

Power & Control Cable

IEC 60502-1

(Multicores)

U₀/U 0.6 / 1 kV

XLPE-Insulation, Armour

2XYRY-fl

Application

For electricity supply and control in public networks and industrial plants; suitable for use in zone 1 and zone 2 group II classified areas (IEC 60079-14).

Recommended for direct burial. For indoor and outdoor installation in dry and wet locations, on racks, in conduits

Construction

Conductor plain annealed copper, class 1 or class 2 resp., acc. to IEC60228
 class 1: circular solid (RE)
 class 2: circular stranded (RM)

Insulation cross-linked polyethylene XLPE

Colour code black, continuously numbered

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

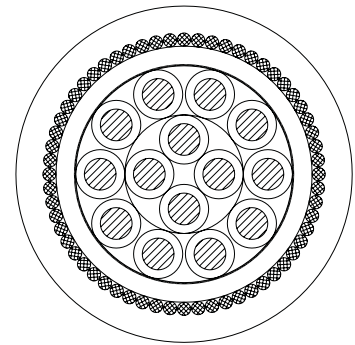
Wrapping at least 1 layer of plastic tape

Bedding extruded polyvinyl chloride PVC, black

Armour galvanized round steel wires

Outer Sheath extruded polyvinyl chloride PVC, 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

Outer Sheath:

Amount of halogen acid gas: max. 17 %
 (IEC 60754-1)

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

Temperature Index (TI): min. 300 °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

Y bedding & outer sheath of PVC

R round steel wire armour

-fl reduced flame propagation

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)

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
5 x 1.5 RE	0.7	9.3	0.8	1.8	14.7	420	20050093
7 x 1.5 RE	0.7	10.1	0.8	1.8	15.5	480	20050094
10 x 1.5 RE	0.7	12.9	1.25	1.8	19.0	730	20050095
12 x 1.5 RE	0.7	13.3	1.25	1.8	19.4	780	20050096
19 x 1.5 RE	0.7	15.7	1.25	1.8	21.8	1000	20050099
27 x 1.5 RE	0.7	19.3	1.6	1.8	26.1	1450	20050102
37 x 1.5 RE	0.7	21.7	1.6	1.8	28.5	1730	20050105
48 x 1.5 RE	0.7	24.9	1.6	1.9	31.9	2100	20050109
5 x 1.5 RM	0.7	9.9	0.8	1.8	15.3	450	20050034
7 x 1.5 RM	0.7	10.8	0.8	1.8	16.2	510	20050035
10 x 1.5 RM	0.7	13.8	1.25	1.8	19.9	770	20050036
12 x 1.5 RM	0.7	14.2	1.25	1.8	20.3	830	20050110
19 x 1.5 RM	0.7	16.8	1.25	1.8	22.9	1070	20050113
27 x 1.5 RM	0.7	20.7	1.6	1.8	27.5	1560	20050116
37 x 1.5 RM	0.7	23.2	1.6	1.8	30.0	1830	20050119
48 x 1.5 RM	0.7	26.7	1.6	1.9	33.7	2270	20050123
5 x 2.5 RE	0.7	10.3	0.8	1.8	15.7	500	20050124
7 x 2.5 RE	0.7	11.3	1.25	1.8	17.4	660	20050125
10 x 2.5 RE	0.7	14.4	1.25	1.8	20.5	880	20050126
12 x 2.5 RE	0.7	14.9	1.25	1.8	21.0	950	20050127
19 x 2.5 RE	0.7	18.1	1.6	1.8	24.9	1430	20050130
27 x 2.5 RE	0.7	21.7	1.6	1.8	28.5	1800	20050133
37 x 2.5 RE	0.7	24.4	1.6	1.9	31.4	2230	20050136
48 x 2.5 RE	0.7	28.5	2.0	2.1	36.7	3010	20050140
5 x 2.5 RM	0.7	11.0	0.8	1.8	16.4	530	20050029
7 x 2.5 RM	0.7	12.0	1.25	1.8	18.1	690	20050030
10 x 2.5 RM	0.7	15.4	1.25	1.8	21.5	930	20050031
12 x 2.5 RM	0.7	16.0	1.25	1.8	22.1	1020	20050032
19 x 2.5 RM	0.7	19.4	1.6	1.8	26.2	1510	20050143
27 x 2.5 RM	0.7	23.3	1.6	1.8	30.1	1930	20050146
37 x 2.5 RM	0.7	26.2	1.6	1.9	33.2	2360	20050149
48 x 2.5 RM	0.7	30.5	2.0	2.1	38.7	3240	20050141

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