

ANHUI FEICHUN SPECIAL CABLE CO., LTD.

安徽飞纯特种电缆有限公司



TROMMELFLEX-M-PUR BRAIDED

D2X11Y 0.6/1 kV - Flexible Low Voltage Reeling Cable

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PRODUCT DESCRIPTION

TROMMELFLEX-M-PUR is a flexible low voltage reeling cable with optimized dimensions and flame retardant, halogen-free polyurethane outer sheath. The cable is specifically designed as power supply for underground mining and tunnelling equipment, engineered to withstand frequently changing dynamic loads such as reeling operation on drilling machines, scoops and LHD's (Load-Haul-Dump vehicles). This robust cable construction is suitable for high mechanical stresses caused by reeling applications and the severe abrasion expected in trailing operation environments.

CABLE CONSTRUCTION

LAYER STRUCTURE & MATERIALS

- 1 Central Aramid Element**
High-strength carrier element
- 2 Conductor**
Finely stranded copper, bare, class 5
- 3 Core Insulation**
XLPE (Cross-linked Polyethylene)

4 Core Arrangement

Three main conductors laid-up with split earth conductor in interstices. Cores twisted with veryshort length of lay.

Main cores: brown, black, grey

5 Earth Conductor

Split configuration for enhanced flexibility

6 Inner Sheath

Halogen-free polymer compound

7 Armoring / Reinforcement

Braiding for mechanical protection

8 Outer Sheath

Polyurethane (PUR) - flame retardant

- 1 Central aramid element
- 2 Conductor
- 3 Core insulation
- 4 Core arrangement
- 5 Earth conductor
- 6 Inner sheath
- 7 Armoring / reinforcement
- 8 Outer sheath



- 2 Finely stranded copper, bare, class 5
- 3 XLPE
- 4 Central Aramid carrier element; Three main conductors laid-up together with split earth conductor in the interstices. Cores twisted with very short length of lay. Main cores: brown, black, grey
- 6 Halogenfree polymer
- 7 Braiding
- 8 Polyurethane (PUR)

STANDARDS / APPROVALS

DIN EN 60228 / IEC 60228 / VDE 0295 Conductor

DIN VDE 0298-300 Core identification

IEC 60502-1 Compound

DIN VDE 0298-4 Electrical parameters

DIN EN 60332-1-2 / IEC 60332-1-2 Fire performance

TECHNICAL PARAMETERS

THERMAL PARAMETERS

Max. conductor temperature

90 °C

Max. conductor temp. at short circuit	250 °C
Ambient temp. fix install. (min)	-40 °C
Ambient temp. fix install. (max)	80 °C
Ambient temp. flexible install. (min)	-30 °C
Ambient temp. flexible install. (max)	80 °C

ELECTRICAL PARAMETERS

Rated voltage U_0/U (U_m)	0.6/1 (1.2) kV
Test voltage	2.5 kV
AC test voltage (control cores)	2 kV
Nominal voltage U	1,000 V

MECHANICAL PARAMETERS

Torsional stress	+/- 50 °/m
Permanent tensile strength (rule)	25 N/mm ²
Travel speed - Reeling operation	100 m/min
Bending radius - Fixed installation	4 × D
Bending radius - Reeling operation	8 × D

CHEMICAL PARAMETERS

Halogen free	Yes
Ozone resistance	Yes
Resistant to UV	Yes
Max. water depth	10 m

CABLE PROPERTIES - TROMMELFLEX-M-PUR D2X11Y 0.6/1KV

BASIC CONSTRUCTION	CONDUCTOR Ø (MM)	CABLE Ø (MIN) (MM)	CABLE Ø (MAX) (MM)	CABLE WEIGHT (KG/KM)	MAX. TENSILE STRENGTH (N)	BENDING RADIUS MOVING (MM)	CONDUCTOR RESISTANCE AT 20°C (Ω/KM)	CURRENT CARRYING CAPACITY (A)
3×25+3G6	6.2	23	25	1,215	1,875	200	0.78	131
3×50+3G10	9.6	30.5	32.5	2,250	3,750	260	0.386	202
3×70+3G16	11.1	35.5	37.5	3,210	5,250	300	0.272	250
3×95+3G16	12.6	39.5	42.5	3,925	7,125	340	0.206	301
3×25+3G6+2×1	6.2	23	24.5	1,243	1,875	196	0.78	131
3×35+3G6+2×1.5	7.8	26.5	28	1,570	2,100	224	0.554	162
3×50+3G10+2×1.5	9.6	30.5	32.5	2,376	3,750	260	0.386	202
3×70+3G16+2×1.5	11.1	35.5	37.5	3,355	5,250	300	0.272	250
3×95+3G16+2×1.5	12.6	40	42.5	4,059	7,125	340	0.206	301
3×120+3G25+2×1.5	14.8	44.5	47	5,291	9,000	376	0.161	352
3×150+3G25+2×1.5	16	49.5	52.5	6,358	11,250	420	0.129	404
3×185+3G35+2×1.5	17.7	54	56.5	8,030	13,875	452	0.106	461
3×240+3G50+2×1.5	20.2	62	65	10,560	18,000	520	0.0801	540
4×16	5.1	22	23.5	900	1,600	188	1.21	99

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