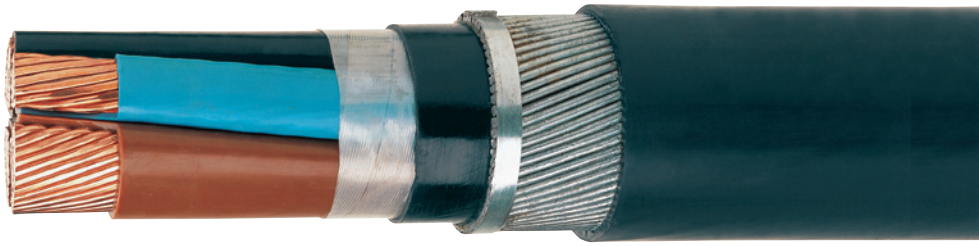
KERPEN
Competence in Cable Technology



Section 2:

XLPE - Insulated

Low Voltage Cables (90 °C)

U_0 /U 0.6 / 1 kV

Power & Control Cable — IEC 60502-1

(2-, 3-, 4- and 5-cores) — U_0/U 0.6 / 1 kV

XLPE-Insulation, PVC-Sheath

2XY-fl

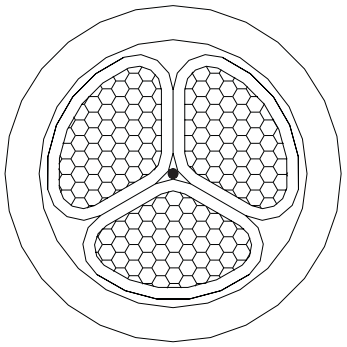
Application

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. (Local and / or legal requirements to be noted)

Construction

Conductor	plain annealed copper, class 1or class 2 resp., acc. to IEC 60228,	
	≤ 35 mm²: circular solid (RE) or circular stranded (RM),	
	> 35 mm²: sector-shaped stranded (SM)[1]	
Insulation	cross-linked polyethylene XLPE	
Colour code [1] [2]	Two-core:	blue, brown
	Three-core:	brown, black, grey
	Four-core:	blue, brown, black, grey
	Five-core:	blue, brown. black, grey, black
Laying up	cores twisted in layers	
Inner Covering	extruded filler of regenerated rubber	
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	**Temperature range:**	
Flame propagation :	IEC 60332-3 cat. A	- 30 °C up to + 90 °C	
		(during operation)	
Outer Sheath :		- 5 °C up to + 50 °C	
Amount of halogen acid gas :	max. 17 %	(during installation)	
	(IEC 60754-1)	max. + 250 °C	
Limiting Oxygen Index (LOI):	min. 30 %	(under short circuit	
	(IEC 60332-3 ann. B)		
Temperature Index (TI) :	min. 300 °C	**Min. bending radius:**	
		8 x cable-∅	

Abbreviations

2X	insulation of XLPE
Y	outer sheath of PVC
-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
Nominal voltage U_o/U :		V	600/1000
Highest system voltage U_m :	max.	V	1200 (for three phase systems)

[1] 5core cables only with circular conductors [2] other colours on request

For further details see appendix

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Power & Control Cable — IEC 60502-1

(2-, 3-, 4- and 5-cores) — U_0/U 0.6 / 1 kV

XLPE-Insulation, PVC-Sheath

2XY-fl

Geometrical Data

No. of cores and cross-section (nom.) n / mm²	Radial thickness of insulation (nom.) mm	Radial thickness of outer sheath (nom.) mm	Overall diameter (approx.) mm	Weigth of cable (approx.) kg / km	Part number
2 x 1.5 RE	0.7	1.8	9.7	140	20810021
2 x 1.5 RM	0.7	1.8	10.2	150	20810022
2 x 2.5 RE	0.7	1.8	10.5	170	20810023
2 x 2.5 RM	0.7	1.8	11.0	180	20810024
2 x 4 RE	0.7	1.8	11.5	210	20810025
2 x 4 RM	0.7	1.8	12.2	230	20810026
2 x 6 RE	0.7	1.8	12.5	270	20810027
2 x 6 RM	0.7	1.8	13.2	290	20810028
2 x 10 RE	0.7	1.8	14.0	370	20810029
2 x 10 RM	0.7	1.8	15.0	410	20810030
2 x 16 RE	0.7	1.8	15.9	530	20810031
2 x 16 RM	0.7	1.8	17.3	580	20810032
2 x 25 RM	0.9	1.8	20.2	740	-
2 x 35 RM	0.9	1.8	22.8	1100	-
2 x 50 SM	1.0	1.8	21.5	1200	20810035
2 x 70 SM	1.1	1.8	24.9	1620	20810036
2 x 95 SM	1.1	2.0	28.0	2200	20810037
2 x 120 SM	1.2	2.1	30.1	2640	20810038
2 x 150 SM	1.4	2.2	33.5	3250	20810039
2 x 185 SM	1.6	2.3	37.7	4050	20810040
2 x 240 SM	1.7	2.5	42.4	5260	20810041
2 x 300 SM	1.8	2.7	49.3	6760	20810091
3 x 1.5 RE	0.7	1.8	10.2	150	20810042
3 x 1.5 RM	0.7	1.8	10.7	170	20810043
3 x 2.5 RE	0.7	1.8	11.0	190	20810044
3 x 2.5 RM	0.7	1.8	11.6	210	20810045
3 x 4 RE	0.7	1.8	12.0	250	20810046
3 x 4 RM	0.7	1.8	12.8	280	20810047
3 x 6 RE	0.7	1.8	13.1	330	20810048
3 x 6 RM	0.7	1.8	13.9	350	20810049
3 x 10 RE	0.7	1.8	14.8	470	20810050
3 x 10 RM	0.7	1.8	15.9	500	20810051
3 x 16 RE	0.7	1.8	16.9	670	20810052
3 x 16 RM	0.7	1.8	18.3	730	20810053
3 x 25 RM	0.9	1.8	21.5	1060	-

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

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Power & Control Cable — IEC 60502-1

(2-, 3-, 4- and 5-cores) — U_0/U 0.6 / 1 kV

XLPE-Insulation, PVC-Sheath

2XY-fl

Geometrical Data

No. of cores and cross-section (nom.) n / mm²	Radial thickness of insulation (nom.) mm	Radial thickness of outer sheath (nom.) mm	Overall Diameter (approx.) mm	Weigth of cable (approx.) kg / km	Part number
3 x 35 RM	0.9	1.8	24.3	1450	-
3 x 50 SM	1.0	1.8	25.0	1710	20810056
3 x 70 SM	1.1	1.9	28.6	2320	20810057
3 x 95 SM	1.1	2.0	31.3	3150	20810058
3 x120 SM	1.2	2.1	34.3	3820	20810059
3 x150 SM	1.4	2.3	38.6	4730	20810060
3 x185 SM	1.6	2.4	43.8	5920	20810061
3 x240 SM	1.7	2.6	49.2	7670	20810062
3 x300 SM	1.8	2.8	56.7	9870	20810063
3 x400 SM	2.0	3.1	63.9	12560	20810064
4 x 1.5 RE	0.7	1.8	10.9	180	20810065
4 x 1.5 RM	0.7	1.8	11.4	190	20810066
4 x 2.5 RE	0.7	1.8	11.8	230	20810067
4 x 2.5 RM	0.7	1.8	12.4	240	20810068
4 x 4 RE	0.7	1.8	12.9	300	20810069
4 x 4 RM	0.7	1.8	13.8	330	20810070
4 x 6 RE	0.7	1.8	14.2	400	20810071
4 x 6 RM	0.7	1.8	15.0	420	20810072
4 x 10 RE	0.7	1.8	16.1	580	20810073
4 x 10 RM	0.7	1.8	17.3	620	20810074
4 x 16 RE	0.7	1.8	18.3	840	20810075
4 x 16 RM	0.7	1.8	19.9	910	20810076
4 x 25 RM	0.9	1.8	23.5	1400	-
4 x 35 RM	0.9	1.8	26.5	1700	-
4 x 50 SM	1.0	1.9	28.8	2240	20810079
4 x 70 SM	1.1	2.0	32.5	3050	20810080
4 x 95 SM	1.1	2.1	35.7	4130	20810081
4 x120 SM	1.2	2.3	39.6	5070	20810082
4 x150 SM	1.4	2.4	43.8	6220	20810083
4 x185 SM	1.6	2.6	49.7	7790	20810084
4 x240 SM	1.7	2.8	56.3	10150	20810085
4 x300 SM	1.8	3.0	62.9	12990	20810086
4 x400 SM	2.0	3.3	73.8	16580	20810087
5 x 4 RE	0.7	1.8	14.0	360	20810331
5 x 4 RM	0.7	1.8	14.9	370	20810332

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

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Power & Control Cable

IEC 60502-1

(2-, 3-, 4- and 5-cores)

U_0/U 0.6 / 1 kV

XLPE-Insulation, PVC-Sheath

2XY-fl

Geometrical Data

No. of cores and cross-section (nom.) n / mm²	Radial thickness of insulation (nom.) mm	Radial thickness of outer sheath (nom.) mm	Overall Diameter (approx.) mm	Weigth of cable (approx.) kg / km	Part number
5 x 6 RE	0.7	1.8	15.4	470	20810333
5 x 6 RM	0.7	1.8	16.3	500	20810334
5 x 10 RE	0.7	1.8	17.5	690	20810335
5 x 10 RM	0.7	1.8	18.8	730	20810336
5 x 16 RE	0.7	1.8	20.0	1010	20810337
5 x 16 RM	0.7	1.8	21.8	1080	20810338
5 x 25 RM	0.9	1.8	25.8	1650	20810339
5 x 35 RM	0.9	1.8	28.8	2120	20810340
5 x 50 RM	1.0	1.8	32.9	2840	20810341
5 x 70 RM	1.1	2.1	38.5	3990	20810342

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

Power & Control Cable — IEC 60502-1

(Multicores) — U_0/U 0.6 / 1 kV

XLPE-Insulation, PVC-Sheath

2XY-fl

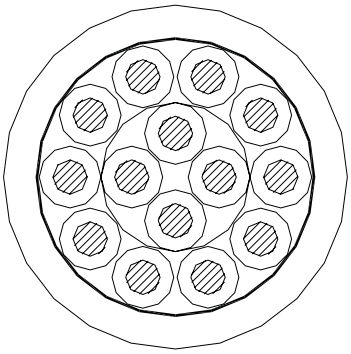
Application

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. (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
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 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-∅	

Abbreviations

2X	insulation of XLPE
Y	outer sheath of PVC
-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
Nominal voltage U_o/U :		V	600/1000
Highest system voltage U_m :	max.	V	1200 (for three phase systems)

For further electrical details see appendix

Power & Control Cable — IEC 60502-1

(Multicores) — U_0/U 0.6 / 1 kV

XLPE-Insulation, PVC-Sheath

2XY-fl

Geometrical Data

No. of cores and cross-section (nom.) n / mm²	Radial thickness of insulation (nom.) mm	Radial thickness of outer sheath (nom.) mm	Overall Diameter (approx.) mm	Weigth of cable (approx.) kg / km	Part number
5 x 1.5 RE	0.7	1.8	11.3	180	20810131
7 x 1.5 RE	0.7	1.8	12.2	220	20810132
10 x 1.5 RE	0.7	1.8	14.9	310	20810133
12 x 1.5 RE	0.7	1.8	15.3	340	20810134
19 x 1.5 RE	0.7	1.8	17.7	480	20810137
27 x 1.5 RE	0.7	1.8	21.0	660	20810140
37 x 1.5 RE	0.7	1.8	23.4	860	20810144
48 x 1.5 RE	0.7	1.8	26.5	1080	20810148
5 x 1.5 RM	0.7	1.8	11.9	190	20810150
7 x 1.5 RM	0.7	1.8	12.8	230	20810151
10 x 1.5 RM	0.7	1.8	15.8	320	20810152
12 x 1.5 RM	0.7	1.8	16.2	360	20810153
19 x 1.5 RM	0.7	1.8	18.8	510	20810156
27 x 1.5 RM	0.7	1.8	22.3	700	20810108
37 x 1.5 RM	0.7	1.8	24.8	910	20810112
48 x 1.5 RM	0.7	1.8	28.3	1150	20810164
5 x 2.5 RE	0.7	1.8	12.4	240	20810351
7 x 2.5 RE	0.7	1.8	13.4	300	20810167
10 x 2.5 RE	0.7	1.8	16.4	400	20810168
12 x 2.5 RE	0.7	1.8	16.9	460	20810169
19 x 2.5 RE	0.7	1.8	19.8	670	20810172
27 x 2.5 RE	0.7	1.8	23.4	920	20810175
37 x 2.5 RE	0.7	1.8	26.1	1210	20810179
48 x 2.5 RE	0.7	1.9	29.9	1550	20810183
5 x 2.5 RM	0.7	1.8	13.0	250	20810115
7 x 2.5 RM	0.7	1.8	14.0	310	20810207
10 x 2.5 RM	0.7	1.8	17.4	420	20810116
12 x 2.5 RM	0.7	1.8	18.0	490	20810186
19 x 2.5 RM	0.7	1.8	21.0	710	20810189
27 x 2.5 RM	0.7	1.8	24.9	980	20810192
37 x 2.5 RM	0.7	1.8	27.8	1290	20810196
48 x 2.5 RM	0.7	1.9	31.9	1650	20810200

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

Power & Control Cable — IEC 60502-1

(2-, 3-, and 4-cores) — U_0/U 0.6 / 1 kV

XLPE-Insulation, Armour

2XYRY-fl

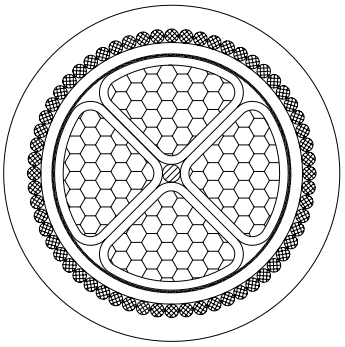
Application

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 IEC 60228, ≤ 35 mm²: circular solid (RE) or circular stranded (RM), > 35 mm²: sector-shaped stranded (SM)	
Insulation	cross-linked polyethylene XLPE	
Colour code	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 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-∅	

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 U_o/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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Power & Control Cable — IEC 60502-1

(2-, 3-, and 4-cores) — U_0/U 0.6 / 1 kV

XLPE-Insulation, Armour
2XYRY-fl

Geometrical Data

No. of cores and cross-section (nom.) n / mm²	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	Weigth of cable (approx.) kg / km	Part number
2 x 1.5 RE	0.7	7.3	0.8	1.8	12.7	310	20050038
2 x 1.5 RM	0.7	7.8	0.8	1.8	13.2	330	20050154
2 x 2.5 RE	0.7	8.1	0.8	1.8	13.5	350	20050039
2 x 2.5 RM	0.7	8.6	0.8	1.8	14.0	370	20050155
2 x 4 RE	0.7	9.1	0.8	1.8	14.5	410	20050040
2 x 4 RM	0.7	9.8	0.8	1.8	15.2	440	20050156
2 x 6 RE	0.7	10.1	0.8	1.8	15.5	480	20050041
2 x 6 RM	0.7	10.8	0.8	1.8	16.2	510	20050042
2 x 10 RE	0.7	11.6	0.8	1.8	17.0	600	20050043
2 x 10 RM	0.7	12.8	1.25	1.8	18.9	770	20050044
2 x 16 RE	0.7	13.5	1.25	1.8	19.6	890	20050045
2 x 16 RM	0.7	14.9	1.25	1.8	21.0	960	20050046
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	20050157
2 x 70 SM	1.1	20.4	1.6	2.0	27.6	2310	20050049
2 x 95 SM	1.1	23.5	2.0	2.1	31.7	3145	20050050
2 x 120 SM	1.2	27.8	2.0	2.2	36.2	3865	20050051
2 x 150 SM	1.4	31.0	2.0	2.3	39.6	4640	20050052
2 x 185 SM	1.6	35.4	2.5	2.5	45.4	6090	20050053
2 x 240 SM	1.7	39.5	2.5	2.7	49.9	7520	20050054
2 x 300 SM	1.8	46.2	2.5	2.8	56.8	9360	20050221
3 x 1.5 RE	0.7	7.8	0.8	1.8	13.2	340	20050057
3 x 1.5 RM	0.7	8.3	0.8	1.8	13.7	360	20050158
3 x 2.5 RE	0.7	8.6	0.8	1.8	14.0	390	20050058
3 x 2.5 RM	0.7	9.2	0.8	1.8	14.6	410	20050159
3 x 4 RE	0.7	9.6	0.8	1.8	15.0	460	20050059
3 x 4 RM	0.7	10.4	0.8	1.8	15.8	510	20050160
3 x 6 RE	0.7	10.7	0.8	1.8	16.1	550	20050060
3 x 6 RM	0.7	11.5	0.8	1.8	16.9	600	20050161
3 x 10 RE	0.7	12.4	1.25	1.8	18.5	830	20050061
3 x 10 RM	0.7	13.5	1.25	1.8	19.6	890	20050162
3 x 16 RE	0.7	14.5	1.25	1.8	20.6	1080	20050062
3 x 16 RM	0.7	15.8	1.25	1.8	21.9	1150	20050163
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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Power & Control Cable — IEC 60502-1

(2-, 3-, and 4-cores) — U_0/U 0.6 / 1 kV

XLPE-Insulation, Armour

2XYRY-fl

Geometrical Data

No. of cores and cross-section (nom.) n / mm²	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	Weigth of cable (approx.) kg / km	Part number
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	20050166
3 x 70 SM	1.1	26.5	2.0	2.0	34.5	3540	20050167
3 x 95 SM	1.1	29.0	2.0	2.2	37.4	4440	20050168
3 x120 SM	1.2	32.0	2.0	2.3	40.6	5280	20050169
3 x150 SM	1.4	36.3	2.5	2.5	46.3	6810	20050170
3 x185 SM	1.6	41.1	2.5	2.6	51.3	8200	20050063
3 x240 SM	1.7	46.1	2.5	2.8	56.7	10310	20050171
3 x300 SM	1.8	53.4	2.5	3.0	64.4	12900	20050064
3 x400 SM	2.0	59.8	2.5	3.2	71.2	15860	20050065
4 x 1.5 RE	0.7	8.5	0.8	1.8	13.9	370	20050066
4 x 1.5 RM	0.7	9.0	0.8	1.8	14.4	400	20050067
4 x 2.5 RE	0.7	9.4	0.8	1.8	14.8	440	20050068
4 x 2.5 RM	0.7	10.0	0.8	1.8	15.4	460	20050172
4 x 4 RE	0.7	10.5	0.8	1.8	15.9	530	20050069
4 x 4 RM	0.7	11.4	0.8	1.8	16.8	580	20050173
4 x 6 RE	0.7	11.8	0.8	1.8	17.2	650	20050070
4 x 6 RM	0.7	12.7	1.25	1.8	18.8	800	20050071
4 x 10 RE	0.7	13.7	1.25	1.8	19.8	970	20050072
4 x 10 RM	0.7	14.9	1.25	1.8	21.0	1040	20050073
4 x 16 RE	0.7	15.9	1.6	1.8	22.7	1390	20050074
4 x 16 RM	0.7	17.5	1.6	1.8	24.3	1500	20050174
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	20050077
4 x 70 SM	1.1	29.7	2.0	2.0	37.7	4370	20050078
4 x 95 SM	1.1	33.2	2.0	2.3	41.8	5590	20050079
4 x120 SM	1.2	37.1	2.5	2.5	47.1	7170	20050080
4 x150 SM	1.4	41.1	2.5	2.6	51.3	8550	20050081
4 x185 SM	1.6	46.6	2.5	2.8	57.2	10460	20050082
4 x240 SM	1.7	53.0	2.5	3.0	64.0	13190	20050083
4 x300 SM	1.8	59.0	2.5	3.2	70.4	16360	20050084
4 x400 SM	2.0	69.7	3.15	3.5	83.0	21470	20050085

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

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Power & Control Cable — IEC 60502-1

(Multicores) — U_0/U 0.6 / 1 kV

XLPE-Insulation, Armour

2XYRY-fl

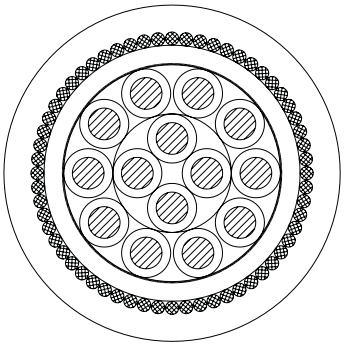
Application

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)
Wraping	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-∅	

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

For further details see appendix

Power & Control Cable — IEC 60502-1

(Multicores) — U_0/U 0.6 / 1 kV

XLPE-Insulation, Armour

2XYRY-fl

Geometrical Data

No. of cores and cross-section (nom.) n / mm²	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	Weigth 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