



## • Application

Multi-core XLPE SWA PVC 1.9/3.3kV power cables with steel wire armour (SWA) are designed for power and auxiliary fixed wiring applications in power networks. They are suitable for both underground and aboveground installations, including outdoor and indoor applications, as well as cable ducting installations.

## • Performance

Electrical Performance: Rated  $U_0/U$ : 1.9/3.3kV, ensuring reliable power transmission within specified voltage ranges.

Chemical Performance: Exhibits resistance to chemicals, UV rays, and oils, ensuring durability and reliability in various environments.

Mechanical Performance: Minimum bending radius of 12 times the overall diameter ensures flexibility and ease of installation.

Terminal Performance:

Maximum Service Temperature: 90°C

Maximum Short-Circuit Temperature: 250°C (max. 5s)

Minimum Service Temperature: -10°C

Fire Performance:

Flame Retardant: Complies with IEC/EN 60332-1-2 standard for enhanced fire safety.

Reduced Emission of Halogens Chlorine: <15%

## • Construction

Conductor: Class 2 stranded round copper or aluminum conductor, sectorial compact copper or aluminum conductor for optimal conductivity and flexibility.

Insulation: XLPE (Cross-linked Polyethylene) insulation provides excellent electrical properties and thermal stability.

Separator: Polyester Tape acts as a separator between the conductor and the insulation, ensuring proper insulation integrity.

Filler: PVC (Polyvinyl Chloride) filler enhances cable stability and performance.

Armoring: SWA (Steel Wire Armour) provides robust mechanical protection against external forces.

Sheath: PVC (Polyvinyl Chloride) sheath ensures overall protection and durability.

Core Identification: Three cores: Brown, Black, Gray

Sheath Colour: Black, providing added protection and a uniform appearance.

## • Specification

-BS 5467, low voltage armored cables with thermosetting insulation for power distribution networks

-IEC/EN 60502-1, IEC/EN 60228

## • Eastful Cable Lab



We have CNAS Accredited Facility to assure conformity assessment services with a focus on quality, expertise, and customer satisfaction.

CNAS has international mutual recognition among IAF, ILAC, APLAC and PAC.

## • Accreditation

We meet the requirements of ISO9001, ISO14001, ISO45001 and ISO50001 and our cables have certificate of CCC, RoHS, CASC, UL, cUL, TUV Rheinland and CCS.



## • National Green Factory



Our facility has been awarded of National Green Factory by Ministry of Industry and Information Technology of China. We are committed to the development of high-end, intelligent and green manufacturing industry.

\*The overall energy consumption level of green factories is better than the energy efficiency benchmark level.

## ● Technical Parameters

Physical Performance Parameters								
No. of Cores	Nominal Section Area	Shape of Conductor	Nominal Dia. of Conductor	Nominal Thickness of Insulation	Dia. of Armour Wire	Approx. Overall Dia.	Approx. Weight	
							Cu	Al
-	mm <sup>2</sup>	-	mm	mm	mm	mm	kg/km	kg/km
3	16	Circular	4.70	2.0	1.6	27.5	1604	1540
3	25	Circular	5.85	2.0	1.6	30.4	2023	1780
3	35	Circular	6.90	2.0	1.6	32.8	2448	2040
3	50	Sectorial	-	2.0	2.0	36.2	3164	2760
3	70	Sectorial	-	2.0	2.0	40.1	4033	3210
3	95	Sectorial	-	2.0	2.0	43.5	5004	3625
3	120	Sectorial	-	2.0	2.5	47.9	6308	4820
3	150	Sectorial	-	2.0	2.5	51.4	7353	5410
3	185	Sectorial	-	2.0	2.5	55.4	8711	6070
3	240	Sectorial	-	2.0	2.5	60.7	10764	7150
3	300	Sectorial	-	2.0	2.5	66.1	12956	8120

Physical Performance Parameters Current Carrying Capacity					
No. of Cores	Clipped Direct	in free air or on a perforated cable tray atc, horizontal or vertical at 30°C	direct in ground or in ducting in ground in or around buildings at 20°C	Approx. Weight	
	1 three or 1 four core cable three-phase A.C. or D.C.	1 three or 1 four core cable three-phase A.C. or D.C.	1 three or 1 four core cable three-phase A.C. or D.C.	Cu	Al
mm <sup>2</sup>	A	A	A	Ω/km	Ω/km
16	94	99	75	1.15	1.91
25	124	131	96	0.727	1.20
35	154	162	115	0.524	0.868
50	187	297	135	0.387	0.641
70	238	251	167	0.268	0.443
95	289	304	197	0.193	0.320
120	335	353	223	0.153	0.253
150	386	406	251	0.124	0.206
185	441	463	281	0.0991	0.164
240	520	546	324	0.0754	0.125
300	599	628	365	0.0601	0.100

Note:

Air ambient temperature: 30°C

Ground ambient temperature: 20°C

Conductor operating temperature: 90°C