

HIDRÁULICA



Industrial Hydraulics

Components & System Solutions



PL PX

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Introduction

Parker Hannifin Corporation	1
Industrial Hydraulic Products & Systems	2
Total System Solutions	4
Value Added Programs	5
Hydraulic Technology Centers	6
Industrial Hydraulic Product Applications	7
Industrial Hydraulic Components	8

Product Range

Pumps

Piston	10
Vane	12
Gear	12
Flow Dividers/Intensifiers	15

Motors

Low Speed High Torque	16
Electric: Close Coupled	18
High Speed	19

Power Units	20
--------------------------	----

Compact Hydraulics	22
---------------------------------	----

Cylinders	24
------------------------	----

Valves

Hydraulic	26
Electrohydraulic	29
DIN Cartridge	31
Auxiliary	31
Threaded Cartridge	32

Rotary Actuators	34
-------------------------------	----

Accumulators	36
---------------------------	----

Filtration	38
-------------------------	----

Fluid Analysis	40
-----------------------------	----

Fluid Connectors

Brass Products	41
Thermoplastic Products	42
Tube Fittings	43
Rubber Hose Products	44
Quick Couplings	45

Information

Sales Offices	46
----------------------------	----

Contact Information	48
----------------------------------	----

CD Catalog	49
-------------------------	----

Pumps Piston

PAVC



- High strength cast iron housing
- Built in supercharger
- High sideload capacity
- Sealed shaft bearing option
- Two piece housing
- Cartridge controls
- Airbleed valve
- Thru-shaft option (PAVC100)
- Optional port location
- Full pressure rating on water glycol fluids
- Control drain may be filtered and/or cooled

Frame size PAVC	-33	-38	-65	-100
Displacement (cm ³ /rev) (in ³ /rev)	33 2.0	38 2.3	65 4.0	100 6.1
Max continuous pressure (Bar) (PSI)	207 3000	207 3000	207 3000	207 3000
Max self priming speed at 0 PSI gauge (rpm)	3000	3000	3000	3000

PVP



- High strength cast iron housing
- Modular controls
- Fast response times
- Thru-shaft options
- Optional port location
- 9 and 11 piston design
- English and metric mounting features
- Low control pressures

Frame size PVP	-16	-23	-33	-41	-48	-60	-76	-100	-140
Displacement (cm ³ /rev) (in ³ /rev)	16 1.0	23 1.4	33 2.0	41 2.5	48 2.9	60 3.7	76 4.6	100 6.1	140 8.5
Max continuous pressure (Bar) (PSI)	248 3600	248 3600	248 3600	248 3600	248 3600	248 3600	248 3600	248 3600	248 3600
Max self priming speed at 0 PSI gauge (rpm)	3000	3000	3000	2800	2600	2200	2200	1800	1800

PVplus



- High strength cast iron housing
- Modular controls
- Large control piston
- Thru-shaft option
- 9 piston design
- Multiple pressure control
- English and metric mounting features
- Reduced flow and pressure ripple

Frame size PVplus	-16	-20	-23	-32	-40	-46	-63	-80	-92	-140	-180	-270
Displacement (cm ³ /rev) (in ³ /rev)	16 .98	20 1.2	23 1.4	32 1.9	40 2.4	46 2.8	63 3.8	80 4.8	92 5.6	140 8.5	180 10.9	270 16.5
Max continuous pressure (Bar) (PSI)	345 5000	345 5000	345 5000	345 5000	345 5000	345 5000	345 5000	345 5000	345 5000	345 5000	345 5000	345 5000
Max self priming speed at 0 PSI gauge (rpm)	2750	2750	2750	2400	2400	2400	2400	2300	2200	2400	2200	1800



PHP



- High strength cast iron housing
- Modular controls
- Fast response times
- Thru-shaft options
- Optional port location
- 9 and 11 piston design
- English and metric mounting features
- Low control pressures

Frame size PHP	-10	-40	-60
Displacement (cm ³ /rev) (in ³ /rev)	10 0.6	40 2.4	60 3.7
Max continuous pressure (Bar) (PSI)	345 5000	345 5000	345 5000
Max self priming speed at 0 PSI gauge (rpm)	3000	2800	2200

RCM



RCM Series remote compensator control modules are designed specifically for remotely controlling pressure compensated pumps. Available with single, two or three pressure controls as well as single or two pressure with low pressure standby.

- Direct-acting cartridge type
- Excellent repeatability and stability
- Low leakage, 2-way poppet type solenoid valves
- Replaceable coils with 120VAC or 24VDC option
- Manual override is standard
- Steel bodies with black oxide finish
- Panel mountable

Frame size RCM	1	1L	2/2P	2LP	3P
Rated flow (LPM) (GPM)	0.19 0.5	0.19 0.5	0.19 0.5	0.19 0.5	0.19 0.5
Max pressure (Bar) (PSI)	345 5000	276 4000	276 4000	276 4000	276 4000

PE



- Compact design (small envelope size) and unique port layout for easy installation
- Rigid housing design
- Reduced pressure ripple
- Short response times
- Long service life
- Flexible, modular design

Frame size PE	060	075	105	145
Displacement (cm ³ /rev) (in ³ /rev)	60 3.66	75 4.58	105 6.41	145 8.85
Max continuous pressure (Bar) (PSI)	320 4600	320 4600	320 4600	320 4600
Max self priming speed at 15 PSI gauge (rpm)	2800	2500	2300	2200

Pumps Vane

PFVI



- 12 vane cartridge design
- Design facilitates field service and conversions
- Wide selection of pumps to meet complex circuit requirements
- Efficient, simple design
- High tolerance to system contamination
- Hydraulically balanced for reduced bearing loads and long pump life
- Mount piston, gear and other vane pumps on common drive shaft
- Ideal for "HI/LO" pump circuits

Frame size PFVI	25	35	45
Displacement (cm ³ /rev) (in ³ /rev)	38-66 2.3-4.0	79-120 4.8-7.3	132-189 8.1-11.6
Max continuous pressure (Bar) (PSI)	172 2500	172 2500	172 2500
Max speed (rpm)	1800	1800	1800

Pumps Gear

PGP 500 Series



- Superior performance
- High efficiency
- Low noise operation at high operating pressures
- International mounts and connections
- Integrated valve capabilities
- Common inlet multiple pump configurations

Frame size PGP505	-2	-3	-4	-5	-6	-7	-8	-9	-10	-11	-12
Displacement (cm ³ /rev) (in ³ /rev)	2 .12	3 .18	4 .24	5 .31	6 .37	7 .43	8 .49	9 .55	10 .61	11 .67	12 .73
Max continuous pressure (Bar) (PSI)	275 3988	275 3988	275 3988	275 3988	275 3988	275 3988	275 3988	250 3625	250 3625	250 3625	220 3190
Max speed at 0 inlet & max outlet pressure (rpm)	4000	4000	4000	4000	3600	3300	3000	2900	2800	2400	2400

Frame size PGP511	-6	-7	-8	-10	-11	-14	-16	-18	-19	-21	-23	-27	-28	-31
Displacement (cm ³ /rev) (in ³ /rev)	6 .37	7 .43	8 .49	10 .61	11 .67	14 .85	16 .98	18 1.10	19 1.16	21 1.28	23 1.40	27 1.65	28 1.71	31 1.89
Max continuous pressure (Bar) (PSI)	275 3988	275 3988	275 3988	275 3988	275 3988	275 3988	275 3988	275 3988	275 3988	235 3408	235 3408	200 2900	195 2828	195 2828
Max speed at 0 inlet & max outlet pressure (rpm)	4000	4000	4000	3600	3600	3300	3000	3000	3000	2800	2800	2400	2300	2300

Frame size PGP517	-14	-16	-19	-23	-25	-28	-33	-36	-38	-44	-52
Displacement (cm ³ /rev) (in ³ /rev)	14 .85	16 .98	19 1.16	23 1.40	25 1.53	28 1.71	33 2.01	36 2.20	38 2.32	44 2.68	52 3.17
Max continuous pressure (Bar) (PSI)	250 3625	250 3625	250 3625	250 3625	250 3625	250 3625	250 3625	250 3625	250 3625	220 3190	200 2900
Max speed at 0 inlet & max outlet pressure (rpm)	3400	3400	3300	3300	3100	3100	3100	3000	3000	2800	2700



PGP300 Series



- Three-piece cast iron construction
- Low friction bushing design
- Single, multiple, piggyback and thru-drive assemblies
- Heavy duty applications
- Long life in severe operating environments
- Integrated or bolt-on valve options available
- Can be configured as pump or motor

Frame size PGP315/PGM315	-05	-06	-07	-08	-10	-11	-12	-13	-15	-16	-17	-18	-20
Displacement (cm ³ /rev)	10.2	12.7	15.2	17.8	20.3	22.9	25.9	27.9	30.5	33.0	35.6	38.1	40.6
(in ³ /rev)	.620	.775	.930	1.09	1.24	1.40	1.55	1.711	1.86	2.02	2.17	2.33	2.48
Max continuous pressure (Bar)	241	241	241	241	241	241	241	241	228	214	200	186	172
(PSI)	3500	3500	3500	3500	3500	3500	3500	3500	3300	3100	2900	2700	2500
Max speed (rpm)	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000

Frame size PGP330/PGM330	-05	-07	-10	-12	-15	-17	-20
Displacement (cm ³ /rev)	16.1	24.2	32.3	40.4	48.4	56.5	64.6
(in ³ /rev)	.985	1.47	1.97	2.46	2.95	3.44	3.94
Max continuous pressure (Bar)	241	241	241	241	241	224	207
(PSI)	3500	3500	3500	3500	3500	3250	3000
Max speed (rpm)	3000	3000	3000	3000	3000	3000	3000

Frame size PGP350/PGM350	-05	-07	-10	-12	-15	-17	-20	-22	-25
Displacement (cm ³ /rev)	20.9	31.3	41.8	52.2	62.7	73.1	83.6	94.0	104.5
(in ³ /rev)	1.28	1.91	2.55	3.19	3.82	4.46	5.10	5.73	6.38
Max continuous pressure (Bar)	241	241	241	241	241	224	207	190	172
(PSI)	3500	3500	3500	3500	3500	3250	3000	2750	2500
Max speed (rpm)	2400	2400	2400	2400	2400	2400	2400	2400	2400

Frame size PGP365/PGM365	-07	-10	-12	-15	-17	-20	-22	-25
Displacement (cm ³ /rev)	44.3	59.0	73.8	88.5	103.3	118.0	132.8	147.5
(in ³ /rev)	2.70	3.60	4.50	5.40	6.30	7.20	8.10	9.00
Max continuous pressure (Bar)	241	241	241	241	241	241	224	207
(PSI)	3500	3500	3500	3500	3500	3500	3250	3000
Max speed (rpm)	2400	2400	2400	2400	2400	2400	2400	2400

P16



- Aluminum flange and cover
- Cast iron gear plate
- Clockwise or counter-clockwise rotation
- Flows to 38 GPM per section
- Journal bearings
- Available with fluorocarbon seals
- Available in tandem and piggy-back configurations
- Integral priority valve available
- Electric clutches available

Frame size P16	-45	-65	-85	-100	-115	-150	-180	-200
Displacement (cm ³ /rev) (in ³ /rev)	14.4 0.89	20.8 1.27	27.3 1.67	32.2 1.96	36.7 2.24	48.1 2.93	57.5 3.51	63.9 3.90
Max continuous pressure (Bar) (PSI)	207 3000	207 3000	207 3000	207 3000	207 3000	207 3000	152 2200	138 2000
Max speed (rpm)	3600	3600	3400	3300	3100	2800	2500	2200

P20



- Aluminum or cast iron construction
- Clockwise or counter-clockwise rotation
- Flows to 98 GPM per section
- Journal bearings
- Available with fluorocarbon seals
- Available in tandem and piggy-back configurations
- Available with integral logic valves

Frame size P20	-100	-150	-200	-250	-300	-350	-400	-450
Displacement (cm ³ /rev) (in ³ /rev)	32.9 2.01	49.5 3.02	66.2 4.04	82.9 5.06	99.1 6.05	115.9 7.07	132.4 8.08	149.1 9.10
Max continuous pressure (Bar) (PSI)	172 2500	172 2500	172 2500	172 2500	145 2100	124 1800	172 2500	172 2500
Max speed (rpm)	2500	2500	2500	2500	2500	2500	2500	2500

P25



- Aluminum or cast iron construction
- Clockwise or counter-clockwise rotation
- Flows to 208 GPM per section
- Journal bearings
- Available with fluorocarbon seals
- Available in tandem and piggy-back configurations

Frame size P25	-300	-350	-400	-450	-500	-550	-660	-770	-950
Displacement (cm ³ /rev) (in ³ /rev)	99.1 6.05	115.9 7.07	132.4 8.08	149.1 9.10	164.7 10.05	181.2 11.06	219.9 13.42	254.4 15.50	315.0 19.22
Max continuous pressure (Bar) (PSI)	207 3000	207 3000	207 3000	207 3000	172 2500	172 2500	172* 2500*	172* 2500*	172* 2500*
Max speed (rpm)	2500	2500	2500	2500	2500	2500	2500	2500	2500

*Consult factory

HP7



- Aluminum or cast iron construction
- Clockwise or counter-clockwise rotation
- Flows to 116 GPM per section
- Journal bearings
- Available with fluorocarbon seals
- Also available as tandem and piggy-back configuration pump

Frame size HP7	-250	-300	-350	-400	-450	-500	-550
Displacement (cm ³ /rev)	82.9	99.1	115.9	128.3	143.4	159.8	176.0
(in ³ /rev)	5.06	6.05	7.07	7.83	8.75	9.75	10.74
Max continuous pressure (Bar)	276	276	276	276	255	228	207
(PSI)	4000	4000	4000	4000	3700	3300	3000
Max speed (rpm)	2500	2500	2500	2500	2500	2500	2500

HP8



- Aluminum construction
- Clockwise or counter-clockwise rotation
- Flows to 177 GPM per section
- Journal bearings
- Available with fluorocarbon seals
- Also available as tandem pump

Frame size HP8	-400	-450	-500	-550	-600	-660	-770	-850
Displacement (cm ³ /rev)	128.3	143.4	159.8	176.0	193.0	213.9	246.0	268.4
(in ³ /rev)	7.83	8.75	9.75	10.74	11.78	1.05	15.01	16.38
Max continuous pressure (Bar)	276	276	276	276	276	248	228	207
(PSI)	4000	4000	4000	4000	4000	3600	3300	3000
Max speed* (rpm)	2500	2500	2500	2500	2500	2500	2500	2500

*Speeds above 2000 RPM require the suction to be pressurized to 5 PSI minimum.

Flow Dividers/Intensifiers

FD30/50/75



- Used to synchronize the operation of multiple cylinders or motors, to distribute pump flow or to increase the pressure available to a system
- Available with 2–5 sections
- Gear widths from ½"–3"
- Self-lubricating, can be mounted in any position
- Operates most efficiently at speeds from 700–1300 RPM
- Eliminates costly components and the problems common in feeding multiple pumps
- Extended studs provided for easy mounting

Motors Low Speed High Torque

TC



- High volumetric efficiency
- Full flow spline cooling
- High pressure shaft seal
- High flow shaft seal cooling
- High starting torque
- Long life

Frame size TC	-0045	-0050	-0065	-0080	-0100	-0130	-0165	-0195	-0230	-0260	-0295	-0330	-0365	-0390
Displacement (cm ³ /rev)	41	49	65	82	98	130	163	195	228	260	293	328	370	392
(in ³ /rev)	2.5	3.0	4.0	5.0	6.0	8.0	10.0	11.9	13.9	15.9	17.9	20.0	22.6	24.0
Max cont pressure (Bar)	86	86	86	86	86	86	86	86	76	66	59	52	45	45
(PSI)	1250	1250	1250	1250	1250	1250	1250	1250	1100	950	850	750	650	650
Max op speed (rpm)	810	688	517	413	460	429	346	287	246	217	193	173	152	144

TB



- High volumetric efficiency
- Full flow spline cooling
- High pressure shaft seal
- High flow shaft seal cooling
- High starting torque
- Long life

Frame size TB	-0036	-0045	-0050	-0065	-0080	-0100	-0130	-0165	-0195	-0230	-0260	-0295	-0330	-0365	-0390
Displacement (cm ³ /rev)	36	41	49	65	82	98	130	163	195	228	260	293	328	370	392
(in ³ /rev)	2.2	2.5	3.0	4.0	5.0	6.0	8.0	10.0	11.9	13.9	15.9	17.9	20.0	22.6	24.0
Max cont pressure (Bar)	124	124	124	124	124	124	124	124	124	103	100	97	93	86	83
(PSI)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1500	1450	1400	1350	1250	1200
Max op speed (rpm)	932	785	678	511	409	454	430	343	287	246	216	191	171	151	143

TE



- High volumetric efficiency
- Full flow spline cooling
- High pressure shaft seal
- High flow shaft seal cooling
- High starting torque
- High side load capacity
- Balanced performance in both directions of rotation
- Long life

Frame size TE	-0045	-0050	-0065	-0080	-0100	-0130	-0165	-0195	-0230	-0260	-0295	-0330	-0365	-0390
Displacement (cm ³ /rev)	41	49	65	82	98	130	163	195	228	260	293	328	370	392
(in ³ /rev)	2.5	3.0	4.0	5.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0	22.6	24.0
Max cont pressure (Bar)	140	140	140	140	140	140	140	140	123	116	109	102	93	88
(PSI)	2000	2000	2000	2000	2000	2000	2000	2000	1750	1650	1550	1450	1325	1250
Max op speed (rpm)	1024	1020	877	695	582	438	348	292	328	287	256	228	203	191

Low Speed High Torque Motors

TJ



- High volumetric efficiency
- Full flow spline cooling
- High pressure shaft seal
- High flow shaft seal cooling
- High starting torque
- High side load capacity
- Long life

Frame size TJ	-0045	-0050	-0065	-0080	-0100	-0130	-0165	-0195	-0230	-0260	-0295	-0330	-0365	-0390
Displacement (cm ³ /rev)	41	49	65	82	98	130	163	195	228	260	293	328	370	392
(in ³ /rev)	2.5	3.0	4.0	5.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0	22.6	24.0
Max cont pressure (Bar)	140	140	140	140	140	140	140	140	120	110	100	100	95	85
(PSI)	2030	2030	2030	2030	2030	2030	2030	2030	1740	1595	1450	1450	1378	1233
Max op speed (rpm)	1024	1020	877	695	582	438	348	292	328	287	256	228	203	191

TF



- High volumetric efficiency
- Full flow spline cooling
- High pressure shaft seal
- High flow shaft seal cooling
- High starting torque
- High side load capacity
- Long life

Frame size TF	-0080	-0100	-0130	-0140	-0170	-0195	-0240	-0280	-0360	-0405	-0475
Displacement (cm ³ /rev)	81	100	128	141	169	197	238	280	364	405	477
(in ³ /rev)	4.9	6.1	7.8	8.6	10.3	12.0	14.5	17.1	22.2	24.7	29.1
Max cont pressure (Bar)	207	155	138	138	138	138	138	138	130	128	113
(PSI)	3000	2250	2000	2000	2000	2000	2000	2000	1880	1850	1645
Max op speed (rpm)	693	749	583	530	444	381	394	334	258	231	195

TG



- High volumetric efficiency
- Full flow spline cooling
- High pressure shaft seal
- High flow shaft seal cooling
- High starting torque
- High side load capacity
- Long life

Frame size TG	-0140	-0170	-0195	-0290	-0295	-0335	-0405	-0475	-0530	-0625	-0785	-0960
Displacement (cm ³ /rev)	140	169	195	237	280	337	405	476	529	624	786	958
(in ³ /rev)	8.6	10.3	11.9	14.5	17.1	20.6	24.7	29.1	32.3	38.0	48.0	58.5
Max cont pressure (Bar)	207	207	207	207	207	207	172	138	138	121	103	69
(PSI)	3000	3000	3000	3000	3000	3000	2500	2000	2000	1750	1500	1000
Max op speed (rpm)	660	554	477	393	334	277	232	237	213	182	143	118

Motors Low Speed High Torque

TH



- High volumetric efficiency
- Full flow spline cooling
- High pressure shaft seal
- High flow shaft seal cooling
- High starting torque
- High side load capacity
- Long life

Frame size TH	-0140	-0170	-0195	-0290	-0295	-0335	-0405	-0475	-0530	-0625	-0785	-0960
Displacement (cm ³ /rev)	140	169	195	237	280	337	405	476	529	624	786	958
(in ³ /rev)	8.6	10.3	11.9	14.5	17.1	20.6	24.7	29.1	32.3	38.0	48.0	58.5
Max continuous pressure (Bar)	207	207	207	207	207	207	172	138	138	121	103	69
(PSI)	3000	3000	3000	3000	3000	3000	2500	2000	2000	1750	1500	1000
Max operating speed (rpm)	660	554	477	393	334	277	232	237	213	182	143	118

TK



- High volumetric efficiency
- Flow through internal spline and shaft seal cooling
- High pressure shaft seal
- High starting torque
- High side load capacity
- Long life

Frame size TK	-0250	-0315	-0400	-0500	-0630	-0800	-1000
Displacement (cm ³ /rev)	250	315	400	500	630	800	1000
(in ³ /rev)	15.3	19.2	24.4	30.5	38.4	48.8	61
Max continuous pressure (Bar)	241	241	207	207	207	190	172
(PSI)	3500	3500	3000	3000	3000	2750	2500
Max operating speed (rpm)	523	413	373	298	237	276	218

Electric Motors Close Coupled

ME



- Pump installed directly to motor: saves cost of mounting adaptor, couplings, installation labor and results in very compact package
- Available with steel band or cast iron housing, providing excellent heat dissipation
- Internal spline—accepts either SAE “AA”, “A”, or “B” pilots with spline shafts; offers superior engagement characteristics
- Available in:
 - ¼, ½ and 1 HP, 1 Phase 115/230 VAC
 - 1, 2, 3, 5, 7.5, 10 HP, 3 Phase 230/460 VAC @ 60 HZ
 - 190/380 VAC @ 50 HZ

M2



- High starting torque typically 90% of running torque
- Smooth output torque throughout the entire speed range
- Bi-directional operation
- High pressure shaft seal
- Standard SAE mounting
- Long life and quiet operation
- Heavy duty bearings

Frame size M2	-085	-127	-169	-254	-339	-508
Displacement (cm ³ /rev)	13.9	20.8	27.7	41.6	55.6	83.2
(in ³ /rev)	0.85	1.27	1.69	2.54	3.39	5.08
Max continuous pressure (Bar)	138	138	138	138	138	69
(PSI)	2000	2000	2000	2000	2000	1000
Max intermittent pressure† (Bar)	166	166	166	166	166	97
(PSI)	2400	2400	2400	2400	2400	1400
Max transient pressure‡ (Bar)	207	207	207	207	207	117
(PSI)	3000	3000	3000	3000	3000	1700
Recommended speeds (rpm)	50–5000	40–4000	36–3600	30–3000	20–2000	15–1500

† Intermittent conditions are to be less than 10% of each minute.

‡ Transient conditions are to be less than 1% of every minute.

Minimum speeds based on constant load. Consult factory for speeds outside range.

M4



- High starting torque typically 90% of running torque
- Smooth output torque throughout the entire speed range
- Bi-directional operation
- High pressure shaft seal
- Standard SAE mounting
- Long life and quiet operation
- Heavy duty bearings

Frame size M4	-015	-030	-045	-060	-075
Displacement (cm ³ /rev)	2.45	4.91	7.37	9.83	12.29
(in ³ /rev)	0.15	0.30	0.45	0.60	0.75
Max continuous pressure (Bar)	138	138	138	138	138
(PSI)	2000	2000	2000	2000	2000
Max intermittent pressure† (Bar)	166	166	166	166	166
(PSI)	2400	2400	2400	2400	2400
Max transient pressure‡ (Bar)	207	207	207	207	207
(PSI)	3000	3000	3000	3000	3000
Recommended speeds (rpm)	75–7500	50–5000	50–5000	36–3600	30–3000

† Intermittent conditions are to be less than 10% of each minute.

‡ Transient conditions are to be less than 1% of every minute.

Minimum speeds based on constant load. Consult factory for speeds outside range.

Power Units

D, H and V-Pak



- Vertical design saves floor space
- Submerged pump for quiet operation and elimination of potential leak point
- Precision pump mounting adaptors to ensure proper alignment and operation
- Suction strainer on inlet protects pump from contamination
- Pressure gauge with shut-off and oil level gauge with thermometer for improved diagnostics
- Remote compensator to adjust system pressure
- Standard safety relief valve to protect pump from system shock
- Breather/fill cap used to control ingress of contaminants
- 1800 RPM motor supplies more flow at less cost
- SAE straight thread connections and ports used to prevent leaks
- Single removable topplate for easy access and service

Low-Profile V-Pak



- Vertical design saves floor space
- Submerged pump for quiet operation and elimination of potential leak point
- Precision pump mounting adaptors to ensure proper alignment and operation
- Suction strainer on inlet protects pump from contamination
- Pressure gauge with shut-off and oil level gauge with thermometer for improved diagnostics
- Standard safety relief valve to protect pump from system shock
- Breather/fill cap used to control ingress of contaminants
- SAE straight thread connections and ports used to prevent leaks
- Cleanout cover for easy access to reservoir

EL-Pak



- Overhead design provides flooded suction and easy priming for pumps
- All connections are Parker Seal Lok, qualifying this platform for the Genuine Parker Parts (GPP) 3-year, zero-leak warranty
- 1800 RPM and 1200 RPM option motors available
- 10 micron, micro glass element in-tank mounted return filter for improved filtration, longer service life and ease of maintenance
- Most components isolation mounted to dampen vibration and reduce noise
- Temperature/level switch, liquid level gauge and pressure gauge with shut-off for improved diagnostics and fail-safe performance
- Ball valve on pump inlet line allows easy maintenance without draining the reservoir
- Top mounted clean out cover for easy access to the reservoir eliminates potential leak points
- Integral safety relief valve protects against system shock and over pressurization
- Breather/fill cap used to control ingress of contaminants
- Siphon breaks on all return lines

EM-Pak



- Horizontal design allows easy maintenance
- Close coupled pump/motor: eliminates mounting adaptor for tank top space saving, eliminates potential for pump misalignment
- Suction strainer protects pumps from contamination
- Pressure gauge with shut-off and oil level gauge with thermometer for improved diagnostics
- Relief valve to protect pump against system shock
- Breather/fill cap used to control ingress of contaminants
- SAE straight thread connections and ports used to prevent leaks
- Available with either pressure compensated piston pump or fixed displacement gear pump

Series	Design	Pressure Bar (PSI)	Max. Flow LPM (GPM)	Tank (Gallons)	Motor (HP)
D-Pak	Vertical	207 (3000)	10.2 (2.7) @ 1725 RPM	5	0.5-3
H-Pak	Vertical	207 (3000)	47 (12.3) @ 1725 RPM	10, 20, 30, 40	0.5-20
V-Pak	Vertical	207 (3000)	59 (15.6) @ 1725 RPM	10, 20, 30, 40	2-20
V-Pak	Low Profile	207 (3000)	42 (11)-136.7 (36.1) @ 1725 RPM	60, 80	7.5-40
EL-Pak	Overhead	207 (3000)	171 (45.5) @ 1200 RPM 252 (67) @ 1800 RPM	110, 165	25-100
EM-Pak	Horizontal	207 (3000)	10.2 (2.7) @ 1725 RPM with gear pump 27.5 (7.3) @ 1725 RPM with piston pump	8, 14	0.5-3

Compact Hydraulics

Fluid Power Systems

108



500



Our compact fluid power systems let you put the power where you need it. They are completely self-contained with motor, pump, reservoir, internal valving, load hold checks and relief valves. They often eliminate the need for other components and plumbing in the system to keep costs down.

The 108 Series models are designed for intermittent service and come in four standard pump sizes. Units are available with single or bi-directional rotation and a choice of several hydraulic circuits.

The 500 Series offers top-quality industrial power in an economical package. Units are available in a wide variety of configurations. The reversing option enables you to eliminate external directional control valves.

Series	Operating Bar (PSI)	Max. Flow LPM (GPM)	Tank (Gallons)	Motor (HP)
108	241 (3500)	3 (0.75)	28 cu.in.-1.5	1/8
500	207 (3000)	11 (3)	1/2-5	1/8-2

Gear Motor

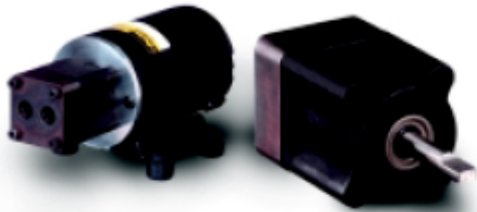


- Concentric center drive
- Bi-directional rotation
- Instantly reversible
- Variety of shaft options
- Flange or face mounting

Frame size 09	
Displacement (cm ³ /rev)	1.48
(in ³ /rev)	.09
Max continuous pressure (Bar)	345
(PSI)	5000
Max speed (rpm)	25000



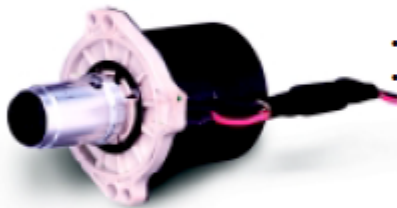
Piston Pumps



- Designed for open circuit systems
- Fixed displacement
- Clockwise, counter-clockwise, or bi-directional rotation
- Naturally aspirated to 5000 rpm
- Porting on sides or rear
- Operate efficiently on thin (1 cS) fluid
- Operating temperature -40° to 300°F

Frame size H	-450	-600	-750	-900	-1000	-1200	-1500	-2000	-2500
Displacement (cm ³ /rev) (in ³ /rev)	0.156 0.0095	0.206 0.0126	0.259 0.0158	0.311 0.0190	0.346 0.0211	0.417 0.0255	0.519 0.0317	0.692 0.0422	0.865 0.0527
Max continuous pressure (Bar) (PSI)	241 3500	241 3500	241 3500	241 3500	241 3500	241 3500	241 3500	224 3250	207 3000
Max speed (rpm)	4400	4200	4000	3800	3800	3700	3700	3600	3500

Cartridge Pumps



- Three-piston design
- Fixed displacement determined by internal cam angle
- Uni-directional
- Designed to fit specially machined manifolds

Displacement (cc/rev) (in ³ /rev)	0.1 to 0.33 0.006 to 0.020
Max continuous pressure (Bar) (PSI)	207 3000
Max speed (rpm)	6000

Hand Pumps



- 2 or 3 position
- Closed or float center
- 5.9 cc/stroke (.36 in³/stroke)
- Operating range: -40° to 160°F (depending on fluid used)
- Excellent backup power supply
- Up to a 24" (61 cm) handle available
- Flexible mounting
- Buna-N seals
- Operating pressure of 207 Bar (3000 PSI)

Cylinders

3L



- Medium duty service with industrial tie rod construction
- Nominal pressure 70 Bar (1000 PSI) dependent on bore size
- Standard bore sizes 1"–8"
- Case hardened, chrome plated piston rod diameters 1/2"–5 1/2"
- Strokes available in any practical stroke length
- 18 standard mounting styles
- Exclusive Jewel Gland with TS2000 Rod Seal
- Rod ends: 4 standard choices, specials to order

2H



- Heavy duty service with industrial tie rod construction
- Nominal pressures up to 210 Bar (3000 PSI), depending on bore size
- Standard bore sizes 1 1/2"–6"
- Piston rod diameters 5/8"–4"
- Strokes available in any practical stroke length
- 19 standard mounting styles
- Exclusive Jewel Gland with TS2000 Rod Seal
- Parker Stepped Cushion for increased performance and productivity
- Rod ends: 3 standard choices, specials to order

3H



- Heavy duty service with industrial tie rod construction
- Nominal pressures up to 210 Bar (3000 PSI)
- Standard bore sizes 7"–20"
- Piston rod diameters 3"–10"
- Strokes available in any practical stroke length
- 15 standard mounting styles
- Parker Stepped Cushion for increased performance and productivity
- Rod ends: 3 standard choices, specials to order

2HX, 3LX, 3HX



- Designed for use with servo and proportional valves in closed-loop applications
- Nominal pressures up to 210 Bar (3000 PSI)
- Standard bore sizes 1 1/2"–8"
- Piston rod diameters 5/8"–5 1/2"
- Seven bolt-on and four integral manifolds available
- Linear displacement transducer (LDT) or linear potentiometer (LRT) feedback options
- Wide variety of stroke lengths available
- Exclusive jewel gland with TS2000 Rod Seal
- Parker stepped cushion for increased performance and productivity
- Simplifies machine design and reduces number of hydraulic lines
- Eliminates need for limit switches, deceleration valves, shock absorbers and mechanical linkages in many applications
- Integral mounted valve eliminates assembly time and fittings
- Intrinsically safe and explosion-proof sensors available
- Low friction seals available



HMI



- Nominal pressures up to 210 Bar (3000 PSI)
- Metric cylinders with bore sizes 25mm–200mm
- ISO 6020/2 mounting interchangeable
- Up to three rod sizes per bore
- Wide range of mounting accessories
- Up to three male and three female rod end threads per bore
- Strokes available in any practical stroke length
- Piston rod diameters 12mm–140mm
- Single and double rod designs
- 12 standard mounting styles
- Exclusive Jewel Gland with TS2000 Rod Seal
- Seal types to suit a wide variety of operating environments
- Parker Stepped Cushion for increased performance and productivity

MT2 (Mill)



- Rated pressure hydraulic series 137 Bar (2000 PSI)
- Rated pressure air series 14 Bar (200 PSI)
- 4:1 design safety factor at rated hydraulic pressure
- Standard temperature 10°–165°F
- Bore sizes from 2"–14"
- Piston rod diameters from 1"–8"
- Cushions optional at either end
- Standard fluid: mineral oil
- Five mounting styles
- 3 standard rod end styles
- Specials made to order

Custom



- Bores to 48"
- Strokes in excess of 50'
- Pressures to 689 Bar (10,000 PSI)
- Intensifier pressures up to 4,130 Bar (60,000 PSI)
- Welded, threaded head and ram designs
- Telescopic cylinders
 - Single acting
 - Double acting
- Single stage "rod type" cylinders
 - Single acting
 - Double acting
- Various materials and coatings
 - Stainless steel
 - Electroless nickel
 - Nitriding
 - Chrome, double chrome
- Typical options
 - Load holding valves
 - Electrohydraulic transducers
 - End of stroke hydraulic cushions
 - Protective rod boots
 - Proximity switches
 - Flow controls, flow fuses
- Agency approvals such as ABS, DNV, Coast Guard approval, MIL-I-45208, can be met and exceeded
- Feedback devices available in all designs
- Custom cylinder designs for your specific application

Directional Control Valves



- NFPA manifold mounted
- Rugged spools with four control lands; up to 21 spool styles available depending on operator
- Solenoid, lever, cam, air or oil pilot operated
- Soft-shift available on D1 and D3 solenoid operated valves
- Low pressure drop
- Phosphate finish body
- Easy access mounting bolts

Valve Size	D1	D3	D31	D61	D81	D101
Maximum Flow* (LPM)	83	150	175	390	622	946
(GPM)	22	40	45	100	180	250
Max operating pressure (Bar)	345	345	345	207	345	207
(PSI)	5000	5000	5000	3000	5000	3000
Mounting Style (NFPA)	D03	D05	D05H	D08	D08	D10
(CETOP)	3	5	5H	8	8	10
(NG)	6	10	-	25	25	32

*Depending on spool

Manapak



- Mounted between directional control valves and their mounting surface
- Steel bodies and internal hardened steel components for strength and durability

Mounting Style	D03	D05	D08
Check	X	X	X
Pilot Operated Check	X	X	X
Flow Control	X	X	X
Direct Op Pressure Reducing	X	X	
Pressure Reducing		X	X
Relief	X	X	X

Cartpak



- Mounted between D1 Series valves and their mounting surface
- Combines cartridge valve with standard ISO4401-03, NFPA D03, CETOP 3 size body
- Aluminum body for 207 Bar (3000 PSI) operation; ductile iron body for 345 Bar (5000 PSI) operation
- Functions include:
 - Pressure relief
 - Pressure reducing
 - Pressure sequence
 - Flow control, needle, check
 - 2-way solenoid
 - 3-way directional
 - Proportional pressure relief
 - Proportional flow control

Pressure Control Valves



- Inline or manifold mounted (NFPA P03, P06 & P10)
- 207 Bar (3000 PSI) in 1/4" (*relief only*), 3/8", 3/4" and 1 1/4" sizes
- 345 Bar (5000 PSI) in 3/4" and 1 1/4" sizes
- Functions include relief, pressure reducing and sequence in both pressures; counterbalance and unloading in 207 Bar only

Republic Specialty and Manatrol Valves



- Needle valves
- Check valves
- Plug valves
- Lo-Torque manual directional control valves
- Exectrol high performance directional control valves
- Pressure control valves
- Hand pumps
- Adjustable velocity fuses
- Volume control valves
- Two-way valves

Colorflow Valves



- Inline mounted flow, check, needle, gauge isolator and snubber valves
- Flow controls available in pressure compensated models
- Sizes 1/8"-2"
- Choice of NPTF, SAE, BSPP and ISO 6149 metric ports
- Maximum operating pressures up to 345 Bar (5000 PSI)
- Flows up to 568 LPM (150 GPM)
- Steel bodies; some models also available with brass or stainless steel

ParTrol Valves



- In-line mounted flow, needle and check valves
- Port sizes up to 1/2" NPT, SAE (-8) thd.
- Pressure ranges up to 345 Bar (5000 PSI) in steel, 138 Bar (2000 PSI) in brass
- Prestolok ports available up to 3/8"
- Available in brass, steel and stainless steel
- Needle valves and flow controls available with a fine needle option

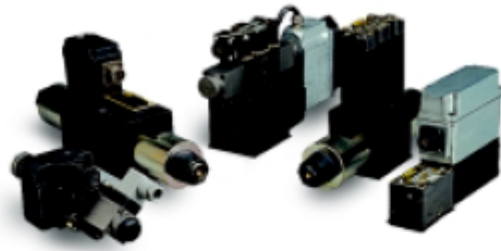
Ball Valves



- Designed for hydraulic, pneumatic and other media
- Features full-port design for low pressure drop and maximum system efficiency
- Blow-out proof stems
- Assortment of port configurations including threaded, manifold mounted, SAE split flange and a unique 4-bolt rotating SAE flange design

Series	Function	Pressure Bar (PSI)	Port Sizes	Material
BVAM	2-Way	138 (2000)	2½"-4"	Steel
BVHP	2-Way	414 (6000)	¼"-1"	Steel
BVAH	2-Way	414 (6000)	¼"-2"	Steel
BVHH	2-Way	993 (14000)	½"-2"	Steel
BVMM	2 & 3-Way (Manifold)	414 (6000)	¼"-1½"	Steel
BV3D	3-Way	207 (3000)	¼"-2"	Steel
BV3H/BV4H	3 & 4-Way	414 (6000)	¼"-2"	Steel
BVAL	2-Way (Suction)	28 (400)	2½"-4"	Steel
590	2-Way (Right Angle)	17 (250)	¼"-½"	Brass
500	2-Way	41 (600)	¼"-2"	Brass
500CS	2-Way	138 (2000)	¼"-1"	Steel
500SS	2-Way	138 (2000)	¼"-1"	Stainless Steel

Proportional Control Valves



- Maximum operating pressures to 345 Bar (5000 PSI)
- Manifold and inline mounting styles
- On-board and remote electronics available
- Zero lap servo spools offered for closed loop applications
- Explosion proof models available
- Valves meet CSA, FM and Cenelec standards

Proportional Directional Control	Series	Direct Operated		Pilot Operated				Spool Feedback	Integrated Electronics
		06	10	10	16	25	32		
Size: NG		06	10	10	16	25	32		
Size: ISO/CETOP		3	5	5	7	8	10		
Std. Performance	D*FW	X	X						X
	D*FT	X	X						
	D*1FW			X	X	X	X		
	D*1FT			X	X	X	X		X
Std. Performance w/motion control	D**FL	X	X		X	X			X
High Performance	D*FX	X	X					X	
	D*1FS			X	X	X	X	X	X
Servo Performance	D*FH	X	X					X	X
	D*1FH			X	X	X	X	X	X
Servo Performance w/dual gain	D1FM	X						X	X
	D3FM		X					X	X
Proportional Throttle	TDA					X			

Proportional Pressure Control	Series	Direct Operated		Pilot Operated			Integrated Electronics
		06	10	25	32		
Size: NG		06	10	25	32		
Size: ISO/CETOP		3	5	8	10		
Proportional Relief	RE06*T	X					X
	RE06*W	X					
	RE*T			X	X		X
	RE*W			X	X		
Proportional Reducing	PC			X	X	X	X
	DWE			X	X	X	
Proportional Reducing w/check valve	PE			X	X	X	X
	DWU			X	X	X	

Valves Electrohydraulic

Servo Valves

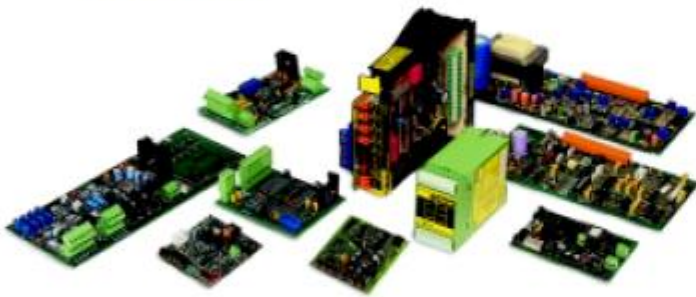


- Robust, reliable industrial strength valves for motion control applications
- Explosion-proof models available
- Intrinsically safe models available
- Valves meet CSA, FM and Cenelec standards

Valve Series	PH76	BD15	BD30	DY
Maximum Flow* (LPM)	57	75	151	378
(GPM)	15	20	40	100
Max Operating Pressure (Bar)	207	207	207	345
(PSI)	3000	3000	3000	5000

*At 1000 PSID

Electronics



- Valve drivers provide ramping, setpoints and deadband compensation
- Feedback amplifiers provide advantages of closed loop control
- Power supplies for a variety of valve applications
- DIN card holders

PMC



- Stand-alone, digital closed loop controllers
- Single or dual axis control
- Encoder or magnetostrictive feedback
- Remote kit available

DIN Cartridge Valves



- Available in sizes 16mm, 25mm, 32mm, 40mm, 50mm, 63mm, 80mm, 100mm
- Flows up to 17,000 LPM (4500 GPM)
- Maximum operating pressures up to 350 Bar (5000 PSI)
- Proportional throttle, relief and pressure controls
- Complete selection of pressure controls
- Variety of direct and pilot operated checks
- Directional controls to 7500 LPM (2000 GPM)

Auxiliary Valves



Valve Type	Max Working Pressure Bar (PSI)	Max Setting Pressure Bar (PSI)	Flow Capacity Liters/Min (GPM)
Subplate/relief valves	345 (5000)	345 (5000)	57 (15)
Hi-lo unloading valves	379 (5500)	345 (5000)	57 (15)
Hand pumps	48 (700)	-	1.36 cm ³ (.083 in ³) stroke (displ.)
Accumulator bleed-down valves	241 (3500)	-	Inlet: 75 (20) accum-tank: 226 (60)
Reducing valves	345 (5000)	345 (5000)	113 (30)
Sequence valves	345 (5000)	345 (5000)	57 (15)
Hose-rupture valves	207 (3000)	-	249 (66)

Valves Threaded Cartridge



Directional Control Valves

Valve Type	Max Working Pressure Bar (PSI)	Flow Capacity Liters/Min (GPM)
Manual valves	241 (3500)	49 (13)
Manual three-way valves	241 (3500)	23 (6)
Manual four-way valves	241 (3500)	8 (2)
Pilot operated valves	241 (3500)	38 (10)
Solenoid, poppet-type, two-way valves	345 (5000)	264 (70)
Solenoid, poppet-type, bi-directional valves	345 (5000)	19 (5)
Solenoid, spool-type, two-way valves	345 (5000)	75 (20)
Solenoid, spool-type, three-way valves	345 (5000)	64 (17)
Solenoid, spool-type, four-way valves	345 (5000)	30 (8)
Double solenoid, spool-type, four-way valves	345 (5000)	23 (6)

Proportional Control Valves

Valve Type	Max Working Pressure Bar (PSI)	Flow Capacity Liters/Min (GPM)
Solenoid operated, two-way NC or NO proportional flow control valves	207 (3000)	226 (60)
Solenoid operated, two-way NO, proportional pressure control valves	207 (3000)	151 (40)
Solenoid operated, two-way NC throttle valve	207 (3000)	19 (5)
Solenoid operated, proportional pressure reducing valves	207 (3000)	38 (10)
Solenoid operated, three-way, proportional pressure control	207 (3000)	11 (3)



Threaded Cartridge Valves

Load Holding Valves

Valve Type	Max Working Pressure Bar (PSI)	Flow Capacity Liters/Min (GPM)
Counterbalance valves	345 (5000)	0-754 (0-200)
Check valves	345 (5000)	0-377 (0-100)
Soft seat check valves	207 (3000)	0-57 (0-15)
Vent-to-open check valves	241 (3500)	0-226 (0-60)
Pilot-to-close check valves	241 (3500)	0-151 (0-40)
Single pilot operated check valves	207 (3000)	0-189 (0-50)
Double pilot operated check valves	207 (3000)	0-189 (0-50)
Shuttle valves	241 (3500)	0-23 (0-6)

Pressure Control Valves

Valve Type	Max Working Pressure Bar (PSI)	Max Setting Pressure Bar (PSI)	Flow Capacity Liters/Min (GPM)
Direct acting relief valves	345 (5000)	345 (5000)	0-151 (0-40)
Cross-over relief valves	241 (3500)	241 (3500)	0-75 (0-20)
Dual relief with anti-cavitation checks	345 (5000)	345 (5000)	0-60 (0-16)
Pilot operated relief valves	345 (5000)	345 (5000)	0-377 (0-100)
Pressure sensing valves	345 (5000)	-	0-189 (0-50)
Reducing/relieving valves	345 (5000)	345 (5000)	0-151 (0-40)
Direct acting pressure reducing valves	345 (5000)	345 (5000)	0-57 (0-15)
Pressure reducing valves	345 (5000)	345 (5000)	0-57 (0-15)
Pressure reducing spools	345 (5000)	-	0-189 (0-50)
Sequence valves	345 (5000)	345 (5000)	0-151 (0-40)
Unloading relief valves	241 (3500)	207 (3000)	0-6 (0-1.5)
Logic elements	248 (3600)	248 (3600)	0-189 (0-50)
Thermal relief	248 (3600)	248 (3600)	0-30 (0-8)

Volume Control Valves

Valve Type	Max Working Pressure Bar (PSI)	Max Flow Setting Liters/Min (GPM)	Flow Capacity Liters/Min (GPM)
Needle valves	241 (3500)	-	0-189 (0-50)
Rotary adjust needle valves	241 (3500)	-	0-57 (0-15)
Flow divider/combiner valves	207 (3000)	-	0-45 (0-12)
Pilot control flow control valves	207 (3000)	-	0-57 (0-15)
Flow control valves	241 (3500)	-	0-45 (0-12)
Restrictive-type, pressure compensated valves	241 (3500)	-	0-151 (0-40)
Priority-type, pressure compensated valves	241 (3500)	0-38 (0-10)	0-57 (0-15)
Restrictive-type, pressure compensated flow regulator valves	241 (3500)	-	0-57 (0-15)
Priority-type, pressure compensated flow regulator valves	241 (3500)	0-34 (0-9)	0-57 (0-15)
Priority-type, pressure compensated flow regulator with relief	241 (3500)	0-34 (0-9)	0-57 (0-15)
Velocity fuses	207 (3000)	-	0-30 (0-8)

Rotary Actuators

HTR Series



- Rack and pinion actuators designed for medium to heavy-duty service
- Operating pressures up to 207 Bar (3000 PSI) non-shock
- Standard rotations: 90°, 180°, 360°
- Output torque at 207 Bar (3000 PSI): 900–600,000 lb-in
- Maximum breakaway pressure: 4.8 Bar (70 PSI)
- Ductile iron housing with mounting options
- Heavy-duty Wear-Pak pistons; tapered roller bearings
- PolyPak piston seals and wearbands eliminate leakage and cylinder scoring
- Chrome alloy steel gears for strength; multiple options for shaft drive
- Optional seals, cushions, stroke adjusters, flow controls and position sensors

LTR Series



- Rack and pinion design provides superior performance in low pressure hydraulic applications
- Nominal pressures up to 68 Bar (1000 PSI)
- Standard rotations: 45°, 90°, 180°, 270°, 360°, 450°
- Output torque at 68 Bar (1000 PSI): 395–22,500 lb-in
- Maximum breakaway pressure: 2 Bar (30 PSI)
- Aluminum housing with mounting options
- Sealed ball bearings and floating pistons
- PolyPak piston seals and wearbands eliminate leakage and cylinder scoring
- Chrome alloy steel rack and pinion gears for strength; multiple options for shaft drive
- Optional seals, cushions, stroke adjusters, flow controls and position sensors

Tork-Mor Series



- Vane actuators—18 sizes available
- Nominal pressures up to 68 Bar (1000 PSI)
- Standard rotations: 280° ±1° single vane, 100° ±1° double vane
- Torques from 38 to 145,000 lb-in across rated pressure range
- Maximum breakaway pressure: 1.7 Bar (25 PSI)
- Port, shaft and mounting options provide flexibility
- High-strength steel shaft; precision bearings

M (MIII) Series



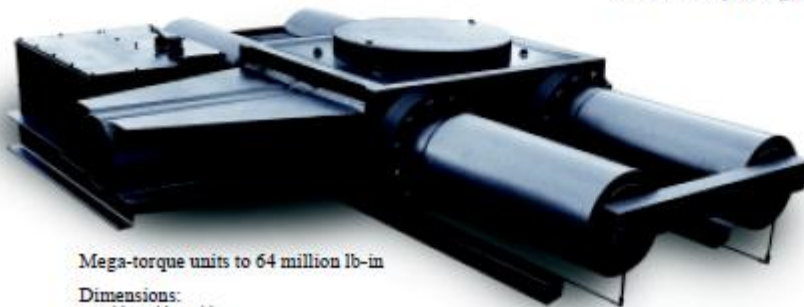
- Non-tie rod design provides durability and dependability in heavy duty operation; easy maintenance
- Maximum operating pressures up to 207 Bar (3000 PSI)
- Standard rotations: 90°, 180°, 360°
- Output torque at 207 Bar (3000 PSI): 75,000–50,000,000 lb-in
- Maximum breakaway pressure: 4.8 Bar (70 PSI)
- Heavy duty ductile iron housing on units up to 1000M; steel weldments on units over 1000M
- Wearband pistons on both ends and bronze rack bearings
- Large diameter tapered roller bearings support the pinion
- Heavy duty Wear-Pak pistons and PolyPak piston seals
- Hardened gear teeth of chrome alloy steel for strength, long life

Custom Engineered Products



Durability features that provide 99% reliability in 10 million cycles. Custom designed to integrate as part of customer structure. Housing and shafting designed with special materials and features to carry high induced loads.

- Rotations to 1080°, variety of speeds, special shafting, mounting, and porting accommodations.
- Units with minimal backlash, combined linear and rotational motion functions
- Integrated with control valve packages, position feedback for total system solutions
- Titanium, monel, stainless steels, bronzes
- Compliance to customer specs and agency certifications—ABS, FDA, UL/CE, SAE, military
- Special environments/applications—robotic, submerged, clean room, medical, PC chips
- Proprietary sizing analysis programs applied to assure safety margins, reliability predictions



Mega-torque units to 64 million lb-in

Dimensions:
4¼ × 5½ × 1¼ m
(14 × 18 × 4 ft)

Accumulators



Piston Accumulators

- Over 50 standard capacities from 5 cu. in. (.075 liters) to 50 gallons (189 liters)
- 2", 3", 4", 6", 7", 9" and 12" nominal bore sizes
- 207, 276 and 350 Bar (3000, 4000 and 5000 PSI) operating pressures
- Patented five-bladed V-O-ring piston seals in five standard seal compounds
- Accumulator and gas bottle configurations
- ASME, CE and other certifications available



ACP Series Non-Repairable Piston Accumulators

- Piston design
- 1½", 2", 3" and 4" bore sizes (40, 50, 80, 100mm)
- Standard capacities from 5 cu. in. (.075 liters) to 488 cu. in. (8 liters)
- 276 Bar (4000 PSI) operating pressure
- Low-cost, non-repairable design
- Multiple port options
- No gas valve option
- Fast delivery



Greer Bladder Accumulators

- Standard capacities from 10 cu. in. (.16 liters) to 15 gallons (56 liters)
- Maximum operating pressures up to 414 Bar (6000 PSI)
- Bladders manufactured in-house
- Six bladder compound to suit a variety of fluids and temperatures
- Bottom and top repairable; medium and high-flow, transfer barriers and gas bottles
- Water/chemical service available
- ASME, CE and other certifications available



Diaphragm Accumulators

- Standard capacities from 5 cu. in. (.075 liters) to 170 cu. in. (2.8 liters)
- Maximum operating pressures up to 250 Bar (3600 PSI)
- Compact and lightweight
- Low-cost, non-repairable design
- Quick responding diaphragms of nitrile or hydin





Inline Pulse-Tone™ Shock Suppressors

- Reduces pulsations and shock
- Compact size, inline mounting
- 207 and 345 Bar (3000 and 5000 PSI) models
- NPT, BSPP, SAE and split flange connections
- Stainless steel model for water/chemical service



KleenVent Hydraulic Reservoir Isolators

- Standard capacities from 2.5 gallons (9.5 liters) to 80 gallons (302 liters)
- Four bladder polymers for a wide range of fluids and temperatures
- Choice of steel or fiberglass shells
- Easy to use installation kits available
- Optional pressure/vacuum breaker
- Protects hydraulic system from contamination



Gas Bottles

- Standard capacities from 40 gallons (151 liters) to 150 gallons (567 liters)
- Maximum operating pressures up to 380 Bar (5500 PSI)
- Both threaded and forged end construction
- High strength alloy steel
- Variety of port options



Accumulator Charging Kit and Mounting Accessories

- Charging and gauging equipment
- Gauge adapters and assemblies
- Unloading valves
- Mounting clamps and base brackets
- U-Bolt mounting hardware
- Accumulator repair tools

Filtration

Low Pressure



- Various mounting configurations
- High capacity/high efficiency Microglass II media
- Visual and electrical indicators with several connector styles
- Flange options for low profile, easy mounting
- Integral breather (FT Series)

Model	Max Flow Liters/Min (GPM)	Max Pressure Bar (PSI)	Mounting Style
12AT	64 (17)	10.3 (150)	Spin-on
50AT	136 (36)	10.3 (150)	Spin-on
FTA	57 (15)	10.3 (150)	Tank top
FTB	132 (35)	10.3 (150)	Tank top
FTC	283 (75)	10.3 (150)	Tank top
RF4	452 (120)	10.3 (150)	Tank top
RF7	1131 (300)	10.3 (150)	Tank top
IL2, RF2	452 (120)	13.8 (200)	In-line, L-style

Medium Pressure



- NPT, SAE or flange ports
- High capacity/high efficiency Microglass II media
- Cartridge style bypass valve
- Visual and electrical indicators with several connector styles

Model	Max Flow Liters/Min (GPM)	Max Pressure Bar (PSI)	Mounting Style
15CN	94 (25)	69 (1000)	In-line
40CN	302 (80)	69 (1000)	In-line
80CN	452 (120)	69 (1000)	In-line

High Pressure



- SAE, flange or ISO ports
- High capacity/high efficiency Microglass II media
- Visual and electrical indicators with several connector styles
- Manifold mount option (50P & 15/30P Series)
- Reverse flow option (50PR Series) for HST circuits

Model	Max Flow Liters/Min (GPM)	Max Pressure Bar (PSI)	Mounting Style
15P	75 (20)	207 (3000)	In-line, manifold
30P	170 (45)	207 (3000)	In-line, manifold
30PD	94 (25)	207 (3000)	In-line, duplex
50P	377 (100)	345 (5000)	In-line, bowl up
50PR	264 (70)	345 (5000)	In-line, reverse flow
18P	94 (25)	414 (6000)	In-line
28P	207 (55)	414 (6000)	In-line
38P	415 (110)	414 (6000)	In-line





Portable/Offline Systems

- Provide flexibility for removing contaminants from hydraulic fluid
- Guardian hand-held purification system with 4 GPM (15 LPM) flow
- Choice of five portable purification systems in 3, 10, 20, 30 and 45 GPM flow rates
- Choice of two filter carts:
 - 5 GPM flow (500 SUS max.) and ½ HP motor
 - 10 GPM flow (3000 SUS max.) and ¾ HP motor



Reservoir Accessories

- Metallic and non-metallic breathers and filler breathers
- Triceptor™ desiccant breathers
- Spin-on breathers
- Diffusers
- Fluid level/temperature gauges
- Suction strainers



Par Gel

- Water removal elements filter “free” water from mineral-base and synthetic fluids
- Fits many Parker filters and the Guardian filtration system



Par-Fit Elements

- Extensive range of competitively priced Parker quality replacement filter elements for any filter brand
- Over 6500 competitive interchange listings help consolidate vendor base by allowing users to acquire all replacement elements from one source
- Provides proven Parker performance in competitive filter housings

Fluid Analysis

PLC-3000



The fully portable PLC-3000 particle counter can perform both on-line and bottle sampling, with the same unit, while reporting counts at 2, 5, 15, 25, 50 and 100 microns. Features include:

- RS232 serial port with Windows-based software

- Particle counting in ISO or NAS format in less than one minute
- On-line sampling up to 414 Bar (6000 PSI)
- Petroleum based and phosphate ester (Skydrol®) fluid compatible with the same unit

Laser CM (LCM)



The LCM laser particle counter is designed primarily for on-line particle counting with a user-programmable automatic count feature with data storage for continuous monitoring. Additional features include:

- Particle count test cycle in 2 mins. reported in ISO or NAS format

- On-line sampling up to 414 Bar (6000 PSI)
- RS232 serial port with data storage capacity up to 300 tests
- Integral printer with data graphing and Windows-based software

Par-Test



A complete laboratory analysis performed on a small volume of fluid, Par-Test results are provided in an organized three-page format.

A water based fluid kit and a petroleum based fluid kit are available. Each kit includes a pre-cleaned sample bottle, data sheet

and mailing container. The standard tests included with the service are:

- Particle count
- Photomicrograph
- Viscosity analysis
- Water analysis
- Neutralization analysis

MS100 Moisture Sensor



The MS100 Moisture Sensor provides a compact, real-time solution to continuous water contamination monitoring. Designed to work well in petroleum/synthetic hydraulic and lubricating oil applications, features include:

- Simple LED's provide local Go/No-Go indication

- Panel meter for local or remote display reports 0-100% saturation
- Meter scale is color coded for positive/easy identification
- 0-10 VDC analog and 120 VAC logic output

IQ200



The IQ200 is specifically designed to provide continuous, on-line monitoring of the particulate contamination level of hydraulic and lubrication fluids. The small, compact IQ200 can connect to virtually any system to give the user real-time data from every 3 seconds to 24 hours. Features include:

- Adjustable contamination level alarms

- Laser accuracy and repeatability
- Integral flow and calibration check
- ISO 4406-1999 reporting format (4, 6, 14 micron) and correlation to NAS 1638
- Data displayed instantly in chronological or graphic form



En Saga Hydraulics nos especializamos en el suministro de soluciones hidráulicas para la industria, ofreciendo productos confiables y de alto desempeño para optimizar procesos y sistemas de automatización.

Contamos con una amplia línea de artículos hidráulicos, entre los que destacan unidades de potencia, válvulas direccionales, actuadores hidráulicos y válvulas de cartucho, diseñados para satisfacer las necesidades de diferentes aplicaciones industriales con calidad y eficiencia.

Nuestro compromiso es brindar atención personalizada, asesoría técnica especializada y soluciones integrales que contribuyan al rendimiento y continuidad operativa de nuestros clientes.

Para mayores informes y atención especializada, favor de comunicarse con el asesor **Juan Carlos González C.** al teléfono **222 705 2857** o al correo electrónico c.gonzalez@sagahydraulics.com.

Saga Hydraulics, tecnología y soluciones hidráulicas para la industria.