

Guangdong OMG Transmitting Technology Co., ltd.
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COMPANY PROFILE

Guangdong OMG Transmitting Technology Co., Ltd, after 27 years of steady development, has become an excellent new energy vehicle cable solution provider, with a global market share of more than 10% of EV charging cables, product footprints in more than 40 countries and regions, with two production bases and two offices. OMG EV CABLE is committed to become a global first-class new energy vehicle cable solution provider, and was recognized as Dongguan Patent Advantage Enterprise, Guangdong Province New Energy Vehicle Intelligent Electrical Engineering Technology Research Center in 2016 , and Top 100 Electric Vehicle Core Components Enterprise in 2017.

Our products and technologies have served major global automotive and well-known connector companies, with major customers such as Amphe-nol, ITT, DEGSON, KST, SINBON, DELTA, ABB, JAE, ATL, DANA. OMG EV CABLE has fully introduced and implemented ISO 9001:2015, IATF 16949:2016 quality management system. We have participated in the drafting of the Technical Specification for Electric Vehicle Conductive Charging System Cables (CQC1103-2015, CQC1104-2015, CQC1105-2015) and Electric Vehicle Charging Cables (GB/T33594-2017), EV Conductive Charging Connection Device GB/T 20234.1-2015 and other standards.

OMG EV CABLE has been cooperating with Harbin University of Science and Technology in the cable product industry for the research and develop-ment of cable products and materials. In the new energy automotive cable industry, we have obtained 22 invention patents, 74 utility model patents, 3 appearance patents, 8 software copyrights and 4 works copyrights. At present, OMG EV CABLE has set up European offices and established business cooperation with global connector companies to achieve 60% sales growth in 2022. In the future, OMG EV CABLE will continue to penetrate more coun-tries and regions, provide more enterprises and users with new energy automotive cable solutions, and help the rapid development of the new energy industry.

OMG EV CABLE — Just for safe



Guangdong OMG Transmitting Technology Co., Ltd



Anhui OMG Transmitting Technology Co., Ltd

CORPORATE CULTURE

Corporate mission

Green conduction for the benefit of mankind

Corporate vision

In the field of new energy electric vehicle charging become
A respected international enterprise

Values

To meet the correct and reasonable needs of customers as the purpose
To accomplish the job goals of employees as a guideline

Quality policy

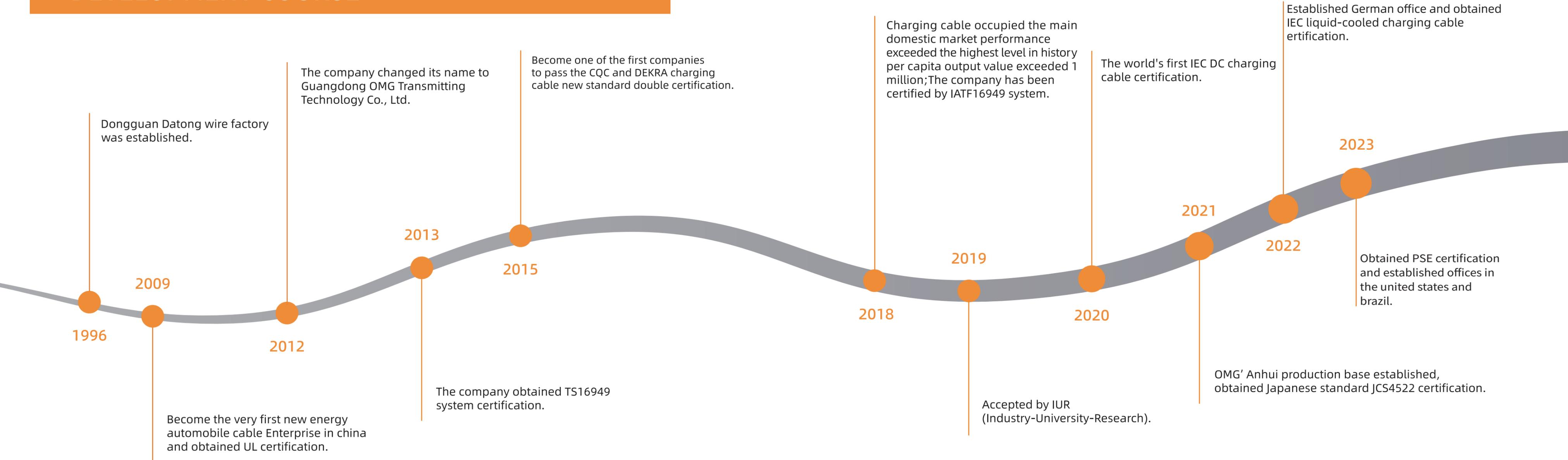
Customer respect, quality-oriented
Full participation, continuous improvement

Security policy

Safety first, prevention first
Risk management, full participation



DEVELOPMENT COURSE



PARTICIPATION IN STANDARDS DEVELOPMENT

"Connecting Devices for Conductive Charging of Electric Vehicles"
GB/T 20234.1-2015

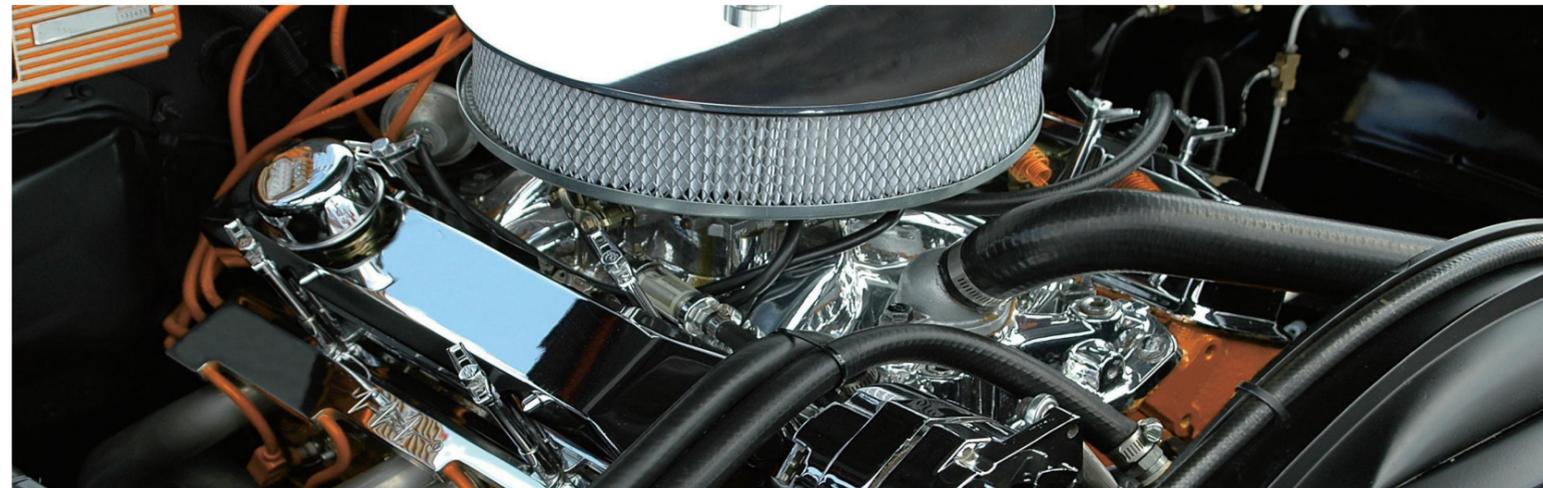
"Electric Vehicle Charging Cables"
(GB/T33594-2017)

"Technical Specifications for Electric Vehicle Conductive Charging System Cables"
(CQC1103-2015, CQC1104-2015, CQC1105-2015)

"AC 1.5kV High Voltage Flexible Cable for Electric Vehicles" Guangdong Local Standard DB44-2100

"High Voltage Connectors and Wiring Harnesses for Electric Vehicles"
CQC Technical Specifications

"Electric Vehicle Wireless Charging System" Guangdong Local Standard



ENTERPRISE HONOR



Guangdong Private Technology Enterprise



Vice President of Dongguan Songshan Lake High-tech Enterprise Listing Promotion Association



Guangdong Famous Brand Products



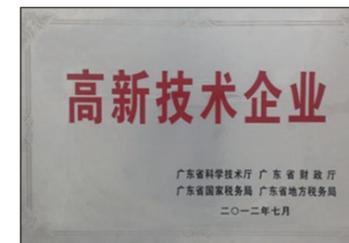
IATF16949 certification



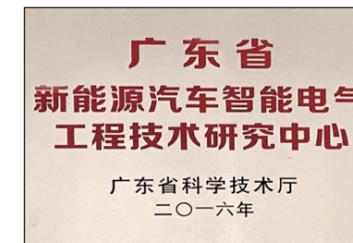
Vice President of Guangdong Cable Industry Association



Guangdong HIT Alumni Expert Committee



High and New Technology Enterprise



Guangdong New Energy Vehicle Intelligent Electrical Engineering Technology Research Center



Quality management system certification



2019 ISO Supervision and Audit Qualification Notice

PRODUCT CERTIFICATE



KK-101918 Dutch version certification



TUV certification



UL certification



UL certification



CQC certification



CQC certification



CQC certification



CQC certification

PATENT CERTIFICATE



Patent for cable terminal forming device



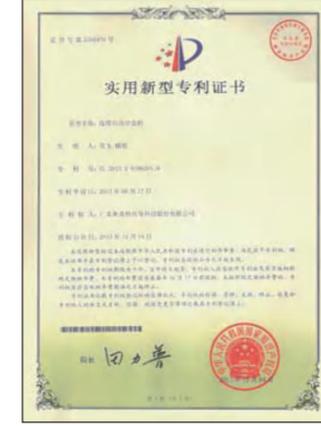
Cable preparation machine patent



New structure wire and cable patent



New wire and cable patent



Patent for automatic cable splitting machine



A kind of spool type take-up and payoff turntable patent



A kind of meter counter patent



Patent for cable rewind recovery device



HIGH VOLTAGE CABLE FOR ELECTRIC VEHICLE

■ INTRODUCTION TO HIGH-VOLTAGE CABLES FOR NEW ENERGY VEHICLES

EV High voltage cables, as the carrier of power transmission, are used to connect the charging port to the battery, inside the battery, between the battery and the engine and other components, as well as battery energy storage equipment and other areas. Due to the harsh application environment in the vehicle, electric vehicle high voltage cables have very high performance requirements.

■ OMG PRODUCT ADVANTAGES AND FEATURES

The OMG high voltage cable products, can perform ISO6722-1、ISO6722-2、ISO14572、LV216、ISO19642、UL758 and other international standards, we also widely produce domestic standard products mainly based on QC/T1037, on the basis of this also launched a leading industry standard enterprise standard, and to rise to the Guangdong province local standards, standard Numbers is DB44 / T 2100 2018, moreover we can also produce some customized products. Conductor material is bare copper, tin-plated copper and aluminum alloy and other conductor types.

OMG product features soft, bending radius up to 5D or less; high and low temperature resistance, oil resistance, acid and alkali resistance, water resistance, wear resistance, crack resistance, UV resistance; good flame retardant properties; good electrical conductivity, small conductor temperature rise; all materials comply with RoHS 2.0 environmental standards.

HIGH VOLTAGE CABLES FOR ROAD VEHICLES

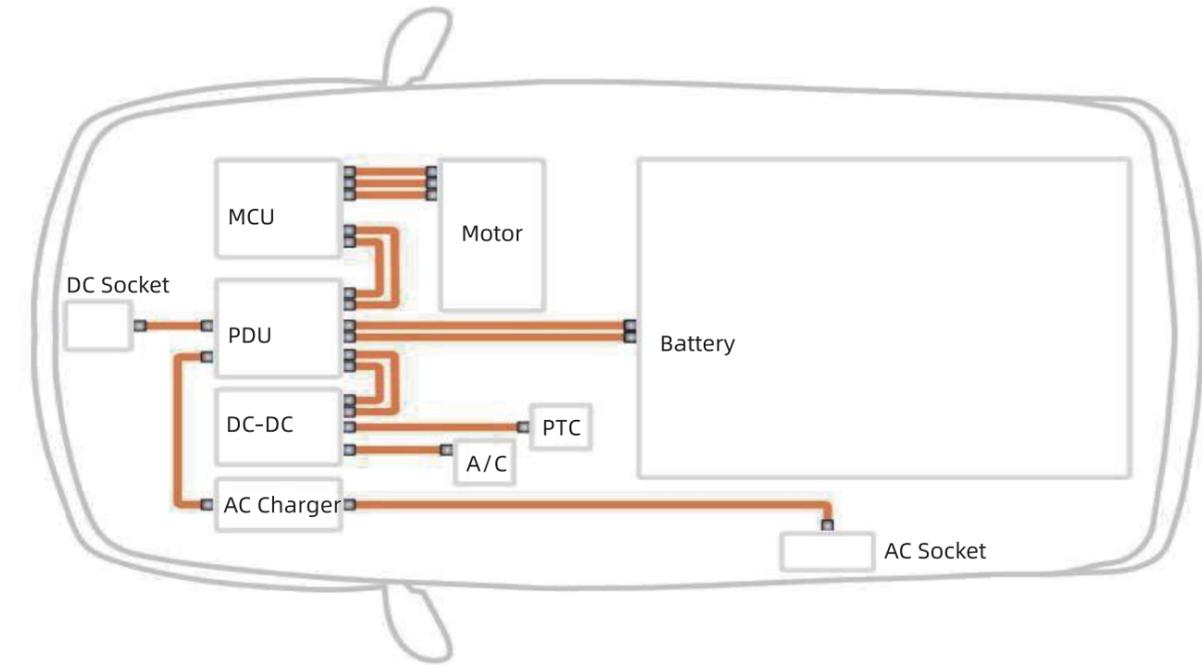
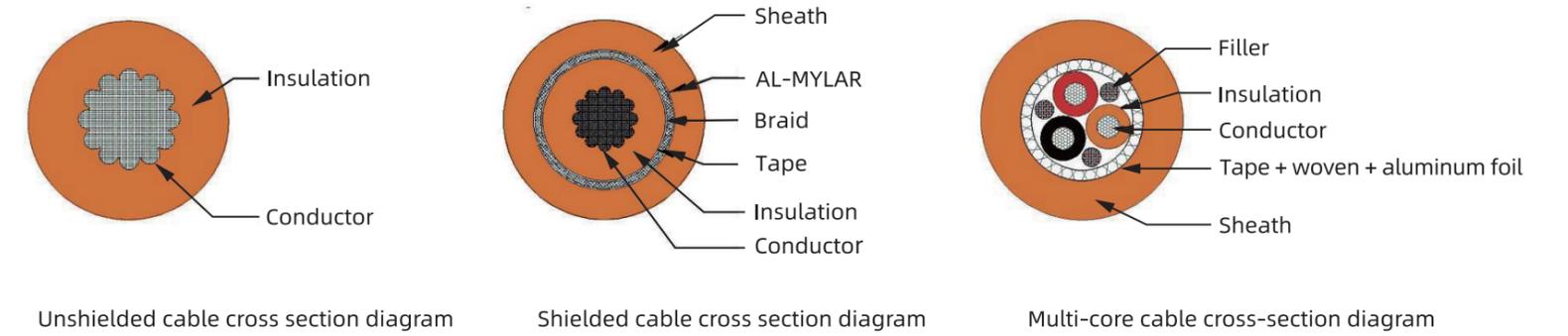


PRODUCT REFERENCE STANDARDS:
 ISO 19642-2019-5、ISO 19642-2019-9、LV216、QC/T 1037-2016
 APPROVAL NO:
 E24*118R03/01*0375*00

PRODUCT DESCRIPTION

Construction	Features
1. Conductor	1. Rated temperature: -40°C ~ +(125°C, 150°C)
Material: Bare Copper	2. Rated Voltage: AC 600V/DC 900V;AC 1000V/DC 1500V
2. Insulation	3. Short-term Aging: 240h Comply with QC/T 1037
Material: XLPE	4. Long term Aging: 3000h Comply with QC/T 1037
Color: Orange	5. Flame Test: Comply With QC/T 1037
3. Shielded	6. Min Bending Radius: 4*OD@OD<15mm ; 6*OD@OD≥15mm
Material: Tinned Copper	7. Dielectric Voltage: 5kVac/5min. No Breakdown
4. Sheath	8. Oil Resistance: Comply With QC/T 1037
Material: XLPE	9. Anti-tear Performance: >20N/mm
Color: Orange	10. Environmental Requirements: Compliant with RoHS and REACH

PRODUCT STRUCTURE DIAGRAM



AC 1000V/DC 1500V(Shielding)

Product Series	Size	Conductor Stranded OD mm (Ref.)	Max. Conductor resistancem Ω /m@20°C	Permissible ampacity A (Ref.)	Over diameter mm (Ref.)
QZJ-C QZJ-D	10mm ²	4.50	1.82	70	9.50
	16mm ²	5.60	1.16	95	11.30
	25mm ²	7.20	0.743	130	13.50
	35mm ²	8.30	0.527	160	14.50
	50mm ²	10.10	0.368	210	17.00
	70mm ²	12.10	0.259	260	19.00
	95mm ²	14.50	0.196	320	21.60
	120mm ²	15.90	0.153	370	23.00
	The specifications, sizes and structures of above product may change due to technological progress, and similar specifications can be designed and manufactured according to customer usage requirements.				

AC 600V/DC 900V(Shielding)

Product Series	Size	Conductor Stranded OD mm (Ref.)	Max. Conductor resistancem Ω /m@20°C	Permissible ampacity A (Ref.)	Over diameter mm (Ref.)
QBJP2-C QBJP2-D	1.5mm ²	1.60	12.7	18	4.00
	2.5mm ²	2.06	7.60	25	4.60
	4mm ²	2.70	4.71	35	5.40
	6mm ²	3.40	3.14	45	6.40
	10mm ²	4.50	1.82	70	8.20
	16mm ²	5.60	1.16	95	9.50
	25mm ²	7.20	0.743	130	11.50
	35mm ²	8.30	0.527	160	13.50
	50mm ²	10.10	0.368	210	15.50
	70mm ²	12.10	0.259	260	18.00
	The specifications, sizes and structures of above product may change due to technological progress, and similar specifications can be designed and manufactured according to customer usage requirements.				

AC 1000V/DC 1500V(Unshielded)

Product Series	Size	Conductor Stranded OD mm (Ref.)	Max. Conductor resistancem Ω /m@20°C	Permissible ampacity A (Ref.)	Over diameter mm (Ref.)
QZJ-C QZJ-D	10mm ²	4.50	1.82	70	6.80
	16mm ²	5.60	1.16	95	8.00
	25mm ²	7.20	0.743	130	10.00
	35mm ²	8.30	0.527	160	11.00
	50mm ²	10.10	0.368	210	13.00
	70mm ²	12.10	0.259	260	15.00
	95mm ²	14.50	0.196	320	17.30
	120mm ²	15.90	0.153	370	19.00
	The specifications, sizes and structures of above product may change due to technological progress, and similar specifications can be designed and manufactured according to customer usage requirements.				

AC 600V/DC 900V(Unshielded)

Product Series	Size	Conductor Stranded OD mm (Ref.)	Max. Conductor resistancem Ω /m@20°C	Permissible ampacity A (Ref.)	Over diameter mm (Ref.)
QBJ-C QBJ-D	1.5mm ²	1.60	12.7	18	2.30
	2.5mm ²	2.06	7.60	25	2.85
	4mm ²	2.70	4.71	35	3.55
	6mm ²	3.40	3.14	45	4.15
	10mm ²	4.50	1.82	70	5.60
	16mm ²	5.60	1.16	95	6.90
	25mm ²	7.20	0.743	130	8.40
	35mm ²	8.30	0.527	160	9.80
	50mm ²	10.10	0.368	210	11.90
	70mm ²	12.10	0.259	260	14.10
	The specifications, sizes and structures of above product may change due to technological progress, and similar specifications can be designed and manufactured according to customer usage requirements.				

MULTI-CORE SHIELDED NEW ENERGY VEHICLE HIGH-VOLTAGE CABLE

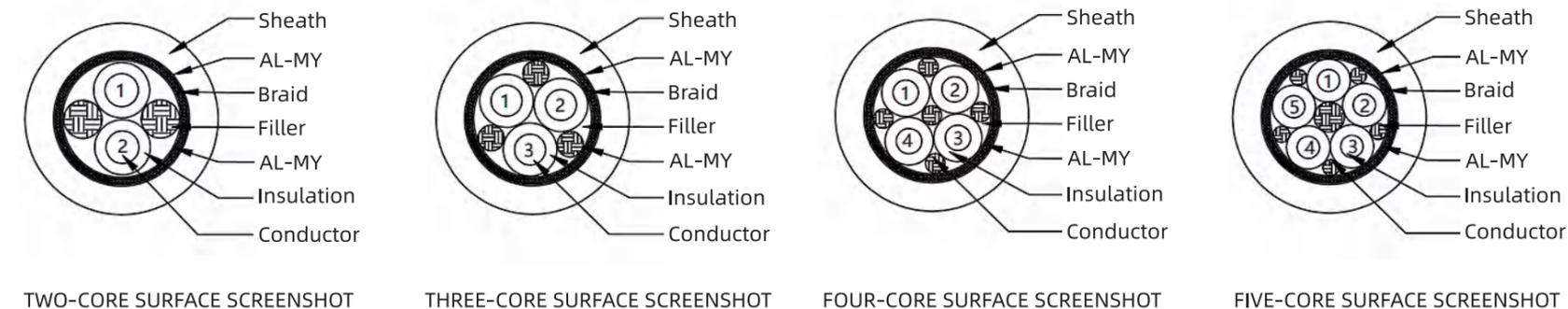
PRODUCT REFERENCE STANDARDS:

ISO 19642-2019-5、ISO 19642-2019-9、LV216、QC/T 1037-2016、

PRODUCT DESCRIPTION

Construction	Features
1. Conductor	1. Rated temperature: -40°C ~ +(125°C, 150°C)
Material: Bare Copper	2. Rated Voltage: AC 600V/DC 900V;AC 1000V/DC 1500V
2. Insulation	3. Short-term Aging: 240h,Comply with QC/T 1037
Material: XLPE	4. Long-term Aging: 3000h,Comply with QC/T 1037
Color: Orange	5. Flame Test: Comply With QC/T 1037
3. Shielded	6. Min Bending Radius: 4*OD@OD<15mm ; 6*OD@OD≥15mm
Material: Tinned Copper	7. Dielectric Voltage: 5kVac/5min. No Breakdown
4. Sheath	8. Oil Resistance: Comply With QC/T 1037
Material: XLPE	9. Anti-tear Performance: >20N/mm
Color: Orange	10. Environmental Requirements: Compliant with RoHS2.0 and REACH

PRODUCT STRUCTURE DIAGRAM



AC 600V/DC 900V (Multi-core shielding)

Product Series	Cores	Size	Conductor Stranded OD mm (Ref.)	Max. Conductor resistancemΩ/m@20°C	Permissible ampacity A (Ref.)	Over diameter mm (Ref.)
QBJP2-C QBJP2-D	2	1.5mm ²	1.60	12.70	13	7.60
	3				11	8.00
	4				10	8.60
	5	2.5mm ²	2.06	7.60	9	9.20
	2				18	8.60
	3				16	9.20
	4	4mm ²	2.70	4.71	14	9.90
	5				13	10.80
	2				26	10.10
	3	6mm ²	3.40	3.14	22	10.60
	4				20	12.00
	5				18	13.20
	2	6mm ²	3.40	3.14	33	11.80
	3				29	12.60
	4				26	13.60
5				23	14.80	

The specifications, sizes and structures of above product may change due to technological progress, and similar specifications can be designed and manufactured according to customer usage requirements.

UL 758 STANDARD DEVICE WIRE FOR ELECTRICAL EQUIPMENT



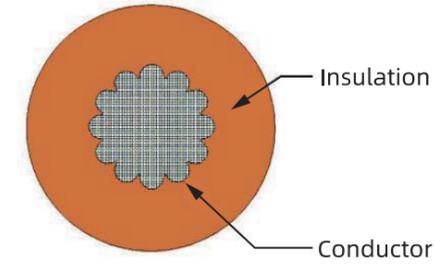
PRODUCT REFERENCE STANDARDS:
 UL 758、UL3820、UL3886、UL30088
 CERTIFICATE NUMBER:
 E323711

APPROVAL NO:
 E24*118R03/01*0375*00

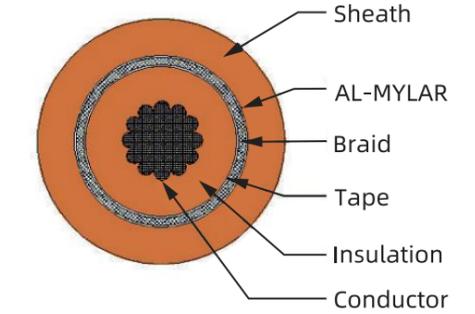
■ PRODUCT DESCRIPTION

Construction	Features
1. Conductor	1. Rated temperature: -40°C ~ +125°C
Material: Bare Copper	2. Rated Voltage: 1000V AC / 1500V AC
2. Insulation	3. Aging: 158°C*168h, comply with UL 758
Material: XLPE	4. Flame Test: VW-1, comply with UL 758
Color: Orange	5. Deformation Test: 121°C*4h, comply with UL 758
3. Shielded	6. Min Bending Radius: 4*OD
Material: Tinned Copper	7. Dielectric Voltage: 3000V AC*1min
4. Sheath	8. Cold Bend Test: -40°C*4h, comply with UL 758
Material: XLPE	9. Environmental Requirements: Compliant with RoHS 2.0 and REACH
Color: Orange	

■ PRODUCT STRUCTURE DIAGRAM



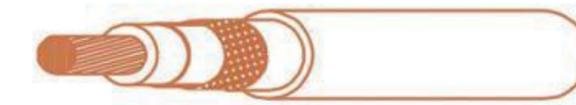
Unshielded cable cross section diagram



Shielded cable cross section diagram



Shielded cable physical picture



Overall image of shielded cable

Single core shielded cable

Product Series	Size	Conductor Stranded OD mm (Ref.)	Max. Conductor resistancemΩ/m@20°C	Permissible ampacity A (Ref.)	Over diameter mm (Ref.)
UL 30088 for 1000V	16AWG	1.50	14.10	15	5.60
	15AWG	1.70	11.20	20	5.70
	14AWG	1.90	8.88	24	5.80
	13AWG	2.10	7.02	28	5.80
	12AWG	2.80	5.58	34	6.70
	11AWG	3.00	4.43	39	6.90
	10AWG	3.30	3.51	45	7.20
	9AWG	3.70	2.78	53	7.60
	8AWG	4.20	2.23	64	8.80
	7AWG	4.80	1.77	75	9.40
	6AWG	5.40	1.40	85	10.00
	5AWG	6.00	1.11	100	12.10
	4AWG	6.60	0.882	115	12.20
	3AWG	7.40	0.7	135	13.00
	2AWG	8.40	0.555	160	13.60
	1AWG	9.40	0.44	175	15.00
The specifications, sizes and structures of above product may change due to technological progress, and similar specifications can be designed and manufactured according to customer usage requirements.					

Single core unshielded cable

Product Series	Size	Conductor Stranded OD mm (Ref.)	Max. Conductor resistancemΩ/m@20°C	Permissible ampacity A (Ref.)	Over diameter mm (Ref.)
UL 3820 for 1000V UL 3886 for 1500V	16AWG	1.50	14.10	15	3.40
	15AWG	1.70	11.20	20	3.50
	14AWG	1.90	8.88	24	3.60
	13AWG	2.10	7.02	28	3.80
	12AWG	2.80	5.58	34	4.50
	11AWG	3.00	4.43	39	4.70
	10AWG	3.30	3.51	45	5.00
	9AWG	3.70	2.78	53	5.40
	8AWG	4.20	2.23	64	6.60
	7AWG	4.80	1.77	75	7.20
	6AWG	5.40	1.40	85	7.80
	5AWG	6.00	1.11	100	8.40
	4AWG	6.60	0.882	115	9.00
	3AWG	7.40	0.7	135	9.40
	2AWG	8.40	0.555	160	10.80
	1AWG	9.40	0.44	175	12.40
The specifications, sizes and structures of above product may change due to technological progress, and similar specifications can be designed and manufactured according to customer usage requirements.					



ELECTRIC VEHICLE CHARGING CABLE

■ ELECTRIC VEHICLE CHARGING CABLE INTRODUCTION

EV charging cables are used to connect electric vehicle charging devices and charging infrastructure to transmit power to electric vehicles and are equipped with a certain amount of signal lines, control lines, power auxiliary lines, etc. to ensure accurate control of the entire charging process and safe operation. Charging cables are generally used in charging stations, parking lots, hotels, communities, garages, and other areas. Portable charging cables can be placed in the car.

■ OMG PRODUCT ADVANTAGES AND FEATURES

OMG is certified by ISO 9001:2015 and IATF 16949:2016 system, among which the electric vehicle charging cable has obtained UL, TUV of Germany, CQC of China, Tokai certification, IEC certification, EN50620 certification; Aomege is also a member of China Quality Certification Center (CQC) technical specifications for cables used in electric vehicle conduction charging system (CQC1103-2015, CQC1104-2015, CQC1105-2015) and the national standard for electric vehicle charging cables (GB/T33594-2017). In the field of electric vehicles, we have obtained 21 invention patents, 74 utility model patents, 3 appearance patents and 8 software copyrights.

OMG product features soft, bending radius up to 5D or less; high and low temperature resistance, oil resistance, acid and alkali resistance, water resistance, wear resistance, anti-cracking, UV resistance; good flame retardancy; good electrical conductivity, small conductor temperature rise; all materials comply with RoHS 2.0 & REACH environmental standards.

EN50620、IEC62893 STANDARD AC CHARGING CABLE



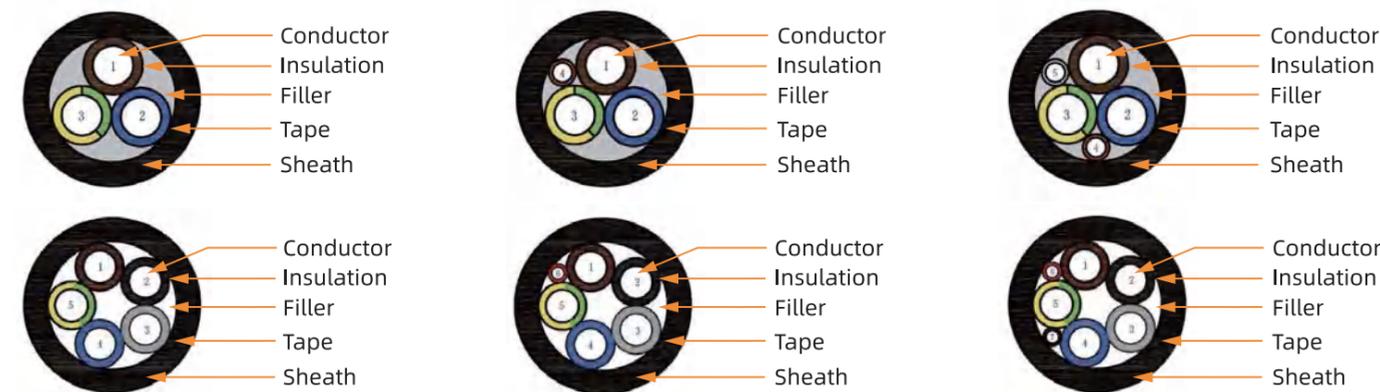
PRODUCT REFERENCE STANDARDS:
EN 50620:2017、IEC62893-3: 2017、DEKRA K175

CERTIFICATE NUMBER:
DEKRA 31-112985、DEKRA 31-111496、TUV R50436193 0001、TUV R50436194 0001

PRODUCT DESCRIPTION

Construction	Features
1. Conductor	1. Rated temperature: -40°C ~ 90°C
Material: Bare copper wire or tinned copper wire	2. Rated Voltage: AC 300/500V、450/750V; DC 1000V
2. Insulation	3. Flame Test: Testing method according to EN 60332-1-2
Material: EVI-2	4. Min Bending Radius: $\geq 6 \times OD$
Color: Brown、Blue、Yellow/Green or other	5. Dielectric Voltage: 2.5 kV AC for main core 2.0 kV AC for CC/CP
3. Filler	6. Low temperature impact: -40°C, No cracks
Material: PP Cord, Cotton thread	7. Hot Shock: 150°C/1h No cracks
4. Tape	8. Oil Resistance: IRM902, 100°C*168h Tensile Strength Variation $< \pm 40\%$, Elongation Variation $< \pm 30\%$
Material: Non-woven fabrics	9. Crush resistance: $Sq \leq 4$, crush force $\geq 4KN$; $4 \leq Sq \leq 35$, crush force $\geq 11KN$
5. Sheath	10. Resistance to Acid and alkali: 168h, Tensile Strength Variation $\leq 30\%$; Elongation $\geq 100\%$
Material: TPU	11. Environmental Requirements: Compliant with RoHS and REACH
Color: Any color	

PRODUCT STRUCTURE DIAGRAM



Type	Size	Conductor Stranded OD mm (Ref.)	Max. Conductor resistancem $\Omega/m@20^\circ C$	Permissible ampacity A (Ref.)	Non-shielded Over diameter mm Ref	Packing M/Reel (Ref.)
H05BZ5-F 62893IEC121	3x1.5mm ² +(0~6)x(0.5~1.0)mm ²	1.6	13.3	10A	8.6~9.6	800m/700#
	3x2.5mm ² +(0~6)x(0.5~1.0)mm ²	2.1	7.98	16A	9.8~10.8	800m/700#
H07BZ5-F 62893IEC123	3x1.5mm ² +(0~6)x(0.5~1.0)mm ²	1.6	13.3	10A	8.8~9.6	800m/700#
	3x2.5mm ² +(0~6)x(0.5~1.0)mm ²	2.1	7.98	16A	10~10.8	800m/700#
	3x4.0mm ² +(0~6)x(0.5~1.0)mm ²	2.8	4.95	20A	11.5	500m/700#
	3x6.0mm ² +(0~6)x(0.5~1.0)mm ²	3.5	3.30	32A	13.2	400m/800#
	3x10.0mm ² +(0~6)x(0.5~1.0)mm ²	4.5	1.91	40A	16.3	500m/950#
	3x16mm ² +(0~6)x(0.5~1.0)mm ²	5.7	1.21	63A	19	500m/700#
	5x2.5mm ² +(0~6)x(0.5~1.0)mm ²	2.1	7.98	16A	13.5	500m/950#
	5x4.0mm ² +(0~6)x(0.5~1.0)mm ²	2.8	4.95	20A	15	400m/950#
	5x6.0mm ² +(0~6)x(0.5~1.0)mm ²	3.5	3.30	32A	16.8	300m/950#
	5x10.0mm ² +(0~6)x(0.5~1.0)mm ²	4.5	1.91	40A	20	300m/1200#
	5x16mm ² +(0~6)x(0.5~1.0)mm ²	5.7	1.21	63A	23.5	800m/700#
5x25mm ² +(0~6)x(0.5~1.0)mm ²	7.2	0.78	80A	29	800m/700#	
5x35mm ² +(0~6)x(0.5~1.0)mm ²	8.4	0.554	125A	32.8	500m/700#	

The specifications, sizes and structures of above product may change due to technological progress, and similar specifications can be designed and manufactured according to customer usage requirements.

EN50620、IEC62893 STANDARD AC COILD CHARGING CABLE



CERTIFICATE NUMBER:
R 50436193 0002



■ PRODUCT PARAMETERS

Spring cable	Size	Conductor Stranded OD mm (Ref.)	Max. Conductor resistancem Ω/m@20°C	Permissible ampacity A (Ref.)	Non-shielded Over diameter mm Ref	Packing M/Reel (Ref.)
EVC H05BZ5H8-F Extensible 62893 IEC 121	3×1.5mm ² +(0~6)×(0.5~1.0)mm ²	1.6	13.3	10A	10.0	TBD
	3×2.5mm ² +(0~6)×(0.5~1.0)mm ²	2.1	7.98	16A	11.2	TBD
EVC H05BZ5H8-F Extensible 62893 IEC 121	3×1.5mm ² +(0~6)×(0.5~1.0)mm ²	1.6	13.3	10A	10.0	TBD
	3×2.5mm ² +(0~6)×(0.5~1.0)mm ²	2.1	7.98	16A	11.2	TBD
	3×4mm ² +(0~6)×(0.5~1.0)mm ²	2.8	4.95	20A	12.5	TBD
	3×6mm ² +(0~6)×(0.5~1.0)mm ²	3.2	3.3	32A	13.3	TBD
	5×2.5mm ² +(0~6)×(0.5~1.0)mm ²	2.1	7.98	16A	13.3	TBD
	5×4mm ² +(0~6)×(0.5~1.0)mm ²	2.8	4.95	20A	15.5	TBD
	5×6mm ² +(0~6)×(0.5~1.0)mm ²	3.2	3.3	32A	16.5	TBD

The specific parameters of product should be according to technical drawings.

DC CHARGING CABLE



PRODUCT REFERENCE STANDARDS:
IEC62893-4-1:2020
CERTIFICATE NUMBER:
R 50438281 0001

■ PRODUCT PARAMETERS

Type	Size	Conductor Stranded OD mm (Ref.)	Max. Conductor resistancem Ω/m@20°C	Permissible ampacity A (Ref.)	Non-shielded Over diameter mm Ref	Packing M/Reel (Ref.)
62893 IEC 126	2×10+10+P(2×0.75)+4×0.5	4.5	1.91	40A	15.5	300m/950#
	2×16+16+P(2×0.75)+4×0.5	5.7	1.21	63A	18	300m/950#
	2×25+16+P(2×0.75)+4×0.5	7.1	0.78	100A	24.5	300m/950#
	2×35+16+P(2×0.75)+4×0.5	8.4	0.554	125A	25.8	300m/950#
	2×50+25+P(2×0.75)+4×0.5	10.2	0.386	150A/200A	30.2	400m/1200#
	2×70+35+P(2×0.75)+4×0.5	12.0	0.272	200A/250A	34.7	400m/1200#
	The above power cable specification can be split into 4 pieces					
	4×50+50+6×0.75	19.0	0.75	300A/350A	37.5	400m/1200#

Specifications: 2-core power cable 4mm to 95mm, 1-core PE cable 4mm to 50mm, 2-core auxiliary power cable 2.5 mm to 6.0mm (optional) 0-12 core signal cable 0.5mm to 1.0mm can be added, the signal cable can be shielded or the main cable can be shielded. Specific product parameters shall be subject to the technical drawings.

UL 2263 CHARGING CABLE



PRODUCT REFERENCE STANDARDS:

UL 2263

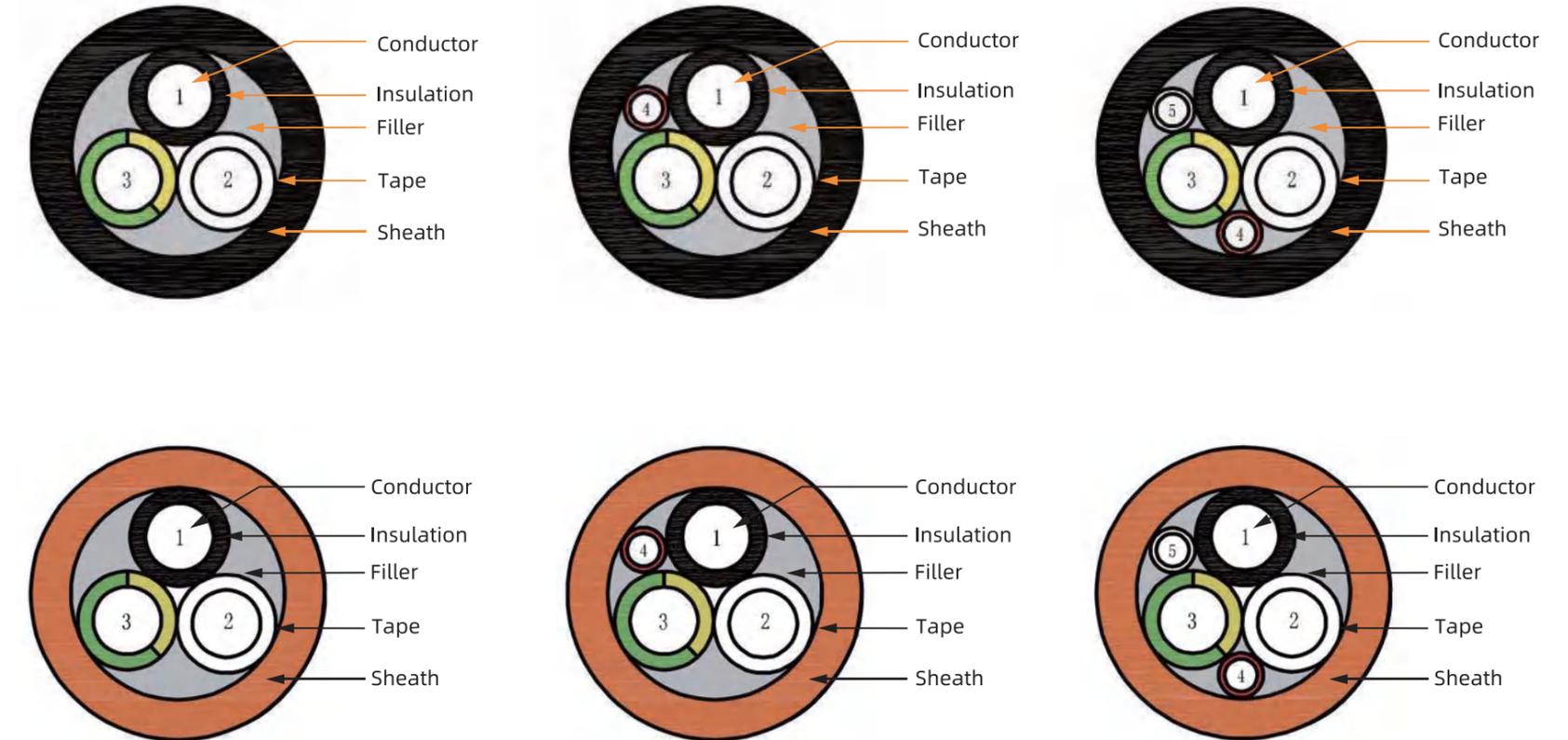
UL FILE NUMBER:

E345899

PRODUCT DESCRIPTION

Construction	Features
1. Conductor	1. Rated temperature: -40°C ~ 105°C
Material: Bare Copper	2. Rated Voltage: 300V; 600V or 1000V
2. Insulation	3. Flame Test: VW-1 Test method Comply with UL 2556
Material: TPE	4. Min Bending Radius: $\geq 6 \times OD$
Color: Black, red, Green/Yellow Or other	5. Dielectric Voltage: 1.5kVac/1min. No Breakdown Test method Comply with UL 2556
3. Filler	6. Cold Bending: -40°C/4h No cracks Test method Comply with UL 2556
Material: PP hemp or cotton yarn	7. Hot Shock: 150°C/1h No cracks Test method Comply with UL 2556
4. Tape	8. Oil Resistance: IRM902, 60°C/168h Tensile and Elongation $\geq 70\%$ Unaged value
Material: Non-woven fabrics	9. Crush Resistance: $S \leq 12AWG$ 4.45kN, $12AWG < S \leq 2AWG$, 11.1kN, $2AWG < S$ 15.6kN
5. Sheath	10. Weather Resistance: 720h in a xenon arc weatherometer, No cracks
Material: TPE	11. Environmental Requirements: Compliant with RoHS and REACH
Color: Black or Orange	

PRODUCT STRUCTURE DIAGRAM



Type	Size	Conductor Stranded OD mm (Ref.)	Max. Conductor resistancem $\Omega/m@20^{\circ}C$	Permissible ampacity A (Ref.)	Over diameter mm (Ref.)	Packing M/Reel (Ref.)
600Vor1000V EVE(TPE)	3x16AWG	1.5/1.2	14.1	12A	10.8±0.5	1000m/700#
	3x14AWG	1.9/1.2	8.88	16A	11.8±0.5	800m/700#
	3x12AWG	2.4/1.2	5.58	23A	14.3±0.5	500m/700#
	3x10AWG	3.0/1.2	3.51	32A	15.6±0.5	500m/700#
	2x8AWG+10AWG	4.3/3.0	2.23/3.51	46A	20.9±0.8	500m/950#
	2x6AWG+8AWG	5.4/4.3	1.40/2.23	63A	23.4±0.8	400m/950#
	2x4AWG+6AWG	6.6/5.4	0.882/1.4	75A	27.0±0.9	300m/950#
	2x2AWG+4AWG	8.2/6.6	0.555/0.882	100A	30.5±1.0	400m/1200#
	3x16AWG+1x18AWG	1.5/1.2	14.1/22.4	12A	11.4±0.5	800m/700#
	3x14AWG+1x18AWG	1.9/1.2	8.88/22.4	16A	13.5±0.5	500m/700#
	3x12AWG+1x18AWG	2.4/1.2	5.58/22.4	23A	14.5±0.5	500m/700#
	3x10AWG+1x18AWG	3.0/1.2	3.51/22.4	32A	15.8±0.6	500m/700#
	2x8AWG+10AWG+18AWG	4.3/3.0	2.23/3.51/22.4	46A	20.9±0.8	500m/950#
	2x6AWG+8AWG+18AWG	5.4/4.3	1.40/2.23/22.4	63A	23.4±0.8	400m/950#
	2x4AWG+6AWG+18AWG	6.6/5.4	0.882/1.4/22.4	75A	27.0±0.9	300m/950#
	2x2AWG+4AWG+18AWG	8.2/6.6	0.555/0.882/22.4	100A	30.5±1.0	400m/1200#
	3x16AWG+2x18AWG	1.5/1.2	3.51/22.4	12A	12.2±0.5	500m/700#
	3x14AWG+2x18AWG	1.9/1.2	8.88/22.4	16A	14.1±0.5	500m/700#
	3x12AWG+2x18AWG	2.4/1.2	5.58/22.4	23A	15.1±0.6	500m/700#
	3x10AWG+2x18AWG	3.0/1.2	3.51/22.4	32A	15.8±0.6	500m/700#
	2x8AWG+10AWG+2x18AWG	4.3/3.0	2.23/3.51	46A	20.9±0.8	500m/950#
	2x6AWG+8AWG+2x18AWG	5.4/4.3	1.40/2.23	63A	23.4±0.8	400m/950#
	2x4AWG+6AWG+2x18AWG	6.6/5.4	0.882/1.4	75A	27.0±0.9	300m/950#
	2x2AWG+4AWG+2x18AWG	8.2/6.6	0.555/0.882	100A	30.5±1.0	400m/1200#
	2x1/0AWG+2AWG	10.5/8.2	0.349/0.555	200A	38.0±1.0	250m/1200#
	2x3/0AWG+1/0AWG	13.05/10.5	0.219/0.349	260A	45.0±1.0	150m/1200#
	4X1-0AWG+4AWG+6X18AWG	10.4/6.5	0.351/0.882/23.6	300A/350A	45.7±1.2	150m/1200#

300V EVJE(TPE)	3x16AWG	1.5/1.2	3.51/22.4	12A	9.5±0.3	1200m/700#
	3x14AWG	1.9/1.2	8.88/22.4	16A	10.2±0.5	1000m/700#
	3x12AWG	2.4/1.2	5.58/22.4	23A	11.4±0.5	800m/700#
	3x16AWG+1x18AWG	1.5/1.2	3.51/22.4	12A	10.5±0.5	1000m/700#
	3x14AWG+1x18AWG	1.9/1.2	8.88/22.4	16A	11.1±0.5	80m/700#
	3x12AWG+1x18AWG	2.4/1.2	5.58/22.4	23A	12.2±0.5	500m/700#
	3x16AWG+2x18AWG	1.5/1.2	3.51/22.4	12A	11.3±0.5	800m/700#
3x14AWG+2x18AWG	1.9/1.2	8.88/22.4	16A	12.0±0.5	800m/700#	
3x12AWG+2x18AWG	2.4/1.2	5.58/22.4	23A	13.1±0.5	500m/700#	
The number of signal lines can be 0~6, or more, and the conductor specifications of signal lines can be 16AWG,18AWG,20AWG,22AWG						
The specifications, sizes and structures of above product may change due to technological progress, and similar specifications can be designed and manufactured according to customer usage requirements.						

JAPAN JCS 4522 STANDARD EV CHARGING CABLE



PRODUCTS COMPLY WITH STANDARDS:
JCS 4522:2019

STATEMENT NO:
JA50541941

SPECIFICATION RANG

$2 \times (2.0 \sim 38) \text{MM}^2 + (1 \sim 10) \times (0.75 \sim 1.25) \text{MM}^2 + (2 \sim 10) \times (0.75 \sim 1.25) \text{MM}^2$

■ PRODUCT DESCRIPTION

Construction			
1. Conductor Material	2. Insulation Material	3. Sheath material	4. Tape Material
Bare Copper	Polyolefin rubber compounds	Polyolefin rubber compounds	Non-woven fabrics
Features			
1. Rated Voltage: 600V (AC) , 750V (DC)		2. Operating ambient temperature: -30°C ~ 40°C	
3. Voltage resistance: Power line AC 3000V/1min, no breakdown, control line AC 1500V/1min, no breakdown		4. Bending experiment: 20 rpm, 200 cycles, no breakage, no cracks, conductor breakage rate ≤ 30%	
5. Mechanical strength: Insulation: tensile strength ≥ 5 Mpa, elongation at break ≥ 200% Sheath: tensile strength ≥ 8 Mpa, elongation at break ≥ 200%		6. Mechanical strength after aging: Insulation: tensile strength ≥ 80% before aging, elongation at break ≥ 65% before aging Sheathing: tensile strength ≥ 80% before aging, elongation at break ≥ 65% before aging	
7. Drag-resistant: Round-trip 1M distance, towing speed 1000M/H, round-trip 3000 times, without revealing the insulator.		8. Torsion resistant: Twisting angle: ±90 degrees, twisting speed: 15 cycles/min, 10,000 times twisting, no breakage, no cracks, conductor breakage rate ≤ 30%	
9. Oil resistant (No. 2 oil or irm 902 oil): Tensile strength ≥ 60% before oil immersion, elongation at break ≥ 65% before oil immersion		10. Flame retardant: JISC3005, tilt test, flame extinguished in 60 seconds	

■ PRODUCT STRUCTURE DIAGRAM



JAPAN PSE CERTIFIED HVCT TYPE CABLE

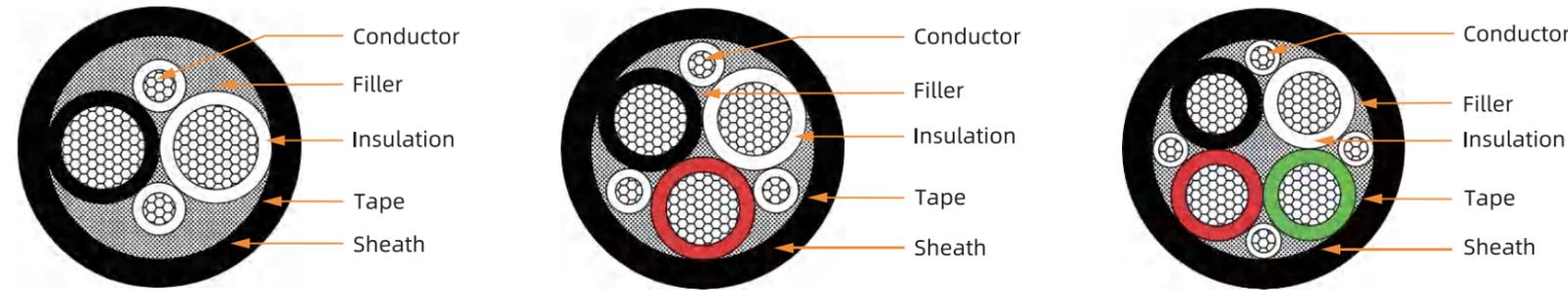


PRODUCT REFERENCE STANDARDS:
JISC 3312

SPECIFICATION RANGE:
HVCT (2~5CORES)1.25MM²~8MM²+(0~6CORES)
0.75MM²~2MM²

STATEMENT NO:
PSE23012360

■ PRODUCT STRUCTURE DIAGRAM



■ PRODUCT DESCRIPTION

Construction	Features
1. Conductor	1. Ambient Temperature: -30°C - +40°C
Material: Bare Copper	2. Rated Voltage: ≤600V AC , ≤750V DC
2. Insulation	3. Tensile Strength: Insulation > 10MPa, after Aging Test (100°C*48H) > 85% Sheath > 10MPa, after Aging Test (100°C*48H) > 85%
Material: PVC	4. Break Elongation: Insulation > 100%, after Aging Test (100°C*48H) > 80% Sheath > 120%, after Aging Test (100°C*48H) > 80%
Color: Black, White, Red, Green	
3. Filler	5. Thermal Deformation: Thickness reduction < 50%
Material: PPhemp or cotton yarn	6. Bending Radius: ≥6 OD
4. Tape	7. Flame Retardant Test: The flame must be extinguished naturally within 30s
Material: Non-woven fabrics	
5. Sheath	
Material: PVC	
Color: Black	

OIL-COOLED CHARGING CABLE



PRODUCTS COMPLY WITH STANDARDS:
IEC 62893-4-2

CERTIFICATE NO:
R50569984

Oil-cooled charging cables, products conforming to IEC 62893-4-2 standard and certification, DC charging cables conforming to the requirements of IEC 61851-1 mode 4 and for use with thermal management systems; these cables are intended for use in circuit-conductive charging systems with thermal management systems as specified in IEC 61851-23 and are intended for use with IEC 62196-3-1 compliant vehicle connectors. The application mode of the cables is mainly used to connect electric vehicle charging devices to the charging infrastructure, thus providing fast power transmission to electric vehicles, and equipped with a certain number of signal and control lines to ensure accurate control and safe and error-free operation of the entire charging process. Cable use scenarios are generally used in centralized charging stations, large parking lots, hotels, garages and other areas.

■ PRODUCT FEATURES

The cable structure mainly consists of the main core of power supply, ground wire, signal wire or shield wire set, return pipe, filler and reinforcing rope combination. DC+ and DC- conductors are immersed in the cooling medium, taking away heat through the medium, circulating through the return pipe to form a cooling circuit, and finally carrying a larger current with a smaller conductor cross-section to achieve high power and fast charging; the products have good feel, oil resistance, Acid and alkali resistant, water resistant The products have good handfeel, oil resistance, acid and alkali resistance, water resistance, wear resistance, pressure resistance, crack resistance, UV resistance and flame resistance; all materials comply with RoHS 2.0 & REACH environmental standards. The products have applied for and received IEC standard product certification at TUV.

■ PRODUCT DESCRIPTION

Construction	Features
1. Conductor	1. Rated temperature: -40°C ~ 90°C
Material: Bare Copper	2. Rated Voltage: 1500V.DC
2. Insulation	3. Flame Test: Testing method according to EN 60332-1-2
Material: EVI-1	4. Min Bending Radius: $\geq 6 \times OD$
Main core color: Black, red, Green/Yellow Or other	5. Dielectric Voltage: 3.5kVac/15min. No Breakdown
Reflux tube material: XLPO	6. Cold Bending: -40°C/4h No cracks
3. Filler	7. Hot Shock: 150°C/1h No cracks
Material: PP hemp or cotton yarn	8. Oil Resistance: IRM902, 100°C/168h Tensile and Elongation $\geq 60\%$
4. Tape	9. Crush Resistance: >11KN
Material: Non-woven fabrics	10. Weather Resistance: 720h in a xenon arc weatherometer, No cracks
5. Sheath	11. Environmental Requirements: Compliant with RoHS and REACH
Material: TPU	
Color: Black	

■ PRODUCT STRUCTURE DIAGRAM



Type	Size	Conductor Stranded OD mm (Ref.)	Blank pipe mm Ref	Max. Conductor resistance $\Omega/Km@20^\circ C$	Permissible ampacity A (Ref.)	Over diameter Ref.mm	Packing M/Reel (Ref.)
62893 IEC 129	$2 \times 16 + 25 + n \times (0.5 - 1.5) + \text{reflux pipe}$	5.7/7.1	$\emptyset 6 / \emptyset 8$	<1.21 / <0.78	/	Design structures according to standards or customer requirements	As per PO or agreement
	$2 \times 25 + 25 + n \times (0.5 - 1.5) + \text{reflux pipe}$	6.8/7.1	$\emptyset 8$	<0.78	500A		
	$2 \times 35 + 25 + n \times (0.5 - 1.5) + \text{reflux pipe}$	8.2/7.1	$\emptyset 8$	<0.554 / <0.78	600A		
	$2 \times 50 + 25 + n \times (0.5 - 1.5) + \text{reflux pipe}$	10.2/7.1	$\emptyset 8 / \emptyset 10$	<0.386 / <0.78	/		
Note: 1. signal line range $n = 0 - 10$; 2. the number of reflux tubes according to customer requirements 3. Cooling medium is defined by the client.							
The specifications, sizes and structures of above product may change due to technological progress, and similar specifications can be designed and manufactured according to customer usage requirements.							

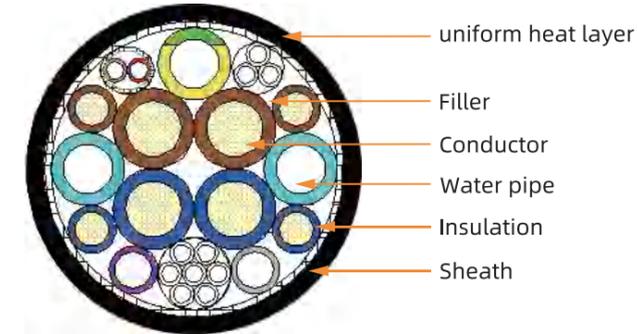
WATER-COOLED CHARGING CABLE

Water-cooled charging cables are designed based on a cooling medium of coolant (ethylene glycol, etc.) or water. Because of the conductivity of coolant or water, the cooling medium and conductor are separated in structure, because the conductor is indirectly cooled, so the same conductor cross-sectional area, the current-carrying capacity of water-cooled charging cable is inferior to that of oil-cooled charging cable, but the cooling medium of water-cooled charging cable is low cost, and the maintenance cycle is long and simple. Water-cooled charging cables are divided into copper-clad water structure and copper-water separation structure according to the structure of the cable core.

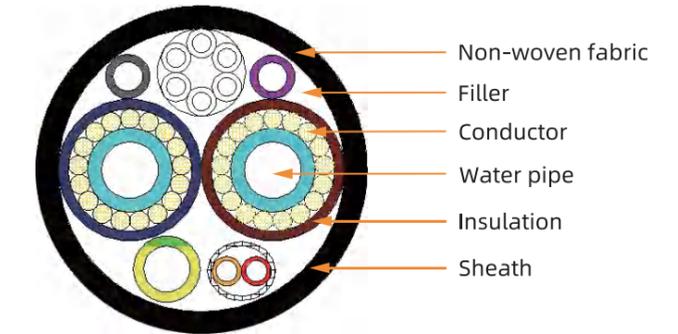
PRODUCT DESCRIPTION

Construction	Features
1. Conductor	1. Rated temperature: -40°C ~ 90°C
Material: Bare copper wire or tinned copper wire	2. Rated Voltage: 1500V DC
2. Insulation	3. Maximum operating current: 250A~700A
Material: XLPO	4. Cable outside diameter range: 22.0mm
3. Filler	5. Min Bending Radius: $\geq 6 \times OD$
Material: PP rope, thermally conductive filling	6. Optional specifications: Customization support
4. Tape	7. Environmental Requirements: Compliant with RoHS and REACH
Material: XLPO TPU+Nylon	
5. Sheath	
Material: TPU	

PRODUCT STRUCTURE DIAGRAM



Copper-water separation structure



Copper-clad water structure



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