

Application

These medium voltage power cables are specifically designed for applications where durability and reliability are paramount. They are suitable for mains enclosed in conduit, buried installations, or underground ducts in industrial plants, buildings, and transformers. These cables are ideal for environments where they are not subjected to mechanical damage but require consistent and dependable power transmission.

Performance

Voltage rating U₀/U(Um): 12.7/22kV

Mechanical performance (minimum bending Radius): Single core unarmoured cable: 20 x overall diameter Single core AWA armoured cable: 15 x overall diameter Three core unarmoured cable: 15 x overall diameter Three core SWA armoured cable: 12 x overall diameter Thermal performance:

Maximum operating temperature: 90°C

Maximum short-circuit temperature: 250°C (Max. 5s)

Minimum service temperature: -10℃

Fire performance:

Flame retardant according to IEC/EN 60332-1-2 standard

Reduced emission of halogens chlorine <15%

Construction

Conductor: Stranded compacted copper or aluminum conductor, class 2

Conductor Screen: Semi-conductive compound Insulation: XLPE (Cross-linked polyethylene) Alternative: EPR (Ethylene Propylene Rubber) Insulation Screen: Semi-conductive compound

Metallic Screen: Individual concentric copper wires or copper

Optional Filler: PET (Polyethylene terephthalate) fibres Binding Tape: Polyester tape or non-woven fabric Optional Inner Sheath: PVC (Polyvinyl chloride) Alternative: LSZH (Low Smoke Zero Halogen)

Optional Armour:

Single-core conductor: AWA (Aluminum Wire Armoring) Three-core conductor: SWA (Steel Wire Armoring)

Outer Sheath:

PVC (Polyvinyl chloride)

Alternative: LDPE, MDPE (Low/Medium Density Polyethylene)

Alternative: LSZH (Low Smoke Zero Halogen)

Conductor Shape

Single Core: Circular, circular compacted

Three Core: Circular, circular compacted, sectorial

Specification

-AS 1429, IEC/EN 60228, IEC 60502-2

Fastful 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, TÜV Rhineland 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

No.of Cores	Nominal Cross Section Area	Nominal Dia. of Conductor	Nominal Thickness of Insulation	Max. Resistance of Conductor				Approx. Short Circuit Current			
				D.C. at 20°C		A.C. at 90°C		Conductor(1s)		Copper Wire Screen(1s)	
				Copper	Aluminum	Copper	Aluminum	Copper	Aluminum	Copper	Aluminum
-	mm^2	mm	mm	Ω/km	Ω/km	Ω/km	Ω/km	kA	kA	kA	kA
1	35	7.1	5.5	0.524	0.868	0.668	1.11	5.0	3.3	4.9	3.3
1	50	8.2	5.5	0.387	0.641	0.494	0.0822	7.2	4.7	7.1	4.4
1	70	9.8	5.5	0.268	0.443	0.342	0.568	10.0	6.6	10.0	6.4
1	95	11.5	5.5	0.193	0.320	0.247	0.411	13.6	9.0	13.5	8.8
1	120	12.9	5.5	0.153	0.253	0.196	0.325	17.2	11.3	13.5	10.0
1	150	14.3	5.5	0.124	0.206	0.159	0.265	21.5	14.2	13.5	13.5
1	185	16.1	5.5	0.0991	0.164	0.128	0.211	26.5	17.5	13.5	13.5
1	240	18.3	5.5	0.0754	0.125	0.0984	0.162	34.3	22.7	13.5	13.5
1	300	20.8	5.5	0.0601	0.100	0.0796	0.130	42.9	28.3	13.5	13.5
1	400	23.5	5.5	0.0470	0.0778	0.0631	0.102	57.2	37.8	13.5	13.5
1	500	26.6	5.5	0.0366	0.0605	0.0508	0.0802	71.5	47.2	13.5	13.5
3	35	7.1	5.5	0.524	-	0.668	-	-	-	-	-
3	50	8.2	5.5	0.387	0.641	0.494	0.0822	7.2	4.7	7.1	4.4
3	70	9.8	5.5	0.268	0.443	0.342	0.568	10.0	6.6	10.0	6.4
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