SHANGHAI HERON TRADING COMPANY

HERON

Denny:+86 137 6191 9353
dennyzhang@heron-sh.com
http://www.heron-sh.com

HERON

CONNECT WITH CONFIDENCE

FLEX WITH EASE

A GLOBAL INNOVATOR IN
INDUSTRIAL CONNECTIVITY SOLUTIONS

SINCE 1997

HERON

QUALIFICATION & HONOR

HERON

CONTENTS

01. ABOUT US

Shanghai Heron Trading Company——we have a manufacturing factory was founded in 1997, has evolved from a regional cable specialist to a global innovator in industrial connectivity solutions...

OUR PRODUCT RANGE

FLEXIBLE AND DURABLE CABLES
COLDFLEX® SERIES: EXTREME-TEMPERATURE RESISTANT CABLES -40°C~105°C

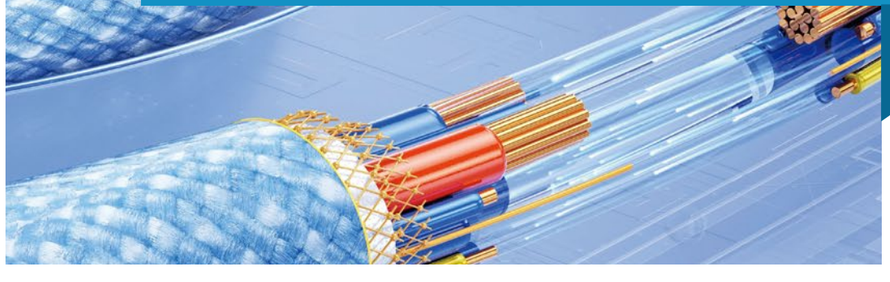
- Flexible bending resistant cables
- Flexible cold-resistant cables
- Flexible flame-retardant and fire-resistant cables
- Irradiation cables
- Elevator cables
- Lifting equipment cables
- Control cables
- Power cables
- Communication cables

SPECIAL CABLES

- Overhead cables
- Photovoltaic cables
- Marine cables
- Mining cables
- Wind energy cables
- Network Cable
- Fiber optic cables

OTHER PRODUCTS

- Robots
- Robot protective suits
- Pipeline package
- Guide rails
- Gripping tools
- ...



OUR EXPERTISE AND COMMITMENT TO QUALITY CABLES

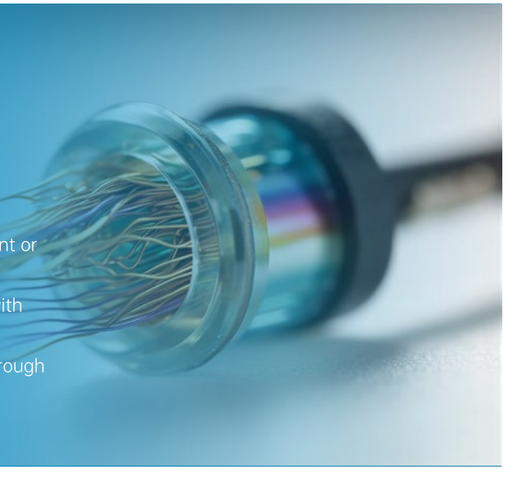
At Shanghai Heron Trading Company, we take pride in our expertise and commitment to providing high-quality cables for various industries. Our dedication to innovation, strict quality control measures, and extensive product knowledge have positioned us as a trusted partner for businesses seeking reliable and efficient cable solutions.

PROFESSIONAL, CUSTOMER-CENTRIC SERVICE EXCELLENCE

With a professional and customer-centric approach, we strive to meet and exceed our clients' expectations. Our team of experienced professionals is dedicated to delivering tailored solutions, superior customer service, and timely delivery of products.

TAILORED CABLE SOLUTIONS FOR DIVERSE INDUSTRY NEEDS

Whether you require cables for heavy-duty lifting equipment or complex control systems or robotics-related accessories, Shanghai Heron Trading Company is here to provide you with the best-quality cables and robotics parts that meet your specific requirements. Join us in transforming industries through our reliable and advanced cable solutions.



OUR JOURNEY

ENGINEERING EXCELLENCE
SINCE 1997

1997
FOUNDATION

- Established in Shanghai under ISO 9001 standards
- Launched core product line: Heavy-duty crane cables for port logistics

2015
TECHNOLOGICAL BREAKTHROUGH

- Developed patented ColdFlex® technology (-40°C to 105°C operational range)
- Expanded to 12 specialized cable categories including offshore wind power cables

2018
GLOBAL EXPANSION

- Achieved CE & UL certification for EU/US markets
- Supplied 120KM cables for Singapore PSA port automation upgrade

2020
ROBOTIC INTEGRATION

- Forged strategic partnerships with 3 industrial robot manufacturers
- Launched robot cable-guide bundle system with 500,000+ bending cycle rating

2022
DIGITAL TRANSFORMATION

- Implemented AI-powered cable life prediction system
- Opened 3D configurator for real-time custom cable simulations

2024
SUSTAINABILITY LEADERSHIP

- Introduced 100% recyclable EcoArmor® halogen-free cables
- Reduced production energy consumption by 37% through solar-powered facility

02. PRODUCT INTRODUCTION

FLAT FESTOON CABLE

APPLICATIONS

- The connection and control cables of crane conveyors
- Docks and complex environments in ports

STANDARDS

- Eu CE certification IEC60227-6: 2001 TVVB
- BS EN 50214: 2006 HO5VVH6-F
- HD359 S2: 1990 H07VVH6-F

TECHNICAL DATA	
Rated voltage	⩽1.5mm² 300/500V， >1.5mm² 450/750V
Test voltage	⩽1.5mm² 2500V， >1.5mm² 3000V
Minimum bending radius	10×outer diameter
Burning vertically test	GB/T1 8383.1-2001, IEC60332-1:1993
Passed standard	GB5023.6, IEC60227-6, EN50214
Working temperature	-15℃ ~ +70℃
Temperature of conductor	Used under the normal conditions，lower than 70℃

*Cable are recommender for installations where the suspended length doesn't exceed 80m and the speed of travel doesn't exceed 4m/s. If it more than this, with steel.

CONSTRUCTION	
Conductor	Multiple strands of ultra-fine stranded oxygen-free copper wire, VDE0295CLASS 5 compliant
Insulation	Special oil resistance, flame retardant, mixed PVC or others
Inner core Color	Color coding according to IEC60227 Color marking, digital marking can be customized according to customer
Inner liner	Shielded or unshielded (Copper wire or tinned wire)
Sheath	Oil resistant, flame retardant, elastic PVC sheath

Type	No. of cores	Specification	Conductor Structure	Width mm	Thickness mm	Density kg/km
YFFB	3	0.75	30/0.18	10.4	4.6	94
YFFB	4	0.75	30/0.18	13.7	4.6	123
YFFB	5	0.75	30/0.18	17.1	4.6	152
YFFB	8	0.75	30/0.18	24.1	4.6	219
YFFB	9	0.75	30/0.18	26.5	4.6	242
YFFB	10	0.75	30/0.18	28.8	4.6	264
YFFB	12	0.75	30/0.18	33.5	4.6	309
YFFB	16	0.75	30/0.18	43.9	4.6	405
YFFB	18	0.75	30/0.18	49.6	4.6	456
YFFB	20	0.75	30/0.18	54.3	4.6	501
YFFB	24	0.75	30/0.18	64.7	4.6	597
YFFB	3	1	40/0.18	11	4.8	112
YFFB	4	1	40/0.18	14.5	4.8	145.3
YFFB	5	1	40/0.18	18.1	4.8	178.7
YFFB	8	1	40/0.18	25.7	4.8	257.7
YFFB	9	1	40/0.18	28.3	4.8	284.1
YFFB	10	1	40/0.18	30.8	4.8	310.4
YFFB	12	1	40/0.18	35.9	4.8	363.2
YFFB	16	1	40/0.18	47.1	4.8	475.5
YFFB	18	1	40/0.18	53.2	4.8	535.2
YFFB	20	1	40/0.18	58.3	4.8	587.9
YFFB	24	1	40/0.18	69.5	4.8	700.3
YFFB	3	1.5	59/0.18	12.3	5.8	151.9
YFFB	4	1.5	59/0.18	16.3	5.8	198.4
YFFB	5	1.5	59/0.18	20.3	5.8	244.9
YFFB	8	1.5	59/0.18	29.3	5.8	358.8
YFFB	9	1.5	59/0.18	32.3	5.8	396.8
YFFB	10	1.5	59/0.18	35.3	5.8	434.7
YFFB	12	1.5	59/0.18	41.3	5.8	510.7
YFFB	16	1.5	59/0.18	54.3	5.8	671
YFFB	18	1.5	59/0.18	6.3	5.8	755.5
YFFB	20	1.5	59/0.18	67.3	5.8	831.4
YFFB	24	1.5	59/0.18	80.3	5.8	991.8
YFFB	3	2.5	47/0.26	14.1	6.6	204.5
YFFB	4	2.5	47/0.26	18.7	6.6	268.4
YFFB	5	2.5	47/0.26	23.3	6.6	332.3
YFFB	8	2.5	47/0.26	36	6.6	513.3
YFFB	9	2.5	47/0.26	37.7	6.6	549.1
YFFB	10	2.5	47/0.26	41.3	6.6	603.3
YFFB	12	2.5	47/0.26	48.5	6.6	711.8
YFFB	16	2.5	47/0.26	63.9	6.6	938.3
YFFB	18	2.5	47/0.26	72.1	6.6	1056

Type	No. of cores	Specification	Conductor Structure	Width mm	Thickness mm	Density kg/km
YFFB	20	2.5	47/0.26	79.3	6.6	1165
YFFB	24	2.5	47/0.26	94.7	6.6	1391
YFFB	3	4	77/0.25	16.5	7.3	279
YFFB	4	4	77/0.26	21.9	7.3	367.7
YFFB	5	4	77/0.26	27.3	7.3	456.3
YFFB	8	4	77/0.26	40.5	7.3	690
YFFB	9	4	77/0.26	44.9	7.3	768
YFFB	10	4	77/0.26	49.3	7.3	845.9
YFFB	12	4	77/0.26	58.1	7.3	1002
YFFB	16	4	77/0.26	76.7	7.3	1324
YFFB	18	4	77/0.26	86.5	7.3	1491
YFFB	3	6	84/0.3	18.6	8	364.7
YFFB	4	6	84/0.3	26.9	8	507.6
YFFB	5	6	84/0.3	32	8	612.9
YFFB	8	6	84/0.3	48.9	8	947.7
YFFB	9	6	84/0.3	54	8	1053
YFFB	10	6	112/0.26	59.1	8	1158
YFFB	12	6	112/0.26	67.7	8	1350
YFFB	16	6	112/0.26	89.7	8	1791
YFFB	3	10	189/0.26	24	9.7	563.9
YFFB	4	10	189/0.26	34.5	9.7	784.1
YFFB	5	10	189/0.26	41.4	9.7	953.1
YFFB	8	10	189/0.26	63.9	9.7	1486
YFFB	9	10	189/0.26	70.8	9.7	1655
YFFB	10	10	189/0.26	77.7	9.7	1824
YFFB	12	10	189/0.26	89.7	9.7	2136
YFFB	3	16	30/0.26	27	10.7	778.3
YFFB	4	16	30/0.26	38.5	10.7	1074
YFFB	5	16	30/0.26	46.4	10.7	1313
YFFB	8	16	30/0.26	71.9	10.7	2057
YFFB	9	16	30/0.26	79.8	10.7	2296
YFFB	10	16	30/0.26	87.7	10.7	2535
YFFB	3	25	456/0.26	33.2	12.8	1145
YFFB	4	25	456/0.26	47	12.8	1575
YFFB	5	25	456/0.26	56.8	12.8	1929
YFFB	8	25	456/0.26	88.2	12.8	3031
YFFB	3	35	646/0.26	40.6	15.2	1645
YFFB	4	35	646/0.26	56.6	15.2	2245
YFFB	5	35	646/0.26	68.6	15.2	2755
YFFB	3	50	839/0.268	47	17.4	2360
YFFB	4	50	839/0.268	60	17.4	3119
YFFB	5	50	839/0.268	75	17.4	3828

FLAT TRAVELLING CABLE

APPLICATIONS

The cable is designed with a special structure for long service life, maximizing the operational efficiency of elevator manufacturers. Elevator control cables provide integral electrical control over long suspension lengths while withstanding mechanical stress. Elevator cables can be used in long-distance suspension applications due to the steel wire bearing core.

NOTE

- **When the elevator cables are arranged in a single font**

  1.The free use length is greater than 35m

  2.Running speed greater than 1.6m/s

  It should be considered to add load-bearing elements in the cable, and the load-bearing elements are generally galvanized soft wire rope or fiber rope, such as aramid yarn

- **When the elevator cable is arranged in a plum blossom pattern**

  1.The free suspension length is greater than 80m

  2.Running speed is 4.0m/s-10m /s

  It should be considered to add load-bearing elements in the cable, and the load-bearing elements are generally galvanized soft wire rope.

TECHNICAL DATA	
Rated voltage	300/500V
Test voltage	2500V
Minimum bending radius	10×outer diameter
Working temperature	-15℃ ~ +70℃
Temperature of conductor	lower than 70℃

*TVVB (pararell) free suspension length must not exceed 35 meters, and the lift speed must not exceed 1.6m/s.
TVVB (interwist) free suspension length must not exceed 80 meters, and the lift speed must not exceed 4 m/s.

STRUCTURE	
Conductor	Multiple strands of ultra-fine stranded oxygen-free copper wire, VDE0295CLASS 5 compliant
Inner core Color	Color coding according to IEC60227, Color marking, digital marking can be customized according to customer's specific requirements
Reinforce	Steel rope. (optional)
Sheath	Flexible PVC, cold resistance and flame resistance, grey (RAL71001) or black (RAL9005)
Inner liner	None
Standard	Eu CE certification IEC60227-6; 2001 60227IEC 71F(TVVB) (3-24)X(0.75-1)mm²

Type	No. of cores	Specification	Conductor Structure	Width mm	Thickness mm	Density kg/km	Shape
TVVB	3	0.75	30/0.18	10.4	4.6	91	Line up
TVVB	4	0.75	30/0.18	13.7	4.6	119	Line up
TVVB	8	0.75	30/0.18	24.1	4.6	212	Line up
TVVB	9	0.75	30/0.18	26.5	4.6	233	Line up
TVVB	10	0.75	30/0.18	28.8	4.6	255	Line up
TVVB	12	0.75	30/0.18	33.5	4.6	299	Line up
TVVB	16	0.75	30/0.18	43.9	4.6	392	Line up
TVVB	18	0.75	30/0.18	49.6	4.6	441	Line up
TVVB	20	0.75	30/0.18	54.3	4.6	485	Line up
TVVB	24	0.75	30/0.18	64.7	4.6	578	Line up
TVVB	28	0.75	30/0.18	31.9	9	505	blossom arrangement
TVVB	30	0.75	30/0.18	40.7	8.3	627	blossom arrangement
TVVB	36	0.75	30/0.18	44.4	9	743	blossom arrangement
TVVB	40	0.75	30/0.18	51.8	8.3	805	blossom arrangement
TVVB	42	0.75	30/0.18	50.6	9	850	blossom arrangement
TVVB	48	0.75	30/0.18	56.7	9	957	blossom arrangement
TVVB	54	0.75	30/0.18	62.9	9	1065	blossom arrangement
TVVB	60	0.75	30/0.18	69	9	1172	blossom arrangement
TVVB	66	0.75	30/0.18	75.2	9	1279	blossom arrangement
TVVB(G)	3	0.75	30/0.18	15.9	4.6	132	Line up （with steel rope)
TVVB(G)	4	0.75	30/0.18	19.2	4.6	158	Line up （with steel rope)
TVVB(G)	8	0.75	30/0.18	29.6	4.6	244	Line up （with steel rope)
TVVB(G)	9	0.75	30/0.18	32	4.6	264	Line up （with steel rope)
TVVB(G)	10	0.75	30/0.18	34.3	4.6	284	Line up （with steel rope)
TVVB(G)	12	0.75	30/0.18	39	4.6	324	Line up （with steel rope)
TVVB(G)	16	0.75	30/0.18	50.1	4.6	418	Line up （with steel rope)
TVVB(G)	18	0.75	30/0.18	55.8	4.6	464	Line up （with steel rope)
TVVB(G)	20	0.75	30/0.18	60.5	4.6	504	Line up （with steel rope)
TVVB(G)	24	0.75	30/0.18	70.9	4.6	591	Line up （with steel rope)
TVVB(G)	28	0.75	30/0.18	40.9	9	651	blossom arrangement （with steel rope)
TVVB(G)	30	0.75	30/0.18	48.9	8.3	756	blossom arrangement （with steel rope)
TVVB(G)	36	0.75	30/0.18	52.6	9	878	blossom arrangement （with steel rope)
TVVB(G)	40	0.75	30/0.18	60	8.3	934	blossom arrangement （with steel rope)
TVVB(G)	42	0.75	30/0.18	59.8	9	1018	blossom arrangement （with steel rope)
TVVB(G)	48	0.75	30/0.18	65.9	9	1125	blossom arrangement （with steel rope)
TVVB(G)	54	0.75	30/0.18	72.1	9	1233	blossom arrangement （with steel rope)
TVVB(G)	60	0.75	30/0.18	78.2	9	1340	blossom arrangement （with steel rope)

PENDANT CABLE

APPLICATIONS

- Special cable lateral suspension strands used to remote control overhead cranes from pushbutton boxes.
- It can be used for installations where the hanging length of cable does not exceed 50m.

TECHNICAL DATA

Minimum bending radius	10×outer diameter
Test voltage	2500V
Working temperature	-15℃ ~ +70℃
Max. temperature at the conductor	in service +90℃ , in short circuit +250℃

CONSTRUCTION

Conductor	Multiple strands of ultra-fine stranded oxygen-free copper wire, VDE0295CLASS 5 compliant
Inner core Color	Color coding according to IEC60227 Color marking, digital marking can be customized according to customer
Insulation	XLPE or others
Sheath	Environmental protection, flame retardant PVC
Steel wire	1 or 2 steel wires
Inner liner	Special non-woven wrap cushioning

Type	No. of cores	Specification	Conductor Structure	Steel wire	Net weight	Approximate Diameter	
RVVG	5c	1.25sq	50/0.18	1	212	15	10.6
RVVG	8c	1.25sq	50/0.18	1	334	19.3	12.6
RVVG	10c	1.25sq	50/0.18	1	426	21.8	15
RVVG	12c	1.25sq	50/0.18	1	472	22.3	15.6
RVVG	14c	1.25sq	50/0.18	1	526	23.2	16.4
RVVG	16c	1.25sq	50/0.18	1	582	24.2	17.4
RVVG	20c	1.25sq	50/0.18	1	689	25.8	19
RVVG	24c	1.25sq	50/0.18	1	831	28.7	21.9
RVVG	30c	1.25sq	50/0.18	1	980	30.2	23.3
RVVG	5c	1.5sq	59/0.18	1	230	15	10.6
RVVG	8c	1.5sq	59/0.18	1	351	19.3	12.6
RVVG	10c	1.5sq	59/0.18	1	450	21.8	15
RVVG	12c	1.5sq	59/0.18	1	498	22.3	15.6
RVVG	14c	1.5sq	59/0.18	1	556	23.2	16.4
RVVG	16c	1.5sq	59/0.18	1	620	24.2	17.4
RVVG	20c	1.5sq	59/0.18	1	736	25.8	19
RVVG	24c	1.5sq	59/0.18	1	912	28.7	21.9
RVVG	30c	1.5sq	59/0.18	1	1070	30.2	23.3
RVV2G	5c	1.25sq	50/0.18	2	248	19.2	10.6
RVV2G	8c	1.25sq	50/0.18	2	346	23.5	12.6
RVV2G	10c	1.25sq	50/0.18	2	439	25.9	15
RVV2G	12c	1.25sq	50/0.18	2	483	26.5	15.6
RVV2G	14c	1.25sq	50/0.18	2	536	27.4	16.4
RVV2G	16c	1.25sq	50/0.18	2	633	30.4	17.4
RVV2G	20c	1.25sq	50/0.18	2	737	32	19
RVV2G	24c	1.25sq	50/0.18	2	895	34.9	21.9
RVV2G	30c	1.25sq	50/0.18	2	1041	36.3	23.3

REELING CABLE

APPLICATIONS

- Reeling cable are suitable for winding and moving applications in heavy machinery such as port cranes, tower cranes, and stackers, as well as for frequent power supply and signal transmission in industrial fields such as mining, metallurgy, and shipbuilding.
- They are resistant to bending, pulling, and twisting.

NOTE

The cable is installed with the upper end fixed, hanging freely for a few days to fully remove the internal stress, and then the lower end is fixed.

TECHNICAL DATA

Minimum bending radius	10×outer diameter
Temperature range	Mobile Installation：-20℃----+70℃ Fixed Installation：-35℃---+80℃
Test voltage	2000V
Working voltage	300/500V
Test voltage	2500V
Working voltage	450/750V

CONSTRUCTION

Conductor	Multiple strands of ultra-fine stranded oxygen-free copper wire, VDE0295CLASS 5 compliant
Insulation	A special blend of Tin-fine PVC soft insulation
Inner core Color	Color coding according to IEC60227, Color marking, digital marking can be customized according to customer's specific requirements
Inner liner	Special non-woven wrap cushioning
Reinforce	Multi-strand jute rope filling (optional)
Sheath	Special PVC, black

Type	Specification	Conductor Structure	Density	Approximate Diameter
YFFB	0.5*3C	28/0.15	73	7.1
YFFB	0.5*4C	28/0.15	88	7.7
YFFB	0.5*5C	28/0.15	104	8.3
YFFB	0.5*6C	28/0.15	121	9
YFFB	0.5*8C	28/0.15	178	12.3
YFFB	0.5*9C	28/0.15	188	12.3
YFFB	0.5*10C	28/0.15	205	12.9
YFFB	0.5*11C	28/0.15	224	13.6
YFFB	0.5*12C	28/0.15	234	13.6
YFFB	0.5*14C	28/0.15	271	14.9
YFFB	0.5*16C	28/0.15	295	15.2
YFFB	0.5*30C	28/0.15	520	20.7
YFFB	0.75*3C	30/0.18	89	7.7
YFFB	0.75*4C	30/0.18	109	8.4
YFFB	0.75*5C	30/0.18	129	9.1
YFFB	0.75*6C	30/0.18	151	9.9
YFFB	0.75*8C	30/0.18	222	13.6
YFFB	0.75*9C	30/0.18	235	13.6
YFFB	0.75*10C	30/0.18	257	14.2
YFFB	0.75*11C	30/0.18	281	15.1
YFFB	0.75*12C	30/0.18	295	15.1
YFFB	0.75*14C	30/0.18	342	16.6
YFFB	0.75*16C	30/0.18	374	16.9
YFFB	0.75*20C	30/0.18	458	18.9
YFFB	0.75*36C	30/0.18	632	21.4
YFFB	1.0*2C	40/0.18	137	9.4
YFFB	1.0*3C	40/0.18	164	10.2
YFFB	1.0*4C	40/0.18	191	11.1
YFFB	1.0*5C	40/0.18	282	15.4
YFFB	1.0*6C	40/0.18	299	15.7

Type	Specification	Conductor Structure	Density	Approximate Diameter
YFFB	1.0*7C	40/0.18	326	16.1
YFFB	1.0*10C	40/0.18	358	17
YFFB	1.0*12C	40/0.18	375	17.6
YFFB	1.0*14C	40/0.18	437	18.7
YFFB	1.0*16C	40/0.18	477	19.1
YFFB	1.0*20C	40/0.18	585	21.3
YFFB	1.5*3C	59/0.18	146	9.8
YFFB	1.5*4C	59/0.18	181	10.7
YFFB	1.5*5C	59/0.18	217	11.6
YFFB	1.5*6C	59/0.18	254	12.7
YFFB	1.5*8C	59/0.18	376	17.7
YFFB	1.5*9C	59/0.18	401	17.7
YFFB	1.5*10C	59/0.18	438	18.6
YFFB	1.5*11C	59/0.18	482	19.7
YFFB	1.5*12C	59/0.18	506	19.7
YFFB	1.5*14C	59/0.18	590	21.7
YFFB	1.5*16C	59/0.18	647	22.1
YFFB	1.5*20C	59/0.18	797	24.7
YFFB	2.5*3C	47/0.26	211	11.6
YFFB	2.5*4C	47/0.26	264	12.8
YFFB	2.5*5C	47/0.26	320	14
YFFB	2.5*8C	47/0.26	558	21.6
YFFB	2.5*9C	47/0.26	597	21.6
YFFB	2.5*10C	47/0.26	655	22.7
YFFB	2.5*11C	47/0.26	722	24.1
YFFB	2.5*13C	47/0.26	800	24.1
YFFB	4.0-3C	77/0.26	278	12.9
YFFB	4.0*4C	77/0.26	351	14.2
YFFB	4.0*5C	77/0.26	427	15.6
YFFB	4.0*6C	77/0.26	505	17

PHOTOVOLTAIC CABLE

APPLICATIONS

Photovoltain cables are suitable for DC (e.g. 1.5kV/1.8kV) and AC low voltage transmission scenarios in solar PV power plants (ground/rooftop), distributed PV systems, building-integrated photovoltaic (BIPV), PV agricultural greenhouses and off-grid PV power generation.

TECHNICAL DATA	
Minimum bending radius	6-8×outer diameter
Temperature range	-40℃~+120℃
Working voltage	DC 1.5kV / 1.8kV, Partial support for AC 0.6/1kV
Flame retardant	Conforms to IEC 60332-1 (single self-extinguishing) or EN 50618 (low smoke and halogen free flame retardant)Low Smoke Zero Halogen (LSZH) optional
STRUCTURE	
Conductor	Prefer tinned copper wire, bare copper for some scenes
Inner core Color	XLPE, Partial use of Low Smoke Zero Halogen (LSZH) materials for special scenarios
Colors	Black or Red

Type	Number and nominal sectional area of conductors(mm^2)	Thickness of insulation(mm)	Thickness of sheath(mm)	Maximum resistance of conductor at 20ºC(Ω/km)	Current carrying capacity(A0)
PV1-F	1x1.5	0.7	0.8	13.7	30
PV1-F	1x2.5	0.7	0.8	8.21	41
PV1-F	1x4	0.7	0.8	5.09	55
PV1-F	1x6	0.7	0.8	3.39	70
PV1-F	1x10	0.7	0.8	1.95	98
PV1-F	1x16	0.7	0.9	1.24	132
PV1-F	1x25	0.9	1.0	0.795	176
PV1-F	1x35	0.9	1.1	0.565	218
PV1-F	1x50	1.0	1.2	0.393	276
PV1-F	1x70	1.1	1.2	0.277	347
PV1-F	1x95	1.1	1.3	0.210	416
PV1-F	1x120	1.2	1.3	0.164	488
PV1-F	1x150	1.4	1.4	0.132	566
PV1-F	1x185	1.6	1.6	0.108	644
PV1-F	1x240	1.7	1.7	0.817	775

POWER CABLE

01 EV CHARGING CABLE

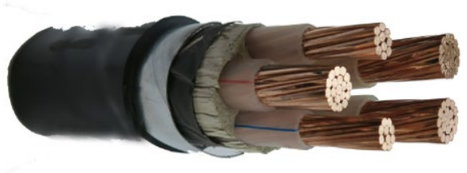
APPLICATIONS

EV Charging cables offer electric vehicle owners and charging infrastructure providers the perfect balance of reliability, durability and efficient power transmission.

TECHNICAL DATA	
Minimum bending radius	10×outer diameter
Working voltage	< 1mm² 300/500V , ⩾1mm² 450/750V
Testing voltage	2000V , 2500V

CONSTRUCTION	
Conductor	Copper (main), Aluminum (optional)
Insulation	Mixed flexible PVC or others
Inner core Color	Color coding according to IEC60227,Color marking, digital marking can be customized according to customer
Inner liner	None or optional
Sheath	Oil resistant, weather resistant elastic PVC special sheath

02 LOW VOLTAGE CABLE

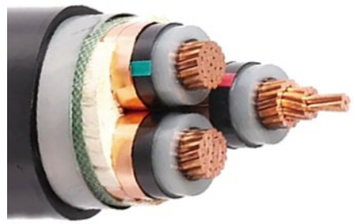


APPLICATIONS

Low-voltage cables are suitable for power transmission and signal control scenarios at lower voltage levels (usually ⩽1kV) such as household power supply, commercial building lighting and outlets, small industrial equipment, charging piles (AC slow charging), landscape lighting, and security systems.

TECHNICAL DATA	
Minimum bending radius	10×outer diameter
Working voltage	300-500v,450-750v,0.6-1kv
Temperature range	-40℃~+90℃ (common PVC/XLPE), extreme scenario optional -50℃~+125℃ (e.g. fluoroplastic insulation)

03 MEDIUM VOLTAGE CABLE



APPLICATIONS

Medium voltage cables are suitable for power transmission scenarios of 6kV - 35kV voltage level in urban distribution networks, power supply in industrial parks, power transmission in large commercial building complexes, power systems in mines and factories, and grid connection of new energy power stations (e.g. photovoltaic/wind power).

TECHNICAL DATA	
Minimum bending radius	20×outer diameter
Working voltage	6/10kV, 8.7/15kV, 12/20kV, 18/30kV (or 35kV)
Testing voltage	-40℃~+90℃ (common PVC/XLPE), extreme scenario optional -50℃~+125℃ (e.g. fluoroplastic insulation)

CONSTRUCTION	
Conductor	Copper (main), Aluminum (optional)
Insulation	PVC or XLPE
Inner core Color	Color coding according to IEC60227,Color marking digital marking can be customized according to customer
Inner liner	None or optional
Sheath	Conductor shielding (semi-conductive layer, uniform electric field) + insulating shielding (peelable or non-peelable), metal shielding of copper tape/wire (ground fault current export)

CONSTRUCTION	
Conductor	Copper (main), Aluminum (optional)
Insulation	Mixed flexible PVC or others
Inner core Color	Color coding according to IEC60227,Color marking, digital marking can be customized according to customer
Inner liner	None or optional
Sheath	Oil resistant, weather resistant elastic PVC special sheath

OVERHEAD CABLE

01 STEEL CORE ALUMINUM ALLOY STRANDED WIRE

APPLICATIONS

Steel core aluminum alloy stranded wire is suitable for large span, high load transmission lines, such as long-distance high-voltage transmission, heavy ice, large gear distance overhead lines and harsh environments (strong wind/corrosion) power transmission, both the high strength of the steel core and aluminum alloy lightweight/corrosion-resistant characteristics.

TECHNICAL DATA	
Rated voltage	10kV、35kV、110kV、220kV、500kV
Temperature range	-40℃~ +80℃
Flame retardancy	Aluminum alloy layer has good atmospheric corrosion resistance, steel core galvanized treatment to enhance corrosion resistance

CONSTRUCTION	
Conductor	Inner steel core, outer aluminum alloy wire
Stranding process	Steel core and aluminum alloy layer using layered stranding process (e.g., concentric layer stranding for steel core, Z-type or S-type stranding for aluminum alloy)

02 ALL ALUMINUM ALLOY CONDUCTOR (AAAC)

APPLICATIONS

Aluminum alloy conductors(AAAC) are suitable for cost-sensitive, moderate current-carrying requirements and ample installation space, such as factory floors, rural power grids, building power distribution and other low-voltage distribution systems, commonly used in fixed laying of power transmission lines.

TECHNICAL DATA	
Rated voltage	0.6/1kV、6/10kV、8.7/15kV
Temperature range	-40℃~+90℃
Flame retardancy	IEC 60332-1 (single self-extinguishing) or better

03 OVERHEAD INSULATED CABLE

APPLICATIONS

Overhead insulated cables are suitable for use in densely populated areas such as town streets, residential areas, parks, etc., as well as in special areas crossing highways, railroads, rivers, etc., and are used for low-voltage or medium-voltage distribution lines of 1kV and below or 10kV and below, with the flexibility of both insulation protection and overhead laying.

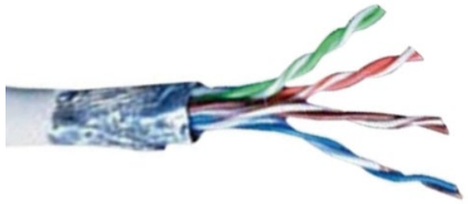
TECHNICAL DATA	
Rated voltage	0.6/1kv、10kv、20kv
Temperature range	-40°C to +70°C (PVC) or +90°C (XLPE)
Flame retardancy	According to IEC 60332 - 1 (single self-extinguishing) or better (e.g. low-smoke halogen-free flame retardant LSZH)

CONSTRUCTION	
Conductor	Mainly hard/soft copper (T2/TU1) or aluminum (L2/LY9)
Monofilament form	Multiple fine monofilament strands
Stranding process	Layered stranding (center mono + multilayer monofilament)
Out jacket	PVC, XLPE, LSZH, PE

CONSTRUCTION	
Conductor	Aluminum or aluminum alloy
Monofilament form	Multiple fine monofilament strands
Stranding process	Tightly pressed (increase fill factor, reduce outer diameter) and non-tightly pressed (superior flexibility)
Special design	shielding layer (e.g. anti-interference) or water-blocking layer (e.g. wet environment) added to some scenarios

NETWORK CABLE

01 HIGH SPEED SHIELDED NETWORK CABLE



APPLICATIONS

Shielded network cable is suitable for industrial environments with strong electromagnetic interference, server room networks with high confidentiality requirements, medical equipment networking and audio/video transmission scenarios, etc. It effectively resists external electromagnetic interference through the metal shielding layer and guarantees high-speed and stable data transmission.

TECHNICAL DATA	
Attenuation	⩽20dB/100m (100MHz, Super Category 5), ⩽15dB/100m (100MHz, Category 6)
Temperature range	-20℃~ +70℃ (conventional), -40℃~ +80℃

CONSTRUCTION	
Conductor	High-purity oxygen-free copper as the main, some low-cost scenes with copper-clad aluminum
Monofilament form	Mostly single solid copper wire (e.g. 24AWG/23AWG common specifications) or fine copper wire stranded (e.g. multi-stranded soft copper to enhance flexibility)
Stranding process	Pairs of wires (e.g., 4 pairs of twisted wires) are stranded using precision spiral stranding
Sheath	Conductor stranded and wrapped with insulation, then combined with a shield (e.g. aluminum foil + woven mesh)

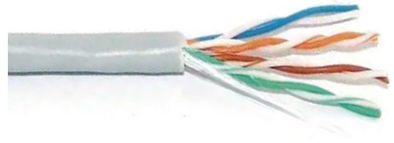
FIBER OPTIC CABLE

APPLICATIONS

Fiber optic cable is suitable for long-distance, high-capacity communication transmission, such as backbone network, metropolitan area network, data center interconnection, cross-sea communication and high-speed and stable information transmission in harsh environments (e.g., strong electromagnetic interference, plateau/desert).

TECHNICAL DATA	
Attenuation coefficient	Single-mode fiber ⩽ 0.36dB/km (1310nm), ⩽ 0.22dB/km (1550nm); multimode fiber ⩽ 3.0dB/km (850nm), ⩽ 1.0dB/km (1300nm)
Temperature range	-40℃~ +70℃ (general), -60℃~ +85℃ (special environment)
Flame retardant	Low Smoke Zero Halogen (LSZH) sheathed fiber optic cables are flame retardant and low toxicity in accordance with the relevant standards (e.g. IEC 60332-3)

02 HIGH SPEED UNSHIELDED NETWORK CABLE



APPLICATIONS

Unshielded network cable is suitable for simple electromagnetic environment, cost-sensitive and moderate transmission rate requirements, such as ordinary home networks, small offices, school classrooms and conventional indoor wiring, to meet the needs of 100 Gigabit to Gigabit basic network communications.

TECHNICAL DATA	
Attenuation	⩽20dB/100m (100MHz, Super Category 5),⩽15dB/100m (100MHz, Category 6)
Temperature range	-20℃~ +70℃ (conventional), -40℃~ +80℃ (industrial grade)
Flame retardancy	Conforms to IEC 60332 - 1 (self-extinguishing single vertical flame) or better (e.g., low-smoke, halogen-free flame retardant)

CONSTRUCTION	
Conductor	High-purity oxygen-free copper as the main, some low-cost scenes with copper-clad aluminum
Monofilament form	Mostly single solid copper wire (e.g. 24AWG/23AWG common specifications) or fine copper wire stranded (e.g. multi-stranded soft copper to enhance flexibility)
Stranding process	Pairs of wires (e.g., 4 pairs of twisted wires) are stranded using precision spiral stranding
Shield	None

CONSTRUCTION	
Conductor	Quartz glass (SiO_2) or plastic optical fiber (POF)
Single-mode fiber	Fine core diameter (8~10μm), cladding diameter of 125μm, allowing only a single mode of optical transmission, suitable for long-distance, high-rate communications
Multimode fiber	Thicker core diameter (50μm/62.5μm), cladding diameter 125μm, support multi-mode optical transmission, for short distance, multi-branch scenarios
Cladding	Buffer coating and secondary coating sequentially wrapped around the fiber
Reinforcement	Steel wire/strip or Kevlar
Inner sheath	Polyethylene (PE) or polyvinyl chloride (PVC)
Outer sheath	Customized according to the environment (e.g. PE sheath with good weather resistance for outdoor use; LSZH low-smoke halogen-free sheath for indoor/crowded areas, flame retardant and low toxicity)
Filling and water-blocking structure	Core gap filled with grease (water-blocking, moisture-blocking) or water-blocking yarn/tape