

Power & Control Cable

IEC 60502-1

(2-, 3-, and 4-cores)

U₀/U 0.6 / 1 kV

XLPE-Insulation, Armour, LSZH-Sheath, Fire Resistant

2XHRH

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 ¹⁾ Two-core: blue, brown
Three-core: brown, black, grey
Four-core: blue, brown, black, grey

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

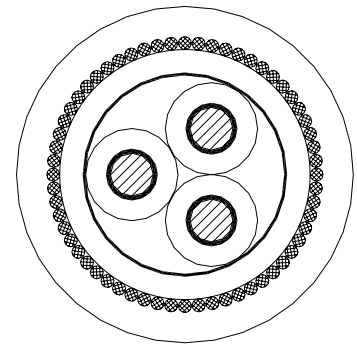
Wrapping at least 1 layer of plastic tape

Bedding extruded zero halogen flame retardant compound LSZH, black

Armour galvanized round steel wires

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 (90 min/750 °C)

Smoke density: IEC 61034-1 and 2

Amount of halogen acid gas: IEC 60754-1; 0 %

Degree of acidity of gases: IEC 60754-2

Outer sheath:

Limiting Oxygen Index (LOI): min. 30 % (IEC 60332-3 ann. B)

Temperature Index (TI): 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 bedding & outer sheath of LSZH

R round steel wire armour

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
Test voltage U _{rms} core:armour		V	3500
Nominal voltage U ₀ /U		V	600/1000
Highest system voltage U _m	max.	V	1200 (for three phase systems)

¹⁾ other colours on request

For further detail see appendix

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Geometrical Data

No. of cores and cross-section (nom.) n / mm ²	Radial thickness of insulation (nom.) mm	Diameter over bedding (approx.) mm	Armour wire diameter (nom.) mm	Radial thickness of outer sheath (nom.) mm	Overall diameter (approx.) mm	Weighth of cable (approx.) kg / km	Part number
2 x 1.5 RE	0.7	9.4	0.8	1.8	14.6	360	21190010
2 x 1.5 RM	0.7	9.8	0.8	1.8	15.2	380	21190000
2 x 2.5 RE	0.7	10.1	0.8	1.8	15.5	400	21190044
2 x 2.5 RM	0.7	10.6	0.8	1.8	15.8	410	21190020
2 x 4 RE	0.7	11.2	0.8	1.8	16.6	430	21190057
2 x 4 RM	0.7	11.8	0.8	1.8	17.2	490	21190060
2 x 6 RE	0.7	12.1	0.8	1.8	17.5	510	21190063
2 x 6 RM	0.7	12.8	0.8	1.8	18.0	560	21190066
3 x 1.5 RE	0.7	9.9	0.8	1.8	15.1	390	21190011
3 x 1.5 RM	0.7	10.4	0.8	1.8	15.8	400	21190001
3 x 2.5 RE	0.7	10.8	0.8	1.8	16.2	450	21190045
3 x 2.5 RM	0.7	11.3	0.8	1.8	16.5	460	21190021
3 x 4 RE	0.7	11.9	0.8	1.8	17.3	490	21190058
3 x 4 RM	0.7	12.6	0.8	1.8	18.0	570	21190061
3 x 6 RE	0.7	12.8	0.8	1.8	18.2	630	21190064
3 x 6 RM	0.7	13.7	0.8	1.8	19.1	660	21190067
4 x 1.5 RE	0.7	10.9	0.8	1.8	16.1	430	21190012
4 x 1.5 RM	0.7	11.5	0.8	1.8	16.6	560	21190002
4 x 2.5 RE	0.7	11.9	0.8	1.8	17.3	510	21190046
4 x 2.5 RM	0.7	12.5	0.8	1.8	17.6	520	21190022
4 x 4 RE	0.7	13.3	0.8	1.8	18.7	550	21190059
4 x 4 RM	0.7	13.8	0.8	1.8	19.2	660	21190062
4 x 6 RE	0.7	14.3	0.8	1.8	19.7	830	21190065
4 x 6 RM	0.7	15.0	1.25	1.8	21.1	890	21190068

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