

Power & Control Cable

IEC 60502-1

(Mulicores)

U₀/U 0.6 / 1 kV

XLPE-Insulation, LSZH-Sheath, Fire Resistant

2XH

Application

For electricity supply and control in public networks and industrial plants or public buildings, where people are potentially endangered in case of fire and where, for a defined period of time, the continuity of control and energy supply is of vital necessity; suitable for use in zone 1 and zone 2 group II classified areas (IEC 60079-14).

For indoor and outdoor installation in dry and wet locations, on racks, in conduits (Local and/or legal requirements to be noted).

Construction

Conductor plain annealed copper, class 1 or class 2 resp., acc. to IEC 60228,
class 1: circular solid (RE)
class 2: circular stranded (RM)

Insulation cross-linked polyethylene XLPE, over the MICA-tape wrapped conductor

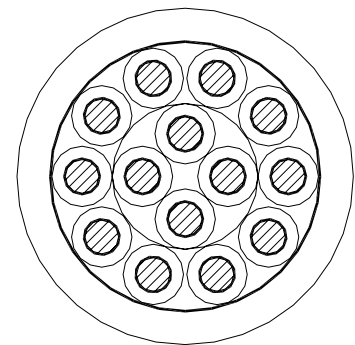
Colour code black, continuously numbered

Laying up cores twisted in layers (if necessary with filling element(s))

Wrapping at least 1 layer of plastic tape

Outer Sheath extruded zero halogen flame retardant compound LSZH, black

Cable marking ELECTRIC CABLE 0.6/1 kV IEC 60502-1
KERPEN, YEAR, LENGTH MARKING, IEC 60331



Technical Data

Flame retardancy: IEC 60332-1

Flame propagation: IEC 60332-3 cat. A

Fire resistance: IEC 60331-21

Smoke density: (90 min/750 °C)

Amount of halogen acid gas: IEC 61034-1 and 2

Degree of acidity of gases: IEC 60754-1; 0 %
IEC 60754-2

Outer sheath:

Limiting Oxygen Index (LOI): min. 30 %

Temperature Index (TI): (IEC 60332-3 ann. B)
min. 250 °C
(ASTM-D-2863)

Temperature range: - 30 °C up to + 90 °C
(during operation)
- 5 °C up to + 50 °C
(during installation)
max. +250° C
(under short circuit)

Min. bending radius:
8 x cable-Ø

Abbreviations

2X insulation of XLPE

H outer sheath of LSZH

Electrical Data at 20 °C

	Character	Unit	Values
Conductor resistance	max.	Ω/km	acc. to IEC 60228
Test voltage U_{rms} core:core		V	3500
Nominal voltage U₀ /U		V	600/1000
Highest system voltage U_m	max.	V	1200 (for three phase systems)

For further details see appendix

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Geometrical Data					
No. of cores and cross-section (nom.) n / mm ²	Radial thickness of insulation (nom.) mm	Radial thickness of outer sheath (nom.) mm	Overall Diameter (approx.) mm	Weight of cable (approx.) kg / km	Part number
5 x 1.5 RE	0.7	1.8	14.1	270	21180053
7 x 1.5 RE	0.7	1.8	15.1	280	21180014
10 x 1.5 RE	0.7	1.8	18.9	400	21180015
12 x 1.5 RE	0.7	1.8	19.5	430	21180016
19 x 1.5 RE	0.7	1.8	22.9	570	21180054
27 x 1.5 RE	0.7	1.8	27.1	750	21180055
37 x 1.5 RE	0.7	1.8	30.4	950	21180056
48 x 1.5 RE	0.7	1.8	34.7	1170	21180057
5 x 1.5 RM	0.7	1.8	14.7	280	21180058
7 x 1.5 RM	0.7	1.8	15.8	300	21180004
10 x 1.5 RM	0.7	1.8	19.8	410	21180005
12 x 1.5 RM	0.7	1.8	20.4	450	21180006
19 x 1.5 RM	0.7	1.8	24.0	600	21180059
27 x 1.5 RM	0.7	1.8	28.5	790	21180060
37 x 1.5 RM	0.7	1.8	31.9	1000	21180061
48 x 1.5 RM	0.7	1.8	36.5	1240	21180062
5 x 2.5 RE	0.7	1.8	15.1	330	21180063
7 x 2.5 RE	0.7	1.8	16.4	390	21180064
10 x 2.5 RE	0.7	1.8	20.5	490	21180065
12 x 2.5 RE	0.7	1.8	21.2	550	21180066
19 x 2.5 RE	0.7	1.8	24.8	760	21180067
27 x 2.5 RE	0.7	1.8	29.5	1010	21180068
37 x 2.5 RE	0.7	1.8	33.1	1300	21180069
48 x 2.5 RE	0.7	1.9	37.8	1640	21180070
5 x 2.5 RM	0.7	1.8	15.8	340	21180071
7 x 2.5 RM	0.7	1.8	17.0	380	21180024
10 x 2.5 RM	0.7	1.8	21.4	510	21180025
12 x 2.5 RM	0.7	1.8	22.1	600	21180026
19 x 2.5 RM	0.7	1.8	26.1	800	21180072
27 x 2.5 RM	0.7	1.8	31.1	1070	21180073
37 x 2.5 RM	0.7	1.8	34.9	1380	21180074
48 x 2.5 RM	0.7	1.9	40.1	1740	21180075

RE: circular solid • RM: circular stranded • SM: sector shaped stranded