ttcables
ELECTRIC CABLE WORKS



AL/XLPE/WB/CWS/WB/MDPE 19/33 (36) kV

Single-core medium-voltage power cable with aluminium conductor, XLPE insulation, longitudinal water blocking, copper wire screen and MDPE outer sheath

APPLICATION

Medium-voltage power cable with enhanced longitudinal water-blocking properties, suitable for indoor and outdoor installations, in cable ducts, directly in the ground and on cable trays. It is designed for use in power distribution, renewable energy, infrastructure and power generation applications.

TECHNICAL CHARACTERISTICS

Longitudinal water-blocking properties: Yes
UV resistance: Yes
Test voltage (15 min): 4 U_0
Minimum cable temperature during installation: 0 °C
Maximum operating temperature: 90 °C
Maximum short-circuit temperature: 250 °C (max. 5 s)
Maximum conductor pulling force: 30 × S
(S = conductor cross-section in mm²)
Minimum bending radius: 20 × D (D = overall cable diameter)

CONSTRUCTION

Conductor: Class 2 stranded aluminium conductor (longitudinal water-blocking optional)
Conductor screen: Semiconductive compound
Insulation: Cross-linked polyethylene (XLPE)
Insulation screen: Semiconductive compound (bonded)
Longitudinal water blocking: Semiconductive swellable tape
Metallic screen: Copper wires with counter-helically applied copper tape
Longitudinal water blocking: Swellable tape
Outer sheath: Medium-density polyethylene (MDPE)

STANDARD

BS 7870-4.10

COMPLIANCE

REACH COMPLIANT · COMPLIANT · COMPLIANT

RoHS compliant

Outer Sheath Colour:

● Black

Other colours available on request

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Nominal conductor cross-section	Nominal metallic screen cross-section	Maximum DC conductor resistance at 20 °C	Nominal insulation thickness	Minimum sheath thickness	Outer diameter (Approx,)	Cable weight (Approx,)
mm²	mm²	Ω/km	mm	mm	mm	kg/km
70	35	0,268	8.0	1.60	38.0	1280
95	35	0,193	8.0	1.68	39.5	1420
120	35	0,153	8.0	1.68	41.0	1535
150	35	0,124	8.0	1.77	43.0	1680
185	35	0,0991	8.0	1.77	44.5	1830
240	35	0,0754	8.0	1.85	47.0	2090
300	35	0,0601	8.0	1.94	49.5	2330
400	35	0,0470	8.0	2.02	53.0	2725
500	35	0,0366	8.0	2.11	56.0	3130
630	35	0,0283	8.0	2.19	60.0	3680
800	35	0,0221	8.0	2.28	64.0	4295
1000	35	0,0176	8.0	2.45	68.0	5060