{m}^3

0.003

0,003

052180E03



AISI 304/316 New Generation

Underwater Lights for Liner Pools - AISI 304 St. Steel

"SlimLED-INOX"

Underwater Light without Niche, Silicone Filled, Single Color.
Frame made of AISI 304 quality Stainless Steel. Polycarbonate light body with a choice of LED quantities and powers embedded into a special transparent silicone. Complete with Aluminium PCB. 2 x 1,5 mm cable of 2,5 m length. 120° - IP68. Wall mounting is done by screwing the wall mounting bracket directly to the pool wall. A single screw then attaches the light to the bracket

making it easy to lift the light out of the pool. 2 Year Leakage Warranty. For AISI 316 quality stainless steel option, 01 should be added to the end of product codes below and 20% should be added to the price. Max. operating temperature 30°.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------------------|----------|----------------|--------------|--------------------------|
| • 252 LED White - 50 W | 052140SS | 1 | 1,400 | 0,008 |
| • 252 LED Daylight - 50 W | 052141SS | 1 | 1,400 | 0,008 |
| • 252 LED Turquoise - 36 W | 052142SS | 1 | 1,400 | 0,008 |
| • 252 LED Blue - 36 W | 052143SS | 1 | 1,400 | 0,008 |
| • 252 LED Red - 36 W | 052144SS | 1 | 1,400 | 0,008 |
| • 252 LED Green - 36 W | 052145SS | 1 | 1,400 | 0,008 |

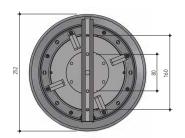


"SlimLED-INOX" Underwater Light without Niche; Ditto, but RGB Changing Color. For built in PCB models there are 13 different lighting patterns.

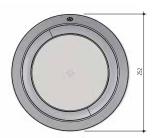
For central PCB models there are 16 different lighting patterns. Lighting patterns are changed by remote control (optional).

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|----------|----------------|--------------|--------------------------|
| • 252 LED RGB, 36 W - Built-in Control | 052153SS | 1 | 1,400 | 0,008 |
| • 252 LED RGB, 36 W - Centrally Control | 052155SS | 1 | 1,400 | 0,008 |

Note: For RGB 81 LED and RGB 90 LED options with stainless steel frame, please add SS to the end of the product codes on page 127, request 'Liner Pool' and ask for price.









Rear View



Liner Wall Mount Bracket



AISI 304/316

Underwater Lights for "New Generation" Liner Pools - AISI 304 St. Steel

"SlimLED-INOXCLICK"

Underwater Light without Niche, Silicone Filled, Single Color.

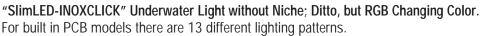
Frame made of AISI 304 quality Stainless Steel.

Polycarbonate light body with a choice of LED quantities and powers embedded into a special transparent silicone. Complete with Aluminium PCB. 2 x 1,5 mm cable of 2,5 m length and Liner Pool Wall Mounting Kit (0521402). 120° - IP68. Wall mounting is done by screwing the wall mounting bracket directly to the pool wall. After the excess cable is wrapped, the light frame is easily slotted onto the mounting bracket (no screw required). This allows for very easy removal of the light out

of the pool. By means of a screw driver. 2 Year Leakage Warranty. For AISI 316 quality stainless steel option, 01 should be added to the end of the product codes below and 20% should be added to the price. Max. operating temperature 30°.



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------------------|-----------|----------------|--------------|--------------------------|
| • 252 LED White - 50 W | 052140SSC | 1 | 1,400 | 0,008 |
| • 252 LED Daylight- 50 W | 052141SSC | 1 | 1,400 | 0,008 |
| • 252 LED Turquoise - 36 W | 052142SSC | 1 | 1,400 | 0,008 |
| • 252 LED Blue - 36 W | 052143SSC | 1 | 1,400 | 0,008 |
| • 252 LED Red - 36 W | 052144SSC | 1 | 1,400 | 0,008 |
| • 252 LED Green - 36 W | 052145SSC | 1 | 1,400 | 0,008 |



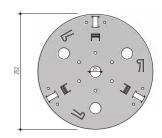
For central PCB models there are 16 different lighting patterns. Lighting patterns are changed by remote control (optional).

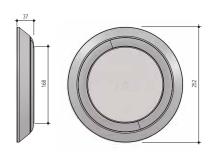


Wall Mount Bracket

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|-----------|----------------|--------------|--------------------------|
| • 252 LED RGB, 36 W - Built-in Control | 052153SSC | 1 | 1,400 | 0,008 |
| • 252 LED RGB, 36 W - Centrally Control | 052155SSC | 1 | 1,400 | 0,008 |

Note: For "INOXCLICK" in RGB 81 LED and RGB 90 LED please add SSC to the end of the product codes on page 128, request 'Liner Pool' and ask for price.





AISI 304/316

"New Generation"



Underwater Lights for Liner Pools - St. Steel

"MAXI-Clicker-INOX"

Underwater Light without Niche, Single Color.

Frame made of AISI 304 Stainless Steel complete with 72 SMD LED. Polycarbonate light body, epoxy PCB and 2 x 0,75 mm cable of 1 m length and Liner Pool Wall Mounting Kit. 120° - IP68. Consists of wall bracket and the light w/frame. After fixing the bracket on pool wall by means of stainless steel screws, it is very easy to fix the frame onto the bracket by a 30° clockwise turn. Just turn & click! In order to remove it, push a screw driver on to the button gently and

turn the frame 30° counter clockwise. 2 Year Leakage Warranty. The light, without the frame, can be used as a replacement bulb for LED conversion of all PAR56 products available in the market. This product is patented. For 316 quality Stainless Steel option, 01 should be added to the end of product codes below, an 20% should be added to the price.

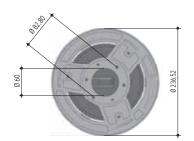
| Code | Pieces/ box | Weight Kg | Volume m ³ |
|-----------|---|--|---|
| 052230SS | 1 | | |
| 052231SS | 1 | | |
| 052232SS | 1 | | |
| 052233SS | 1 | | |
| 052234SS | 1 | | |
| 052235SS | 1 | | |
| 0522301SS | 1 | | |
| 0522311SS | 1 | | |
| 0522321SS | 1 | | |
| 0522331SS | 1 | | |
| 0522341SS | 1 | | |
| 0522351SS | 1 | | |
| | 052230SS 052231SS 052232SS 052233SS 052234SS 052235SS 0522301SS 0522311SS 0522321SS 0522331SS 0522331SS | Code box 052230SS 1 052231SS 1 052232SS 1 052233SS 1 052234SS 1 052235SS 1 0522301SS 1 0522311SS 1 0522321SS 1 0522331SS 1 0522331SS 1 0522331SS 1 0522331SS 1 0522341SS 1 | Code box Kg 052230SS 1 052231SS 1 052232SS 1 052233SS 1 052234SS 1 052234SS 1 052235SS 1 052231SS 1 0522311SS 1 0522321SS 1 0522331SS 1 0522331SS 1 0522331SS 1 0522331SS 1 0522331SS 1 0522331SS 1 0522341SS 1 1 1 |

"MAXI-Clicker-INOX" Underwater Light without Niche; Ditto, but RGB Changing Color. For built in PCB models there are 13 different lighting patterns.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------------------------------|-----------|----------------|--------------|--------------------------|
| 72 LED RGB - Built-in Control - 30 W | 052236SS | 1 | | |
| 72 LED RGB - Center Control - 30 W | 052237SS | 1 | | |
| 72 LED RGB - Built-in Control - 20 W | 0522361SS | 1 | | |
| 72 LED RGB - Center Control - 20 W | 0522371SS | 1 | | |

"MAXI-Clicker" Underwater Light without Niche Mounting Kits.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|-----------|----------------|--------------|--------------------------|
| Liner panel pool mounting kit (2" with nut) | 052160E01 | 1 | 0,300 | 0,003 |
| Polyester pool mounting kit (2" with nut) | 05223003 | 1 | 0,300 | 0,003 |









Patented Bayonet "Click" System



052160E01





Underwater Lights for Liner Pools - St. Steel

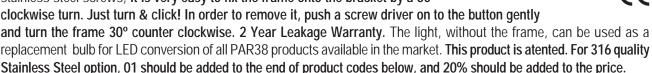
"New Generation"

AISI 304/316



Underwater Light without Niche, Single Color.

Designed for stairs, small pools and spas. Frame made of AISI 304 Stainless Steel complete with 72 SMD LED. Polycarbonate light body, epoxy PCB and 2 x 0,75 mm cable of 1,0 m length and Liner Pool Wall Mounting Kit. 120° - IP68. Consists of wall bracket and the light w/frame. After fixing the bracket on pool wall by means of stainless steel screws, it is very easy to fix the frame onto the bracket by a 30°





| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------------------|-----------|----------------|--------------|--------------------------|
| • 72 LED White - 11 W | 052160ESS | 1 | | |
| • 72 LED Daylight - 11 W | 052161ESS | 1 | | |
| • 72 LED Turquoise - 8 W | 052162ESS | 1 | | |
| • 72 LED Blue - 8 W | 052163ESS | 1 | | |
| • 72 LED Red - 8 W | 052164ESS | 1 | | |
| • 72 LED Green - 8 W | 052165ESS | 1 | | |



"MIDI-Clicker-INOX" Underwater Light without Niche; Ditto, but RGB Changing Color. For built in PCB models there are 13 different lighting patterns. For central PCB models there are 16 different lighting patterns. Lighting patterns are changed by remote control (optional).

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------------------------------|-----------|----------------|--------------|--------------------------|
| • 72 LED RGB - Built-in Control -8 W | 052170ESS | 1 | | |
| • 72 LED RGB - Central Control -8 W | 052171ESS | 1 | | |

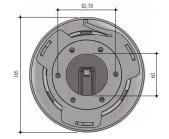
Patented Bayonet "Click" System



"MIDI-Clicker" Underwater Light without Niche Mounting Kits.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|-----------|----------------|--------------|--------------------------|
| • Liner panel pool mounting kit (2" with nut) | 052160E01 | 1 | 0,300 | 0,003 |
| Polyester pool mounting kit (2" with nut) | 052160E03 | 1 | 0,300 | 0,003 |









AISI 304/316

"New Generation"

Underwater Lights for Liner Pools - AISI 304 St. Steel

"MINI-Clicker-INOX"

Underwater Light without Niche, Single Color.

Designed for stairs, small pools and spas. Frame made of AISI 304 Stainless Steel complete with 72 SMD LED. Polycarbonate light body, epoxy PCB and 2 x 0,75 mm cable of 1,0 m length and Liner Pool Wall Mounting Kit. 120° - IP68. Consists of wall bracket and the light w/frame. After fixing the bracket on pool wall by means of

stainless steel screws, it is very easy to fix the frame onto the bracket by a 30° clockwise turn. Just turn & click! In order to remove it, push a screw driver on to the button gently and turn the

frame 30° counter clockwise. 2 Year Leakage Warranty. The light, without the frame, can be used as a replacement bulb for LED conversion of all PAR38 products available in the market. This product is patented. For 316 quality Stainless Steel option, 01 should be added to the end of product codes below, and 20% should be added to the price.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------------------|----------|----------------|--------------|--------------------------|
| • 36 LED White - 7 W | 052180SS | 1 | | |
| • 36 LED Daylight - 7 W | 052181SS | 1 | | |
| • 36 LED Turquoise - 5 W | 052182SS | 1 | | |
| • 36 LED Blue - 5 W | 052183SS | 1 | | |
| • 36 LED Red - 5 W | 052184SS | 1 | | |
| • 36 LED Green - 5 W | 052185SS | 1 | | |



"MINI-Clicker-INOX" Underwater Light without Niche; Ditto, but RGB Changing Color. For built in PCB models there are 13 different lighting patterns. For central PCB models there are 16 different lighting patterns. Lighting patterns are changed by remote control (optional).

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------------------------|----------|----------------|--------------|--------------------------|
| • 36 LED RGB-Built-in Control -5 W | 052190SS | 1 | | |
| • 36 LED RGB-Central Control -5 W | 052191SS | 1 | | |



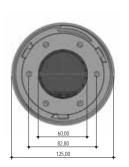
Patented Bayonet "Click" System

"MINI-Clicker" Underwater Light without Niche Mounting Kits.

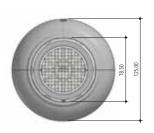
| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|-----------|----------------|--------------|--------------------------|
| • Liner panel pool mounting kit (2" with nut) | 052160E01 | 1 | 0,300 | 0,003 |
| Polyester pool mounting kit (2" with nut) | 052180E03 | 1 | 0,300 | 0,003 |



052160E01









052180E03



Hang Over Underwater LED Light for

Prefbricated Pools

"Hang Over"

Underwater LED Light.

Hang Over Underwater LED Light specifically designed for DIY installation to above ground pools. Complete with 50 W/12 V AC transformer, 5+2 meters cable. The product is ready to be connected to 220 V AC to start function. Easy DIY install with two screws to pool coping. Optional elongation part (13,5 cm) to be used to install at deeper levels. LED beam angle 120°.

Technical Features:

- Special, elegant, stylish and patented design
- Easy snap mechanism by design
- In IP68 protection, class III
- Ability to direct connect 220-230 V / 50-60 Hz network line
- Can be easily installed in above ground swimming pools

"New Generation"





(

"Hang Over" Underwater LED Light. Single Color.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------------------------|---------|----------------|--------------|--------------------------|
| • 72 LED White - 16 W | 0511611 | 1 | | |
| • 72 LED Daylight - 16 W | 0511612 | 1 | | |
| • 72 LED Turquoise - 13 W | 0511613 | 1 | | |
| • 72 LED Blue - 13 W | 0511614 | 1 | | |
| • 72 LED Red - 13 W | 0511615 | 1 | | |
| • 72 LED Green - 13 W | 0511616 | 1 | | |

"Hang Over" Underwater LED Light. RGB Changing Color

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------------------------------|-----------|----------------|--------------|--------------------------|
| • 72 LED RGB-Built-in Control - 13 W | 0511711 | 1 | | |
| • 72 LED RGB-Self Control - 13 W | 0511711SC | 1 | | |







Easy DIY Installation



50W/12VAC Transformer





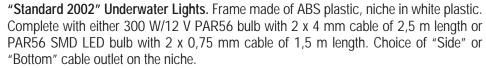


Underwater Lights for Concrete Pools - ABS

"Standard 95"

Underwater Lights. Frame made of ABS plastic, niche in white plastic. Complete with either 300 W/12 V PAR56 bulb with 2 x 4 mm cable of 2,5 m length or PAR56 SMD LED bulb with 2 x 0,75 mm cable of 1,5 m length. Choice of "Side" or "Bottom" cable outlet on the niche.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|------------|----------------|--------------|--------------------------|
| • Complete light, with 300 W/12 V PAR56 | 051111 | 1 | 2,160 | 0,016 |
| Complete light, with 20 W-63 SMD LED | 051111LS | 1 | | |
| • 051111, without cable | 051111C | 1 | | |
| • 051111LS, without cable | 051111LSC | 1 | | |
| • 051111, without niche and cable | 051111NC | 1 | | |
| • 051111LS, without niche and cable | 051111LSNC | 1 | | |
| • Niche | 05111110S | 1 | | |



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|------------|----------------|--------------|--------------------------|
| • Complete light, with 300 W/12 V PAR56 | 051114 | 1 | 2,160 | 0,016 |
| • Complete light, with 20 W-63 SMD LED | 051114LS | 1 | | |
| • 051114, with locking | 051115 | 1 | | |
| 051114LS, with locking | 051115LS | 1 | | |
| • 051114, without cable | 051114C | 1 | | |
| 051114LS, without cable | 051114LSC | 1 | | |
| • 051114, without cable and niche | 051114NC | 1 | | |
| 051114LS, without cable and niche | 051114LSNC | 1 | | |
| • Niche | 05111410S | 1 | | |
| Modular niche extension | 0511411 | 1 | | |

"Standard 2004" Underwater Lights. Frame made of ABS plastic, niche in white plastic. Complete with either 300 W/12 V PAR56 bulb with 2 x 4 mm cable of 2,5 m length or PAR56 SMD LED bulb with 2 x 0,75 mm cable of 1,5 m length. Choice of "Side" or "Bottom" cable outlet on the niche.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|------------|----------------|--------------|--------------------------|
| • Complete light, with 300 W/12 V PAR56 | 051118 | 1 | | |
| • Complete light, with 20 W-63 SMD LED | 051118LS | 1 | | |
| • 051118, with locking | 051119 | 1 | | |
| 051118LS, with locking | 051119LS | 1 | | |
| 051118, without cable | 051118C | 1 | | |
| • 051118LS, without cable | 051118LSC | 1 | | |
| • 051118, without cable and niche | 051118NC | 1 | | |
| • 051118LS, without cable and niche | 051118LSNC | 1 | | |
| • Niche | 05111810S | 1 | | |
| Modular niche extension | 0511411 | 1 | | |



051111 - 051130ER



051114



051114 - 051130ER



051119



0511411



Underwater Lights for Concrete Pools - ABS





"Standard 2006" Underwater Lights.

Frame made of ABS plastic, niche in white plastic.

Complete with either 300 W/12 V PAR56 bulb with 2 x 4 mm cable of 2,5 m length or PAR56 SMD LED bulb with 2 x 0,75 mm cable of 1,5 m length. Choice of "Side" or "Bottom" cable outlet on the niche. Light is fixed to the niche with 2 front screws.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|----------|----------------|--------------|--------------------------|
| • Complete Light, with 300 W/12 V PAR56 | 051112 | 1 | 2,800 | 0,016 |
| • Complete Light, with 20 W-63 SMD LED | 051112LS | 1 | 2,800 | 0,016 |



"Mini 2008" Underwater Lights.

For concrete pools. Frame and niche made of ABS plastic. Complete with halogen or power led bulb, 2 m cable and special tightening tool.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------------------------|----------|----------------|--------------|--------------------------|
| • 7 W/12 V | 05112 | 1 | | |
| • 7 W/12 V with white SMD 36 LED | 05112LS | 1 | | |
| • Niche | 0511212S | 1 | | |



"Mini 2001" Underwater Lights.

Heat resistant plastic body, bottom outlet. Complete with 2 m. cable. 50 W/12 V bulb or power LED.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------------------------|----------|----------------|--------------|--------------------------|
| Slip type body with plastic frame | 05112S | 4 | 2,000 | 0,007 |
| • 05112S, with 7 W/12 V SMD 36 LED | 05112SLS | 4 | 2,500 | 0,007 |
| • 2" threaded with plastic frame | 05112T | 4 | 2,100 | 0,007 |
| • 05112T, with 7 W/12 V SMD 36 LED | 05112TLS | 4 | 2,500 | 0,007 |



05112SLS



05112T

Housing for Mini 2001 for Concrete Pools.

Complete with the special "no-leak" cable outlet.



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|--------|----------------|--------------|--------------------------|
| | 04160A | 20 | 10,420 | 0,060 |



"No-leak" adaptor for cables.

Can be adhered to the back of the GEMAS Housing for Concrete Pools, or at the mouth of Ø 63 mm 10 atm PVC pipes. With cable gland seal.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------------|----------------|--------------|--------------------------|
| | 0511200101S | 1 | | |





Underwater Lights for Concrete Pools - S.S.

"Standard 2002" Underwater Lights.

AISI 304 Quality Stainless Steel Frame. Frame made of AISI 304 quality stainless steel, niche in white plastic. Complete with either 300 W/12 V PAR56 bulb with 2 x 4 mm cable of 2,5 m length or PAR56 SMD LED bulb with 2 x 0,75 mm cable of 1,5 m length. Choice of "Side" or "Bottom" cable outlet on the niche.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------------------------------|------------|----------------|--------------|--------------------------|
| Complete Light | 051114SS | 1 | 2,790 | 0,016 |
| Complete Light, SMD LED version | 051114SSLS | 1 | | |



051114SSLS

"Standard 95" Underwater Lights. AISI 304 Quality Stainless Steel Plated Frame.

Frame made of AISI 304 quality stainless steel plated ABS plastic, niche in white plastic. Complete with either 300 W/12 V PAR56 bulb with 2 x 4 mm cable of 2,5 m length or PAR56 SMD LED bulb with 2 x 0,75 mm cable of 1,5 m length. Choice of "Side" or "Bottom" cable outlet on the niche.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------------------------------|------------|----------------|--------------|--------------------------|
| Complete Light | 051113SS | 1 | 2,646 | 0,016 |
| Complete Light, SMD LED version | 051113SSLS | 1 | | |



Stainless Steel Frame For Underwater Lights.

Made of AISI 304 quality stainless steel. Can easily be adapted to existing ABS frames.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------------------------|------------|----------------|--------------|--------------------------|
| • For "Flat" Light | 05111608 | 1 | | |
| • For "Standard 2002" Light | 05111408 | 1 | | |
| • For "Mini 2008" Light | 0511212508 | 1 | | |
| • "Standard 2002" For Locked Light | 05111508 | 1 | | |
| For "Standard 95" Light | 05111108 | 1 | | |



05111608

"Mini 2001" Underwater Lights.

Heat resistant plastic body, bottom outlet. Complete with 2 m. cable. 50 W/12 V bulb or 7 W SMD LED bulb.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------------------------------------|-----------|----------------|--------------|--------------------------|
| • Slip type body with st. steel frame | 05112SC | 4 | 2,300 | 0,007 |
| • Ditto, with white 36 LED | 05112SCLS | 4 | | |
| • 2" threaded with st. steel frame | 05112TC | 4 | 2,400 | 0,007 |
| • Ditto, with white 36 LED | 05112TCLS | 4 | | |



05112SC



Underwater Lights for Liner Pools







052111B - 051130ER

"Standard 95" Underwater Lights.

Frame made of ABS plastic, brass screw fittings, niche in white plastic.

Complete with either 300 W/12 V PAR56 bulb with 2 x 4 mm cable of 2,5 m length or PAR56 SMD LED bulb with 2 x 0,75 mm cable of 1,5 m length. Choice of "Side" or "Bottom" cable outlet on the niche. Complete with flange, bolts and gaskets.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|-------------|----------------|--------------|--------------------------|
| • Complete light with 300 W/12 V PAR56 | 052111B | 1 | 2,450 | 0,016 |
| Complete light with 20 W-63 SMD LED | 052111BLS | 1 | 2,450 | 0,016 |
| 052111B, without cable | 052111BC | 1 | 2,300 | 0,016 |
| 052111BLS, without cable | 052111BLSC | 1 | 2,300 | 0,016 |
| • 052111B, without niche and cable | 052111BNC | 1 | 2,100 | 0,016 |
| • 052111BLS, without niche and cable | 052111BLSNC | 1 | 2,100 | 0,016 |
| • Niche | 05211101BSP | 1 | | 0,016 |

"Standard 2002" Underwater Lights.

Frame made of ABS plastic, brass screw fittings, niche in white plastic.

Complete with either 300 W/12 V PAR56 bulb with 2 x 4 mm cable of 2,5 m length or PAR56 SMD LED bulb with 2 x 0,75 mm cable of 1,5 m length. Choice of "Side" or "Bottom" cable outlet on the niche. Complete with flange, bolts and gaskets.



052114B

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|-------------|----------------|--------------|--------------------------|
| • Complete light, with 300W/12V PAR56 | 052114B | 1 | 2,450 | 0,016 |
| • Complete light, with 20W – 63 SMD LED | 052114BLS | 1 | 2,450 | 0,016 |
| • 052114B, with locking mechanism | 052115B | 1 | 2,700 | 0,016 |
| • 052114BLS, with locking mechanism | 052115BLS | 1 | 2,700 | 0,016 |
| 052114B, without cable | 052114BC | 1 | 2,300 | 0,016 |
| • 052114BLS, without cable | 052114BLSC | 1 | 2,300 | 0,016 |
| • 052114B, without niche and cable | 052114BNC | 1 | 2,100 | 0,016 |
| • 052114BLS, without niche and cable | 052114BLSNC | 1 | 2,100 | 0,016 |
| • Niche | 05211410BSP | 1 | | 0,016 |

"Standard 2004" Underwater Lights.

Frame made of ABS plastic, brass screw fittings, niche in white plastic.

Complete with either 300 W/12 V PAR56 bulb with 2 x 4 mm cable of 2,5 m length or PAR56 SMD LED bulb with 2 x 0,75 mm cable of 1,5 m length. Choice of "Side" or "Bottom" cable outlet on the niche. Complete with flange, bolts and gaskets.



052118B - 051130ER

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|-------------|----------------|--------------|--------------------------|
| • Complete light, with 300W/12V PAR56 | 052118B | 1 | 2,450 | 0,016 |
| • Complete light, with 20W – 63 SMD LED | 052118BLS | 1 | 2,450 | 0,016 |
| • 052118B, with locking mechanism | 052119B | 1 | 2,700 | 0,016 |
| • 052118BLS, with locking mechanism | 052119BLS | 1 | 2,700 | 0,016 |
| 052118B, without cable | 052118BC | 1 | 2,300 | 0,016 |
| 052118BLS, without cable | 052118BLSC | 1 | 2,300 | 0,016 |
| 052118B, without niche and cable | 052118BNC | 1 | 2,100 | 0,016 |
| • 052118BLS, without niche and cable | 052118BLSNC | 1 | 2,100 | 0,016 |
| • Niche | 05211810BSP | 1 | | 0,016 |
| | | | | |





Underwater Lights for Liner Pools

"Standard 2006" Underwater Lights.

Frame, niche and niche fittings made of ABS plastic. Complete with either 300 W/12 V PAR56 bulb with 2 x 4 mm cable of 2,5 m length or PAR56 SMD LED bulb with 2 x 0,75 mm cable of 1,5 m length. Choice of "Side" or "Bottom" cable outlet on the niche. Complete with flange, bolts and gaskets. Light is fixed to the niche with 2 front screws. **Specially designed for panel type liner pools.** Complete with flange, bolts and gaskets.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------------------|----------|----------------|--------------|--------------------------|
| Complete Light | 052112 | 1 | 2,800 | 0,016 |
| Complete Light, with SMD LED | 052112LS | 1 | | |



052112 - 051130ER

"Mini 2008" Underwater Light for Concrete Pools.

For liner pools. Frame, niche and flange made of ABS plastic. Complete with halogen bulb or power LED, 2 m. cable and special locking tool.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------------------------|----------|----------------|--------------|--------------------------|
| • 50 W / 12 V | 05212B | 1 | | |
| • 7 W / 12 V White SMD 36 LED | 05212BLS | 1 | | |
| • Niche | 0521212S | 1 | | |



05212B

"Mini 2001" Underwater Light.

Heat resistant plastic body, bottom cable outlet, 2 m silicon cable. 50 W / 12 V.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-----------------------------------|----------|----------------|--------------|--------------------------|
| Slip body, plastic frame | 05112S | 4 | 2,000 | 0,007 |
| • Ditto, White SMD 36 LED | 05112SLS | 4 | | |
| • 2" threaded body, plastic frame | 05112T | 4 | 2,100 | 0,007 |
| • Ditto, White SMD 36 LED | 05112TLS | 4 | | |



05112S

Housing for Mini 2001 for Liner Pools.

For fixing the light to the pool wall. Complete with the "no-leak" cable adaptor, flange, screws and gaskets.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-----------------------|---------|----------------|--------------|--------------------------|
| Housing | 04260A | 20 | 11,800 | 0,060 |
| Ditto, brass cavities | 04260AB | 20 | 11,800 | 0,060 |



"Standart 2002" Underwater Light Colored Frame

Made of ABS. Different Color options can be adapted to all Standart 2002 Models. For Frame with "Locking Mechanism" Please the sixth digit of the code from "4" to "5". Price only includes the frame, not the complete light.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-----------------------|------------|----------------|--------------|--------------------------|
| Anthracite - RAL 7016 | 051114011A | 1 | | |
| • Beige - RAL 1015 | 051114011B | 1 | | |
| • Gray - RAL 7004 | 051114011G | 1 | | |



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Electrical Equipments_____



Technical Table For PAR56 LED Bulbs - Single Color

| Code | Description | LED Type | # of LED | Voltage (V) | AC V Power (W) | Light Intensity (lux=lm/m²) | Light Angle | Safe |
|----------|---|---------------|-------------|----------------|-------------------|--------------------------------|----------------|---------------|
| 0541101 | Slim 252 SMD LED - White | SMD | 252 | 12 | 50 | 3536 | 120° | Policarbonate |
| 0541102 | Slim 252 SMD LED - Daylight | SMD | 252 | 12 | 50 | 3536 | 120° | Policarbonate |
| 0541103 | Slim 252 SMD LED - Turquoise | SMD | 252 | 12 | 36 | 1011 | 120° | Policarbonate |
| 0541104 | Slim 252 SMD LED - Blue | SMD | 252 | 12 | 36 | 1011 | 120° | Policarbonate |
| 0541105 | Slim 252 SMD LED - Red | SMD | 252 | 12 | 36 | 1011 | 120° | Policarbonate |
| 0541106 | Slim 252 SMD LED - Green | SMD | 252 | 12 | 36 | 1011 | 120° | Policarbonate |
| 0541111 | Slim 81 SMD LED - White | SMD | 81 | 12 | 35 | 2739 | 120° | Policarbonate |
| 0541112 | Slim 81 SMD LED - Daylight | SMD | 81 | 12 | 35 | 2739 | 120° | Policarbonate |
| 0541113 | Slim 81 SMD LED - Turquoise | SMD | 81 | 12 | 30 | 1241 | 120° | Policarbonate |
| 0541114 | Slim 81 SMD LED - Blue | SMD | 81 | 12 | 30 | 1241 | 120° | Policarbonate |
| 0541115 | Slim 81 SMD LED - Red | SMD | 81 | 12 | 30 | 1241 | 120° | Policarbonate |
| 0541116 | Slim 81 SMD LED - Green | SMD | 81 | 12 | 30 | 1241 | 120° | Policarbonate |
| 051130ER | ECOSIim 72 SMD LED - White | SMD | 72 | 12 | 24 | 1614 | 120° | Policarbonate |
| 051131ER | ECOSlim 72 SMD LED - Daylight | SMD | 72 | 12 | 24 | 1614 | 120° | Policarbonate |
| 051132ER | ECOSIim 72 SMD LED - Turquoise | SMD | 72 | 12 | 20 | 671 | 120° | Policarbonate |
| 051133ER | ECOSIim 72 SMD LED - Blue | SMD | 72 | 12 | 20 | 671 | 120° | Policarbonate |
| 051134ER | ECOSlim 72 SMD LED - Red | SMD | 72 | 12 | 20 | 671 | 120° | Policarbonate |
| 051135ER | ECOSIim 72 SMD LED - Green | SMD | 72 | 12 | 20 | 671 | 120° | Policarbonate |
| 051160E | MIDI-Clicker 72 SMD LED - White | SMD | 72 | 12 | 11 | 952 | 120° | Policarbonate |
| 051161E | MIDI-Clicker 72 SMD LED - Daylight | SMD | 72 | 12 | 11 | 952 | 120° | Policarbonate |
| 051162E | MIDI-Clicker 72 SMD LED - Turquoise | SMD | 72 | 12 | 8 | 170 | 120° | Policarbonate |
| 051163E | MIDI-Clicker 72 SMD LED - Blue | SMD | 72 | 12 | 8 | 170 | 120° | Policarbonate |
| 051164E | MIDI-Clicker 72 SMD LED - Red | SMD | 72 | 12 | 8 | 170 | 120° | Policarbonate |
| 051165E | MIDI-Clicker 72 SMD LED - Green | SMD | 72 | 12 | 8 | 170 | 120° | Policarbonate |
| 051180 | MINI-Clicker 36 SMD LED - White | SMD | 36 | 12 | 7 | 508 | 120° | Policarbonate |
| 051181 | MINI-Clicker 36 SMD LED - Daylight | SMD | 36 | 12 | 7 | 508 | 120° | Policarbonate |
| 051182 | MINI-Clicker 36 SMD LED - Turquoise | SMD | 36 | 12 | 5 | 86 | 120° | Policarbonate |
| 051183 | MINI-Clicker 36 SMD LED - Blue | SMD | 36 | 12 | 5 | 86 | 120° | Policarbonate |
| 051184 | MINI-Clicker 36 SMD LED - Red | SMD | 36 | 12 | 5 | 86 | 120° | Policarbonate |
| 051185 | MINI-Clicker 36 SMD LED - Green | SMD | 36 | 12 | 5 | 86 | 120° | Policarbonate |
| 0531101 | Single color PAR56 SMD with 63 LED - White | SMD | 63 | 12 | 20 | 1404 | 120° | Policarbonate |
| 0531102 | Single color PAR56 SMD with 63 LED - Daylight | SMD | 63 | 12 | 20 | 1404 | 120° | Policarbonate |
| 0531103 | Single color PAR56 SMD with 63 LED - Turquoise | SMD | 63 | 12 | 16 | 550 | 120° | Policarbonate |
| 0531104 | Single color PAR56 SMD with 63 LED - Blue | SMD | 63 | 12 | 16 | 550 | 120° | Policarbonate |
| 0531105 | Single color PAR56 SMD with 63 LED - Red | SMD | 63 | 12 | 16 | 550 | 120° | Policarbonate |
| 0531106 | Single color PAR56 SMD with 63 LED - Green | SMD | 63 | 12 | 16 | 550 | 120° | Policarbonate |
| 0531111 | Single color PAR56 SMD with 252 LED - White | SMD 2835 | 252 | 12 | 40 | 3059 | 85° | Policarbonate |
| 0531112 | Single color PAR56 SMD with 252 LED - Daylight | SMD 2835 | 252 | 12 | 40 | 3059 | 85° | Policarbonate |
| 0531113 | Single color PAR56 SMD with 252 LED - Turquoise | SMD 2835 | 252 | 12 | 31 | 900 | 80° | Policarbonate |
| 0531114 | Single color PAR56 SMD with 252 LED - Blue | SMD 2835 | 252 | 12 | 31 | 900 | 80° | Policarbonate |
| 0531115 | Single color PAR56 SMD with 252 LED - Red | SMD 2835 | 252 | 12 | 31 | 900 | 80° | Policarbonate |
| 0531116 | Single color PAR56 SMD with 252 LED - Green | SMD 2835 | 252 | 12 | 31 | 900 | 80° | Policarbonate |
| 0532311 | Single color PAR56 with 9 OSRAM Power LED-White | OSRAM POWER | 9 | 12 | 20 | 2409 | 80° | Policarbonate |
| 0532312 | Single color PAR56 with 9 OSRAM Power LED-Daylight | OSRAM POWER | 9 | 12 | 20 | 2409 | 80° | Policarbonate |
| 0532313 | Single color PAR56 with 9 OSRAM Power LED-Turquoise | e OSRAM POWER | 9 | 12 | 23 | 893 | 80° | Policarbonate |
| 0532314 | Single color PAR56 with 9 OSRAM Power LED-Blue | OSRAM POWER | 9 | 12 | 23 | 893 | 80° | Policarbonate |
| 0532315 | Single color PAR56 with 9 OSRAM Power LED-Red | OSRAM POWER | 9 | 12 | 23 | 893 | 80° | Policarbonate |
| 0532316 | Single color PAR56 with 9 OSRAM Power LED-Green | OSRAM POWER | 9 | 12 | 23 | 893 | 80° | Policarbonate |
| 0532111 | Single color PAR56 with 18 Power LED - White | POWER | 18 | 12 | 24 | 1690 | 140° | Policarbonate |
| 0532112 | Single color PAR56 with 18 Power LED - Daylight | POWER | 18 | 12 | 24 | 1690 | 140° | Policarbonate |
| 0532113 | Single color PAR56 with 18 Power LED - Turquoise | POWER | 18 | 12 | 24 | 848 | 140° | Policarbonate |
| 0532114 | Single color PAR56 with 18 Power LED - Blue | POWER | 18 | 12 | 24 | 848 | 140° | Policarbonate |
| 0532115 | Single color PAR56 with 18 Power LED - Red | POWER | 18 | 12 | 24 | 848 | 140° | Policarbonate |
| 0532116 | Single color PAR56 with 18 Power LED - Green | POWER | 18 | 12 | 24 | 848 | 140° | Policarbonate |
| 05321111 | Single color PAR56 with 27 Power LED - White | POWER | 27 | 12 | 36 | 1038 | 140° | Policarbonate |
| 05321121 | Single color PAR56 with 27 Power LED - Daylight | POWER | 27 | 12 | 36 | 1038 | 140° | Policarbonate |
| 05321131 | Single color PAR56 with 27 Power LED - Turquoise | POWER | 27 | 12 | 36 | 1038 | 140° | Policarbonate |
| | | | | | | | | |

Technical Table For PAR56 LED Bulbs - Single Color

| Code | Description | LED Type | # of LED | Voltage (V) | AC V Power (W) | Light Intensity (lux=lm/m²) | Light Angle | Safe |
|----------|--|----------|-------------|----------------|-------------------|--------------------------------|----------------|---------------|
| 05321141 | Single color PAR56 with 27 Power LED - Blue | POWER | 27 | 12 | 36 | 1038 | 140° | Policarbonate |
| 05321151 | Single color PAR56 with 27 Power LED - Red | POWER | 27 | 12 | 36 | 1038 | 140° | Policarbonate |
| 05321161 | Single color PAR56 with 27 Power LED - Gren | POWER | 27 | 12 | 36 | 1038 | 140° | Policarbonate |
| 0532211 | Single color PAR56 with 18 Power LED - White | POWER | 18 | 24 | 46 | | 140° | Aluminium |
| 0532212 | Single color PAR56 with 18 Power LED - Daylight | POWER | 18 | 24 | 46 | | 140° | Aluminium |
| 0532213 | Single color PAR56 with 18 Power LED - Turquoise | POWER | 18 | 24 | 46 | | 140° | Aluminium |
| 0532214 | Single color PAR56 with 18 Power LED - Blue | POWER | 18 | 24 | 46 | | 140° | Aluminium |
| 0532215 | Single color PAR56 with 18 Power LED - Red | POWER | 18 | 24 | 46 | | 140° | Aluminium |
| 0532216 | Single color PAR56 with 18 Power LED - Green | POWER | 18 | 24 | 46 | | 140° | Aluminium |
| 05322111 | Single color PAR56 with 27 Power LED - White | POWER | 27 | 12 | 70 | 4225 | 140° | Aluminium |
| 05322121 | Single color PAR56 with 27 Power LED - Daylight | POWER | 27 | 12 | 70 | 4225 | 140° | Aluminium |
| 05322131 | Single color PAR56 with 27 Power LED - Turquoise | POWER | 27 | 12 | 70 | 4225 | 140° | Aluminium |
| 05322141 | Single color PAR56 with 27 Power LED - Blue | POWER | 27 | 12 | 70 | 4225 | 140° | Aluminium |
| 05322151 | Single color PAR56 with 27 Power LED - Red | POWER | 27 | 12 | 70 | 4225 | 140° | Aluminium |
| 05322161 | Single color PAR56 with 27 Power LED - Green | POWER | 27 | 12 | 70 | 4225 | 140° | Aluminium |

Technical Table For PAR56 LED Bulbs - RGB

| Code | Description | LED Type | # of LED | Voltage (V) | | Light Intensity (lux=lm/m²) | Light Angle | Safe |
|----------|--|-------------|-------------|----------------|----|--------------------------------|----------------|---------------|
| 05115301 | Slim 252 SMD LED Built-in Control | SMD | 252 | 12 | 36 | 1011 | 120° | Policarbonate |
| 05115501 | Slim 252 SMD LED Centrally Control | SMD | 252 | 12 | 36 | 1011 | 120° | Policarbonate |
| 0541201 | Slim 90 SMD LED Built-in Control | SMD | 90 | 12 | 36 | 1081 | 120° | Policarbonate |
| 0541202 | Slim 90 SMD LED Centrally Control | SMD | 90 | 12 | 36 | 1081 | 120° | Policarbonate |
| 05115601 | Slim 81 SMD LED Built-in Control | SMD | 81 | 12 | 30 | 1241 | 120° | Policarbonate |
| 05115701 | Slim 81 SMD LED Centrally Control | SMD | 81 | 12 | 30 | 1241 | 120° | Policarbonate |
| 051150ER | ECOSlim 72 SMD LED Bulbs with Built-in Control | SMD | 72 | 12 | 20 | 671 | 120° | Policarbonate |
| 051151ER | ECOSlim 72 SMD LED Bulbs with Central Control | SMD | 72 | 12 | 20 | 671 | 120° | Policarbonate |
| 051236 | MAXI-Clicker 72 SMD LED Bulbs with Built-in Control | SMD | 72 | 12 | 30 | 774 | 120° | Policarbonate |
| 051237 | MAXI-Clicker 72 SMD LED Bulbs with Central Control | SMD | 72 | 12 | 30 | 774 | 120° | Policarbonate |
| 0512361 | MAXI-Clicker 72 SMD LED Bulbs with Built-in Control | SMD | 72 | 12 | 20 | 671 | 120° | Policarbonate |
| 0512371 | MAXI-Clicker 72 SMD LED Bulbs with Central Control | SMD | 72 | 12 | 20 | 671 | 120° | Policarbonate |
| 0532523 | MIDI-Clicker 72 SMD LED Bulbs with Built-in Control | SMD | 72 | 12 | 8 | 170 | 120° | Policarbonate |
| 0532524 | MIDI-Clicker 72 SMD LED Bulbs with Central Control | SMD | 72 | 12 | 8 | 170 | 120° | Policarbonate |
| 0532631 | MINI-Clicker 36 SMD LED Bulbs with Built-in Control | SMD | 36 | 12 | 5 | 86 | 120° | Policarbonate |
| 0532622 | MINI-Clicker 36 SMD LED Bulbs with Central Control | SMD | 36 | 12 | 5 | 86 | 120° | Policarbonate |
| 0531201 | RGB PAR56 SMD with 54 LED - Built-in Control System | SMD | 54 | 12 | 16 | 550 | 120° | Policarbonate |
| 0531202 | RGB PAR56 SMD with 54 LED - Central Control System | SMD | 54 | 12 | 16 | 550 | 120° | Policarbonate |
| 0531211 | RGB PAR56 SMD with 252 LED - Built-in Control System | SMD | 252 | 12 | 31 | 900 | 120° | Policarbonate |
| 0531212 | RGB PAR56 SMD with 252 LED - Central Control System | SMD | 252 | 12 | 31 | 900 | 120° | Policarbonate |
| 0532321 | PAR56 9 OSRAM Power LED Centrally Control | OSRAM POWER | 9 | 12 | 23 | 893 | 80° | Policarbonate |
| 0532322 | PAR56 9 OSRAM Power LED Built-in Control | OSRAM POWER | 9 | 12 | 23 | 893 | 80° | Policarbonate |
| 0532121 | PAR56 18 Power LED Bulbs with Built-in Control | POWER | 18 | 12 | 24 | 848 | 140° | Policarbonate |
| 0532721 | PAR56 18 Power LED'li Bulbs with Central Control | POWER | 18 | 12 | 24 | 848 | 140° | Policarbonate |
| 0532221 | PAR56 with 18 Power LED - Built-in Control System with Alu. Body | POWER | 18 | 12 | 46 | 2226 | 140° | Aluminium |
| 0532222 | PAR56 with 18 Power LED - Central Control System with Alu. Body | POWER | 18 | 12 | 46 | 2226 | 140° | Aluminium |
| 0532122 | PAR56 27 Power LED Bulbs with Built-in Control | POWER | 27 | 12 | 36 | 1038 | 140° | Policarbonate |
| 0532722 | PAR56 27 Power LED Bulbs with Central Control | POWER | 27 | 12 | 36 | 1038 | 140° | Policarbonate |
| 0532123 | RGBW PAR56 30 LED Built-in Control | POWER | 30 | 12 | 31 | 1779 | 120° | Policarbonate |
| 0532223 | RGBW PAR56 with 30 Power LED - Central Control System | POWER | 30 | 12 | 31 | 1779 | 120° | Policarbonate |
| 0532223 | RGB PAR56 with 27 Power LED - Built-in Control System with Alu. Body | POWER | 27 | 12 | 70 | 4225 | 140° | Aluminium |
| 0532224 | RGB PAR56 with 27 Power LED - Central Control System with Alu. Body | POWER | 27 | 12 | 70 | 4225 | 140° | Aluminium |
| 0532226 | RGBW PAR56 with 30 Power LED - Built-in Control System | POWER | 30 | 12 | 50 | 2525 | 120° | Policarbonate |
| 0532227 | RGBW PAR56 with 30 Power LED - Central Control System | POWER | 30 | 12 | 50 | 2525 | 120° | Policarbonate |



SlimLED Bulbs for PAR56 Replacement - Single Color





120° Light Spectrum



"SlimLED" Underwater Light Bulb - Replacement - Single Color.

Embedded into special transparent silicone, polycarbonate light body with 252 LED, 2 x 1,5 cable of 2,5 m length 120° IP68. Complete with adapter set.

2 years leakage warranty. Can be used for the replacement of any existing PAR56 bulb on the market. 50.000 hours of life.

| "SLIMLED" BULBS | | | | | | | | | | |
|-----------------|-------------|-------------------------|--|----------------|--|--|--|--|--|--|
| Color | # of LED | AC 12 V Power (W) | Light Intensity (lux=lm/m ²) | Light Angle | | | | | | |
| White | 252 | 50 | 3536 | 120° | | | | | | |
| Daylight | 252 | 50 | 3536 | 120° | | | | | | |
| Turquoise | 252 | 36 | 1011 | 120° | | | | | | |
| Blue | 252 | 36 | 1011 | 120° | | | | | | |
| Red | 252 | 36 | 1011 | 120° | | | | | | |
| Green | 252 | 36 | 1011 | 120° | | | | | | |

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|---------|----------------|--------------|--------------------------|
| • White | 0541101 | 1 | | |
| Daylight | 0541102 | 1 | | |
| • Turquoise | 0541103 | 1 | | |
| • Blue | 0541104 | 1 | | |
| • Red | 0541105 | 1 | | |
| • Green | 0541106 | 1 | | |





"SlimLED" Underwater Light Bulb - Replacement - Single Color.

Embedded into special transparent silicone, polycarbonate light body with 81 LED, 2 x 1,5 cable of 2,5 m length 120° IP68. Complete with adapter set. **2 years leakage warranty**. Can be used for the replacement of any existing PAR56 bulb on the market. 50.000 hours of life.

| "SLIMLED" BULBS | | | | | | | | | |
|-----------------|-------------|-------------------------|-----------------------------------|----------------|--|--|--|--|--|
| Color | # of LED | AC 12 V Power (W) | Light Intensity (lux=lm/m²) | Light Angle | | | | | |
| White | 81 | 35 | 2739 | 120° | | | | | |
| Daylight | 81 | 35 | 2739 | 120° | | | | | |
| Turquoise | 81 | 30 | 1241 | 120° | | | | | |
| Blue | 81 | 30 | 1241 | 120° | | | | | |
| Red | 81 | 30 | 1241 | 120° | | | | | |
| Green | 81 | 30 | 1241 | 120° | | | | | |

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------------------------|---------|----------------|--------------|--------------------------|
| • White | 0541111 | 1 | | |
| Daylight | 0541112 | 1 | | |
| Turquoise | 0541113 | 1 | | |
| • Blue | 0541114 | 1 | | |
| • Red | 0541115 | 1 | | |
| • Green | 0541116 | 1 | | |







"New Generation"

120° Light Spectrum

ECOSlimLED Bulbs for PAR56 Replacement - Single Color

"ECOSImLED" Underwater Light Bulb - Replacement - Single Color.

Polycarbonate light body complete with 72 SMD LED, epoxy PCB.

2 x 0,75 cable of 1,5 m length 120° IP68. Complete with adapter set. Can be used for the replacement of any existing PAR56 bulb on the market. 50.000 hours of life.



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------------------|----------|----------------|--------------|--------------------------|
| • White | 051130ER | 1 | | |
| Daylight | 051131ER | 1 | | |
| • Turquoise | 051132ER | 1 | | |
| • Blue | 051133ER | 1 | | |
| • Red | 051134ER | 1 | | |
| • Green | 051135ER | 1 | | |

| "ECOSLIMLED" BULBS | | | | | |
|--------------------|-------------|-------------------------|-----------------------------------|----------------|--|
| Color | # of LED | AC 12 V Power (W) | Light Intensity (lux=lm/m²) | Light Angle | |
| White | 72 | 24 | 1614 | 120° | |
| Daylight | 72 | 24 | 1614 | 120° | |
| Turquoise | 72 | 20 | 671 | 120° | |
| Blue | 72 | 20 | 671 | 120° | |
| Red | 72 | 20 | 671 | 120° | |
| Green | 72 | 20 | 671 | 120° | |

PAR56 LED Bulbs - Single Color - with SMD LED

120° Light Spectrum

Single Color PAR56 with 63 SMD LED - 120°.

Polycarbonate body, AC-DC 11-14 V. 50.000 hours long life.



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------------------|---------|----------------|--------------|--------------------------|
| • White | 0531101 | 1 | | |
| Daylight | 0531102 | 1 | | |
| • Turquoise | 0531103 | 1 | | |
| • Blue | 0531104 | 1 | | |
| • Red | 0531105 | 1 | | |
| • Green | 0531106 | 1 | | |

| 63 "SMD" LED BULBS | | | | | |
|--------------------|-------------|-------------------------|-----------------------------------|----------------|--|
| Color | # of LED | AC 12 V Power (W) | Light Intensity (lux=lm/m²) | Light Angle | |
| White | 63 | 20 | 1511 | 120° | |
| Daylight | 63 | 20 | 1511 | 120° | |
| Turquoise | 63 | 16 | 550 | 120° | |
| Blue | 63 | 16 | 550 | 120° | |
| Red | 63 | 16 | 550 | 120° | |
| Green | 63 | 16 | 550 | 120° | |

Single Color PAR56 with 252, SMD LED - 120°.

Polycarbonate body, AC-DC 11-14 V. 50.000 hours long life.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------------------|---------|----------------|--------------|--------------------------|
| • White | 0531111 | 1 | | |
| Daylight | 0531112 | 1 | | |
| • Turquoise | 0531113 | 1 | | |
| • Blue | 0531114 | 1 | | |
| • Red | 0531115 | 1 | | |
| • Green | 0531116 | 1 | | |

| | 252 "SMD" LED BULBS | | | | | |
|-----------|---------------------|-------------------------|--|----------------|--|--|
| Color | # of LED | AC 12 V Power (W) | Light Intensity (lux=lm/m ²) | Light Angle | | |
| White | 252 | 40 | 3059 | 120° | | |
| Daylight | 252 | 40 | 3059 | 120° | | |
| Turquoise | 252 | 31 | 900 | 120° | | |
| Blue | 252 | 31 | 900 | 120° | | |
| Red | 252 | 31 | 900 | 120° | | |
| Green | 252 | 31 | 900 | 120° | | |

Note: Bulbs with "Flat Transparent Glass" fronts are available, please add F to the end of the above product codes.



PAR56 LED Bulbs -Single Color - With OSRAM LED



OSRAM Single Color PAR56 9 Power LED Bulb.

Polycarbonate body, AC-DC 11-14 V. 50.000 hours long life. All bulb circuits have heat sensitive **Automatic Current Control** to ensure long life.



80° Light Spectrum

| 9 PAR56 "POWER" LED BULBS | | | | | |
|---------------------------|-------------|-------------------------|--|----------------|--|
| Color | # of LED | AC 12 V Power (W) | Light Intensity (lux=lm/m ²) | Light Angle | |
| White | 9 | 20 | 1936 | 80° | |
| Daylight | 9 | 20 | 1936 | 80° | |
| Turquoise | 9 | 23 | 893 | 80° | |
| Blue | 9 | 23 | 893 | 80° | |
| Red | 9 | 23 | 893 | 80° | |
| | 9 | 23 | 893 | 80° | |

| Description | Code | Pieces/ Weight Volume box Kg m ³ |
|------------------------------|---------|--|
| • White | 0532311 | 1 |
| Daylight | 0532312 | 1 |
| • Turquoise | 0532313 | 1 |
| • Blue | 0532314 | 1 |
| • Red | 0532315 | 1 |
| • Green | 0532316 | 1 |

PAR56 LED Bulbs -Single Color - With Power LED





Single Color PAR56 Lamp with 18 Power LED.

Polycarbonate body, AC-DC 11-14V. 50.000 hours - long life. To ensure longer life, all the light circuits has heat sensitive **Automatic Current Control**.



140° Light Spectrum



| 18 PAR56 "POWER" LED BULBS | | | | | |
|----------------------------|-------------|-------------------------|--|----------------|--|
| Color | # of LED | AC 12 V Power (W) | Light Intensity (lux=lm/m ²) | Light Angle | |
| White | 18 | 24 | 1690 | 140° | |
| Daylight | 18 | 24 | 1690 | 140° | |
| Turquoise | 18 | 24 | 848 | 140° | |
| Blue | 18 | 24 | 848 | 140° | |
| Red | 18 | 24 | 848 | 140° | |
| Green | 18 | 24 | 848 | 140° | |

| Description | Code | Pieces/ Weight Volume box Kg m³ |
|------------------------------|---------|------------------------------------|
| • White | 0532111 | 1 |
| Daylight | 0532112 | 1 |
| • Turquoise | 0532113 | 1 |
| • Blue | 0532114 | 1 |
| • Red | 0532115 | 1 |
| Green | 0532116 | 1 |

PAR56 LED Bulbs - Single Color - With Power LED

Single color PAR56 with 27 Power LED Bulb.

Polycarbonate body, AC-DC 11-14V. 50.000 hours-long life. To ensure longer life, all the light circuits has heat sensitive **Automatic Current Control**.









 $(\epsilon$

| Description | Code | Pieces/ Weight Volume box Kg m ³ |
|------------------------------|----------|--|
| • White | 05321111 | 1 |
| Daylight | 05321121 | 1 |
| • Turquoise | 05321131 | 1 |
| • Blue | 05321141 | 1 |
| • Red | 05321151 | 1 |
| • Green | 05321161 | 1 |

| 27 P | 27 PAR56 "POWER" LED BULBS | | | | |
|-----------|----------------------------|-------------------------|--|----------------|--|
| Color | # of LED | AC 12 V Power (W) | Light Intensity (lux=lm/m ²) | Light Angle | |
| White | 27 | 36 | 1038 | 140° | |
| Daylight | 27 | 36 | 1038 | 140° | |
| Turquoise | 27 | 36 | 1038 | 140° | |
| Blue | 27 | 36 | 1038 | 140° | |
| Red | 27 | 36 | 1038 | 140° | |
| Green | 27 | 36 | 1038 | 140° | |

Single color PAR56 with 27 Power LED Bulb.

Polycarbonate glass - **Aluminum injection body**, AC-DC 22-26V. 50.000 hours-long life. To ensure longer life, all the light circuits has heat sensitive **Automatic Current Control**.







| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------------------------|----------|----------------|--------------|--------------------------|
| • White | 05322111 | 1 | | |
| Daylight | 05322121 | 1 | | |
| Turquoise | 05322131 | 1 | | |
| • Blue | 05322141 | 1 | | |
| • Red | 05322151 | 1 | | |
| • Green | 05322161 | 1 | | |

| 27 PAR56 "POWER" LED BULBS | | | | | | |
|----------------------------|-------------|-------------------------|-----------------------------------|----------------|--|--|
| Color | # of LED | AC 24 V Power (W) | Light Intensity (lux=lm/m²) | Light Angle | | |
| White | 27 | 70 | 4225 | 140° | | |
| Daylight | 27 | 70 | 4225 | 140° | | |
| Turquoise | 27 | 70 | 4225 | 140° | | |
| Blue | 27 | 70 | 4225 | 140° | | |
| Red | 27 | 70 | 4225 | 140° | | |
| Green | 27 | 70 | 4225 | 140° | | |



PAR38 LED Bulbs - Single Color - With SMD LED



Single Color 72 SMD LED bulb. Polycarbonate body, AC-DC 11-14V.



30° Light Spectrum Automatic Current Control

| 63 "SMD" LED BULBS | | | | | | |
|--------------------|-------------|-------------------------|-----------------------------------|----------------|--|--|
| Color | # of LED | AC 12 V Power (W) | Light Intensity (lux=lm/m²) | Light Angle | | |
| White | 72 | 11 | 952 | 30° | | |
| Daylight | 72 | 11 | 952 | 30° | | |
| Turquoise | 72 | 8 | 170 | 30° | | |
| Blue | 72 | 8 | 170 | 30° | | |
| Red | 72 | 8 | 170 | 30° | | |
| Green | 72 | 8 | 170 | 30° | | |

| Description | Code | Pieces/ Weight Volume box Kg m ³ |
|------------------------------|---------|--|
| • White | 0532711 | 1 |
| Daylight | 0532712 | 1 |
| • Turquoise | 0532713 | 1 |
| • Blue | 0532714 | 1 |
| • Red | 0532715 | 1 |
| • Green | 0532716 | 1 |

Mini LED Bulbs - Single Color - With SMD LED



Single Color 36 SMD LED Lights.

AC-DC 11-14V. Bare Circuit Bulb. 50,000 hours-long life.



90° Light Spectrum

| 36 "SMD" LED BULBS | | | | | | |
|--------------------|-------------|-------------------------|--|----------------|--|--|
| Color | # of LED | AC 12 V Power (W) | Light Intensity (lux=lm/m ²) | Light Angle | | |
| White | 36 | 7 | 298 | 140° | | |
| Daylight | 36 | 7 | 298 | 140° | | |
| Turquoise | 36 | 6 | 75 | 140° | | |
| Blue | 36 | 6 | 75 | 140° | | |
| Red | 36 | 6 | 75 | 140° | | |
| Green | 36 | 6 | 75 | 140° | | |

| Description | Code | Pieces/ Weight Volume box Kg m³ |
|------------------------------|---------|------------------------------------|
| • White | 0532822 | 1 |
| Daylight | 0532821 | 1 |
| • Turquoise | 0532824 | 1 |
| • Blue | 0532823 | 1 |
| • Red | 0532825 | 1 |
| • Green | 0532826 | 1 |

Underwater STRIP LED Lights - IP68





Single Color LED Strip Lighting.

12 V strip IP68 LED 12 W. Width 10 mm, Thickness 5 mm. Standard roll Length is 5 m. Price below is per metre. Special sealed cable connection possible.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|-----------|----------------|--------------|--------------------------|
| White - price per meter | 0534111 | | | |
| Daylight - price per meter | 0534112 | | | |
| Blue - price per meter | 0534113 | | | |
| RGB - price per meter | 0534121 | | | |
| Aluminium Mounting Strip, w/opaque cover | 0534111C | | | |
| Aluminium Mounting Strip, cap | 0534111CC | | | |

Note: LED Strip Light can be pre-assembled into the overflow channel profile. Please ask for price.



SlimLED Bulbs for PAR56 Replacement - RGB

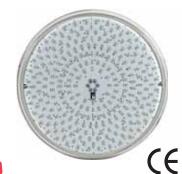
"SlimLED" Underwater Light Bulb - Replacement Kit - RGB changing Color.

Polycarbonate light body with a choice of LED quantities and powers embedded into a special transparent silicone. Complete with 2 x 1,5 mm cable of 2,5 m length and adapter set. 120° - IP68. For built in PCB models there are 13 different lighting patterns. For central PCB models there are 16 different lighting patterns. Lighting patterns are changed by remote control (optional). **2 years leakage warranty.** The light can be used as a replacement bulb for LED conversion of all

PAR56 products available on the market.

50,000 hours life.

120° Light Spectrum



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|----------|----------------|--------------|--------------------------|
| • 252 Built-in Control replacement kit | 05115301 | 1 | | |
| • 252 Central Control replacement kit | 05115501 | 1 | | |
| • 90 Built-in Control replacement kit | 0541201 | 1 | | |
| • 90 Central Control replacement kit | 0541202 | 1 | | |
| 81 Built-in Control replacement kit | 05115601 | 1 | | |
| 81 Central Control replacement kit | 05115701 | 1 | | |

| "SLIMLED" BULBS | | | | | |
|-----------------|-------------|--------------------|--|----------------|--|
| Color | # of LED | AC Power (W) | Light Intensity (lux=lm/m ²) | Light Angle | |
| RGB B.I. | 252 | 36 | 1011 | 120° | |
| RGB C.I. | 252 | 36 | 1011 | 120° | |
| RGB B.I. | 90 | 36 | 1081 | 120° | |
| RGB C.I. | 90 | 36 | 1081 | 120° | |
| RGB B.I. | 81 | 30 | 1241 | 120° | |
| RGB C.I. | 81 | 30 | 1241 | 120° | |

"New Generation"

"ECOSlimLED" Bulbs for PAR56 Replacement Kit - RGB

"ECOSlimLED" Underwater Light Bulb - Replacement Kit - RGB changing Color.

Complete with 72 SMD LEDs: Polycarbonate light body, epoxy PCB and 2 x 0,75 mm cable of 1,5 m length and adapter kit. 120° - IP68. For built in PCB models there are 13 different lighting patterns. For central PCB models there are 16 different lighting patterns. Lighting patterns are changed by remote control (optional). The light can be used as a replacement bulb for LED conversion of all PAR56 products available on the market.

120° Light Spectrum



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|------------|----------------|--------------|--------------------------|
| • 72 Built-in Control replacement kit | 051150ER | 1 | | |
| • 72 Central Control replacement kit | 051151ER | 1 | | |
| 72 Self Control replacement kit | 051150ERSC | 1 | | |

| "ECOSLIMLED" BULBS | | | | | |
|---|----|----|-----|------|--|
| Color # AC Light Light of LED Power (W) (lux=lm/m²) | | | | | |
| RGB B.I. | 72 | 20 | 671 | 120° | |
| RGB C.I. | 72 | 20 | 671 | 120° | |
| RGB S.C. | 72 | 20 | 671 | 120° | |





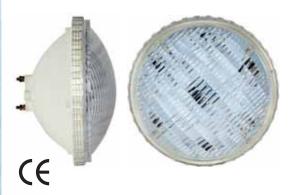






PAR56 LED Bulbs - RGB - With SMD LED





Rainbow PAR56 LED bulb.

Polycarbonate body. For built-in PCB models RGB 13, for central PCB models RGB 16 different lighting patterns. Changing programs with switch on and off. For built-in control bulbs two-core cable infrastructure and for central PCB bulbs four-core or twocore cable infrastructure together with a central control pannel is required. It is recommended to use central control models to avoid syncronization problems in systems with more than 10 lamps, 50.000 hours long life. To ensure longer life, all the light circuits has heat sensitive **Automatic Current Control**.

| PAR56 "SMD" LED BULBS | | | | | |
|---|----|----|-----|------|--|
| Color # AC Light Light of LED Power Intensity Angle (W) (lux=lm/m²) | | | | | |
| RGB B.I. | 63 | 16 | 550 | 120° | |
| RGB C.I. | 63 | 16 | 550 | 120° | |

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------------------------|---------|----------------|--------------|--------------------------|
| • Rainbow 63 Built in Control | 0531201 | 1 | | |
| • Rainbow 63 Central Control | 0531202 | 1 | | |



120° Light Spectrum

Rainbow PAR56 LED bulb. Polycarbonate body. For built-in PCB models RGB 13, for central PCB models RGB 16 different lighting patterns. Changing programs with switch on and off. For built-in control bulbs two-core cable infrastructure and for central PCB bulbs four-core or twocore cable infrastructure together with a central control panel is required. It is recommended to use central control models to avoid syncronization problems in systems with more than 10 lamps, 50.000 hours long life. Self RCU control models has a built in PCB system with inside remote control reciever. With one remote, max 6 lights can work with synchronization. Remote control i not included in price of the bulb. To ensure longer life, all the light circuits has heat sensitive Automatic Current Control.

| PAR56 "SMD" LED BULBS | | | | |
|-----------------------|-------------|--------------------|--|----------------|
| Color | # of LED | AC Power (W) | Light Intensity (lux=lm/m ²) | Light Angle |
| RGB B.I. | 252 | 31 | 900 | 120° |
| RGB S.C. | 252 | 31 | 454 | 120° |
| RGB C.I. | 252 | 31 | 900 | 120° |

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------------------------------|-----------|----------------|--------------|--------------------------|
| Rainbow 252 Built in Control | 0531211 | 1 | | |
| Rainbow 252 Self RCU Controlled | 0531211SC | 1 | | |
| Rainbow 252 Central Control | 0531212 | 1 | | |

Note: Bulbs with "Flat Transparent Glass" fronts are available, please add F to the end of the above product codes.



PAR56 LED Bulbs - RGB - Power LED

80° Light Spectrum

Rainbow PAR56 LED bulb.

Polycarbonate body. For built-in PCB models RGB 13, for central PCB models RGB 16 different lighting patterns. Changing programs with switch on and off. For built-in control bulbs two-core cable infrastructure and for central PCB bulbs four-core or twocore cable infrastructure together with a central control pannel is required. It is recommended to use central control models to avoid syncronization problems in systems with more than 10 lamps, 50.000 hours long life. To ensure longer life, all the light circuits has heat sensitive **Automatic Current Control**.





| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|---------|----------------|--------------|--------------------------|
| Rainbow 9 Built-in Control | 0532322 | 1 | | |
| Rainbow 9 Central Control | 0532321 | 1 | | |

| PAR56 "POWER" LED BULBS | | | | | |
|-------------------------|-------------|--------------------|-----------------------------------|----------------|--|
| Color | # of LED | AC Power (W) | Light Intensity (lux=lm/m²) | Light Angle | |
| RGB B.I. | 9 | 23 | 893 | 80° | |
| RGB C.I. | 9 | 23 | 893 | 80° | |

Note: Bulbs with "Flat Transparent Glass" fronts are available, please add F to the end of the above product codes.

140° Light Spectrum

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-----------------------------|---------|----------------|--------------|--------------------------|
| Rainbow 18 Built in Control | 0532121 | 1 | | |
| Rainbow 18 Central Control | 0532721 | 1 | | |



| PAR56 "POWER" LED BULBS | | | | | |
|-------------------------|-------------|--------------------|--|----------------|--|
| Color | # of LED | AC Power (W) | Light Intensity (lux=lm/m ²) | Light Angle | |
| RGB B.I. | 18 | 24 | 848 | 140° | |
| RGB C.I. | 18 | 24 | 848 | 140° | |

140° Light Spectrum

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|---------|----------------|--------------|--------------------------|
| Rainbow 27 Built in Control | 0532122 | 1 | | |
| Rainbow 27 Central Control | 0532722 | 1 | | |
| • Rainbow 27 Built in Control - Alu. Body | 0532223 | 1 | | |
| • Rainbow 27 Central Control - Alu. Body | 0532224 | 1 | | |
| | 0532224 | 1 | | |

Note: Bulbs with "Flat Transparent Glass" fronts are available, please add F to the end of the above product codes.



| PAR56 "POWER" LED BULBS | | | | | |
|-------------------------|-------------|--------------------|--|----------------|--|
| Color | # of LED | AC Power (W) | Light Intensity (lux=lm/m ²) | Light Angle | |
| RGB B.I. | 27 | 36 | 1038 | 140° | |
| RGB C.I. | 27 | 36 | 1038 | 140° | |
| RGB B.I. | 27 | 70 | 4225 | 140° | |
| RGB C.I. | 27 | 70 | 4225 | 140° | |



PAR 56 LED BULBS - RGB Single and Multi Color with

Brand New Concept.





White and RGB together

Rainbow 30 and Rainbow 50 PAR 56 LED Bulb - 140°.

Made of 18 RGB plus12 white led. The Light can work not only with RGB led programs, but also with only white led lights. It also has an option to light the white leds, with RGB leds all together. In this case, the white light intensity can be maximized. Polycarbonate body. In Built-in PCB system, it is RGB 13+1 white, in Central PCB system, it is RGB 16+1 white different light patterns. On-off, enables changing the program. For built-in PCB systems 2 core cable, for Central PCB systems 4 core cable and central control panels are required. When there is more than 10 LED Bulbs, not to have problems in synchronisation during long hours of working, Central PCB Systems model should be chosen. To ensure longer life, all light circuits have heat sensitive **Automatic Current Control**. Light specificatioms on the table are with RGB and white leds working at the same time.

| PAR56 "POWER" LED BULBS | | | | |
|-------------------------|-------------|--------------------|-----------------------------------|----------------|
| Color | # of LED | AC Power (W) | Light Intensity (lux=lm/m²) | Light Angle |
| RGBW B.I. | 30 | 31 | 1779 | 140° |
| RGBW B.I. | 30 | 50 | 2525 | 140° |

| Built in Control System Led Bulbs | | | | |
|-----------------------------------|---------|----------------|--------------|--------------------------|
| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
| • Rainbow 30 | 0532123 | 1 | | |
| • Rainbow 50 - Aluminium Body | 0532226 | 1 | | |

Power LED Bulb Lens



Power LED Lenses.



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|---------|----------------|--------------|--------------------------|
| • 30° Lens | 0532001 | 1 | | |
| • 45° Lens | 0532002 | 1 | | |
| • 60° Lens | 0532003 | 1 | | |

PAR38 LED Bulbs - RGB - SMD LED





120° Light Spectrum

Rainbow PAR38 72 SMD LED Bulb.

Polycarbonate body, RGB 16 different light alternatives, changing programmes with switch on and off.

50.000 hours long life. To ensure longer life, all the light circuits have heat sensitive **Automatic Current Control**.

| 72 | PAR38 | "SMD" LE | D BULBS | |
|----------|-------------|-------------------------|-----------------------------------|----------------|
| Color | # of LED | AC 12 V Power (W) | Light Intensity (lux=lm/m²) | Light Angle |
| RGB B.I. | 72 | 8 | 316 | 120° |
| RGB C.I. | 72 | 8 | 316 | 120° |

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------------------|---------|----------------|--------------|--------------------------|
| • Built-in control - 8 W | 0532523 | 1 | | |
| Central control - 8 W | 0532524 | 1 | | |

Mini LED - RGB - SMD LED 120° Light Spectrum

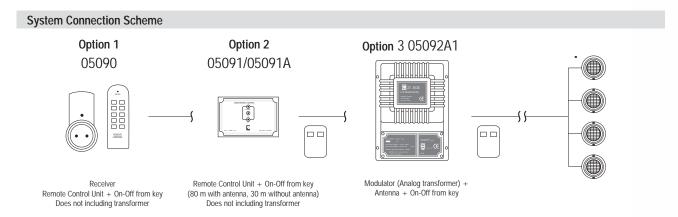
Rainbow 36 SMD LED bulbs. Different RGB light modes, AC-DC 11-14V. (Central control panel is obligatory for applications with multiple bulbs.)

| 3 | 6 "SME | " LED AMI | PULLER | |
|----------|--------|-------------------------|--|----------------|
| Color | of LED | AC 12 V Power (W) | Light Intensity (lux=lm/m ²) | Light Angle |
| RGB B.I. | 36 | 6 | 75 | 120° |
| RGB C.I. | 36 | 6 | 75 | 120° |

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------------|---------|----------------|--------------|--------------------------|
| Built-in control - 6 W | 0532631 | 1 | | |
| Central control - 6 W | 0532622 | 1 | | |

Single Color LED Bulbs - Control Systems

Single color LED lights used in swimming pools can be controlled with remote control systems. The control devices in question are divided into 2 main groups, with and without transformer. Transformer receivers (Modulator) can be analog or electronic transformers. Transformers are inside the antenna receiver unit. In cases where the capacity is not enough, the increase in capacity can be achieved with the help of additional transformers. There is an analog transformer control system on our list. An electronic transformer system can be made upon request.



Single Color Bulb Control Panels and Remote Controls

"Modulator for Single Color LED Light" complete with 220 V input, 12 V output, radio wave-antenna remote control receiver, 200 W analog transformer and 2 key remote control switch. It can be connected in parallel with the conventional transformer for added power. It is installed with two-core cable.

| Description | Code | Pieces/ Weight Volume box Kg m ³ |
|--------------------------------------|---------|--|
| Modulator for Single Color LED Light | 05092A1 | 1 |



REMOTE CONTROL DEVICES FOR SINGLE COLOR LED LIGHTS

Remote Control. Used for LED lights with built-in PCB. Changes the program of a group of light easily by switching on and off, without going to the engine room. The reach of the model is 30 m without the antenna and 80 m with antenna. Power capacity for all of the models is 1,1 kW.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|-------------------|----------------|--------------|--------------------------|
| • Receiver with the plug + remote control key | 05090 | 1 | 0,200 | |
| • In-line receiver + remote control key | 05091 | 1 | | |
| • 05091, with antenna | 05091A | 1 | | |
| Remote Control Unit | 05091AY01 | 1 | | |
| • Two Terminal Panel 2 with 4 button Remote Control | ol 05092A3 | 1 | | |
| 05092A3's Panel Type | 05092A3P | 1 | | |







05091AY01



RGB LED Bulbs - Control Systems



05073231

techniques. The basic difference between the lights is the method it uses to control the light changes and the harmony in the light attractions. This control can be maintained separately for every light by an integrated PCB (printed circuit board) as in built-in PCB models. Alternatively, there can be a central PCB installed in a central control panel, to regulate all the lights centrally. Central PCB models are the definite solution to the synchronization problems that occur

in multi-light systems (>10 lamps) in long time operation. Hence they are recommended in multi-light systems. These kind of control panels are suitable for a limited number of lights. For larger quantities, adequate number of satellite panels should be installed.

LED lights with changing RGB colors and light attractions can be installed with different

Changing the light program of the lights is realized by switching the system on and off with a remote control. Before doing this, the system should be operating for at least 1-2 minutes. In lights with built-in PCB, all the lights are tied to a plug with remote control receiver

- (1) or a board with a receiver
- (2). These receivers make sure that the light program has changed for all the lights by switching them on and off with the command from the remote control. As the distances between the PCBs in the lights and the receiver are different, synchronization problem may occur in operations longer than 2 hours. In case of this problem, the system should be switched off, and be switched on again after 7-13 seconds. After this, all lights continue working simultaneously with the same program. There is also a special board
- (3) that facilitates this synchronization. This board also has a remote control and receiver, and can control back and forth movement between light programs. An external timer can also be installed in this panel.

In central PCB systems receiver is installed within the board and controls a single central PCB. In this systems, the synchronization of the light programs never spoil.



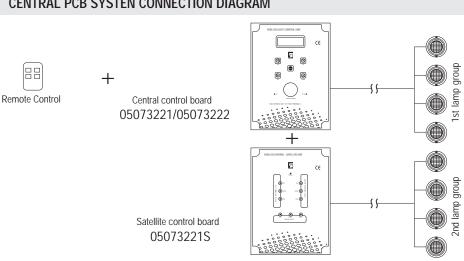
05073221

BUILT-IN PCB SYSTEM CONNECTION DIAGRAM Option 2 Option 3 05073231 Option 1 05090 05091/05091A 70 日日 (1) Receiver with plug and remote control + Remote Control + Remote control + syncronization changing programs with the remove changing programs on the board + changing programs with (with antenna 80 m - without antenna 30 m) note control + external timer connection

CENTRAL PCB SYSTEN CONNECTION DIAGRAM



05073221S



RGB LED Lights Control Panels and Remote Control Devices

Light Modulator for RGB Color and Single Color Led Lights. Complete with 220 V input, 12 V output, radio remote control receiver, antenna and 4-key remote-control switch. Synchronization with one button, on-off button, reset button, program change buttons via control switch. It is a 200 W Analog Transformer, it can be connected in parallel with a conventional transformer for additional power. Installed with two-core cable.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|------------|----------------|--------------|--------------------------|
| • LED Modulator, for RGB LED | 05092A | 1 | | |
| • 4- Button Remote Control, for RGB LED | 05092A3Y01 | 1 | | |



Built-in Two-terminal Light modulators for RGB changing Color LED.

Complete with 220 V input-output, radio remote control receiver, antenna and 4-button remote control. Synchronization with a single button on the panel and the remote control (Panel 1) or only on the remote control (Panel 2). On-Off button, reset button, program change buttons. Connections for an external timer. Installed with two-core cable. There is no Transformer on the panel, can be installed with analog or electronic transformers (= Satellite Panel).

| Description | Code | Pieces/ box | Weight Kg | |
|---|----------|----------------|--------------|--|
| • Two Terminal Panel 1 with 4 button Remote Control | 05073231 | 1 | | |
| • Two Terminal Panel 2 with 4 button Remote Control | 05092A3 | 1 | | |
| 05092A3's Panel Type | 05092A3P | 1 | | |







Central Control Panel with Four Terminals for RGB LED Bulbs:

LED light control panel complete with 200 V inlet / 12 V outlet, **200 W electronic transformer**, remote control and radio wave receiver. Central control with 16 different light programs. Connections for external timer. **To be established with four core cable infrastructure**.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|-----------|----------------|--------------|--------------------------|
| Board I with four terminals | 05073221 | 1 | | |
| • Satellite board*, for four terminals | 05073221S | 1 | | |

^{*} Electronic transformer.







Transformers - 230/12V



300 W / 230 - 12 V Outlet Transformer.

Housing made of heat resistant plastic. Gasket sealed lid. Input with glass fuse, outlet with special connection terminal. Complete with hardware necessary for fixing on the wall. Winding is completely sealed in polyurethane for humid rooms. IP65.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| | 05073 | 1 | 4,000 | 0,003 |

100 W / 230 - 12 V outlet. Plastic housing, polyurethane isolation.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| IP65 | 05067 | 1 | | 0,007 |

50 W / 220 - 12 V outlet.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| | 05069 | | | |

300 W / 230 - 12 V Outlet. Housing made of resistant plastic. 220 V input with glass fuse.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------------------------------|--------|----------------|--------------|--------------------------|
| • IP20 | 05074 | 1 | 5,050 | 0,007 |
| • Ditto, w/polyester isolation, IP65 | 05074P | 1 | 6,250 | 0,007 |
| • 400 W / 230 - 12 V Outlet | 05078P | 1 | | |



2 X 300 W = 600 W / 230 - 12 V Outlet.

Housing made of heat resistant plastic. Two 300 W/12 V underwater lamp can be connected.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-----------------------------|-------|----------------|--------------|--------------------------|
| IP65, w/polyester isolation | 05063 | 1 | 7,200 | 0,008 |

300 W / 230 - 13-14-15-16 V with cascade output. (No load through transformer).

Housing made of heat resistant durable plastic. Connection compartment has a sealed cover. Outlet with special connection terminals, 230 V input with glass fuse. Supplied with bolts + plugs to hang on the wall and spare glass fuse. Designed for installations where the lamp and transformer are remote. 2 x 6 cable type allows for connection up to 50 meters apart. Model 05062P is for highly humid engine rooms.

Winding is completely insulated with polyurethane. (See Selection Chart)

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-----------------|--------|----------------|--------------|--------------------------|
| | 05062 | 1 | 6,100 | 0,007 |
| Fully insulated | 05062P | 1 | 7,800 | 0,007 |

300 W-220/13"14"15"16" V OUTPUT, SELECTION TABLE FOR OUTPUT VOLTAGE (VOLTS) FOR STEP-UP TRANSFORMER

| CABLE TYPE | DISTANCE BETWEEN TRAFO & LAMPS (m) | | | | | | | |
|------------|------------------------------------|----|----|----|----|----|----|----|
| | 3-6-9 | 12 | 15 | 18 | 21 | 24 | 27 | 30 |
| 2 x 4 | 13 | 15 | 15 | 16 | 16 | - | - | - |
| 2 x 6 | - | 13 | 13 | 14 | 14 | 15 | 16 | 16 |



Transformers - 230/24V

230 V - 24 V Outlet Transformer. Plastic box, wall mounted.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------|-------|----------------|--------------|--------------------------|
| 150 W - IP20 | 05064 | 1 | 4,600 | 0,007 |
| 300 W - IP20 | 05065 | 1 | 5,900 | 0,007 |



600 W / 230-24 V Outlet Transformer. Plastic box, wall mounted.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| IP20 | 05066 | 1 | 7,400 | 0,008 |

Bulbs for Underwater Lights

PAR38 - 150 W/24 V Bulb.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------------------|----------|----------------|--------------|--------------------------|
| PAR38 - 150 W/24 V Bulb | 05021001 | 12 | 4,916 | 0,003 |



100 W/12 V Halogen Bulb.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------------------|----------|----------------|--------------|--------------------------|
| 100 W/12 V Halogen Bulb | 05113002 | | | |



50 W/12 V Halogen Bulb.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------------|---------|----------------|--------------|--------------------------|
| 50 W/12 V Halogen Bulb | 0511207 | 50 | 2,000 | 0,007 |



0511207

Sandwich Gasket for Underwater Lights

Sandwich gasket for underwater lights.

| · · | • | | | |
|------------------------------------|-----------|----------------|--------------|--------------------------|
| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
| For Standard 2002 Underwater light | 05211401S | 1 | 0,800 | |





Installation Equipment for Underwater Lights



Junction Box.

Made of white ABS plastic. Connections are for "05051" conduits. Two main and two back-up connections.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------|-------|----------------|--------------|--------------------------|
| Junction Box | 05040 | 8 | 2,610 | 0,016 |



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------------------|--------|----------------|--------------|--------------------------|
| Hose Conduit | 05051 | 50 | 9,100 | 0,070 |
| • Ditto, with threaded ends. | 05051T | 50 | | |

Hose Conduit.

Spiral wounded-transparent and blue PVC hose of 3/4".

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------------------|-------|----------------|--------------|--------------------------|
| Transparent- price per meter | 05053 | 50 | 9,100 | 0,070 |
| Blue- price per meter | 05054 | 50 | 5,200 | |



Underwater Light Cable.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------------------------|----------|----------------|--------------|--------------------------|
| • 2 x 1,5 TTR price per meter | 05111062 | 100 m | | |
| • 2 x 4 TTR price per meter | 0511106 | 100 m | 21,200 | |
| • 2 x 6 TTR price per meter | 05111061 | 100 m | 30,400 | |





Special tube used for underwater joints of the lamp cables.

Can be used with cables with a diameter between 1,2 - 3 mm. After the copper joint, the cable should be wrapped with electric band, and then be isolated with the underwater tube by heat treatment.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|--------|----------------|--------------|--------------------------|
| For Ø1,2 - 3 mm cables, price per meter | 050831 | 1 | | |

Electronic Switches

Flow Switch, 1,5 m cable.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------------------------|-------|----------------|--------------|--------------------------|
| • Flow Switch 1 (Floater Type) | 05081 | 1 | | |
| • Flow Switch 2 (Paddle Type) | 05083 | 1 | | |
| | | | | |

Note: Flow Switch 1 'Floater' gives a 'no flow' signal when the floater is in the horizontal position.



Floater Switch.

Made of PP. For on-off control of the level controlled device. 30 cm cable.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------|-------|----------------|--------------|--------------------------|
| Floater switch | 05082 | 1 | | |



Pneumatic Switch.

Up to 1 HP. Detects air flow or the absence of air flow through the button.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------|--------|----------------|--------------|--------------------------|
| Pneumatic Switch | 156871 | 1 | | |



156871

Wired and Wireless Remote Controls

Pneumatic Switch Board.

For threephase pumps up to 4 kW (excluding). Complete with contactor and fuse. Ready installed in plastic box.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------------|-------|----------------|--------------|--------------------------|
| Pneumatic switch board | 05080 | 1 | 0,748 | 0,003 |



05080

Pneumatic Button For Underwater Installations Through the Wall:

For the control of electrical equipment inside the pool. Complete with special wall conduit + cable outlet. Can be used with 05080 to be effective up to 30 m.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------------------------------|--------|----------------|--------------|--------------------------|
| Pneumatic Button For Underwater | 05080B | 1 | 0,650 | 0,004 |



WIRED REMOTE CONTROL FOR LIGHTING AND / OR POOL EQUIPMENT.

Used for remote wired control of lights, pumps, heaters or similar equipment. It has three outputs. Max for each output power capacity is 1.15 kW / 5 A. Cable distance is 3.0 m standard. Order for longer distances.

| 3 | | | | |
|-----------------------------------|-------|----------------|--------------|--------------------------|
| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
| • Three Function Button + Driver | 15233 | 1 | | |
| Three Function Button | 15231 | 1 | | |
| • Single Function Button + Driver | 15234 | 1 | | |
| Single Function Button | 15232 | 1 | | |
| • Driver | 15230 | 1 | | |





Wired and Wireless Remote Controls



REMOTE CONTROLS FOR LED LIGHTS OR POOL EQUIPMENT.

Used for remote control of lamps, pumps, heaters or similar equipment. Single output. Max. power capacity is 1,15 kW / 5 A. Control range is 80 m in open air. There may be a reduction in range in underground engine rooms. Does not include a transformer.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------------------------|-------------------|----------------|--------------|--------------------------|
| • In-Line Receiver and Remote Co | ntrol 05091A | 1 | | |
| • Remote Control Handset only (2 | button) 05091AY01 | 1 | | |



WI-FI REMOTE CONTROL FOR LIGHTING AND / OR POOL EQUIPMENT.

Used for remote wired control of lights, pumps, heaters or similar equipment. It has two outputs. Max for each output power capacity is 1,15 kW / 5 A. The control range is limited through internet browser by the Wi-Fi range. Controlled via screen commands with computers or smartphones through internet browser.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------------|--------|----------------|--------------|--------------------------|
| WiFi Type Panel Unit | 050700 | 1 | | |

Electrical Control Boards



050712T

With contactor.

Electric control board; made of injection plastic, resistent to dust and impacts, closed type board with decorative look. For threephase and monophase pumps of up to 4 kW (exclusive). All boards have Siemens contactors and thermal magnetic switch board protection.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|----------|----------------|--------------|--------------------------|
| • 1 triphase pump + 1 group of lights | 050711 | 1 | 3,300 | 0,017 |
| • Ditto, w/timer | 050711T | 1 | 3,500 | 0,017 |
| • Ditto, w/200 W Analog Transformer | 050711TT | 1 | | 0,017 |
| • 1 triphase pump + 2 groups of lights | 050712 | 1 | 3,594 | 0,017 |
| Ditto, w/timer | 050712T | 1 | 3,725 | 0,017 |
| • 2 triphase pumps + 2 groups of lights | 050713 | 1 | 4,382 | 0,017 |
| Ditto, w/timer | 050713T | 1 | 4,580 | 0,017 |

Note: Please ask for the price for your special boards.



050722T

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|----------|----------------|--------------|--------------------------|
| • 1 Monophase Pump + 1 group of lights | 050721 | 1 | 3,300 | 0,017 |
| • Ditto, w/timer | 050721T | 1 | 3,500 | 0,017 |
| • Ditto, w/200 W Analog Transformer | 050721TT | 1 | | 0,017 |
| • 1 Monophase Pump + 2 group of lights | 050722 | 1 | 3,594 | 0,017 |
| Ditto, w/timer | 050722T | 1 | 3,725 | 0,017 |
| • 2 Monophase Pump + 2 group of lights | 050723 | 1 | 4,382 | 0,017 |
| • Ditto, w/timer | 050723T | 1 | 4,580 | 0,017 |

Note: For special panels with phase protection and circuit breakers etc, please ask for price.



Pool Control Mono/Tri - Electronic Control Boards

"POOL CONTROL MONO". Fully electronic, 7 segment display, pool electrical control panel. It controls single-phase pumps from 0.33 Hp to 2.0 Hp and 1 group of 100 W / 12 V lights (up to 4 pieces). Complete with 100 W or 200 W / 12 V Analogue transformer.

"POOL CONTROL TRI". Fully electronic, 7 segment display, pool electrical control panel. It controls tri-phase pumps up to 0.33 Hp and 1 group of 100W / 12V lights (up to 4 pieces). Complete with 100 W or 200 W / 12 V Analogue transformer.

Technical Specifications:

- Controlled automatic operation is possible for pumps and lights. While the system is operating, it can pass from automatic control to manual or manual control to automatic without interrupting the system.
- Wrong Connection Protection: In case of a wrong connection in the connection box of the motor, it gives a short circuit warning and prevents the motor from starting. It stops the motor in case of a short circuit in the motor windings for any reason. (For example, the motor is submerged)
- Thermal Current Protection: The current drawn by the motor can be defined with a precision between 10% and 50%. In case of excessive current out of tolerance, the motor is disabled.
- Closed Valve Protection: It deactivates the motor using current control if the valves in the pump suction and / or discharge lines are closed by error. Thus, it eliminates the risk of damage caused by overheating.
- Ampere Reading: It allows seeing the current drawn by the pump motor at any time. All controls are disabled in this mode.
- Working Time: Possibility to see the total working time as year-month-day-hour-minute on the indicator from the first commissioning of the pump. Also uninterrupted working time display from last on.
- Time Counter: Possibility to start-stop the pump automatically for the desired time with the help of the meter.
- Light Control and Toroidal Transformer: 1 group 100 W or 200 W / 12 V light output and Toroidal transformer.
- Spare Pump Connection: Possibility of conversion to spare pump with a button.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|-------------|----------------|--------------|--------------------------|
| Pool Control Mono; (Max. 100 W) | 0507311 | 1 | | |
| 1 Pump (+1 spare)+1 Gr. Light | | | | |
| • 050731, (Max. 200 W) | 0507312 | 1 | | |
| Pool Control Tri; (Max. 100 W) | 0507311T | 1 | | |
| 1 Pump (+1 spare)+1 Gr. Light | | | | |
| • 0507311T, (Max. 200 W) | 0507312T | 1 | | |
| Modul Control | 050731101 | 1 | | |
| • Modul Control w/smartphone Wi-Fi app. | 050731101WF | | | |

"IF THE POOL CONTROL MONO / TRI IS PURCHASED AND INSTALLED WITH GEMAS MONOPHASE PUMPS, THE PUMP WARRANTY PERIOD IS EXTENDED FOR 2 YEARS FREE OF CHARGE."







050731101



ISAVER - Pool Pump Frequency Inverter

"New Inverter Technology"





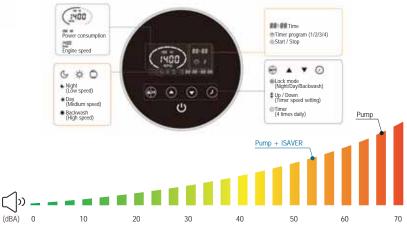
GEMAS "ISAVER". The first "Touch Screen" frequency inverter manufactured in the pool industry. By adjusting the running speed of the pool pump, it delivers significant electricity savings and silent operation. In addition, it allows automatic operation adjustment with different cycles in 4 different time intervals during the day. Consumption power values corresponding to the revolutions set are displayed on the screen. It is also possible to adjust the speed during operation. There are different models of the device for three-phase and single-phase motors as shown in the table below. Max. capacity is 2,2 kW. There are dry contacts inside the device for different types of external controls.

PROVIDES SIGNIFICANT ENERGY SAVING.

| | Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|----------------|--------------|----------------|--------------|--------------------------|
| | • ISAVER 1100 | 0111INV1100 | 1 | | |
| | • ISAVER 1100C | 0111INV1100C | 1 | | |
| | • ISAVER 2200 | 0111INV2200 | 1 | | |
| ٠ | • ISAVER 2200C | 0111INV2200C | 1 | | |



ISAVER Comparison Chart



TECHNICAL SPECIFICATIONS

| MODEL | ISAVER 1100 | ISAVER 2200 | ISAVER 1100C | ISAVER 2200C | |
|-----------------|-----------------|--------------|--------------|--------------|--|
| Operating Temp. | -10 ~ 40°C | -10 ~ 40°C | -10 ~ 40°C | -10 ~ 40°C | |
| Input Power | 1ph AC | 1ph AC | 1ph AC | 1ph AC | |
| Input Voltage | 220V~240V | 220V~240V | 220V~240V | 220V~240V | |
| Frequency | 50 Hz | 50 Hz | 50 Hz | 50 Hz | |
| Output Voltage | Mono, 0~240V | Mono, 0~240V | Tri, 0~240V | Tri, 0~240V | |
| Output Power | Max 1.1kW | Max 2.2kW | Max 1.1kW | Max 2.2kW | |
| Output Current | Max 6A | Max 12A | Max 4.5A | Max 8A | |
| Pump Type | Monophase | Monophase | Triphase | Triphase | |
| Speed Range | 1200 ~ 2900 rpm | | | | |



Control Boards - Level Control

LEVEL CONTROL BOARD; Full electronic balance tank level regulator control system. Complete with electronic floater.

Technical Characteristics:

- Overflow Control: In case of an overflow of balance tank, sends signal to sound alarm system and/or balance tank suction motorised valve, alarms and/or prevents the overflow.
- Lower Level Control: When there is no water in the balance tank, sends signal to pump contactor and terminates the pump operation.
- **Upper Level Control**: In case a water shortage in the balance tank, device controls the selenoid valve of the main water line and automatically delivers water to the system.



MODELS:

Level Control I, Automatic water top up.

Complete with 3/4" selenoid valve and 1 electronic floater.

Level Control II, Automatic water top up and overflow alarm.

Complete with 3/4" selenoid valve, 2 electronic floater and sound alarm.

Level Control III, water top up, lower level and overflow alarm.

3/4" selenoid valve, 3 electronic floaters and sound alarm.

Overflow Control, Can be supplied by Ø50 or Ø63 motorized ball valve addition.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|---------|----------------|--------------|--------------------------|
| Level Control I | 050741 | 1 | 0,500 | 0,002 |
| Level Control II | 050742 | 1 | | |
| Level Control III | 050743 | 1 | | |
| For Overflow Control; | | | | |
| Ø50 mm motorized ball valve | 131115M | 1 | | |
| Ø63 mm motorized ball valve | 131116M | 1 | | |









Pool Disinfection Systems



Automatic pH - Redox Controller



06311N





06312N



GEMAS POOL DIRECTOR (Automatic pH-Redox Conroller). Complete with electrodes, electrode cable, flow cell, on-line strainer and buffer solutions. Microprocessor controlled. Installed on a 507 x 705 plastic panel. Dosing pump spaces reserved on panel. Operation instructions are mentioned and a space for assembling of the metering pump is reserved on the panel. Wi-fi communication is optional. Dosing pumps excluded.

Technical Features:

- Microprocessor technology
- Touch-operated keypad
- ON-OFF and rational operation modes can be selected for pH and ORP separately
- Automatic calibration with chosen calibration solution
- Optional heat sensor
- Optional dosing pump level control
- Optional flow switch for flow control
- RS232 or RS485 outlets for optional DATA transfer
- Optional Wifi communication



05083



05082

| Description | Code | Pieces/ Weight Volume box Kg m ³ |
|---|---------|--|
| Pool director - with board | 06311N | 1 |
| Pool director - w/out board | 06312N | 1 |
| Additional heat sensor | 063212N | 1 |
| Additional dosing pump level control | 05082 | 1 |
| Additional Flow Switch | 05083 | 1 |
| Wifi option | 063216 | 1 |

GEMAS POOL DIRECTOR ECO (Automatic pH-Redox Conroller). Complete with two 1.5 lt/h - 1 bar peristaltic dosing pumps, electrodes, electrode cable, sensor holder, fixing accessories and buffer solutions. Microprocessor controlled. Wi-fi communication is optional. Please ask price for larger capacity dosing pumps.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|---------|----------------|--------------|--------------------------|
| Monoblock Peristaltic Dosing Pump | 06311E | 1 | | |
| Additional heat sensor | 063212N | 1 | | |
| Additional dosing pump level control | 05082 | 1 | | |
| Additional Flow Switch | 05083 | 1 | | |
| Wifi option | 063216 | 1 | | |

Free-Chlorine and pH Controller



GEMAS pH and Free Chlorine Controller. Free-chlorine and pH electrode fully assembled on the panel. Complete with flow switch, flow meter with proximity switch, acrylic Flow Cell, pHFree Chlorine - Temperature Sensors, Calibration solutions and Mounting Kit. IP65 protection, Residual chlorine ppm (= mg / I), redox (=mV) and pH measurement and control system. It can be remotely controlled from the mobile phone with the optional Wi-Fi module. It also shows instant water temperature. Dosage pumps can be mounted on the panel. **Dosing pumps are not included in the price**.

| Description | Code | Pieces/ box | Weight Kg | Wolume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| | 06420 | 1 | | |

Free chlorine and pH in public swimming pools according to DIN 19643 (additionally REDOX should be preferred.) Automatic Control System is compulsory. FCL sensor is amperometric. Ionselective sensor can be produced upon request.

Pool Disinfection Systems

Free-Chlorine and pH Controller

GEMAS pH, Redox and Free Chlorine Controller. Free-chlorine and pH electrode fully assembled on the panel. Complete with flow switch, flow meter with proximity switch, acrylic Flow Cell, pH-Redox - Free Chlorine - Temperature Sensors, Calibration solutions and Mounting Kit. IP65 protection, Residual chlorine ppm (= mg / I), redox (=mV) and pH measurement and control system. It can be remotely controlled from the mobile phone with the optional Wi-Fi module. It also shows instant water temperature. Dosage pumps can be mounted on the panel. **Dosing pumps are not included in the price.**



| | Code | Pieces/ box | Weight Kg | Wolume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| Description | 06422 | 1 | | |

Free chlorine and pH in public swimming pools according to DIN 19643 (additionally REDOX should be preferred.) Automatic Control System is compulsory. FCL sensor is amperometric. Ionselective sensor can be produced upon request.

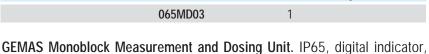
Monoblock Automatic Control Systems with Dosing Pumps

GEMAS Monoblock Measurement and Dosing Unit. IP65 digital indicator, Complete with 10 l/h - 2 bar dosage pump integrated pH and ORP dosage units, sensors, sensor holders, calibration solutions. Assembled on panel.

Technical Specifications:

- Microcontroller technology
- Automatic calibration with the selected calibration fluid
- Optional dosing pump level controls
- "Flow Switch" for optional flow control

| Description | Code | Pieces/ box | Weight Kg | Wolume m ³ |
|-------------|---------|----------------|--------------|--------------------------|
| | 065MD03 | 1 | | |



integrated with 10 l/h - 2 bar dosage pumps. Complete with sensor, sensor

holders, calibration solutions. PVC pump body, seramic valve.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|---------|----------------|--------------|--------------------------|
| • pH | 065MD01 | 1 | 3,164 | 0,009 |
| • ORP | 065MD02 | 1 | 3,156 | 0,009 |



POOL INFO PANELS.

Digital panels; indicating the info transferred from "Pool Director" through RS485 input. Four lines indicating pH, ORP, pool water temperature, ambient temperature (PANEL I) + Sliding announcement feature with PC connection (PANEL II). h=160 mm characte (can be easily seen from 60 m). h=160 mm character (can be easily seen from 60 m). Suitable for outdoor use. Main supply 220 V AC. Sliding info program is included.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------------|--------------------|----------------|--------------|--------------------------|
| • PANEL I; | 0632142 | 1 | | |
| h=160 mm character ~ | 640 x 640 x 90 mm | | | |
| • PANEL II; | 0632152 | 1 | | |
| h=160 mm character~ | 1280 x 480 x 90 mm | | | |

Pool Info Panels



Pool Disinfection Systems_



Dosing Pumps



GEMAS Dosing Pump. Membrane type. Analogue. Manually adjustable from 10% to 100%.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------------------|----------|----------------|--------------|--------------------------|
| • 2 lt / h - 12 Bar | 06MD0212 | 1 | 3,092 | 0,009 |
| • 3 lt / h - 11 Bar | 06MD0311 | 1 | 3,092 | 0,009 |
| • 5 lt / h - 9 Bar | 06MD0509 | 1 | 3,092 | 0,009 |
| • 8 lt / h - 5 Bar | 06MD0805 | 1 | 3,092 | 0,009 |
| • 10 lt / h - 4 Bar | 06MD1004 | 1 | 3,092 | 0,009 |
| • 15 lt / h - 2 Bar | 06MD1502 | 1 | 3,092 | 0,009 |



GEMAS Vertical Dosing Pumps. Membrane type. Analoque. Manually adjustable from 10% to 100%. Easily mounted on the chemical container.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------------------|-------------|----------------|--------------|--------------------------|
| • 2 lt / h - 12 Bar | 06T1202AB11 | 1 | 3,092 | 0,009 |
| • 6 lt / h - 8 Bar | 06T0806AB11 | 1 | 3,092 | 0,009 |
| • 11 lt / h - 3 Bar | 06T0311AB11 | 1 | 3,092 | 0,009 |
| • 22 lt / h - 2 Bar | 06T0222AB11 | 1 | 3,092 | 0,009 |



GEMAS Dosing Pump. Peristaltic type. Analogue. Manually adjustable from 10% to 100%.

| Description | Code | Pieces/ Weight Volume box Kg m³ | è |
|----------------------|----------|------------------------------------|---|
| • 1,5 lt / h - 1 Bar | 06PD0302 | 1 | |
| • 3 lt / h - 1 Bar | 06PD0301 | 1 | |

Dosing Pumps Capacity Calculation

Chosing the Dosing Pump:

A- Daily Chlorine Requirement:

- 1- Loss From Swimmers: The number of swimmers should be determined or estimated. This number should be considered according to busiest day. Daily loss per swimmer in meditarranean region is 10 gr/day.
- 2- Loss From Sun Light (The Destructive effects of UV light on chlorine): This loss is on average 2,5 gr per each pool m³ in meditarranean belt.

Daily Chlorine Requirement (gr) = The Number of Swimmers x 10 gr + Pool Volume (m³) x 2,5 gr For example: The Pool that 250 swimmer's daily use and 1000 m³ pool volume. Daily Chlorine Requirement = $250 \times 10 \text{ gr} + 1000 \text{ m}^3 \times 2,5 \text{ gr/m}^3 = 5000 \text{ gr}$

B- Determining The Capacities of Chlorine and Dosing Pumps:

* Minimum Dosing Pump Capacity (I/h) = Daily Chlorine Requirement (gr/day) x 0,0015 It depends on the fact that the determined capacity equals to the daily need of chlorine with %12 sodium hypoclorid get dosed 12 hours period. If dosing period is wanted to be shortened, the capacity should be increased with same level of shortining. For example; dosing period is chosen at 8 hours, total capacity 12/8 = 1,5 times increased. The same capacity is also enough for PH pump. Pump pressure loss should be chosen minimum 2 bars.

C- Determining The Capacity of Flocculant Dosing Pump:

Flocculant should be dosed as far as possible from filter. It's suggested to be dosed from pump outlet.

* Minimum Capacity of Dosing Pump: Pool Circulation Flow (m^3/h) x 0,002 The dosing that technically required is to give enough quantity continuously. Too much and too fast dosing would cause blur of the pool water. Pump pressure loss should be chosen minimum 2 bars. For example; a pool which has 100 m^3 flow, flocculant dosing pump capacity (l/h) = 100 m^3/h x 0,002 = 0,2 l/h. In this case the dosing pump which has 2 l/h capacity should work with 10%.



Pool Disinfection Systems

Chemical Drums

Polythene Chemical Drums.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| • 100 | 06811 | 1 | 5,086 | 0,145 |
| • 200 | 06812 | 1 | 8,110 | 0,285 |



Chemical Drum Mixers

Manual Mixer. Made of PVC Plastic.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| | 06831 | 1 | 0,260 | 0,001 |

Motorized Fast Mixer. Made of PVC plastic. 1400 rpm speed fast mixer. 0.18 KW / 220 V / 50 Hz. Shaft length: 600 mm.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| Fast Mixer | 06832 | 1 | 10,260 | 0,137 |

Motorized Slow Mixer. Made of PVC plastic. 70 rpm speed slow mixer. 0.13 KW /220 V / 50 Hz. Shaft length: 600 mm.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| Slow Mixer | 06833 | 1 | | |



Spare Parts for Control Systems - Sensors

pH ELECTRODE: Complete with cable and, BNC socket.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| | 06611 | 1 | 0,124 | 0,0006 |



REDOX ELECTRODE: Complete with cable and, BNC socket.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| | 06612 | 1 | 0,920 | 0,0006 |



Free Chlorine Electrode, ion selective. 0 - 5 ppm measuring range.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|----------|----------------|--------------|--------------------------|
| Membrane Replacement | 06420011 | 1 | | |
| Membrane Electrolite, 50 cc Free | 06420012 | 1 | | |
| Chlorine Electrode ion selective | 0642001 | 1 | 0,920 | 0,0006 |
| • F.C. Electrode Amperometric (Open cell) | 0642004 | 1 | | |



06420001

Pool Disinfection Systems.



Spare Parts for Control Systems - Others



Heat sensor with 1,5 m cable





PVC FLOW CELL: Ø 20 mm, single.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| | 06631 | 1 | 0,048 | |



Electrode Cell, Double.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| • Single | 06632 | 1 | | |
| • Double | 06633 | 1 | 0,980 | |





Electrode Chamber, Made of injected, triple - Flow Rate Controlled - Complete proximitx switch.

| Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------|----------------|--|---|
| 0642015 | 1 | | |
| 0642016 | 1 | | |
| | 0642015 | Code box 0642015 1 | Code box Kg 0642015 1 |



0642016

Sensor Holder Made of PVC. Easy connection Ø 63 PVC Tube by Ø 63 Tee. Also includes Ø63-Ø50 mm reducer for Ø50 mm pipe installation.



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------------------------------|---------|----------------|--------------|--------------------------|
| Sensor Holder for pH and ORP sensors | 0642017 | 1 | | |





Redox Buffer Solution

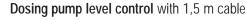
| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------|-------|----------------|--------------|--------------------------|
| • 220 mv - 50 cc | 06511 | 1 | 0,032 | |
| • 468 mv - 50 cc | 06512 | 1 | 0,032 | |



pH Buffer Solution

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------|-------|----------------|--------------|--------------------------|
| • pH 4 - 50 cc | 06521 | 1 | 0,032 | |
| • pH 7 - 50 cc | 06522 | 1 | 0,026 | |





| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| | 05082 | 1 | | |



05081 05083

Flow switch, 1,5 m cable

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------------------------|-------|----------------|--------------|--------------------------|
| • Flow Switch 1 (Floater type) | 05081 | 1 | | |
| • Flow Switch 2 (Paddle type) | 05083 | 1 | | |

PS. 05081 Can be used as floater swicth. It will give signal only on open mode not on vertical mode.



Pool Disinfection Systems

Tablet Chlorine Dosing Systems

CHLORINE DISPENSER.

Made of ABS plastic, floating type tablet chlorine dosing float. Adjustable dosing amount.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------------------------------------|-----------|----------------|--------------|--------------------------|
| • Chlorine Dispenser Model 1-7 Tablet | 0619027 | 1 | 0,290 | 0,004 |
| • Chlorine Dispenser Model 2-6 Tablet | 0611504 | 1 | 0,358 | 0,008 |
| Chlorine Dispenser Model 3-6 Tablet | 06190701 | 1 | | |
| Chlorine Dispenser Model 4-6 Tablet | 06190701T | 1 | | |
| • With thermometer. | | | | |



06190701T

GEMAS CLT-167 CHLORINATOR. ABS body, 2 kg tablet capacity. Dosage adjustment on the device. Used for pools of maximum 95 m³ capacity. Off-line model can be installed in the pool circulation line with an easy by-pass.

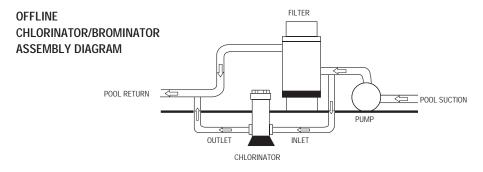
| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------------|------------|----------------|--------------|--------------------------|
| • Off - Line | 069CLT167A | 1 | 1,130 | 0,012 |
| • On - Line | 069CLT167B | 1 | 0,962 | 0,012 |
| Chlorinator Base, Inox | 069CLT01 | 1 | | |

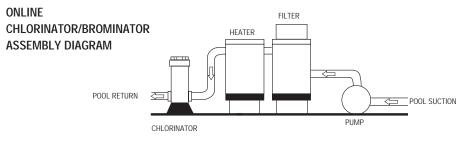
GEMAS CLT-168 CHLORINATOR. ABS body, 4 kg tablet capacity. Dosage adjustment on the device. Used for pools of maximum 150 m³ capacity. Off-line model can be installed in the pool circulation line with an easy by-pass.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|------------|----------------|--------------|--------------------------|
| Off - Line | 069CLT168A | 1 | 1,748 | 0,017 |
| • On - Line | 069CLT168B | 1 | 1,626 | 0,017 |



069CLT167B







173

Pool Disinfection Systems



Puritron GSC Salt-Water Chlorinators

Description



Salt Water Chlorinators produce chlorine by electrolysis of pool water with salinity of teardrop. The device has a standart cleaning cycle process (by switching polarity) against calcification inside electrode cell. Numeric screen shows the working percentage and current value in ampers. According to total hardness of the pool water, Switching Polarity Cycle could be arranged from 1 to 8 hours. Factory Setting is once in every 6 hours. Device saves the total working hour. **Electrodes are made of titanium and have a 14.000 hours long life**. It can be installed to every existing pool. All models can be used in seawater. The recommended salinity rate is 4000 ppm (4kg/m³). The approximate salinity in sea water is 35.000 ppm.

Pieces/

Weight

Volume



| Description | | (| Joue | | | box | Kg | m^3 |
|---------------------------|---------------------|-------------------|-----------------|------------------|------------------|----------------|------------------|-------|
| • Puritron GSC-10, 10 g/h | | 0 | 64250 | | | 1 | | |
| • Puritron GSC-15, | 15 g/h | 064255 | | | 1 | | | |
| • Puritron GSC-20, | 20 g/h | 0 | 64260 | 1 | | | | |
| • Puritron GSC-30, | 30 g/h | 0 | 64270 | | | 1 | | |
| Model | Pool Volume (m³) | CI Prod. (g/h) | Salt (kg/m³) | Voltage (VAC) | Voltage (VDC) | Current DC (A) | Energy Cor (W | |
| Puritron GSC - 10 | 0 - 40 | 10 | 4,0 | 220 | 24 | 1,5 | 12 | 5 |
| Puritron GSC - 15 | 15 - 75 | 20 | 4,0 | 220 | 24 | 2,5 | 13 | 0 |
| Puritron GSC - 20 | 30 - 90 | 20 | 4,0 | 220 | 24 | 3,5 | 15 | 0 |
| Puritron GSC - 30 | 80 - 150 | 30 | 4,0 | 220 | 24 | 5,0 | 20 | 0 |



In addition to the above salt chlorinator specifications, the required software and hardware are added to enable automatic pH control. The device is installed on a panel complete with pH electrodes, electrode flow cell and 2 l/h dosing pump.

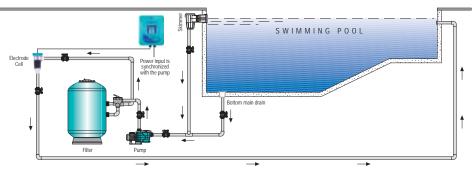
| Description | Code | Pieces/ Weight box Kg |
|---|--------|--------------------------|
| • Puritron-101, with Automatic pH control | 064251 | 1 |
| • Puritron-151, with Automatic pH control | 064256 | 1 |
| • Puritron-201, with Automatic pH control | 064261 | 1 |
| • Puritron-301, with Automatic pH control | 064271 | 1 |



In addition to the above salt chlorinator specifications, the required software and hardware are added to enable automatic pH and Redox control. The device is installed on a panel complete with pH electrodes, electrode flow cell and 2 l/h dosing pump.

| Description | Code | Pieces/ Weight box Kg |
|---|------------------|--------------------------|
| • Puritron-102, with Automatic pH & redox contr | ol 064252 | 1 |
| • Puritron-152, with Automatic pH & redox contr | ol 064258 | 1 |
| • Puritron-202, with Automatic pH & redox contr | ol 064262 | 1 |
| • Puritron-302, with Automatic pH & redox contr | ol 064272 | 1 |

INSTALLATION DIAGRAM:





Puritron GSCN - 30

Puritron GSCN - 50

80 - 150

150 - 250

30

30

Pool Disinfection Systems

Puritron GSCN Salt-Water Chlorinators

Salt Water Chlorinators produce chlorine by electrolysis of pool water with salinity of teardrop. The device has a standart cleaning cycle process (by switching polarity) against calcification inside electrode cell. Numeric screen shows the working percentage and current value in ampers. According to total hardness of the pool water, Switching Polarity Cycle could be arranged from 1 to 8 hours. Factory Setting is once in every 6 hours. Device saves the total working hour. Measures and shows salinity level. New design have on easy access from the front for service and aux connection purposes wifi control over MODBUS. Electrodes are made of titanium and have a 14.000 hours long life. It can be installed to every existing pool. All models can be used in seawater. The recommended salinity rate is 4000 ppm (4kg/m³). The approximate salinity in sea water is 35.000 ppm.

| _ | | _ | | | _ | | | |
|--------------------|---------------------|-------------------|-----------------|------------------|------------------|----------------|--------------|--------------------------|
| Description | | | Code | | | Pieces/ box | Weight Kg | Volume m ³ |
| • Puritron GSCN-1 | 0, 10 g/h | | 064253 | | | 1 | | |
| • Puritron GSCN-1 | 5, 15 g/h | | 064243 | | | 1 | | |
| • Puritron GSCN-2 | 0, 20 g/h | | 064263 | | | 1 | | |
| • Puritron GSCN-3 | 0, 30 g/h | | 064273 | | | 1 | | |
| • Puritron GSCN-5 | 0, 50 g/h | | 064293 | | | 1 | | |
| Model | Pool Volume (m³) | CI Prod. (g/h) | Salt (kg/m³) | Voltage (VAC) | Voltage (VDC) | Current Do | C Energy (| Consumption (W) |
| Puritron GSCN - 10 | 0 - 40 | 10 | 4,0 | 220 | 24 | 1,5 | | 125 |
| Puritron GSCN - 15 | 15 - 75 | 20 | 4,0 | 220 | 24 | 2,5 | | 130 |
| Puritron GSCN - 20 | 30 - 90 | 20 | 4,0 | 220 | 24 | 3,5 | | 150 |

Inaddition to above Salt Chlarinator specifications, the required software are added to enable automatic pH control. The new compact design allows a monoblock peristaltic pH dosing pump (1.5 lt/h-1 bar) embedded to chlorinator unit. Complete with sensor holder pH sensor and required pipe fittings. Please ask price for larger capacity dosing pumps. (0642932 model is produced with 3lt/h - 1bar pump)

4,0

4.0

220

220

24

5,0

10.0

200

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|---------|----------------|--------------|--------------------------|
| Puritron GSCN-101, pH control | 0642532 | 1 | | |
| • Puritron GSCN-151, pH control | 0642432 | 1 | | |
| Puritron GSCN-201, pH control | 0642632 | 1 | | |
| Puritron GSCN-301, pH control | 0642732 | 1 | | |
| Puritron GSCN-501, pH control | 0642932 | 1 | | |

Inaddition to above Salt Chlorinator specifications, the required software are added to enable automatic pH and ORP control. The new compact design allows a monoblock peristaltic pH dosing pump embedded to chlorinator unit. Complete with sensor holder pH and ORP sensor and required pipe fittings. 4 X 20 LCD screen, water tempeture measurement options. Please ask price for larger capacity dosing pumps. (0642932 model is produced with 3lt/h - 1bar pump)

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|--------|----------------|--------------|--------------------------|
| • Puritron GSCN-102, pH & redox control | 064254 | 1 | | |
| • Puritron GSCN-152, pH & redox control | 064244 | 1 | | |
| • Puritron GSCN-202, pH & redox control | 064264 | 1 | | |
| • Puritron GSCN-302, pH & redox control | 064274 | 1 | | |
| • Puritron GSCN-502, pH & redox control | 064294 | 1 | | |





Electrode (except 50 gr/h models)





Sensor Holder



Pool Disinfection Systems



Puritron On-Line Salt-Water Chlorinators



"On-Line" devices with a monoblock body that produce chlorine from salt using electrolysis, providing salt concentration into the pool water at the same rate as tear salinity. The device has the feature to self-clean the electrode against calcification at certain intervals.

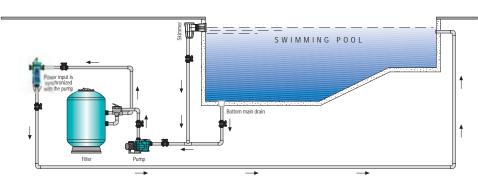
Digital screen; temperature value of water; LED display screen shows the working percentage rate. Automatic polarity changing of the electrodes for cleaning purposes which can be adjusted between 1-8 hours according to the hardness level of the water. The factory setting is every 6 hours. During operation, the flow cell is illuminated by colored LEDs. LEDs change color during polarity change. In the event of an alarm, the red-light flashes. The device records the total working hours in its memory.

Electrodes are made of titanium and have an average life of 14,000 hours. It can be easily installed in any existing pool. The device can be mounted on the right or left side, depending on preference. All models can also be used with seawater. Recommended min. salinity rate is 4,000 ppm (4 kg/m³). The salinity rate in sea waters is 35.000 ppm on average.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------------------|----------|----------------|--------------|--------------------------|
| Puritron GSCOL-10 | 0642500L | 1 | 5,650 | 0,035 |
| • Puritron GSCOL-15 | 0642510L | 1 | 5,650 | 0,035 |
| • Puritron GSCOL-20 | 0642600L | 1 | 5,650 | 0,035 |
| • Puritron GSCOL-30 | 0642700L | 1 | 5,650 | 0,035 |

| Model | Pool Volume (m ³) | CI Prod (g/h) | . Salt (kg/m ³) | Voltage (VAC) | Voltage (VDC) | Current DC (A) | Energy Consumption (W) |
|------------------------|-------------------------------|------------------|-----------------------------|------------------|------------------|-------------------|---------------------------|
| Puritron GSC, GSCOL-10 | 0 - 40 | 10 | 4,0 | 220 | 24 | 1,5 | 125 |
| Puritron GSC, GSCOL-15 | 15 - 75 | 20 | 4,0 | 220 | 24 | 2,5 | 130 |
| Puritron GSC, GSCOL-20 | 30 - 90 | 20 | 4,0 | 220 | 24 | 3,5 | 150 |
| Puritron GSC, GSCOL-30 | 80 - 150 | 30 | 4,0 | 220 | 24 | 5,0 | 200 |

INSTALLATION DIAGRAM:



Salt for Salt-Chlorine Generators



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|-------|----------------|--------------|--------------------------|
| Granule Salt, 25 kg | 02317 | 1 | | |
| Tablet Salt, 25 kg | 02318 | 1 | | |



Pool Disinfection Systems

Puritron Salt-Water Chlorinators

Designed for midsize hotel and apartment complex pools. The device produces chlorine by electrolysis of pool water with salinity of teardrop. It has a standart cleaning cycle process against calcification. **Electrods are made of titanium and have a 20.000 hours long life**. Corrosion resist stainless steel body. Electrods cell made of methacrylate and transparent. It has a LCD screen. Device is switched mode. All models can be used with seawater.

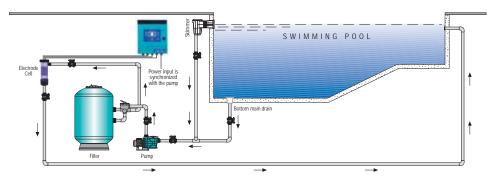
| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------------|-------|----------------|--------------|--------------------------|
| • Puritron GSC - 75 | 06435 | 1 | 15,000 | |
| • Puritron GSC - 100 | 06436 | 1 | 20,000 | |
| • Puritron GSC - 150 | 06437 | 1 | 25,000 | |

| | :[| |]: | |
|---|----|----------|-----|-----|
| 1 | | <u>E</u> | Œ | • |
| | | ī | GSC | -75 |
| - | | | • | • |

| Model | Pool Volume | Chlorine | Voltage | Voltage | Current | Power | PVC Pipe | Weight | Device | Cell |
|--------|-------------------|------------|---------|---------|---------|-------------|----------|--------|-------------|--------------|
| | (m ³) | Production | (VAC) | (VDC) | (A) | Consumption | ı (mm) | (kg) | Dimensions | Measurements |
| | | (g/h) | | | | (W) | | | (mm) | (mm) |
| GSC75 | 200 - 250 | 75 | 220 | 24 max. | 100 | 350 | 63 | 15 | 300x250x150 | 140 x 531 |
| GSC100 | 250 - 300 | 100 | 220 | 24 max. | 150 | 500 | 90 | 20 | 300x250x150 | 140 x 531 |
| GSC150 | 300 - 350 | 150 | 220 | 24 max. | 200 | 670 | 90 | 25 | 300x250x150 |) 140 x 531 |

Note: The above pool capacities have been calculated with the principle that the pool operates for 12-14 hours per day.

INSTALLATION DIAGRAM:





Salt - Water Chlorinator Capacity Measurement:

A- Daily Chlorine Requirement:

- 1- Loss From Swimmers: The number of swimmers should be determined or estimated. This number should be considered according to busiest day. Daily lost per swimmer in meditarranean Region is 10 gr/day.
- 2- Loss From Sun Light (The Destructive effects of UV light on chlorine): This lost is on average 2,5 gr per each pool m^3 in meditarranean belt.

Daily Chlorine Requirement (gr)=The Number of Swimmers x 10 gr + Pool Volume (m³) x 2,5 gr For example: The Pool that 250 swimmer's daily use and 1000 m³ pool volume. Daily Chlorine Requirement = 250 x 10 gr + 1000 m³ x 2,5 gr/m³ = 5000 gr

With 12 hours filtration = $5000 \text{ gr}/12\text{h} = 416 \text{ gr/h} \triangleright \text{GSC } 500$ With 24 hours filtration = $5000 \text{ gr}/24\text{h} = 200 \text{ gr/h} \triangleright \text{GSC } 250$

Pool Disinfection Systems_____



Puritron-GSC Salt - Water Chlorinators

Designed for large public and competition pools. The device produces chlorine by electrolysis of pool water with salinity of teardrop. It has a standart cleaning cycle process against calcification. **Electrods are made of titanium and have a 20.000 hours long life**. Corrosion resist stainless steel body. Electrods cell made of methacrylate and transparent. It has a LCD screen. Device is switched mode. All models can be used with seawater. In addition to all above specifications, this device has electronic current control, heat and flow control.

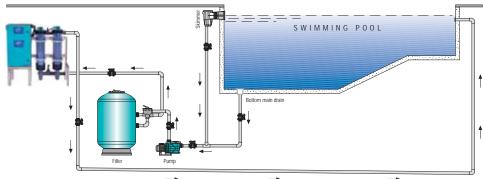
| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-----------------------|-------|----------------|--------------|--------------------------|
| • Puritron GSC - 250 | 06438 | 1 | 40,000 | |
| • Puritron GSC - 500 | 06439 | 1 | 60,000 | |
| • Puritron GSC - 750 | 06440 | 1 | 80,000 | |
| • Puritron GSC - 1000 | 06446 | 1 | 100,000 | |

| Model | Chlorine Production (g/h) (5kg/m³ salt) | Voltage (VAC) | Voltage (VDC) | Current (A) | Power Consumption (W) | PVC Pipe (mm) | Cell Measurements (mm) |
|---------|---|------------------|------------------|----------------|-----------------------------|------------------|------------------------------|
| GSC250 | 250 | 220 | 24 max. | 50 | 1.350 | 63 | 750 x 450 x 900 |
| GSC500 | 500 | 220 | 24 max. | 100 | 2.540 | 63 | 1000 x 450 x 900 |
| GSC750 | 750 | 220 | 24 max. | 150 | 3.900 | 90 | 1250 x 450 x 900 |
| GSC1000 | 1000 | 220 | 24 max. | 200 | 5.000 | 90 | 1500 x 450 x 900 |



Electrode Cells Made of Transparent PVC Tube

INSTALLATION DIAGRAM:



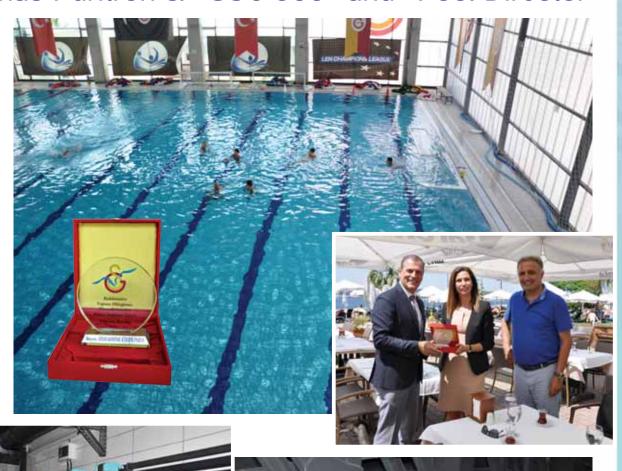








Galatasaray Kalamış Facilities Indoor Swimming Pool, Sponsored by Gemas; Automatically controlled with a Gemas Puritron & "GSC 500" and "Pool Director"





Pool Disinfection Systems.



Salt-Water Chlorinators - Anodic Protection

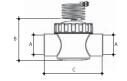
In pools using salt-chlorine generators, installation of this device is used to prevent electrolytic corrosion of stainless-steel materials. The electric connection is made to the pump's control panel ground/earth point.



- Easy to install.
- Provides "Electric Shock" protection in fiberglass pools.
- Maximum 4 bars 63 body
- Transparent cover for anode control
- Pure zinc, its average life is 3 years

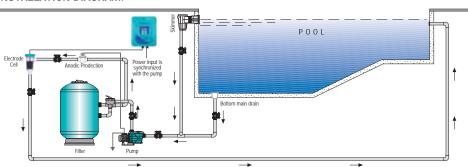
| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------------|-------|----------------|--------------|--------------------------|
| Ø 63 Anodic Protection | 06423 | 1 | | |





| TYPE | DIMENSIONS | | | | |
|----------|------------|-----|-----|-----|--|
| | CONECTION | Α | В | С | |
| GDF50-1E | 63 mm | Ø63 | 129 | 190 | |

INSTALLATION DIAGRAM:



Salt-Water Chlorinators - Electrode Cleaning



"SCALEX" Anti-Lime for Salt Chlorine Generators. One of the common problems in pools using a salt-chlorine generator is calcification on the electrode. This problem is often encountered especially in pools using hard water or sea water. In such cases, regular use of SCALEX provides a definitive solution.

Initial dose: 2,5 I/100 m³ pool water.

This dose should be doubled in pools using hard water.

Consecutive use dose 2,5 I/6 months.

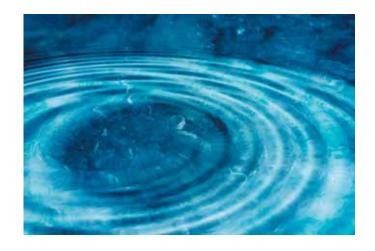
| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|--------|----------------|--------------|--------------------------|
| • 51 | 075327 | 1 | 5,000 | 0,001 |
| • 10 | 075328 | 1 | 10,000 | 0,007 |
| • 20 | 075329 | 1 | 20,000 | 0,028 |



Salt-Water Chlorinators - Spare Parts

| Description | | Code | Pieces/ box |
|-------------|--------------------------------|---------|----------------|
| GSC1 | O Bipolar Electrode | 06430YE | 1 |
| GSC1 | 5 Bipolar Electrode | 06428YE | 1 |
| GSC2 | O Bipolar Electrode | 06425YE | 1 |
| GSC3 | O Bipolar Electrode | 06426YE | 1 |
| GSC E | Electrode Housing | 0643102 | 1 |
| GSC E | Electrode Housing Nut | 0643103 | 1 |
| GSC E | lectrode Connection Cable | 0643104 | 1 |
| GSC E | Electrode Oring | 0643105 | 1 |
| GSC 2 | 230 VAC Cable | 0643106 | 1 |
| GSC V | Vall Hang Piece | 0643107 | 1 |
| GSC 5 | 60 Electrode | 0643401 | 1 |
| GSC 7 | '5 Electrode | 0643501 | 1 |
| GSC 1 | 00 Electrode | 0643601 | 1 |
| GSC 1 | 50 Electrode | 0643701 | 1 |
| GSC 2 | 50-500 Electrode | 0643801 | 1 |
| GSC 5 | 0-75-100-150 Electrode Housing | 0643402 | 1 |







Ultraviolet UV-C Disinfection Systems



Ultraviolet disinfection systems work with the principle of lethal effects of 220-280 nm wave length ultraviolet lights on living organisms. This wave-length ultraviolet lights require a certain contact time to kill microorganisms by destroying their cell walls. The UV devices are designed to provide this contact time according to the given flow rate.

UV radiation is considered in 4 spectrum: UV-A, UV-B, UV-C and vacuum UV. UV-C spectrum is used for water disinfection with the wave length as specified above.

Advantages of UV-C System:

- Reduces Chlorine and chemical consumption by 50% 80%.
- Effective for all microorganisms.
- Eliminates all the side effects caused by chlorine (skin irritation, eye burn, allergy, asthma and similar side effects)
- Destroys all bound chlorine compounds (=chloramines) and other harmful organic compounds.
- Reduces all chemical usage and leaves no harmful waste in water.
- Low operating cost, and eco-friendly technology.

Devices below are designed for private pools.

All models are 316L quality stainless steel body and enables +35% radiation efficiency. Devices are complete with **timers** that shows bulb operating life. Device gives warning when bulb completes their lifespan. Also, there is a **flow switch (circuit breaker)** at the outlet of 130 watt device that disables the bulb when pool circulation stops. The **AMALGAM** bulb that provides the most effective UV-C radiation is used in this model. Max. operating pressure is 2 bar. Bulb lifespan is 9.000 hours.

| Description | Code | Pieces/ box |
|--|-------------|----------------|
| • Pool UV-C 40 Device with Timer up to 40 m ³ | 06NTUV40T | 1 |
| • Pool UV-C 75 Device, with Timer up to 75 m³ | 06NTUV75T | 1 |
| • Pool UV-C 130 Device, with Timer, Flow Switch up to 150 m ³ | 06NTUV130TF | 1 |



06NTUV130TF

| Technic Specifications | NT-UV40-T | NT-UV75-T | NT-UV130-TF |
|------------------------------------|---------------------|---------------------|---------------------|
| Pool Volume (m ³) | 40 | 75 | 150 |
| Max. Flow Rate (m ³ /h) | 20 | 25 | 30 |
| Max. Working Pressure (bar) | 3 | 3 | 3 |
| Diameter (mm) | 72 | 72 | 72 |
| Length (cm) | 60 | 100 | 100 |
| Outlet Diameter (mm) | 63-50 | 63-50 | 63-50 |
| Stainless Steel | 316L | 316L | 316L |
| Electronic Ballast | 120-240V AC 50/60Hz | 120-240V AC 50/60Hz | 120-240V AC 50/60Hz |
| Max. Current (Amp) | 0,27 | 0,5 | 1,1 |
| Bulb Power (W) | 40 | 75 | 130 |
| Wave Length (nm) | 253,7 | 253,7 | 253,7 |
| Timer | Available | Available | Available |
| Bulb Change Warning | Available | Available | Available |
| Flow Switch | - | - | Available |
| Chemical Usage Decrease | 80% | 80% | 80% |
| Weigh (Kg) | 4 | 5 | 5,5 |
| Package Size (mm) | 260 x 110 x 550 | 280 x 150 x 1010 | 280 x 150 x 1010 |





Ultraviolet UV-C Disinfection Systems

The devices below designed for Semi-Public (Hotel, complex, school...) and Public Pools. All models (PRO series) are 316L quality stainless steel body, and provides +35% efficiency. Devices are assembled with **timers** that shows bulb operating life. Devices give warning when bulbs complete their lifespan. Also, there is **flow switch** (**circuit breaker**) at the outlet of 130 watt device that disables the bulb when pool circulation stops. In this model, Philips brand **AMALGAM** bulb has been used which allows most effective UV-C radiation. Max. operating pressure is UV-C Pro 5 bar, UV-C Pro Buster 10 bar.

| Description | Code | Pieces/ box | Weight Kg | Volume m³ |
|--|-----------|----------------|--------------|--------------|
| Pool UV-C PRO 130 Device, | 06B210007 | 1 | 8,500 | |
| With Timer, Flow Switch, 150 m ³ | | | | |
| Pool UV-C PRO Buster Device, | 06B200031 | 1 | 30,000 | |
| With Timer, Flow Switch, 450 m ³ | | | | |

| Technic Specifications | B210007 | B200031 |
|-----------------------------|---------------------------------------|---------------------------------------|
| Pool Volume (m³) | 150 | 450 |
| Max. Flow Rate (m³/h) | 40 | 60 |
| Max. Working Pressure (bar) | 5 | 10 |
| Diameter (mm) | 120 | 158 |
| Length (cm) | 100 | 95 |
| Outlet Diameter (mm) | 63 | 75 |
| Stainless Steel | 316L | 316L |
| Electronic Ballast | 230V AC 50/60Hz | 230V AC 50/60Hz |
| Max. Current (Amp) | 1,1 | 3 x 1,1 Amp. |
| Bulb Power (W) | 130 | 3 x 130 Watt |
| Wave Length (nm) | 253.7 | 253.7 |
| Bulb Voltage (V) | 70 | 70 |
| Bulb Current (Amp) | 2.1 | 2.1 |
| UV-C 100 h outlet (W) | 50 | 3 x 50 Watt |
| μW/cm² 1 meter distance | 468 | 3 x 468 |
| Bulb Type | Philips TUV 130 Watt 4P-SE Amalgam | Philips TUV 130 Watt 4P-SE Amalgam |
| Setting Time | Exist | Exist (3x) |
| Bulb Change Warning | Exist | Exist (3x) |
| Flow Switch | Exist | Exist |
| Chemical Usage Decrease | 80% | 80% |
| Weigh (Kg) | 8,5 | 30 |
| Package Size (mm) | 265 x 190 x 1065 | 1150 x 365 x 365 |





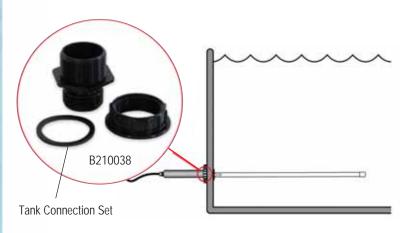
Ultraviolet UV-C Disinfection Systems





This UV-C device is designed for Water Tanks. It's complete with 10 meters cable and installation kit. In case of any problem of installation to wall, it can be placed freely into water tank. It is resistant to sea water. Tank connection set is not included in price.

| Description | Code | Pieces/ box | Weight Kg | Volume m³ |
|------------------------------|-----------|----------------|--------------|--------------|
| UV-C Device, for Water Tanks | 06C100120 | 1 | | |
| UV-C Device Montage Kit | 06C100121 | 1 | | |



| Technic Specifications | B714404039581 |
|-------------------------------------|-----------------------------|
| Diameter (mm) | 35 |
| Length (cm) | 80 |
| Electronic Ballast | 230V AC 50/60Hz |
| Max. Current (Amp) | 0,57 |
| Bulb Power (Watt) | 75 |
| Wave Length | 253,7 |
| Bulb Voltage (V) | 97 |
| Bulb Current (Amp) | 0,80 |
| UV-C 100h output (W) | 25 |
| μW/cm ² 1 meter distance | 230 |
| Bulb Type | Van Erp UV-C Budget 75 Watt |
| Weigh (Kg) | 2 |
| Package Size (mm) | 70 x 220 x 840 |

Ozone Generators - CORONA DISCHARGE



GEMAS HYDROZONE Corona Discharge Ozone Generators. The ozone generated is vacuumed and introduced to the system by injector. Operates with free air suction. Complete with the injector with by-pass valve water trap, flow meter and active carbon filtration for discharge ozone (see.pg 186). Installation of static mixer is recommended. (see.pg 186).

| Description | Code | Pieces/ box | Weight Kg | Volume m³ |
|-----------------------|-------|----------------|--------------|--------------|
| • HOZ CD-05, 5 gr/h | 06421 | 1 | | |
| • HOZ CD-15, 15 gr/h* | 06424 | 1 | | |
| • HOZ CD-08, 8 gr/h | 06451 | 1 | | |
| • HOZ CD-25, 25 gr/h* | 06452 | 1 | | |

(* Must be installed with oxygen concentrator.)



GEMAŞ HYDROZONE Corona Discharge Compact Ozone Systems. 5 g/h capacity, complete with jet pump, automatic gas discharge valve, PVC contact tank, deozonization active carbon tank, injector, PVC water trap tank, PVC base and column. Complete with necassary mechanical and electrical installation. It can be use with oxygen concentrator.

| Description | Code | Pieces/ box | Weight Kg | Volume m³ |
|-------------------------------|--------|----------------|--------------|--------------|
| HOZ CD-05, 5gr/h Compact Unit | 06421C | 1 | | |

Ozone Generators - CORONA DISCHARGE

GEMAS HYDROZONE Corona Discharge COMPACT Ozone Systems.

For 10 gr/h and higher models must be installed with; oxygen concentrator, ozone resistant deozonization contact tank, automatic gas discharge valve and excessive ozone-destructive filter. Below you can see the package systems that are easy to install existing pools. Required amount of quartz sand, and automatic pH and ORP control systems are included in the package price.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------------------------------|--------|----------------|--------------|--------------------------|
| • HOZ CDP-10, 10 gr/h-2" connection | 06424P | 1 | | |
| • HOZ CDP-20, 20 gr/h-2" connection | 06425P | 1 | | |
| • HOZ CDP-50, 50 gr/h-3" connection | 06427P | 1 | | |



Oxygen Concentrator

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-----------------------------------|--------|----------------|--------------|--------------------------|
| • 5 l/h (for 5 - 20 gr/h devices) | 064201 | 1 | | |
| • 10 l/h (for 50 gr/h devices) | 064203 | 1 | | |



Oxygen Cone

It can be used effectively in all application areas where oxygen need is critical (waste water treatment plants, dam lakes where water is supplied, rivers, lakes and ponds open to eutrophication and pollution in recreational areas, fish farming farms, which have a critical place in the food chain, etc.). It is a specially designed unit that can maximize the oxygenation level (super oxygenation) in the said environments at very high rates compared to and its equivalents.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|--------|----------------|--------------|--------------------------|
| • Ø900 mm Oxygen Cone Max Op. Pressure 2 bar | 064400 | 1 | | |
| • Ø1000 mm Oxygen Cone Max Op. Pressure 2 bar | 064401 | 1 | | |
| • Ø1200 mm Oxygen Cone Max Op. Pressure 2 bar | 064402 | 1 | | |
| • Ø1400 mm Oxygen Cone Max Op. Pressure 2 bar | 064403 | 1 | | |
| • Ø1600 mm Oxygen Cone Max Op. Pressure 2 bar | 064404 | 1 | | |



Ozone Injectors

Ozone Injectors. The ozone generated is vacuumed and introduced to the system by injector. Operates with free air suction. It is made of PVDF materials and resistant to all kinds of chemicals.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|-------|----------------|--------------|--------------------------|
| • Venture-3/4"-1/4", center 1-3 m ³ /h | 06441 | 1 | | |
| • Venture-1"-1/2", center 3-10 m3/h | 06442 | 1 | | |
| • Venture-1 1/4"-1/2", center 10-25 m³/h | 06443 | 1 | | |
| • Venture-2"-1/4", center 30-50 m³/h | 06444 | 1 | | |





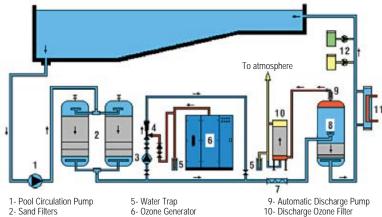
Ozone Generators - CORONA DISCHARGE



| Ozone Capacity Pool Flow Rate (m³/h) | | Recommended Pool Volume (m³) | | Contact + Deozonization | |
|--------------------------------------|--------------|---------------------------------|-----------------------------|-------------------------|-------------------------------|
| (g/h) | Partial Flow | Full Flow | Partial Flow Full Flow 1 | | Tank Diameter Ø (mm) - h (mm) |
| 15 | 75 | 15 | 375 | 75 | Ø 615 - 1550 |
| 25 | 150 | 25 | 750 | 150 | Ø 1250 - 2500 |
| 40 | 200 | 40 | 1000 | 200 | Ø 1400 - 2500 |
| 50 | 250 | 50 | 1250 | 250 | Ø 1400 - 2500 |
| | | | (Average Circ Time: 5 Hrs.) | | |

PS: Above values must increase 10% for indoor pools.

Full flow ozone system: with contact and deozonization tank



- 2- Sand Filters
- 3- Jet Pump 4- Ozone Injector
- 7- Static Mixer 8- Contact + Active Carbon Tank
- 10- Discharge Ozone Filter
- 11- Pool Heater
- 12- Pool Disinfection System

OZONE DOSAGE:

Partial Flowrate:

| OLUME DOGMOL. | |
|---------------------|---|
| UP to 32°C: | 0,8 g/m³ per system flow (For middle busy pool) |
| | 1,0 g/m³ per system flow (For busy pool) |
| Above 32°C: | 1,2 g/m³ per system flow (For middle busy pool) |
| | 1,5 g/m³ per system flow (For busy pool) |
| Ozone Contact Time: | 2 min. |
| Active Carbon Dept: | Min. 500 mm |

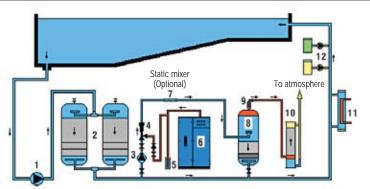
Partial flow ozone system: with contact and deozonization tank

20% of Total Flowrate



WATER TRAP (Pls. see 186)

STATIC MIXER (Pls. see 186)



- 1- Pool Circulation Pump
- 2- Sand Filters 3- Jet Pump
- 4- Ozone Injector
- 5- Water Trap
- 6- Ozone Generator
- 7- Static Mixer
- 8- Contact + Active Carbon Tank
- 9- Automatic Discharge Pump
- 10- Discharge Ozone Filter 11- Pool Heater
- 12- Pool Disinfection System



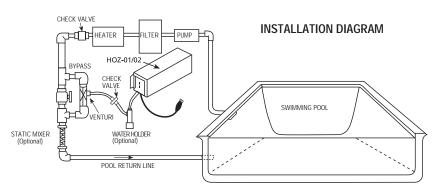
Ozone Generators with UV Method

GEMAS HYDROZONE OZONE GENERATOR (With UV Method).

The ozone generated is vacuumed and introduced to the system by venturi. Complete with venturi + by-pass valve. Can be easily installed in existing swimming pools. Recommended for residential pools.



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|-------|----------------|--------------|--------------------------|
| • HOZ-01, up to 90 m ³ - 0,248 g/h | 06411 | 1 | 13,000 | 0,051 |
| • HOZ-02, up to 150 m ³ - 0,437 g/h | 06412 | 1 | 14,000 | 0,051 |





UV-Ozone Spare Bulb For GEMAS HYDROZONE Ozone Generator.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|--------|----------------|--------------|--------------------------|
| | 064101 | 1 | 0,616 | 0,003 |

Water Trap for Ozone Generator. Prevents back flow of water to the device when the system is shut down.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|--------|----------------|--------------|--------------------------|
| | 064102 | 1 | | |
| | 064103 | 1 | | |



Static Mixer. Provides evenly diffusion of ozone in water flow.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|---------|----------------|--------------|--------------------------|
| • 1 1/2" | 0641031 | 1 | | |
| • 2" | 0641032 | 1 | | |
| • 2 1/2" | 0641033 | 1 | | |
| • 3" | 0641034 | 1 | | |



GEMAS CORONA Ozone Discharge Valve. Ozone resistant.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------------|---------|----------------|--------------|--------------------------|
| 1/2", 316 Inox Floater | 0641041 | 1 | 0,616 | 0,003 |

0641031





Ozone + Ultraviolet Combined Disinfection Systems

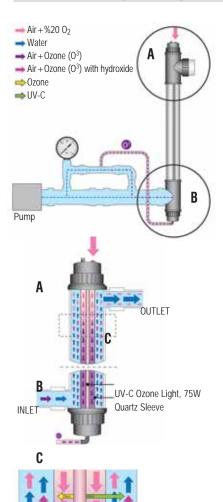


With the Ozone + UV Device; ozone generated inside special wave length UV bulb is vacuumed and introduced to the system by injector and transferred into pool circulation. On the other hand, it can execute the disinfection process by direct radiation to pool water from the same ozone bulb's quarts housing. Devices is complete with the bypass valve and injector. It can easily be installed into existing pool installations. Device body is 316L stainless steel.

It has timer, and gives signal when bulb's lifespan is over. Bulb power is 75 Watt, radiation power is 25 Watt, and Ozone output is 0,6 g/h.

The recommended pool capacity by the manufacturer is $75~\text{m}^3$. It can reduce the chlorine usage up to 90%. Ozone helps destroying sun cream, cosmetics, urine, and sweat in the water. After these process UV-C exposed pool water eliminates the residual ozone through disinfection.

| Description | Code | Pieces/ box | Weight Kg | Volume m³ |
|--------------------------------|------------|----------------|--------------|--------------|
| Ozon + UV-C Device (Gemas OEM) | 06NTUV87TO | 1 | 7,700 | |



| Technic Specifications | NT-UV87-TO |
|--|---------------------|
| Pool Volume (m ³) | 90 |
| Max. Flow Rate (m ³ /h) | 25 |
| Max. Working Pressure (bar) | 3 |
| Diameter (mm) | 72 |
| Length (cm) | 100 |
| Outlet Diameter (mm) | 63 |
| Stainless Steel | 316L |
| Electronic Ballast | 120-240V AC 50/60Hz |
| Max. Current (Amp) | 0,60 |
| Bulb Power (W) | 87 |
| Wave Length (nm) | 253,7 |
| Bulb Voltage (V) | 97 |
| Bulb Current (Amp) | 0,90 |
| UV-C 100 h outlet (W) | 25 |
| μ W/cm ² 1 meter distance | 144 |
| Bulb Type | Ozone lamp 87 W |
| Ozone | Exist - 0,6 gr/h |
| Setting Time | Exist |
| Bulb Change Warning | Exist |
| Chemical Usage Decrease | 95% |
| Weigh (Kg) | 7,7 |
| Package Size (mm) | 370 x 130 x 1110 |



Copper Ionization + UV Combined Disinfection System

It's for private pools. It can completely eliminate the need of chlorine. It provides the disinfection 80% with UV-C and 20% through copper ionization. It controls the bacteria and algae formation in the water. It also provides an active flocculation by releasing positive charged ions to pool water.

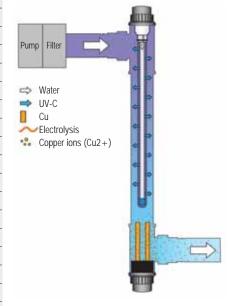
Copper electrolysis + UV-C works combined. 253,7 mm wave length UV lights are highly effective on bacteria and viruses. 316L stainless steel body provides + 35% better radiation. The chloric buffer function in UV + Chlori combination is done by copper ions. In system, it's installed after filter. The device constantly supplies copper ions into water. +2 charged copper ions kill bacteria, algae and other primitive organisms by destroying their cell walls. Fortnightly, the copper concentration is measured with tool supplied with the device. Thus, 0,7 ppm copper concentration continuity is provided. Ionization amount is controlled with the electronic control device. The device is ideal up to 70 m³ private pools.

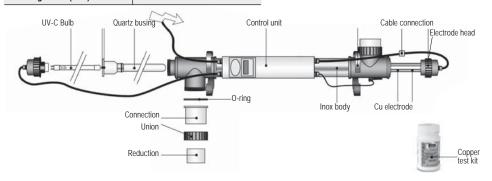
Copper ionization system comfortably and effectively substitutes the algecides and floculent chemical agents in the existing pools.

| Description | Code | Pieces/ box | Weight Kg | Volume m³ |
|---------------------------------|-----------|----------------|--------------|--------------|
| Copper Ionization + UV-C Device | 06B200003 | 1 | 6,000 | |

| Technic Specifications | B200003 |
|------------------------------------|-------------------------|
| Pool Volume (m ³) | 70 |
| Max. Flow Rate (m ³ /h) | 25 |
| Max. Working Pressure (bar) | 2 |
| Diameter (mm) | 72 |
| Length (cm) | 100 |
| Outlet Diameter (mm) | 63-50 |
| Stainless Steel | 316L |
| Electronic Ballast | 230V AC 50/60Hz |
| Max. Current (Amp) | 0,57 |
| Bulb Power (W) | 75 |
| Wave Length (nm) | 253,7 |
| Bulb Voltage (V) | 97 |
| Bulb Current (Amp) | 0,80 |
| UV-C 100 h outlet (W) | 25 |
| μ W/cm 2 1 meter distance | 230 |
| Bulb Type | Blue Lagoon UV-C 75 Wat |
| Copper Ionization | Exist - 0,7 gr/h |
| Bulb Change Warning | Exist |
| Chemical Usage Decrease | 100% |
| Weigh (Kg) | 6 |
| Package Size (mm) | 280 x 150 x 1010 |

This product sales are limited with current stock. Please ask the stock status before ordering.









Floating - Solar Copper Lonization System



Solar Clear, Copper + Zinc Alloyed Lonization System.

Works with solar battery. Max pool volume120 m³. Decreases the chlorine or equivalent oxidation disinfection requirement aproximately 80%. It can be used with UV and/or Dechloramin for Chlorine-Free applications in residential pools. It should not be used in liner/membrane pools due to Coppers dispersing agent impact on synthetic materials. It's not obliged to use flocculant or algecide, because Copper having positive effect on algea and flocculation. On the high degrees of water hardness, the product will act as a softening agent as it collects lime on its anode. But the anode must be cleaned periodically with wire brush inside the package. Complete with wire brush and strip copper test device. Ideal copper concentration is 0,5 ppm. Permanently use necessary on above 70 m³ pool but it can be used halftime on smaller pools. Min. Copper concentration must be 0,3 ppm. Electrode lifetime can be change by use aproximately 12 to 24 months.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|------|----------------|--------------|--------------------------|
| Solar Clear | 0601 | 1 | | |

Solar Copper Lonization System Spares



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------------|---------|----------------|--------------|--------------------------|
| • Anode | 0601Y01 | 1 | | |
| • Filter | 0601Y02 | 1 | | |
| • Screw | 0601Y03 | 1 | | |
| Stripe Copper Test Kit | 0834 | 1 | | |
| Wire Brush | 0601Y04 | 1 | | |



0601Y02

Dechloramin use recommended with SOLAR CLEAR

"DECHLORAMIN". Granulated active oxygen compound for chloramine destruction. After shocking, the pool can be used by bathers within a very short time. Alternative to the required small amount of chlorine in ozone pools.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| • 1 kg | 07611 | 1 | 1,000 | 0,002 |
| • 5 kg | 07612 | 1 | 5,000 | 0,009 |
| • 25 kg | 07613 | 1 | 10,000 | 0,023 |



07613

| DECHLORAMIN | Non-chlorine Shock Treatment Agent | For Clarifying Pool Water | 100 gr/week to 10 m³ pool water (Residential pool) 150 gr/week to 10 m³ pool water (Public pool) |
|-------------|--|------------------------------|---|
| | Agent | | 130 girweek to 10 iii pool water (i abiie pool) |





Water Disinfection

"FASTCHLOR" Stabilized Dichlorine Granular, 56%.

Quick dissolving stabilized granular dichlorine with 56% or 60% chlorine content.



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|--------|----------------|--------------|--------------------------|
| • 5 kg | 071111 | 1 | 5,000 | 0,006 |
| • 10 kg | 071112 | 1 | 10,000 | 0,012 |
| • 15 kg | 071113 | 1 | 15,000 | 0,017 |
| • 25 kg | 071116 | 1 | 25,000 | 0,033 |
| • 30 kg | 071114 | 1 | 30,000 | 0,033 |
| • 50 kg | 071115 | 1 | 50,000 | 0,057 |

"FASTCHLOR 100" Stabilized Trichlorine Granular, 90%.

Slow dissolving stabilized granular trichlorine with 90% chlorine content.



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|--------|----------------|--------------|--------------------------|
| • 5 kg | 071131 | 1 | 5,000 | 0,006 |
| • 10 kg | 071132 | 1 | 10,000 | 0,012 |
| • 15 kg | 071133 | 1 | 15,000 | 0,017 |
| • 25 kg | 071136 | 1 | 25,000 | 0,033 |
| • 30 kg | 071134 | 1 | 30,000 | 0,033 |
| • 50 kg | 071135 | 1 | 50,000 | 0,057 |

"TABCHLOR" Stabilized Trichlorine Tablet, 200 gr 90%.

Slow dissolving stabilized trichlorine with 90% chlorine content in 200 gr tablet form.



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|---------|----------------|--------------|--------------------------|
| • 5 kg | 0712311 | 1 | 5,000 | 0,006 |
| • 10 kg | 0712312 | 1 | 10,000 | 0,012 |
| • 15 kg | 0712313 | 1 | 15,000 | 0,017 |
| • 20 kg | 0712314 | 1 | 20,000 | 0,022 |
| • 50 kg | 0712315 | 1 | 50,000 | 0,057 |

"TABCHLOR-Multi" Stabilized Trichlorine Tablet, 200 gr.

Slow dissolving stabilized Trichlorine. Algecide and flocculant.



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|---------|----------------|--------------|--------------------------|
| • 5 kg | 0714241 | 1 | 5,000 | 0,006 |
| • 10 kg | 0714242 | 1 | 10,000 | 0,012 |
| • 15 kg | 0714243 | 1 | 15,000 | 0,017 |
| • 20 kg | 0714244 | 1 | 20,000 | 0,022 |
| • 50 kg | 0714245 | 1 | 50,000 | 0,057 |



Water Disinfection and Chlorine Stabilizer

"CALCIUM HYPOCHLORITE" 70%

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------|--------|----------------|--------------|--------------------------|
| • 40 kg Granular | 071125 | 1 | 40,000 | 0,044 |
| • 40 kg Tablet | 071226 | 1 | 40,000 | 0,044 |



"FASTCHLOR L".

Sodium hypochlorite with 12% active chlorine content.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------|--------|----------------|--------------|--------------------------|
| • 10 I / 12 kg | 071311 | 1 | 10,000 | 0,012 |
| • 20 I / 25 kg | 071313 | 1 | 20,000 | 0,028 |
| • 25 I / 30 kg | 071315 | 1 | 25,000 | 0,044 |
| • 30 I / 36 kg | 071312 | 1 | 30,000 | 0,044 |



CHLORSTAB isocyanuric acid - chlorine stabilizer.It can be used with FASTCHLOR L, Calcium Hypochloride and Salt-Water Chlorinators. Reduces chlorine useage at least 100%.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|--------|----------------|--------------|--------------------------|
| • 5 kg | 075391 | 1 | 5,000 | 0,008 |
| • 10 kg | 075392 | 1 | 10,000 | 0,017 |
| • 20 kg | 075393 | 1 | 20,000 | 0,023 |
| • 50 kg | 075395 | 1 | 50,000 | 0,057 |



| CHLORSTAB Isocyanuric acid | Chlorine Stabilizer | 5 kg first dose for 100 m³ pool water Following doses according to test results max. 100 ppm |
|----------------------------|---------------------|--|
|----------------------------|---------------------|--|



Non-Chlorine Shock Treatment



"DECHLORAMIN".

Granulated active oxygen compound for chloramine destruction. After shocking, the pool can be used by bathers within a very short time. Alternative to the required small amount of chlorine in ozone pools.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| • 5 kg | 07612 | 1 | 5,000 | 0,006 |
| • 10 kg | 07617 | 1 | 10,000 | 0,011 |
| • 25 kg | 07613 | 1 | 25,000 | 0,027 |



"OXYTRONE"

Granulated active oxygen compound for chloramine destruction. After shocking, the pool can be used by bathers within a very short time. Alternative to the required small amount of chlorine in ozone pools.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|--------|----------------|--------------|--------------------------|
| • 5 kg | 071151 | 1 | 5,000 | 0,006 |
| • 10 kg | 071152 | 1 | 10,000 | 0,011 |
| • 25 kg | 071153 | 1 | 25,000 | 0,027 |



"CHLORINE-OUT"

Reset the Total Chlorine of pool water in pools with high Combined Chlorine problems or pools with high chlorine. To reduce the Total Chlorine of 100 m³ pool water by 1 ppm, dissolved 300 gr of Chlorine-Out in water and dose this into the pool.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|--------|----------------|--------------|--------------------------|
| • 5 kg | 071144 | 1 | 5,000 | 0,006 |
| • 10 kg | 071145 | 1 | 10,000 | 0,011 |
| • 25 kg | 071146 | 1 | 25,000 | 0,027 |

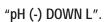
pH Regulators



"pH (-) DOWN".

Granular acid to reduce and stabilize pH level.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|--------|----------------|--------------|--------------------------|
| • 7 kg | 072111 | 1 | 7,000 | 0,006 |
| • 15 kg | 072112 | 1 | 15,000 | 0,017 |
| • 25 kg | 072113 | 1 | 25,000 | 0,023 |
| • 50 kg | 072114 | | 50,000 | 0,043 |



Granular acid to reduce and stabilize pH level.



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------|--------|----------------|--------------|--------------------------|
| • 10 I / 12 kg | 072121 | 1 | 12,000 | 0,012 |
| • 20 I / 25 kg | 072123 | 1 | 25,000 | 0,028 |
| • 25 I / 30 kg | 072124 | 1 | 30,000 | 0,044 |
| • 30 I / 36 kg | 072122 | 1 | 36,000 | 0,044 |



pH Regulators

"pH (-) DOWN HCI" Liquid pH reducer and limescale remover. (30% Hydrochloric acid)

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|--------|----------------|--------------|--------------------------|
| • 10 | 072126 | 1 | 10,000 | 0,014 |
| • 25 | 072125 | 1 | 25,000 | 0,028 |
| • 30 | 072129 | 1 | 30,000 | 0,044 |
| • 35 | 072128 | 1 | 35,000 | 0,044 |



"pH (+) UP".

Alkaline in powder form to increase and stabilize pH level.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|--------|----------------|--------------|--------------------------|
| • 4 kg | 072211 | 1 | 4,000 | 0,006 |
| • 10 kg | 072212 | 1 | 10,000 | 0,012 |
| • 25 kg | 072218 | 1 | 25,000 | 0,022 |
| 20 119 | 072210 | 1 | 20,000 | 0,02 |



Algicides

"ALGEX".

Liquid Algicide and bactericide for destruction of algae.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|--------|----------------|--------------|--------------------------|
| • 51 | 073111 | 1 | 5,000 | 0,007 |
| • 10 | 073112 | 1 | 10,000 | 0,014 |
| • 20 | 073114 | 1 | 20,000 | 0,028 |
| • 30 | 073113 | 1 | 30,000 | 0,044 |
| | | | | |



"ALGEX PROTECTOR".

Liquid Algicide and bactericide against algae growth.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|--------|----------------|--------------|--------------------------|
| • 5 | 073311 | 1 | 5,000 | 0,007 |
| • 10 | 073312 | 1 | 10,000 | 0,014 |
| • 20 | 073314 | 1 | 20,000 | 0,028 |
| • 30 | 073313 | 1 | 30,000 | 0,044 |
| | | | | |





Algicides

A BRAND NEW KIND OF ALGICIDE



"STARVEX" Anti Phosphate.

Starvex is an ECO-firendly chemical which vanishes algea chain by binding and destructing the phosphate in the water. It does not blur the water. It can be used with all pool chemicals. **USED DOSAGES ARE VERY LOW**

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|--------|----------------|--------------|--------------------------|
| • 51 | 075381 | 1 | 5,000 | 0,007 |
| • 10 | 075382 | 1 | 10,000 | 0,014 |
| • 20 | 075383 | 1 | 20,000 | 0,028 |
| • 30 | 075384 | 1 | 30,000 | 0,044 |

For Phosphate Test Kit, Please see Test Kits Section.

| STARVEX Liquid Algicide | 1 I dose for 50 m³ pool water. 0,5 I dose in following weeks. |
|-------------------------|--|
|-------------------------|--|

Flocculant



"PUREFLOCK L". Highly Effective Liquid Flocculant.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| • 51 | 07411 | 1 | 5,000 | 0,007 |
| • 10 | 07422 | 1 | 10,000 | 0,014 |
| • 20 | 07424 | 1 | 20,000 | 0,028 |
| • 30 | 07423 | 1 | 30,000 | 0,044 |



"PUREFLOCK C".

Cartridges Flocculant for continuous clarifying treatment.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------------------|-------|----------------|--------------|--------------------------|
| Box containes 8 cartridges | 07421 | 1 | 1,280 | 0,003 |



"MULTIFLOCK C".

Cartridges Flocculant and algicide for continuous clarifying treatment.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------------------|-------|----------------|--------------|--------------------------|
| Box containes 8 cartridges | 07430 | 1 | 1,280 | 0,003 |



"CLEARFLOCK GEL" Gel Flocculant.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------------------------|-------|----------------|--------------|--------------------------|
| Box containes 4 gel cartridges | 07425 | 1 | 0,30 | |
| Box containes 1 gel cartridges | 07427 | 1 | 0,65 | |



"ACTIVE FLOCK" Liquid. Floating partides in the pool water are catched by the sand filter. No sediments on the pool bottom.



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|--------|----------------|--------------|--------------------------|
| • 51 | 074241 | 1 | 5,000 | 0,007 |
| • 10 | 074242 | 1 | 10,000 | 0,014 |
| • 20 | 074243 | 1 | 20,000 | 0,028 |
| • 30 | 074244 | 1 | 30,000 | 0,044 |



Flocculant

"MIRACLEAR" Super Shock Clarifier.

It enables the suspended particles in the pool water to be held inside the filter. Miraclear does not make sediment on the floor of the pool. Single dose in every 3 or 4 week is enough. It's a fast and an effective for solution to cloudy pools.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|--------|----------------|--------------|--------------------------|
| • 5 | 075371 | 1 | 5,000 | 0,007 |
| • 10 | 075372 | 1 | 10,000 | 0,014 |
| • 20 | 075373 | 1 | 20,000 | 0,028 |
| • 30 | 075374 | 1 | 30,000 | 0,044 |



"CALCEX FILTER".

Descaling and cleansing agent for periodical maintenance of sand filters.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| • 1 kg | 07521 | 1 | 1,000 | 0,001 |
| • 4 kg | 07522 | 1 | 4,000 | 0,006 |
| • 10 kg | 07523 | 1 | 10,000 | 0,012 |

Filter Care



Prevention of Lime Sedimentation in Hard Pool Waters

"CALSTAB".

Stabilizes hardness prevents scaling on pool surfaces.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| • 51 | 07551 | 1 | 5,000 | 0,007 |
| • 10 | 07552 | 1 | 10,000 | 0,014 |
| • 20 | 07556 | 1 | 20,000 | 0,028 |
| • 30 | 07553 | 1 | 30,000 | 0,044 |



Electrode Cleaning for Salt-Chlorine Generators

"SCALEX" Anti-Lime for Salt-Chlorine Generators.

Initial dose: 2,5 I/100 m³ pool water. This figure should be doubled in pools using hard water. Consecutive use dose: 2.5 I/6 months.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|--------|----------------|--------------|--------------------------|
| • 5 kg | 075327 | 1 | 5,000 | 0,007 |
| • 10 kg | 075328 | 1 | 10,000 | 0,014 |
| • 20 kg | 075329 | 1 | 20,000 | 0,028 |



"FUNGEX". Fungicidal disinfectant.

Description Code Pieces/box Weight Kg Volume m³ • 10 I 07541 1 10,000 0,014 • 30 I 07542 1 30,000 0,044

Foot and Surface Disinfection



Pool Surface Cleaning



"SCALEX POOL" Limescale Removal - effective when the pool is "FULL"

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|--------|----------------|--------------|--------------------------|
| • 5 kg | 075323 | 1 | 5,000 | 0,001 |
| • 10 kg | 075324 | 1 | 10,000 | 0,007 |
| • 20 kg | 075325 | 1 | 20,000 | 0,028 |

"CALCEX POOL".

Descaling cleaner to eliminate calcium deposits on the pool basin.



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|--------|----------------|--------------|--------------------------|
| •11 | 075311 | 1 | 1,000 | 0,001 |
| • 51 | 075312 | 1 | 5,000 | 0,007 |
| • 10 | 075313 | 1 | 10,000 | 0,012 |
| • 20 | 075315 | 1 | 20,000 | 0,028 |
| • 30 | 075314 | 1 | 30,000 | 0,044 |

"SOOT-OFF".

Cleaner for removing grease and dirts at the water rim.



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|--------|----------------|--------------|--------------------------|
| •11 | 075321 | 1 | 1,000 | 0,001 |
| • 51 | 075322 | 1 | 5,000 | 0,007 |
| • 10 | 075323 | 1 | 10,000 | 0,014 |
| • 20 | 075325 | 1 | 20,000 | 0,028 |

"CLEAN GROUTING" Grouting cleaner.

| | | | | - | П |
|------|------------|---|----|---|---|
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| - 60 | <u>. u</u> | | 9 | | |

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|--------|----------------|--------------|--------------------------|
| •11 | 075341 | 1 | 1,000 | 0,001 |
| • 51 | 075342 | 1 | 5,000 | 0,007 |

"MORTAR-OFF" Mortar cleaner.



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|--------|----------------|--------------|--------------------------|
| •11 | 075351 | 1 | 1,000 | 0,001 |
| • 51 | 075352 | 1 | 5,000 | 0,007 |

Winter Care

"POOLWIC".

For Winter Care against algae growth and calcium deposits.



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| • 51 | 07511 | 1 | 5,000 | 0,007 |
| • 10 | 07512 | 1 | 10,000 | 0,014 |
| • 20 | 07514 | 1 | 20,000 | 0,028 |
| • 30 | 07513 | 1 | 30,000 | 0,044 |



Pool Chemicals

| GEMAS POOL CHEMICALS DOSING INSTRUCTIONS | | | | |
|--|------------------------------------|--|--|--|
| PRODUCT | DESCRIPTION | FUNCTION | DOSAGE | |
| FACTCHI OD | Stabilized Granular | Disinfection | 0,5 kg/day for 100 m³ pool water (Public pools) 0,5 kg/week for 100 m³ pool water (Residential pools) | |
| FASTCHLOR | Dichlorine | Shocking | 0,6-1 kg/15day for 100 m³ pool water (Public pools) 0,6-1 kg/month for 100 m³ pool water (Residential pools) | |
| FASTCHLOR 100 | Stabilized Granular Trichlorine | Disinfection | 0,35 kg/day for 100 m³ pool water (Public pools) 0,35 kg/week for 100 m³ pool water (Residential pools) | |
| TABCHLOR 200 gr | Stabilized Trichlorine Tablet | Disinfection | 1 Tablet for 30 m³ pool water (once 10-12 days) | |
| H.TRICHLOR T 200 gr | Stabilized Trichlorine Tablet | Disinfection | 1 Tablet for 30 m³ pool water (once 10-12 days) | |
| CALCIUM HYPOCHLORITE | %70 Granular/Tablet | Disinfection | 200 gr/day for 100 m³ pool water | |
| BROMINE | Bromine Tablet | Disinfection | 400 gr/day for 30 m³ pool water | |
| FASTCHLOR L | Sodium Hypochlorite %12 | Disinfection | 2,5-5 liters/day for 100 m³ pool water | |
| CHLORSTAB | Isocyanuric Acid | Chlorine Stabilizer | 5 kg first dose for 100 m³ pool water. Following doses according to test results max. 100 ppm | |
| DE0.11 0D 11 111 | Non-chlorine Shock | For the William of the con- | 100 gr/week for 10 m³ pool water (Residential pools) | |
| DECHLORAMIN | Treatment Agent | For clarifying pool water | 150 gr/week for 10 m³ pool water (Public pools) | |
| OXYTRONE | Granular | Oxygen based organic cleaner | 1000-1300 gr/week dose per 100 m³ pool water (Residential pools) 1500-1800 gr/week dose per 100 m³ pool water (Public pools) | |
| CHLORINE-OUT | Gralunar | Chlorine and chlorine remover | 300 gr dose per 100 m³ pool water to reduce total chlorine by 1 ppm | |
| pH (-) DOWN | Granular | pH Down | 1 kg for 100 m³ pool water decreases pH by 0,1 unit | |
| pH (-) DOWN L | Liquid | pH Down | 1 liter for 100 m³ pool water decreases pH by 1 unit | |
| pH (-) DOWN HCI | Liquid | pH Reduce and Limescale cleaner | 1 I dose per 100 m³ pool water reduces pH by 0,1 and alkalinity by 0,23 ppm | |
| pH (+) UP | Granular | pH Up | 1 kg for 100 m³ pool water increases pH by 0,1 unit | |
| | | | First dosage of 1,5 liters. Weekly dosage of 0,5 liter afterwards (outdoor pool) | |
| ALGEX | Liquid | Algicide | First dosage of 1,5 liters. Weekly dosage of 0,3 liter afterwards (indoor pool) | |
| ALGEX PROTECTOR | Liquid | Algicide | First dosage of 1,5 liters. Weekly dosage of 0,5 liter afterwards (outdoor pool) | |
| STARVEX | Liquid | Algicide | 1 I dose for 50 m³ pool water. 0,5 I dose in following weeks. | |
| PUREFLOCK L | Liquid | Flocculant | 30-200 ml/day for 100 m³ pool water | |
| CLEARFLOCK GEL | Mold Gel | Gel Flocculant | | |
| PUREFLOCK C | Cartridge | Flocculant | 1 cartridge/5-7 days for 60 m³ pool water | |
| MULTIFLOCK C | Cartridge | Flocculant + Anti-Algea | 1 cartridge/5-7 days for 60 m³ pool water | |
| ACTIVE FLOCK | Liquid | Polisher | 100 m³ pool water 30-200 ml/day | |
| MIRACLEAR | Liquid | Super Shock Clerifier | 1 l first dose for 100 m³ pool water. Same dose in following 3-4 week. | |
| CALCEX FILTER | Granular | Anti Calcification | 1 kg/15-30 days for each m³ of filter volume | |
| CALSTAB | Liquid | Hardness Stabilization | 100-400 ml for 10 m³ pool water. | |
| CALCEX POOL | Liquid | Descaling Cleaner on Surface | Can be diluted at ratio of 1/5 or 1/10. Should be waited maximum 15 minutes. | |
| SCALEX POOL | Liquid | For Cleaning Lime on Pool Surface | 2,5-5 l per 100 m³ pool water | |
| SCALEX | Liquid | Anti-Lime for Salt-Chlorine Generators | 2,5 l first dose to 100 m³ pool water 375 ml/month or 2,5 l/6 month | |
| SOOT-OFF | Liquid | Grease and dirt remover | Can be diluted at ratio of 1/5 or 1/10. | |
| CLEAN GROUTING | Liquid | Grout cleaning | Can be diluted 1/5 or 1/10. Wait for 2-3 minutes and brush. | |
| MORTAR-OFF | Liquid | Mortar cleaning | Apply on mortar. Brush with heavy duty bristles. | |
| POOLWIC | Liquid | Winter Care Product | 3 - 5 liter (According to hardness) to 100 m³ pool Re-dose in 2 months. | |



Pool Problems and Solutions



| PROBLEM | CAUSE | EFFECT | SOLUTION |
|--|---|---|--|
| Dull looking cloudy water | Low chlorine stabilizer (cyanuric acid) high (>100 ppm) | The first stage of algae growth | Adjust pH with FASTCHLOR L and shock chlorination |
| On walls, pipes, filters, etc. stone formation | pH high, CaCO3 Solubility exceeded, alkalinity high | Pipes blocked increase in filter pressure | pH should be adjusted continuously |
| Eye and skin irritation | Unsuitable pH, ineffective chlorine due to chlorination with high amount | Increase in the amount of pollution | Adjust pH with FASTCHLOR and shocking chlorination |
| Constantly in an eye-catching level chlorine smell | Free chlorine low, due to false shock chlorination stabilizer and bound chlorine, high (>0.2 ppm) | Insufficient disinfection | Free chlorine should be 0.8-2.0 ppm and correct shock chlorination must be done |
| Foaming in pool water | High-dose algaecide use and organic pollution | Cost increase | Shock chlorination and use fresh water |
| Non shiny water | Filtration low pH high | Insoluble suspended matter increase by amount | Check the filter, decrease pH |
| Colorful but clear water | Metal ions are present in the water | Metal oxidation | Adjust pH with FASTCHLOR shocking chlorinate and use CALSTAB ion holder |
| Bleaching in hair, clothing, vinyl coatings | Chlorine level is too high, free chlorine incorrectly measured | Cost increase due to excessive chlorine consumption | Lower the chlorine level |
| Colored particles present in the water | Low pH and corrosion | Metal oxidation | Raise pH |
| Green blurry water, slippery surfaces and algae | Low chlorine level too much stabilizer | Algae growth | Adjust pH, perform shock chlorination |
| Green or brown algae | Lower free chlorine in water | Inadequate disinfection and algae re-production | Adjust pH with FASTCHLOR shocking chlorine,use antialgae. Brush the surfaces and clean |

Properties That Should Exist In Pool Waters

- (1) It is checked in the pools where chlorine compounds with stabilizers are used for disinfection of water.
- (2) Hydrogen peroxide should be within the range of 40-80 when "hydrogen peroxide + biguanide" is used for disinfection of water. In this case it is acceptible that pH 8.2, ammonium 1.5 and total level of alkalinity suitable up to level 220. No free chlorine measurement is done in these pools but hydrogen peroxide and biguanide are measured.
- (3) It is checked in the pools where Chlorine and chlorinated compounds are used for water disinfection.(4) It is the exact required level where
- Ozone, UV, chlorine dioxide and other disinfection systems are used in the pools for water disinfection.

 NOTE: Hydrogen peroxide, biguanide and free chlorine measurements are made on pool site.

 Our company reserves the right to make changes in all listed products without notifying the customer.

Annex-1 Chemical Properties

| Parameter | Analysis Range | Unit | Limit \ Minimum | /alues Maximum |
|--|-------------------|------|--------------------|-------------------|
| Cyanuric acid (1) | | | - | 100 |
| Biguanid ⁽²⁾ | | | 2 | 30 |
| Hydrogen peroxide (2) | | | 40 | 80 |
| pH ⁽²⁾ | | | 6,5 | 7,8 |
| Ammonium (2) | | | | 0,5 |
| Nitrite | | | | 0,5 |
| Nitrate | Once a month | mg/l | | 50 |
| Copper | | | | 1 |
| Aluminum | | | | 0,2 |
| Total alkalinity (2) (CaCO ₃) | | | 30 | 180 |
| Bound chlorine (3) | | | | 0,2 |
| Indoor swimming pool water free chlorine (3) | | | 1 | 1,5 |
| Open swimming pool water free chlorine (3) | | | 1 | 3 |
| Free chlorine ⁽⁴⁾ | | | 0,3 | 0,6 |



Test Kits with Liquid Reagents

TEST KIT FOR CHLORINE AND pH WITH LIQUID REAGENTS.

Complete with 25 cc OTO and PHENOL RED Liquid reagents.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| | 08211 | 1 | 0,170 | |



LIQUID REAGENTS

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------------|--------|----------------|--------------|--------------------------|
| • CHLORINE OTO - 25 cc | 082111 | 1 | 0,028 | |
| • PHENOL RED - 25 cc | 082112 | 1 | 0,028 | |



TOTAL HARDNESS TEST KIT. By titration method.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| | 08221 | 7 | 1,120 | 0,006 |



Test Kits with Tablet Reagents

TEST KIT WITH TABLETS.

For Free Chlorine and pH. Includes 10 pieces of test agents.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| | 08111 | 10 | 0,160 | 0,0004 |



TEST KIT FOR CHLORINE/BROMINE, pH & ALKALINITY

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| PT 500 | 08131 | 1 | 0,160 | 0,0004 |





Stick Test Kits



AQUACHECK "YELLOW" STICK TEST KITS.

Indicates pH, Free Chlorine, Total Alkalinity and Cyanuric Acid Level. Colormetric based measure system. Includes 50 pieces of test sticks.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------------------------------|------|----------------|--------------|--------------------------|
| AQUACHECK YELLOW - For 50 Tests | 0831 | 1 | 0,050 | 0,0008 |



POOL ID STRIP SALINITY TEST KIT.

It measures salinity between 0 - 8000 ppm. There are 20 pieces of test strips in the box.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------------|------|----------------|--------------|--------------------------|
| SALINITY TEST KIT | 0835 | 1 | | |

Electronic Photometer - Test Strips & Readers



AQUACHECK "TRUTEST" DIGITAL TEST STRIPS & READER.

pH, free chlorine and total alkalinity. After the AQUCHECK TRUTEST test strips are immersed in the pool water, the measurement is made by placing it on the Trutest device. It eliminates the risk of making wrong measurements due to users distinguishing colours incorrectly. It reports on the left of the screen that the measured values are low, ideal or high. Keeps the last 9 measurements in its memory. For bromine measurement, multiply the Chlorine measurement obtained by 2.2. Works with 2 alkaline batteries.

Code

0841

08411

Weight

Κğ

0,236

0,042

Pieces/

box

Volume

 m^3

0,0018

0,0008







Photometer Test Kits

"POOLLAB"

Photometric test kit. Total / Bound Chlorine, Ph, Alkalinity, Cyanuric Acid, Total Hardness, Active Oxygen, Bromine, Chlordioxide, Ozone, Hydrogen peroxide can be measured. There are reagents for the first four parameters in the kit. Other reagents should be purchased extra on request. It can be connected to a **smartphone** via Bluetooth. When the test results are synchronized, the software and the preloaded chemicals in the application will suggest the required dose. The user can print these results. The poollab, which is an IP68 rated device, can be safely submersed into the body of water to be sampled.



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------------|------|----------------|--------------|--------------------------|
| POOLLAB 5 in 1 kit | 0844 | 1 | | |

"PRIMELAB" Multitest.

Photometric test kit. Options with 5 in 1 kit which measures Total/Combined Chlorine, pH, Alkalinity, Total Hardness and Cyanuric Acid. Pro kit includes parameters Total / Combined Chlorine, Bromine, pH, Alkalinity, Cyanuric Acid, Ammonify, Nitrite, Nitrat, Copper, Aluminium, Hidrogen Peroxide, Biguanide, Color and Turbidity).

Complete with all necessary agents calibration and measurement equipment and carrier case. For spare part agent prices, please see page 201. It can be connected via bluetooth to smartphones, tablets and PCs.

The necessary chemical dosages and comments to the test results are given as suggestions with the help of software or application.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------------------|------|----------------|--------------|--------------------------|
| Primelab 5 in 1 Kit | 0848 | 1 | | |
| Primelab Pro Kit | 0849 | 1 | | |
| Parameter Addition | 0843 | | | |



Test Kits With Disc Comparator

With 5 in 1 kit, Free chlorine, pH, total alkalinity, total hardness and cyanuric acid are measured. The result is given by comparing the sample color with color disc. Complete with all agents, sample tubes and carrier bag.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|------|----------------|--------------|--------------------------|
| • 5 in 1 Test Kit, with disc comparator | 0850 | 1 | | |
| Phosphate Test Kit, with disc comparator | 0851 | 1 | | |







0850



Spare Tablet Agents

"DPD1 FREE CHLORINE REAGENT. (1 Folio includes 10 tablets)



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------------------|----------|----------------|--------------|--------------------------|
| • DPD1 – Folio | 081111 | 50 | 0,128 | 0,001 |
| • Box inc. 500 pcs | 0811111 | 1 | 0,170 | 0,0009 |
| • Box inc. 1000 pcs | 08111112 | 1 | | |

PHENOL RED REAGENT. (1 Folio includes 10 tablets)



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------------|---------|----------------|--------------|--------------------------|
| • Phenol Red – Folio | 081112 | 50 | 0,128 | 0,001 |
| • Box inc. 500 pcs | 0811121 | 1 | | |
| • Box inc. 1000 pcs | 0811122 | 1 | | |

DPD3 DEPENDENT CHLORINE AGENT. (1 Folio includes 10 tablets)

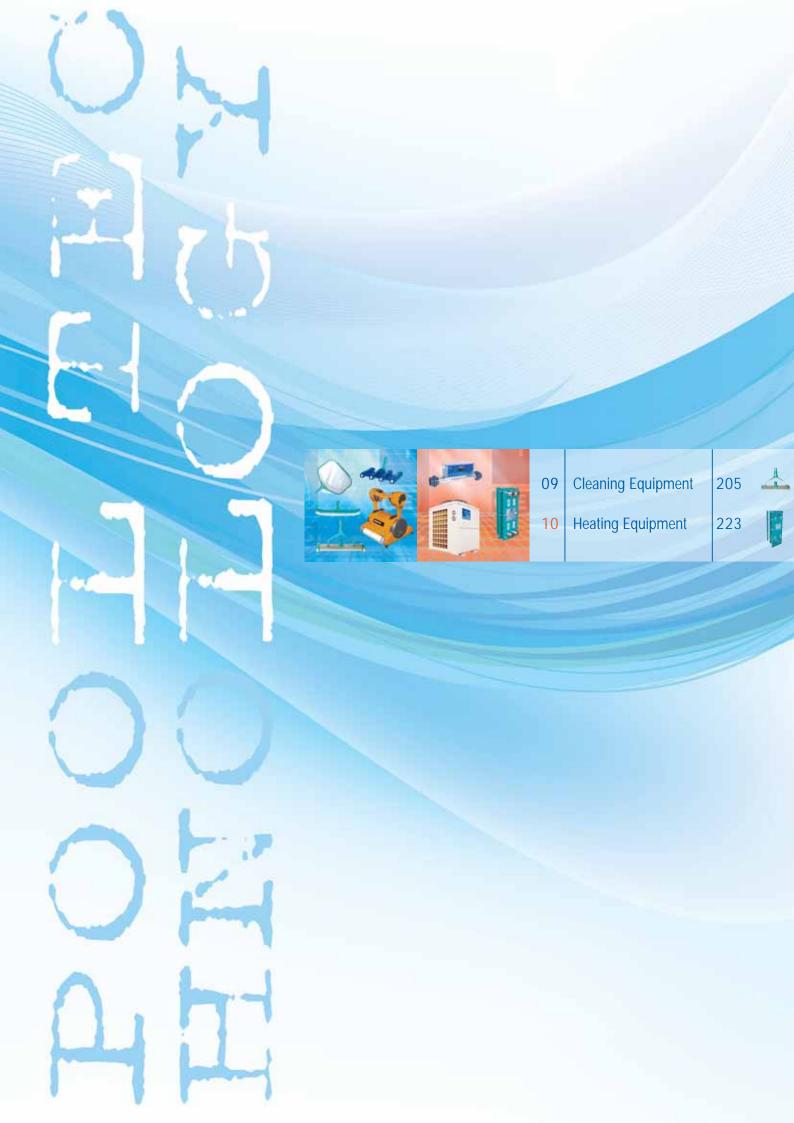
| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------------------|---------|----------------|--------------|--------------------------|
| • DPD3 – Folio | 081113 | 50 | 0,128 | 0,001 |
| • Box inc. 500 pcs | 0811131 | 1 | 0,170 | 0,0009 |
| • Box inc. 1000 pcs | 0811132 | 1 | | |

Photometer Tablet Agents

Below spare agents for 250 pieces packages. PLS. ASK PRICE.

| TADI ET DEACENTS | Chlor diavida Chroina |
|----------------------|--------------------------|
| TABLET REAGENTS | Chlor dioxide - Glycine |
| Alkalinity - M | Total Hardness |
| Cholorine - DPD1 | Iron |
| Cholorine - DPD3 | Phosphate - No:1 |
| Cyanuric Acid | Phosphate - No:2 |
| Calcium Hardness | Sodium Hypochloride 1 |
| pH - Phenol Red | Sodium Hypochloride 2 |
| Aluminium - No:1 | Sulphate |
| Aluminium - No:2 | Urea - Amonia No:1 |
| Ammonia - No:1 | Urea - Amonia No:2 |
| Ammonia - No:2 | Zinc - Copper Zinc |
| Bromine - DPD1 | Zinc - EDTA |
| Bromine - Glycine | |
| Copper - No:1 | LIQUID REAGENTS |
| Copper - No:2 | Hydrogen Peroxide - No:1 |
| Nitrite | Hydrogen Peroxide - No:2 |
| Ozone - DPD1 | Nitrate - No:1 |
| Ozone - DPD2 | Nitrate - No:2 |
| Ozone - DPD3 | Chlorine - No:1 |
| PHMB | Chlorine - No:2 |
| Chloramine DPD1 | Chlorine - No:3 |
| Chloramine DPD2 | Iron - No:1 |
| Chloramine DPD3 | Iron - No:2 |
| Chloride - No:1 | рН |
| Chloride - No:2 | Urea - No:3 |
| Chlor dioxide - DPD1 | Urea - No:4 |

We reserve our right to change all or part of the features of the articles or contents of this document, without prior notice.





"Standard" Automatic Pool Cleaners



DOLPHIN "E 10" AUTOMATIC POOL CLEANERS.

Designed for residental pools up to 8 m, 24 V motor unit and 12 m cable. Lightweight, easy to carry. Cleaning cycle time 1,5 hours. Automatic program for optimal pool cleaning. With the help of active brush which moves twice times faster than robot, removes the algea and bacteria on the walls and bottom. Easy access and cleaning box-shaped net filter. 2 years warranty.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------------------|--------|----------------|--------------|--------------------------|
| "E10" Automatic Pool Cleaner | 091202 | 1 | 10,000 | 0,070 |







DOLPHIN "S100" AUTOMATIC POOL CLEANERS.

Self-powered, 12 m cable for pools up to 8 m. The cleaning period is 1,5 hours. Self-programmed for optimal pool cleaning. Prevents algae and bacteria from forming by brushing the entire pool surface with the double brushing system that moves twice as fast as the robot. Cleans the pool floor, walls and waterline. It operates in standard cleaning mode via the new generation energy-saving power unit. Complete with mesh filter for collecting coarse dirt and cartridge filter for finer cleaning. Due to this, filter clogging takes much longer than other robots models. **2 years warranty**.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------------------------|--------|----------------|--------------|--------------------------|
| "S100" Automatic Pool Cleaner | 091208 | 1 | 11,000 | |







DOLPHIN "S200" AUTOMATIC POOL CLEANERS.

Designed for residental pools up to 12 m. 24 V motor unit and 18 m cable. Cleaning cycle time 2 hours. Automatic program for optimal pool cleaning. Cleans the pool surface, walls and waterline. During climbing on the walls, it increases the vacuum according to the slipperiness, prevents to slip down. With patented POWERSTREAM technology, it has the most effective movement and manouvering features. Active brush which moves twice times faster than robot, removes the algea and bacteria on the walls and bottom. It works with standard cleaning mode with new generation energy saving power unit. Complete with 2 layer filtering system, cartridge filter and net filter for coarse dust. The cartridge filter remains clean much longer due to the 2 layer system. 3 years warranty.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------------------------|--------|----------------|--------------|--------------------------|
| "S200" Automatic Pool Cleaner | 091203 | 1 | 12,000 | |







DOLPHIN "S300" AUTOMATIC POOL CLEANERS.

Self-powered, 18 m cable for pools up to 12 m. The cleaning period is 1 and 2 hours. Self-programmed for optimal pool cleaning. Patented POWER STREAM technology has more effective movement maneuvering and cleaning ability of the pool floor, wall and waterline. Prevents algae and bacteria from forming by brushing the entire pool surface with the double brushing system that moves twice as fast as the robot. Cleans the pool floor, walls and waterline. It operates in standard cleaning mode via the new generation energy-saving power unit. Thanks to its new layered filter, it separates the dirt by dimension and traps small and large-sized dirt separately. In this way, filter clogging takes much longer than other robots models. Complete with Caddy. 3 years warranty.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------------------------|--------|----------------|--------------|--------------------------|
| "S300" Automatic Pool Cleaner | 091209 | 1 | 19,000 | |



"Standard" Automatic Pool Cleaners

DOLPHIN "S300i" AUTOMATIC POOL CLEANERS.

Designed for residental pools up to 12 m. 24 V motor unit and 18 m cable. Cleaning cycle time can be adjustable 1, 1.5, 2 or 2.5 hours. Automatic program for optimal pool cleaning. Cleans the pool surface, walls and waterline. During climbing on the walls, it increases the vacuum according to the slipperiness and prevents to slip down. With patented POWERSTREAM technology, it has the most effective movement and manouvering features. Active brush which moves twice times faster than robot, removes the algea and bacteria on the walls and bottom. It has different cleaning modes; fast, standard, ultra-clean, floor only and waterline. Weekly timer and delayed start can be adjusted. it seperates the debris according to their sizes inside the 2 layer filtering system; net filter for coarse, cartridge filter for finer debris. It can be remote controlled with "Mydolphin" application via smartphones. Complete with caddy. 2 years warranty.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------------------------|--------|----------------|--------------|--------------------------|
| "S300i" Automatic Pool Cleaner | 091204 | 1 | 19,000 | |



"M Series" Automatic Pool Cleaners

DOLPHIN "M200" AUTOMATIC POOL CLEANERS.

Self-powered, 70-micron filter, 18 m cable, 24 V motor, 16 m³/h flow rate. Designed for home pools up to 10 m. The cleaning period is 3 hours. Self-programmed for optimal pool cleaning. Cleans the pool floor and the difficult to reach corners where the floor meets the pool wall. Patented Tangle Free Cable swivel system to avoid cable damage due to bending. Complete with caddy. 2 years warranty.

NOTE: WALL CLIMBING IS NOT SUPPORTED BY THE M200. IF WALL CLEANING IS IMPORTANT, THE LOWEST MODEL THAT SHOULD BE SELECTED IS \$200.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------------------------|--------|----------------|--------------|--------------------------|
| "M200" Automatic Pool Cleaner | 091171 | 1 | 16,000 | |



DOLPHIN "M400" AUTOMATIC POOL CLEANERS.

Self-powered, low micron cartridge or mesh filter, 18 m cable, 24 V motor, 16 m3/h flow rate. Designed for home pools between 10-12 m in length. The cleaning period is 2.5 hours. Self-programmed for optimal pool cleaning. Microprocessor controlled. Climbs the pool walls up to the waterline. With the patented tangle-free cable swivel system, it prevents damage caused by bending of the cable. It offers weekly programming with the options 'once a day, every two days, and every three days' via the power supply unit. With the 'My Dolphin' smartphone application, it provides manual use and weekly programming via the Internet. Triple Active Brushes. Easy interchangeable filter panels. GYROSCOPE technology advanced system ensures accurate scanning for systematic coverage of floor, walls and waterline. Complete with caddy. 3 year warranty.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------------------------|--------|----------------|--------------|--------------------------|
| "M400" Automatic Pool Cleaner | 091181 | 1 | 24,000 | |





"M Series" Automatic Pool Cleaners

3 years Parts WARRANTY



DOLPHIN 'M500' AUTOMATIC POOL CLEANERS.

New generation user-friendly with remote control power unit for setup and programming. Self-powered. Interchangeable low micron filter or mesh filter to remove both rough and fine dirt. 18 m cable, 24 V motor, 16 m³/h flow rate. Designed for home pools between 12-15 m in length. The cleaning period can be set as 2, 3, 4 hours. Self-programmed for optimal pool cleaning. Microprocessor controlled. Climbs up to the pool walls to the waterline. With the patented Tangle Free Cable Swivel System, to prevent cable damage due bending. A wide range of options for cleaning programs and parameters can be set with the new generation remote control and 'My Dolphin' application which can be installed on smartphones e.g. Cycle time, Climbing frequency, Standard or Ultra cleaning. When the filter is clogged, it gives a cleaning signal on the power unit. Easy access to the filters from the top. Using the WiFi My Dolphin Plus application, users can intervene at anytime, from anywhere; e.g. cleaning modes, delayed time, and weekly timer settings can be made. Filter panels are easily changed by the user. "HIGHLY ACCURATE POOL SCANNING WITH GYROSCOPE TECHNOLOGY". Complete with caddy. 3 year warranty.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------------------------|--------|----------------|--------------|--------------------------|
| "M500" Automatic Pool Cleaner | 091182 | 1 | 24,000 | 0,070 |







Effective cleaning with the third brush



Easy access to the filters from the top

DOLPHIN "M600" AUTOMATIC POOL CLEANERS.

Self-powered. 18 m cable, designed for pools up to 15 m. Cleaning cycle can be programmed as 1.5, 2, 2.5 hours for optimal cleaning. With its patented **DUAL DRIVE POWERSTREAM** technology, it offers more effective movement, maneuvering and cleaning ability to the pool floor, wall and waterline. Prevents algae and bacteria from forming by brushing the entire pool surface with the double speed brushing system that moves two times faster than the robot. It is available with fast, standard, ultra-clean cleaning options. Thanks to its new layered filter, it separates the dirt particles by dimension and traps small and large-sized dirt separately. Thus, filter clogging takes longer than other models. It can be remotely controlled with the My Dolphin Plus application, which can be installed on smartphones, and allows the user to intervene on the internet anytime and anywhere; adjusting cleaning modes, delayed time settings and weekly timer settings etc. **Complete with caddy. 3 year warranty.**





| Description | | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------------------|--------------|--------|----------------|--------------|--------------------------|
| "M600" Automatic Pool C | Cleaner | 091183 | 1 | 24,000 | |
| | | | | | |
| | Carlot Marie | | | 1 | - 62// |









Automatic Pool Cleaners for Special Pools

DOLPHIN "BIO-S" AUTOMATIC POOL/POND CLEANERS.

esigned especially for 15 m Ecologic/ Natural Swimming Pools and Ponds. 18 m cable, patented swivel technology avoids the harm caused by cable bend. Cleaning cycle time can be selected 2, 3 or 4 hours. Next to 70 micron cartridge filter, there is an additional vacuum line that can connect to filtration system for the accumulation of the extra rough dirt. Thus, while rough dirt such as leaves and mud are kept in a central filter, small size dirt kept in cartridge filter. GEMAS Portable Vacuum Cleaners (see. Pg 185) can provide an effective and automatic cleaning in a pool that has no vacuum line. For better cleaning, standard extra 3rd brush. It's complete with user-friendly remote control and power unit. Complete with caddy. 2 year warranty.

| standard extra 3rd brush. It's complete with user-friendly remote control and power unit. Complete with caddy. 2 year warranty. | | | | | | |
|---|--------|----------------|--------------|--------------------------|--|--|
| Description | Code | Pieces/ box | Weight Kg | Volume m ³ | | |
| "BIO-S" Automatic Pool Cleaner | 091211 | 1 | 24,000 | | | |



Automatic Pool Cleaners for Commercial Pools

DOLPHIN "2 x 2 PRO GYRO" AUTOMATIC POOL CLEANER.

New generation user friendly remote control and power supply. Two 50 micron self filters either disposable or permanent, 40 m cable, 24 V motor unit, 32 m³/h flow rate. Designed for commercial pools up to 60 m. Cleaning cycle time can be selected as 4, 6 or 8 hours. Giroscope navigation provides precise pool scanning. Different cleaning modes and parameters can be selected for optimal pool cleaning; cycle time, pool length, climbing frequency, regular or ultra cleaning, water line definition. Climbs the pool walls and water lines. Warning signal when filter is blocked.

Complete with caddy and remote control. 2 year warranty.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------------------------------|--------|----------------|--------------|--------------------------|
| "2 x 2 PRO GYRO" Auto. Pool Cleaner | 091151 | 1 | 44,000 | 0,340 |



DOLPHIN "WAVE 30" AUTOMATIC POOL CLEANERS.

Effective pool scanning with double motion axle. 70 micron "permanent" or "disposable" type filters. 18 m cable. 16 m³/h flow rate, 24 V motor. Design for pools up to 15 m. Patented swivel system avoids the harm caused by cable bend. Cleaning cycle time is 3 hours. Climbing frequency is 8 minutes. **Complete with Caddy. 3 year warranty.**

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------------------------|--------|----------------|--------------|--------------------------|
| "WAVE 30" Automatic Pool Cleaner | 091201 | 1 | | |



DOLPHIN "C4" AUTOMATIC POOL CLEANERS.

New generation user-friendly remote control power unit. Designed for pools up to 20 m. Self-powered, low micron cartridge or mesh filter, 24 m cable, 24 V motor, 17 m³/h flow rate. The cleaning period can be set as 1.5, 2.5, 3.5 hours. Non-deflection pool scanning powered by gyroscope technology. Self-programmed and microprocessor-controlled for optimal pool cleaning. Climbs up the pool wall. It signals when its filter is clogged. Easy access to the filters from the top. **Complete with caddy. 2 year warranty**.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-----------------------------|--------|----------------|--------------|--------------------------|
| "C4" Automatic Pool Cleaner | 091172 | 1 | 24,000 | |





Automatic Pool Cleaners for Commercial Pools



DOLPHIN "WAVE 80" AUTOMATIC POOL CLEANERS.

Effective pool scanning in 4 hours, with the double motion axle. 70 micron "permanent" or "disposable" type filters. 24 m cable. 16 m³/h flow rate, 24 V motor. Design for pools up to 20 m. Patented swivel system avoids the harm caused by cable bend. Cleaning cycle time is 3 hours. Climbing frequency is 8 minutes.

Complete with Caddy. 3 year warranty.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------------------------|--------|----------------|--------------|--------------------------|
| "WAVE 80" Automatic Pool Cleaner | 091216 | 1 | 23,000 | |

Note: This robot is identical to Wave 50. Wave 50 sales will remain limited with stocks.



DOLPHIN "WAVE 100" AUTOMATIC POOL CLEANERS.

New generation user-friendly remote control and power unit. Effective pool scanning in 4 hours, with the double motion axle. 70 micron "permanent" or "disposable" type filters. 24 m cable. 16 m³/h flow rate, 24 V motor. Design for pools up to 25 m. Patented swivel system avoids the harm caused by cable bend. Cleaning cycle time is 3 hours. Climbing frequency is 8 minutes. Complete with Caddy. 3 year warranty.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-----------------------------------|--------|----------------|--------------|--------------------------|
| "WAVE 100" Automatic Pool Cleaner | 091142 | 1 | 25,000 | |



Dolphin "WAVE 200" Automatic Pool Cleaner.

It provides professional cleaning for pools up to 40 m. It seperates the dust inside the water to 3 different sizes and increases filtration area by cycling the water. All filter layers can be seperated and used individually. With the help of Man-Machine Interface (MMI), specifications of the pool can be installed and max performance is obtained. With the navigation system, the robot has the most accurate navigating capabilities. Active brushes, prevents the algea and bacteria growth. 40 m³/h flow rate. Geometric design of monoblock brushes, pushes the dirt directly to vaccum holes. The specifications of MMI, navigation system and 4 of different pool memory are identical with Wave 300XL.

Complete with Caddy. 3 year warranty.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-----------------------------------|--------|----------------|--------------|--------------------------|
| "WAVE 200" Automatic Pool Cleaner | 091207 | 1 | 91,000 | |



Automatic Pool Cleaners for Commercial Pools

DOLPHIN "WAVE 300 XL" AUTOMATIC POOL CLEANER.

50 micron three different types of filters; standard, coarse and disposable. Complete with caddy, user friendly interactive control panel, and remote control. Designed for commercial pools up to 60 m. scanning guarantee for 100% of the pool with the navigation technology that is used for the first time in automatic pool cleaners. Can memorize four different pools. Complete with Caddy. 2 year warranty.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------------------------|--------|----------------|--------------|--------------------------|
| "WAVE 300 XL" Auto. Pool Cleaner | 091161 | 1 | 101,000 | 0,150 |





Crystal clear pools with the 21st century technology

"Dolphin Wave 300 XL"



Wave 300 XL, is the new generation automatic pool cleaner of MAYTRONICS; world leader in the sector of automatic pool cleaners. Wave 300 XL is designed specifically for the systematic and stable cleaning of the olympic pools as a highly professional robot compared to all other robots in the market.









50 microns filter system Digit

Remote control device

Active Brush System: Hard brushes of polyethylene plastic brushes and rubs the pool and prevents algea and bacteria. Small brushes on the sides reaches to every edge, corner and water line.

Scanning Method: WAVE 300 XL has a navigation brain unique in the market which guarantees 100% scanning.

Filtration: Automatic pool cleaners cleans the pool with their integrated filters. This is an advantage compared to manual cleaners which uses the pool filter, as they cause faster blockage of the filter. This results with more back washing, so more loss of water and chemicals. As all other automatic pool cleaners

WAVE 300 XL is environmentally-friendly and economic in this sense. Moreover, with 40 m³/h vacuum rate and 50 micron filter WAVE 300 XL offers you much more than manual cleaning.

MMI: All the control of the robot is realized with the interactive digital interface panel which is called MMI. With this state of the art device you may set all the parameters of the robot, give comment for delayed start up in order to wait for the sedimentation of dirt on the floor, or give comment for automatically going in and out of the water. You may also control the robot manually with the remote control. Although WAVE 300 XL is a heavy duty robot, it is the leading public pool cleaner in the market with the highest performance/cost ratio in the market and with the easiness of its use and maintenance.



Wave 300 XL entrance to pool.



Wave 300 XL can be controlled remotely.



Dolphin Robot Cleaners Selection Table

| | E10 | \$100 | \$200 | 8 300 | S300i | M200 | M400 | M500 | M600 | WAVE 30 | C4 | WAVE 80 | WAVE 100 | WAVE 200 | 2X2 PRO GYRO | WAVE 300XL | Bo-S |
|-----------------------------------|-----|-------|----------|---------|-------------|----------|-----------------|-----------------|-----------|-----------------|-----------------|-----------------|-----------------|----------|-----------------|------------|---------|
| Only Floor | | | <u>ت</u> | <u></u> | <u></u> | | | | | * | * | | | | | | 2 |
| Walls and Floor | | | | | | | | | | | | | | | | | |
| Floor, Walls and Water Line | | | | | | | | | | | | | | | | | |
| Smart Scan | | | | | | | | | | | | | | | | | |
| Extra Brush | | | | | | | | | | | | | | | | | |
| Type of Brush | PVC | PVC | PVC | PVC | PVC | Combined | Wonder Brush | Wonder Brush | PVC | Wonder Brush | Wonder Brush | Wonder Brush | Wonder Brush | PVC | Wonder Brush | PVC | PVC |
| Pool Length (m) | 8 | 8 | 12 | 12 | 12 | 10 | 12 | 12-15 | 15 | 15-18 | 20 | 18-20 | 20-25 | 30-40 | 25-33 | 40-60 | 15 |
| Easy Access to Filter | | | | | | | | | | | | | | | | | |
| Swivel | | | | | | | | | | | | | | | | | |
| Caddy | | | | | | Stand | | | | | | | | | | | |
| Remote Control | | | | | Smart phone | | Smart phone | | Optional | | | | | | | | |
| Warranty (Year) | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 2 | 2 | 2 |
| Cycle Time (Hour) | 1.5 | 1.5 | 2 | 2 | 1.5,2,2.5 | 3 | 2.5 | 1.5,2.5,3.5 | 1.5,2,2.5 | 3 | 1.5,2.5,3.5 | 3 | 4, 6, 8 | 1 - 8 | 4, 6, 8 | 1 - 8 | 2, 3, 4 |
| MyDolphin Smart Phone | | | | | | | | | | | | | | | | | |
| Timer | | | | | | | | | | | | | | | | | |
| Full Filter Alert | | | | | | | | | | | | | | | | | |

Automatic Suction Pool Cleaner

GEMAS "S250 AUTOMATIC SUCTION POOL CLEANER".

Operates on hydraulic vacuuming principle. Complete with 11 m special hose.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------------|-------|----------------|--------------|--------------------------|
| S250 Automatic Cleaner | 09123 | 1 | 6,290 | 0,069 |



HOSE FOR GEMAS "S250 AUTOMATIC SUCTION POOL CLEANER". 1 m

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|----------|----------------|--------------|--------------------------|
| S250 Hose | 09123Y01 | 1 | | |

Compact Suction Cleaner - Cartridge Filter

Compact Suction Cleaner.

Assembled on a st. steel wheel caddy, complete with cartridge filter, monophase self-priming pump, Poolvac manual cleaner, hose, telescopic pole and checkvalve. Fuse and 18 m cable included. Designed for pools which do not have suction inlet. Can be used as a filtration unit as well.

| Descript | ion | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------------|---------------|--------|----------------|--------------|--------------------------|
| • 11 m³/h | - 3/4 HP Pump | 093101 | 1 | 37,000 | |
| • 16 m ³ /h | - 1/2 HP Pump | 093102 | 1 | 40,000 | |



Compact Suction Cleaner - Sand Filter

Compact Suction Cleaner.

Assembled on a st. steel wheel caddy, complete with sand filter, filtration media, monophase self-priming pump, Poolvac manual cleaner, hose, telescopic pole. Fuse and 18 m cable included. Designed for pools which do not have suction inlet. Can be used as a filtration unit as well. Sand is included in the price.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|--------|----------------|--------------|--------------------------|
| 6 m ³ /h. Sand Filter-1/2 HP Pump | 093103 | 1 | | |

PS: Please ask price for larger capacities.





Manual Pool Cleaners



GEMAS "POOLVAC" Pool Cleaner.

For concrete pools. Anodized aluminum body.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------------------------------|---------|----------------|--------------|--------------------------|
| • With butterfly nut, 11/2"-L=346 mm | 092111 | 1 | 2,382 | 0,012 |
| • With butterfly nut, 11/2"-L=456 mm | 092112 | 1 | 3,094 | 0,015 |
| • With clip, 11/2"-L=346 mm | 092121 | 1 | 2,388 | 0,012 |
| • With clip, 11/2" -L=456 mm | 092122 | 1 | 3,220 | 0,015 |
| • With butterfly nut, 2"-L=456 mm | 0921121 | 1 | 3,060 | 0,015 |
| • With clip, 2"-L=456 mm | 0921122 | 1 | 3,128 | 0,015 |



GEMAS "FOLD-VAC" Pool Cleaner.

For concrete pools. Aluminum body can be folded. Efficient cleaning is provided at pool coves and edges. Each model is 1/2" and 2" connection with clip.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------|--------|----------------|--------------|--------------------------|
| • Width: 35,5 cm | 092211 | 1 | 3,000 | 0,017 |
| • Width: 45,5 cm | 092212 | 1 | 3,500 | 0,018 |



GEMAS "POOLKING" Pool Cleaner.

For concrete pools with wide openings. Aluminum body. Wheel group and hose connection made of chrome bronze and stainless steel. $2^{\prime\prime}$ Hose connection. Cleaner scanning width, $L\!=\!80$ cm

| • | Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|---|-------|----------------|--------------|--------------------------|
| | Pull Type | 09213 | 1 | 10,008 | 0,020 |
| | With fork for using with Handle | 09214 | 1 | 11,516 | 0,032 |



GEMAS "LEAF" Pool Cleaner.

Plastic body with brush. No wheels for liner and concrete pools. Operates with water jet. 1 1/2" hose connection with clip. Ø 38 cm body dia.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|--------|----------------|--------------|--------------------------|
| | 09222 | 1 | 0,860 | |
| Spare bag | 092221 | 1 | | |

Manual Pool Cleaners - Liner

GEMAS "LUXVAC" POOL CLEANER.

Plastic Body. Brushes on body for concrete and liner pools. 1 1/2" hose connection. Pole connection is with clip. Control on top for vacuum strength.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------------------|-------|----------------|--------------|--------------------------|
| Luxvac pool cleaner | 09215 | 1 | | |



GEMAS "TRIANGLE" POOL CLEANER.

Plastic glare body. Brushes on body for concrete and liner pools. 1 1/2" hose connection. Pole connection is with clip.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-----------------------|-------|----------------|--------------|--------------------------|
| Triangle Pool Cleaner | 09217 | 1 | 1,380 | 0,013 |



GEMAS "BUTTERFLY" POOL CLEANER.

Plastic Body. Brushes on body for concrete and liner pools. 1 1/2" hose connection. Pole connection is with clip.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------------------------------|-------|----------------|--------------|--------------------------|
| Butterfly pool cleaner | 09218 | 1 | 0,868 | 0,007 |
| Butterfly pool cleaner - Side Brush | 09219 | 1 | 1,048 | 0,008 |



GEMAS "HEAVY-DUTY FLEX" POOL CLEANER.

Plastic Body. 2500 gr weight for heavy duty usage. Wheels with Adjustable height. Suitable for both concrete and liner pools d38 mm hose connection. Pole connection with clip. Brushes and wheels on body for concrete and liner pools. 1 1/2" hose connection.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|---------|----------------|--------------|--------------------------|
| Heavy-Duty Flex | 09224 | 1 | | |
| Metallic Handle | 0922401 | 1 | | |
| Flex pool cleaner | 09220 | 1 | | |
| Ditto, with side brushes | 09223 | 1 | | |



"AQUAQUIK" POOL AND SPA CLEANER.

Manual cleaner with hand pump for easy cleaning in pools and spas. Works without hose. Package is complete with flat scoop, brush, wide and narrow suction heads and wall assembly part. Length:140 cm. Dia: 7,5 cm

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------|-------|----------------|--------------|--------------------------|
| Pool & SPA VAC | 09216 | 1 | 1,418 | 0,060 |
| | | | 5517 | |







Vacuum Hoses



GEMAS VACUUM HOSE.

Economic blue and white colored, 30 m roll. Without adapter.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------------------------------|-------|----------------|--------------|--------------------------|
| • D.38 mm, 1 1/2" - Price per meter. | 09511 | 30 | 4,992 | 0,152 |
| • D.50 mm, 2"- Price per meter. | 09512 | 30 | 7,696 | 0,298 |



GEMAS VACUUM HOSE.

Blue or white colored. Different lengths of D.38 mm, special hose adapter included. Sold in hox

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-----------------|--------|----------------|--------------|--------------------------|
| • 1 1/2" - 8 m | 095111 | 1 | 2,784 | 0,073 |
| • 1 1/2" - 10 m | 095112 | 1 | 3,112 | 0,073 |
| • 1 1/2" - 12 m | 095113 | 1 | 3,340 | 0,073 |
| • 1 1/2" - 15 m | 095114 | 1 | 3,932 | 0,073 |



GEMAS VACUUM HOSE.

Blue or white colored. Different lengths of D.50 mm, special hose adapter included.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|--------|----------------|--------------|--------------------------|
| • 2" - 12 m | 095121 | 1 | 4,646 | 0,127 |
| • 2" - 15 m | 095122 | 1 | 5,372 | 0,127 |
| • 2" - 18 m | 095123 | 1 | 6,098 | 0,127 |



GEMAS "EVAPOOL VACUUM HOSE".

Economic blue striped, white colored. 30 m rolls.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------------------------------|--------|----------------|--------------|--------------------------|
| • D.38 mm, 1 1/2" - Price per meter. | 09511E | 30 m | | |
| • D.50 mm, 2"- Price per meter. | 09512E | 30 m | | |



GEMAS "EVAPOOL VACUUM HOSE".

Blue striped, white colored. Different lengths of D.38 mm. With special adapter. Sold in box.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-----------------|---------|----------------|--------------|--------------------------|
| • 1 1/2" - 8 m | 09511E1 | | | |
| • 1 1/2" - 10 m | 09511E2 | | | |
| • 1 1/2" - 12 m | 09511E3 | | | |
| • 1 1/2" - 15 m | 09511E4 | | | |



GEMAS "EVAPOOL VACUUM HOSE".

Blue striped, white colored. Different lengths of D.50 mm. With special adapter. Sold in box.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|---------|----------------|--------------|--------------------------|
| • 2" - 12 m | 09512E1 | | | |
| • 2" - 15 m | 09512E2 | | | |
| • 2" - 18 m | 09512E4 | | | |

Hose Adapters and Clips

GEMAS LINK CONNECTOR.

For connection of \emptyset 38 mm hose to "04134" suction inlet, in white ABS plastic. 1 1/2" threaded.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| | 09821 | 20 | 0,812 | 0,006 |



BULLDOG CLIP. In stainless steel.

For Gemaş hose

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------------------|-------|----------------|--------------|--------------------------|
| • For Ø 38 mm. (1 1/2") hose | 09831 | 100 | 3,000 | 0,001 |
| • For Ø 50 mm. (2") hose | 09832 | 50 | 1,800 | 0,002 |



GEMAS HOSE CUFFS. In flexible PVC plastic, threaded inside.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|-------|----------------|--------------|--------------------------|
| • For Ø 38 mm. (1 1/2") hose | 09811 | 120 | 6,000 | 0,028 |
| • For Ø 50 mm. (2") hose | 09812 | 120 | 7,200 | 0,028 |
| • For both Ø38 mm and Ø50 mm Gemas Eva hose. | 09813 | 120 | 10,800 | 0,064 |
| • For both Ø38 mm and Ø50 mm Gemas hose. | 09814 | 120 | 10,800 | 0,064 |



GEMAS THREADED HOSE CUFFS. In PVC plastic, 1 1/2" male threaded.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------|-------|----------------|--------------|--------------------------|
| For Ø 38 mm. | 09841 | | 0,040 | |



GEMAS HOSE COLLECTION WHEEL.

Made of ABS plastic. 15 m of D.38 Hose collection capacity.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| Hose wheel | 09513 | 1 | 2,678 | 0,044 |



GEMAS LEAF TRAP.

Transparent body. Designed to assemble on vacuum hose. Can be cleaned easily. Complete with hose connections, \emptyset 38 mm. (please ask adaptors for \emptyset 50 mm).

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| Leaf Trap | 09851 | 1 | | |





Leaf Scoops



GEMAS LEAF SCOOP IN PLASTIC. Fixing with clip.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| | 09710 | 12 | 3,350 | 0,053 |



GEMAS LEAF SKIMMER IN PLASTIC. Fixing with clip.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| | 09720 | 12 | 3,780 | 0,053 |



GEMAS "LUX" LEAF SCOOP IN PLASTIC. Fixing with clip.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| | 09730 | 12 | 7,950 | 0,085 |



GEMAS "ECONOMIC" LEAF SCOOP IN PLASTIC. Fixing with clip.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| | 09740 | 12 | | |





Pool Brushes

GEMAS VACUUM BRUSH IN PLASTIC.

Pool wall brush, standard. With hose connection.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| | 09624 | 1 | | |



GEMAS WALL BRUSH IN PLASTIC. Pool wall brush, 60 cm, standard.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| | 09622 | 1 | | |



GEMAS WALL BRUSH IN PLASTIC. Pool wall brush, 90 cm, standard.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| | 09623 | 1 | | |



GEMAS CURVED BRUSH IN PLASTIC. Pool wall brush, 46 cm, standard.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| | 09620 | 1 | 0,348 | 0,002 |



GEMAS FLOOR BRUSH IN PLASTIC.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------|-------|----------------|--------------|--------------------------|
| • Flat 12,5 cm | 09611 | | | |
| • Flat 26 cm | 09626 | 2 | 0,244 | 0,002 |



GEMAS ALGAE BRUSH WITH STAINLES STEEL BRISTLES.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------|-------|----------------|--------------|--------------------------|
| • W=12,50 cm | 09612 | 1 | 0,160 | 0,001 |
| • W=25,00 cm | 09613 | 1 | 0,304 | 0,002 |



GEMAS CORNER BRUSH. Corner Brush. Circular. Plastic.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| | 09640 | 1 | 0,114 | 0,001 |





Auxiliary Cleaning Equipment



GEMAS SCRUBBING PAD. With plastic handle.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| | 09633 | | | |



GEMAS SCRUBBING PAD. Plastic.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| | 09632 | | 0,050 | 0,050 |



GEMAS "LUX" LEAF SCOOP IN PLASTIC. Fixing with clip.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ | |
|-------------|-------|----------------|--------------|--------------------------|--|
| | 09630 | | 0,296 | 0,001 | |



GEMAS PUMICE. Plastic clip body. Used for algae cleaning between ceramics.

| Description | Code | Pieces/ Weight Volume box Kg m³ |
|-------------|-------|------------------------------------|
| | 09631 | 0,096 |



GEMAS LIFEGUARD HOOK. Aluminum.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| | 09800 | | 0,408 | 0,044 |



GEMAS LIFEGUARD RING. Plastic.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-----------------------|-------|----------------|--------------|--------------------------|
| Big Life Buoy 440x700 | 09809 | 1 | | |
| Small Life Buoy | 09810 | 1 | | |



GEMAS LIFEGUARD RING - WALL HANG PART. Stainless Steel.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| | 09815 | 1 | | |

Telescopic Handles

TELESCOPIC HANDLES.

In anodized aluminium (natural or gold color). Connection via clip or butterfly nut.

| Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------|---|--|---|
| 09410 | 1 | 0,430 | 0,159 |
| 09420 | 1 | 0,890 | 0,312 |
| 09430 | 1 | 1,100 | 0,220 |
| 09490 | 1 | 1,600 | 0,261 |
| 09440 | 1 | 1,500 | 0,323 |
| 09450 | 1 | 1,300 | 0,169 |
| 09460 | 1 | 1,540 | 0,220 |
| 09470 | 1 | 2,200 | 0,328 |
| 09480 | 1 | 4,200 | 0,630 |
| | 09410 09420 09430 09490 09440 09450 09460 | Code box 09410 1 09420 1 09430 1 09490 1 09440 1 09450 1 09460 1 09470 1 | Code box Kg 09410 1 0,430 09420 1 0,890 09430 1 1,100 09490 1 1,600 09440 1 1,500 09450 1 1,300 09460 1 1,540 09470 1 2,200 |



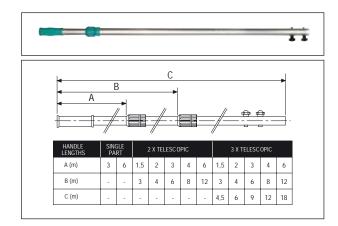
09430

TELESCOPIC HANDLE.

Aluminum, blue anodized. Stripy lower body.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------|-------|----------------|--------------|--------------------------|
| • 2 x 1,8 m | 09489 | 1 | 0,800 | 0,262 |
| • 2 x 2,4 m | 09491 | 1 | 1,000 | 0,262 |
| • 2 x 3,0 m Blue | 09492 | 1 | | |







WALL HANG SET FOR TELESCOPIC HANDLE.

Made of Plastic. Complete with screws.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------------|-------|----------------|--------------|--------------------------|
| Wall Hang Set | 09400 | 1 | 0,160 | 0,001 |





Pool Thermometers



Pool Thermometers, floating.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|-------|----------------|--------------|--------------------------|
| • Thermometer - Floating Type (Duck) | 10414 | 24 | | |
| • Thermometer - Floating Type (Fish) | 10412 | 24 | | |
| • Thermometer - Floating Type (Turtle) | 10415 | 24 | | |



Pool Thermometer, to be connected to the ladder.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------------------------|-------|----------------|--------------|--------------------------|
| • Thermometer - Floating Type | 10411 | 1 | 0,090 | |
| To be connected to the ladder | 10421 | 1 | 0,068 | |



Pool Thermometer, floating and circular scaled, Ø 190 mm.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| | 10431 | 1 | 0,298 | 0,010 |



Digital Pool Thermometer with Solar Battery, Ø 80 mm.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| | 10432 | 1 | 0,140 | 0,001 |

Pool Ice Barrier



Pool Ice Barrier. Made of Plastic. 49 x 24 cm size floating barrier is arrayed all around the pool perimeter. Protects the pool coating by absorbing the expansion of freezing at very low atmospheric temperature.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|---------|----------------|--------------|--------------------------|
| Ice Barrier | 1297105 | Piece | | |



Pool Heat Pumps

GEMAS Heat Pump.

Uses the extant heat in the air for 80% of the total energy required to heat up the pool. Consumes electrical energy only for the 20% of the required heat.

- Operational costs are 80% lower compared to natural gas. System can be used for heating or cooling. It is the only solution for shock pools.
- The heat exchanger that transfers energy from air to water is made of titanium. It can be installed in the pools with sea water.
- An electronic-digital control board on the device that also shows the temperature of the water.
- Heating or cooling modes are also selected with the help of this board.
- The heat pump can easily be installed on the extant pool installations without any infrastructural problems.
- The heat pump is designed to change the water temperature by $\pm 12^{\circ}\text{C}$ in 5 days when the outside temperature 20°C.
- Using a solar pool cover that provides isolation will shorten the time and reduce energy consumption.
- The heat pump does not work efficiently when the ambient temperature is below 10°C.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------------------------------|--------|----------------|--------------|--------------------------|
| • 030MS3 - Heating/Cooling, 12,6 kW | 101313 | 1 | | |
| • 040MS3 - Heating/Cooling, 18,9 kW | 101314 | 1 | | |
| • 060MS3 - Heating/Cooling, 25,2 kW | 101315 | 1 | | |
| • 080MS3 - Heating/Cooling, 33,8 kW | 101317 | 1 | | |
| • 100MS3 - Heating/Cooling, 42 kW | 101318 | 1 | | |
| • 120MS3 - Heating/Cooling, 50,4 kW | 101320 | 1 | | |

ATTENTION! :

Below pool volumes are valid during the heating period (1 may - 15 september) for the conditions when the system is on for 15 hours a day and the pool is covered with an isolated cover during the night. If these conditions cannot be fulfilled, a larger model is recommended.

| Model | FPHC | 030T | 045T | 060T3 | 080T3 | 100T3 | 120T3 |
|---------------------------------|---------|-------------|--------------|--------------|--------------|---------------|---------------|
| Cooling gas | | R410A | R410A | R410A | R410A | R410A | R410A |
| Heating Capacity* | kW | 12,6 | 18,9 | 25,2 | 33,0 | 42,0 | 50,4 |
| COP* A:24/W:28 | W/W | 5,5 | 5,5 | 5,5 | 5,5 | 5,5 | 5,5 |
| Input Power* | kW | 2,29 | 3,44 | 4,58 | 6,11 | 7,64 | 9,16 |
| Input Current* | Α | 10,4 | 15,6 | 8,7 | 11,6 | 14,5 | 17,4 |
| Heating Capacity** | kW | 10,5 | 15,8 | 21,0 | 28,0 | 35,0 | 42,0 |
| COP** A:15/W:28 | W/W | 4,6 | 4,6 | 4,6 | 4,6 | 4,6 | 4,6 |
| Input Power** | kW | 2,28 | 3,43 | 4,57 | 6,09 | 7,61 | 9 <u>,</u> 13 |
| Input Current ** | Α | 10,4 | 15,6 | 8,7 | 11,6 | 14,5 | 17,3 |
| Havuz Hacmi **** | m^3 | 30 | 50 | 65 | 80 | 130 | 180 |
| Cooling Capacity (A35W28) - | kW | 7,5 | 11,3 | 15,0 | 20,0 | 25,0 | 30,0 |
| Cooling Capacity (A33W26) | BTU/h | 25590 | 38385 | 51180 | 68240 | 85300 | 102360 |
| COP A:35/W:28 | W/W | 2,8 | 2,8 | 2,8 | 2,8 | 2,8 | 2,8 |
| Input Power | kW | 2,68 | 4,02 | 5,36 | 7,14 | 8,93 | 10,71 |
| Input Current | Α | 13,4 | 20,1 | 10,7 | 14,3 | 17,9 | 21,4 |
| Power Supply | V/PH/Hz | 220/1/50 | 220/1/50 | 380/3/50 | 380/3/50 | 380/3/50 | 380/3/50 |
| Compressor | | Rotary | Rotary | Scroll | Scroll | Scroll | Scroll |
| Compressor Qty | | 1 | 1 | 1 | 2 | 2 | 2 |
| Fan Qty | | 1 | 1 | 1 | 2 | 2 | 2 |
| Noise | dB(A) | 52 | 54 | 55 | 58 | 60 | 62 |
| Water Out let/Water In let | inch | 1-1/2" | 1-1/2" | 1-1/2" | 2" | 2" | 2" |
| Water Flow Volume | m³/h | 3,61 | 5,42 | 7,22 | 9,63 | 12,04 | 14,45 |
| Water Pressure Drop | kpa | 15 | 16 | 16 | 18 | 18 | 18 |
| Fan Direction | | Vertical | Vertical | Vertical | Vertical | Vertical | Vertical |
| Unit Net Dimensions (L/M/H) | mm | 640/590/790 | 710/660/940 | 810/660/940 | 810/660/990 | 1450/730/1135 | 1450/730/1335 |
| Unit Shipping Dimensions (L/M/H |) mm | 680/630/910 | 750/700/1060 | 850/700/1060 | 850/700/1110 | 1520/750/1290 | 1520/750/1490 |
| Net Weight | kg | 80 | 98 | 113 | 240 | 260 | 280 |
| Shipping Weight | kg | 88 | 120 | 125 | 270 | 290 | 310 |



101313



101315



101317



101320



Heat Exchangers, Shell & Tube Type



GEMAS Heat Exchangers, Shell and Tube Type. Made of AISI 316 quality Stainless Steel. Max. pressure 10 bars. Operated by 90-70 °C hot water from the boiler. Connection cuffs are not included.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|----------|----------------|--------------|--------------------------|
| • 22.000 kcal/h Conn.: Pool side 1 1/2"- boiler side 3/4" | 101210 | 1 | | |
| • 35.000 kcal/h Conn.: Pool side 1 1/2"- boiler side 3/4" | 101211 | 1 | | |
| • 40.000 kcal/h Conn.: Pool side 1 1/2"- boiler side 3/4" | 101217 | 1 | | |
| • 65,000 kcal/h Conn.: Pool side 1 1/2"- boiler side 1" | 101212 | 1 | | |
| • 80.000 kcal/h Conn.: Pool side 2"- boiler side 1" | 101218 | 1 | | |
| • 90.000 kcal/h Conn.: Pool side 2"- boiler side 2x1" | 101213 | 1 | | |
| • 110.000 kcal/h Conn.: Pool side 2"- boiler side 1" | 101219 | 1 | | |
| • 180.000 kcal/h Conn.: Pool side 2"- boiler side 2x11/2" | 101214 | 1 | | |
| • 220.000 kcal/h Conn.: Pool side 2"- boiler side 2x2" | 101220 | 1 | | |
| • 250.000 kcal/h Conn.: Pool side 2"- boiler side 2x2" | 101215 | 1 | | |
| • 330.000 kcal/h Conn.: Pool side 2"- boiler side 2x2" | 101221 | 1 | | |
| • 400.000 kcal/h Conn.: Pool side 2"- boiler side 2x2" | 101216 | 1 | | |
| St. Steel Wall Clampset | 10121101 | 1 | | |



Heat Exchangers, Shell and Tube Type. With plastic body, AISI 316/Titanium-Corrugated Metal Coil. The plastic body is resistant to high pressure and corrosion. It is attractive in terms of cost advantage and quality. It works with hot water (90/70°C) from the boiler. Max. pressure: Primary (boiler side) circuit 6 bar, secondary (poolside) 2 bar. Connection fittings are ABS, 0-rings are silicone.

| Description | Code | Pieces/ Weight Volume box Kg m ³ |
|--|---------|--|
| • D-KWT 25, 25 kW - 21,500 kcal/h, AISI 316 | 101201 | 1 |
| • D-KWT 45, 45 kW - 39,560 kcal/h, AISI 316 | 101202 | 1 |
| • D-KWT 85, 85 kW - 78,260 kcal/h, AISI 316 | 101203 | 1 |
| • D-KWT 105, 105 kW - 108,360 kcal/h, AISI 316 | 101204 | 1 |
| • D-KWT 25, Titanium | 101201T | 1 |
| • D-KWT 45, Titanium | 101202T | 1 |
| • D-KWT 85, Titanium | 101203T | 1 |
| • D-KWT 105, Titanium | 101204T | 1 |







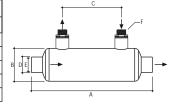
Heat Exchangers, Shell & Tube Type

| Model | | D-KWT 25 | D-KWT 45 | D-KWT 85 | D-KWT 105 |
|--------------------------|----------------|---------------------|---------------------|---------------------|---------------------|
| Heating Capacity | kw | 25 | 45 | 91 | 126 |
| Heating Capacity | kcal/h | 21.500 | 39.560 | 78.260 | 108.360 |
| Temperature difference | °C | 70 = 0.36 kW/°C | 70 = 0.66 kW/°C | 70 = 1.3 kW/°C | 70 = 1.8 kW/°C |
| Area | m ² | 0.09 | 0.15 | 0.33 | 0.54 |
| Flow Primary* | m³/h | 2 | 2 | 2 | 2 |
| Flow Secondary* | m³/h | 8 | 10 | 12 | 15 |
| Pressure Loss Primary* | bar | 0.10 | 0.15 | 0.28 | 0.36 |
| Pressure Loss Secondary* | bar | 0.11 | 0.15 | 0.22 | 0.30 |
| Max. Pressure Primary* | bar | 6 | 6 | 6 | 6 |
| Max. Pressure Secondary* | bar | 2 | 2 | 2 | 2 |
| Outer Body | | PP 30% Fiberglass | PP 30% Fiberglass | PP 30% Fiberglass | PP 30% Fiberglass |
| Connection Socket | | ABS | ABS | ABS | ABS |
| 0-ring | | Silicon | Silicon | Silicon | Silicon |
| Spiral Hose | | AISI 316 / Titanium | AISI 316 / Titanium | AISI 316 / Titanium | AISI 316 / Titanium |
| Weight | kg | 1.8 | 2.2 | 3.6 | 5.3 |
| Packaging Volume | m ³ | 0.079 | 0.095 | 0.162 | 0.233 |
| | | | | | |

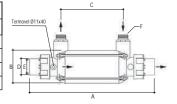
^{*}Primary: Heating fluid, Secondary: Heating fluid (Pool water)

^{**}The technical value table above also applies to Gemas Shell and Tube Type Heat Exchangers.

| | | Dimensions | | | | | | | |
|-------------------------|--------|------------|--------|-----------|--------|------|--|--|--|
| Heat Exchanger Type | A (mm) | B (mm) | C (mm) | D | E (mm) | F | | | |
| 101210 - 22.000 kcal/h | 350 | 110 | 135 | D.63-PN10 | 50 | 3/4" | | | |
| 101217 - 40.000 kcal/h | 420 | 110 | 205 | D.63-PN10 | 50 | 3/4" | | | |
| 101212 - 65.000 kcal/h | 665 | 110 | 450 | D.63-PN10 | 50 | 1″ | | | |
| 101218 - 80.000 kcal/h | 710 | 110 | 495 | D.63-PN10 | 50 | 1″ | | | |
| 101219 - 110.000 kcal/h | 1020 | 110 | 805 | D.63-PN10 | 50 | 1″ | | | |



| Heat Freshammen Trons | | Dimensions | | | | | | |
|----------------------------|--------|------------|--------|-----------|--------|------|--|--|
| Heat Exchanger Type | A (mm) | B (mm) | C (mm) | D | E (mm) | F | | |
| D-KWT25 AISI 316/Titanium | 345 | 110 | 135 | D.63-PN10 | 50 | 3/4" | | |
| D-KWT45 AISI 316/Titanium | 415 | 110 | 205 | D.63-PN10 | 50 | 3/4" | | |
| D-KWT85 AISI 316/Titanium | 705 | 110 | 495 | D.63-PN10 | 50 | 1″ | | |
| D-KWT105 AISI 316/Titanium | 1015 | 110 | 805 | D.63-PN10 | 50 | 1″ | | |



Shell & Tube Type Heat Exchanger Selection Chart

| Model | Model D-KWT 25 | | | | D-KWT 45 D-KWT 85 | | | D-KWT 105 | | | | |
|------------------------|----------------|-----------|-----------|-----------|-------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Pool Water | 20 °C | 24 °C | 28 °C | 20 °C | 24 °C | 28 °C | 20 °C | 24 °C | 28 °C | 20 °C | 24 °C | 28 °C |
| Heating Capacity | 25 kW | 23,5 kW | 22,1 kW | 46 kW | 43,4 kW | 40,7 kW | 91 kW | 85,8 kW | 80,6 kW | 126 kW | 118.8 kW | 111,6 kW |
| Primary Input/Output | 90/79°C | 90/79,6°C | 90/80,2°C | 90/69,6°C | 90/70,8°C | 90/72°C | 90/49,6°C | 90/52°C | 90/54,2°C | 90/34°C | 90/37,3°C | 90/40,5°C |
| Secondary Input/Output | 20/22,7°C | 24/26,5°C | 28/30,4°C | 20/24°C | 24/27,8°C | 28/31,5°C | 20/26,5°C | 24/30,2°C | 28/33,8°C | 20/27,2°C | 24/30,8°C | 28/34,4°C |
| Heating Capacity | 21,5 kW | 20 kW | 18,6 kW | 39 kW | 36,4 kW | 33,7 kW | 78 kW | 72,8 kW | 67,6 kW | 108 kW | 100,8 kW | 93,6 kW |
| Primary Input/Output | 80/70,5°C | 80/71,2°C | 80/71,8°C | 80/62,8°C | 80/64°C | 80/65,1°C | 80/45,5°C | 80/47,8°C | 80/50,1°C | 80/32,3°C | 80/35,5°C | 80/38,7°C |
| Secondary Input/Output | 20/22,3°C | 24/26,2°C | 28/30°C | 20/23,4°C | 24/27,1°C | 28/30,9°C | 20/25,6°C | 24/29,2°C | 28/32,9°C | 20/26,2°C | 24/29,8°C | 28/33,4°C |
| Heating Capacity | 18 kW | 16,5 kW | 15,1 kW | 32 kW | 29,4 kW | 26,7 kW | 65 kW | 59,8 kW | 54,6 kW | 90 kW | 82,8 kW | 75,6 kW |
| Primary Input/Output | 70/62°C | 70/62,8°C | 70/63,4°C | 70/55,9°C | 70/57°C | 70/58,3°C | 70/41,4°C | 70/43,7°C | 70/46°C | 70/30,4°C | 70/33,6°C | 70/36,7°C |
| Secondary Input/Output | 20/21,9°C | 24/25,8°C | 28/29,6°C | 20/22,8°C | 24/26,5°C | 28/30,3°C | 20/24,7°C | 24/28,3°C | 28/31,9°C | 20/25,2°C | 24/28,8°C | 28/32,4°C |
| Heating Capacity | 14,5 kW | 13 kW | 11,6 kW | 25 kW | 22,4 kW | 19,7 kW | 52 kW | 46,8 kW | 41,6 kW | 72 kW | 64,8 kW | 57,6 kW |
| Primary Input/Output | 60/53,6°C | 60/54,3°C | 60/54,9°C | 60/49°C | 60/50,2°C | 60/51,4°C | 60/37,2°C | 60/39,5°C | 60/41,8°C | 60/28,4°C | 60/31,6°C | 60/34,8°C |
| Secondary Input/Output | 20/21,6°C | 24/25,4°C | 28/29,2°C | 20/22,1°C | 24/25,9°C | 28/29,7 | 20/23,7°C | 24/27,4°C | 28/31°C | 20/24,1°C | 24/27,7°C | 28/31,3°C |
| Heating Capacity | 11 kW | 9,5 kW | 8,1 kW | 18 kW | 15,4 kW | 12,7 kW | 39 kW | 33,8 kW | 28,6 kW | 54 kW | 46,8 kW | 39,6 kW |
| Primary Input/Output | 50/45,2°C | 50/45,9°C | 50/46,5°C | 50/42,1°C | 50/43,3°C | 50/44,5°C | 50/33°C | 50/35,2°C | 50/37,5°C | 50/26,4°C | 50/29,6°C | 50/32,7°C |
| Secondary Input/Output | 20/21,2°C | 24/25°C | 28/28,9°C | 20/21,5°C | 24/25,3°C | 28/29,1°C | 20/22,8°C | 24/26,4°C | 28/30,1°C | 20/23,1°C | 24/26,7°C | 28/30,3°C |



Plate Heat Exchangers - High Pressure Drop



GEMAS Stainless Steel Plate Heat Exchanger. Made of AISI 316 quality stainless steel with nitryl or EPDM seal exchangers. Operated by 90-70°C hot water from boiler. Max. pressure 10 bars - Max. heat 130°C. Pressure loss from boiler and pool is 5 mwh.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------------------------|--------|----------------|--------------|--------------------------|
| • 30,000 kcal/h, 504 Body, 5 Pl. | 101251 | 1 | | |
| • 40,000 kcal/h, 504 Body, 6 Pl. | 101252 | 1 | | |
| • 50,000 kcal/h, 504 Body, 7 Pl. | 101253 | 1 | | |
| • 60,000 kcal/h, 504 Body, 8 Pl. | 101254 | 1 | | |
| • 70,000 kcal/h, 504 Body, 10 Pl. | 101255 | 1 | | |
| • 80,000 kcal/h, 504 Body, 10 Pl. | 101256 | 1 | | |
| • 90,000 kcal/h, 504 Body, 12 Pl. | 101257 | 1 | | |
| • 100,000 kcal/h, 504 Body, 12 Pl. | 101258 | 1 | | |
| • 125,000 kcal/h, 504 Body, 16 Pl. | 101259 | 1 | | |
| • 150,000 kcal/h, 504 Body, 20 Pl. | 101261 | 1 | | |
| • 175,000 kcal/h, 504 Body, 24 Pl. | 101262 | 1 | | |
| • 200,000 kcal/h, 514 Body, 10 Pl. | 101263 | 1 | | |
| • 250,000 kcal/h, 514 Body, 12 Pl. | 101264 | 1 | | |
| • 300,000 kcal/h, 514 Body, 14 Pl. | 101265 | 1 | | |
| • 325,000 kcal/h, 514 Body, 14 Pl. | 101266 | 1 | | |
| • 400,000 kcal/h, 514 Body, 18 Pl. | 101267 | 1 | | |
| • 500,000 kcal/h, 514 Body, 22 Pl. | 101268 | 1 | | |
| • 600,000 kcal/h, 514 Body, 28 Pl. | 101269 | 1 | | |
| Thermostat and Solenoid Automation | 101260 | 1 | | |

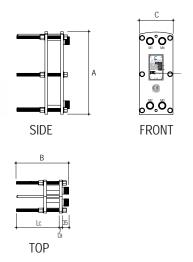


504 BODY

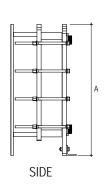




101260 Optional



| Body Model | A (mm) | B (mm) | C (mm) |
|------------|--------|-------------|--------|
| 504 BODY | 490 | La+Lc+35 | 200 |
| 514 BODY | 942 | La+Lc+40+20 | 350 |



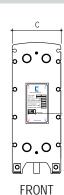




Plate Heat Exchangers - Low Pressure Drop

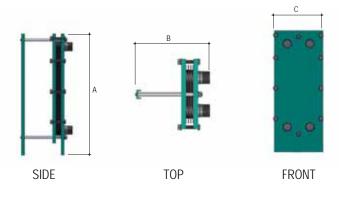
GEMAS Plate Heat Exchangers.

Plates made of AISI 316 quality stainless steel, with nitryl or EPDM gaskets. Body plates are 20 mm and painted over galvanization. Operated by 90-70°C hot water from boiler. Max Pressure 10 bar - Max temperature 130°C. Pressure losses from the sides of the pool and boiler are shown seperately for each capacity.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|--------|----------------|--------------|--------------------------|
| • 40,000 kcal/h: Pool side 1,02 mwh - | 101231 | 1 | 34,500 | |
| Boiler side 1,00 mwh 2,00 - 2,00 m ³ /h 6 pl. | | | | |
| • 65,000 kcal/h: Pool side 1,16 mwh - | 101232 | 1 | 35,900 | |
| Boiler side 1,20 mwh 3,20 - 3,30 m ³ /h 8 pl. | | | | |
| • 90,000 kcal/h: Pool side 1,28 mwh - | 101233 | 1 | 64,000 | |
| Boiler side 1,29 mwh 4,50 - 4,60 m ³ /h 10 pl. | | | | |
| • 110,000 kcal/h: Pool side 1,21 mwh - | 101234 | 1 | 65,200 | |
| Boiler side 1,90 mwh 5,50 - 5,60 m ³ /h 11 pl. | | | | |
| • 130,000 kcal/h: Pool side 1,18 mwh - | 101235 | 1 | 85,600 | |
| Boiler side 1,71 mwh 6,50 - 6,60 m³/h 13 pl. | | | | |
| • 150,000 kcal/h: Pool side 1,55 mwh - | 101236 | 1 | 87,200 | |
| Boiler side 1,60 mwh 7,50 - 7,70 m³/h 14 pl. | | | | |
| • 180,000 kcal/h: Pool side 1,65 mwh - | 101237 | 1 | 87,200 | |
| Boiler side 1,70 mwh 9,00 - 9,20 m³/h 16 pl. | | | | |
| • 225,000 kcal/h: Pool side 1,58 mwh - | 101238 | 1 | 88,800 | |
| Boiler side 1,63 mwh 11,00 - 11,00 m³/h 20 p | ol. | | | |
| • 300,000 kcal/h: Pool side 1,63 mwh - | 101239 | 1 | | |
| Boiler side 1,97 mwh 15,00 - 15,40 m³/h 25 p | ol. | | | |
| • 400,000 kcal/h: Pool side 1,71 mwh - | 101240 | 1 | | |
| Boiler side 1,97 mwh 20,00 - 20,50 m ³ /h 33 p | ol. | | | |
| • 500,000 kcal/h: Pool side 1,81 mwh - | 101241 | 1 | | |
| Boiler side 1,87 mwh 25,00 - 26,00 m³/h 41 p | ol. | | | |
| • 700.000 kcal/h: Pool side 1,14 mwh - | 101242 | 1 | | |
| Boiler side 1,88 mwh 27,00 - 36,00 m ³ /h 62 p | ol. | | | |







A (mm)

B (mm)

250

C (mm)

290



101260 Optional

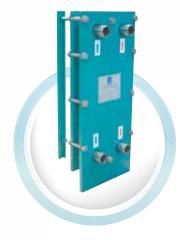
DIMENSIONS



Plate Heat Exchangers-Titanium-Low Pressure Drop

GEMAS Titanium Plate Exchanger.

Titanium plates resistent to sea water. Seals of nitrile or EPDM. Operated by 90-70°C hot water from boiler. Max pressure 10 bars, max temperature 130°C. Pressure losses from the side of the pool and the boiler are shown below separately for each capacity.



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|---------|----------------|--------------|--------------------------|
| • 40,000 kcal/h: Pool side 1,02 mwh - | 101231T | 1 | 34,500 | |
| Boiler side 1,00 mwh 2,00 - 2,00 m ³ /h 6 pl. | | | | |
| • 65,000 kcal/h: Pool side 1,16 mwh - | 101232T | 1 | 35,900 | |
| Boiler side 1,20 mwh 3,20 - 3,30 m ³ /h 8 pl. | | | | |
| • 90,000 kcal/h: Pool side 1,28 mwh - | 101233T | 1 | 64,000 | |
| Boiler side 1,29 mwh 4,50 - 4,60 m ³ /h 10 pl. | | | | |
| • 110,000 kcal/h: Pool side 1,21 mwh - | 101234T | 1 | 65,200 | |
| Boiler side 1,90 mwh 5,50 - 5,60 m ³ /h 11 pl. | | | | |
| • 130,000 kcal/h: Pool side 1,18 mwh - | 101235T | 1 | 85,600 | |
| Boiler side 1,71 mwh 6,50 - 6,60 m ³ /h 13 pl. | | | | |
| • 150,000 kcal/h: Pool side 1,55 mwh - | 101236T | 1 | 87,200 | |
| Boiler side 1,60 mwh 7,50 - 7,70 m ³ /h 14 pl. | | | | |
| • 180,000 kcal/h: Pool side 1,65 mwh - | 101237T | 1 | 87,200 | |
| Boiler side 1,70 mwh 9,00 - 9,20 m ³ /h 16 pl. | | | | |
| • 225,000 kcal/h: Pool side 1,58 mwh - | 101238T | 1 | 88,800 | |
| Boiler side 1,63 mwh 11,00 - 11,00 m ³ /h 20 pl. | | | | |
| • 300,000 kcal/h: Pool side 1,63 mwh - | 101239T | 1 | | |
| Boiler side 1,97 mwh 15,00 - 15,40 m³/h 25 pl. | | | | |
| • 400,000 kcal/h: Pool side 1,71 mwh - | 101240T | 1 | | |
| Boiler side 1,97 mwh 20,00 - 20,50 m ³ /h 33 pl. | | | | |
| • 500,000 kcal/h: Pool side 1,81 mwh - | 101241T | 1 | | |
| Boiler side 1,87 mwh 25,00 - 26,00 m ³ /h 41 pl. | | | | |
| • 700.000 kcal/h: Pool side 1,14 mwh - | 101242T | 1 | | |
| Boiler side 1,88 mwh 27,00 - 36,00 m ³ /h 62 pl. | | | | |



Option (101260): Complete with solenoid valve, thermostat and thermostat cap for automation-650 Euro.





Electrical Heaters - Power Unit

Gemas Spiron-M Electrical Heater.

AISI 316 quality stainless steel body and resistance. Complete with mechanical thermostat, flow switch, temperature control and Contactor-Thermal Fuses. Triphase.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------------------------|--------|----------------|--------------|--------------------------|
| • 9 kW Spiron-M Electrical Heater | 10113M | 1 | 3,750 | 0,031 |
| • 12 kW Spiron-M Electrical Heater | 10114M | 1 | 4,140 | 0,031 |
| • 15 kW Spiron-M Electrical Heater | 10115M | 1 | 5,100 | 0,031 |
| • 18 kW Spiron-M Electrical Heater | 10116M | 1 | 5,540 | 0,031 |
| • 21 kW Spiron-M Electrical Heater | 10117M | 1 | | |
| • 24 kW Spiron-M Electrical Heater | 10118M | 1 | | |



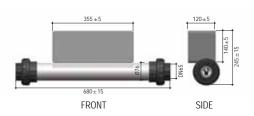
Gemas Spiron-D Electrical Heater.

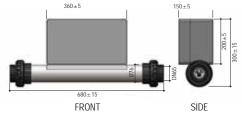
AISI 316 quality stainless steel body and resistance. Complete with digital thermostat, Flow switch, temperature control and Contactor-Thermal Fuses. Triphase.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------------------------|--------|----------------|--------------|--------------------------|
| • 9 kW Spiron-D Electrical Heater | 10113D | 1 | 3,750 | 0,031 |
| • 12 kW Spiron-D Electrical Heater | 10114D | 1 | 4,140 | 0,031 |
| • 15 kW Spiron-D Electrical Heater | 10115D | 1 | 5,100 | 0,031 |
| • 18 kW Spiron-D Electrical Heater | 10116D | 1 | 5,540 | 0,031 |
| • 21 kW Spiron-D Electrical Heater | 10117D | 1 | | |
| • 24 kW Spiron-D Electrical Heater | 10118D | 1 | | |



[&]quot;Please ask for price for intermediate capacities up to 48 W."





[&]quot;Please ask for price for intermediate capacities up to 48 W."



Electrical Exchangers



GEMAS Electric Heaters. AISI 304 quality Stainless Steel. Complete with thermostat and **"Flow Switch"**. Triphase.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------------------------|-------|----------------|--------------|--------------------------|
| 6 kW Gemas Electric Heaters | 10111 | 1 | 4,140 | 0,031 |
| • 9 kW Gemas Electric Heaters | 10112 | 1 | 4,140 | 0,031 |
| • 12 kW Gemas Electric Heaters | 10113 | 1 | 5,540 | 0,031 |
| • 18 kW Gemas Electric Heaters | 10114 | 1 | 5,540 | 0,031 |

Pool Thermometers



Pool Thermometers, floating.

| Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------|----------------|----------------------|---|
| 10414 | 24 | | |
| 10412 | 24 | | |
| 10415 | 24 | | |
| | 10414 10412 | 10414 24 10412 24 | Code box Kg 10414 24 10412 24 |



Pool Thermometer, to be connected to the ladder.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------------------------|-------|----------------|--------------|--------------------------|
| • Thermometer - Floating Type | 10411 | 1 | 0,090 | |
| To be connected to the ladder | 10421 | 1 | 0,068 | |



Pool Thermometer, floating and circular scaled, Ø 190 mm.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| | 10431 | 1 | 0,298 | 0,010 |



Digital Pool Thermometer with Solar Battery, Ø 80 mm.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| | 10432 | 1 | 0,140 | 0,001 |



Indoor Pool Air Handling Unit Heating Dehumidification + Ventilation

Gemas air handling unit. Provides energy recovery humidity control for indoor pool spaces. It airs the space - it heats, it provides heating support to the pool water. It does all these operations automatically. Air duct system should be installed in the indoor pool area. Please ask for an offer.

| Indoor Unit | MADCRA060N-15 | MADCRA120N-30 | MADCRA200N-50 | |
|--|--|-----------------------------|----------------------------|--|
| Model Outdoor Unit | MAA060W | MAA120W | MAA100Wx2 | |
| Air Flow (m ³ /h) | 4000-4500 | 7000 | 10000-11000 | |
| Static Pressure (Pa) | 250-300 | 400-450 | 600-800 | |
| Exhaust Air Flow (m ³ /h) | 1000 | 2000 | 3300 | |
| Dehumidification (kg/h) | 15 | 30 | 50 | |
| Air Cooling Capacity (kW) | 17 | 33 | 51 | |
| Air Heating Capacity (kW) | 19 | 36 | 60 | |
| Pool Water Heating Capacity (kW) | 30 | 55 | 90 | |
| Surface Air Cooler Cooling Capacity (kW) | 32 | 53 | 91 | |
| Surface Air Cooler Heating Capacity (kW) | 40 | 62 | 102 | |
| Water Flow (m ³ /h) | 6 | 8 | 14 | |
| Pool Water Pipe Size | 1.5"-Female Threaded | 2"-1.5"-Female Threaded | 2.5"-1.5"-Female Threaded | |
| Condensation Discharge - Pipe Size | 1"-Male Threaded | 1"-Male Threaded | 1"-Male Threaded | |
| Cooler | R410A | R410A | R410A | |
| Expansion Control | Electronic Expansion Valve | Electronic Expansion Valve | Electronic Expansion Valve | |
| Compressor Quantity | 1 | 1 | 2 | |
| Compressor Power Input (kW) | 5.6 | 10.6 | 8.6x2 | |
| Power source | 380V/3ph/50Hz | 380V/3ph/50Hz | 380V/3ph/50Hz | |
| Operating Power (kW) | 7.1 | 12.8 | 24 | |
| Dehumidifying Heat Exchanger Type | Female Threaded Pipe + Hydrophilic Aluminum Foil | | | |
| Heat Exchanger Type | Female Threaded Pipe + Hydrophilic Aluminum Foil | | | |
| Surface Air Cooler for Heat Recovery | Straigh | t Pipe + Hydrophilic Alumin | um Foil | |
| Water Side Heat Exchanger Type | | Titanium Heat Exchanger | | |

| Water Side Heat Exchanger Type | | | Titanium Heat Exchanger | | |
|--------------------------------|----------------------------|--|-------------------------|---------------|--|
| Fan Syst | em | | | | |
| | Fans Amount | 1 | 2 | 4 | |
| OUTDOOR | Power Source | 220V/1ph/50Hz | 220V/1ph/50Hz | 220V/1ph/50Hz | |
| UNIT | Power Supply Input | Indoor Unit Output Terminal | | | |
| | Fan Motor Power Input (kW) | 0.5 | 0.5x2 | 0.5x4 | |
| | Connection Pipe (mm) | Ø19 Ø12.7 | Ø22 Ø16 | 2xØ22 2xØ16 | |
| | Fans Amount | 2 | 2 | 3 | |
| | Fan Motor Type | Low Noise-Pre-Twisted-Double Air Inlet Centrifugal Fan | | | |
| INDOOR | Air Supply Fan Motor (kW) | 8 | 2.2 | 1.5x2 | |
| UNIT | Air Exhaust Fan Motor (kW) | 0.18 | 0.32 | 0.55 | |
| | Air Valve Amount | 3 | 3 | 3 | |
| | Air Duct Filter Amount | 2 | 2 | 2 | |

| Dimensions and Weight | | | | |
|-----------------------|-------------|----------------|----------------|----------------|
| OUTDOOR | L/W/H (kg) | 810x780x830 | 1450x780x910 | 1450x780x910 |
| UNIT | Weight (mm) | 70 | 100 | 100x2 |
| INDOOR | L/W/H (kg) | 1900x1000x1680 | 2000x1200x1980 | 2500x1600x2280 |
| UNIT | Weight (mm) | 400 | 650 | 1000 |

- 1. Dehumidification capacity test conditions: Indoor DB-Dry Thermometer 27°C, WB-Wet Thermometer 21.2°C, unit operated for 1 hour.
- 1. Defurindincation capacity test conditions: indoor DB-Dry Thermorheet 27 C, will of 2. Air cooling capacity test conditions; outdoor return temperature 3°C, indoor return temperature 21°C.

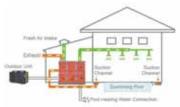
 3. Air Heating Capacity test conditions; outdoor air return temperature 7°C, indoor air return temperature 21°C.

 4. Pool heating capacity test conditions; outdoor air return temperature 24°C, unit water inlet 25°C, water outlet 28°C.

 5. Dimensions after venting added: 2075/1200/2155

 6. Working environment temperature range 0°C ~ 43°C







Dehumidifiers

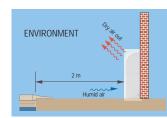
GEMAS Dehumidifier. Provides energy-saving humid control for indoor swimming pool. Allows adjusting desired humidity rate with digital hygrometer.





10231

- Quite operation, HP Buster Technology,
- R410A Eco-Friendly Gas,
- Installation on basement or wall,
- Plastic Case,
- Optional Electrical Heater.



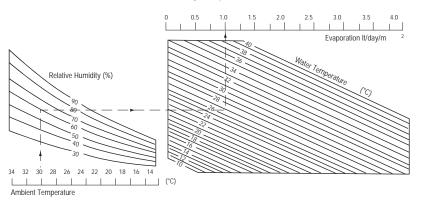
| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|-------|----------------|--------------|--------------------------|
| Model MDH75A / 75 I/day | 10231 | 1 | 57,000 | 0,244 |
| Model MDH90A / 90 I/day | 10236 | 1 | 64,000 | 0,336 |
| Model MDH125A / 125 I/day | 10234 | 1 | 66,000 | 0,336 |
| Model MDH170A / 170 I/day | 10235 | 1 | 79,000 | 0,427 |

Note: Test Conditions - 30°C ambient temperature, %80 relative humidity.



10234

Determination Chart for Daily Evaporation in Indoor Pool Areas



| | 14511754 | 14011004 | MADULAGEA | 14704 |
|---------------------------------------|-----------------|-----------------|-----------------|-----------------|
| Model | MDH75A | MDH90A | MDH125A | MDH170A |
| Capacity (kg/24sa) 30°C/70% humidity* | 75 | 90 | 125 | 170 |
| Heat Retention (kW) 30°C/70% humidity | * 3.2 | 4 | 5 | 8.2 |
| Noise Level (dB(A)) | 48 | 50 | 50 | 52 |
| Air Flow (m ³ /h) | 600 | 1200 | 1200 | 1800 |
| Input Energy | 220V/1ph/50Hz | 220V/1ph/50Hz | 220V/1ph/50Hz | 220V/1ph/50Hz |
| Operation Power (kW) | 1.30 | 1.60 | 2.00 | 2.92 |
| Current (A) | 5.9 | 7.3 | 9.1 | 13.3 |
| Start Current (A) | 25 | 34 | 42 | 63 |
| Water Inlet (inch) | 3/4 | 3/4 | 3/4 | 3/4 |
| Water Outlet (inch) | 3/4 | 3/4 | 3/4 | 3/4 |
| Drainage (mm D ₂ fl Çap) | 16 | 16 | 16 | 16 |
| Operation Temperature (°C) | 5~35 | 5~35 | 5~35 | 5~35 |
| Compressor Protection | 3 minutes delay | 3 minutes delay | 3 minutes delay | 3 minutes delay |
| Defrost Mode | Automatic | Automatic | Automatic | Automatic |
| Cooler | R410A | R410A | R410A | R410A |
| Compressor | Rotary | Rotary | Rotary | Rotary |
| Net / Gross Weight (kg) | 52/57 | 57/64 | 59/66 | 70/79 |
| Net Dimensions (mm) | 905x243x673 | 1288x243x673 | 1288x243x673 | 1672x243x673 |
| Package Dimensions (mm) | 1015x315x765 | 1395x315x765 | 1395x315x765 | 1775x315x765 |



12,50 x 25,00 x 1,80

12,50 x 25,00 x 1,50

8,00 x 16,00 x 1,50

6,00 x 12,00 x 1,50

5,00 x 10,00 x 1,50

,00 x 8,00 x 1,50

48 h

72 h

72 h

72 h **Pool Dimensions**

Volume (m³)

 $\Delta t = 5^{\circ}C$

 $\Delta t = 10^{\circ}C$

Wind Sheltered Pools

Heat

Requirement

(kcal/h)

,86

Ш

Watt)

ndoor Pools

24 h

72 h

24 h

48 h

24 h

48 h

72 h

24 h

72 h

24 h

48 h

24 h

48 h

25°C

 $= 10^{\circ}C$

Open Pools

Heat Requirement Chart For Miscellaneous Pools

16,00 x 35,00 x 1,50

25,00 x 50,00 x 2,00

1525604 1004677

|1327177|1066714| 979892

|1848104|1327177|1153535

1900152 1014576

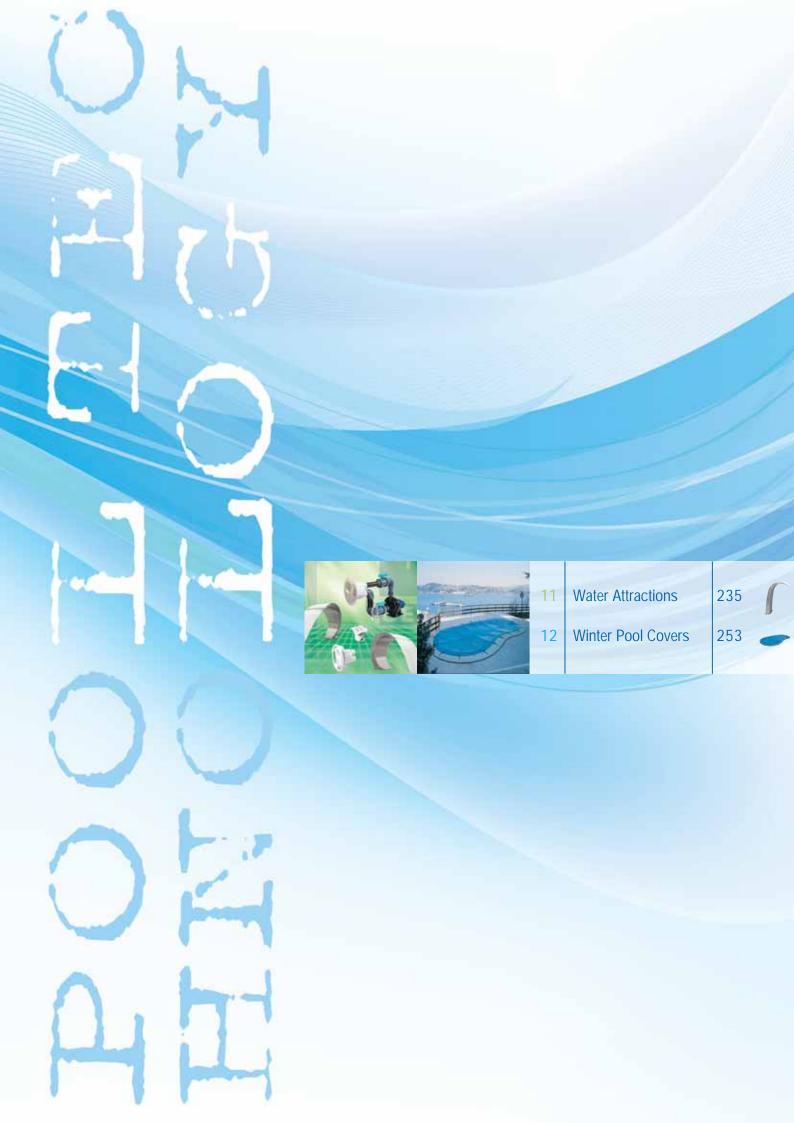
719384 2733635

25,00 x 50,00 x 1,50

20,00 x 40,00 x 1,50

- 1- Above values are calculated with assumption of 24 hr of boiler operation. These values needs to be increased (x 24/work hours) in cases where boiler works less Instructions:
- 2- Exchanger capacities on the price list are for 90/70 °C boiler water temperature. Selected exchanger capacities needs to be increased for lower boiler water temperatures 3- Values on the chart are approximate and can vary according to pool's construction and coating
- 4- Δt = Preferred temprature increase for pools
- Above time values for preffered temperature increase. Installation capacity needs to be increased for decreasing operation time values
- Same type of cover decreases humidity by %50 at indoor pools
 - Using the "solar air-bubble cover" during the heating process, provides energy saving. (>%50



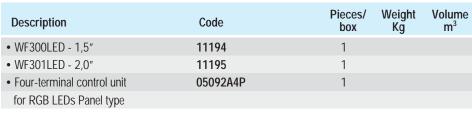




Water Cascade - Acrylic - RGB LED



Made of transparent acrylic. Complete with stainless steel bottom mounting plate, gasket, screws and nuts. Different light animations are created with RGB LED. Transformer remote control unit is not included in the price. Color change can be achieved with on-off.



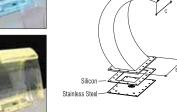
PS: It must be used with a dedicated 1 HP Streamer pump.

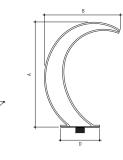














TECHNICAL CHARACTERISTICS

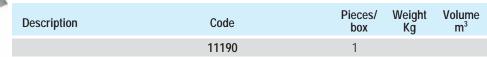
| MODEL | Ø | A (mm) | B (mm) | C (mm) | D (mm) | E (mm) | Power (W) | Voltage (VDC) |
|------------|------|--------|--------|--------|--------|--------|-----------|---------------|
| WF-300 LED | 1.5" | 603 | 423.5 | 320 | 236 | 416 | 12.0 | 12 |
| WF-301 LED | 2.0" | 750 | 540.6 | 395 | 280 | 500 | 13.0 | 12 |

Water Cascade



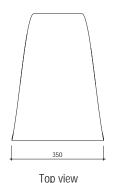
Mini Cobra Water Cascade.

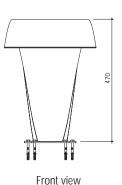
Made of AISI 304 quality stainless steel. Connection 1 1/2" female threaded. Complete with bolts and plugs.

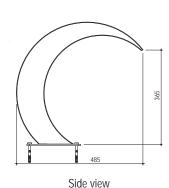


PS: It must be used with a dedicated 1 HP Streamer pump.









We reserve our right to change all or part of the features of the articles or contents of this document, without prior notice



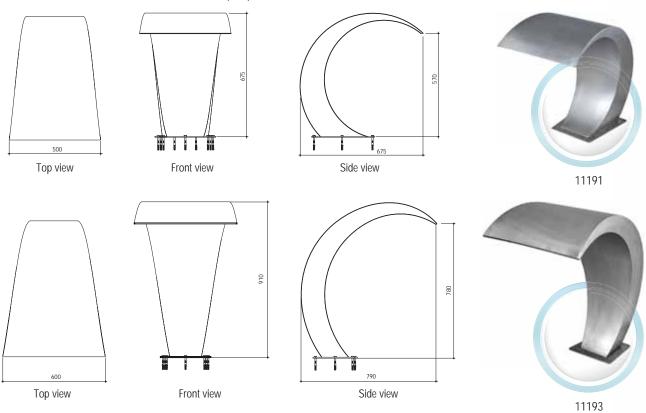
Water Cascade

Midi Cobra Water Cascade.

Made of AISI 304 quality stainless steel. Connection 2" female threaded. Complete with bolts and plugs.

| Description | Code | Pieces/ Weight box Kg | Volume m ³ |
|---------------------------|-------|--------------------------|--------------------------|
| • Midi 1 - h=575 x 500 mm | 11191 | 1 | |
| • Midi 2 - h=900 x 600 mm | 11193 | 1 | |

PS: It must be used with a dedicated 2 HP Streamer pump.

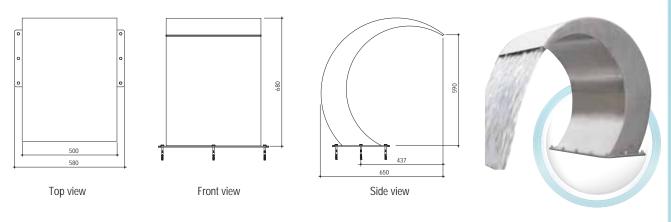


Niagara Water Cascade.

Made of AISI 304 quality stainless steel. Connection 2" female threaded. Complete with bolts and plugs.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| | 11192 | 1 | | |

PS: It must be used with a dedicated 2 HP Streamer pump.





Water Cascade

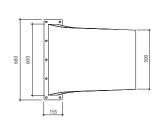
Arcade - Lux Water Cascade.

Made of AISI 304 quality stainless steel. 2" female thereaded connection. Complete with bolt and plugs.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------|-------|----------------|--------------|--------------------------|
| • 500 mm cascade | 11150 | 1 | | |
| • 600 mm cascade | 11151 | 1 | | |

PS: It must be used with a dedicated 3 HP Streamer pump.





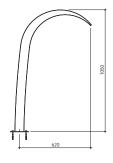


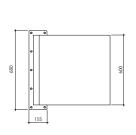
Arcade - Water Cascade.

Made of AISI 304 quality stainless steel. 2" female thereaded connection. Complete with bolt and plugs.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------|-------|----------------|--------------|--------------------------|
| • 400 mm cascade | 11160 | 1 | 30,300 | |
| • 600 mm cascade | 11161 | 1 | | |

PS: It must be used with a dedicated 3 HP Streamer pump.







Made of AISI 304 quality stainless steel. 2" female thereaded connection. Complete with bolt and plugs.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------|-------|----------------|--------------|--------------------------|
| 350 mm cascade | 11170 | 1 | 12,400 | |

PS: It must be used with a dedicated 3 HP Streamer pump.



| | 600 | 350 | |
|------|-----|----------|-----|
| | | | |
| 1500 | | 1300 | 160 |
| 1 | | <u> </u> | |



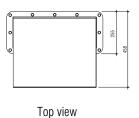
Water Cascade

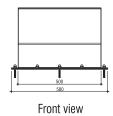
Floor Waterfall.

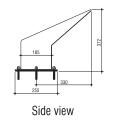
Made of AISI 304 quality stainless steel. Connection 2" female threaded. Complete with bolts and plugs.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| | 11200 | 1 | | |

PS: It must be used with a dedicated 3 HP Streamer pump.





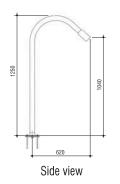




Water Jet.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|-------|----------------|--------------|--------------------------|
| • Ø 50 body made of AISI 304 quality | 11140 | 1 | | |
| stainless steel. Exchangeable jet mouth | ١. | | | |
| • Jet No 1 | 11141 | 1 | | |
| • Jet No 2 | 11142 | 1 | | |
| • Jet No 3 | 11143 | 1 | | |
| • Jet No 4 | 11144 | 1 | | |

PS: It must be used with a dedicated 3 HP Streamer pump.





Top view







Jet No 4





Water Cascade - Wall Type

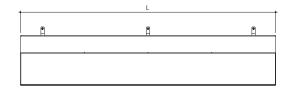
Wall Waterfall.

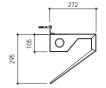
Made of AISI 304 quality stainless steel. Connection 2 x 1 1/2" female threaded. Complete with bolts and plugs.



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| • L= 1 m. | 11110 | 1 | | |
| • L= 1,5 m. | 11111 | | | |

PS: It must be used with a dedicated 1 - 1 1/2 HP Streamer pump.





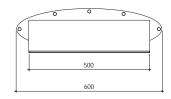
Tortum Water Cascade.

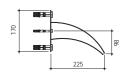
Made of AISI 304 quality stainless steel. Connection 1 1/2" female threaded. Complete with bolts and plugs.



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| • L= 0,3 m. | 11112 | 1 | | |
| • L= 0,5 m. | 11113 | 1 | | |

PS: It must be used with a dedicated 3/4 - 1 HP Streamer pump.





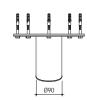
Wall Shower.

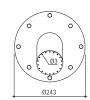
Made of AISI 304 quality stainless steel. Connection 1 1/2" female threaded. Complete with bolts and plugs. Recommended to be used with 05080 pneumatic button.



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| | 11121 | 1 | | |

PS: It must be used with a dedicated 3/4 HP Streamer pump.





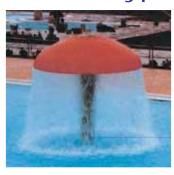


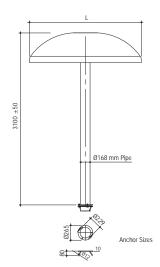
Water Cascade - Mushroom Type

Mushroom Cascade.

FRP mushroom with AISI 304 quality stainless steel pivot, flanged at both ends.

| Description | Code | l | Pieces/ box | Weight Kg | Volume m ³ |
|---------------------------------|-------|---|----------------|--------------|--------------------------|
| • Mushroom Cascade L=Ø 2000 mm: | 11133 | | 1 | | |
| Requires 150 m³/h | | | | | |
| • Mushroom Cascade L=Ø 1600 mm: | 11132 | | 1 | 53,000 | 1,190 |
| Requires 80 m³/h | | | | | |
| • Mushroom Cascade L=Ø 1000 mm: | 11131 | | 1 | | |
| Requires 40 m³/h | | | | | |





Water Cascade - Wall Type - Stainless Steel

"Pool Waterfall".

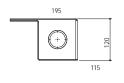
Made of AISI 304 quality stainless steel. Connection 2 x 1 1/2" female threaded.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-----------------------------|-------|----------------|--------------|--------------------------|
| • Model HS01 - 0,30 m width | 11180 | 1 | | |
| • Model HS02 - 0,50 m width | 11181 | 1 | | |
| • Model HS03 - 1,00 m width | 11182 | 1 | | |
| • Model HS04 - 1,50 m width | 11183 | 1 | | |



PS: Suggested pumps are Streamer Mini 1/3 HP, 1/2 HP, 3/4 HP ve 1 HP respectively.

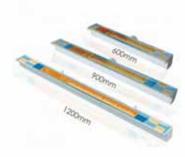
| | 1000 | | |
|--|------|--|--|
| | 1000 | | |
| | | | |







Water Cascade - Wall Type - LED



"LED RGB COLORED POOL WATERFALL".

Two models for different water effects. It has a remote control. Revitalizes your pool. It is one of the most beautiful aesthetic properties for pools and SPAs. While creating a water movement in your pool, relaxing water adds elegance and style to your pool and massages your back. It provides vivid colors with its RGB LED unit that can be activated when desired. With a choice between 2 different water cascading models

- Rainfall or Waterfall Arc, offering visual interest, relaxing sound and a unique waterfall view.

Features:

- Two different widths: 25 mm and 150 mm. Suitable for different wall sizes.
- Three different lengths: 600 mm, 900 mm and 1200 mm
- LED strip lighting is powered by external 12V DC, which is safe and reliable.
- LEDs can be operated with a panel or remote control and there are 10 different lighting patterns.

LED Pool Waterfall Control Box

The LED strip is placed in the unit (instead of using fiber optics) the light falls as close as possible to the water. This design provides water illumination falling into a wonderful pool. A selection of 10 pre-programmed LED lighting patterns provide the best lighting options.

There are 2 different models for different water effects:

- PB Series: Standard orbital waterfall effect
- RS Series: Rain effect with transparent orbit

LED Strip Power 12V DC

Remote Control

10 Lighting Patterns

Width **25/150 mm**

Length **600/900/1200 mm**

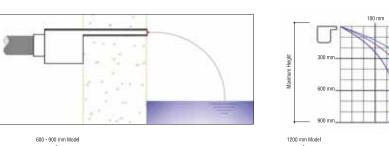


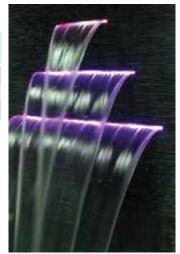
Water Cascade - Wall Type - LED

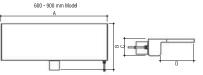
PB Series Pool Waterfall.

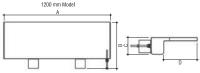
Provides excellent water light effect by creating standard continuous waterfall flow.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------------|----------|----------------|--------------|--------------------------|
| • PB600-150L | 11PB600 | 1 | | |
| • PB900-150L | 11PB900 | 1 | | |
| • PB1200-150L | 11PB1200 | 1 | | |









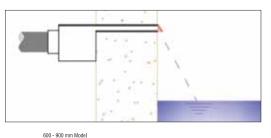
TECHNICAL CHARACTERISTICS

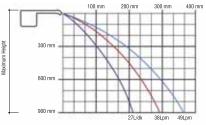
| N | MODEL A (mm) | | B (mm) | C (mm) | D (mm) | Voltage (VDC) | Power (W) |
|---|--------------|------|--------|--------|--------|---------------|-----------|
| F | PB600-150L | 606 | 263 | 76 | 150 | 12 | 8.0 |
| F | PB900-150L | 906 | 263 | 76 | 150 | 12 | 12.0 |
| F | PB1200-150L | 1206 | 263 | 76 | 150 | 12 | 17.0 |

RS Series Pool Waterfall.

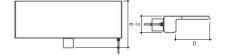
Creates a rain-like waterfall flow, providing a perfect water and light effect in your pool.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------|---------|----------------|--------------|--------------------------|
| • RS600-150L | 11RS600 | 1 | | |
| • RS900-150L | 11RS900 | 1 | | |









TECHNICAL CHARACTERISTICS

| MODEL A (mm) | | B (mm) | C (mm) | D (mm) | Voltage (VDC) | Power (W) |
|--------------|-----|--------|--------|--------|---------------|-----------|
| RS600-150L | 606 | 284 | 78 | 171 | 12 | 8.0 |
| RS900-150L | 906 | 284 | 78 | 171 | 12 | 12.0 |



Inpool Hydro Massage Systems

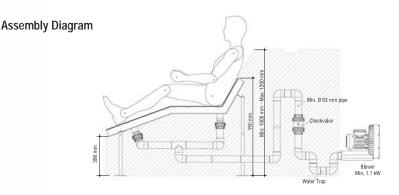


Air Bed.

Made of AISI 304 quality stainless steel. Complete with adjustable legs and PVC piping. \emptyset 63 mm air connection.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| • Double | 11330 | 1 | | |
| • Single | 11331 | 1 | | |

PS: This product must be used with 2,2 - 1,1 kw blower.



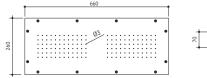
Rectangular Floor Air Jet.

Made of AISI 304 quality stainless steel. Connection 2" female threaded. Complete with bolt and plugs.



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------|-------|----------------|--------------|--------------------------|
| 660 x 260 mm | 11340 | 1 | | |

PS: This product must be used with 2,2 kw blower.





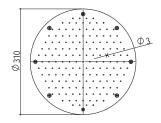


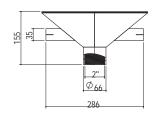
Circular Floor Air Jet.

Made of AISI 304 quality stainless steel. Connection 2" female threaded. Complete with bolt and plugs.

| Description | Code | | ight Volume g m³ |
|--------------|-------|---|---------------------|
| Ø 310 mm dia | 11350 | 1 | |

PS: This product must be used with 1,1 kw blower.







Counter Current and Massage Systems

STP-SP Counter Current System. Complete with jet pump, pneumatic switch, LED light, valves and fittings. Two seperate air buttons for pump and LED. Completely made of ABS plastic. The suction line is 75 mm and the discharge line is 63 mm. Thanks to the suction check valve, the air suction line can be installed below the water level. Hand massage is possible with optional massage hose. Complete with a stainless steel handle. For Concrete and Liner Pools.

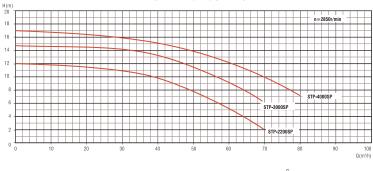


For Concrete and Liner Pools:

| Description | Code | Pieces/ box | Weight Kg |
|---|---------|----------------|--------------|
| • STP-SPM Monophase-with 3,0 HP BTP 0,396 | 112270M | 1 | |
| • STP-SPT Triphase-with 3,0 HP BTP | 112271T | 1 | |
| • STP-SPT Triphase-with 4,0 HP BTP | 112272T | 1 | |
| • STP-SPT Triphase-with 5,5 HP BTP | 112273T | 1 | |
| • STP-SP Counter Current System, Niche, front frame set | 1122213 | 1 | |
| Massage Hose Set | 1122211 | 1 | |



PERFORMANCE CURVES



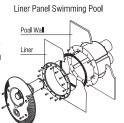


| PUMP TYPE | | | | DIM | ENSI | 0 N S | | | | Weight |
|-----------|-----|-----|-----|-----|------|-------|------|-----|-----|--------|
| 1000 | Α | В | С | D | Е | F | G | Н | H1 | (Kg) |
| STP-2200 | 370 | 156 | 440 | Ø75 | 395 | 77 | 1110 | 340 | 635 | 22 |
| STP-3000 | 410 | 156 | 470 | Ø75 | 395 | 77 | 1110 | 340 | 635 | 24 |
| STP-4000 | 440 | 156 | 500 | Ø75 | 395 | 77 | 1110 | 340 | 635 | 26 |

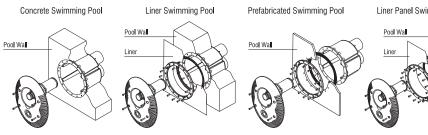














Counter Current and Massage Systems - S. Steel



STP-SS Counter Current System.

Complete with jet pump, pneumatic switch, LED light, valves and fittings. Two seperate air buttons for pump and LED.

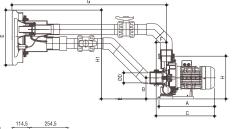
Completely made of stainless steel 304 quality. The suction line is 75 mm and the discharge line is 63 mm. Thanks to the suction check valve, the air suction line can be installed below the water level. Hand massage is possible with optional massage hose. For Concrete and Liner Pools.

For Concrete and Liner Pools:

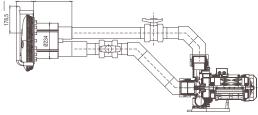


| Description | Code | Pieces/ box | Weight Kg |
|---|-----------|----------------|--------------|
| STP-SSM Monophase-with 3,0 HP BTP | 112270MSS | 1 | |
| • STP-SST Triphase-with 3,0 HP BTP | 112271TSS | 1 | |
| • STP-SST Triphase-with 4,0 HP BTP | 112272TSS | 1 | |
| • STP-SST Triphase-with 5,5 HP BTP | 112273TSS | 1 | |
| • STP-SS Counter Current System, Niche, front frame set | | 1 | |
| Massage Hose Set | 1122211 | 1 | |





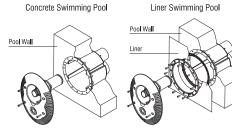
| PUMP TYPE | DIMENSIONS | | | | | | Weight | | | |
|-----------|------------|-----|-----|-----|-----|----|--------|-----|-----|------|
| | Α | В | С | D | Е | F | G | Н | H1 | (Kg) |
| STP-2200 | 370 | 156 | 440 | Ø75 | 395 | 77 | 1110 | 340 | 635 | 22 |
| STP-3000 | 410 | 156 | 470 | Ø75 | 395 | 77 | 1110 | 340 | 635 | 24 |
| STP-4000 | 440 | 156 | 500 | Ø75 | 395 | 77 | 1110 | 340 | 635 | 26 |



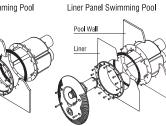




MOUNTING TYPE:



Prefabricated Swimming Pool





Counter Current and Massage Systems

GEMAS "ELIPTICAL MODEL" Counter Current System.

Complete with jet pump, pneumatic switch, valves and connection parts. Easy to direct nozzle inside pool. Completely made of ABS plastic. Suction line Ø 75 mm, return line Ø 63 mm. Air suction line can be established below water level by the help of suction check valve. Possible hand massage with optional massage hose. Optional stainless steel handle. Can be used both for liner and concrete pools.

For Concrete Pools:

| Description | Code | ı | Pieces/ box | Weight Kg | Volume m ³ |
|--|--------|---|----------------|--------------|--------------------------|
| • 3,0 HP Monophase-with Pumpex pump | 112221 | | 1 | | |
| • 3,5 HP Monophase-with Fooderjet pump | 112222 | | 1 | | |
| • 3,0 HP Triphase-with Pumpex pump | 112223 | | 1 | | |
| • 3,5 HP Triphase-with Fooderjet pump | 112224 | | 1 | | |
| • 4,5 HP Triphase-with Fooderjet pump | 112225 | | 1 | | |
| • 5,5 HP Triphase-with Fooderjet pump | 112226 | | 1 | | |



For Liner Pools:

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|--------|----------------|--------------|--------------------------|
| • 3,0 HP Monophase-with Pumpex pump | 112251 | 1 | | |
| • 3,5 HP Monophase-with Fooderjet pump | 112252 | 1 | | |
| • 3,0 HP Triphase-with Pumpex pump | 112253 | 1 | | |
| • 3,5 HP Triphase-with Fooderjet pump | 112254 | 1 | | |
| • 4,5 HP Triphase-with Fooderjet pump | 112255 | 1 | | |
| • 5,5 HP Triphase-with Fooderjet pump | 112256 | 1 | | |



GEMAS "ELIPTICAL MODEL" Counter Current System.

Niche made of ABS and front frame set.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------------|-------|----------------|--------------|--------------------------|
| • For Concrete Pools | 11223 | 1 | | |
| • For Liner Pools | 11224 | 1 | | |



GEMAS "ELIPTICAL MODEL" Counter Current System, Massage Hose Set.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|---------|----------------|--------------|--------------------------|
| | 1122211 | 1 | | |



AISI 304 Quality Stainless Steel Handles for GEMAS Counter Current System.

Complete with screws and pegs, with flange. Pipe is \emptyset 42 mm.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|---------|----------------|--------------|--------------------------|
| Price for 2 | 1122212 | 1 | | |





Counter Current and Massage Systems



GEMAS "SQUARE MODEL" Counter Current System.

Complete with jet pump, pneumatic switch, valves and connection parts. Easy to direct nozzle inside pool. Completely made of ABS plastic. Suction line \emptyset 75 mm, return line \emptyset 63 mm. Air suction line can be established below water level by the help of suction check valve. Possible hand massage with optional massage hose. Optional stainless steel handle. Can be used both for liner and concrete pools.

For Concrete Pools:

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|---------|----------------|--------------|--------------------------|
| • 3,0 HP Monophase-with Pumpex pump | 112221K | 1 | | |
| • 3,5 HP Monophase-with Fooderjet pump | 112222K | 1 | | |
| • 3,0 HP Triphase-with Pumpex pump | 112223K | 1 | | |
| • 3,5 HP Triphase-with Fooderjet pump | 112224K | 1 | | |
| • 4,5 HP Triphase-with Fooderjet pump | 112225K | 1 | | |
| • 5,5 HP Triphase-with Fooderjet pump | 112226K | 1 | | |



For Liner Pools:

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|---------|----------------|--------------|--------------------------|
| • 3,0 HP Monophase-with Pumpex pump | 112251K | 1 | | |
| • 3,5 HP Monophase-with Fooderjet pump | 112252K | 1 | | |
| • 3,0 HP Triphase-with Pumpex pump | 112253K | 1 | | |
| • 3,5 HP Triphase-with Fooderjet pump | 112254K | 1 | | |
| • 4,5 HP Triphase-with Fooderjet pump | 112255K | 1 | | |
| • 5,5 HP Triphase-with Fooderjet pump | 112256K | 1 | | |



GEMAS "SQUARE MODEL" Counter Current System.

Niche made of ABS and front frame set.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------------|--------|----------------|--------------|--------------------------|
| • For Concrete Pools | 11223K | 1 | | |
| • For Liner Pools | 11224K | 1 | | |



GEMAS "SQUARE MODEL" Counter Current System, Massage Hose Set.

| Description | Code | Pieces/ box | Weight Kg | Volume m³ |
|-------------|---------|----------------|--------------|--------------|
| | 1122211 | 1 | | |



Inpool Hydro Massage Systems

In-Pool Hydro Massage Bed.

Made of Acrylic + Polyester. Water and air connections are ready to install.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| • Type 1 | 11310 | 1 | 15,000 | |
| • Type 2 | 11311 | 1 | | |



In-Pool Hydro Massage Chair.

Made of Acrylic + Polyester. Water and air connections are ready to install.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| | 11320 | 1 | | |







Decorative Wall Nozzles



Small Lionhead, Antique Copper



Large Lionhead, Antique Copper



Plain Bowl Waterfall



Plain Bowl Waterfall, Antique Copper



Slotted Bowl Waterfall, Antique Copper



Snail Antique Copper



Antique Badge

GEMAS Wall Nozzles. Made of polyester and the surface finish is made with various aging paints. Standart trims are antique copper, antique brass, antique silver and oxide. Special implementations can be made according to special demands.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|---------|----------------|--------------|--------------------------|
| Small Lionhead, Antique Copper | 1122411 | 1 | | |
| Large Lionhead, Antique Copper | 1122421 | 1 | | |
| Plain Bowl Waterfall, Antique Copper | 1122431 | 1 | | |
| Slotted Bowl Waterfall, Antique Copper | 1122241 | 1 | | |
| Snail, Antique Copper | 1122251 | 1 | | |
| Antique Badge, Antique Copper | 1122261 | 1 | | |









Poolside Flowerpots

GEMAS Poolside Flowerpots. Made of polyester and the surface finish is made with various aging paints. Standart trims are antique copper, antique brass, antique silver and oxide. Special implementations can be made according to special demands.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|---------|----------------|--------------|--------------------------|
| • Flowerpot with Angle Figure, Antique Copper | 1122511 | 1 | | |
| Cube Flowerpot, Antique Copper | 1122521 | 1 | | |













Laminar Flow Illuminated Jet

American Poolside Light Jet System. The jet is installed in and around the pool terrace. Requires electricity + 12 V transformer and water supply installation + cartridge filter facility. Please call for details.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|--------|----------------|--------------|--------------------------|
| Laminar Jet | 112261 | 1 | | |









Fiberoptic Star Effect

GEMAS Fiberoptic Star Effect.

Before coating the pool, fiberoptic fibers are inserted on pool floor, extended into engine room and all fibers connected to RGB light source. In this way, RGB or single colored star effect is created on the pool floor.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|---------|----------------|--------------|--------------------------|
| | 1122711 | | | |







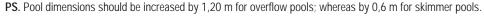




Poyrazlux - Winter Cover

Pool Cover. Made of PVC. Peripheral reinforcement of 5 cm. Laterals at each 1 m of the periphery are used to stretch the cover over pool surface by means of stainless steel springs attached to special bronze retractable anchors. Drain holes are available at the center to discharge the rain water. Complete with springs and retractable anchors.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|-------|----------------|--------------|--------------------------|
| • Rectangular shape, price per square meter | 12110 | | | |
| • Irregular shape, price per square meter | 12111 | | | |
| • Free form cover, price per square meter | 12112 | | | |
| Special cut for pool ladder or other | 12117 | | | |
| special forms, price per cut | | | | |







Solar Cover - Heat Saving

Solar Pool Cover. Provides a limited amount of solar heating and saves energy by minimizing the surface heat loss. Decreases the humidity 50% at indoor pools. Recommended to be used with cover reel.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|---------|----------------|--------------|--------------------------|
| Solar Cover, in role per m ² | 1211101 | | | |
| Width: 2 m. (Welded price is double). | | | | |

PS. Please ask for prices of Solar Covers in special shape.



Cover Accessories

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|--------|----------------|--------------|--------------------------|
| Retractable anchor | 121101 | 1 | 0,062 | |
| Dynamometric Spring. | 121102 | 1 | 0,144 | |
| AISI 304 quality stainless steel | | | | |
| Manuel Vacuum Pump. Used for | 12114 | 1 | | |
| discharge of rain water on the cover. | | | | |









Motorized Pool Cover



COVERTEC Pool Cover.

Blue PVC 650 gr/m2. Reinforced with aluminium bars placed with 1,2 m - 1,4 m intervals. With the help of portable rechargeable-reductor 24 V motor, the pool cover is opened or collected easily and quickly. Safe for children and pets. For windy environments, fixation is provided by side reinforcements. For irregular-shaped swimming pools, the cover needs to be rectangular form. There should be 25 cm margin for short edges and 50 cm margin for long edge.

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| Description | Code | Pieces/ Weight box Kg | Volume m ³ |
|-----------------|-------|--------------------------|--------------------------|
| • 3 x 6 m Pool | 12210 | 1 | |
| • 4 x 8 m Pool | 12211 | 1 | |
| • 5 x 10 m Pool | 12212 | 1 | |
| • 6 x 12 m Pool | 12213 | 1 | |

All Pool Covers Have Below Specifications

- Strong resistance to UV lights from the Sun. Preserves its aero-elastic structure under bad weather conditions.
- Can be easily clean due to dirt-proof LAQUER coating.
- Anti Fungal
- · Anti Bacterial
- Not affected negatively by pool chemicals











Motorized Pool Cover

Automatic PVC Slatted Pool Cover. Made of PVC profiles, 24 V Above-groun motor. It weights a person walking above and does not sink. With the help of safety straps, the cover can be fixed manually to pool deck. It's suitable for new and existing pools. For remote control option please ask for price.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------------------|-------|----------------|--------------|--------------------------|
| • 3 x 6 m Pool - White | 12220 | | | |
| • 4 x 8 m Pool - White | 12221 | | | |
| • 5 x 10 m Pool - White | 12222 | | | |
| • 6 x 12 m Pool - White | 12223 | | | |
| • 3 x 6 m Pool - Solar Blue | 12224 | | | |
| • 4 x 8 m Pool - Solar Blue | 12225 | | | |
| • 5 x 10 m Pool - Solar Blue | 12226 | | | |
| • 6 x 12 m Pool - Solar Blue | 12227 | | | |



PS. This is a no-stock item. Produced according to order.

P.A.P. (Please Ask Price)









Cover Reels



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-----------------------------------|--------|----------------|--------------|--------------------------|
| Cover Reel. | 12113 | 1 | 6,100 | 0,047 |
| Made of ABS plastic, | | | | |
| complete with cover tie set. | | | | |
| • Ditto, Made of stainless steel, | 12115 | 1 | | |
| complete with cover tie set. | | | | |
| • 3 x 2 m Aluminium | 121131 | 1 | 6,394 | 0,039 |
| Telescopic Cover Bar. | | | | |

PS. Please ask quotation for "telescopic cover bar"





Pool Ice Barrier

12113



Pool Ice Barrier. Made of Plastic. 49 x 24 cm size floating barrier is arrayed all around the pool perimeter. Protects the pool coating by absorbing the expansion of freezing at very low atmospheric temperature.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|---------|----------------|--------------|--------------------------|
| Ice Barrier | 1297105 | 1 | | |







Ball Valves



Ball Valves in PVC. Slip connection and adjustable ball pressure. HDPE seats and EPDM O-rings. PN 16.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-----------------------------|---------|----------------|--------------|--------------------------|
| • d.20 mm - Slip connection | 131111 | 88 | 23,050 | 0,094 |
| • d.25 mm - Slip connection | 131112 | 78 | 27,160 | 0,094 |
| • d.32 mm - Slip connection | 131113 | 20 | 7,900 | 0,017 |
| • d.40 mm - Slip connection | 131114 | 12 | 7,800 | 0,017 |
| • 1/2" - Threaded | 131111T | 88 | 23,050 | 0,094 |
| • 3/4" - Threaded | 131112T | 78 | 27,160 | 0,094 |
| • 1" - Threaded | 131113T | 20 | 7,900 | 0,017 |
| • 1 1/4" - Threaded | 131114T | 12 | 7,800 | 0,017 |



Ball Valves in PVC. Slip connection; adjustable ball pressure as well as patented union-screwing by means of handle. HDPE seats and EPDM 0-rings. PN 16.



| Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------|---|--|---|
| 131115L | 6 | 4,620 | 0,013 |
| 131116L | 6 | 7,542 | 0,021 |
| 131117L | 2 | 3,680 | 0,016 |
| 131118L | 2 | 3,660 | 0,016 |
| 131119L | 1 | 6,240 | 0,018 |
| 131115LT | 6 | 4,620 | 0,013 |
| 131116LT | 6 | 7,542 | 0,021 |
| 131117LT | 2 | 3,680 | 0,016 |
| 131118LT | 2 | 3,660 | 0,016 |
| 131119LT | 1 | 6,240 | 0,018 |
| | 131115L 131116L 131117L 131118L 131119L 131115LT 131116LT 131117LT | Code box 131115L 6 131116L 6 131117L 2 131118L 2 131119L 1 131115LT 6 131116LT 6 131117LT 2 131118LT 2 | Code box Kg 131115L 6 4,620 131116L 6 7,542 131117L 2 3,680 131118L 2 3,660 131119L 1 6,240 131115LT 6 4,620 131116LT 6 7,542 131117LT 2 3,680 131118LT 2 3,660 |



Single Union PVC Ball Valve. Made of PVC. One side is slip connection from the inside and the other side is with a union. O-rings EPDM, packing PP. PN 16. Patented design: Valve handle can be used to tighten the union. Please ask price for threaded versions.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|--------|----------------|--------------|--------------------------|
| • d.50 mm | 131415 | 6 | 3,900 | 0,013 |
| • d.63 mm | 131416 | 6 | 6,200 | 0,021 |
| • d.75 mm | 131417 | 2 | 3,000 | 0,016 |
| • d.90 mm | 131418 | 2 | 3,030 | 0,016 |



Industrial Ball Valves

PVC Industrial Ball Valve. Slip connection and adjustable ball pressure. For acidic liquid resistance, O-rings from viton, seal from teflon.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|---------|----------------|--------------|--------------------------|
| • d.32 mm | 131123 | 20 | 7,900 | 0,017 |
| • d.40 mm | 131124 | 12 | 7,800 | 0,017 |
| • d.50 mm | 131125L | 6 | 4,620 | 0,013 |
| • d.63 mm | 131126L | 6 | 7,542 | 0,021 |
| • d.75 mm | 131127L | 2 | 3,000 | 0,016 |
| • d.90 mm | 131128L | 2 | 3,060 | 0,016 |
| • d.110 mm | 131129L | 1 | 5,975 | 0,018 |



Industrial Ball Valves

PVC Industrial Ball Valve. Adjustable ball pressure and threaded connection. For acidic liquid resistance, O-rings from viton, seal from teflon. PN 16.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|----------|----------------|--------------|--------------------------|
| • 1" | 131123T | 20 | 7,900 | 0,017 |
| • 1 1/4" | 131124T | 12 | 7,800 | 0,017 |
| • 1 1/2" | 131125LT | 6 | 4,620 | 0,013 |
| • 2" | 131126LT | 6 | 7,542 | 0,021 |
| • 2 1/2" | 131127LT | 2 | 3,680 | 0,016 |
| • 3" | 131128LT | 2 | 3,660 | 0,016 |
| • 4" | 131129LT | 1 | 6,240 | 0,018 |



Motorized PVC Ball Valves

Motorized Ball Valves. In case of reverse contactor connection and pool circulation pump is switched off, it closes the suction line of balance tank automatically. In this way, it eleminates the risk of flooding to the engine room due to check valve problems of overflow pools. It can be used with "GEMAS Level Control", "GEMAS Flow Control" devices and also used with every kind of automation systems. 220V/50Hz - 24V AC/DC.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------------------------|---------|----------------|--------------|--------------------------|
| • Ø 50 mm Motorized Valve | 131115M | 1 | 1,602 | 0,008 |
| • Ø 60 mm Motorized Valve | 131116M | 1 | 1,876 | 0,008 |





3-Way Valves



Three Way Disc Valve. Made of ABS. Slip Connection. The pump can be used for dispensing at the suction port and / or filter outlet.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------------------------|-------|----------------|--------------|--------------------------|
| • Three Way Disc Valve - Ø 50 mm | 13171 | 1 | 1,602 | 0,008 |
| Three Way Disc Valve - Ø 63 mm | 13172 | 1 | 1,876 | 0,008 |

Mini Valves



PP Mini Irrigation Valve. Handle from ABS PN16.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------------------------------|---------|----------------|--------------|--------------------------|
| • 1" x 3/4" Male-Female Valve | 131210 | 100 | 19,600 | 0,055 |
| • 3/4" Male-Female Valve | 131211 | 100 | 18,700 | 0,055 |
| • 1" Male-Female Valve | 131212 | 100 | 20,800 | 0,055 |
| • 1" x 3/4" Female-Female Valve | 131210D | 100 | 19,200 | 0,055 |
| • 3/4" Female-Female Valve | 131211D | 100 | 18,400 | 0,055 |
| • 1" Female-Female Valve | 131212D | 100 | 21,050 | 0,055 |

Butterfly Valves



GEMAS PVC BUTTERFLY VALVES.

Handle From ABS, Lining From EPDM. Stem from Zinc PLated Carbon Steel. AISI 316 Stem is optional. Valve can be adjusted by 3,75 degree sensitivity. Hole for Security PAdlock.Complete with flanges bolts and nuts. NEW Design Butterfly Valve is limited to sizes d110, d125, d140 and d160. PLease ask availability for other sizes.

Pieces/

Weight

Volume

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|--------|----------------|--------------|--------------------------|
| • Ø 63 mm | 131600 | 1 | 2,470 | 0,094 |
| • Ø 75 mm | 131601 | 1 | 3,250 | 0,094 |
| • Ø 90 mm | 131602 | 1 | 5,270 | 0,124 |
| • Ø 110 mm | 131603 | 1 | 6,530 | 0,124 |
| • Ø 125 mm | 131604 | 1 | 8,770 | 0,124 |
| • Ø 140 mm | 131605 | 1 | 9,100 | 0,124 |
| • Ø 160 mm | 131606 | 1 | 12,100 | 0,124 |
| • Ø 200 mm | 131607 | 1 | 17,300 | 0,124 |
| • Ø 225 mm | 131608 | 1 | 17,800 | 0,124 |
| • Ø 250 mm | 131609 | 1 | 36,200 | 0,124 |
| • Ø 280 mm | 131610 | 1 | 40,100 | 0,124 |
| • Ø 315 mm | 131611 | 1 | 46,100 | 0,124 |





Butterfly Valves

MOTORIZED BUTTERFLY VALVE, ON-OFF:

Valve actuator, works with 24 V AC/DC. Complete with flanges, flange adaptors, bolts & nuts. All valves can be controlled manually with switch or flywheel.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-----------|----------------|--------------|--------------------------|
| • Ø 90 mm | 131602M11 | 1 | | |
| • Ø 110 mm | 131603M11 | 1 | | |
| • Ø 125 mm | 131604M11 | 1 | | |
| • Ø 140 mm | 131605M11 | 1 | | |
| • Ø 160 mm | 131606M11 | 1 | | |
| • Ø 200 mm | 131607M11 | 1 | | |
| • Ø 225 mm | 131608M11 | 1 | | |
| • Ø 250 mm | 131609M11 | 1 | | |
| • Ø 280 mm | 131611M11 | 1 | | |
| • Ø 315 mm | 131610M11 | 1 | | |



PLEASE ASK PRICE FOR PROPOTIONAL MODELS.

Check Valves - Wafer Check Valves

PVC Swing Check Valves. Two piece body. Complete with bolts.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------------------|---------|----------------|--------------|--------------------------|
| • Ø 50 mm Slip connection | 131499Y | 30 | 24,200 | 0,124 |
| • Ø 63 mm Slip connection | 131500Y | 24 | 20,000 | 0,124 |
| • Ø 75 mm Slip connection | 131501Y | 12 | 17,000 | 0,124 |
| • Ø 90 mm Slip connection | 131502Y | 10 | 17,850 | 0,124 |
| • Ø 110 mm Slip connection | 131503Y | 6 | 19,000 | 0,124 |



PVC Wafer Check Valves. Complete with flange adaptors, flanges, bolts and nuts.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|--------|----------------|--------------|--------------------------|
| • Ø 90 mm | 131502 | 1 | 3,620 | 0,124 |
| • Ø 110 mm | 131503 | 1 | 4,250 | 0,124 |
| • Ø 125 mm | 131504 | 1 | 5,080 | 0,124 |
| • Ø 140 mm | 131505 | 1 | 5,360 | 0,124 |
| • Ø 160 mm | 131506 | 1 | 7,400 | 0,124 |
| • Ø 200 mm | 131507 | 1 | 10,050 | 0,124 |
| • Ø 225 mm | 131508 | 1 | 10,150 | 0,124 |
| • Ø 250 mm | 131509 | 1 | 20,600 | 0,124 |
| • Ø 280 mm | 131510 | 1 | 21,500 | 0,124 |
| • Ø 315 mm | 131511 | 1 | 25,650 | 0,124 |





PVC Wafer Swing Check Valve - With Transparent Cover and Spring.

Easy cleaning access via the threaded cover. Thanks to its transparent cover and large chamber, any type of congestion problem can be easily observed. DN50.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------------------|----------|----------------|--------------|--------------------------|
| Ø 63 mm Slip connection | 131500EM | 1 | | |





Check Valves - Spring Weighed Check Valves



Spring Weighed Check Valves. In PVC or ABS. EPDM O-rings. AISI 316 quality spring. PN16.



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------------------|----------|----------------|--------------|--------------------------|
| • Ø 50 mm | 131315 | 6 | 4,330 | 0,013 |
| • Ø 63 mm | 131316 | 6 | 5,810 | 0,022 |
| • Ø 75 mm | 131317 | 2 | 3,920 | 0,016 |
| • Ø 90 mm | 131318 | 2 | 3,780 | 0,016 |
| • Ø 50 mm - Transparent | 131315PC | 6 | 4,330 | 0,013 |
| • Ø 63 mm - Transparent | 131316PC | 6 | 5,800 | 0,022 |
| • Ø 75 mm - Transparent | 131317PC | 2 | 3,920 | 0,016 |
| • Ø 90 mm - Transparent | 131318PC | 2 | 3,780 | 0,016 |

Valve Boxes



Valve Box.

Designed to supply access to valves which are on the undersoil line. Manufactured from PP.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|--------|----------------|--------------|--------------------------|
| • Ø 250 mm, circular (10") | 135601 | 1 | | |
| 250 x 375 mm, prismatic (12") | 135602 | 1 | | |





Sight Glass



"Union Sight Glass"

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|--------|----------------|--------------|--------------------------|
| • d.50 mm | 134204 | | | |
| • d.63 mm | 134205 | | | |
| • d.75 mm | 134206 | | | |
| • d.90 mm | 134207 | | | |
| • d.110 mm | 134208 | | | |



Sight Glass

"Flanged Sight Glass"

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|--------|----------------|--------------|--------------------------|
| • d.90 mm | 134220 | | | |
| • d.110 mm | 134221 | | | |
| • d.125 mm | 134222 | | | |
| • d.140 mm | 134223 | | | |
| • d.160 mm | 134224 | | | |
| • d.200 mm | 134225 | | | |
| • d.225 mm | 134226 | | | |



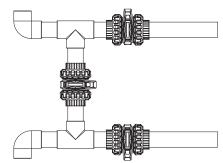
U-PVC BY-Pass Kit

U-PVC BY-Pass Kit

Easy mount valve and fittings kit for installation of BY-Pass lines to auxilary equipment such as heat pumps, salt chlorinators, UV strelizers etc. Complete with 125 ml PVC glue and 100 ml cleaner.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------------------------|---------|----------------|--------------|--------------------------|
| KIT BY-PASS DIAMETER 50 mm | 13543BP | | | |
| Valve (3x), Tee (2x), Elbow (2x), | | | | |
| Tub PVC Plastic PVC Glue 125ml (1) | k) and | | | |
| Bottle PVC cleaner 100ml (1x) | | | | |
| • KIT BY-PASS DIAMETER 63 mm | 13547BP | | | |
| Valve (3x), Tee (2x), Elbow (2x), | | | | |
| Tub PVC Plastic PVC Glue 125ml (1) | k) and | | | |
| Bottle PVC cleaner 100ml (1x) | | | | |







PVC Fittings - Elbow

"Elbow, 90°" PN16 up to size 160 mm. Bigger size PN10.



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|--------|----------------|--------------|--------------------------|
| • Ø 20 mm | 133101 | 250 | 4,000 | 0,021 |
| • Ø 25 mm | 133102 | 500 | 5,500 | 0,021 |
| • Ø 32 mm | 133103 | 250 | 17,500 | 0,094 |
| • Ø 40 mm | 133104 | 144 | 3,400 | 0,021 |
| • Ø 50 mm | 133105 | 180 | 25,380 | 0,034 |
| • Ø 63 mm | 133106 | 100 | 20,700 | 0,034 |
| • Ø 75 mm | 133107 | 80 | 24,400 | 0,124 |
| • Ø 90 mm | 133108 | 50 | 25,800 | 0,124 |
| • Ø 110 mm | 133109 | 30 | 23,800 | 0,124 |
| • Ø 125 mm | 133110 | 16 | 15,600 | 0,124 |
| • Ø 140 mm | 133111 | 12 | 15,400 | 0,124 |
| • Ø 160 mm | 133112 | 8 | 18,300 | 0,124 |
| • Ø 200 mm | 133113 | 4 | 14,660 | 0,124 |
| • Ø 225 mm | 133114 | 3 | 13,300 | 0,124 |
| • Ø 250 mm | 133115 | 1 | 7,710 | 0,094 |
| • Ø 280 mm | 133116 | 1 | 9,800 | 0,124 |
| • Ø 315 mm | 133117 | 1 | 14,440 | 0,124 |
| | | | | |

"Elbow, 45°" PN16 up to size 160 mm. Bigger size PN10.



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|--------|----------------|--------------|--------------------------|
| • Ø 20 mm | 133201 | 600 | 3.400 | 0,021 |
| • Ø 25 mm | 133202 | 500 | 3,400 | 0,021 |
| • Ø 32 mm | 133203 | 320 | 4,200 | 0,021 |
| • Ø 40 mm | 133204 | 150 | 4,200 | 0,021 |
| • Ø 50 mm | 133205 | 225 | 24,070 | 0,940 |
| • Ø 63 mm | 133206 | 120 | 19,800 | 0,940 |
| • Ø 75 mm | 133207 | 100 | 24,180 | 0,124 |
| • Ø 90 mm | 133208 | 50 | 18,080 | 0,124 |
| • Ø 110 mm | 133209 | 30 | 17,120 | 0,124 |
| • Ø 125 mm | 133210 | 18 | 14,340 | 0,124 |
| • Ø 140 mm | 133211 | 15 | 16,380 | 0,124 |
| • Ø 160 mm | 133212 | 9 | 16,400 | 0,124 |
| • Ø 200 mm | 133213 | 4 | 14,300 | 0,124 |
| • Ø 225 mm | 133214 | 4 | 15,260 | 0,124 |
| • Ø 250 mm | 133215 | 1 | 6,100 | 0,124 |
| • Ø 280 mm | 133216 | 1 | 8,980 | 0,124 |
| • Ø 315 mm | 133217 | 1 | 10,880 | 0,124 |



PVC Fittings - Tee

"Tee"

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|--------|----------------|--------------|--------------------------|
| • Ø 20 mm | 133301 | 150 | 3,240 | 0,021 |
| • Ø 25 mm | 133302 | 150 | 4,420 | 0,021 |
| • Ø 32 mm | 133303 | 100 | 5,380 | 0,021 |
| • Ø 40 mm | 133304 | 50 | 4,180 | 0,021 |
| • Ø 50 mm | 133305 | 115 | 20,580 | 0,940 |
| • Ø 63 mm | 133306 | 75 | 20,010 | 0,940 |
| • Ø 75 mm | 133307 | 50 | 20,800 | 0,124 |
| • Ø 90 mm | 133308 | 30 | 21,780 | 0,124 |
| • Ø 110 mm | 133309 | 20 | 20,820 | 0,124 |
| • Ø 125 mm | 133310 | 11 | 14,700 | 0,124 |
| • Ø 140 mm | 133311 | 8 | 15,140 | 0,124 |
| • Ø 160 mm | 133312 | 5 | 15,060 | 0,124 |
| • Ø 200 mm | 133313 | 3 | 14,160 | 0,124 |
| • Ø 225 mm | 133314 | 2 | 13,800 | 0,124 |
| • Ø 250 mm | 133315 | 1 | 10,500 | 0,094 |
| • Ø 280 mm | 133316 | 1 | 12,200 | 0,124 |
| • Ø 315 mm | 133317 | 1 | 18,760 | 0,124 |
| | | | | |



PVC Fittings - Reducing Tee

"Reducing Tee"

| Description | Code | Pieces/ Weight box Kg | Volume m ³ |
|--------------------|----------|--------------------------|--------------------------|
| • Ø 63 - Ø 50 mm | 13330061 | 75 | 0,940 |
| • Ø 75 - Ø 50 mm | 13330071 | 50 | 0,124 |
| • Ø 75 - Ø 63 mm | 13330072 | 50 | 0,124 |
| • Ø 90 - Ø 63 mm | 13330081 | 50 | 0,124 |
| • Ø 90 - Ø 75 mm | 13330082 | 30 | 0,124 |
| • Ø 110 - Ø 63 mm | 13330091 | 20 | 0,124 |
| • Ø 110 - Ø 75 mm | 13330092 | 20 | 0,124 |
| • Ø 110 - Ø 90 mm | 13330093 | 20 | 0,124 |
| • Ø 125 - Ø 75 mm | 13330101 | 11 | 0,124 |
| • Ø 125 - Ø 90 mm | 13330102 | 11 | 0,124 |
| • Ø 125 - Ø 110 mm | 13330103 | 11 | 0,124 |
| • Ø 140 - Ø 90 mm | 13330111 | 8 | 0,124 |
| • Ø 140 - Ø 110 mm | 13330112 | 8 | 0,124 |
| • Ø 140 - Ø 125 mm | 13330113 | 8 | 0,124 |
| • Ø 160 - Ø 63 mm | 13330121 | 5 | 0,124 |
| • Ø 160 - Ø 75 mm | 13330122 | 5 | 0,124 |
| • Ø 160 - Ø 90 mm | 13330123 | 5 | 0,124 |
| • Ø 160 - Ø 110 mm | 13330124 | 5 | 0,124 |
| • Ø 160 - Ø 125 mm | 13330125 | 5 | 0,124 |
| • Ø 160 - Ø 140 mm | 13330126 | 5 | 0,124 |
| • Ø 200 - Ø 75 mm | 13330131 | 3 | 0,124 |





PVC Fittings - Reducing Tee

"Reducing Tee"



| Description | Code | | eight Volume Kg m³ |
|--------------------|----------|---|-----------------------|
| • Ø 200 - Ø 90 mm | 13330132 | 3 | 0,124 |
| • Ø 200 - Ø 110 mm | 13330133 | 3 | 0,124 |
| • Ø 200 - Ø 125 mm | 13330134 | 3 | 0,124 |
| • Ø 200 - Ø 140 mm | 13330135 | 3 | 0,124 |
| • Ø 200 - Ø 160 mm | 13330136 | 3 | 0,124 |
| • Ø 225 - Ø 110 mm | 13330141 | 2 | 0,124 |
| • Ø 225 - Ø 125 mm | 13330142 | 2 | 0,124 |
| • Ø 225 - Ø 140 mm | 13330143 | 2 | 0,124 |
| • Ø 225 - Ø 160 mm | 13330144 | 2 | 0,124 |
| • Ø 225 - Ø 200 mm | 13330145 | 2 | 0,124 |

PVC Cross

"Cross"



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|--------|----------------|--------------|--------------------------|
| • d.32 mm | 133321 | | | |
| • d.40 mm | 133322 | | | |
| • d.50 mm | 133323 | | | |
| • d.63 mm | 133324 | | | |
| • d.75 mm | 133325 | | | |
| • d.90 mm | 133326 | | | |
| • d.110 mm | 133327 | | | |
| • d.125 mm | 133328 | | | |
| • d.140 mm | 133329 | | | |
| • d.160 mm | 133330 | | | |
| • d.200 mm | 133331 | | | |
| • d.225 mm | 133332 | | | |
| • d.250 mm | 133333 | | | |
| • d.280 mm | 133334 | | | |
| • d.315 mm | 133335 | | | |

PVC Fittings - Nipple

"Nipple"



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|---------|----------------|--------------|--------------------------|
| • 1/2" | 1111080 | | | |
| • 3/4" | 1111081 | | | |
| • 1" | 1111082 | | | |
| • 1 1/4" | 1111083 | | | |
| • 1 1/2" | 1111084 | | | |
| • 2" | 1111085 | | | |
| • 2 1/2" | 1111086 | | | |
| • 3" | 1111087 | | | |
| • 4" | 1111088 | | | |
| • 4 1/2" | 1111089 | | | |
| • 5" | 1111090 | | | |
| • 6" | 1111091 | | | |
| • 7" | 1111092 | | | |



PVC Fittings - Adaptors

"Female Threaded Adaptor"

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|--------|----------------|--------------|--------------------------|
| • Ø 50 mm | 133405 | 120 | 13,600 | 0,049 |
| • Ø 63 mm | 133406 | 87 | 15,010 | 0,049 |
| • Ø 75 mm | 133407 | 120 | 25,760 | 0,094 |
| • Ø 90 mm | 133408 | 60 | 19,600 | 0,094 |
| • Ø 110 mm | 133409 | 44 | 13,460 | 0,094 |



"Male Threaded Adaptor"

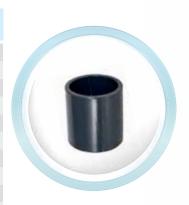
| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|--------|----------------|--------------|--------------------------|
| • Ø 50 mm | 133505 | 156 | 17,720 | 0,049 |
| • Ø 63 mm | 133506 | 116 | 18,040 | 0,049 |
| • Ø 75 mm | 133507 | 120 | 26,700 | 0,094 |
| • Ø 90 mm | 133508 | 75 | 25,860 | 0,094 |
| • Ø 110 mm | 133509 | 36 | 17,000 | 0,094 |



U-PVC Sockets

"Socket"

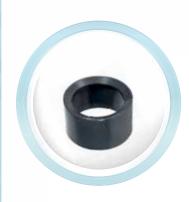
| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|--------|----------------|--------------|--------------------------|
| • Ø 20 mm | 133821 | 500 | 7,000 | 0,021 |
| • Ø 25 mm | 133822 | 500 | 10,500 | 0,021 |
| • Ø 32 mm | 133823 | 300 | 10,650 | 0,021 |
| • Ø 40 mm | 133824 | 250 | 15,500 | 0,021 |
| • Ø 50 mm | 133805 | 150 | 13,100 | 0,049 |
| • Ø 63 mm | 133806 | 87 | 13,400 | 0,049 |
| • Ø 75 mm | 133807 | 96 | 22,300 | 0,094 |
| • Ø 90 mm | 133808 | 60 | 22,540 | 0,094 |
| • Ø 110 mm | 133809 | 36 | 21,480 | 0,094 |
| • Ø 125 mm | 133804 | 24 | 14,340 | 0,094 |
| • Ø 140 mm | 133803 | 15 | 14,380 | 0,094 |
| • Ø 160 mm | 133802 | 12 | 16,660 | 0,094 |
| • Ø 200 mm | 133810 | 5 | 11,320 | 0,094 |
| • Ø 225 mm | 133811 | 3 | 10,220 | 0,094 |
| • Ø 250 mm | 133812 | 2 | 8,910 | 0,124 |
| • Ø 280 mm | 133813 | 1 | 6,120 | 0,124 |
| • Ø 315 mm | 133814 | 1 | 7,100 | 0,124 |





PVC Fittings - Reducing Sockets

"Reducing Socket"



| | | | Kg | m³ |
|-----------------------------|----------|------|--------|-------|
| • Ø 25 - Ø 20 mm | 133602 | 250 | | |
| • Ø 32 - Ø 25 mm 1 | 133604 | 1000 | | |
| • Ø 40 - Ø 32 mm | 133603 | 600 | | |
| • Ø 50 - Ø 32 mm 1 | 133601 | 200 | | |
| • Ø 50 - Ø 40 mm 1 | 1336095 | 200 | 16,800 | 0,094 |
| • Ø 63 - Ø 50 mm 1 | 133605 | 252 | 16,100 | 0,049 |
| • Ø 75 - Ø 63 mm 1 | 133606 | 150 | 12,400 | 0,049 |
| • Ø 90 - Ø 75 mm 1 | 133607 | 88 | 12,496 | 0,049 |
| • Ø 110 - Ø 90 mm 1 | 133608 | 48 | 12,912 | 0,049 |
| • Ø 75 - Ø 50 mm | 1336061 | 150 | 15,100 | 0,049 |
| • Ø 90 - Ø 63 mm 1 | 1336071 | 88 | 15,900 | 0,049 |
| • Ø 110 - Ø 75 mm | 1336081 | 48 | 13,800 | 0,049 |
| • Ø 110 - Ø 63 mm | 1336082 | 48 | 13,700 | 0,049 |
| • Ø 125 - Ø 90 mm 1 | 1336091 | 36 | 15,190 | 0,049 |
| • Ø 125 - Ø 110 mm | 133609 | 36 | 10,440 | 0,049 |
| • Ø 140 - Ø 90 mm 1 | 133612 | 23 | 18,800 | 0,049 |
| • Ø 140 - Ø 110 mm | 1336121 | 23 | 6,400 | 0,049 |
| • Ø 140 - Ø 125 mm 1 | 1336122 | 23 | 8,700 | 0,049 |
| • Ø 160 - Ø 90 mm 1 | 133610 | 15 | 11,320 | 0,049 |
| • Ø 160 - Ø 110 mm | 133611 | 15 | 10,180 | 0,049 |
| • Ø 160 - Ø 140 mm 1 | 13366111 | 15 | 8,940 | 0,049 |
| • Ø 200 - Ø 160 mm 1 | 133672 | 14 | 17,500 | 0,094 |
| • Ø 200 - Ø 140 mm 1 | 133671 | 14 | | 0,094 |
| • Ø 225 - Ø 200 mm 1 | 133681 | 12 | 16,300 | 0,094 |
| • Ø 225 - Ø 160 mm 1 | 133682 | 12 | 15,400 | 0,094 |
| • Ø 250 - Ø 225 mm 1 | 133683 | 8 | 13,900 | 0,094 |
| • Ø 280 - Ø 250 mm 1 | 133686 | | | |
| • Ø 315 - Ø 250 mm | 133693 | | | |

"Conical Socket"



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------------|----------|----------------|--------------|--------------------------|
| • Ø 75 - Ø 50 mm | 1339071 | | | |
| • Ø 75 - Ø 63 mm | 1339072 | | | |
| • Ø 90 - Ø 63 mm | 1339082 | | | |
| • Ø 110 - Ø 63 mm | 1339091 | | | |
| • Ø 160 - Ø 110 mm | 13390121 | | | |
| • Ø 200 - Ø 110 mm | 13390131 | | | |

PVC Fittings - Caps

"Caps"

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|--------|----------------|--------------|--------------------------|
| • Ø 20 mm | 133701 | 200 | | |
| • Ø 25 mm | 133702 | 1000 | | |
| • Ø 32 mm | 133703 | 600 | | |
| • Ø 40 mm | 133704 | 360 | | |
| • Ø 50 mm | 133705 | 262 | 14,480 | 0,049 |
| • Ø 63 mm | 133706 | 130 | 13,120 | 0,049 |
| • Ø 75 mm | 133707 | 80 | 15,200 | 0,049 |
| • Ø 90 mm | 133708 | 46 | 11,440 | 0,049 |
| • Ø 110 mm | 133709 | 33 | 14,340 | 0,049 |
| • Ø 125 mm | 133711 | 20 | 9,620 | 0,049 |
| • Ø 140 mm | 133712 | 11 | 8,280 | 0,049 |
| • Ø 160 mm | 133713 | 8 | 8,840 | 0,049 |
| • Ø 200 mm | 133714 | 8 | 13,100 | 0,094 |
| • Ø 225 mm | 133715 | 6 | 12,800 | 0,094 |
| • Ø 250 mm | 133716 | 4 | 13,200 | 0,124 |
| • Ø 280 mm | 133717 | 3 | 15,800 | 0,124 |
| • Ø 315 mm | 133718 | 2 | | 0,124 |



"Female Threaded Cap"

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|---------|----------------|--------------|--------------------------|
| • Ø 50 mm | 133705T | 210 | | 0,049 |
| • Ø 63 mm | 133706T | 130 | | 0,049 |
| • Ø 75 mm | 133707T | 80 | | 0,049 |
| • Ø 90 mm | 133708T | 46 | | 0,049 |
| • Ø 110 mm | 133709T | 33 | | 0,049 |
| • Ø 125 mm | 133711T | 46 | | |
| • Ø 140 mm | 133712T | 33 | | |
| • Ø 160 mm | 133713T | | | |
| • Ø 200 mm | 133714T | | | |
| • Ø 225 mm | 133715T | | | |



"Male Threaded Cap"

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|--------|----------------|--------------|--------------------------|
| • 2 1/2" | 133722 | | | |
| • 3" | 133723 | | | |
| • 4" | 133724 | | | |



"Caps Male Threaded"

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------------------------|---------|----------------|--------------|--------------------------|
| • 1 1/2" Male Threaded w/oring | 133728T | | | |
| • 2" Male Threaded w/oring | 133729T | | | |

Unions

"Both Side Female Union"

O-ring in EPDM compatible with Fitvalf d.50 mm ball valve handle.



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|--------|----------------|--------------|--------------------------|
| • d.20 mm | 132111 | 250 | 11,400 | 0,021 |
| • d.25 mm | 132112 | 200 | 12,800 | 0,021 |
| • d.32 mm | 132113 | 150 | 13,400 | 0,021 |
| • d.40 mm | 132114 | 80 | 11,280 | 0,021 |
| • d.50 mm | 132115 | 100 | 19,600 | 0,094 |
| • d.63 mm | 132116 | 50 | 18,400 | 0,094 |
| • d.75 mm | 132117 | 30 | 22,300 | 0,094 |
| • d.90 mm | 132118 | 30 | 19,600 | 0,094 |
| • d.110 mm | 132119 | 20 | 30,000 | 0,094 |

PVC One Sided Threaded Union. O-Ring in EPDM.



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|----------|----------------|--------------|--------------------------|
| • d.20 mm | 132111T1 | 250 | 11,400 | 0,021 |
| • d.25 mm | 132112T1 | 200 | 12,800 | 0,021 |
| • d.32 mm | 132113T1 | 150 | 13,400 | 0,021 |
| • d.40 mm | 132114T1 | 80 | 11,280 | 0,021 |
| • d.50 mm | 132115T1 | 100 | 19,600 | 0,094 |
| • d.63 mm | 132116T1 | 50 | 18,400 | 0,094 |
| • d.75 mm | 132117T1 | 40 | 22,300 | 0,094 |
| • d.90 mm | 132118T1 | 30 | 19,600 | 0,094 |
| • d.110 mm | 132119T1 | 20 | 30,000 | 0,094 |

PVC Both Sided Threaded Union. EPDM O-Ring.



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|---------|----------------|--------------|--------------------------|
| • 1/2" | 132111T | 250 | 11,400 | 0,021 |
| • 3/4" | 132112T | 200 | 12,800 | 0,021 |
| • 1" | 132113T | 150 | 13,400 | 0,021 |
| • 1 1/4" | 132114T | 80 | 11,280 | 0,021 |
| • 1 1/2" | 132115T | 100 | 19,600 | 0,094 |
| • 2" | 132116T | 50 | 18,400 | 0,094 |
| • 2 1/2" | 132117T | 40 | 22,300 | 0,094 |
| • 3" | 132118T | 30 | 19,600 | 0,094 |
| • 4" | 132119T | 20 | 30,000 | 0,094 |



Unions

PVC Unions. Female socket / Male threaded.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------------------------|---------|----------------|--------------|--------------------------|
| • 1 1/2" - d.50 mm | 132121 | 100 | 24,200 | 0,094 |
| • 2" - d.63 mm | 132122 | 50 | 21,800 | 0,094 |
| • 1 1/2" - d.63 mm Male Adapter. | 132123 | 50 | 21,400 | 0,094 |
| • 1 1/2" - d.50 mm* | 1321211 | 100 | 24,200 | 0,094 |

^{*} It can be used with Gemas 02400T, 02404T and 02403T products.



"Brass Union Female Threaded"

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|--------|----------------|--------------|--------------------------|
| • d.20 mm | 133450 | | | |
| • d.25 mm | 133451 | | | |
| • d.32 mm | 133452 | | | |
| • d.40 mm | 133453 | | | |
| • d.50 mm | 133454 | | | |
| • d.63 mm | 133455 | | | |



PVC Fittings - Flange Adaptors

"PVC Flange Adaptor"

| Description | Code | Pieces/ | Weight | Volume m ³ |
|-------------|--------|---------|--------|--------------------------|
| | | DOX | Kg | III- |
| • Ø 50 mm | 133927 | 200 | 13,600 | 0,049 |
| • Ø 63 mm | 133928 | 100 | 11,200 | 0,049 |
| • Ø 75 mm | 133929 | 70 | 12,400 | 0,049 |
| • Ø 90 mm | 133908 | 42 | 10,850 | 0,049 |
| • Ø 110 mm | 133909 | 25 | 10,380 | 0,049 |
| • Ø 125 mm | 133910 | 15 | 9,400 | 0,049 |
| • Ø 140 mm | 133911 | 14 | 8,940 | 0,049 |
| • Ø 160 mm | 133912 | 16 | 18,320 | 0,094 |
| • Ø 200 mm | 133913 | 8 | 12,640 | 0,094 |
| • Ø 225 mm | 133914 | 8 | 14,740 | 0,094 |
| • Ø 250 mm | 133915 | 5 | 14,800 | 0,124 |
| • Ø 280 mm | 133916 | 4 | 11,700 | 0,124 |
| • Ø 315 mm | 133917 | 2 | 8,500 | 0,124 |





Unions

"Female Threaded Flange Adaptor"



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|---------|----------------|--------------|--------------------------|
| • 1 1/2" | 133927T | | | |
| • 2" | 133928T | | | |
| • 2 1/2" | 133929T | | | |
| • 3" | 133908T | | | |
| • 4" | 133909T | | | |
| • 4 1/2" | 133910T | | | |
| • 5" | 133911T | | | |
| • 6" | 133912T | | | |
| • 7" | 133913T | | | |
| • 8" | 133914T | | | |

Flange Adaptors and Flanges

"PVC Flange"



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|---------|----------------|--------------|--------------------------|
| • Ø 50 mm | 1331005 | 70 | 17,800 | 0,049 |
| • Ø 63 mm | 1331006 | 60 | 19,100 | 0,049 |
| • Ø 75 mm | 1331007 | 50 | 21,200 | 0,049 |
| • Ø 90 mm | 1331008 | 40 | 15,940 | 0,049 |
| • Ø 110 mm | 1331009 | 34 | 15,200 | 0,049 |
| • Ø 125 mm | 1331010 | 23 | 15,060 | 0,049 |
| • Ø 140 mm | 1331011 | 23 | 13,680 | 0,049 |
| • Ø 160 mm | 1331012 | 25 | 20,840 | 0,094 |
| • Ø 200 mm | 1331013 | 16 | 26,440 | 0,094 |
| • Ø 225 mm | 1331014 | 16 | 24,080 | 0,094 |
| • Ø 250 mm | 1331015 | 5 | 14,800 | 0,124 |
| • Ø 280 mm | 1331016 | 4 | 9,600 | 0,124 |
| • Ø 315 mm | 1331017 | 2 | 5,600 | 0,124 |

"Blind Flange"

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|---------|----------------|--------------|--------------------------|
| • Ø 110 mm | 1331109 | 34 | | |
| • Ø 125 mm | 1331110 | 23 | | |
| • Ø 140 mm | 1331111 | 23 | | |
| • Ø 160 mm | 1331112 | 25 | | |
| • Ø 200 mm | 1331113 | | | |
| • Ø 225 mm | 1331114 | | | |



Flange Adaptors and Flanges

"Vibration Flange"

| Description | Code | Pieces/ Weight box Kg | Volume m ³ |
|-------------|---------|--------------------------|--------------------------|
| • d.50 mm | 0141113 | | |
| • d.65 mm | 0141114 | | |
| • d.80 mm | 0141115 | | |
| • d.100 mm | 0141116 | | |
| • d.125 mm | 0141117 | | |
| • d.150 mm | 0141118 | | |
| • d.200 mm | 0141119 | | |
| • d.250 mm | 0141120 | | |
| • d.300 mm | 0141121 | | |
| • d.350 mm | 0141122 | | |
| • d.400 mm | 0141123 | | |
| • d.450 mm | 0141124 | | |
| • d.500 mm | 0141125 | | |
| • d.600 mm | 0141126 | | |



Hose Connection and Wall Conduit Flanges

PVC Hose Connection. O-rings in EPDM.

One side is external threaded, the other side is internal slip.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------------------------|--------|----------------|--------------|--------------------------|
| • For d.38 mm hose-1 1/2" | 136115 | 100 | 24,200 | 0,094 |
| • For d.38 mm hose-1 1/2" used | 136125 | 50 | 21,800 | 0,094 |
| above adaptor | | 50 | 21,400 | 0,094 |





PVC Wall Conduit Flange.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|--------|----------------|--------------|--------------------------|
| • Ø 63 mm | 041602 | | | |
| • Ø 75 mm | 041603 | | | |
| • Ø 90 mm | 041604 | | | |
| • Ø 110 mm | 041605 | | | |





U-PVC Pipes - 6 bars

U-PVC Solvent Cement Socket Pressure Pipes for Clean Water:

PVC Clean Water Pipes have a smooth and a regular surface. Resistant to pressure and atmosphere conditions. With its high durability to chemicals, it is suitable for all kinds of liquid flow. Manufactured according to the norms of TS274, EN 1452 and DIN 8062,19532. They are the most common products that are used for the transfer of clean water with their simple installation and transfer, durability and healthy structure.

As Quality is the major principle for our Quality. Tests and analysis are done regulary at the laboratory.



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|---------|----------------|--------------|--------------------------|
| • Ø 50 mm | 1390601 | | | |
| • Ø 63 mm | 1390602 | | | |
| • Ø 75 mm | 1390603 | | | |
| • Ø 90 mm | 1390604 | | | |
| • Ø 110 mm | 1390605 | | | |
| • Ø 125 mm | 1390606 | | | |
| • Ø 140 mm | 1390607 | | | |
| • Ø 160 mm | 1390608 | | | |
| • Ø 200 mm | 1390609 | | | |
| • Ø 225 mm | 1390610 | | | |
| • Ø 250 mm | 1390611 | | | |
| • Ø 280 mm | 1390612 | | | |
| • Ø 315 mm | 1390613 | | | |
| • Ø 355 mm | 1390614 | | | |
| • Ø 400 mm | 1390615 | | | |

U-PVC Pipes - 10 bars - 16 bars

U-PVC Solvent Cement Socket Pressure Pipes for Clean Water. 10 BARS



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|---------|----------------|--------------|--------------------------|
| • Ø 20 mm | 1391000 | | | |
| • Ø 25 mm | 1391001 | | | |
| • Ø 32 mm | 1391002 | | | |
| • Ø 40 mm | 1391003 | | | |
| • Ø 50 mm | 1391004 | | | |
| • Ø 63 mm | 1391005 | | | |
| • Ø 75 mm | 1391006 | | | |
| • Ø 90 mm | 1391007 | | | |
| • Ø 110 mm | 1391008 | | | |
| • Ø 125 mm | 1391009 | | | |
| • Ø 140 mm | 1391010 | | | |
| • Ø 160 mm | 1391011 | | | |
| • Ø 200 mm | 1391012 | | | |
| • Ø 225 mm | 1391013 | | | |



U-PVC Pipes - 10 bars - 16 bars

U-PVC Solvent Cement Socket Pressure Pipes for Clean Water. 10 BARS

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|---------|----------------|--------------|--------------------------|
| • Ø 250 mm | 1391014 | | | |
| • Ø 280 mm | 1391015 | | | |
| • Ø 315 mm | 1391016 | | | |
| • Ø 355 mm | 1391017 | | | |
| • Ø 400 mm | 1391018 | | | |



U-PVC Solvent Cement Socket Pressure Pipes for Clean Water. 16 BARS

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|---------|----------------|--------------|--------------------------|
| • Ø 20 mm | 1391601 | | | |
| • Ø 25 mm | 1391602 | | | |
| • Ø 32 mm | 1391603 | | | |
| • Ø 40 mm | 1391604 | | | |
| • Ø 50 mm | 1391605 | | | |
| • Ø 63 mm | 1391606 | | | |
| • Ø 75 mm | 1391607 | | | |
| • Ø 90 mm | 1391608 | | | |
| • Ø 110 mm | 1391609 | | | |
| • Ø 125 mm | 1391610 | | | |
| • Ø 140 mm | 1391611 | | | |
| • Ø 160 mm | 1391612 | | | |
| • Ø 200 mm | 1391613 | | | |
| • Ø 225 mm | 1391614 | | | |
| • Ø 250 mm | 1391615 | | | |
| • Ø 280 mm | 1391616 | | | |
| • Ø 315 mm | 1391617 | | | |
| • Ø 355 mm | 1391618 | | | |
| • Ø 400 mm | 1391619 | | | |
| | | | | |

PVC Solvent Cements

"FITVALF PVC Solvent Cement". Plastic bottle with brush. ASTM Heavy Duty formula. Low Viscosity, Fast Curing Time.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------------|-------|----------------|--------------|--------------------------|
| • Fitvalf 1000 ml | 13525 | 12 | | |
| • Fitvalf 500 ml | 13527 | 12 | 6,900 | 0,011 |
| • Fitvalf 250 ml | 13529 | 24 | 7,600 | 0,011 |
| • Fitvalf 125 ml | 13537 | 16 | | |

"FITVALF Pool PVC Solvent Cement". Plastic bottle with brush. Medium Duty formula. Medium Viscosity, Normal Curing Time.

| Description | Code | Pieces box | s/ Weight Kg | Volume m ³ |
|--|-------|---------------|-----------------|--------------------------|
| • Fitvalf Pool 1000 ml | 13531 | 6 | | |
| • Fitvalf Pool 500 ml | 13550 | 12 | 7,200 | 0,012 |
| • Fitvalf Pool 250 ml | 13554 | 24 | 6,900 | 0,011 |
| • Fitvalf Pool 125 ml | 13556 | 16 | 7,600 | 0,011 |
| • Hydrodif "PVC Solvent Cement" - 500 gr | 13530 | | | |





13530



PVC Solvent Cements



"Fast PVC Cements" Made in USA.

Can be pressurized to system 15 minutes after application.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| 1 kg | 13540 | | | |

PVC Pipe Clamps

UPVC Pipe Clamps.



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|--------|----------------|--------------|--------------------------|
| • Ø 20 mm | 133350 | | | |
| • Ø 25 mm | 133351 | | | |
| • Ø 32 mm | 133352 | | | |
| • Ø 40 mm | 133353 | | | |
| • Ø 50 mm | 133354 | | | |
| • Ø 63 mm | 133355 | | | |
| • Ø 75 mm | 133356 | | | |
| • Ø 90 mm | 133357 | | | |
| • Ø 110 mm | 133358 | | | |
| • Ø 125 mm | 133359 | | | |
| • Ø 140 mm | 133360 | | | |
| • Ø 160 mm | 133361 | | | |



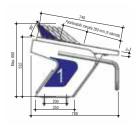
Starting Platforms

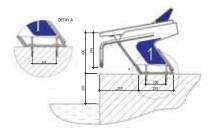
Track-Start Platforms. Made of FRP, AISI 304 stainless steel handles. Foot rest pad can be adjusted to front or back. Platform in non-slip and large surface.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|---------|----------------|--------------|--------------------------|
| Height: 400 mm | 14141 | 1 | | |
| Relay Sensor, Mechatronic | 14141DS | 1 | | |

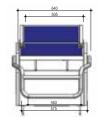


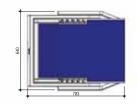










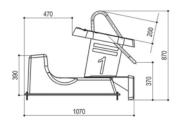


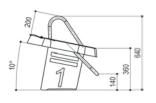
Fixed Starting Platforms. Made of FRP, AISI 304 quality stainless steel top and front handles. Height can be adjusted up to 700 mm through the elevation platform. FRP turning panels can be adapted to front side of the platform.

| Description | Code | Pieces/ Weight Volume box Kg m³ |
|--|-------|------------------------------------|
| Height: 400mm | 14151 | 1 |
| Height: 700mm | 14152 | 1 |
| FRP Turning Panel (Optional) | 14153 | 1 |











14152 + 14153

View with elevation platform



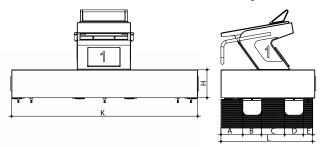
Starting Platforms



Starting Platform with Elevation and Turning Podiums. Made of FRP over steel frame, h=300 mm, height adjustable legs. Used with 400 mm height starting platforms. Each for every swim lane.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------|--------|----------------|--------------|--------------------------|
| • 2000 x 1000 mm | 141411 | 1 | | |
| • 2500 x 1000 mm | 141412 | 1 | | |

PS: For platform connection, the dimensions of "A, B, C, D and E" must be given.

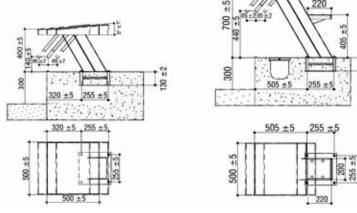


Starting Platforms; **Adjustable**. Base in AISI 304 quality stainless steel, platform in fiberglass reinforced polyester with non-slip finish. 500 x 500 mm. Special anchor to be installed in concrete slab is upon request.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------|-------|----------------|--------------|--------------------------|
| Height: 700 mm | 14111 | 1 | 23,112 | 0,340 |
| Height: 400 mm | 14112 | 1 | 17,200 | 0,375 |



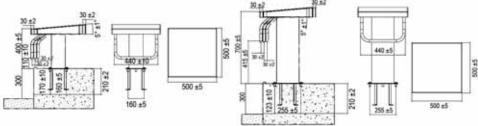






Adjustable Starting Platform. AISI 304 quality stainless steel cylindrical body. The platform can by adjusted 3 cm forwards or backwards. The handle is also independently adjustable by 3 cm. Non-slippery surface, polyester and fiberglass 500 x 500 mm platform.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------|-------|----------------|--------------|--------------------------|
| Height: 400 mm | 14113 | 1 | | |
| • Height: 700 mm | 14114 | 1 | | |
| 30 +2 | 10.47 | 30.12 | | |

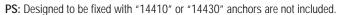




Starting Platforms

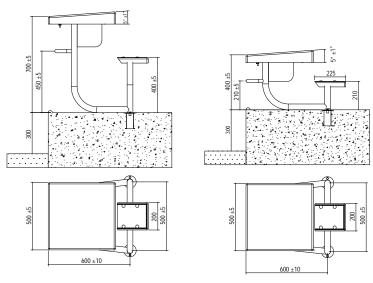
Starting Platforms; **Fixed.** Base made of AISI 304 quality stainless steel \emptyset 42 mm. pipe, platform in fiberglass reinforced polyester with non-slip finish. 500 x 500 mm.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------|-------|----------------|--------------|--------------------------|
| Height: 700 mm | 14121 | 1 | | |
| Height: 400 mm | 14122 | 1 | | |



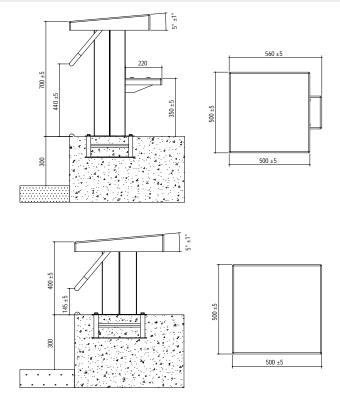






Starting Platforms; **Fixed**. Base made of AISI 304 quality stainless steel, platform in fiberglass reinforced polyester with non-slip finish. 500 x 500 mm.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------------------------|-------|----------------|--------------|--------------------------|
| Height: 700 mm | 14131 | 1 | | |
| Height: 400 mm | 14132 | 1 | | |







Anchors



Level Anchors for Zurich and Wiesbaden Type Swimming Pools.

In AISI 304 quality stainless steel, for Ø 42 mm pipe.

| [| Description Co | ode | Pieces/ box | Weight Kg | Volume m ³ |
|---|----------------|-----|----------------|--------------|--------------------------|
| | 14 | 410 | 2 | 1,672 | 0,008 |



Inclined Anchors for Finnish Type Swimming Pools.

In AISI 304 quality stainless steel, for Ø 42 mm pipe.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| | 14420 | 2 | 1,020 | 0,008 |



Level Anchors with Bolts for "14121" and "14122" Starting Platforms.

In AISI 304 quality stainless steel for Ø 42 mm pipe.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| | 14430 | 2 | 1,240 | 0,008 |

Turning Panels

Turning Panels for Overflow Competition Pools.

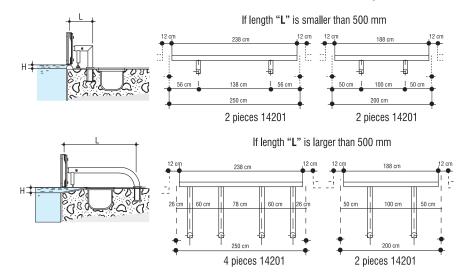
Frame in AISI 304 quality stainless steel frame screened with plastic grating. Height 300 mm.



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-----------------------------------|-------|----------------|--------------|--------------------------|
| • Lane width : 2,0 m | 14210 | 1 | 12,000 | |
| • Lane width : 2,5 m | 14220 | 1 | 14,000 | |
| Support for turning panels in | 14201 | 2 | 7,000 | |
| AISI 304 quality stainless steel. | | | | |

PS: Designed to be fixed with "14410" or "14420" anchors which are not included.

"L" and "H" should be dimensioned when ordering.



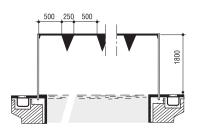


Post Set

Set of Backstroke Turn Indicators. Composed of 2 posts \emptyset 42 mm. in AISI 304 quality stainless steel. Height: 1,80 m. One of them is with a pulley and the other with a fixing element for cord. Complete with nylon cord and flags.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-----------------------------|-------|----------------|--------------|--------------------------|
| • For pools of 12,5 m width | 14311 | 1 | 16,000 | 0,060 |
| • For pools of 25 m width | 14312 | 1 | 14,000 | 0,050 |

PS: Designed to be fixed with "14410" or "14420" anchors which are not included.

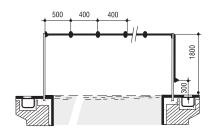




Set of False Start Posts. Composed of 2 posts \emptyset 42 mm. in AISI 304 quality stainless steel. Height: 1,80 m. One of them is with a pulley and the other with a fixing element for cord. Complete with plastic floats and nylon cord.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------------------|-------|----------------|--------------|--------------------------|
| • For pools of 12,5 m width. | 14321 | 1 | 12,000 | 0,057 |
| • For pools of 25 m width. | 14322 | 1 | 14,000 | 0,030 |
| • | | | | |

PS: Designed to be fixed with "14410" or "14420" anchors which are not included. Two sets are necessary for a competition pool.

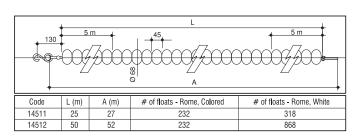


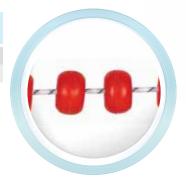


Floating Lanes

Rome Model. Complete with plastic floats, nylon line and 1 hook "14650"

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------|-------|----------------|--------------|--------------------------|
| • Length: 25 m | 14511 | 1 | 8,700 | 0,135 |
| • Length: 50 m | 14512 | 1 | 17,400 | 0,265 |

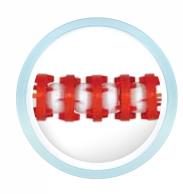




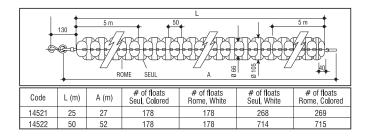


Floating Lanes

Seul Model. Complete with plastic floats, nylon line and 1 hook "14650"



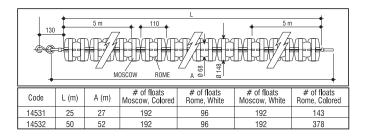
| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------|-------|----------------|--------------|--------------------------|
| • Length: 25 m | 14521 | 1 | 23,700 | 0,340 |
| • Length: 50 m | 14522 | 1 | 47,400 | 0,620 |



Moscow Model. Complete with plastic floats, nylon line and 1 hook "14650"



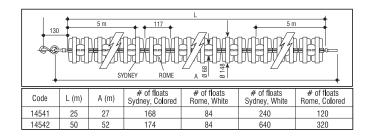
| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------|-------|----------------|--------------|--------------------------|
| • Length: 25 m | 14531 | 1 | 22,150 | 0,340 |
| • Length: 50 m | 14532 | 1 | 44,300 | 0,620 |



Sydney Model. Complete with plastic floats on 1 hook "14650"



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------|-------|----------------|--------------|--------------------------|
| • Length: 25 m | 14541 | 1 | | |
| Length: 50 m | 14542 | 1 | | |

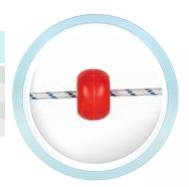




Floaters

"Rome Model". Floater.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|--------|----------------|--------------|--------------------------|
| White | 145101 | 500 | 7,000 | 0,110 |
| • Orange | 145102 | 500 | 7,000 | 0,110 |
| • Blue | 145103 | 500 | 7,000 | 0,110 |
| • Red | 145104 | 500 | 7,000 | 0,110 |



"Seul Model". Floater.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|--------|----------------|--------------|--------------------------|
| • White | 145201 | 150 | 7,000 | 0,080 |
| • Orange | 145202 | 150 | 7,000 | 0,080 |
| • Blue | 145203 | 150 | 7,000 | 0,080 |
| • Red | 145204 | 150 | 7,000 | 0,080 |



Floating Lane Accessories

Seperator Collector Trolley. It has 4 wheels which 2 of them with brakes. Covered with PVC canvas for avoiding dripping out of excess water. Design to carry 1 piece 50m seperator. It's for the installation of the seperator with stainless steel anchors in the overflow pools. AISI 304 quality stainless steel. Dimenson is 200 x 100 x 84. Has a 3/4" release valve in the bottom, to drain collected water.

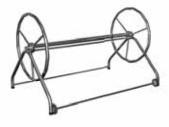


| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| | 14680 | 1 | | |

Float Lane Roller. Made of AISI 304 quality stainless steel, Ø 42 pipe. Width: 1,20 m.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-----------------|-------|----------------|--------------|--------------------------|
| • Width: 1,20 m | 14660 | 1 | 25,000 | 2,200 |
| • Width: 1,80 m | 14661 | 1 | | |

| • Width: 1,80 m | | | 14661 | | 1 | | |
|------------------|------------|------|-------|------------------|------------|------|------|
| Roller Capacity: | Width 1,20 |) m | | Roller Capacity: | Width 1,80 |) m | |
| FLOAT LINE | 25 m | 33 m | 50 m | FLOAT LINE | 25 m | 33 m | 50 m |
| Seul Model | 4 | 2 | 2 | Seul Model | 6 | 3 | 3 |
| Rome Model | 8 | 6 | 4 | Rome Model | 12 | 9 | 6 |
| Moscow Model | 4 | 2 | 2 | Moscow Model | 6 | 3 | 3 |



Float Line. Rope.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|-------|----------------|--------------|--------------------------|
| Nylon. | 14631 | 160 m | 8,420 | 0,025 |
| Ø 7 mm. Price per meter. | | | | |
| Plastified Stainless Steel. | 14632 | | | |
| Ø 5 mm. Price per meter. | | | | |





Floating Lane Accessories



Ergonomic Seperator Tensioner. Body made of GF-PP and accessories from AISI 316. complete with 7 mm thick hook, SS rope fixing accessories. Threaded tension rod and easy grip plastic body allows easy tightening up to 130 mm. Can only used with SS lane ropes

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| | 14643 | | | |



Floating Line Tensor with Spring. In chrome plated bronze.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| | 14641 | 1 | 0,686 | 0,001 |



Floating Line Tensor with Screw. In AISI 304 quality stainless steel.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| | 14642 | 6 | 0,182 | |



Rope Anchor. Made of bronze. 3/4".

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| | 14651 | | 0,186 | |



Line Hook. To be attached at one end of float lane. In AISI 304 quality stainless steel.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| | 14650 | | 0,186 | |



Lane Anchor Cup. AISI 304 quality, to be embedded to pool wall.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| • Model 1 | 14611 | 1 | 22,150 | 0,340 |
| • Model 2 | 14627 | 1 | 44,300 | 0,620 |



Model 2

Model 1

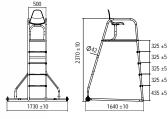
Float Support. To be used with anchors "14410" and 14420". In AISI 304 quality stainless steel.

| Description | Code | Pieces/ box | Kg | Volume m ³ |
|-------------|-------|----------------|-------|--------------------------|
| | 14620 | 2 | 0.520 | |

Refree Seat. Made of AISI 304 quality stainless steel and Ø 42 mm pipe.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| • Model 1 | 14670 | 1 | 0,566 | 0,001 |
| • Model 2 | 14671 | 1 | | |





AUTOMATIC TIMING SYSTEMS FOR COMPETITION POOLS ALGE TIMEMANAGER TM-SWIM

PLEASE ASK PRICE ON PROJECT BASIS



ALGE TIMEMANAGER TM-SWIM SPECIFICATIONS

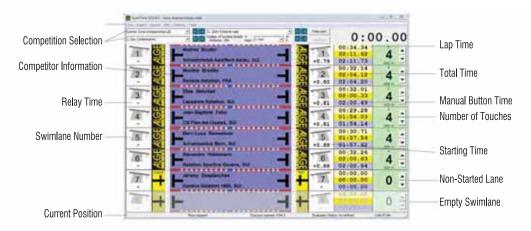
- PC based timing system
- Easy connection to new generation lap-top and PC with USB interface
- User friendly
- Swimlane control with 16 touchpads
- Audio and optic control for each swimlane
- Each swimlane can be connected to 5 independent timing channels (1 touchpad, 3 button, 1 Relay Time)
- Integrated battery system 4 hours working time
- Integrated speaker system
- False start warning on the screen
- Detection and warning system for difference of timing channels
- Reliable Touchpads
- Saving the statistics values
- Compatible with FINA, SSCH, AAU, NCAA and LEN regulations.



AUTOMATIC TIMING SYSTEMS FOR COMPETITION POOLS ALGE TIMEMANAGER TM-SWIM

PC Software

Alge Swimtime Software provides the information of time-manager processor, with user friendly and visual interface. Available for all Windows Systems.





- · User Friendly software
- Visual illustration
- · Same layout with pool
- Free update for 10 years
- Back-up Battery
- · Manage 16 swimlane
- · Competitors Information





COMPETITION POOL SCORE SYSTEM PRODUCTS



TimeManager TM-SWIM: It's the processor that all timing activities are processed and recorded. Easy connection to new generation lap-top and PC with USB interface. Automatic timing, recording and instant printout. In this way, printouts of all timings are obtained in case of a system issue. Complete with speaker, 4 hour battery for power cut, printer, score board, starting system, auditory and visual warning inputs. Measuring range is 23 hours, 59 minutes, 59,9999 seconds.



TouchPads TP2400/TP1800: The most important instrument of the system. Quality of this product determines quality of the system. The backside is made of stainless steel. To be found in two different swimlane measures.



SWIM Terminal SWT3: Needs to be installed to each swimlane. The TimeManager automaticly finds and enumerates SWT3 which is founded in each swimlane. 5 different time channels can be connected to every SWT3 terminals; 1 x touchpad, 3 x Manuel Time Buttons, 1 x starting time.



Manuel Time Buttons: Waterproof design, 2 m cable.



Start Unit: Complete with integrated microphone and start buton.



Track Start Blocks. Made of FRP. Foot rest pad can be adjusted for ergonomic start.



Active (SPA) and Passive (SPP) Speakers. Each active speakers includes a amplifier and controls a passive speaker.



Platform with Time Sensor: Can be adapted to available platforms. Starting time detection platform adaptor.

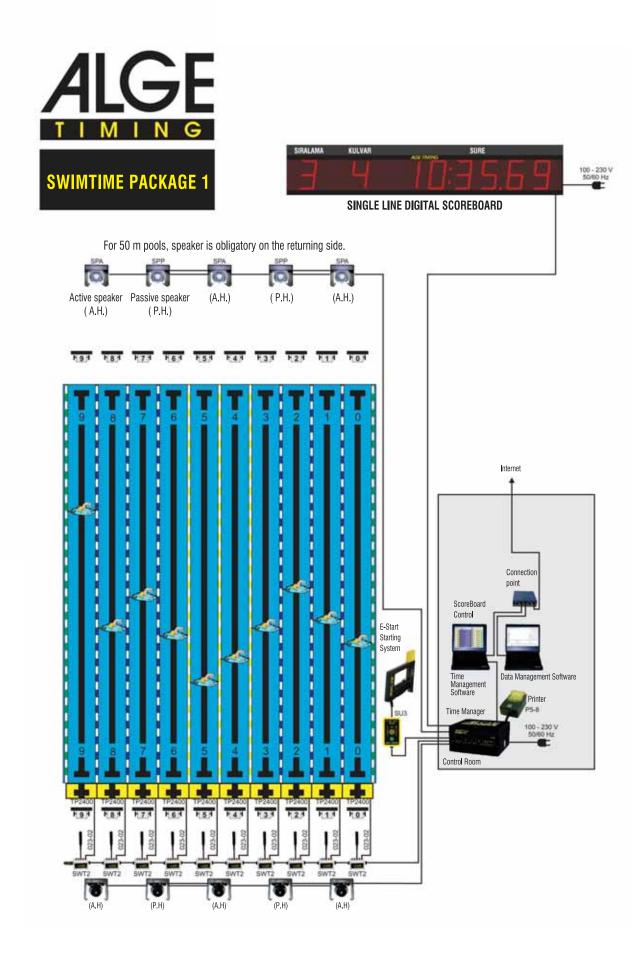


LED SCORE BOARDS: Options for 1, 8, 10 lines, wall matrix video options and options for colored displays.



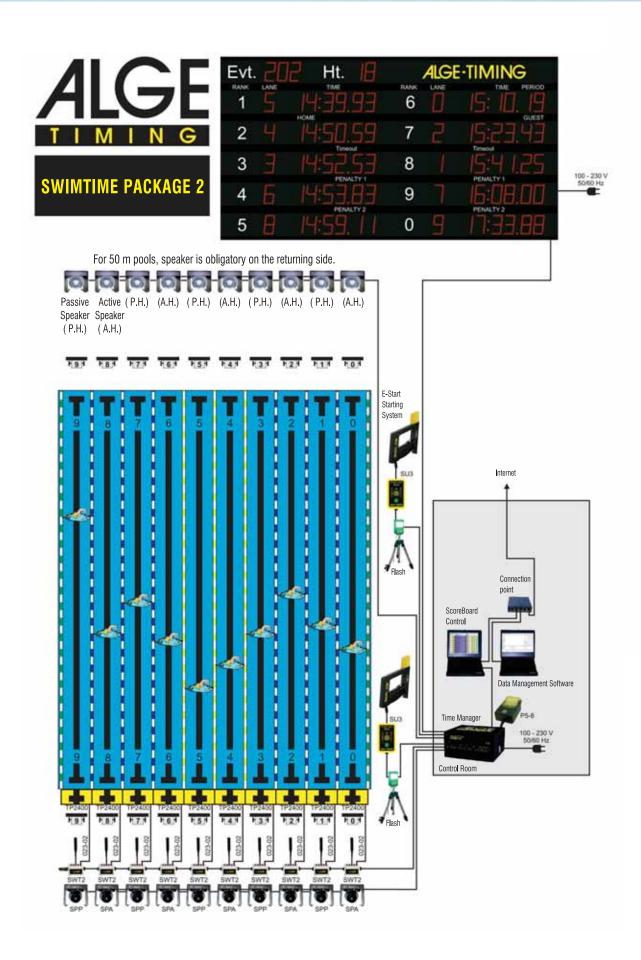
Backstroke Starting Kit. Prevents the start through the glide from touching panel. Compatible with GEMAS Starting Platform







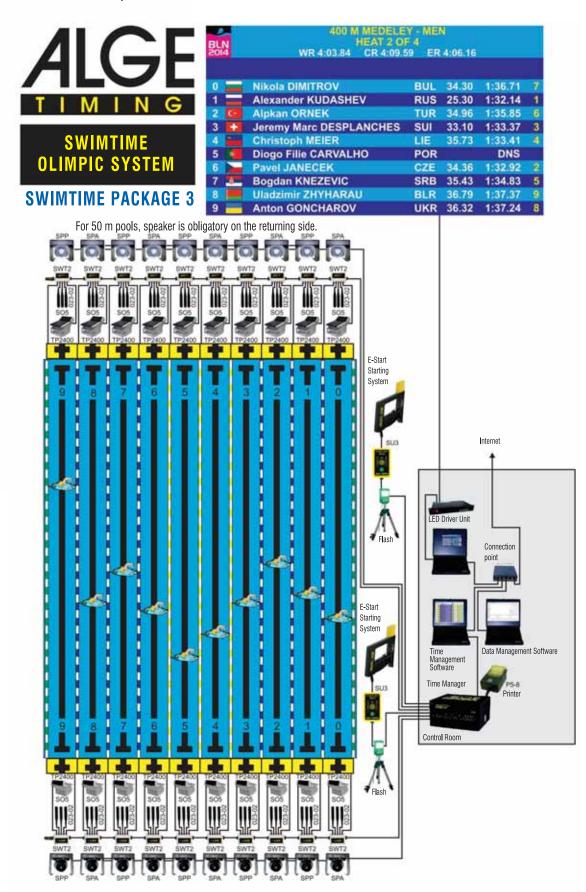
Olympic Pool Accessories





10 LINES MATRIX LED SCOREBOARD

Below seen videowall is optional







Massage Jets



"Freedom" model massage jet. Water connection d.50 mm, air connection Ø 32 mm, complete with internal set. Recommended flow; 1,5 m 3 /h - 7 mSS

| Descr | iption Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------|-------------|----------------|--------------|--------------------------|
| | 1510-FS715 | 1 | 0,380 | |



"Freedom" model massage jet internal set. Adjustable type

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------------|----------------|--------------|--------------------------|
| | 1510-FS00TA | 1 | 0,090 | |



"Hydrojet" model massage jet. Complete with nozzle. Water and Air connection Ø 50 mm, PVC, including nozzle. Recommended flow; 1,5 m³/h - 7 mSS

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-----------|----------------|--------------|--------------------------|
| | 1510-4100 | 1 | 0,440 | |



"Magna" Model Massage Jet Body. Water connection d.50, air connection d.32, excluding nozzle. Recommended flow; 2,7 m³/h - 7 mwh

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-----------|----------------|--------------|--------------------------|
| | 1510-4833 | 1 | 0,440 | |



To be used for "Magna" Model Massage Jet.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-----------------------------------|-----------|----------------|--------------|--------------------------|
| • Magna'SSage: Single mouth 0,008 | 1516-4821 | 1 | 0,062 | |
| heading jet nozzle. | | | | |
| Magna'SSage: Double mouth | 1516-4820 | 1 | 0,078 | |
| swivel heading jet nozzle. | | | | |



"SP-1434A" Model Massage Jet. Water and air connections Ø 50 mm; PVC, 2" inlet included. Recommended flow; 1,5 m³/h - 7 mwh

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|------------|----------------|--------------|--------------------------|
| | 1510-1434A | 1 | | |



"SP-1434ASS" Model Massage Jet. Water and air connection Ø 50, PVC, 2" inlet included. Frame is stainless steel. Recommended flow; 1,5 m³/h - 7 mwh

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|--------------|----------------|--------------|--------------------------|
| | 1510-1434ASS | | | |

SPA Equipment

Massage Jets

Massage Unit. Can be installed as single or multiple massage stations.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------------|-----------|----------------|--------------|--------------------------|
| • Model 1 - Ø40 mm | 1510-1435 | 1 | | |
| • Model 2 - Ø28 mm | 1510-1436 | | | |



Massage Unit. Used for massage from the floor.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------------|-----------|----------------|--------------|--------------------------|
| Model 3 - 5 x Ø19 mm | 1510-1437 | 1 | | |



"EM" Model Massage Jets. Water connection D.50, air connection D.32. Complete with adjustable type internal set.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|------------|----------------|--------------|--------------------------|
| | 1596601207 | 1 | 0,420 | |



"EM" Model Massage Jet Internal Set.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|------------|----------------|--------------|--------------------------|
| • Adjustable type, Recommended Flow 1,5m ³ /h | 1588090812 | 1 | 0,090 | |
| Rotary type, Recommended Flow 1,5m³/h | 1588090912 | 1 | 0,090 | |



1588090912

"Swimjet" Model Massage Jet. Water connection Ø 63 mm, air connection Ø 32 mm, length 145 mm. Recommended flow; $16 \text{ m}^3/\text{h} - 7 \text{ mwh}$

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-----------|----------------|--------------|--------------------------|
| | 1516-5759 | 1 | 0,420 | |



"Hydrojet" Model Massage Jet Extension. L=105 mm, ABS.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-----------|----------------|--------------|--------------------------|
| | 1510-4400 | 1 | 0,214 | |





Massage Jets



"Venturi TEE" Model Massage Jet Body. Water connection Ø 48,6 mm, length excluding nozzle: 260 mm. Suggested discharge: $5m^3/h$ - 7mwh (Used for building massage station inside the pool).

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-----------|----------------|--------------|--------------------------|
| | 1510-4320 | 1 | 0,253 | |



"Venturi TEE" Model Massage Jet Inlet.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|-----------|----------------|--------------|--------------------------|
| F.I.S. F <tt<ngs.< td=""><td>1510-3420</td><td>1</td><td>0,090</td><td></td></tt<ngs.<> | 1510-3420 | 1 | 0,090 | |

Air Jets



Air jet. White, ABS.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------------------------|-----------|----------------|--------------|--------------------------|
| • 9 Holes - Top, Removable Cover | 1511-9201 | 1 | | |
| • 9 Holes - Top | 1511-9202 | 1 | | |

Suction Drain



"Big Type" Suction Drain.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|-----------|----------------|--------------|--------------------------|
| White ABS, 3" external thread 0,008 | 1510-6201 | 1 | 1,222 | |
| Ø 152 mm external diameter | | | | |
| Ø 90 mm Slip Connection | | | | |
| Recommended Flow Rate 20 m ³ /h | | | | |

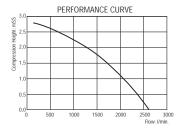


Air Blowers

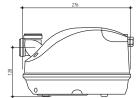
BLOWERS FOR DISCONTINUED USE.

Genesis Blower 1,2 kW, 230 V/50 Hz. Maximum pressure: 3,0 mwh, Maximum recommended flow rate: $160 \text{ m}^3/\text{h}$.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-----------------------|---------------|----------------|--------------|--------------------------|
| Genesis Blower 1,2 kW | 15GB120-2NN-3 | 1 | 2,792 | 0,011 |











"Air Blower for Continuous Use"

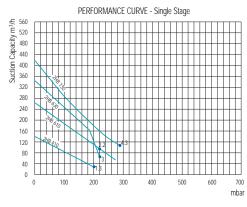
| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------------------------------------|----------|----------------|--------------|--------------------------|
| Blower 1.3 kW, Single Stage, 220/380V | 15410H26 | 1 | 17,000 | |
| Blower 2.2 kW, Single Stage, 220/380V | 15610H16 | 1 | 28,000 | |
| Blower 2.2 kW, Double Stage, 220/380V | 15420H46 | 1 | 27,000 | |
| Blower 3 kW, Single Stage, 220/380V | 15630H26 | 1 | 35,000 | |
| Blower 3 kW, Double Stage, 220/380V | 15720H26 | 1 | 48,000 | |
| Blower 4.3 kW, Double Stage, 380/660V | 15730H47 | 1 | 45,000 | |
| Blower 4.3 kW, Double Stage, 380/660V | 15720H37 | 1 | 54,000 | |
| Blower 5.5 kW, Double Stage, 380/660V | 15720H47 | 1 | 70,000 | |
| Blower 7.5 kW, Double Stage, 380/660V | 15720H57 | 1 | 74,000 | |

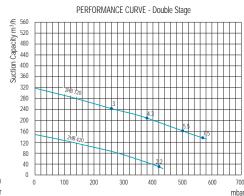


TECHNICAL CHARACTERISTICS

| MODEL | 15410H26 | 15610H16 | 15420H46 | 15630H26 | 15720H26 | 15730H47 | 15720H37 | 15720H47 | 15720H57 |
|-------------------------------|----------|----------|----------|----------|----------|-----------|-----------|-----------|-----------|
| Frequency (Hz) | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 |
| Power (kW) | 1.3 | 2.2 | 2.2 | 3 | 3 | 4.3 | 4.3 | 5.5 | 7.5 |
| Voltage (V) | 220-380 | 220-380 | 220-380 | 220-380 | 220-380 | 380∆-660Y | 380∆-660Y | 380∆-660Y | 380∆-660Y |
| Current (A) | 5.7 | 9.7 | 9.7 | 12.5 | 12.5 | 9.5 | 10 | 13.3 | 16.7 |
| Max. Flow (m ³ /h) | 145 | 265 | 150 | 345 | 320 | 420 | 320 | 320 | 320 |
| Vacuum (mbar) | -170 | -235 | -330 | -240 | -280 | -265 | -360 | -440 | -440 |
| Pressure (mbar) | 200 | 220 | 420 | 220 | 260 | 290 | 380 | 500 | 570 |
| Noise (dB) | 63 | 69 | 66 | 70 | 73 | 70 | 73 | 73 | 73 |
| Weight (Kg) | 17 000 | 28 000 | 27 000 | 35,000 | 48 000 | 45,000 | 54 000 | 70.000 | 74 000 |









Air Buttons

1522-1043 1522-1044

"Standard" Pneumatic Air Button

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------------------------------|-----------|----------------|--------------|--------------------------|
| Body external diameter 31,5 mm, | 1522-1043 | 1 | 0,020 | |
| 3 mm tube connection. | | | | |
| Body external diameter 1", | 1522-1044 | | | |
| 3 mm tube connection. | | | | |



"Big Size" Pneumatic Air Button

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ | |
|--|---------|----------------|--------------|--------------------------|--|
| Big size, Ø 65 mm white PVC | 1156433 | 1 | 0,035 | | |
| pneumatic button, h=67 mm. 4 mm tube connection. Can be depressed from 25 m. | | | | | |
| • h=37,5 mm ABS white lid | 156438 | | 0,022 | | |

Pneumatic Switch Boards



| | | Diagon | \\\\aimba | Valumas | |
|--|--------|----------------|--------------|--------------------------|--|
| Description | Code | Pieces/ box | Weight Kg | Volume m ³ | |
| • PNEUMATIC SWITCH BOARD, | 05080 | 1 | 0,748 | | |
| Complete with contactor and circuit breaker for up to 4 kw triphase pumps. | | | | | |
| Assembled in a humid resistant plastic | box. | | | | |
| • PNEUMATIC SWITCH. | 156871 | 1 | 0,020 | | |
| Permanent type. Up to 1 HP | | | | | |
| • PNEUMATIC SWITCH HOSE. | 15310 | | | | |
| D 2 0 - 4 0 mm Price per meter | | | | | |

Electronic 3-Function Button



GEMAS "Electronic Button" 64mm.

Works with the driver. It can be installed / used outdoors. UV protected touch pad.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------------------|-------|----------------|--------------|--------------------------|
| • 3-Function Button | 15231 | 1 | | |
| • Driver | 15230 | 1 | | |

Air Regulators





"Standart" Type Air Regulator

| 1510-2100 | 1510-2100S |
|-----------|------------|
| 1510-2100 | - |
| 1510-2200 | 1510-2300 |

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|------------|----------------|--------------|--------------------------|
| Big model 1 1/4" male threaded | 1510-2100 | 1 | 0,084 | |
| Big model 1 1/4" male threaded. St.Steel | 1510-2100S | 1 | | |
| • Small model 3/4" male threaded | 1510-2200 | 1 | 0,036 | |
| • Small model 1" male threaded. Chrome-plated. | 1510-2300 | 1 | | |



Caps

Hydro-Air "Caps"

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-----------|----------------|--------------|--------------------------|
| Ø 50 mm | 1520-1015 | 1 | 0,036 | |



PVC Flexible Tubes

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-----------------------------|-------|----------------|--------------|--------------------------|
| • Ø 32 mm PVC Flexible Tube | 15410 | | | |
| • Ø 50 mm PVC Flexible Tube | 15420 | | | |
| • Ø 63 mm PVC Flexible Tube | 15430 | | | |



Flexible Tube Cement

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| Ø 50 mm | 13530 | 1 | 0,500 | |



SPA Underwater Lights

"Mini 2001" Underwater Lights. Heat resistant plastic body, bottom outlet. Complete with 2 m. cable. 50 W/12 V bulb or 4,2 W power LED. Led bulbs is 100% sealed from water with transparent epoxy.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------------------------------------|----------|----------------|--------------|--------------------------|
| Slip type body with plastic frame | 05112S | 4 | 2,000 | 0,007 |
| • 05112S,6 W/12 V SMD 36 LED | 05112SLS | 4 | | |
| • 2" Threaded body with plastic frame | 05112T | 4 | 2,100 | 0,007 |
| • 05112T, 6 W/12 V SMD 36 LED | 05112TLS | 4 | | |



05112SLS



05112T

Nut for Mini Underwater Light, for FR-Polyester Pools. Made of white ABS Plastic with 2" internal thread. Complete with gasket.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| Ø 50 mm | 04237 | 35 | 1,474 | 0,006 |





Sauna Heater



Sauna Heater With Onboard Control. JM series heater. Dimensions 32x32x53 cm. Stone capacity: 7,5 kg

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-----------------------|---------|----------------|--------------|--------------------------|
| JM-36BS, 3,6 kW Mono. | 1811101 | 1 | | |



Sauna Heater With Onboard Control. SCA series heater, made of galvanized steel. Dimensions: 43x30x60 cm. Stone capacity: 7,5 kg. **Stone is included in price.**

| Description | Code | Pieces/ box | Weight Volume Kg m ³ |
|--------------------------|---------|----------------|------------------------------------|
| • SCA-30NS, 3,0 kW Mono. | 1811211 | 1 | |
| • SCA-45NS, 4,5 kW Mono. | 1811212 | 1 | |
| • SCA-60NS, 6,0 kW Mono. | 1811213 | 1 | |
| • SCA-80NS, 8,0 kW Tri. | 1811214 | 1 | |
| • SCA-90NS, 9,0 kW Tri. | 1811215 | 1 | |



Sauna Heater With Onboard Control. Made of stainless steel, SCASS series heater. Dimensions: 43x30x60 cm. Stone capacity: 7,5 kg. **Stone is included in price**.

| Description | Code | Pieces/ box | Weight Volume Kg m ³ |
|-------------------------|---------|----------------|------------------------------------|
| • SCA-30N, 3,0 kW Mono. | 1811221 | 1 | |
| • SCA-45N, 4,5 kW Mono. | 1811222 | 1 | |
| • SCA-60N, 6,0 kW Mono. | 1811223 | 1 | |
| • SCA-80N, 8,0 kW Tri. | 1811224 | 1 | |
| • SCA-90N, 9,0 kW Tri. | 1811225 | 1 | |

Sauna Heater Stones



Heat-resist volcanic sauna stones.

| Description | Code | Pieces/ Weight Volume box Kg m ³ |
|-------------|--------|--|
| • 7,5 kg | 181101 | 1 |
| • 20 kg | 181102 | 1 |

Sauna Heater

Sauna Heater External Control. Made of stainless steel, SCASS series heater. Dimensions: 43x30x60 cm. Stone capacity: 7,5 kg.**Control and Stone is included in price**.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------------|---------|----------------|--------------|--------------------------|
| • SCA-30, 3,0 kW Mono. | 1811321 | 1 | | |
| • SCA-45, 4,5 kW Mono. | 1811322 | 1 | | |
| • SCA-60, 6,0 kW Mono. | 1811323 | 1 | | |
| • SCAS-80, 8,0 kW Tri. | 1811324 | 1 | | |
| • SCA-90, 9,0 kW Tri. | 1811325 | 1 | | |



Sauna Heater External Control. SAV series commercial heater.

Dimensions: 69x55x52 cm. Stone capacity: 20 kg. Control and Stone is included in price.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------------------|---------|----------------|--------------|--------------------------|
| • SAV-105, 10,5 kW Tri. | 1811411 | 1 | | |
| • SAV-120, 12,0 kW Tri. | 1811412 | 1 | | |
| • SAV-150, 15,0 kW Tri. | 1811413 | 1 | | |
| • SAV-180, 18,0 kW Tri. | 1811414 | 1 | | |



Sauna Heater External Control. SAV series commercial heater. Dimensions: 72x69x55 cm. Stone capacity: 30 kg. **Control and Stone is included in price.**

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------------------|---------|----------------|--------------|--------------------------|
| • SAV-210, 21,0 kW Tri. | 1811511 | 1 | | |
| • SAV-240, 24,0 kW Tri. | 1811512 | 1 | | |
| • SAV-270, 27,0 kW Tri. | 1811513 | 1 | | |
| • SAV-300, 30,0 kW Tri. | 1811514 | 1 | | |





Sauna Control and Power Control Boxes



Sauna Control and Power Control Boxes. Designed for external control sauna heaters. All models have a second safety thermostat for thermostat malfunction. Each control panel has a timer for setup of working hours.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-----------------------------------|--------|----------------|--------------|--------------------------|
| • SCA Digital Control, 3-15 kW | 181201 | 1 | | |
| SAV Digital Control, 18-30 kW | 181203 | 1 | | |
| • Power Control Box, for 18-30 kW | 181204 | 1 | | |

Sauna Construction Materials



181311

Prefabricated Sauna Doors. Made of Knotty Finn pine. Complete with doorframe, 6 mm thick tempered glass.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------------------------|--------|----------------|--------------|--------------------------|
| • KS-D1, 200 x 71,5 x 5,5 | 181311 | 1 | | |
| • KS-D2, 200 x 71,5 x 5,5 | 181312 | 1 | | |
| KS-D3, All-Glass | 181313 | 1 | | |







| Pieces/ | Weight | Volume |
|---------|--------|----------------|
| box | Kg | m ³ |



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------------------------|--------|----------------|--------------|--------------------------|
| Sauna Door Handle, Wooden | 181316 | 1 | | |

Sauna Construction Materials

Wooden Vent.

| Description | Code | Pieces/ Weight Volume box Kg m ³ |
|-------------------------------|--------|--|
| • Grid, Constant 200 x 140 mm | 181321 | 1 |
| • Flap 350 x 150 mm | 181322 | 1 |





Wooden Profiles for Sauna Construction

For Wall and Ceiling Coating. Abachi panel lenghts between 210 - 220 - 240 - 250 - 300 - 400 - 420 - 440 cm.

Scandinavian panel lenghts between 210 - 220 - 240 - 250 cm. Price per meter.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|-----------|----------------|--------------|--------------------------|
| Abachi Panel 85 x 12 mm | 1813341 | | | |
| Abachi Panel 85 x 15 mm | 1813342 | | | |
| • Scandinavian Panel, Knot-free 87 x 15 m | m 1813343 | | | |
| • Scandinavian Panel, Knot-free 87 x 18 m | m 1813344 | | | |



For Sitting Groups. Abachi wooden profile lenghts between 220 - 460 cm. Price Per Meter.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------------------------|---------|----------------|--------------|--------------------------|
| Abachi Wooden Profile 95 x 15 mm | 1813331 | | | |
| Abachi Wooden Profile 95 x 18 mm | 1813332 | | | |



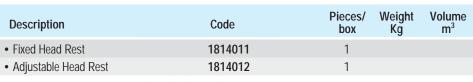
For Framework. Abies framework. Lenghts 200, 300, 400. Price Per Meter.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------------------|---------|----------------|--------------|--------------------------|
| Abies Framework. 5 x 5 cm | 1813361 | | | |
| Abies Framework. 5 x 10 cm | 1813362 | | | |

Sauna Accessories

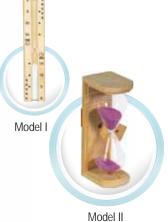
Sauna Head Rest. Made of wood. Fixed and adjustable models are available.











Sauna Clocks. Made of wood.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------------------|---------|----------------|--------------|--------------------------|
| Hourglass, Model I | 1814021 | 1 | | |
| Hourglass, Model II | 1814022 | 1 | | |



Sauna Wooden Bucket, Spoon, Brush. Made of wood. Buckets needs to be keep with water in it.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------------------------------|---------|----------------|--------------|--------------------------|
| Wooden Bucket, Model I | 1814031 | 1 | | |
| Wooden Bucket, Model II | 1814032 | 1 | | |
| Wooden Brush, with Removable Handle | 1814041 | 1 | | |
| Wooden Spoon | 1814042 | 1 | | |





1814031

1814032

Wooden Hanger. For Sauna Entry.



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------|---------|----------------|--------------|--------------------------|
| Quintet Hanger | 1814051 | 1 | | |

Sauna Accessories

Hygrometer - Thermometer. For humidity and temperature measurement inside the sauna.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|---------|----------------|--------------|--------------------------|
| Metallic Hygrometer-Thermometer, Combination | 1814061 | 1 | | |
| Wooden Thermometer | 1814062 | 1 | | |
| • Wooden Hygrometer-Thermometer, Combination | 1814063 | 1 | | |
| Wooden Hygrometer-Thermometer, Monoblock | 1814064 | 1 | | |











Sauna Perfumes. 250 ml.

| Description | Code | Pieces/ Weight Volume box Kg m ³ |
|--------------------------------|---------|--|
| • Pinewood | 1814091 | 1 |
| Eucalyptus | 1814092 | 1 |
| Menthol | 1814093 | 1 |



Bucket Shower

Bucket Shower. Made of Kaballah Wood. Completely handcrafted design, with AISI 304 quality stainless steel console and solid wooden bucket.

| Description | Code | Pieces/ Weight Volume box Kg m ³ |
|---------------|--------|--|
| Bucket Shower | 181501 | 1 |



Snow Fountain

Snow Fountain. It's designed for refresh the body with small ice parts after sauna sessions. You can take the ice parts from the bucket and apply to your body. This application enables the skin to be more tightened, fastens the blood stream and makes the immunity system stronger. This unique relaxing therapy lets not only the skin tightened, but also refreshes the body. It can be repeated several times according to demand. Snow fountain can be adjustable to different variaties. It does not include any chemicals, it is 100% natural. The usage and maintenance of system is very easy. Snow fountain is not inside the sauna cabin so this system can be used also by the guests who does not like the cold or has high blood pressure and cardiac disease. It's an alternative to snowroom. This system is designed with glassmosaics and/or wood materials

Accessories; Iced Glass Bowl, Stainless Steel Chrome Snow-Ice drain mouth, Snow Level Detection Sensor. The ice particulars which are produced by the system do not harm the skin during the skin exposure.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------------------------|--------|----------------|--------------|--------------------------|
| Snow Fountain, | 181502 | 1 | | |
| Complete with Accessories | | | | |







Steam Generators with Electric Heater



FL Series Steam Generator. Device protection when it is without water. High pressure protection, automatic water fill up and drainage. All models should be used with an external control panel. One remote control panel can operate 2, 3 or 4 pieces combined with steam generator. Generator feeding water should not be over 0-5 Fh(Fench Hardness) hardness level. Otherwise it will be out of warranty. Complete with safety valve.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-----------------|--------|----------------|--------------|--------------------------|
| • FL-45, 4,5 kW | 182101 | | | |
| • FL-60, 6 kW | 182102 | | | |
| • FL-90, 9 kW | 182104 | | | |
| • FL-120, 12 kW | 182105 | | | |
| • FL-150, 15 kW | 182106 | | | |
| • FL-180, 18 kW | 182107 | | | |



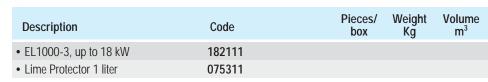
Control panels for steam generators with electric heater. The "Operating" light, steam room temperature display, working hour countdown, automatic disinfection function (ozone) can be obsevered outside the panel.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-----------------------------|--------|----------------|--------------|--------------------------|
| • FAN-T, For 60/90 models | 182201 | | | |
| • FAN-M, For 120/180 models | 182202 | | | |



STEAMER STEAM GENERATORS WITH ELECTRODE.

The product is not negatively effected from hard water. Automatic water filling and drainage. Device can be adjusted gradually and operated to the max. 10 kW level. Elektrode and tanks are washed automatically. Can be operated automatic and manual. Phase protection exists on the device. Body electrostatic painted and Stainless Steel 304 Quality. 40x200 mm LCD Board is on the device enabling to observe all the control values. 3 functional key gives oppurtunity for manual operation, automatic operation and stopping the system and draining. All devices are used with external control panels. 3 steam generators can be combined and controlled by 1 piece remote control. 1 It Lime Prodector included in price.





Control Panel for STEAMER Steam Generators with Electrode. Device is controlled with touch pad. The cabinet Lightning, ventilation and heating-steam function can be controlled separately with time clock trough the device. It can be programmed each week day separately. Same Control panel can control 3 pieces generators. Enables possibility to operate Monophase or Triphase. It is not mandatory to be used with steam generator.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|--------|----------------|--------------|--------------------------|
| ELKT1000 | 182211 | | | |



Steam Room Accessory Equipments

Steam Nozzle.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------------------|--------|----------------|--------------|--------------------------|
| Stainless Steel AISI 304 | 182301 | 1 | | |
| Steam Nozzle Plastic | 182302 | | | |



Steam Bath Door.

8 mm thick tempered glass. Aluminium hinge, plastic handle. 71,5x200x5,5 cm

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|--------|----------------|--------------|--------------------------|
| | 182401 | 1 | | |



Steam Bath Door Handle. Made of plastic.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|---------|----------------|--------------|--------------------------|
| | 1824011 | 1 | | |



Adventure Shower

ADVENTURE SHOWER.

Adventure Showers enables different shower oppurtunities, with enriched special showerheads, cold and warm water with various intensities, refreshing fragrance dosing systems, rich light shows, thunder, nature sounds effects and featured sprays. Stimulates all the senses increases the feeling of relief and purifies. Easily maintained, operate without noise, easy assembly, 2 years spare parts warranty.

Types of Adventure Showers:

- 1- Tropical Storm Shower with 3 programs
- 2- Ocean Shower with 3 Programs
- 3- Polar Rain Shower with 2 Programs
- 4- Different Experience Shower with 2 Programs
- 5- Aroma Shower with 2 Programs
- 6- Fresh Aroma Shower with 2 Programs

All types include sound effects (mp3), perfumes dosing system, light effect system. Our Company can design different adventure showers according to demand. Different productions are possible such as, Multiple programs, different programs, different sound effects, adjustable program durations.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|--------|----------------|--------------|--------------------------|
| Adventure Shower with All inclusive Programs | 183101 | | | |





Prefabricated Construction Materials For SPA



Relaxation Beds. Made of Extruded polystyrene, XPS, hard foam and all surfaces are reinforced with fiber glass and covered with industrial plaster. There will no need of construction process, glass mosaics can be covered directly right after delivery. 920x700x1830 mm.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|--------|----------------|--------------|--------------------------|
| | 184101 | | | |



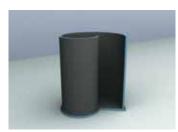
Steam Room Seats. Made of Extruded polystyrene, XPS, hard foam and all surfaces are reinforced with fiber glass and covered with industrial plaster. There will no need of construction process, glass mosaics can be covered directly right after delivery. 850x590x2000 mm.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|--------|----------------|--------------|--------------------------|
| | 185101 | | | |



Rounded Shower Cabin. Made of Extruded polystyrene, XPS, hard foam and all surfaces are reinforced with fiber glass and covered with industrial plaster. There will no need of constructive process, glass mosaics can be covered directly right after delivery. 50x1020x2000 mm.

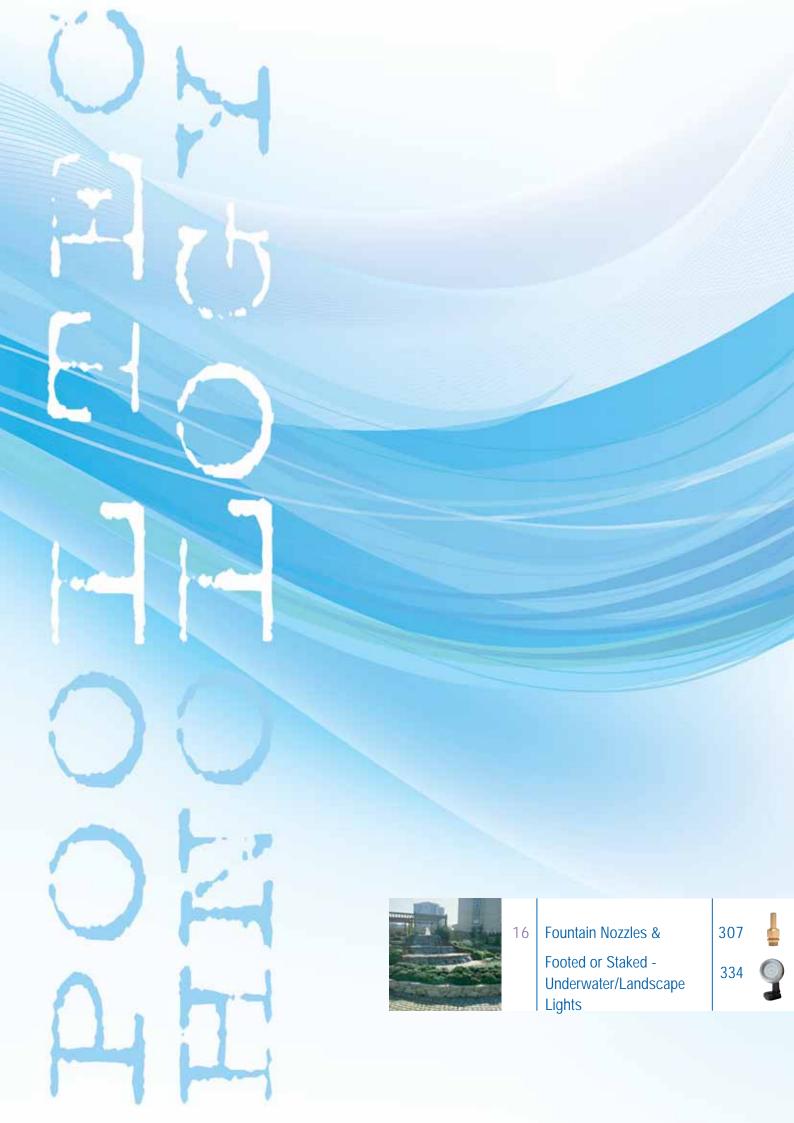
| Description | Code | Pieces/ box | Weight Kg | Volume m ³ | |
|-------------|--------|----------------|--------------|--------------------------|--|
| | 186101 | | | | |



Spiral Shower Cabin. Made of Extruded polystyrene, XPS, hard foam and all surfaces are reinforced with fiber glass and covered with industrial plaster. There will no need of constructive process, glass mosaics can be covered directly right after delivery. 50x1575x1950x2000 mm

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|--------|----------------|--------------|--------------------------|
| | 186102 | | | |

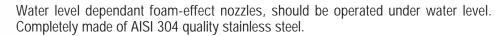






Cascade Nozzles - Stainless Steel







| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|--------|----------------|--------------|--------------------------|
| • Cascade (50T) 1" Male threaded: | 161161 | 1 | | |
| Articulated. Ø 50 mm water column | | | | |
| • Cascade (70T) 1 1/2" Male threaded: | 161121 | 1 | | |
| Articulated. Ø 75 mm water column | | | | |
| • Cascade (90T) 2" Male threaded: | 161131 | 1 | | |
| Articulated. Ø 97 mm water column | | | | |
| • Cascade (110T) 2 1/2" Female threaded: | 161141 | 1 | | |
| Articulated. Ø 117 mm water column | | | | |
| • Cascade (130T) 3" Female threaded: | 161151 | 1 | | |
| Articulated. Ø 135 mm water column | | | | |











Cascade Nozzles - Bronze

Water level dependant foam-effect nozzles, should be operated under water level. Completely made of bronze.



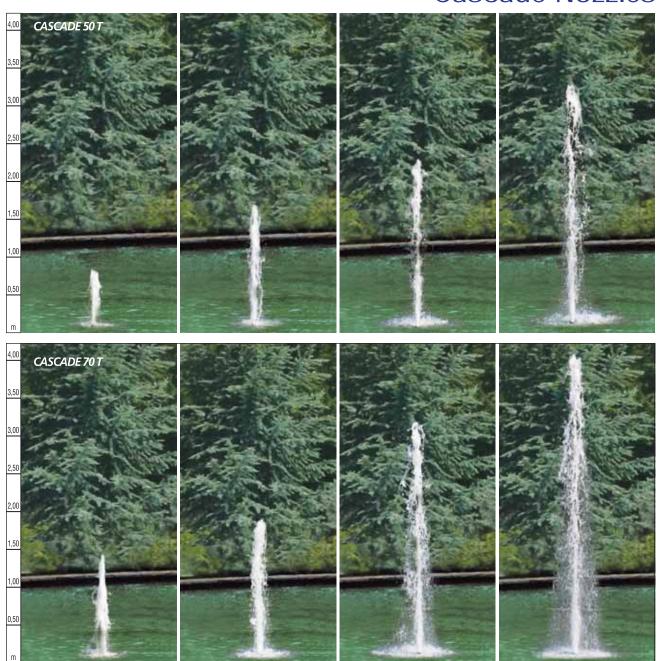
16115

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|-------|----------------|--------------|--------------------------|
| • Cascade (50T) 1" Female threaded: | 16111 | 1 | 0,722 | 0,0006 |
| Articulated. Ø 50 mm water column | | | | |
| • Cascade (70T) 1 1/2" Female threaded: | 16112 | 1 | 1,828 | 0,0015 |
| Articulated. Ø 75 mm water column | | | | |
| • Cascade (90T) 2" Female threaded: | 16113 | 1 | 2,346 | 0,0023 |
| Articulated. Ø 97 mm water column | | | | |
| • Cascade (110T) 2 1/2" Female threaded: | 16114 | 1 | 2,732 | 0,0045 |
| Articulated. Ø 117 mm water column | | | | |
| • Cascade (130T) 3" Female threaded: | 16115 | 1 | 14,194 | 0,0130 |
| Articulated. Ø 135 mm water column | | | | |



Flow and Pressure Chart for Fountain Nozzles

Cascade Nozzles



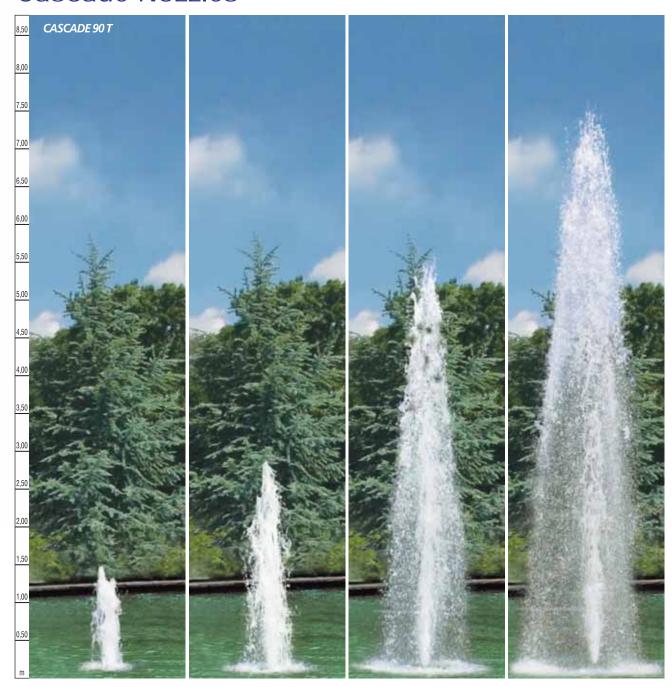
Flow and Pressure Indicators According to Nozzles Squirt Height

| Squirt | CASC | ADE 50 1 | - | CAS | CADE 70 | Т | CAS | CADE 90 | T | CASC | ADE 110 | Т | CASC | ADE 130 | T |
|---------|--------------|-------------|---------------------|--------------|--------------------|---------------------|--------------|-------------|---------------------|--------------|-------------|--------------------|--------------|-------------|---------------------|
| Height | Flow m³/h | Pressure re | equirement atm | Flow m³/h | Pressure re mSS | equirement atm | Flow m³/h | Pressure re | equirement atm | Flow m³/h | Pressure re | quirement atm | Flow m³/h | Pressure re | equirement atm |
| 0,25 m | 1,37 | 1,1 | 0,11 | 2,62 | 0,8 | 0.08 | | | G-0.17 | | | | | | 0.011 |
| 0,50 m | 1,93 | 2,1 | 0,21 | 3,70 | 1,5 | 0,15 | 7,39 | 1,9 | 0,19 | | | | | | |
| 0,75 m | 2,36 | 3,2 | 0,32 | 4,54 | 2,3 | 0,23 | 8,59 | 2,6 | 0,26 | | | | | | |
| 1,00 m | 2,73 | 4,2 | 0,42 | 5,24 | 3,1 | 0,31 | 9,65 | 3,3 | 0,33 | 14,44 | 3,0 | 0,30 | 20,72 | 3,0 | 0,30 |
| 1,50 m | 3,35 | 6,4 | 0,63 | 6,42 | 4,6 | 0,46 | 11,46 | 4,7 | 0,47 | 17,41 | 4,4 | 0,44 | 25,01 | 4,4 | 0,44 |
| 2,00 m | 3,86 | 8,5 | 0,85 | 7,42 | 6,2 | 0,62 | 13,04 | 6,0 | 0,60 | 19,95 | 5,8 | 0,58 | 28,67 | 5,8 | 0,58 |
| 2,50 m | 4,32 | 10,6 | 1,06 | 8,29 | 7,7 | 0,77 | 14,43 | 7,4 | 0,74 | 22,20 | 7,2 | 0,72 | 31,91 | 7,1 | 0,71 |
| 3,00 m | 4,73 | 12,7 | 1,27 | 9,08 | 9,2 | 0,92 | 15,70 | 8,7 | 0,87 | 24,24 | 8,5 | 0,85 | 34,86 | 8,5 | 0,85 |
| 4,00 m | 5,46 | 16,9 | 1,69 | 10,49 | 12,3 | 1,23 | 18,00 | 11,5 | 1,15 | 27,87 | 11,3 | 1,13 | 40,10 | 11,3 | 1,13 |
| 5,00 m | | | | 11,73 | 15,4 | 1,54 | 20,00 | 14,2 | 1,42 | 31,09 | 14,0 | 1,40 | 44,73 | 14,0 | 1,40 |
| 6,00 m | | | | 12,85 | 18,5 | 1,85 | 21,85 | 16,9 | 1,69 | 34,00 | 16,8 | 1,68 | 48,93 | 16,8 | 1,68 |
| 8,00 m | | | | | | | 25,12 | 22,4 | 2,24 | 39,18 | 22,3 | 2,23 | 56,39 | 22,3 | 2,23 |
| 10,00 m | | | | | | | 28,00 | 27,8 | 2,78 | 43,75 | 27,8 | 2,78 | 62,97 | 27,8 | 2,78 |
| 12,00 m | | | | | | | | | | 47,88 | 33,3 | 3,33 | 68,93 | 33,3 | 3,33 |
| 14,00 m | | | | | | | | | | 51,69 | 38,8 | 3,88 | 74,42 | 38,8 | 3,88 |
| 16,00 m | | | | | | | | | | | | | 79,52 | 44,3 | 4,43 |
| 18,00 m | | | | | | | | | | | | | 84,32 | 49,8 | 4,98 |
| 20,00 m | | | | | | | | | | | | | 88,86 | 55,3 | 5,53 |

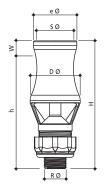
Flow and Pressure Chart for Fountain Nozzles_GEMAS



Cascade Nozzles



TECHNICAL CHARACTERISTICS

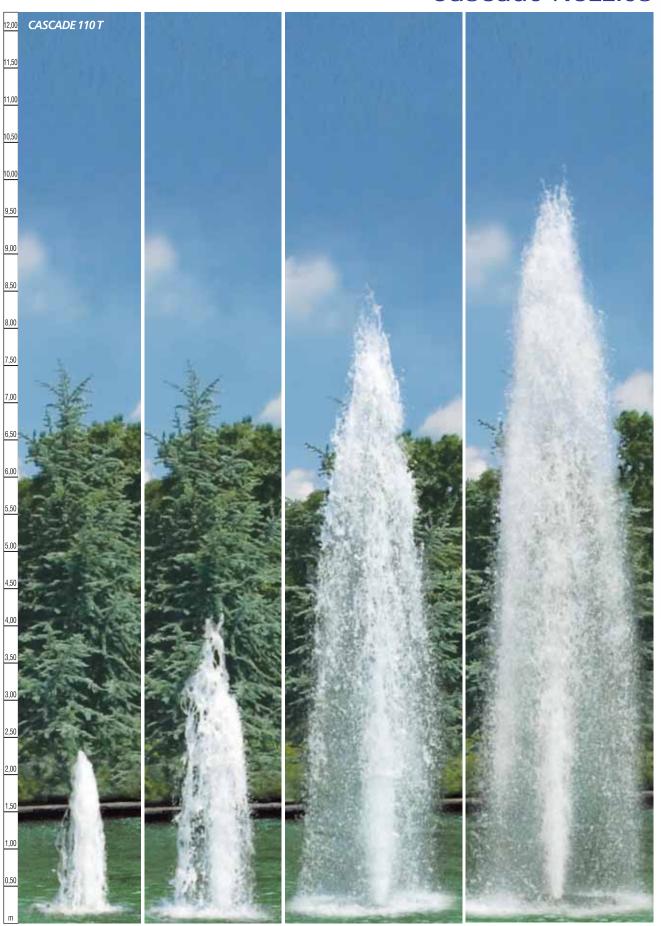


| MODEL | 50 T / 161111 | 70 T / 161121 | 90 T / 161131 | 110 T / 161141 | 130 T / 161151 |
|-------------|---------------|---------------|---------------|----------------|----------------|
| S Ø (mm) | 50 | 70 | 96 | 117 | 147 |
| R Ø (mm) | 32 (1") | 40 (1 1/2") | 50 (2") | 65 (2 1/2) | 80 (3") |
| D Ø (mm) | 74 | 90 | 117 | 130 | 150 |
| e Ø (mm) | 63 | 82 | 110 | 120 | 150 |
| H (mm) | 190 | 240 | 283 | 240 | 330 |
| h (mm) | 170 | 215 | 253 | | |
| W (mm) | 20 | 25 | 30 | | |
| WEIGHT (Kg) | | | | | |



Flow and Pressure Chart for Fountain Nozzles

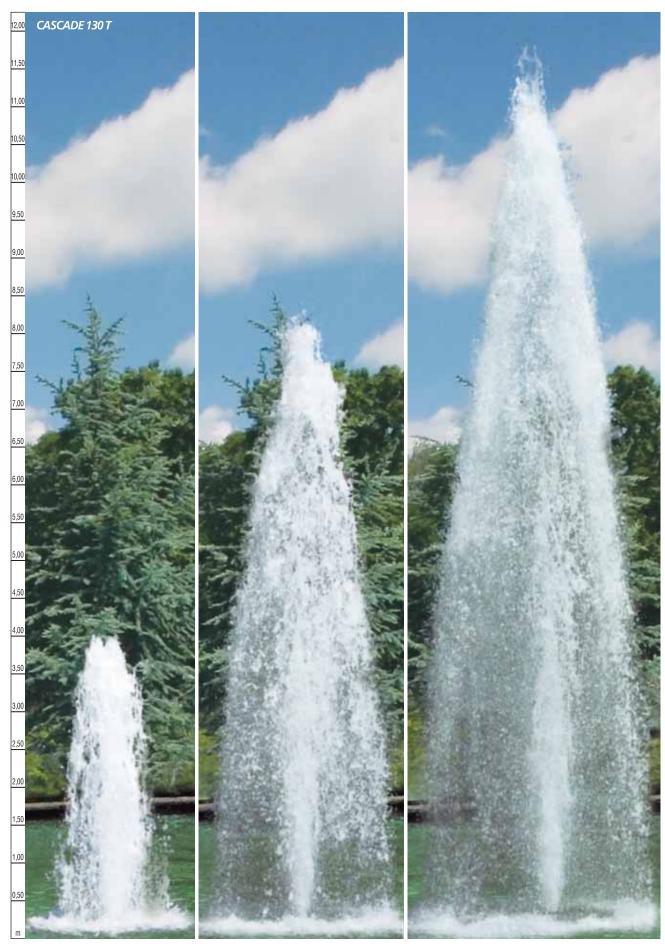
Cascade Nozzles



Flow and Pressure Chart for Fountain Nozzles_ GEMAS



Cascade Nozzles





Finger Nozzles - Bronze/Chrome plated

Made of bronze. Can be articulated up to 15°.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------------------------------|--------|----------------|--------------|--------------------------|
| • Finger (3-6T) 3/8" Male Threaded. | 161211 | 1 | 0,054 | |
| Water spray dia. Ø 6,0 mm | | | | |
| • Finger (5-8T) 1/2" Male Threaded. | 161221 | 1 | 0,086 | |
| Water spray dia. Ø 8 mm | | | | |
| • Finger (5-10T) 1/2" Male Threaded. | 161222 | 1 | 0,080 | |
| Water spray dia. Ø 10 mm | | | | |
| • Finger (10-12T) 1" Male Threaded. | 161231 | 1 | 0,246 | |
| Water spray dia. Ø 12 mm | | | | |



Finger Nozzles - Bronze/Chrome plated - Adjustable

Chrome plated bronze. Can be articulated up to 15°. Flow adjusting valve over fountain.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------------------------------|---------|----------------|--------------|--------------------------|
| • Finger (3-6T) 3/8" Male Threaded. | 1612111 | 1 | | |
| Water spray dia. Ø 6,0 mm | | | | |
| • Finger (5-8T) 1/2" Male Threaded. | 1612211 | 1 | | |
| Water spray dia. Ø 8 mm | | | | |
| • Finger (5-10T) 1/2" Male Threaded. | 1612221 | 1 | | |
| Water spray dia. Ø 10,0 mm | | | | |
| • Finger (10-12T) 1" Male Threaded. | 1612311 | 1 | | |
| Water spray dia. Ø 12,0 mm | | | | |



Finger Nozzles - Plastic/Chrome Plated - Adjustable

Chrome plated plastic. Can be articulated up to 15°. Flow adjusting valve over fountain.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------------------------------|-----------|----------------|--------------|--------------------------|
| • Finger (3-6T) 3/8" Male Threaded. | 161211PCR | 1 | | |
| Water spray dia. Ø 6,0 mm | | | | |
| • Finger (5-8T) 1/2" Male Threaded. | 161221PCR | 1 | | |
| Water spray dia. Ø 8 mm | | | | |
| • Finger (5-10T) 1/2" Male Threaded. | 161222PCR | 1 | | |
| Water spray dia. Ø 10 mm | | | | |
| • Finger (10-12T) 1" Male Threaded. | 161231PCR | 1 | | |
| Water spray dia. Ø 12 mm | | | | |





Finger Nozzles - Plastic/Golden Plated - Adjustable

Made of plastic. Can be articulated up to 15°. (Please add unit prices for footed models)



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------------------------------|----------|----------------|--------------|--------------------------|
| • Finger (3-6T) 3/8" Male Threaded. | 161211PG | 1 | | |
| Water spray dia. Ø 6,0 mm | | | | |
| • Finger (5-8T) 1/2" Male Threaded. | 161221PG | 1 | | |
| Water spray dia. Ø 8 mm | | | | |
| • Finger (5-10T) 1/2" Male Threaded. | 161222PG | 1 | | |
| Water spray dia. Ø 10 mm | | | | |
| • Finger (10-12T) 1" Male Threaded. | 161231PG | 1 | | |
| Water spray dia. Ø 12 mm | | | | |

Finger Nozzles - Plastic/Chrome Plated - Adjustable

Made of plastic. Can be articulated up to 15°.



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------------------------------|----------|----------------|--------------|--------------------------|
| • Finger (3-6T) 3/8" Male Threaded. | 161211PC | 1 | | |
| Water spray dia. Ø 6,0 mm | | | | |
| • Finger (5-8T) 1/2" Male Threaded. | 161221PC | 1 | | |
| Water spray dia. Ø 8 mm | | | | |
| • Finger (5-10T) 1/2" Male Threaded. | 161222PC | 1 | | |
| Water spray dia. Ø 10 mm | | | | |
| • Finger (10-12T) 1" Male Threaded. | 161231PC | 1 | | |
| Water spray dia. Ø 12 mm | | | | |

Finger Nozzles - Plastic/Black

Made of plastic. Can be articulated up to 15°.

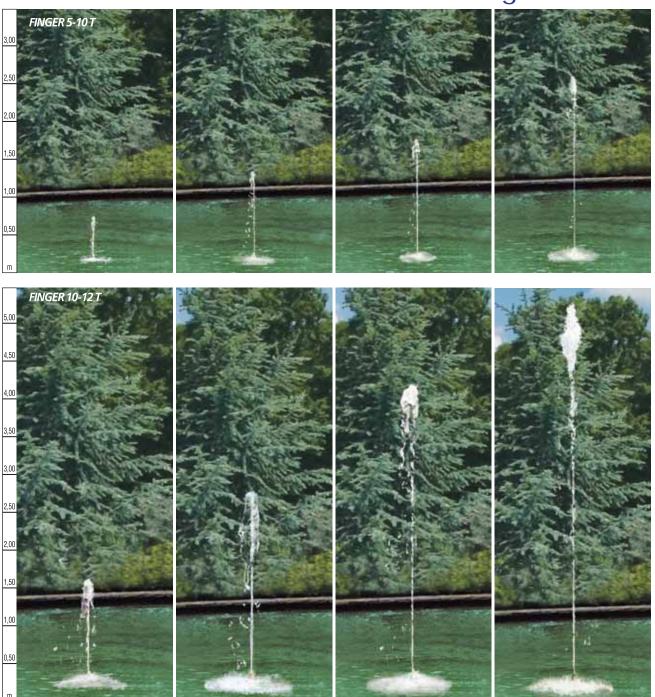


| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------------------------------|---------|----------------|--------------|--------------------------|
| • Finger (3-6T) 3/8" Male Threaded. | 161211P | 1 | | |
| Water spray dia. Ø 6,0 mm | | | | |
| • Finger (5-8T) 1/2" Male Threaded. | 161221P | 1 | | |
| Water spray dia. Ø 8 mm | | | | |
| • Finger (5-10T) 1/2" Male Threaded. | 161222P | 1 | | |
| Water spray dia. Ø 10 mm | | | | |
| • Finger (10-12T) 1" Male Threaded. | 161231P | 1 | | |
| Water spray dia. Ø 12 mm | | | | |



Flow and Pressure Chart for Fountain Nozzles

Finger Nozzles



Flow and Pressure Indicators According to Nozzles Squirt Height

| Squirt | FIN | GER 3-6 T | | FINGER 5-8 T | | FINGER 5-10 T | | | FINGER 10-12 T | | | |
|--------|--------------|----------------------|--------------------|--------------|----------------------|--------------------|--------------|----------------------|--------------------|--------------|----------------------|--------------------|
| Height | Flow m³/h | Pressure re m / h | quirement atm | Flow m³/h | Pressure re m / h | quirement atm | Flow m³/h | Pressure re m / h | quirement atm | Flow m³/h | Pressure re m / h | quirement atm |
| 0,25 m | 0,23 | 0,30 | 0,03 | 0,41 | 0,30 | 0,03 | 0,65 | 0,30 | 0,03 | | | |
| 0,50 m | 0,33 | 0,60 | 0,06 | 0,59 | 0,60 | 0,06 | 0,92 | 0,60 | 0,06 | 1,32 | 0,60 | 0,06 |
| 0,75 m | 0,40 | 0,90 | 0,09 | 0,72 | 0,90 | 0,09 | 1,13 | 0,90 | 0,09 | 1,63 | 0,90 | 0,09 |
| 1,00 m | 0,47 | 1,20 | 0,12 | 0,84 | 1,20 | 0,12 | 1,31 | 1,20 | 0,12 | 1,89 | 1,20 | 0,12 |
| 1,25 m | 0,53 | 1,51 | 0,15 | 0,94 | 1,51 | 0,15 | 1,47 | 1,51 | 0,15 | 2,12 | 1,51 | 0,15 |
| 1,50 m | 0,58 | 1,81 | 0,18 | 1,04 | 1,81 | 0,18 | 1,62 | 1,81 | 0,18 | 2,33 | 1,81 | 0,18 |
| 2,00 m | 0,68 | 2,42 | 0,24 | 1,21 | 2,42 | 0,24 | 1,88 | 2,42 | 0,24 | 2,72 | 2,42 | 0,24 |
| 2,50 m | 0,76 | 3,03 | 0,30 | 1,36 | 3,03 | 0,30 | 2,13 | 3,03 | 0,30 | 3,06 | 3,03 | 0,30 |
| 3,00 m | 0,84 | 3,64 | 0,36 | 1,50 | 3,64 | 0,36 | 2,35 | 3,64 | 0,36 | 3,38 | 3,64 | 0,36 |
| 4,00 m | 0,99 | 4,88 | 0,49 | 1,76 | 4,88 | 0,49 | 2,76 | 4,88 | 0,49 | 3,97 | 4,88 | 0,49 |
| 5,00 m | | | | 2,00 | 6,12 | 0,61 | 3,13 | 6,12 | 0,61 | 4,51 | 6,12 | 0,61 |
| 6,00 m | | | | | | | 3,48 | 7,37 | 0,74 | 5,01 | 7,37 | 0,74 |
| 8,00 m | | | | | | | | | | 5,96 | 9,91 | 0,99 |



Geiser Nozzles - Stainless Steel

Description

• Geiser (20T) - 1" Male threaded: Water

• Geiser (40T) - 1 1/2" Female threaded:

• Geiser (80T) - 2 1/2" Female threaded:

Water spray nozzle dia. Ø 40 mm
• Geiser (60T) - 2" Female threaded: Water

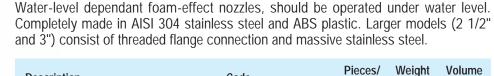
Water spray nozzle dia. Ø 80 mmGeiser (100T) - 3" Female threaded:

Water spray nozzle dia. Ø 100 mm

spray nozzle dia. Ø 20 mm

spray nozzle dia. Ø 60 mm





Code

161311

161321

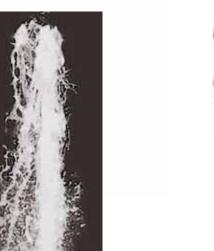
161331

161341

161351



161341 - 161351





161311





box

Geiser Nozzles - Bronze

Water-level dependant foam-effect nozzles, should be operated under water level. Completely made in bronze.

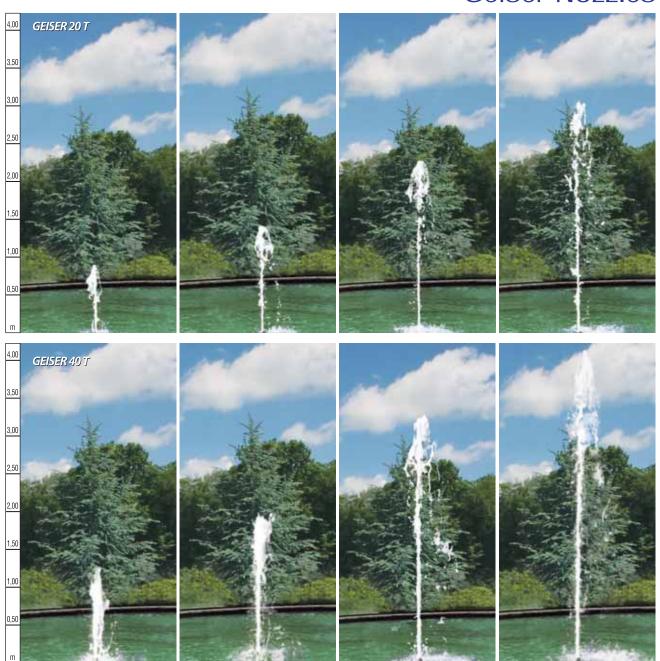


| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|-------|----------------|--------------|--------------------------|
| • Geiser (20T) - 1" Male threaded: Water | 16131 | 1 | 1,054 | |
| spray nozzle dia. Ø 20 mm | | | | |
| • Geiser (40T) - 1 1/2" Female threaded: | 16132 | 1 | 3,882 | |
| Water spray nozzle dia. Ø 40 mm | | | | |
| • Geiser (60T) - 2" Female threaded: Water | 16133 | 1 | 3,210 | |
| spray nozzle dia. Ø 60 mm | | | | |
| • Geiser (80T) - 2 1/2" Female threaded: | 16134 | 1 | 10,730 | |
| Water spray nozzle dia. Ø 80 mm | | | | |
| Geiser (100T) - 3" Female threaded: | 16135 | 1 | 15,200 | |
| Water spray nozzle dia. Ø 100 mm | | | | |



Flow and Pressure Chart for Fountain Nozzles

Geiser Nozzles



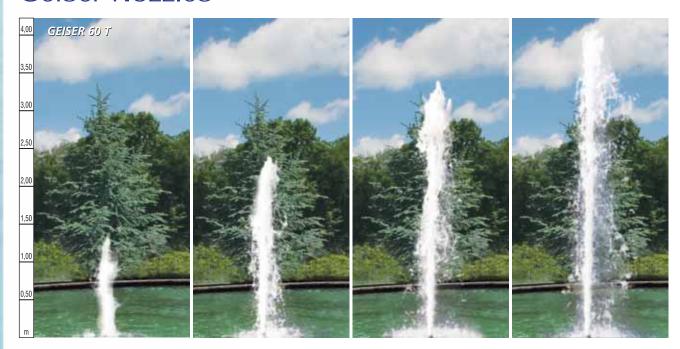
Flow and Pressure Indicators According to Nozzles Squirt Height

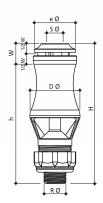
| Squirt | GEIS | ER 20 T | | GEIS | ER 40 T | | GEIS | SER 60 T | | GEIS | SER 80 T | | GEIS | ER 100 T | |
|---------|--------------|-------------|---------------------|--------------|-------------|---------------------|--------------|----------------------|---------------------|--------------|----------------------|------------------|--------------|------------|---------------------|
| Height | Flow m³/h | Pressure re | equirement atm | Flow m³/h | Pressure re | equirement atm | Flow m³/h | Pressure re m / h | equirement atm | Flow m³/h | Pressure re m / h | quirement atm | Flow m³/h | Pressure r | equirement atm |
| 0,50 m | 1,83 | 1,9 | 0,19 | 4,05 | 1,8 | 0,18 | 7,90 | 2,2 | 0,22 | | | | | | |
| 0,75 m | 2,07 | 2,4 | 0,24 | 4,60 | 2,4 | 0,24 | 8,88 | 2,8 | 0,28 | | | | | | |
| 1,00 m | 2,28 | 3,0 | 0,30 | 5,08 | 2,9 | 0,29 | 9,78 | 3,4 | 0,34 | 15,62 | 3,5 | 0,35 | | | |
| 1,50 m | 2,66 | 4,0 | 0,40 | 5,94 | 4,0 | 0,40 | 11,36 | 4,6 | 0,46 | 18,57 | 5,0 | 0,50 | | | |
| 2,00 m | 3,00 | 5,1 | 0,51 | 6,68 | 5,0 | 0,50 | 12,74 | 5,8 | 0,58 | 21,10 | 6,5 | 0,65 | 31,14 | 6,8 | 0,68 |
| 2,50 m | 3,29 | 6,2 | 0,62 | 7,35 | 6,1 | 0,61 | 13,98 | 6,9 | 0,69 | 23,37 | 7,9 | 0,79 | 34,00 | 8,1 | 0,81 |
| 3,00 m | 3,57 | 7,2 | 0,72 | 7,97 | 7,1 | 0,71 | 15,12 | 8,1 | 0,81 | 25,44 | 9,4 | 0,94 | 36,62 | 9,4 | 0,94 |
| 4,00 m | 4,06 | 9,4 | 0,94 | 9,08 | 9,2 | 0,92 | 17,19 | 10,5 | 1,05 | 29,13 | 12,3 | 1,23 | 41,39 | 12,0 | 1,20 |
| 5,00 m | 4,50 | 11,5 | 1,15 | 10,06 | 11,3 | 1,13 | 19,03 | 12,8 | 1,28 | 32,41 | 15,2 | 1,52 | 45,66 | 14,6 | 1,46 |
| 6,00 m | 4,90 | 13,6 | 1,36 | 10,96 | 13,5 | 1,35 | 20,70 | 15,2 | 1,52 | 35,38 | 18,2 | 1,82 | 49,56 | 17,2 | 1,72 |
| 8,00 m | | | | 12,56 | 17,7 | 1,77 | 23,70 | 19,9 | 1,99 | 40,68 | 24,0 | 2,40 | 56,52 | 22,4 | 2,24 |
| 10,00 m | | | | 13,98 | 21,9 | 2,19 | 26,37 | 24,6 | 2,46 | 45,37 | 29,9 | 2,99 | 62,79 | 27,6 | 2,76 |
| 12,50 m | | | | | | | 29,36 | 30,5 | 3,05 | 50,62 | 37,2 | 3,72 | 69,80 | 34,1 | 3,41 |
| 15,00 m | | | | | | | 32,07 | 36,4 | 3,64 | <i>55,37</i> | 44,5 | 4,45 | 76,16 | 40,6 | 4,06 |
| 17,50 m | | | | | | | | | | 59,75 | 51,8 | 5,18 | 82,04 | 47,1 | 4,71 |
| 20,00 m | | | | | | | | | | 63,83 | 59,1 | 5,91 | 87,51 | 53,6 | 5,36 |
| 25,00 m | | | | | | | | | | | | | 97,55 | 66,6 | 6,66 |
| 30,00 m | | | | | | | | | | | | | 106,65 | 79,6 | 7,96 |

Flow and Pressure Chart for Fountain Nozzles_ GEMAS



Geiser Nozzles





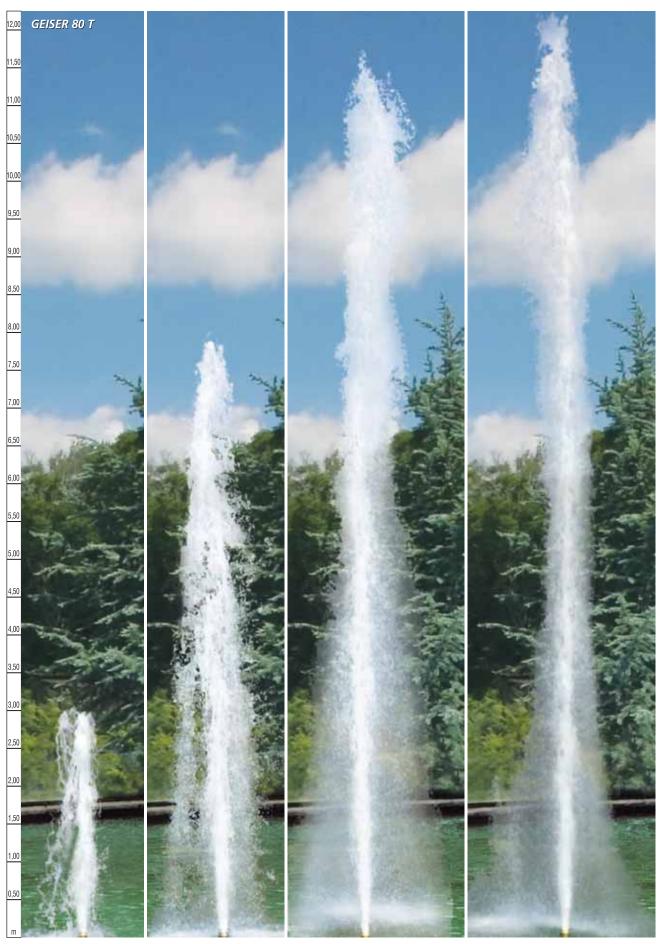
TECHNICAL CHARACTERISTICS

| MODEL | 20 T / 161311 | 40 T / 161321 | 60 T / 161331 | 80 T / 161341 | 100 T / 161351 |
|-------------|---------------|---------------|---------------|---------------|----------------|
| S Ø (mm) | 23 | 45 | 60 | 80 | 100 |
| R Ø (mm) | 32 (1") | 40 (1 1/2") | 50 (2") | 65(2 1/2") | 80 (3") |
| D Ø (mm) | 74 | 92 | 117 | 230 | 165 |
| e Ø (mm) | 61 | 81 | 107 | 120 | 150 |
| H (mm) | 207 | 277 | 325 | 250 | 330 |
| h (mm) | 176 | 217 | 246 | 240 | 310 |
| W (mm) | 31 | 60 | 80 | 10 | 20 |
| WEIGHT (Kg) | | | | | |



Flow and Pressure Chart for Fountain Nozzles

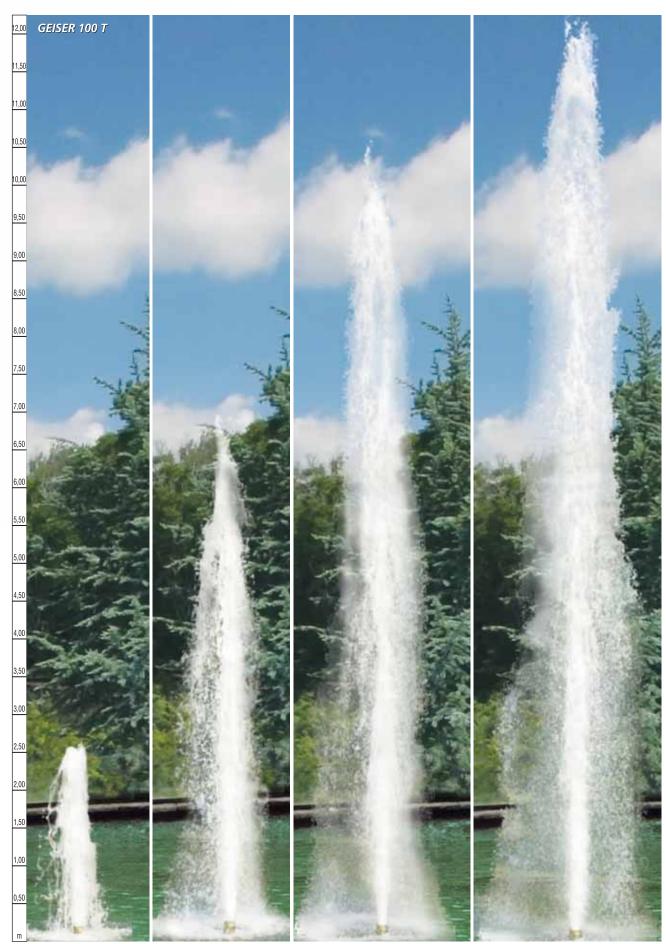
Geiser Nozzles



Flow and Pressure Chart for Fountain Nozzles_ GEMAS



Geiser Nozzles





Water Fan Nozzle

"Water Fan Nozzle" Made of Stainless Steel.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------------------------|--------|----------------|--------------|--------------------------|
| • Water Fan Nozzle (115 - 15T), 1" | 161111 | 1 | 1,798 | 0,002 |
| • Duck Mouth, 1" | 161113 | 1 | | |
| • Duck Mouth, 1 1/2" | 161114 | 1 | | |



Finger Jet Nozzle

"Finger Water Fan Nozzle" Made of Stainless Steel. Distributes the water with 60° angle from Ø 4,0 mm water jet. 1" male threaded connection.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|---------|----------------|--------------|--------------------------|
| • Finger Water Fan (13 - 4T). 13 Mouth | 1611121 | 1 | 2,814 | 0,003 |
| • Finger Water Fan (25 - 4T). 25 Mouth | 1611122 | 1 | 2,868 | 0,003 |
| Big Type Finger Water Fan (6 - 8T) | 1611123 | | | |



Volcano Nozzles

Creates a water pattern consisting of a series of jets which rise in one or more steps.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|--------|----------------|--------------|--------------------------|
| Volcano (43 - 3T) 1" | 16143P | 1 | - | - |
| Male threaded : Made in plastic. | | | | |
| • Volcano (19 - 3T) 1" | 16142 | 1 | 1,118 | 0,0008 |
| Male threaded : Water spray hole dia. | | | | |
| Ø 3 mm x 19 pcs. | | | | |
| Volcano (43 - 3T) 1" | 16143 | 1 | 1,160 | 0,0008 |
| Male threaded : Water spray hole dia. | | | | |
| Ø 3 mm x 43 pcs. | | | | |
| Volcano (200/19 - 6T) 2" | 16144 | 1 | 4,154 | 0,0034 |
| Male threaded : Consists of 1 x Ø 10 mr | m + | | | |
| 18 x Ø 6 mm finger nozzle | | | | |
| Ditto, Made of golden plated plastic | 16144P | 1 | | |
| finger jets. | | | | |
| Volcano (300/19 - 8T) 2 1/2" Male | 16145 | 1 | 9,250 | |
| threaded: Consists of 1 x Ø 12 mm | | | | |
| + 18 x Ø 8 mm finger nozzle | | | | |



Volcano 200/19 - 6 T

Volcano 300/19 - 8 T





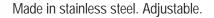


Volcano 300/19



Water Bell Nozzles





| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|--------|----------------|--------------|--------------------------|
| • 30T : H= 30 cm 1" Male threaded. | 161621 | 1 | 1,040 | 0,001 |
| • 40T : Height = 40 cm 1" Male threaded. | 161622 | 1 | 1,316 | 0,001 |
| • 60T : H= 60 cm 1" Male threaded. | 161523 | 1 | 1,538 | 0,002 |
| • 30TP : H= 30 cm and can be extended. | 16161P | 1 | 0,148 | 0,001 |
| 1/2" Male threaded. Made in plastic. | | | | |



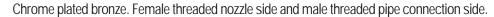
Water Sphere Nozzles



127 Arms made in stainless steel are fitted on the central bronze sphere. Stands on a stainless steel pivot.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|--------|----------------|--------------|--------------------------|
| • Water Sphere Nozzle 1500, Ø 1500 mm | 161101 | 1 | | |
| • Water Sphere Nozzle 2500, Ø 2500 mm | 161102 | 1 | | |
| • Half a sphere of water 1500, \emptyset 1500 mm | 161103 | 1 | | |
| • Half a sphere of water 2500, \emptyset 2500 mm | 161104 | 1 | | |

Valves for Nozzle Adjustment







| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| • 1/2" | 16201 | 1 | | |
| • 3/4" | 16202 | 1 | | |
| • 1" | 16203 | 1 | | |
| • 1 1/2" | 16204 | 1 | | |
| • 2" | 16205 | 1 | | |

Nozzle Joint

Female threaded nozzle side and male threaded pipe connection side.



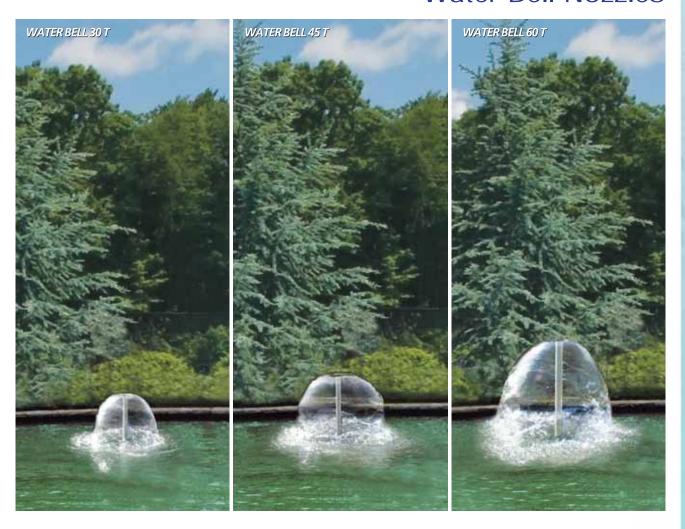


| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-----------------------------------|-------|----------------|--------------|--------------------------|
| • 1" Plastic | 16301 | | | |
| • 1 1/2" Plastic | 16302 | | | |
| • 1" with Stainless Steel Nut | 16303 | | | |
| • 1 1/2" with Stainless Steel Nut | 16304 | | | |



Flow and Pressure Chart for Fountain Nozzles

Water Bell Nozzles



Flow and Pressure Indicators According to Nozzles Squirt Height

| Bell Diameter | WATER BELL 30 T | | WATER BELL 45 T | | | WATER BELL 60 T | | | |
|------------------|-----------------|----------------------|---------------------|--------------|----------------------|---------------------|--------------|-----------------------|------------------|
| | Flow m³/h | Pressure re m / h | equirement atm | Flow m³/h | Pressure re m / h | equirement atm | Flow m³/h | Pressure red m / h | quirement atm |
| 0,15 m | | | | | | | | | |
| 0,20 m | | | | | | | | | |
| 0,30 m | 2,10 | 1, 1 | 0,11 | | | | | | |
| 0,40 m | 2,58 | 1,3 | 0,13 | 2,58 | 1,4 | 0,14 | | | |
| 0,50 m | 3,06 | 1,6 | 0,16 | 3,06 | 1,7 | 0,17 | 2,58 | | |
| 0,60 m | 3,54 | 2,0 | 0,20 | 3,54 | 2,1 | 0,21 | 3,06 | | |
| 0,70 m | 4,02 | 2,5 | 0,25 | 4,02 | 2,6 | 0,26 | 3,54 | | |
| 0,90 m | | | | 4,50 | 3,2 | 0,32 | 4,02 | | |
| 1,10 m | | | | | | | 4,50 | 2,1 | 0,21 |
| 1,30 m | | | | | | | 4,98 | 2,4 | 0,24 |
| 1,50 m | | | | | | | | 2,8 | 0,28 |



Water Star Nozzles



Made in bronze. O.D. Ø 750 mm. Water spray nozzle Ø 4 mm. Connection: 1 1/2"

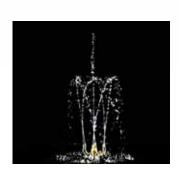
| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-----------------------------------|-------|----------------|--------------|--------------------------|
| • 12 / K3 - 4 / 750T with 12 arms | 16101 | 1 | | |
| • 18 / K3 - 4 / 750T with 18 arms | 16102 | 1 | | |
| • 24 / K3 - 4 / 750T with 24 arms | 16103 | 1 | | |



Plastic Water Star. Made of 36 pieces of 3/8" plastic finger jets. Dia Ø 1000 mm, water jet Ø 4,0 mm, connection 1 1/2".

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------------------------|-------|----------------|--------------|--------------------------|
| Plastic Water Star Nozzle 1000 | 16104 | 1 | 4,184 | 0,106 |

Water Pirouette Nozzle



Made in bronze. Effect is created by rotation.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------------------------|-------|----------------|--------------|--------------------------|
| • (M7 - 5T) 1/2" Male threaded | 16191 | | 1,846 | 0,046 |
| • (M7 - 10T) 1" Male threaded | 16192 | 1 | | |



_Flow and Pressure Chart for Fountain Nozzles

Water Bell Nozzles



Flow and Pressure Indicators According to Nozzles Squirt Height

| Consist | WATER STA | R 12/K3-4/ | 750 T | WATER STA | R 18/K3-4/ | 750 T | WATER STAR 24/K3-4/750 T | | | |
|------------------|--------------|----------------------|--------------------|--------------|----------------------|--------------------|--------------------------|----------------------|--------------------|--|
| Squirt Height | Flow m³/h | Pressure re m / h | quirement atm | Flow m³/h | Pressure re m / h | quirement atm | Flow m³/h | Pressure re m / h | quirement atm | |
| 0,50 m | 1,79 | 0,7 | 0,07 | 2,69 | 0,7 | 0,07 | 3,60 | 0,9 | 0,09 | |
| 0,75 m | 2,22 | 1, 1 | 0,11 | 3,33 | 1, 1 | 0,11 | 4,47 | 1,4 | 0,14 | |
| 1,00 m | 2,60 | 1,4 | 0,14 | 3,90 | 1,4 | 0,14 | 5,24 | 1,8 | 0,18 | |
| 1,25 m | 2,94 | 1,8 | 0,18 | 4,40 | 1,8 | 0,18 | 5,93 | 2,3 | 0,23 | |
| 1,50 m | 3,25 | 2,1 | 0,21 | 4,88 | 2,1 | 0,21 | 6,59 | 2,7 | 0,27 | |
| 1,75 m | 3,55 | 2,5 | 0,25 | 5,32 | 2,5 | 0,25 | 7,20 | 3,2 | 0,32 | |
| 2,00 m | 3,84 | 2,9 | 0,29 | 5,75 | 2,9 | 0,29 | 7,80 | 3,6 | 0,36 | |
| 2,50 m | 4,11 | 3,2 | 0,32 | 6,17 | 3,2 | 0,32 | 8,36 | 4,1 | 0,41 | |
| 3,00 m | 4,38 | 3,6 | 0,36 | 6,56 | 3,6 | 0,36 | 8,93 | 4,5 | 0,45 | |
| 3,50 m | 4,89 | 4,3 | 0,43 | 7,33 | 4,3 | 0,43 | 10,00 | 5,4 | 0,54 | |
| 4,00 m | 5,39 | 5,0 | 0,50 | 8,07 | 5,0 | 0,50 | 11,04 | 6,4 | 0,64 | |
| 4,50 m | 5,86 | 5,8 | 0,58 | 8,79 | 5,8 | 0,58 | 12,05 | 7,3 | 0,73 | |



Spring Nozzles



Foam effect nozzle to be operated above the water level. Completely made in plastic and stainless steel. (Only model of 75-20T is stainless steel + bronze)

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|--------|----------------|--------------|--------------------------|
| • Spring (35 - 10E) 1" Male threaded: | 161521 | 1 | 0,684 | 0,0004 |
| Water spray dia. Ø 32 mm. Adjustable. | | | | |
| • Spring (55 - 10E) 1" Male threaded: | 161522 | 1 | 1,282 | 0,0008 |
| Water spray dia. Ø 50 mm. Adjustable. | | | | |
| • Spring (55 - 15E) 1 1/2" Male threaded: | 16153 | 1 | 1,306 | 0,0008 |
| Water spray dia. Ø 50 mm. Adjustable. | | | | |
| • Spring (75 - 20T) 2" Male threaded: | 16154 | 1 | 2,742 | 0,0020 |
| Water spray dia. Ø 75 mm. Adjustable. | | | | |







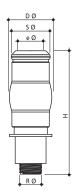




16154

TECHNICAL CHARACTERISTICS

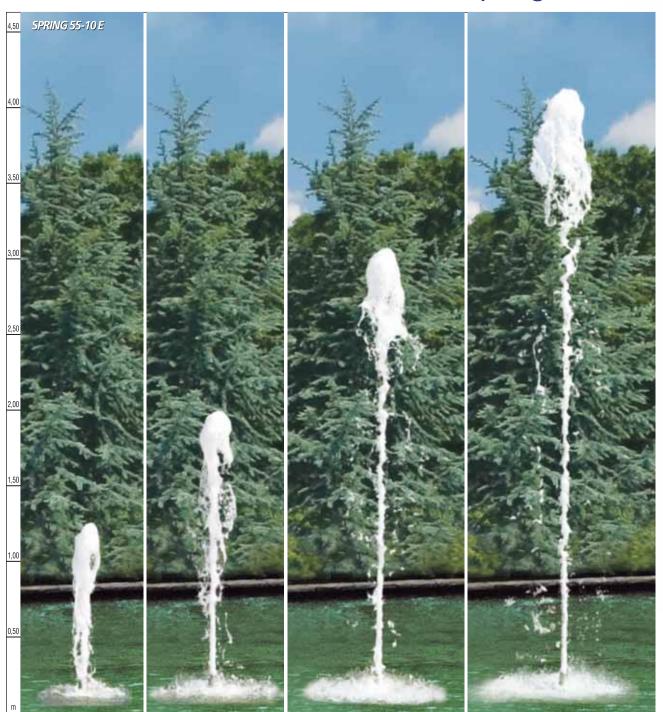
| MODEL | 35 - 10E | 55 - 10E | 55 - 15E | 75 - 20T | |
|-------------|----------|----------|-------------|----------|--|
| S Ø (mm) | 50 | 72 | 72 | 80 | |
| R Ø (mm) | 32 (1") | 32 (1") | 40 (1 1/2") | 50 (2") | |
| D Ø (mm) | 58 | 79 | 79 | 100 | |
| e Ø (mm) | 32,50 | 50 | 50 | 66 | |
| H (mm) | 153 | 178 | 180 | 240 | |
| WEIGHT (Kg) | | | | | |





Flow and Pressure Chart for Fountain Nozzles

Spring Nozzles



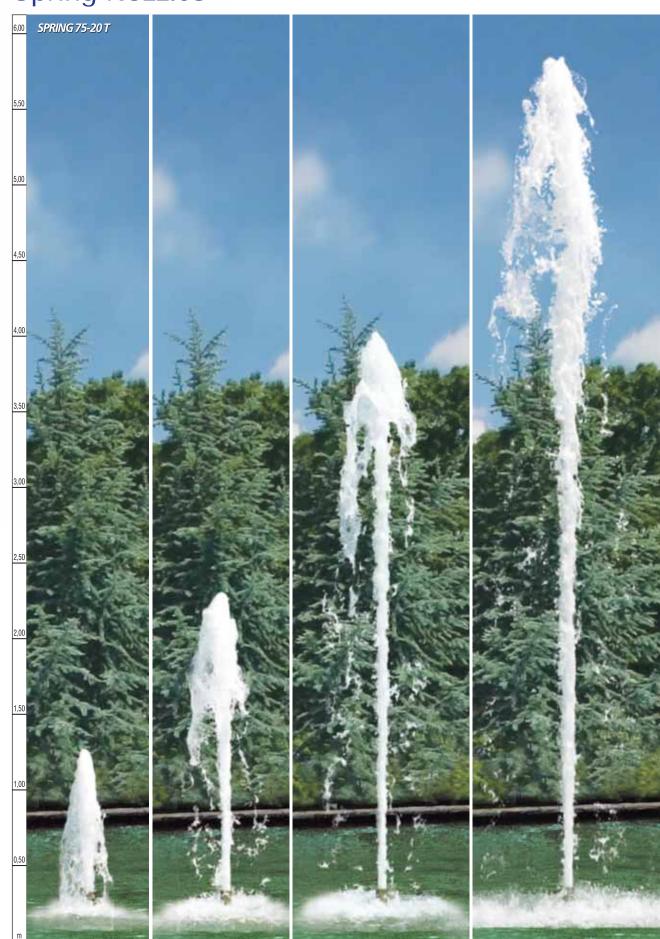
Flow and Pressure Indicators According to Nozzles Squirt Height

| Squirt | SPRI | NG 35-10 E | | SPR | ING 55-10 E | | SPRI | ING 55-15 E | : | SPRING 75-20 T | | | |
|--------|--------------|----------------------|--------------------|--------------|----------------------|--------------------|--------------|----------------------|--------------------|----------------|--------------|------------------|--|
| Height | Flow m³/h | Pressure re m / h | quirement atm | Flow m³/h | Pressure re m / h | quirement atm | Flow m³/h | Pressure re m / h | quirement atm | Flow m³/h | Pressure rea | quirement atm | |
| 0,25 m | 2,33 | 0,7 | 0,07 | | | | | | | | | | |
| 0,50 m | 3,29 | 1,5 | 0,15 | 4,85 | 2,0 | 0,20 | 4,85 | 1,3 | 0,13 | 13,23 | 0,9 | 0,09 | |
| 0,75 m | 4,03 | 2,2 | 0,22 | 5,95 | 2,9 | 0,29 | 5,95 | 1,9 | 0,19 | 16,25 | 1,3 | 0,13 | |
| 1,00 m | 4,65 | 2,9 | 0,29 | 6,89 | 3,9 | 0,39 | 6,89 | 2,5 | 0,25 | 18,81 | 1,8 | 0,18 | |
| 1,25 m | 5,21 | 3,6 | 0,36 | 7,72 | 4,9 | 0,49 | 7,72 | 3,1 | 0,31 | 21,08 | 2,2 | 0,22 | |
| 1,50 m | 5,70 | 4,4 | 0,44 | 8,48 | 5,9 | 0,59 | 8,48 | 3,8 | 0,38 | 23,15 | 2,6 | 0,26 | |
| 2,00 m | 6,58 | 5,8 | 0,58 | 9,84 | 7,8 | 0,78 | 9,84 | 5,0 | 0,50 | 26,86 | 3,5 | 0,35 | |
| 2,50 m | | | | 11,05 | 9,8 | 0,98 | 11,05 | 6,3 | 0,63 | 30,17 | 4,4 | 0,44 | |
| 3,00 m | | | | | | | 12,17 | 7,5 | 0,75 | 33,21 | 5,3 | 0,53 | |
| 4,00 m | | | | | | | 14,18 | 10,1 | 1,01 | 38,70 | 7,1 | 0,71 | |
| 5,00 m | | | | | | | 16,00 | 12,6 | 1,26 | 43,67 | 8,9 | 0,89 | |
| 6,00 m | | | | | | | 17,69 | 15,2 | 1,52 | 48,27 | 10,7 | 1,07 | |

Flow and Pressure Chart for Fountain Nozzles_ GEMAS



Spring Nozzles





Ornamental Pool and Accessories

Decorative Wall Nozzles

GEMAS Wall Nozzles. Made of polyester and the surface finish is made with various aging paints. Standart trims are antique copper, antique brass, antique silver and oxide. Special implementations can be made according to special demands.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|---------|----------------|--------------|--------------------------|
| Small Lionhead, Antique Copper | 1122411 | 1 | | |
| Large Lionhead, Antique Copper | 1122421 | 1 | | |
| Plain Bowl Waterfall, Antique Copper | 1122431 | 1 | | |
| Slotted Bowl Waterfall, Antique Copper | 1122241 | 1 | | |
| Snail, Antique Copper | 1122251 | 1 | | |
| Antique Badge, Antique Copper | 1122261 | 1 | | |

WALLSPRING DECORATIVE WALLACCENTS



Small Lionhead, Antique Copper



Large Lionhead, Antique Copper



Plain Bowl Waterfall





Plain Bowl Waterfall, Antique Copper



Slotted Bowl Waterfall, Antique Copper



Snail Antique Copper



Antique Badge



Submersible Pumps for Fountains.



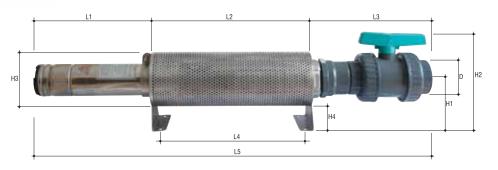
Submersible Pumps for Fountains



High pressure - High Flow Submersible deepwell pumps: Such pumps with below technical spects are made of stainless steel (AISI 304) including its fan being capable of working long time by minimum maintenance thanks to the stainless steel pre-filter. All pumps are complete with a ball or butterfly valve suitable to their connection diameter. Low profile of pumps provide usage in shallow ornamental pools. Easy to be fixed to side nozzle collectors and nozzles saving significantly from laborious and expensive pipe installation. It's vitally important to take precautions in control panels of pumps against electric leakage. All pump models are manufactured upon customer's order. Delivery time is approximately 15 days. Please ask quotation for AISI 316 quality pumps.

TECHNICAL CHARACTERISTICS

| Step | Stainless Steel (AISI 304), Optional (AISI 316) |
|---------------------------|---|
| Fan | Stainless Steel (AISI 304), Optional (AISI 316) |
| Pump shaft | X22 CrNi 17 |
| Step rubber | Nitrile Rubber |
| Filter | Stainless Steel (AISI 304), Optional (AISI 316) |
| Pump suction adapter | Stainless Steel (AISI 304), Optional (AISI 316) |
| Pump Output Connection | Stainless Steel (AISI 304), Optional (AISI 316) |
| Throttle | Stainless Steel (AISI 304), Optional (AISI 316) |
| Max. Sand Amount | 50 gr/m ³ |
| Max. departure p | 20 (kal/s) |
| Frequency | 50 Hz |
| Max. working noise | 70 dB < |
| Class of motor protection | IP 68 |
| Motor Body | Stainless Steel (AISI 304) |
| Max Water Temperature | 40°C |
| Motor Rotation Direction | Anti-clockwise direction |
| Speed | 2900 speed/min. |



| PUMP TYPE | DIMENSIONS (mm) | | | | | | | | | | | | | |
|--------------------|-----------------|-----|-----|-----|-----|------|-----|-----|-----|-----|--|--|--|--|
| 1 51111 1112 | Ø D | L1 | L2 | L3 | L4 | L5 | H1 | H2 | Н3 | H4 | | | | |
| GMD-CR14-E2/05 | 2" | 435 | 500 | 183 | 470 | 1168 | 200 | 301 | 200 | 100 | | | | |
| GMD-CR17-A1,5/02 | 2" | 289 | 500 | 183 | 470 | 1022 | 200 | 301 | 200 | 100 | | | | |
| GMD-CR30-B03/02 | 3" | 405 | 500 | 264 | 470 | 1219 | 200 | 337 | 200 | 100 | | | | |
| GMD-CR30-B04/03 | 3" | 565 | 600 | 264 | 570 | 1379 | 200 | 337 | 200 | 100 | | | | |
| GMD-CR30-B05/04 | 3" | 530 | 700 | 264 | 670 | 1544 | 200 | 337 | 200 | 100 | | | | |
| GMD-CR46-C04/02 | 4" | 399 | 600 | 414 | 570 | 1463 | 200 | 350 | 200 | 100 | | | | |
| GMD-CR46-C07/03 | 4" | 540 | 600 | 414 | 570 | 1604 | 250 | 400 | 300 | 100 | | | | |
| GMD-CR60-D03/01 | 4" | 425 | 500 | 414 | 470 | 1289 | 200 | 350 | 200 | 100 | | | | |
| GMD-CR77-E07/01 | 5" | 482 | 600 | 380 | 570 | 1512 | 250 | 480 | 300 | 100 | | | | |
| GMD-CR77-E10/02 | 5" | 560 | 700 | 380 | 670 | 1690 | 250 | 480 | 300 | 100 | | | | |
| GMD-CR135-G10/01-1 | 6" | 536 | 700 | 408 | 670 | 1694 | 250 | 498 | 300 | 100 | | | | |
| GMD-CR135-G10/01 | 6" | 516 | 700 | 408 | 670 | 1674 | 250 | 498 | 300 | 100 | | | | |
| GMD-CR135-G25/02-1 | 6" | 712 | 900 | 408 | 870 | 2100 | 250 | 498 | 300 | 100 | | | | |



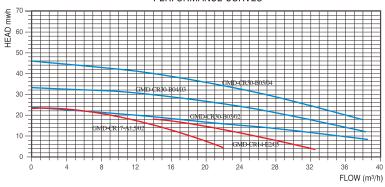
Submersible Pumps for Fountains

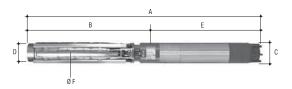
Submersible Pumps for Fountains

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------------------------|----------|----------------|--------------|--------------------------|
| • GMD-CR14-E2/05M - 2 HP Mono. | 1631201M | 1 | 20,000 | |
| • GMD-CR14-E2/05 - 2 HP Tri. | 1631201 | 1 | 18,000 | |
| • GMD-CR17-A1,5/02 - 1,5 HP Tri. | 1631211 | 1 | 17,100 | |
| • GMD-CR30-B03/02 - 3 HP Tri. | 1631224 | 1 | 21,600 | |
| • GMD-CR30-B04/03 - 4 HP Tri. | 1631225 | 1 | 26,400 | |
| • GMD-CR30-B05/04 - 5,5 HP Tri. | 1631223 | 1 | 30,800 | |



PERFORMANCE CURVES





| | STEP MOTOR | TOR | ΑN | ЛP | | | | | | HEAD | mwh | | | | | | |
|------------------|------------|-----|-----|-------|------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|----|
| PUMP TYPE | NUMBER | | | п | Ш | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 17 | 18 | 20 | 21 | 23 |
| | | HP | KW | 220 V | | | | | | | FLOV | / m³/h | | | | | |
| GMD-CR14-E2/05 | 5 | 2 | 1,5 | 11,50 | 4,00 | 32,00 | 31,00 | 29,00 | 28,00 | 25,00 | 23,00 | 18,00 | 16,50 | 14,00 | - | - | - |
| GMD-CR17-A1,5/02 | 2 | 1,5 | 1,1 | - | 3,00 | - | - | 19,80 | 18,00 | 16,20 | 14,40 | 13,50 | 12,60 | 10,80 | 9,00 | 7,20 | - |
| GMD-CR30-B03/02 | 2 | 3 | 2,2 | - | 5,00 | - | - | 38,50 | 36,00 | 31,00 | 28,80 | 22,00 | 21,60 | 18,00 | 14,40 | 10,80 | - |

| | STEP | MOTOR | | AN. | /IP | | | | | HEAD n | nwh | | | | |
|-----------------|--------|-------|----|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|------|----|
| PUMP TYPE | NUMBER | | | " | III | 14 | 18 | 21 | 24 | 26 | 28 | 29 | 31 | 32 | 34 |
| | | HP | KW | 220 V | 380 V | | | | | FLOW n | n³/h | | | | |
| GMD-CR30-B04/03 | 3 | 4 | 3 | | 7,00 | 36,00 | 32,40 | 28,80 | 25,20 | 21,60 | 18,00 | 14,40 | 10,80 | 7,20 | - |

| | STEP | MO. | TOR | AN. | ΛP | | | | | HEAD n | nwh | | | | |
|-----------------|--------|-----|-----|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|------|----|
| PUMP TYPE | NUMBER | | | " | III | 20 | 25 | 28 | 32 | 34 | 37 | 39 | 41 | 43 | 45 |
| | | HP | KW | 220 V | 380 V | | | | | FLOW n | n³/h | | | | |
| GMD-CR30-B05/04 | 4 | 5,5 | 4 | | 9,00 | 36,00 | 32,40 | 28,80 | 25,20 | 21,60 | 18,00 | 14,40 | 10,80 | 7,20 | _ |

| PUMP TYPE | MOTOR | VOLTAGE | | DI | MENS | IONS (mn | 1) | | W | EIGHT (| Kg) |
|------------------|--------------|---------|------|-----|------|------------|-----|-----|--------|---------|--------------|
| 1 31111 7 11 2 | TYPE | (V) | А | В | ØС | D | Е | ØF | Pump | Motor | Total Weight |
| GMD-CR14-E2/05M | G095MC/02-M | 220 | 985 | 510 | 95 | 2" *11 diş | 475 | 96 | 6,000 | 14,000 | 20,000 |
| GMD-CR14-E2/05 | G095MC/02-T | 380 | 955 | 510 | 95 | 2" *11 diş | 445 | 96 | 6,000 | 12,000 | 18,000 |
| GMD-CR17-A1,5/02 | G095MC/1,5-T | 380 | 839 | 414 | 95 | 3" *11 diş | 415 | 134 | 6,100 | 11,000 | 17,100 |
| GMD-CR30-B03/02 | G095MC/03-T | 380 | 955 | 480 | 95 | 3" *11 diş | 475 | 135 | 6,600 | 15,000 | 21,600 |
| GMD-CR30-B04/03 | G 095MC/04-T | 380 | 1115 | 575 | 95 | 3" *11 diş | 540 | 135 | 8,700 | 18,000 | 26,400 |
| GMD-CR30-B05/04 | G 095MC/05-T | 380 | 1280 | 670 | 95 | 3" *11 diş | 610 | 135 | 10,800 | 20,000 | 30,800 |

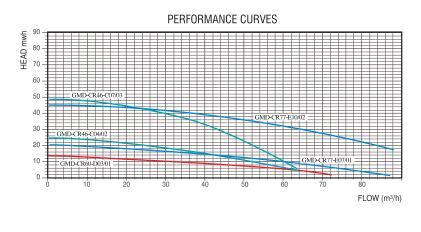
Submersible Pumps for Fountains.

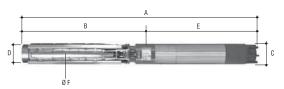


Submersible Pumps for Fountains



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------------------------------|---------|----------------|--------------|--------------------------|
| • GMD-CR46-C04/02 - 4 HP Tri. | 1631231 | 1 | 25,150 | |
| • GMD-CR60-D03/01 - 3 HP Tri. | 1631241 | 1 | 53,500 | |
| • GMD-CR77-E07/01 - 7,5 HP Tri. | 1631251 | 1 | 21,200 | |
| • GMD-CR46-C07/03 - 7,5 HP Tri. | 1631232 | 1 | 61,000 | |
| • GMD-CR77-E10/02 - 10 HP Tri. | 1631252 | 1 | 70,000 | |





| | STEP | MO [°] | TOR | AN | ЛP | | | | | | HEAD | mwh | | | | | |
|-----------------|--------|-----------------|-----|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|----|
| PUMP TYPE | NUMBER | | | ,, | III | 4 | 5 | 9 | 10 | 12 | 15 | 16 | 18 | 19 | 20 | 22 | 25 |
| | | HP | KW | 220 V | | | | | | | FLOV | V m³/h | | | | | |
| GMD-CR46-C04/02 | 2 | 4 | 3 | - | 5,00 | - | - | 54,00 | 52,00 | 48,00 | 43,20 | 39,60 | 36,00 | 26,00 | 28,80 | 18,00 | - |
| GMD-CR60-D03/01 | 1 | 3 | 2,2 | - | 5,80 | 64,80 | 61,20 | 46,80 | 43,20 | 18,00 | - | - | - | - | - | - | - |
| GMD-CR77-E07/01 | 1 | 7,5 | 5,5 | - | 12,00 | - | 79,20 | 68,40 | 62,00 | 61,20 | 54,00 | 36,00 | 24,00 | 18,00 | - | - | - |

| | STEP | MO. | TOR | AN | /IP | | | | HE | AD mwh | | | | |
|-----------------|--------|-----|-----|-------|-------|-------|-------|-------|-------|---------|-------|-------|-------|----|
| PUMP TYPE | NUMBER | | | l 11 | III | 17 | 24 | 27 | 30 | 33 | 36 | 40 | 45 | 48 |
| | | HP | KW | 220 V | 380 V | | | | FLO | OW m³/h | | | | |
| GMD-CR46-C07/03 | 3 | 7,5 | 5,5 | | 7,00 | 54,00 | 50,50 | 46,80 | 43,20 | 39,60 | 36,00 | 28,80 | 18,00 | - |

| | STEP | МОТ | ΓOR | AN | ЛP | | | | | HEAD n | ıwh | | | | |
|-----------------|--------|-------|-----|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|----|
| PUMP TYPE | NUMBER | | | l 11 | III | 23 | 27 | 28 | 29 | 30 | 33 | 35 | 42 | 44 | 47 |
| | | HP | KW | 220 V | 380 V | | | | | FLOW n | n³/h | | | | |
| GMD-CR77-E10/02 | 2 | 10,00 | 7,5 | | 18,00 | 79,20 | 72,00 | 68,40 | 64,80 | 61,20 | 57,60 | 54,00 | 36,00 | 18,00 | - |

| PUMP TYPE | MOTOR | VOLTAGE | | DI | MENS | IONS (mn | 1) | | W | EIGHT (| Kg) |
|-----------------|--------------|---------|------|-----|------|---------------|-----|-----|--------|---------|--------------|
| | TYPE | (V) | Α | В | ØС | D | Е | ØF | Pump | Motor | Total Weight |
| GMD-CR46-C04/02 | G 095MC/04 | 380 | 1049 | 509 | 95 | 3"-4" *11 diş | 540 | 145 | 8,650 | 16,500 | 25,150 |
| GMD-CR46-C07/03 | G 145MC/07 | 380 | 1190 | 620 | 145 | 3"-4" *11 diş | 570 | 145 | 11,500 | 42,000 | 53,500 |
| GMD-CR60-D03/01 | G0 95MC/03-T | 380 | 875 | 400 | 95 | 2"-4" *11 diş | 475 | 145 | 6,200 | 15,000 | 21,200 |
| GMD-CR77-E07/01 | G 145MC/07 | 380 | 1132 | 562 | 145 | 5" *11 diş | 570 | 171 | 19,000 | 42,000 | 61,000 |
| GMD-CR77-E10/02 | G 145MC/10 | 380 | 1310 | 690 | 145 | 5" *11 diş | 620 | 171 | 23,000 | 47,000 | 70,000 |



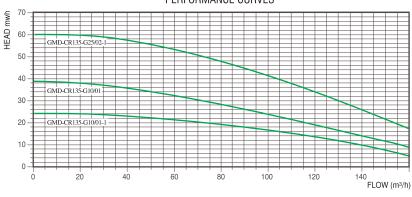
Submersible Pumps for Fountains

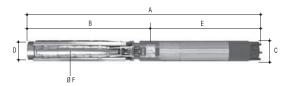
Submersible Pumps for Fountains

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------------------------|---------|----------------|--------------|-----------------------|
| • GMD-CR135-G10/01-1 -10 HP Tri. | 1631261 | 1 | 78,000 | |
| • GMD-CR135-G15/01-15 HP Tri. | 1631262 | 1 | 89,000 | |
| • GMD-CR135-G25/02-1 -25 HP Tri. | 1631263 | 1 | 114,000 | |



PERFORMANCE CURVES





| | STEP | MO | TOR | ΑN | /IP | | | | HE | AD mwh | | | | |
|--------------------|--------|----|-----|---------------|-------|-------|-------|-------|-------|---------|------|------|------|----|
| PUMP TYPE | NUMBER | | | _{II} | Ш | 7 | 8 | 13 | 16 | 17 | 18 | 19 | 23 | 24 |
| | | HP | KW | 220 V | 380 V | | | | FLO | OW m³/h | | | | |
| GMD-CR135-G10/01-1 | 1 | 10 | 7,5 | | 16,00 | 151,2 | 144,0 | 126,0 | 108,0 | 90,0 | 72,0 | 54,0 | 36,0 | - |

| | STEP | MO ⁻ | TOR | AN. | ИP | | | | HE | AD mwh | | | | |
|------------------|--------|-----------------|-----|-------|-------|-------|-------|-------|-------|---------|------|------|------|----|
| PUMP TYPE | NUMBER | | | l 11 | m | 11 | 17 | 20 | 22 | 24 | 27 | 28 | 36 | 39 |
| | | HP | KW | 220 V | 380 V | | | | FLO | OW m³/h | | • | | |
| GMD-CR135-G10/01 | 1 | 15 | 11 | | 23,50 | 151,2 | 144,0 | 126,0 | 108,0 | 90,0 | 72,0 | 54.0 | 36,0 | - |

| | STEP | MO | TOR | ΑN | /IP | | | | HE | AD mwh | | | | |
|--------------------|--------|----|------|---------------|-------|-------|-------|-------|-------|---------|------|------|------|----|
| PUMP TYPE | NUMBER | | | _{II} | Ш | 21 | 26 | 32 | 39 | 43 | 47 | 50 | 58 | 59 |
| | | HP | KW | 220 V | 380 V | | | | FLO | OW m³/h | | | | |
| GMD-CR135-G25/02-1 | 2 | 25 | 18,5 | | 40 | 151,2 | 144,0 | 126,0 | 108,0 | 90,0 | 72,0 | 54,0 | 36,0 | - |

| PUMP TYPE | MOTOR | VOLTAGE | | DI | MENS | SIONS (mm | 1) | | W | EIGHT (| Kg) |
|--------------------|------------|---------|------|-----|------|------------|-----|-----|--------|---------|--------------|
| | TYPE | (V) | А | В | ØС | D | Е | ØF | Pump | Motor | Total Weight |
| GMD-CR135-G10/01-1 | G 145MC/10 | 380 | 1286 | 666 | 145 | 6" *11 diş | 620 | 210 | 31,000 | 47,000 | 78,000 |
| GMD-CR135-G15/01 | G 145MC/15 | 380 | 1366 | 666 | 145 | 6" *11 diş | 700 | 210 | 31,000 | 58,000 | 89,000 |
| GMD-CR135-G25/02-1 | G 145MC/25 | 380 | 1692 | 822 | 145 | 6" *11 diş | 870 | 210 | 38,000 | 76,000 | 114,000 |



Plastic Body-Footed or Staked-Underwater/Landscape Lights



"Spot 14" Underwater Ornamental Light, Single Color.

Designed for fountains and landscape lighting.

72 SMD LEDs; complete with polycarbonate bulb body, epoxy PCB and 1.0 m long 2 x 0.75 cable. Mounting foot or stake type. 120° - IP68. The light can be used as a replacement bulb for LED conversion in all PAR38 bulb products available on the market. **The product is patented.**



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|----------|----------------|--------------|--------------------------|
| • 72 LED White - Footed 23 W | 1651140 | 1 | | |
| 72 LED Daylight - Footed 23 W | 1651141 | 1 | | |
| • 72 LED Turquoise - Footed 20 W | 1651142 | 1 | | |
| • 72 LED Blue - Footed 20 W | 1651145 | 1 | | |
| • 72 LED Red - Footed 20 W | 1651144 | 1 | | |
| • 72 LED Green - Footed 20 W | 1651143 | 1 | | |
| | | | | |
| • 72 LED White - Staked 23 W | 1651140K | 1 | | |
| • 72 LED Daylight - Staked 23 W | 1651141K | 1 | | |
| • 72 LED Turquoise - Staked 20 W | 1651142K | 1 | | |
| • 72 LED Blue - Staked 20 W | 1651143K | 1 | | |
| • 72 LED Red - Staked 20 W | 1651144K | 1 | | |
| • 72 LED Green - Staked 20 W | 1651145K | 1 | | |

"Spot 14" Fountain Underwater Light, RGB Color.

Designed for fountains and landscape lighting.

72 SMD LEDs; complete with polycarbonate bulb body, epoxy PCB and 1.0 m long 2 x 0.75 cable. Mounting foot or staked type. RGB 13 different light patterns for built-in models, RGB 16 light patterns for central integrated models. Switch from program to program with On-Off or remote control. 120° - IP68. The light can be used as a replacement bulb for LED conversion in all PAR38 bulb products available on the market. **The product is patented.**

| Description | Code | Pieces/ V | Weight Kg | Volume m ³ |
|---|----------|-----------|--------------|--------------------------|
| • 72 LED RGB - Built-in - Footed 20 W | 1651150 | 1 | | |
| • 72 LED RGB - Central Integrated-Footed 20 W | 1651151 | 1 | | |
| • 72 LED RGB - Built-in - Staked 20 W | 1651150K | 1 | | |
| • 72 LED RGB - Central Integrated-Staked 20 W | 1651151K | 1 | | |



St. Steel Body-Footed or Staked-Underwater/Landscape Lights

"Spot 14" Underwater Ornamental Light, Single Color.

Designed for fountains and landscape lighting. Stainless steel frame.

72 SMD LEDs; complete with polycarbonate bulb body, epoxy PCB and 1.0 m long 2 x 0.75 cable. Mounting foot or Staked type. 120° - IP68. The light can be used as a replacement bulb for LED conversion in all PAR38 bulb products available on the market. **The product is patented.**

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------------------------|-----------|----------------|--------------|--------------------------|
| • 72 LED White - Footed 23 W | 1651140S | 1 | | |
| • 72 LED Daylight - Footed 23 W | 1651141S | 1 | | |
| • 72 LED Turquoise - Footed 20 W | 1651142S | 1 | | |
| • 72 LED Blue - Footed 20 W | 1651143S | 1 | | |
| • 72 LED Red - Footed 20 W | 1651144S | 1 | | |
| • 72 LED Green - Footed 20 W | 1651145S | 1 | | |
| | | | | |
| • 72 LED White - Staked 23 W | 1651140KS | 1 | | |
| • 72 LED Daylight - Staked 23 W | 1651141KS | 1 | | |
| • 72 LED Turquoise - Staked 20 W | 1651142KS | 1 | | |
| • 72 LED Blue - Staked 20 W | 1651143KS | 1 | | |
| • 72 LED Red - Staked 20 W | 1651144KS | 1 | | |
| • 72 LED Green - Staked 20 W | 1651145KS | 1 | | |





"Spot 14" Underwater Ornamental Light, RGB Color.

Designed for fountains and landscape lighting. Stainless steel frame.

72 SMD LEDs; complete with polycarbonate bulb body, epoxy PCB and 1.0 m long 2 x 0.75 cable. Mounting foot or Staked type. RGB 13 different light patterns for built-in models, RGB 16 light patterns for central integrated models. Switch from program to program with On-Off or remote control. 120° - IP68. The light can be used as a replacement bulb for LED conversion in all PAR38 bulb products available on the market. The product is patented.

| Description | Code | Pieces/ Weight Volume box Kg m³ |
|---|-----------|------------------------------------|
| • 72 LED RGB - Built-in - Footed 20 W | 1651150S | 1 |
| • 72 LED RGB - Central Integrated-Footed 20 W | 1651151S | 1 |
| • 72 LED RGB - Built-in - Staked 20 W | 1651150KS | 1 |
| • 72 LED RGB - Central Integrated-Staked 20 W | 1651151KS | 1 |



Plastic Body-Footed or Staked-Underwater/Landscape Lights





"Spot 10" Underwater Ornamental Light, Single Color.

Designed for fountains and landscape lighting.

72 SMD LEDs; complete with polycarbonate bulb body, epoxy PCB and 1.0 m long 2 x 0.75 cable. Mounting foot or stake type. 120° - IP68. The light can be used as a replacement bulb for LED conversion in all PAR38 bulb products available on the market. **The product is patented.**

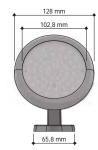
| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------------------------------|----------|----------------|--------------|--------------------------|
| • 72 LED White - Footed 10 W | 1651160 | 1 | | |
| • 72 LED Daylight - Footed 10 W | 1651161 | 1 | | |
| • 72 LED Turquoise - Footed 8 W | 1651162 | 1 | | |
| • 72 LED Blue - Footed 8 W | 1651163 | 1 | | |
| • 72 LED Red - Footed 8 W | 1651164 | 1 | | |
| • 72 LED Green - Footed 8 W | 1651165 | 1 | | |
| | | | | |
| • 72 LED White - Staked 10 W | 1651160K | 1 | | |
| • 72 LED Daylight - Staked 10 W | 1651161K | 1 | | |
| • 72 LED Turquoise - Staked 8 W | 1651162K | 1 | | |
| • 72 LED Blue - Staked 8 W | 1651163K | 1 | | |
| • 72 LED Red - Staked 8 W | 1651164K | 1 | | |
| • 72 LED Green - Staked 8 W | 1651165K | 1 | | |

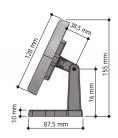
"Spot 10" Fountain Underwater Light, RGB Color.

Designed for fountains and landscape lighting.

72 SMD LEDs; complete with polycarbonate bulb body, epoxy PCB and 1.0 m long 2 x 0.75 cable. Mounting foot or staked type. RGB 13 different light patterns for built-in models, RGB 16 light patterns for central integrated models. Switch from program to program with On-Off or remote control. 120° - IP68. The light can be used as a replacement bulb for LED conversion in all PAR38 bulb products available on the market. The product is patented.

| Description | Code | Pieces/ Weight Volume box Kg m ³ |
|---|----------|--|
| • 72 LED RGB - Built-in - Footed 10 W | 1651170 | 1 |
| • 72 LED RGB - Central Integrated-Footed 10 W | 1651171 | 1 |
| • 72 LED RGB - Built-in - Staked 10 W | 1651170K | 1 |
| • 72 LED RGB - Central Integrated-Staked 10 W | 1651171K | 1 |







St. Steel Body-Footed or Staked-Underwater/Landscape Lights

"Spot 10" Underwater Ornamental Light, Single Color.

Designed for fountains and landscape lighting. Stainless steel frame.

72 SMD LEDs; complete with polycarbonate bulb body, epoxy PCB and 1.0 m long 2 x 0.75 cable. Mounting foot or Staked type. 120° - IP68. The light can be used as a replacement bulb for LED conversion in all PAR38 bulb products available on the market. **The product is patented.**

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---------------------------------|-----------|----------------|--------------|--------------------------|
| • 72 LED White - Footed 10 W | 1651160S | 1 | | |
| • 72 LED Daylight - Footed 10 W | 1651161S | 1 | | |
| • 72 LED Turquoise - Footed 8 W | 1651162S | 1 | | |
| • 72 LED Blue - Footed 8 W | 1651163S | 1 | | |
| • 72 LED Red - Footed 8 W | 1651164S | 1 | | |
| • 72 LED Green - Footed 8 W | 1651165S | 1 | | |
| | | | | |
| • 72 LED White - Staked 10 W | 1651160KS | 1 | | |
| 72 LED Daylight - Staked 10 W | 1651161KS | 1 | | |
| • 72 LED Turquoise - Staked 8 W | 1651162KS | 1 | | |
| • 72 LED Blue - Staked 8 W | 1651163KS | 1 | | |
| • 72 LED Red - Staked 8 W | 1651164KS | 1 | | |
| • 72 LED Green - Staked 8 W | 1651165KS | 1 | | |



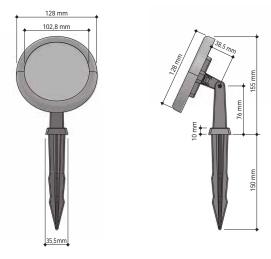


"Spot 10" Underwater Ornamental Light, RGB Color.

Designed for fountains and landscape lighting. Stainless steel frame.

72 SMD LEDs; complete with polycarbonate bulb body, epoxy PCB and 1.0 m long 2 x 0.75 cable. Mounting foot or Staked type. RGB 13 different light patterns for built-in models, RGB 16 light patterns for central integrated models. Switch from program to program with On-Off or remote control. 120° - IP68. The light can be used as a replacement bulb for LED conversion in all PAR38 bulb products available on the market. **The product is patented.**

| Description | Code | Pieces/ Weight Volume box Kg m ³ |
|---|-----------|--|
| • 72 LED RGB - Built-in - Footed 10 W | 1651170S | 1 |
| • 72 LED RGB - Central Integrated-Footed 10 W | 1651171S | 1 |
| • 72 LED RGB - Built-in - Staked 10 W | 1651170KS | 1 |
| • 72 LED RGB - Central Integrated-Staked 10 W | 1651171KS | 1 |





Plastic Body-Footed or Staked-Underwater/Landscape Lights





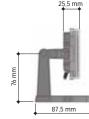


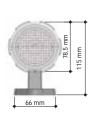
| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|----------|----------------|--------------|--------------------------|
| • 36 LED (3528) White - Footed 6 W | 1651180 | 1 | | |
| • 36 LED (3528) Daylight - Footed 6 W | 1651181 | 1 | | |
| • 36 LED (3528) Turquoise - Footed 4 W | 1651182 | 1 | | |
| • 36 LED (3528) Blue - Footed 4 W | 1651183 | 1 | | |
| • 36 LED (3528) Red - Footed 4 W | 1651184 | 1 | | |
| • 36 LED (3528) Green - Footed 4 W | 1651185 | 1 | | |
| | | | | |
| • 36 LED (3528) White - Staked 6 W | 1651180K | 1 | | |
| • 36 LED (3528) Daylight - Staked 6 W | 1651181K | 1 | | |
| • 36 LED (3528) Turquoise - Staked 4 W | 1651182K | 1 | | |
| • 36 LED (3528) Blue - Staked 4 W | 1651183K | 1 | | |
| • 36 LED (3528) Red - Staked 4 W | 1651184K | 1 | | |
| • 36 LED (3528) Green - Staked 4 W | 1651185K | 1 | | |

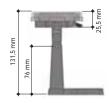
"Spot 11" Underwater Ornamental Light, RGB Color. Designed for fountains and landscape lighting. 36 SMD LEDs; complete with polycarbonate bulb body, epoxy PCB and 1.0 m long 2 x 0.75 cable. Mounting foot or Staked type. RGB 13 different light patterns for built-in models, RGB 16 light patterns for central integrated models. Switch from program to program with On- Off or remote control. 120 ° - IP68. The light can be used as a replacement bulb for LED conversion in all PAR38 bulb products available on the market. The product is patented.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|----------|-------------|--------------|--------------------------|
| • 36 LED (2835) RGB - Built-in - Footed 4 W | 1651190 | 1 | | |
| • 36 LED (2835) RGB - Central Integrated-Footed 4 W | 1651191 | 1 | | |
| • 36 LED (2835) RGB - Built-in - Staked 4 W | 1651190K | 1 | | |
| • 36 LED (2835) RGB - Central Integrated-Staked 4 W | 1651191K | 1 | | |













St. Steel Body-Footed or Staked-Underwater/Landscape Lights

"Spot 11" Underwater Ornamental Light, Single Color. Designed for fountains and landscape lighting. Stainless steel frame. 36 SMD LEDs; complete with polycarbonate bulb body, epoxy PCB and 1.0 m long 2 x 0.75 cable. Mounting foot or Staked type. 120° - IP68. The light can be used as a replacement bulb for LED conversion in all PAR38 bulb products available on the market. The product is patented.

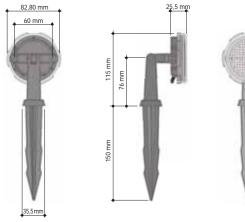
| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|-----------|----------------|--------------|--------------------------|
| • 36 LED (3528) White - Footed 6 W | 1651180S | 1 | | |
| • 36 LED (3528) Daylight - Footed 6 W | 1651181S | 1 | | |
| • 36 LED (3528) Turquoise - Footed 4 W | 1651182S | 1 | | |
| • 36 LED (3528) Blue - Footed 4 W | 1651183S | 1 | | |
| • 36 LED (3528) Red - Footed 4 W | 1651184S | 1 | | |
| • 36 LED (3528) Green - Footed 4 W | 1651185S | 1 | | |
| | | | | |
| • 36 LED (3528) White - Staked 6 W | 1651180KS | 1 | | |
| • 36 LED (3528) Daylight - Staked 6 W | 1651181KS | 1 | | |
| • 36 LED (3528) Turquoise - Staked 4 W | 1651182KS | 1 | | |
| • 36 LED (3528) Blue - Staked 4 W | 1651183KS | 1 | | |
| • 36 LED (3528) Red - Staked 4 W | 1651184KS | 1 | | |
| • 36 LED (3528) Green - Staked 4 W | 1651185KS | 1 | | |





"Spot 11" Underwater Ornamental Light, RGB Color. Designed for fountains and landscape lighting. Stainless steel frame. 36 SMD LEDs; complete with polycarbonate bulb body, epoxy PCB and 1.0 m long 2 x 0.75 cable. Mounting foot or Staked type. RGB 13 different light patterns for built-in models, RGB 16 light patterns for central integrated models. Switch from program to program with On-Off or remote control. 120° - IP68. The light can be used as a replacement bulb for LED conversion in all PAR38 bulb products available on the market. The product is patented.

| Description | Code | Pieces/ \ box | Weight Kg | Volume m ³ |
|---|-----------|---------------|--------------|--------------------------|
| • 36 LED (2835) RGB - Built-in - Footed 4 W | 1651190S | 1 | | |
| • 36 LED (2835) RGB - Central Integrated-Footed 4 W | 1651191S | 1 | | |
| • 36 LED (2835) RGB - Built-in - Staked 4 W | 1651190KS | 1 | | |
| • 36 LED (2835) RGB - Central Integrated-Staked 4 W | 1651191KS | 1 | | |





St. Steel Body -St. Steel Footed Underwater Lights



"SPOT 12" Underwater Ornamental Light, Single Color.

Designed for fountains and landscape lighting. Stainless steel lamp body with 3 Power LEDs; It is complete with 1.0 m long 2 x 0.75 cable. Light beam angle is 30°. The lamp complies with IP68 degree of protection at a nominal depth of 2 m.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|---------|----------------|--------------|--------------------------|
| • 3 Power LED White - AISI 304 - 9 W | 16631SF | 1 | | |
| • 3 Power LED Daylight - AISI 304 - 9 W | 16633SF | 1 | | |
| • 3 Power LED Blue - AISI 304 - 6 W | 16637SF | 1 | | |

If AISI 316 of the above lamps is requested, the code "01" should be added next to the existing code. Prices should be considered with a 20% increase.

"SPOT 12" Underwater Ornamental Light, RGB Color.

Designed for fountains and landscape lighting. Stainless steel lamp body with 3 Power LEDs; It is complete with 1.0 m long 2 x 0.75 cable. RGB 13 different light patterns for built-in models, RGB 16 light patterns for central integrated models. Light beam angle is 30°. The lamp complies with IP68 degree of protection at a nominal depth of 2 m.

| Description | Code | Pieces/ box | Weight Kg |
|---|---------|----------------|--------------|
| • 3 Power LED RGB -Built-in-AISI 304 - 6 W | 16635SF | 1 | |
| • 3 Power LED RGB -Central Integrated -AISI 304 - 6 W | 16636SF | 1 | |

If AISI 316 of the above lamps is requested, the code "01" should be added next to the existing code. Prices should be considered with a 20% increase.

"SPOT 12" Underwater Ornamental Light Foots.

| Description | Code | Pieces/ box | Weight Kg | Volume m³ |
|--|---------|----------------|--------------|--------------|
| AISI 304 Quality Lamp Foot + Body Connection Set | 1663003 | 1 | | |
| • AISI 316 Quality Lamp Foot + Body Connection Set | 1663002 | 1 | | |

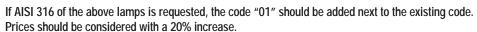


St. Steel Body -St. Steel Footed Underwater Lights

"SPOT 13" Underwater Ornamental Light, Single Color.

Designed for fountains and landscape lighting. Stainless steel lamp body with 6 Power LEDs; It is complete with 1.0 m long 2 x 0.75 cable. Light beam angle is 30°. The lamp complies with IP68 degree of protection at a nominal depth of 2 m.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|---------|----------------|--------------|--------------------------|
| • 6 Power LED White - AISI 304 - 15 W | 16651SF | 1 | | |
| • 6 Power LED Daylight - AISI 304- 15 W | 16653SF | 1 | | |
| • 6 Power LED Blue - AISI 304 - 13 W | 16657SF | 1 | | |





"SPOT 13" Underwater Ornamental Light, RGB Color.

Designed for fountains and landscape lighting. Stainless steel lamp body with 6 Power LEDs; It is complete with 1.0 m long 2 x 0.75 cable. RGB 13 different light patterns for built-in models, RGB 16 light patterns for central integrated models. Light beam angle is 30°. The lamp complies with IP68 degree of protection at a nominal depth of 2 m.

| Description | Code | Pieces/ box | Weight Kg |
|---|---------|----------------|--------------|
| • 6 Power LED RGB -Built-in-AISI 304- 13 W | 16655SF | 1 | |
| • 6 Power LED RGB -Central Integrated-AISI 304 - 13 W | 16656SF | 1 | |

If AISI 316 of the above lamps is requested, the code "01" should be added next to the existing code. Prices should be considered with a 20% increase.

"SPOT 13" Underwater Ornamental Light Foots.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|-----------|----------------|--------------|--------------------------|
| • AISI 304 Quality Lamp Foot + Body Connection Set | 1665002 | 1 | | |
| • AISI 316 Quality Lamp Foot + Body Connection Set | 1665002SS | 1 | | |



Massive Stainless Steel Body - Underwater Lights



Underwater Light Stainless Steel Body Single Color

Made of AISI 304 quality stainless steel. Pipe type. Complete with special transparent resin filled, epoxy PCB and 1 m long 2 x 1.5 cable. A tight fit is mounted inside a 32 mm, 40 mm and 50 mm PN10 pipe. 2 years sealing guarantee. "01" should be added next to AISI 316 Stainless Steel codes. Prices should be considered with a 20% increase.



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------------------------|--------|----------------|--------------|--------------------------|
| Microchrome for Ø32 mm pipe he | ousing | | | |
| • 3 LED White - 4 W | 16670 | 1 | | |
| • 3 LED Daylight - 4 W | 16671 | 1 | | |
| • 3 LED Turquoise - 4 W | 16672 | 1 | | |
| • 3 LED Blue - 4 W | 16673 | 1 | | |
| • 3 LED Red - 4 W | 16674 | 1 | | |
| • 3 LED Green - 4 W | 16675 | 1 | | |



| Mini Chrome for Ø40 mm pipe housing |] | |
|-------------------------------------|-------|---|
| • 3 LED White - 4 W | 16680 | 1 |
| • 3 LED Daylight - 4 W | 16681 | 1 |
| • 3 LED Turquoise - 4 W | 16682 | 1 |
| • 3 LED Blue - 4 W | 16683 | 1 |
| • 3 LED Red - 4 W | 16684 | 1 |
| • 3 LED Green - 4 W | 16685 | 1 |



| Midi Chrome for Ø50 mm pipe hous | ing | | |
|----------------------------------|-------|---|--|
| • 3 LED White - 4 W | 16690 | 1 | |
| • 3 LED Daylight - 4 W | 16691 | 1 | |
| • 3 LED Turquoise - 4 W | 16692 | 1 | |
| • 3 LED Blue - 4 W | 16693 | 1 | |
| • 3 LED Red - 4 W | 16694 | 1 | |
| • 3 LED Green - 4 W | 16695 | 1 | |

Underwater Light Stainless Steel Body RGB

RGB 13 different light patterns for built-in models, RGB 16 light patterns for central integrated models. Switch from program to program with On- Off or remote control. 2 years sealing guarantee. "01" should be added next to AISI 316 Stainless Steel codes. Prices should be considered with a 20% increase.

| Description | Code | Pieces/ | Weight Kg | Volume m ³ |
|--------------------------------------|-------|---------|--------------|--------------------------|
| Microshrome for 022 mm nine housing | | DOX | Ng | |
| Microchrome for Ø32 mm pipe housing | | | | |
| • 3 LED RGB - Built-in - Control 4 W | 16676 | 1 | | |
| • 3 LED RGB - Central Control 4 W | 16677 | 1 | | |
| | | | | |
| Mini Chrome for Ø40 mm pipe housing | | | | |
| • 3 LED RGB - Built-in - Control 4 W | 16686 | 1 | | |
| • 3 LED RGB - Central Control 4 W | 16687 | 1 | | |
| | | | | |
| Midi Chrome for Ø50 mm pipe housing | | | | |
| • 3 LED RGB - Built-in - Control 4 W | 16696 | 1 | | |
| • 3 LED RGB - Central Control 4 W | 16697 | 1 | | |



Plastic Body - Footed Underwater Lights

"SPOT 01"

PAR 38, 150 W or 120 W / 24 V plastic body, footed fountain light. Double cable outlets. Colored lens can be adapted.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------------------------------|---------|----------------|--------------|--------------------------|
| • | 05021 | 1 | | |
| • Ditto, with Stainless Steel Frame | 05021SF | 1 | | |



"SPOT 01"

Rainbow 9 PAR 38 RGB Power LED bulb, plastic body, footed fountain light. Central PCB. Double cable union. Including lens.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------------------------------|----------|----------------|--------------|--------------------------|
| • RGB Power LED-9 pcs | 160212 | 1 | | |
| • Ditto, with Stainless Steel Frame | 160212SF | 1 | | |

Ps: Regarding control panel and other options of RGB LED fountain lights, please see Section 5; "PAR 38 LED Bulbs"

"SPOT 02"

50 W/12 V refractory exclusive plastic body, footed fountain light.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|------------------------------|--------------------|----------------|--------------|--------------------------|
| • Single cable union. Outl | let at back. 05022 | 4 | | |
| • Ditto, Stainless Steel Fra | ame 05022C | 4 | | |



"SPOT 02"

Rainbow 36 PAR 38 RGB LED bulb, plastic body, footed fountain light. Central PCB.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------------------------------|---------|----------------|--------------|--------------------------|
| Single cable union. Outlet at back. | 160221 | 4 | | |
| Ditto, Stainless Steel Frame | 160221C | 4 | | |

Ps: Regarding control panel and other options of RGB LED fountain lights, please see Section 5; "Mini LED Bulbs"





Stainless Steel Body - Footed Underwater Lights



"SPOT 06"

Rainbow RGB Power LED bulb, AISI 304 quality stainless steel body, plastic footed fountain light. **Single cable union**. Outlet at back. Central control. With 50 cm Cable.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------------------------|-------|----------------|--------------|--------------------------|
| • Rainbow 9, 9 power LED | 16433 | 1 | | |
| • Rainbow 12, 12 power LED | 16434 | 1 | | |
| Stainless Steel Foot is optionel | | | | |



"SPOT 07"

Rainbow RGB Power LED bulb, AISI 304 quality stainless steel body, plastic footed fountain light. Single cable union. Outlet at back. Central control. With 50 cm Cable.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------------------------|-------|----------------|--------------|--------------------------|
| • Rainbow 15, 15 power LED | 16435 | 1 | | |
| • Rainbow 18, 18 power LED | 16436 | 1 | | |
| Stainless Steel Foot is optionel | | | | |

Stainless Steel Body -Underwater Lights with Fountain Nozzles



"SPOT 05"

Underwater light to be coupled with fountain nozzles. 304 quality stainless steel body and single union. 15° light angle with Power LED. Different Adaptors are used for different size nozzles (for exp. 1", 1 1/2", 2"). For this reason nozzles diameter should be mentioned during the order. (Nozzles are NOT included to the price). 13 different light models are avaliable and are controlled by a Central Control Panel. With 50 cm 4 x 15 Cable.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------|---------|----------------|--------------|--------------------------|
| • 12 Power LED | 16531SS | 1 | | |
| • 18 Power LED | 16532SS | 1 | | |



Underwater light coupled with Finger fountain nozzle. 304 quality stainless steel body and single union. Nozzle (Ø10 mm) bottom connection is with swivel system and regulation valve (1/2" or 1"). 15° light angle with Power LED. 13 different light models are avaliable and are controled by a Central Control Panel. With 50 cm 4 x 15 Cable.



| Description | Code | Pieces/ box | Weight Kg | Volume m³ |
|---------------------|---------|----------------|--------------|--------------|
| • 6 Power LED, 1/2" | 16432F1 | 1 | | |
| 6 Power LED, 1" | 16432F2 | 1 | | |
| • 9 Power LED, 1/2" | 16433F1 | 1 | | |
| • 9 Power LED, 1" | 16433F2 | 1 | | |

- Ps: 1- Regarding control panel and other options of RGB LED fountain light, please have a look at relevant section to "RGB LED Bulbs Control Panels"
 - 2- All the lights mentioned above can be produced "Double Union" according to demand. And can be connected serial.
 - 3- All the lights mentioned above can be 1, 1,5 and 2 m cable length. Please ask price.



Stainless Steel Body - Underwater Lights for Fountains

"SPOT 09-K"

Underwater light combined with fountain nozzles. 304 quality stainless steel body and single union. Also nozzle (Ø10 mm) bottom connection is with swivel system and regulation valve (1/2" or 1"). 15° light angle with Power LED. 13 different light models are available and controlled by a Central Control Panel. With 50 m cable.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------------------------|---------|----------------|--------------|--------------------------|
| 9 Power LED, With 1" Fountain | 16433F3 | 1 | | |



Stainless Steel Pool Light Foots

Adjustable for all type stainless steel body underwater lights.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-----------|----------------|--------------|--------------------------|
| • Single | 16431Y015 | 1 | | |
| • Double | 16431Y025 | 1 | | |



Dry Pool Systems

Dry surface fountain desgined on a bunker walking floor grade made out concrete or polyester and dimensions light combinations 304 quality stainless steel. Dismountable cover and frame. Light housings are designed for SPOT 6. Fountain port is for fountains max. 2". Different designs can be done according to demand.

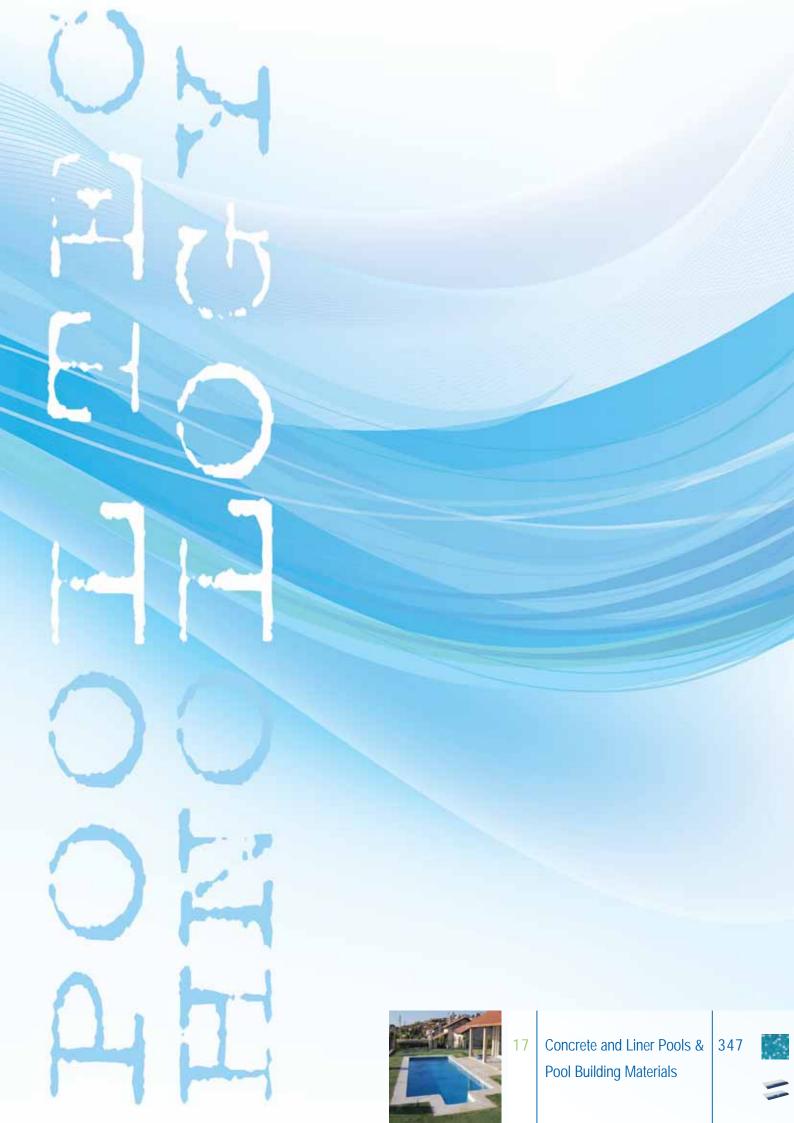
| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------|----------|----------------|--------------|--------------------------|
| • 300 x 300 mm | 16433DF1 | 1 | | |
| • 400 x 400 mm | 16433DF2 | 1 | | |
| • 500 x 500 mm | 16433DF3 | 1 | | |





- Ps: 1- Regarding control panel and other options of RGB LED fountain light, please have a look at relevant section (5th) to "RGB LED Bulbs Control Panels"
 - 2- All the lights mentioned above can be produced "Double Union" according to demand. And can be connected serial.
 - 3- All the lights mentioned above can be 1, 1,5 and 2 m cable length. Please ask price.





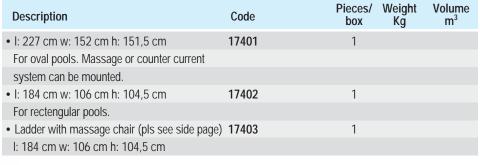
Concrete and Liner Pool Construction Materials



Skimmer Liner Pool Ladders

GEMAS Embedded Liner Pool Ladder. Made of FR polyester and reinforced with wood. Complete with Connection Flange and PVC concealing flange. Anti-slip steps.







17402

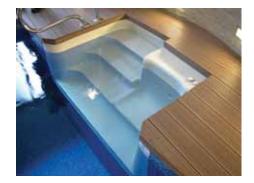




17403



- · 2 x Massage Station
- 1 x Counter current



- · Ladder with massage chair
- · Composite Deck

PVC Liner Repair Kit

Liner Repair Kit. 30 ml. Can be used for underwater repairs.



| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------|-------|----------------|--------------|--------------------------|
| | 17211 | | 0,116 | |



Concrete and Liner Pool Construction Materials

In-Pool Insulation Materials

Gemas In-Pool Isolation Material. Used for leak proofing in swimming pools and fountains. Fully elastic, UV filtered, cement added, two-compound waterproofing.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--|-------|----------------|--------------|--------------------------|
| • Gemas PL207, 10 kg Liquid + 20 kg Powder - Gray | 17310 | 1 | 30,000 | |
| • Gemas PL207, 10 kg Liquid + 20 kg Powder - White | 17311 | 1 | 30,000 | |





Gemas Joint Tape and Adhesive. Used for closing static capillary cracks and joins between the pool wall and floor. Tape size 0.20 x 100 m. Prices are per roll. Adhesive average consumption 1.65 - 2.75 kg/m²

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|----------------------------------|-------|----------------|--------------|--------------------------|
| Gemas Joint Tape | 17312 | 4 | | |
| • Gemas PL05N-01 Adhesive, 10 kg | 17313 | 1 | 10,000 | |
| • Gemas PL05N-01 Adhesive, 20 kg | 17314 | 1 | 20,000 | |

Gemas Concrete Waterproofing Primer. Used as primer before painting on reinforced concrete and screed. Average consumption is 8000 - 1000 gr/m².

| Description | Code | Pieces/ Weight Volume box Kg m ³ |
|---|-------|--|
| Gemas PL302, 20 kg Liquid + 6 kg Powder | 17315 | 1 26,000 |

Gemas Shock Water Breaker Concrete Admixture. Used for stopping pressurized water leaking. Consumption changes according to the surface condition, application thickness, loss such as spillage and cavity filling against water leaks. It is recommended to make trial mixes for optimum mixing ratio, workability and setting time. For wet system shotcrete, it is recommended to use between 3% and 6% of the weight of the binder for 20 cm thick layers.

| Description | Code | Pieces/ box | Weight \ | Volume m ³ |
|--------------------|-------|----------------|----------|--------------------------|
| • Gemas BK03, 1 kg | 17316 | 1 | 1,000 | |
| • Gemas BK03, 5 kg | 17317 | 1 | 5,000 | |

Gemas Pool Paint. Used in natural swimming pools, fountains, thermal pools (up to max. 70° temperatures), fish breeding pools, drinking water tanks, ponds, dams, water channels, water tanks. Consumption varies according to surface condition, application thickness, spillage and void conditions. 200 gr/m² on the first floor, 200 gr/m² on the second floor. On reinforced concrete surfaces, waterproofing is applied after the primer coat.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------------------|-------|----------------|--------------|--------------------------|
| Gemas Pool Paint, 20 kg | 17318 | 1 | 20,000 | |

Pool Paints



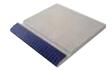
Concrete and Liner Pool Construction Materials_



Porcelain Pool Handle and Antislip







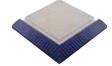
| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|---------|----------------|--------------|--------------------------|
| • 12,2 x 24,5 x 2 cm Handle | 1711AP | | | |
| • 12,2 x 24,5 x 0,9 cm Antislip | 1712AP | | | |
| • 24,5 x 24,5 x 2 cm Square Handle | 1714P | | | |
| • 12 x 12 cm Handle Internal Corner | 1711CI1 | | | |
| • 24,5 x 24,5 cm Square Handle | 17141 | | | |
| • 24,5 x 24,5 cm Handle Internal Corner | 1714CI1 | | | |
| • 12 x 12 x 0,9 cm Antislip Internal Corner | 1711C01 | | | |
| • 12 x 12 cm Handle External Corner | 1714 | | | |
| • 24,5 x 24,5 cm Handle External Corner | 1714C01 | | | |
| • 12 x 12 x 0,9 cm Antislip External Corner | 1712C01 | | | |













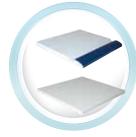
Porcelain Pool Handle and Antislip - Striped Design



| Description | Code | Pieces/ Weight box Kg | Volume m ³ |
|--|--------|--------------------------|--------------------------|
| • 12,2 x 24,5 x 2 cm Handle | 1711A | 11,050 | 0,008 |
| • 12,2 x 24,5 x 1,5 cm Antislip | 1712 | 12,840 | 0,008 |
| • 12,2 x 24,5 x 0,8 cm Stair-Step Antislip | 1713 | 12,696 | 0,007 |
| • 12,2 x 24,5 x 0,8 cm Antislip | 1712A | 9,346 | 0,007 |
| • 24,5 x 24,5 x 2 cm Square Handle | 1714 | | |
| • 24,5 x 24,5 x 0,8 cm Square Antislip | 1715 | | |
| Handle Internal Corner (for 1711) | 1711CI | 11,376 | 0,008 |
| Handle External Corner (for 1711) | 1711CO | 11,376 | 0,008 |
| Antislip Internal Corner (for 1712) | 1712CI | 10,100 | 0,008 |
| Antislip External Corner (for 1712) | 1712CO | 10,100 | 0,008 |
| Handle Internal Corner (for 1714) | 1714CI | | |
| Handle External Corner (for 1714) | 1714CO | | |
| Antislip Corner (for 1715) | 1715C | | |



1713 - 1712A



1714 - 1715



1711CO - 1712CO



Concrete and Liner Pool Construction Materials

Glass Mosaics

GEMAS GLASS MOSAICS.

| Description | Code | Pieces/ Weight Volume box Kg m ³ |
|--|-------|--|
| • KSMS-01 Sprayed Turquoise 38 x 38 cm | 17062 | |
| • KSMS-01 Sprayed Blue 38 x 38 cm | 17061 | |
| • KSMS-01 Sprayed Turquoise 25 x 25 cm | 17041 | |
| • KSMS-02 Sprayed Blue 25 x 25 cm | 17031 | |
| • MIX-13 Mix Blue 25 x 25 cm | 17011 | |
| • MIX-15 Mix Blue + White 25 x 25 cm | 17051 | |





38 x 38 KSMS-01









Leakproofing Meterials

"Fix a leak" leakproofing chemical. Prevents leakage on the body or mechanical installation of filled pools. No matter what construction material of pool or massage pool is, it can be used successfully with installation materials such as PVC, ABS, poly plastics, copper, steel etc. A single bottle of "fix a leak" is efficient per 100 m³ pool. Minimum volume of water that a full bottle can be implemented is 2 m³. If a more concentrated implementation is required, pool should be drained after the implementation process. Please request usage instructions for further details.



| Description | Code | Pieces/ Weight Volume box Kg m ³ |
|----------------------------------|-------|--|
| FİX A LEAK Leakproofing Chemical | 17301 | 1 1,300 |



Concrete and Liner Pool Construction Materials.



Galit 103

PVC Membrane Pool Coating



8273 Antislip Blue



8272 Antislip Blue

Coating Membrane: 1,5 mm wall thickness. Manufactured of laminated double layer PVC film and fortified with polyester mesh. Can be implemented in every type of pools by using equipments of a liner pool. Sold per 25 m roll. Price per m².

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|---|-------|----------------|--------------|--------------------------|
| • 8273 Blue-Width: 1,65 m | 17201 | | | |
| • 8272 Light blue-Width: 1,65 m | 17202 | | | |
| • Snapir 102 Mosaic pattern-Width: 1,65 m | 17203 | | | |
| Galit 103 Marble pattern-Width: 1,65 m | 17204 | | | |
| 8273 Antislip blue-Width: 1,60 m | 17205 | | | |
| • 8272 Antislip blue-Width: 1,60 m | 17206 | | | |
| | | を記 | 24 | |

PS: Colour of above pictures may differ from original products.

8272 Light blue

8273 Blue

Economic PVC Membrane: 1,5 mm wall thickness. Manufactured of laminated double layer PVC film and fortified with polyester mesh. Can be implemented in every type of pools by using equipments of a liner pool. Sold per 25 m roll. Price per m².

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|--------------------------------------|-------------|----------------|--------------|--------------------------|
| • Eco Blue - Width: 1,65/2,00 m | 17201E | | | |
| • Square Mosaic - Width: 1,65/2,00 m | 17207 | | | |
| • Rome Mosaic - Width: 1,65/2,00 m | 17203E | | | |
| • Water Pattern - Width: 1,65/2,00 m | 17208 | | | |
| | | | | 1 |
| Eco Blue Square Mosaic | Rome Mosaic | : | Water P | attern |

PS: Colour of above pictures may differ from original products.

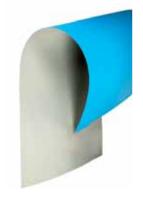


Concrete and Liner Pool Construction Materials

PVC Membrane Pool Coating

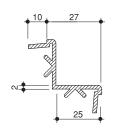
PVC laminated Stainless sheet. PVC laminated Stainless sheet with dimensions of 2 x 1 m. Used as a detection strip in PVC membrane covered pools.

| Description | Code | Pieces/ Weig box Kg | ght Volume J m ³ |
|--|-------|------------------------|--------------------------------|
| Blue - price per piece | 17214 | 1 | |
| PVC special conduit side profile (m) | 03752 | | |











Overflow Detailed

Liquid PVC - 1 I.

| Description | Code | Pieces/ box | Weight Kg | Volume m ³ |
|-------------------|-------|----------------|--------------|--------------------------|
| • Light blue 8272 | 17212 | 1 | | |
| • Blue 8273 | 17213 | 1 | | |











Quality Policy

GEMAS Genel Muhendislik Mekanik Sanayi ve Ticaret A.S. targets to be a universally well known company in its sector.

In order to achieve that

Gemas embraces:

- Constant increase in customer satisfaction.
- Continuous development in production technology and efficiency.
- Continuous progress in all activities as the main principles of the company.

Genel Manager İbrahim ÜSTÜNES

Date of Issue: 30.03.2005



Safe Swimming Pleasure!

All over your pool; from construction materials to installation, from lighting to filtration, from disinfection to heating, from cleaning to massage equipment - shortly, we are in your pool, outside, and in the engine room! You can trust us.

Polyester Laminated/Bobbin Wound and Plastic Body Sand Filters ➤ Self-priming Pool Pumps ➤ Multiport valves ➤ PVC Fittings ➤ Skimmers ➤ Underwater Lights ➤ Transformers ➤ Pool Ladders ➤ Diving Boards ➤ Automatic Disinfection Systems ➤ Salt-Water Chlorinators ➤ Return Inlets ➤ Main Drains ➤ Overflow Gratings ➤ Automatic Pool Cleaners and Accessories ➤ Olympic Pool Accessories ➤ Plastic Valves and Fittings ➤ Pool Chemicals ➤ Heaters ➤ Fountain Nozzles ➤ Stropool Fast Pool Systems.



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GENERAL TERMS OF TRADING

Art.1. Price

Quoted prices are exclusive of VAT and of delivery. If delivery is to be organized by GEMAS, the Customer is liable to pay delivery charges to GEMAS.

Art. 2. Specifications

In order to improve the quality of our products, GEMAS shall not be under a liability in respect of specifications, illustrations or other matter in relation to goods contained in any material such as brochures, price list or trade publications, descriptive or advertising matter or delivery notes other than in respect of specifications expressly set out in GEMAS' acknowledgment order.

Art. 3. Orders

No liability shall be attached to GEMAS, its agent or employees in respect of any representation or statement made, whether before or after agreement is reached, unless confirmed in written by GEMAS. In case of cancellation of a special order, we reserve the right to invoice all the items included in the manufacturing of this product or order.

Art. 4 Payment

Subject to any special terms agreed in writing between GEMAS and the Customer, for the first order payment for the goods shall be made in cash net with order, and delivery shall not be made until payment has been received in full set by GEMAS. In the event of default in payment by the due date, GEMAS reserves the right to charge interest on all amounts overdue at the rate of 1% calculated on a monthly basis (a part of a month being treated as a full month for this purpose) until payment in full is made and to suspend delivery or terminate the contract in respect of any of the goods or services delivered to the Customer. If GEMAS takes any legal action against a customer for a non-payment, the Customer will have to pay 20% fees of the total due amount. The Customer accepts that the liabilities of GEMAS caused by the guarantee conditions cannot be an excuse for the Customer's delay in payment.

Art. 5. Delivery

Our goods are sold ex-works izmir - Turkey. GEMAS may organize the carriage of the goods to the Customer if it is specified so in the order acknowledgement. Notification of short deliveries or loss or damage to goods in transit must be made in writing to the transport company within three working days of the date when the goods have or should have been delivered. GEMAS shall bear no liability therefore unless such notification is made by the Customer and confirmed by GEMAS. Any date or time given by GEMAS to the Customer for the delivery of the goods is an estimate only. While GEMAS will always endeavor to meet dates or times given or specified by either party, no such dates or times shall be binding on GEMAS or form part of the contract. GEMAS will not accept any order cancellation, nor penalties in case of a late delivery. The Customer will bear the cost of any urgent courier dispatch.

Art. 6. Goods return

No goods shall be returned without our previous acceptance within 8 days. The Customer will bear the transport costs. If the return is accepted the Customer shall pay 15% of the invoiced value.

Art. 7. Guarantee

GEMAS warrants the goods to be of satisfactory quality from the dispatch date and takes effects after full payment of the goods. The guarantee expires once the goods have been modified out of factory. The guarantee is limited to the replacement or repair of the parts which have been proved defective, therefore no labor, no travelling expenses, no transport, no damage nor whatsoever compensation may be claimed to GEMAS. The guarantee applies only if the installation complies with professional standards. Guarantee liability of GEMAS is only to the Customer, and does not include the third parties, such as the customers of the Customer.

Art. 8. Title to the goods

Notwithstanding delivery and the passing of risk in the goods, or any other provision of these conditions, title in the goods remains vested in GEMAS and shall only pass from GEMAS to the Customer upon full payment being made by the Customer of all sums due, on whatever account or grounds to GEMAS. In the event of goods being sold by the Customer in such a manner as to pass to a third party a valid title to the goods, whilst any such sums are due to GEMAS, GEMAS' right under this condition shall attach to such part of the proceeds of sales as is equivalent to the sums due to GEMAS and the Customer shall place the relevant part of the proceeds of sale in a separate account. Until such time as title to the goods passes to the Customer, the Customer shall hold the goods as GEMAS' fiduciary agent and bailee, and shall keep the goods separate from those of the Customer and the third parties and properly stored, protected and insured and identified as GEMAS' property. Until that the time the Customer shall be entitled to resell or use the goods in the ordinary course of its business, but shall account to GEMAS for proceeds of sale or otherwise of the goods whether tangible or intangible, including insurance proceeds, and shall keep all such proceeds separate from any money or property of the Customer and third parties and this case of tangible proceeds properly stored, protected and insured. Until such time as title to the goods passes to the Customer (and provided goods are still in existence and have not been resold) GEMAS shall be entitled at any time to require the Customer to deliver up the goods to GEMAS and if the Customer fails to do so forthwith, to enter upon any premises of the Customer or any third parties where the goods are stored and repossess the goods.

Art. 9. Claims

The application of these provisions is exclusively governed by the Turkish laws. In case of any dispute arising from the execution of an order in all or part of its modalities or regarding the interpretation of these general terms, the only competent shall be the Turkish courts, even in the case of a plurality of defendants, appeals to guarantee or indivisible or connected requests.

BANK ACCOUNT

HALKBANK IBAN No:

TR29 0001 2009 7290 0058 0001 94 (€)

TR21 0001 2009 7290 0053 0001 82 (\$)

SWIFT CODE: TRHBTR2AXXX

GARANTI BANK IBAN No:

TR73 0006 2000 4480 0009 0719 05 (€)

TR03 0006 2000 4480 0009 0719 04 (\$)

SWIFT CODE: TGBATRISXXX