

Power & Control Cable

IEC 60502-1

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

U₀/U 0.6 / 1 kV

XLPE-Insulation, Armour, LSZH-Sheath

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; suitable for use in zone 1 and zone 2 group II classified areas (IEC 60079-14).

Recommended for direct burial (partly). 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,
 ≤ 35 mm²: circular solid (RE) or circular stranded (RM),
 > 35 mm²: sector-shaped stranded (SM)

Insulation cross-linked polyethylene XLPE

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)

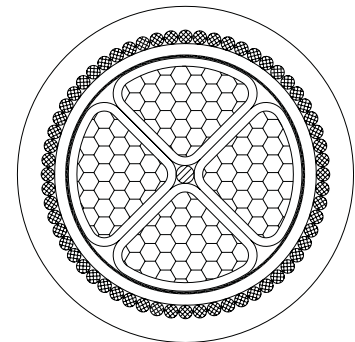
Wrapping at least 1 layer of plastic tape

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



Technical Data

Flame retardancy: IEC 60332-1
Flame propagation: IEC 60332-3 cat. A
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-∅

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 U₀ /U		V	600/1000
Highest system voltage U_m:	max.	V	1200 (for three phase systems)

¹⁾ other colours on request

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	Diameter over bedding (approx.) mm	Armour wire diameter (nom.) mm	Radial thickness of outer sheath (nom.) mm	Overall diameter (approx.) mm	Weight of cable (approx.) kg / km	Part number		
2 x 1.5 RE	0.7	7.3	0.8	1.8	12.7	310	21380071		
2 x 1.5 RM	0.7	7.8	0.8	1.8	13.2	330	21380072		
2 x 2.5 RE	0.7	8.1	0.8	1.8	13.5	350	21380073		
2 x 2.5 RM	0.7	8.6	0.8	1.8	14.0	370	21380074		
2 x 4 RE	0.7	9.1	0.8	1.8	14.5	410	21380075		
2 x 4 RM	0.7	9.8	0.8	1.8	15.2	440	21380076		
2 x 6 RE	0.7	10.1	0.8	1.8	15.5	480	21380077		
2 x 6 RM	0.7	10.8	0.8	1.8	16.2	510	21380078		
2 x 10 RE	0.7	11.6	0.8	1.8	17.0	600	21380079		
2 x 10 RM	0.7	12.8	1.25	1.8	18.9	770	21380080		
2 x 16 RE	0.7	13.5	1.25	1.8	19.6	890	21380081		
2 x 16 RM	0.7	14.9	1.25	1.8	21.0	960	21380082		
2 x 25 RM	0.9	18.3	1.6	1.8	25.1	1350	-		
2 x 35 RM	0.9	20.5	1.6	1.8	27.3	1620	-		
2 x 50 SM	1.0	19.2	1.6	1.9	26.0	1845	21380085		
2 x 70 SM	1.1	20.4	1.6	2.0	27.6	2310	21380086		
2 x 95 SM	1.1	23.5	2.0	2.1	31.7	3145	21380087		
2 x 120 SM	1.2	27.8	2.0	2.2	36.2	3865	21380088		
2 x 150 SM	1.4	31.0	2.0	2.3	39.6	4640	21380089		
2 x 185 SM	1.6	35.4	2.5	2.5	45.4	6090	21380090		
2 x 240 SM	1.7	39.5	2.5	2.7	49.9	7520	21380091		
2 x 300 SM	1.8	46.2	2.5	2.8	56.8	9360	21380092		
3 x 1.5 RE	0.7	7.8	0.8	1.8	13.2	320	21380023		
3 x 1.5 RM	0.7	8.3	0.8	1.8	13.7	340	21380010		
3 x 2.5 RE	0.7	8.6	0.8	1.8	14.0	390	21380037		
3 x 2.5 RM	0.7	9.2	0.8	1.8	14.6	410	21380050		
3 x 4 RE	0.7	9.6	0.8	1.8	15.0	460	21380093		
3 x 4 RM	0.7	10.4	0.8	1.8	15.8	510	21380094		
3 x 6 RE	0.7	10.7	0.8	1.8	16.1	550	21380095		
3 x 6 RM	0.7	11.5	0.8	1.8	16.9	600	21380096		
3 x 10 RE	0.7	12.4	1.25	1.8	18.5	830	21380097		
3 x 10 RM	0.7	13.5	1.25	1.8	19.6	890	21380098		
3 x 16 RE	0.7	14.5	1.25	1.8	20.6	1080	21380099		
3 x 16 RM	0.7	15.8	1.25	1.8	21.9	1150	21380100		
3 x 25 RM	0.9	19.6	1.6	1.8	26.4	1660	-		

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

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3 x 35 RM	0.9	22.0	1.6	1.8	28.8	2050	-
3 x 50 SM	1.0	22.7	1.6	1.9	29.7	2500	21380103
3 x 70 SM	1.1	26.5	2.0	2.0	34.5	3540	21380104
3 x 95 SM	1.1	29.0	2.0	2.2	37.4	4440	21380105
3 x120 SM	1.2	32.0	2.0	2.3	40.6	5280	21380106
3 x150 SM	1.4	36.3	2.5	2.5	46.3	6810	21380107
3 x185 SM	1.6	41.1	2.5	2.6	51.3	8200	21380108
3 x240 SM	1.7	46.1	2.5	2.8	56.7	10310	21380109
3 x300 SM	1.8	53.4	2.5	3.0	64.4	12900	21380110
3 x400 SM	2.0	59.8	2.5	3.2	71.2	15860	21380111
4 x 1.5 RE	0.7	8.5	0.8	1.8	13.9	370	21380024
4 x 1.5 RM	0.7	9.0	0.8	1.8	14.4	400	21380011
4 x 2.5 RE	0.7	9.4	0.8	1.8	14.8	440	21380038
4 x 2.5 RM	0.7	10.0	0.8	1.8	15.4	460	21380051
4 x 4 RE	0.7	10.5	0.8	1.8	15.9	530	21380112
4 x 4 RM	0.7	11.4	0.8	1.8	16.8	580	21380113
4 x 6 RE	0.7	11.8	0.8	1.8	17.2	650	21380114
4 x 6 RM	0.7	12.7	1.25	1.8	18.8	800	21380115
4 x 10 RE	0.7	13.7	1.25	1.8	19.8	970	21380116
4 x 10 RM	0.7	14.9	1.25	1.8	21.0	1040	21380117
4 x 16 RE	0.7	15.9	1.6	1.8	22.7	1390	21380118
4 x 16 RM	0.7	17.5	1.6	1.8	24.3	1500	21380119
4 x 25 RM	0.9	21.6	1.6	1.8	28.4	1980	-
4 x 35 RM	0.9	24.0	1.6	1.9	31.0	2530	-
4 x 50 SM	1.0	26.3	1.6	2.0	33.5	3150	21380122
4 x 70 SM	1.1	29.7	2.0	2.0	37.7	4370	21380123
4 x 95 SM	1.1	33.2	2.0	2.3	41.8	5590	21380124
4 x120 SM	1.2	37.1	2.5	2.5	47.1	7170	21380125
4 x150 SM	1.4	41.1	2.5	2.6	51.3	8550	21380126
4 x185 SM	1.6	46.6	2.5	2.8	57.2	10460	21380127
4 x240 SM	1.7	53.0	2.5	3.0	64.0	13190	21380128
4 x300 SM	1.8	59.0	2.5	3.2	70.4	16360	21380129
4 x400 SM	2.0	69.7	3.15	3.5	83.0	21470	21380130

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

KERPEN's Focus:

Competence - Flexibility - Quality - Service

Service

- consultation for technical and economical solutions
- engineering service to meet customer requirements
- availability of production schedules, progress reports, technical specifications, data sheets, ...
- ex stock deliveries for various standards, stock in different countries
- world wide logistic and international documentation know how