

SECURITY CABLES



J-Y(St)Y Lg

fire warning installation cable



ELETTROTEK KABEL® J-Y(st)Y Lg BRANDMELDE KABEL



Construction:

Conductor:	solid red copper conductor 0,8 mmØ Cl. 1, acc to IEC 60228
Insulation:	PVC type Y11
Colour cores:	DIN VDE 0815
Stranding:	cores twisted in pairs twisted in concentric layers
Screen:	electrostatic screen of plastic and aluminium tape + tinned drain-wire
Outer sheath:	red (RAL3000) with imprint "BRANDMELDE KABEL", PVC type YM1

Resistance:



Flame retardant and self-extinguishing acc.to:
PVC DIN VDE 0482 part 332-1-2
EN 60332-1-2
IEC 60332-1

Technical data:

Nominal voltage:	300 V
Test voltage:	core/core U eff. 800 V core/screen 800 V
Temperature range	
<i>Fixed laying:</i>	- 30 °C / + 70 °C
<i>Flexible application:</i>	- 5 °C / + 50 °C
Loop resistance: at 20°C	0,6 mm-max. 73,2 Ohm/km
Min. bending radius	
to DIN VDE 0891 part 5 during delivery:	7,5 xd
single bending without tension:	2,5 xd
repeated bending without tension:	7,5 xd
Insulation resistance:	min. 100 MOhm×/km
Mutual capacitance: at 800 Hz	max. 100 nF/km
Capacitance unbalances: at 800 Hz	k ₁ max.300 pF/100 m
Line attenuation: at 800 Hz	1,48 dB/KM

Features:

Fire warning installation cable

SECURITY CABLES

J-Y(St)Y Lg

fire warning installation cable



ELETTROTEK KABEL® J-Y(st)Y Lg BRANDMELDE KABEL



Part no.	No. of cores x conductor diameter n x mm	Outer-Ø ca. mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	AWG no. *)
49010CRW012M08	1x2x0,8	4,5	11	38	19
49010CRW022M08	2x2x0,8	7	21	60	19
49010CRW032M08	3x2x0,8	8,5	31	80	19
49010CRW042M08	4x2x0,8	9	41	100	19
49010CRW052M08	5x2x0,8	9,5	52	120	19
49010CRW062M08	6x2x0,8	11	62	140	19
49010CRW082M08	8x2x0,8	11,5	82	170	19
49010CRW102M08	10x2x0,8	13,2	102	220	19
49010CRW122M08	12x2x0,8	14,2	123	250	19
49010CRW142M08	14x2x0,8	14,6	145	280	19
49010CRW162M08	16x2x0,8	16	164	320	19
49010CRW202M08	20x2x0,8	17	204	380	19
49010CRW242M08	24x2x0,8	19	244	460	19
49010CRW302M08	30x2x0,8	20,8	304	560	19
49010CRW402M08	40x2x0,8	23	405	710	19
49010CRW502M08	50x2x0,8	26	505	900	19
49010CRW602M08	60x2x0,8	28	606	1050	19
49010CRW802M08	80x2x0,8	31,5	807	1400	19
49010CRWAA2M08	100x2x0,8	33	1008	1750	19

Other dimensions and colours available on request.

SECURITY CABLES

J-H(St)H

fire warning installation cable



CE

ELETTROTEK KABEL® J-H(St)H



Construction:

Conductor:	solid red copper conductor 0,8 mmØ Cl. 1, acc to IEC 60228
Insulation:	Halogen-free compound type HI2
Colour cores:	DIN VDE 0815
Stranding:	cores twisted in quads, quads stranded to units
Wrapping:	plastic tape
Screen:	electrostatic screen of plastic and aluminium tape + tinned drain-wire
Outer sheath:	red (RAL3000) with imprint "BRANDMELDE KABLE", Halogen-free compound type HM2

Resistance:



Flame retardant acc. to:
DIN VDE 0482 part 332-3
EN 60332-3
IEC 60332-3



Halogen free acc. to:
EN 50267-2-1 + IEC 60754-1,
DIN VDE 0482 part.267-2-1



Low corrosiveness combustion gases acc.to:
EN 50267-2, IEC 60754-2,
DIN VDE 0482 part.267-2



Smoke density acc. to:
IEC 61034
EN 61034, CEI 20-38

Technical data:

Nominal voltage:	300 V
Test voltage:	800 V
Temperature range	
<i>Fixed laying:</i>	- 30 °C / + 70 °C
<i>Flexible application:</i>	- 5 °C / + 50 °C
Min. bending radius:	7,5 x d
Radiation resistance:	up to 100x10 ⁶ cJ/kg

Features:

Bd fire warning installation cable

Part no.	No.of cores x conductor diameter n x mm	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	AWG no.®)
49020CRW022M08	2x2x0,8	6,8	25	70	19
49020CRW042M08	4x2x0,8	10,5	45	135	19
49020CRW062M08	6x2x0,8	10,9	65	151	19
49020CRW102M08	10x2x0,8	13,1	106	230	19
49020CRW202M08	20x2x0,8	20,4	206	507	19
49020CRW302M08	30x2x0,8	21,5	307	600	19
49020CRW402M08	40x2x0,8	24,5	407	788	19
49020CRW502M08	50x2x0,8	27,1	508	972	19
49020CRW602M08	60x2x0,8	29,4	608	1120	19
49020CRW802M08	80x2x0,8	33,2	809	1475	19
49020CRWAA2M08	100x2x0,8	37,2	1010	1804	19

Other dimensions and colours available on request.

SECURITY CABLES

JE-H(St)H

Bd fire warning cable, FE 180/E 30 to E 90 (red), Halogen-free



CE

ELETTROTEK KABEL® JE-H(St)H



Construction:

Conductor:	solid red copper conductor 0,8 mmØ Cl. 1, acc to IEC 60228
Insulation:	Halogen-free compound type HI1
Colour cores:	DIN VDE 0815
Stranding:	cores twisted in quads, quads stranded to units
Wrapping:	plastic tape
Screen:	electrostatic screen of plastic and aluminium tape + tinned drain-wire
Outer sheath:	red (RAL3000) with imprint "BRANDMELDE KABLE", Halogen-free compound type HM2

Resistance:



Flame retardant acc. to:
DIN VDE 0482 part 332-3
IEC 60332-3



Halogen free acc. to:
EN 50267-2-1
IEC 60754-1
DIN VDE 0482 part.267-2-1



Low corrosiveness combustion gases acc.to:
EN 50267-2
IEC 60754-2
DIN VDE 0482 part.267-2



Smoke density acc. to:
IEC 61034
EN 61034, CEI 20-38

Technical data:

Nominal voltage:	300 V
Test voltage:	800 V
Temperature range	
<i>Fixed laying:</i>	- 30 °C / + 70 °C
<i>Flexible application:</i>	- 5 °C / + 70 °C
Min. bending radius:	6 x d
Radiation resistance:	up to 100x10 ⁶ cJ/kg

Features:

Bd fire warning installation cable

Part no.	No.of cores x conductor diameter n x mm	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	AWG no.*)
49030CRW022M08	2x2x0,8	7,4	25	70	19
49030CRW042M08	4x2x0,8	10,8	45	135	19
49030CRW082M08	8x2x0,8	16,9	65	151	19
49030CRW122M08	12x2x0,8	18,5	106	230	19
49030CRW162M08	16x2x0,8	20	206	507	19
49030CRW202M08	20x2x0,8	22,2	307	600	19
49030CRW322M08	32x2x0,8	29	407	788	19
49030CRW402M08	40x2x0,8	34,2	508	972	19
49030CRW522M08	52x2x0,8	37,3	608	1120	19

Other dimensions and colours available on request.

SECURITY CABLES

JE-H(St)HRH

Bd fire warning cable, FE 180/E 30 to E 90, Halogen-free



CE

ELETTROTEK KABEL® JE-H(St)HRH

Construction:

- Conductor:** solid red copper conductor 0,8 mmØ
Cl. 1, acc to IEC 60228
- Insulation:** Halogen-free compound type HI1 to DIN VDE 0207 part 23 flame retardant (E90 with special foil wrapping over conductor)
- Colour cores:** DIN VDE 0815
- Stranding:** 2 cores twisted to pair and each 4 pairs layed up in bunches, the bunches stranded in layers
- Wrapping:** plastic tape
- Screen:** electrostatic screen of plastic and aluminium tape + tinned drain-wire
- Inner sheath:** flame retardant polyolefin compound to DIN VDE 0207 type HM3
- Armour:** Braid of galvanized steel wires
- Outer sheath:** red (RAL3000) with imprint "BRANDMELDE KABLE, Halogen-free compound type HM2

Resistance:



Flame retardant acc. to:
DIN VDE 0482 part 332-3
IEC 60332-3



Halogen free acc. to:
EN 50267-2-1
IEC 60754-1
DIN VDE 0482 part.267-2-1



Low corrosiveness combustion gases acc.to:
EN 50267-2
IEC 60754-2
DIN VDE 0482 part.267-2



Smoke density acc. to:
IEC 61034
EN 61034, CEI 20-38

Technical data:

- Nominal voltage:** 300 V
- Test voltage:** 800 V
- Min. bending radius:** 6 x d

Features:

- FE 180: insulation integrity for 180 min.
Test to DIN VDE 0472 part.814 IEC 60331
- E 30: functional for 30 min. Test to DIN 4102 part.12
- E 90: functionally for 90 min. Test to DIN 4102 part.12

Part no.	No.of cores x conductor diameter n x mm	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	AWG no.*)
49040CRW022M08	2x2x0,8	10,5	25	150	19
49040CRW042M08	4x2x0,8	14,8	45	275	19
49040CRW082M08	8x2x0,8	21,1	85	545	19
49040CRW122M08	12x2x0,8	22,7	126	602	19
49040CRW162M08	16x2x0,8	25	166	734	19
49040CRW202M08	20x2x0,8	26,9	206	870	19
49040CRW322M08	32x2x0,8	35	326	1360	19
49040CRW402M08	40x2x0,8	41	407	1800	19
49040CRW522M08	52x2x0,8	44	529	2038	19

Other dimensions and colours available on request.

JE-H(St)H Orange

Bd FE 180/E 30 to E 90 (orange),Halogen-free



CE

ELETTROTEK KABEL® JE-H(St)H

Construction:

Conductor:	solid red copper conductor 0,8 mmØ Cl. 1, acc to IEC 60228
Insulation:	Halogen-free compound type HI1 to DIN VDE 0207 part.23 flame retardant (E90 with special foil wrapping over conductor)
Colour cores:	DIN VDE 0815, (with ring colours and ring groups)
Stranding:	cores twisted in pair, 4 pairs to a unit and several units stranded to layers.
Wrapping:	special polyester tape
Screen:	electrostatic screen of plastic and aluminium tape + tinned drain-wire
Outer sheath:	orange (RAL2003),flame retardant to DIN VDE 0207 part 24,Halogen free type HM2

Technical data:

Nominal voltage:	300 V
Test voltage:	800 V
Temperature range	
<i>Fixed laying:</i>	- 30 °C / + 70 °C
<i>Flexible application:</i>	- 5 °C / + 70 °C
Min. bending radius:	6 x d
Radiation resistance:	up to 100x10 ⁶ cJ/kg

Resistance:



Flame retardant acc. to:
DIN VDE 0482 part 332-3
IEC 60332-3



Halogen free acc. to:
EN 50267-2-1
IEC 60754-1
DIN VDE 0482 part.267-2-1



Low corrosiveness combustion gases acc.to:
EN 50267-2
IEC 60754-2
DIN VDE 0482 part.267-2



Smoke density acc. to:
IEC 61034
EN 61034, CEI 20-38

Features:

FE 180: insulation integrity for 180 min.
Test to DIN VDE 0472 part.814 IEC 60331

E 30: functional for 30 min.Test to DIN 4102 part.12

E 90: functionally for 90 min.Test to DIN 4102 part.12

SECURITY CABLES

JE-H(St)H Orange

Bd FE 180/E 30 to E 90 (orange),Halogen-free



CE



Functionally E 30 to E 90

Part no.	No.of cores x conductor diameter n x mm	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	AWG no.*)
49050CGW012M08	1x2x0,8	6	17	57	19
49050CGW022M08	2x2x0,8	7,4	25	74	19
49050CGW042M08	4x2x0,8	10,8	45	127	19
49050CGW082M08	8x2x0,8	16,9	85	300	19
49050CGW122M08	12x2x0,8	18,5	126	336	19
49050CGW162M08	16x2x0,8	20,1	166	426	19
49050CGW202M08	20x2x0,8	22,2	206	529	19
49050CGW322M08	32x2x0,8	29,1	326	859	19
49050CGW402M08	40x2x0,8	34,2	407	1094	19
49050CGW522M08	52x2x0,8	37,3	529	1280	19

Functionally E 30

Part no.	No.of cores x conductor diameter n x mm	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	AWG no.*)
49051CGW012M08	1x2x0,8	6	17	57	19
49051CGW022M08	2x2x0,8	7,5	25	74	19
49051CGW042M08	4x2x0,8	9,3	45	127	19
49051CGW082M08	8x2x0,8	11,4	85	300	19
49051CGW122M08	12x2x0,8	13	126	336	19
49051CGW162M08	16x2x0,8	15,7	166	426	19
49051CGW202M08	20x2x0,8	16,5	206	529	19
49051CGW322M08	32x2x0,8	20,3	326	859	19
49051CGW402M08	40x2x0,8	23,4	407	1094	19
49051CGW522M08	52x2x0,8	25,2	529	1280	19

Other dimensions and colours available on request.

FTGI0(O)MI 0,6/1 kV



Construction:

Conductor:	flexible red copper conductor Cl.5, acc. to IEC 60228
Insulation:	rubber, type G10
Wrapping:	glass/mica tape, wrapped to helix
Outer sheath:	blue (RAL 5012), halogen-free compound type M1

Technical data:

Nominal voltage:	0,6/1 kV
Test voltage:	4 kV
Temperature range	
<i>Fixed laying:</i>	- 25 °C / + 90 °C
<i>Flexible application:</i>	0 °C / + 90 °C
Max short circuit temperature:	+ 250 °C
Min. bending radius:	12 x d

Resistance:



Flame retardant and self extinguishing acc. to:
EN 50266
IEC 60332-3-24, CEI 20-22III



Halogen free acc. to:
EN 50267-2-1
IEC 60754-1
DIN VDE 0482 part.267-2-1



Fire resistant acc. to:
IEC 60331, EN 50200



Smoke density acc. to:
IEC 61034
EN 61034, CEI 20-38

SECURITY CABLES

FTGI0(O)MI 0,6/I kV



Part no.	No. of cores x cross section n x mm ²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	AWG no.)*
49060GBL010M15	1x1,5	7,2	14,4	65	16
49060GBL010M25	1x2,5	7,8	24	80	14
49060GBL010M40	1x4	8,2	38,4	100	12
49060GBL010M60	1x6	9	57,6	125	10
49060GBL010M61	1x10	10,6	96	175	8
49060GBL010M62	1x16	11,8	153,6	230	6
49060GBL010M63	1x25	12,9	240	340	4
49060GBL010M64	1x35	15,7	336	460	2
49060GBL010M65	1x50	16,5	480	620	1
49060GBL010M66	1x70	19,5	672	845	2/0
49060GBL010M67	1x95	21	912	1110	3/0
49060GBL010M68	1x120	23	1152	1380	4/0
49060GBL010M69	1x150	25,1	1440	1680	250 MCM
49060GBL010M70	1x185	27,1	1776	2000	350 MCM
49060GBL010M71	1x240	32,1	2304	2580	450 MCM
49060GBL010M72	1x300	34,6	2880	3000	550 MCM
49060GB3020M15	2x1,5	12,7	28,8	170	16
49060GB3020M25	2x2,5	14,1	48	205	14
49060GB3020M40	2x4	14,9	76,8	255	12
49060GB3020M60	2x6	16,1	115,2	330	10
49060GB3020M61	2x10	18,4	192	470	8
49060GB3020M62	2x16	20	307,2	645	6
49060GB3020M63	2x25	23	480	955	4
49060GB3020M64	2x35	25	672	1240	2
49060GB3030M15	3x1,5	13,4	43,2	190	16
49060GB3030M25	3x2,5	14,3	72	235	14
49060GB3030M40	3x4	15,6	115,2	310	12
49060GB3030M60	3x6	17	172,8	395	10
49060GB3030M61	3x10	20	288	575	8
49060GB3030M62	3x16	21,8	460,8	800	6
49060GB3030M63	3x25	25,2	720	1180	4
49060GB3030M64	3x35	28,1	1008	1690	2
49060GB3040M15	4x1,5	14	57,6	225	16
49060GB3040M25	4x2,5	16,2	96	290	14
49060GB3040M40	4x4	17,1	153,6	375	12
49060GB3040M60	4x6	18,1	230,4	490	10
49060GB3040M61	4x10	21,4	384	715	8
49060GB3040M62	4x16	25,2	614,4	975	6
49060GB3040M63	4x25	29,1	960	1450	4
49060GB3035M64	3x35+25	30,2	1248	1910	2
49060GB3050M15	5x1,5	16,1	72	270	16
49060GB3050M25	5x2,5	17,4	120	335	14
49060GB3050M40	5x4	18,2	192	455	12
49060GB3050M60	5x6	19,9	288	580	10
49060GB3050M61	5x10	24,1	480	850	8
49060GB3050M62	5x16	28,3	768	1180	6
49060GB3050M63	5x25	32,2	1200	1735	4
49060GB3050M64	5x35	36,4	1680	2320	2
49060GB1070M15	7x1,5	17,5	100,8	365	16
49060GB1100M15	10x1,5	19,8	144	470	16
49060GB1120M15	12x1,5	21,9	172,8	560	16
49060GB1160M15	16x1,5	24,3	230,4	660	16
49060GB1190M15	19x1,5	27,5	273,6	790	16
49060GB1240M15	24x1,5	29,8	345,6	1020	16
49060GB1072M25	7x2,5	18,3	168	425	14
49060GB1100M25	10x2,5	21,5	240	590	14
49060GB1120M25	12x2,5	23,8	288	700	14
49060GB1160M25	16x2,5	27,5	384	850	14
49060GB1190M25	19x2,5	28,9	456	990	14
49060GB1240M25	24x2,5	33,2	576	1300	14

Other dimensions and colours available on request.

GAALFIRE 90 0,6/1 kV



ELETTROTEK KABEL® GAALFIRE 90 06/1 kv

Construction:

Conductor:	flexible red copper conductor Cl.5, acc. to IEC 60228
Insulation:	rubber, type G10
Wrapping:	glass/mica tape, wrapped to helix
Stranding:	wires twisted together in concentric layers, wrapping overlapped polyester tape
Screen:	electrostatic screen of plastic and aluminium tape + tinned drain-wire
Outer sheath:	red (RAL 3000), halogen-free compound type M1

Technical data:

Nominal voltage:	0,6/1 kV
Test voltage:	4 kV
Temperature range:	- 40 °C / + 90 °C
Min. bending radius:	12 x d

Resistance:



Flame retardant and self extinguishing acc. to:

IEC 60332-1
DIN VDE 0482 part.266-2-4
EN 50266-2-4
IEC 60332-3-24



Halogen free acc. to:

EN 50267-2-1
IEC 60754-1
DIN VDE 0482 part.267-2-1



low corrosiveness gases and smoke opacity emissions during combustion acc. to:

CEI 20-37, IEC 60754, IEC 61034, CEI 20-38

Features:

Acc. to CEI UNEL 00722-00725

conductor acc. to CEI 20-29, IEC 60228

insulation and sheath acc. to CEI 20-11

compound lead-free acc. to CEI 20-52

insulated cables fire resistant with elastometric compound with nominal voltage $\leq U_0/U$ 0,6/1 kV acc. to CEI 20-45

NoBurn cables with IMQ are marked:

- CEI 20-45 PH 90 (outer diameter up to 20 mm) they are fire-resistant complying with CEI 20-36/4-0 (EN50200) regulation, which requires a minimum working time of the cables during the test, that is the cable has to be exposed to direct fire and mechanic shock for 120 minutes at 842 °C.

NoBurn are also "no flame propagation on the single vertical element" cables, complying with CEI 20-35 (EN and IEC 60332-1) test.

Moreover, the cables are made with special "without halogen" blends complying with CEI and CENELEC regulation, in order to prevent any risk coming from any toxic substance issued during the combustion.

That characteristic is verified by many laboratory tests at IMQ and it limits the issue of corrosive, acid and toxic gas and the formation of murky smoke in the surrounding ambient in case of fire.

NoBurn cables are made complying with CEI 20-45 regulation and they are not included in CEI 20-38 1. However, they have equivalent prescriptions about the test regarding the formation of toxic and corrosive smoke and gas.

Applications:

screened cable for power, signaling and control elastometric isolated compound fire retardant, LSOH, with flexible wires protected by fire resistant barrier suitable for the 'power users' emergency areas with danger of explosion or fire (exits and emergency lighting, Alarm signals, warning of smoke or gases, escalators, pumps, fire protection, fire curtains, etc.).

SECURITY CABLES

GAALFIRE 90 06/I kV



Part no.	No. of cores x cross section n x mm ²	Outer-Ø ca. mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	AWG no. *)
49070GR3020M10	2x1	7,9	24	67	18
49070GR3030M10	3x1	8,2	33,6	85	18
49070GR3040M10	4x1	9,4	43,2	110	18
49070GR3020M15	2x1,5	8,9	33,6	86	16
49070GR3030M15	3x1,5	9,4	48	113	16
49070GR3040M15	4x1,5	10,5	62,4	141	16
49070GR3020M25	2x2,5	10,4	52,8	120	14
49070GR3030M25	3x2,5	10,9	76,8	158	14
49070GR3040M25	4x2,5	12,4	100,8	205	14
49070GR1071M10	7G1	11,5	72	175	18
49070GR1071M15	7G1,5	12,9	105,6	228	16

Other dimensions and colours available on request.

SECURITY CABLES

N2XH-FE 180/E 30



CE



Construction:

Conductor:	Solid or stranded red copper conductor Cl. 1 or 2, acc. to IEC 60228 DIN VDE 0259
Insulation:	core with double insulation: Flame retardant MICA-tape over conductor Core insulation with cross-linked polyethylene compound type 2XI1 to DIN VDE 0276 PART 604
Colour cores:	acc. to DIN VDE 0293-308, HD 308 S2
Stranding:	cores stranded in layers
Wrapping:	halogen-free filling compound, pressed
Outer sheath:	orange (RAL 2003), thermoplastic halogen-free polyolefine, flame retardant, type HM4 to DIN VDE 0276 part 604

Technical data:

Nominal voltage:	0,6/1 kV
Test voltage:	4 kV
Temperature range:	- 30 °C / + 70 °C
Min. bending radius:	12 x d
Radiation resistance:	up to 200x10 ⁶ cJ/kg

Resistance:



Flame retardant acc. to:
DIN VDE 0482 part 332-3
IEC 60332-3



Halogen free acc. to:
EN 50267-2-1
IEC 60754-1
DIN VDE 0482 part.267-2-1



Low corrosiveness combustion gases acc. to:
EN 50267-2
IEC 60754-2
DIN VDE 0482 part.267-2



Low smoke emission acc. to:
EN 50268-2
IEC 61034-2,
DIN VDE 0482 part. 268-2

Features:

Security cable, 0,6/1 kV, with improved fire characteristics

Insulation integrity under flame propagation to VDE 0472 part 814 IEC 60331

Burning behavior in fire (functionality) of the complete cable system to DIN 4102 part 12 (30 min.)

FE 180: insulation integrity for 180 min.
Test to DIN VDE 0472 part.814 IEC 60331

E 30: functionally for 30 min. Test to DIN 4102 part. 12



re: circular solid conductor



rm: circular stranded conductor



sm: sector-shaped stranded conductor



se: sector-shaped solid conductor

SECURITY CABLES

N2XH-FE 180/E 30



CE



Part no.	No. of cores x cross section n x mm ²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	AWG no.*)
49080GGL010M40	1x4 re	8	38	155	12
49080GGL010M60	1x6 re	9	58	190	10
49080GGL010M61	1x10 re	10	96	215	8
49080GGL010M62	1x16 re	10,5	154	240	6
49080GGL010M63	1x25 rm	13	240	380	4
49080GGL010M64	1x35 rm	14	336	460	2
49080GGL010M65	1x50 rm	15,5	480	590	1
49080GGL010M66	1x70 rm	17,5	672	820	2/0
49080GGL010M67	1x95 rm	19,5	912	1090	3/0
49080GGL010M68	1x120 rm	21	1152	1350	4/0
49080GGL010M69	1x150 rm	23	1440	1650	250 MCM
49080GGL010M70	1x185 rm	25	1776	2030	350 MCM
49080GGL010M71	1x240 rm	29	2304	2590	450 MCM
49080GG3020M15	2x1,5 re	11,5	29	170	16
49080GG3020M25	2x2,5 re	12	48	190	14
49080GG3020M40	2x4 re	13	77	260	12
49080GG3020M60	2x6 re	14	115	310	10
49080GG3020M61	2x10 re	15,5	192	430	8
49080GG3020M62	2x16 re	17,5	307	600	6
49080GG3020M63	2x25 rm	22	480	930	4
49080GG3031M15	3G1,5 re	12	43	170	16
49080GG3031M25	3G2,5 re	12,5	72	220	14
49080GG3031M40	3G4 re	13,5	115	290	12
49080GG3031M60	3G6 re	14,5	173	370	10
49080GG3031M61	3G10 re	16,5	288	530	8
49080GG3031M62	3G16 re	18,5	461	760	6
49080GG3031M63	3G25 rm	23,5	720	1160	4
49080GG3035M63	3G25/16 rm	22,5	874	1430	4
49080GG3031M64	3G35 rm	26	1080	1560	2
49080GG3035M64	3G35/16 rm	28	1162	1810	2
49080GG3031M65	3G50 rm	29	1440	2030	1
49080GG3035M65	3G50/25 rm	32	1680	2340	1
49080GG3031M66	3G70 rm	34	2016	2890	2/0
49080GG3035M66	3G70/35 rm	35	2352	3190	2/0
49080GG3035M67	3G95/50 rm	40	3216	4350	3/0
49080GG3035M68	3G120/70 rm	45	4128	5550	4/0
49080GG3035M69	3G150/70 rm	48,5	4992	6560	250 MCM
49080GG3035M70	3G185/95 rm	54	6240	8240	350 MCM
49080GG3041M15	4G1,5 re	12,5	58	210	16
49080GG3041M25	4G2,5 re	13	96	260	14
49080GG3041M40	4G4 re	13	154	310	12
49080GG3041M60	4G6 re	14,5	230	410	10
49080GG3041M61	4G10 re	16	384	620	8
49080GG3041M62	4G16 re	18	614	900	6
49080GG3040M63	4X25 re	23,6	960	1600	4
49080GG3040M64	4X35 re	26,4	1344	2050	2
49080GG3040M65	4X50 re	29,5	1920	2761	1
49080GG3040M66	4X70 re	34,6	2688	3785	2/0
49080GG3040M67	4X95 re	39	3648	5010	3/0
49080GG3040M68	4X120 re	43,5	4608	6135	4/0
49080GG3051M15	5G1,5 re	12	72	210	16
49080GG3051M25	5G2,5 re	13	120	280	14
49080GG3051M40	5G4 re	14,5	192	380	12
49080GG3051M60	5G6 re	15,5	288	510	10
49080GG3051M61	5G10 re	18	480	760	8
49080GG3051M62	5G16 re	20	768	1120	6
49080GG3050M63	5x25 re	24,5	1200	1840	4
49080GG3050M64	5x35 re	33,5	1680	2510	2
49080GG1071M15	7G1,5 re	13	101	250	16
49080GG1121M15	12G1,5 re	16,5	173	390	16

Other dimensions and colours available on request.

N2XCH-FE 180/E 30



CE



Construction:

Conductor:	Solid or stranded red copper conductor Cl. 1 or 2, acc. to IEC 60228 DIN VDE 0259
Insulation:	core with double insulation: Flame retardant MICA-tape over conductor Core insulation with cross-linked polyethylene compound type 2X11 to DIN VDE 0276 PART 604
Colour cores:	acc. to DIN VDE 0293-308, HD 308 S2
Stranding:	cores stranded in layers
Wrapping:	halogen-free filling compound, pressed
Screen:	concentric conductor of corrugated copper wires + copper tape
Outer sheath:	orange (RAL 2003), thermoplastic halogen-free polyolefine, flame retardant, type HM4 to DIN VDE 0276 part 604

Technical data:

Nominal voltage:	0,6/1 kV
Test voltage:	4 kV
Temperature range:	- 30 °C / + 70 °C
Min. bending radius:	15 x d
Radiation resistance:	up to 200x10 ⁶ cJ/kg

Resistance:



Flame retardant acc. to:
DIN VDE 0482 part 332-3
IEC 60332-3



Halogen free acc. to:
EN 50267-2-1
IEC 60754-1
DIN VDE 0482 part.267-2-1



Low corrosiveness combustion gases acc. to:
EN 50267-2
IEC 60754-2
DIN VDE 0482 part.267-2



Low smoke emission acc. to:
EN 50268-2
IEC 61034-2
DIN VDE 0482 part. 268-2

Features:





Security cable, 0,6/1 kV, with improved fire characteristics

Insulation integrity under flame propagation to VDE 0472 part 814 IEC 60331

Burning behavior in fire (functionality) of the complete cable system to DIN 4102 part 12 (30 min.)

FE 180: insulation integrity for 180 min. Test to DIN VDE 0472 part.814 IEC 60331

E 30: functionally for 30 min. Test to DIN 4102 part.12

-  re: circular solid conductor
-  rm: circular stranded conductor
-  sm: sector-shaped stranded conductor
-  se: sector-shaped solid conductor

SECURITY CABLES

N2XCH-FE 180/E 30



CE



Part no.	No. of cores x cross section n x mm ²	Outer-Ø ca. mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	AWG no. *)
49090GG3020M15	2x1,5/1,5 re	13	52	200	16
49090GG3020M25	2x2,5/2,5 re	14	80	250	14
49090GG3020M40	2x4/4 re	15	123	310	12
49090GG3020M60	2x6/6 re	16	182	400	10
49090GG3020M61	2x10/10 re	17,5	312	570	8
49090GG3030M15	3x1,5/1,5 re	13	66	220	16
49090GG3030M25	3x2,5/2,5 re	14	104	270	14
49090GG3030M40	3x4/4 re	15,5	161	360	12
49090GG3030M60	3x6/6 re	16,5	24	470	10
49090GG3030M61	3x10/10 re	18,5	408	680	8
49090GG3030M62	3x16/16 re	21	643	960	6
49090GG3030M63	3x25/16 rm	25,5	902	1390	4
49090GG3030M64	3x35/16 rm	29	1190	1720	4
49090GG3030M65	3x50/25 rm	31,5	1723	2320	1
49090GG3030M66	3x70/35 rm	36,5	2410	3260	2/0
49090GG3030M67	3x95/50 rm	40	3296	4310	3/0
49090GG3030M68	3x120/70 rm	46	4236	5520	4/0
49090GG3030M69	3x150/70 rm	50,5	5100	6620	250 MCM
49090GG3030M70	3x185/95 rm	55	6383	8180	350 MCM
49090GG3030M71	3x240/120 rm	61,5	8242	10620	450 MCM
49090GG3040M15	4x1,5/1,5 re	15	81	260	16
49090GG3040M25	4x2,5/2,5 re	16	128	310	14
49090GG3040M40	4x4/4 re	17	200	420	12
49090GG3040M60	4x6/6 re	18	297	540	10
49090GG3040M61	4x10/10 re	20	504	800	8
49090GG3040M62	4x16/16 re	22,5	796	1150	6
49090GG3040M63	4x25/16 re	28	1142	1670	4
49090GG3040M64	4x35/16 re	30,5	1526	2160	2
49090GG3040M65	4x50/25 re	32	2203	2860	1
49090GG3040M66	4x70/35 re	39,5	3082	3980	2/0
49090GG3040M67	4x95/50 re	43,5	4208	5300	3/0
49090GG3040M68	4x120/70 re	49,5	5388	6740	4/0
49090GG3040M69	4x150/70 re	55,5	6558	8210	250 MCM
49090GG3040M70	4x185/95 re	60	8159	10200	350 MCM
49090GG3040M71	4x240/120 re	68	10546	12900	450 MCM
49090GG1070M15	7x1,5/2,5 re	16,5	133	360	16
49090GG1120M15	30x1,5/6 re	29	499	1070	16

Other dimensions and colours available on request.

NHXXH-FE 180/E 30



CE

ELETTROTEK KABEL® NHXXH-FE 180/E 30

Construction:

Conductor:	Solid or stranded red copper conductor Cl. 1 or 2, acc. to IEC 60228 DIN VDE 0259
Insulation:	double core insulation of mica tape and cross-linked polymer type HI1, to DIN VDE 0207 part 23
Colour cores:	acc. to DIN VDE 0293-308, HD 308 S2
Stranding:	cores stranded in layers
Wrapping:	glass-fibre
Outer sheath:	orange (RAL 2003), polymer compound DIN VDE 0207 part 24, flame retardant

Technical data:

Nominal voltage:	0,6/1 kV
Test voltage:	4 kV
Temperature range:	- 30 °C / + 70 °C
Min. bending radius:	15 x d
Radiation resistance:	up to 200x10 ⁶ cJ/kg

Resistance:



Flame retardant acc. to:
IEC 60332-3-24
EN 50266-2
DIN VDE 0482 part.266-2



Halogen free acc. to:
EN 50267-2-1
IEC 60754-1
DIN VDE 0482 part.267-2-1



Low corrosiveness combustion gases acc.to:
EN 50267-2
IEC 60754-2
DIN VDE 0482 part.267-2



Low smoke emission acc. to:
EN 50268-2
IEC 61034-2
DIN VDE 0482 part. 268-2

Features:

Security cable, 0,6/1 kV, with improved fire characteristics

Insulation integrity under flame
propagation to VDE 0472 part 814 IEC 60331

Burning behavior in fire (functionality)
of the complete cable system to DIN 4102
part 12 (30 min.)

FE 180: insulation integrity for 180 min.
Test to DIN VDE 0472 part.814 IEC 60331

E 30: functionally for 30 min. Test to DIN 4102 part. 12

○ re: circular solid conductor

⊗ rm: circular stranded conductor

⊗ sm: sector-shaped stranded conductor

△ se: sector-shaped solid conductor

SECURITY CABLES

NHXH-FE 180/E 30



CE

ELETTROTEK KABEL® NHXH-FE 180/E 30

Part no.	No. of cores x cross section n x mm ²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	AWG no.)*
49100GGL010M40	1x4 re	7	38	98	12
49100GGL010M60	1x6 re	7,5	58	125	10
49100GGL010M61	1x10	8	96	165	8
49100GGL010M62	1x16	9	154	230	6
49100GGL010M63	1x25	10,5	240	345	4
49100GGL010M64	1x35	11,5	336	450	2
49100GGL010M65	1x50	12	480	590	1
49100GGL010M66	1x70	15	672	800	2/0
49100GGL010M67	1x95	16,5	912	1100	3/0
49100GGL010M68	1x120	18,5	1152	1350	4/0
49100GGL010M69	1x150	20,5	1440	1650	250 MCM
49100GGL010M70	1x185	23	1776	2000	350 MCM
49100GGL010M71	1x240	25,5	2304	2650	450 MCM
49100GGL010M72	1x300	31,8	2880	3200	550 MCM
49100GG3020M25	2x2,5	12,5	48	290	14
49100GG3020M40	2x4	13,5	77	345	12
49100GG3020M60	2x6	14,5	115	410	10
49100GG3020M61	2x10	16	192	540	8
49100GG3020M62	2x16	18	307	720	6
49100GG3020M63	2x25	21	480	1100	4
49100GG3020M64	2x35	24	672	1120	2
49100GG2031M15	3G1,5	12,5	43	280	16
49100GG2031M25	3G2,5	13,5	72	330	14
49100GG2031M40	3G4	14,5	115	400	12
49100GG2031M60	3G6	15,5	173	480	10
49100GG2031M61	3G10	17	288	650	8
49100GG2031M62	3G16	19	461	850	6
49100GG2031M63	3G25	22,5	720	1300	4
49100GG2031M64	3G35	24,5	1080	1700	2
49100GG2031M65	3G50	27,5	1440	2200	1
49100GG2031M66	3G70 rm	32	2016	3000	2/0
49100GG2031M67	3G95 rm	35,5	2736	4000	3/0
49100GG2031M68	3G120 rm	39,5	3456	4850	4/0
49100GG2031M69	3G150 rm	44	4320	5950	250 MCM
49100GG2031M67	3G185 rm	49,5	5328	7450	350 MCM
49100GG2031M71	3G240 rm	60	6910	8600	450 MCM
49100GG2041M15	4G1,5 re	13,5	58	325	16
49100GG2041M25	4G2,5 re	14	96	385	14
49100GG2041M40	4G4 re	15,5	154	470	12
49100GG2041M60	4G6 re	16,5	230	580	10
49100GG2041M61	4G10 re	18,5	384	790	8
49100GG2041M62	4G16 rm	20,5	614	1100	6
49100GG2041M63	4G25 rm	24,5	960	1650	4
49100GG2041M64	4G35 rm	27	1344	2150	2
49100GG2041M65	4G50 rm	30	1920	2800	1
49100GG2041M66	4G70 rm	35	2688	3800	2/0
49100GG2041M67	4G95 rm	39,5	3648	5050	3/0
49100GG2041M68	4G120 rm	43,5	4608	6150	4/0
49100GG2041M69	4G150 rm	49	5760	7650	250 MCM
49100GG2051M15	5G1,5 re	14	72	375	16
49100GG2051M25	5G2,5 re	15	120	445	14
49100GG2051M40	5G4 re	16,5	192	560	12
49100GG2051M60	5G6 re	18	288	690	10
49100GG2051M61	5G10 re	20	480	950	8
49100GG2051M62	5G16 re	22,5	768	1300	6
49100GG2051M63	5G25 rm	26,5	1200	1980	4
49100GG2051M64	5G35 rm	36	1680	2600	2
49100GG0071M15	7G1,5 re	15	101	365	16
49100GG0071M25	7G2,5 re	16,5	168	540	14
49100GG0101M15	10G1,5 re	18	144	580	16
49100GG0101M25	10G2,5 re	20	240	710	14
49100GG0121M15	12G1,5 re	19	173	640	16
49100GG0121M25	12G2,5 re	20,5	288	790	14

Other dimensions and colours available on request.

NHXCH-FE 180/E 30



CE



Construction:

Conductor:	Solid or stranded red copper conductor Cl. 1 or 2, acc. to IEC 60228 DIN VDE 0259
Insulation:	special core insulation of mica tape and cross-linked polymer type HI1, acc. to DIN VDE 0207 part 23
Colour cores:	acc. to DIN VDE 0293-308, HD 308 S2
Stranding:	cores stranded in layers
Wrapping:	glass-fibre
Screen:	red copper wires and one or two copper tape(s) applied helically
Outer sheath:	orange (RAL 2003), polymer compound DIN VDE 0207 part 24, flame retardant

Technical data:

Nominal voltage:	0,6/1 kV
Test voltage:	4 kV
Min. bending radius:	15 x d
Radiation resistance:	up to 200x10 ⁶ cJ/kg

Resistance:



Flame retardant acc. to:
IEC 60332-3
EN 50266-2
DIN VDE 0482 part.266-2



Halogen free acc. to:
EN 50267-2-1
IEC 60754-1
DIN VDE 0482 part.267-2-1



Low corrosiveness combustion gases acc. to:
EN 50267-2,
IEC 60754-2,
DIN VDE 0482 part.267-2



Low smoke emission acc. to:
EN 50268-2
IEC 61034-2
DIN VDE 0482 part. 268-2

Features:

Security cable, 0,6/1 kV, with improved fire characteristics

Insulation integrity under flame
propagation to VDE 0472 part 814 IEC 60331

Burning behavior in fire (functionality)
of the complete cable system to DIN 4102
part 12 (30 min.)

FE 180: insulation integrity for 180 min.
Test to DIN VDE 0472 part.814 IEC 60331

E 30: functionally for 30 min. Test to DIN 4102 part. 12



re: circular solid conductor



rm: circular stranded conductor



sm: sector-shaped stranded conductor



se: sector-shaped solid conductor

SECURITY CABLES

NHXCH-FE 180/E 30



CE

ELETTROTEK KABEL® NHXCH-FE 180/E 30

Part no.	No. of cores x cross section n x mm ²	Outer-Ø ca. mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	AWG no. *)
49110GG3020M15	2x1,5/1,5 re	15	52	220	16
49110GG3020M25	2x2,5/2,5 re	13,5	80	385	14
49110GG3020M40	2x4/4 re	14,5	123	470	12
49110GG3020M60	2x6/6 re	16	182	550	10
49110GG3020M61	2x10/10 re	18	312	730	8
49110GG3030M15	3x1,5/1,5 re	13,5	66	380	16
49110GG3030M25	3x2,5/2,5 re	14,5	104	430	14
49110GG3030M40	3x4/4 re	15,5	161	530	12
49110GG3030M60	3x6/6 re	16,5	240	630	10
49110GG3030M61	3x10/10 re	18,5	408	850	8
49110GG3030M62	3x16/16 rm	20,5	643	1150	6
49110GG3030M63	3x25/16 rm	24	902	1700	4
49110GG3030M64	3x35/16 rm	26,5	1190	2150	2
49110GG3030M65	3x50/25 rm	29,5	1723	2800	1
49110GG3030M66	3x70/35 rm	33	2410	3800	2/0
49110GG3030M67	3x95/50 rm	37,5	3296	5100	3/0
49110GG3030M68	3x120/70 rm	42,5	4236	6250	4/0
49110GG3030M69	3x150/70 rm	47	5100	6900	250
49110GG3030M70	3x185/95 rm	52,5	6383	8550	350
49110GG3030M71	3x240/120 rm	58,5	8242	11150	450 MCM
49110GG3040M15	4x1,5/1,5 re	14,5	81	435	16
49110GG3040M25	4x2,5/2,5 re	15,5	128	500	14
49110GG3040M40	4x4/4 re	16,5	200	610	12
49110GG3040M60	4x6/6 re	17,5	297	740	10
49110GG3040M61	4x10/10 re	20	504	1050	8
49110GG3040M62	4x16/16 re	22	796	1350	6
49110GG3040M63	4x25/16 rm	26	1142	1950	4
49110GG3040M64	4x35/16 rm	28,5	1526	2400	2
49110GG3040M65	4x50/25 rm	32	2203	3200	1
49110GG3040M66	4x70/35 rm	37	3082	4300	2/0
49110GG3040M67	4x95/50 rm	41,5	4208	5750	3/0
49110GG3040M68	4x120/70 rm	47	5388	7100	4/0
49110GG3040M69	4x150/70 rm	52	6558	8550	250 MCM
49110GG3040M70	4x185/95 rm	58	8159	10700	350 MCM
49110GG3040M71	4x240/120 rm	64	10546	13930	450 MCM
49110GG1070M15	7x1,5/2,5 re	16,5	133	635	16
49110GG1070M25	7x2,5/2,5 re	17,5	200	680	14
49110GG1100M15	10x1,5/2,5 re	19,5	176	870	16
49110GG1100M25	10x2,5/4 re	21	286	980	14
49110GG1120M15	12x1,5/2,5 re	20	205	1050	16
49110GG1120M25	12x2,5/4 re	21,5	334	1050	14
49110GG1240M15	24x1,5/6 re	26	413	1900	16
49110GG1240M25	24x2,5/6 re	28,5	696	1900	14
49110GG1300M15	30x1,5/6 re	27	499	2200	16
49110GG1300M25	30x2,5/10 re	30	840	2200	14

Other dimensions and colours available on request.

N2XH-FE 180/E 90



CE



Construction:

Conductor:	Solid or stranded red copper conductor Cl. 1 or 2, acc. to IEC 60228 DIN VDE 0259
Insulation:	core insulation with cross-linked polyethylene. type 2X11 to DIN VDE 0276 PART 604. core with double insulation. flame retardant MICA-tapeover conductor.
Colour cores:	acc. to DIN VDE 0293-308, HD 308 S2
Stranding:	cores stranded in layers
Wrapping:	halogen-free filling compound, pressed
Outer sheath:	orange (RAL 2003), thermoplastic halogen-free polyolefine compound, type HM4 to DIN VDE 0276 part 604, flame retardant.

Technical data:

Nominal voltage:	0,6/1 kV
Test voltage:	4 kV
Highest voltage:	Um 1,2 kV
Temperature range:	- 30 °C / + 70 °C
Min. bending radius:	12 x d
Radiation resistance:	up to 200x10 ⁶ cJ/kg

Resistance:



Flame retardant acc. to:
IEC 60332-3
EN 50266-2
DIN VDE 0482 part.266-2



Halogen free acc. to:
EN 50267-2-1
IEC 60754-1
DIN VDE 0482 part.267-2-1



Low corrosiveness combustion gases acc.to:
EN 50267-2,
IEC 60754-2,
DIN VDE 0482 part.267-2



Low smoke emission acc. to:
EN 50268-2
IEC 61034-2
DIN VDE 0482 part. 268-2

Features:

Security cable, 0,6/1 kV, with improved fire characteristics

Insulation integrity under flame
propagation to VDE 0472 part 814 IEC 60331

Burning behavior in fire (functionality)
of the complete cable system to DIN 4102
part 12 (90 min.)

FE 180: insulation integrity for 180 min.
Test to DIN VDE 0472 part.814 IEC 60331

E 90: functionally for 90 min. Test to DIN 4102 part.12



re: circular solid conductor



rm: circular stranded conductor



sm: sector-shaped stranded conductor



se: sector-shaped solid conductor

SECURITY CABLES

N2XH-FE 180/E 90



CE



Part no.	No. of cores x cross section n x mm ²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	AWG no.)*
49120GGL010M62	1x16 rm	11,5	154	250	6
49120GGL010M63	1x25 rm	13	240	360	4
49120GGL010M64	1x35 rm	14	336	460	2
49120GGL010M65	1x50 rm	15,5	480	610	1
49120GGL010M66	1x70 rm	17,5	672	840	2/0
49120GGL010M67	1x95 rm	19,5	912	1120	3/0
49120GGL010M68	1x120 rm	21,5	1152	1390	4/0
49120GGL010M69	1x150 rm	23,5	1440	1690	250 MCM
49120GGL010M70	1x185 rm	25,5	1776	2090	350 MCM
49120GGL010M71	1x240 rm	28,5	2304	2660	450 MCM
49120GGL010M72	1x300 rm	31	2880	3350	550 MCM
49120GGL010M73	1x400 rm	34,5	3840	4230	650 MCM
49120GG3020M15	2x1,5 re	14,5	29	270	16
49120GG3020M25	2x2,5 re	15,5	48	310	14
49120GG3020M40	2x4 re	16,5	77	370	12
49120GG3020M60	2x6 re	17,5	115	440	10
49120GG3020M61	2x10 rm	19,5	192	600	8
49120GG3020M62	2x16 rm	21	307	780	6
49120GG3020M63	2x25 rm	23,5	480	1100	4
49120GG3020M64	2x35 rm	26,5	672	1400	2
49120GG3020M65	2x50 rm	30	960	1830	1
49120GG3020M66	2x70 rm	33	1344	2420	2/0
49120GG3020M67	2x95 rm	37,5	1824	3240	3/0
49120GG3020M68	2x120 rm	41,0	2304	3940	4/0
49120GG3030M15	3x1,5 re	15	43	260	16
49120GG3030M25	3x2,5 re	16	72	350	14
49120GG3030M40	3x4 re	17	115	420	12
49120GG3030M60	3x6 re	18	173	520	10
49120GG3030M61	3x10 rm	20,5	288	710	8
49120GG3030M62	3x16 rm	22,5	461	950	6
49120GG3030M63	3x25 rm	26	720	1370	4
49120GG3035M64	3x35/16 rm	29,5	1162	1950	2
49120GG3030M64	3x35 rm	28	1008	1750	2
49120GG3035M65	3x50/25 rm	33,5	1680	2640	1
49120GG3030M65	3x50 rm	32	1440	2310	1
49120GG3030M66	3x70 rm	35,5	2016	3100	2/0
49120GG3035M66	3x70/35 rm	37	2352	3520	2/0
49120GG3035M67	3x95/50 rm	42	3216	4710	3/0
49120GG3030M67	3x95 rm	40,5	2736	4180	3/0
49120GG3035M68	3x120/70 rm	46,5	4128	5910	4/0
49120GG3030M68	3x120 rm	44	3456	5130	4/0
49120GG3030M69	3x150 rm	48,5	4320	6260	250 MCM
49120GG3035M69	3x150/70 rm	50	4992	6970	250 MCM
49120GG3035M70	3x185/95 rm	55,5	6240	8750	350 MCM
49120GG3030M70	3x185 rm	53	5328	7720	350 MCM
49120GG3035M71	3x240/120 rm	61,5	8064	1180	450 MCM
49120GG3030M71	3x240 rm	59,5	6912	9990	450 MCM
49120GG3040M15	4x1,5 re	16,5	58	350	16
49120GG3040M25	4x2,5 re	17,5	96	420	14
49120GG3040M40	4x4 re	18,5	154	510	12
49120GG3040M60	4x6 re	19,5	230	630	10
49120GG3040M61	4x10 rm	22,5	384	880	8
49120GG3040M62	4x16 rm	24,5	614	180	6
49120GG3040M63	4x25 rm	28,5	960	1730	4
49120GG3040M64	4x35 rm	31	1344	2220	2
49120GG3040M65	4x50 rm	35	1920	2940	1
49120GG3040M66	4x70 rm	39	2688	3960	2/0
49120GG3040M67	4x95 rm	45	3648	5360	3/0
49120GG3040M68	4x120 rm	48,5	4608	6550	4/0
49120GG3040M69	4x150 rm	54	5760	8070	250 MCM
49120GG3040M70	4x185 rm	59	7104	9970	350 MCM
49120GG3040M71	4x240 rm	66	9216	12830	450 MCM

Other dimensions and colours available on request.

SECURITY CABLES

N2XCH-FE 180/E 90



CE

ELETTROTEK KABEL® N2XCH-FE 180/E 90

Construction:

Conductor:	Solid or stranded red copper conductor Cl. 1 or 2, acc. to IEC 60228 DIN VDE 0259
Insulation:	core insulation with cross-linked polyethylene. type 2X11 to DIN VDE 0276 PART 604. core with double insulation. flame retardant MICA-tapeover conductor.
Colour cores:	acc. to DIN VDE 0293-308, HD 308 S2
Stranding:	cores stranded in layers
Wrapping:	halogen-free filling compound, pressed
Screen:	concentric conductor of corrugated copper wires + copper tape
Outer sheath:	orange (RAL 2003), thermoplastic halogen-free polyolefine, flame retardant, type HM4 to DIN VDE 0276 part 604

Resistance:



Flame retardant acc. to:
IEC 60332-3
EN 50266-2
DIN VDE 0482 part.266-2



Halogen free acc. to:
EN 50267-2-1
IEC 60754-1
DIN VDE 0482 part.267-2-1



Low corrosiveness combustion gases acc. to:
EN 50267-2,
IEC 60754-2,
DIN VDE 0482 part.267-2



Low smoke emission acc. to:
EN 50268-2
IEC 61034-2
DIN VDE 0482 part. 268-2

Technical data:

Nominal voltage:	0,6/1 kV
Test voltage:	4 kV
Highest voltage:	Um 1,2 kV
Temperature range:	- 30 °C / + 70 °C
Min. bending radius:	12 x d
Radiation resistance:	up to 200x10 ⁶ cJ/kg

Features:

Security cable, 0,6/1 kV, with improved fire characteristics

Insulation integrity under flame
propagation to VDE 0472 part 814 IEC 60331

Burning behavior in fire (functionality)
of the complete cable system to DIN 4102
part 12 (90 min.)

FE 180: insulation integrity for 180 min.
Test to DIN VDE 0472 part.814 IEC 60331

E 90: functionally for 90 min. Test to DIN 4102 part. 12



re: circular solid conductor



rm: circular stranded conductor



sm: sector-shaped stranded conductor



se: sector-shaped solid conductor

SECURITY CABLES

N2XCH-FE 180/E 90



CE



Part no.	No. of cores x cross section n x mm ²	Outer-Ø ca. mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	AWG no. *)
49130GG3030M15	3x1,5/1,5 re	16,5	66	330	16
49130GG3030M25	3x2,5/2,5 re	17,5	104	400	14
49130GG3030M40	3x4/4 re	18,5	161	480	12
49130GG3030M60	3x6/6 re	20	240	600	10
49130GG3030M61	3x10/10 re	22	408	840	8
49130GG3030M62	3x16/16 rm	24,5	643	1130	6
49130GG3030M63	3x25/16 rm	28	902	1560	4
49130GG3030M64	3x35/16 rm	30,5	1190	1960	2
49130GG3030M65	3x50/25 rm	34	1723	2610	1
49130GG3030M66	3x70/35 rm	37,5	2410	3500	2/0
49130GG3030M67	3x95/50 rm	43	3296	4700	3/0
49130GG3030M68	3x120/70 rm	48	4236	5880	4/0
49130GG3030M69	3x150/70 rm	52	4992	7300	250 MCM
49130GG3030M70	3x185/95 rm	57,5	6383	8760	350 MCM
49130GG3030M71	3x240/120 rm	63,5	8242	11280	450 MCM
49130GG3040M15	4x1,5/1,5 re	17,5	81	390	16
49130GG3040M25	4x2,5/2,5 re	19	128	470	14
49130GG3040M40	4x4/4 re	20	200	570	12
49130GG3040M60	4x6/6 re	21,5	297	720	10
49130GG3040M61	4x10/10 rm	24	504	1010	8
49130GG3040M62	4x16/16 rm	26,5	796	1370	6
49130GG3040M63	4x25/16 rm	30,5	1142	1940	4
49130GG3040M64	4x35/16 rm	33	1526	2420	2
49130GG3040M65	4x50/25 rm	37,5	2203	3240	1
49130GG3040M66	4x70/35 rm	41,5	3082	4360	2/0
49130GG3040M67	4x95/50 rm	47,5	4208	5900	3/0
49130GG3040M68	4x120/70 rm	52,5	5388	7340	4/0
49130GG3040M69	4x150/70 rm	57,5	6540	8840	250 MCM
49130GG3040M70	4x185/95 rm	63,5	8159	11020	350 MCM
49130GG3040M71	4x240/120 rm	70	10546	14140	450 MCM
49130GG1070M15	7x1,5/2,5 re	20,5	133	520	16
49130GG1070M25	7x2,5/2,5 re	22	200	630	14
49130GG1120M15	12x1,5/2,5 re	26	205	770	16
49130GG1120M25	12x2,5/2,5 re	28,5	334	950	14
49130GG1240M15	24x1,5/6 re	35	413	1380	16
49130GG1240M25	24x2,5/10 re	37,5	696	1750	14
49130GG1300M15	30x1,5/6 re	37	499	1630	16
49130GG1300M25	30x2,5/10 re	39,5	840	2080	14

Other dimensions and colours available on request.

NHXX-FE 180/E 90



CE



Construction:

Conductor:	Solid or stranded red copper conductor Cl. 1 or 2, acc. to IEC 60228 DIN VDE 0259
Insulation:	double core insulation of mica tape and cross-linked polymer type HI1, to DIN VDE 0207 part 23
Colour cores:	acc. to DIN VDE 0293-308, HD 308 S2
Stranding:	cores stranded in layers
Inner sheath:	halogen-free filling compound, pressed.
Outer sheath:	orange (RAL 2003), polymer compound DIN VDE 0207 part 24, flame retardant

Technical data:

Nominal voltage:	0,6/1 kV
Test voltage:	4 kV
Temperature range:	- 30 °C / + 70 °C
Min. bending radius:	12 x d
Radiation resistance:	up to 200x10 ⁶ cJ/kg

Resistance:



Flame retardant acc. to:
IEC 60332-3-24
EN 50266-2
DIN VDE 0482 part.266-2



Halogen free acc. to:
EN 50267-2-1
IEC 60754-1
DIN VDE 0482 part.267-2-1



Low corrosiveness combustion gases acc.to:
EN 50267-2,
IEC 60754-2,
DIN VDE 0482 part.267-2



Low smoke emission acc. to:
EN 50268-2
IEC 61034-2
DIN VDE 0482 part. 268-2

Features:

Security cable, 0,6/1 kV, with improved fire characteristics

Insulation integrity under flame
propagation to VDE 0472 part 814 IEC 60331

Burning behavior in fire (functionality)
of the complete cable system to DIN 4102
part 12 (90 min.)

FE 180: insulation integrity for 180 min.
Test to DIN VDE 0472 part.814 IEC 60331

E 90: functionally for 90 min. Test to DIN 4102 part.12



re: circular solid conductor



rm: circular stranded conductor



sm: sector-shaped stranded conductor



se: sector-shaped solid conductor

SECURITY CABLES

NHXH-FE 180/E 90



CE



Part no.	No. of cores x cross section n x mm ²	Outer-Ø ca. mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	AWG no. *)
49140GG2031M15	3G1,5 re	14	43	280	16
49140GG2031M25	3G2,5 re	15	72	330	14
49140GG2031M40	3G4 re	16	115	400	12
49140GG2031M60	3G6 re	17	173	480	10
49140GG2031M61	3G10 re	19	288	650	8
49140GG2031M62	3G16 re	21	461	850	6
49140GG2031M63	3G25 re	25	720	1300	4
49140GG2031M64	3G35 re	28	1008	1700	2
49140GG2035M64	3G35/16 re	28	1162	1850	2
49140GG2035M65	3G50/25 rm	32	1680	2500	1
49140GG2035M66	3G70/35 rm	36	2352	3350	2/0
49140GG2035M67	3G95/50 rm	42	3216	4500	3/0
49140GG2035M68	3G120/70 rm	45	4128	5600	4/0
49140GG2035M69	3G150/70 rm	49	4992	6700	250 MCM
49140GG2035M70	3G185/95 rm	55	6240	8350	350 MCM
49140GG2035M71	3G240/120 rm	63	8064	10000	450 MCM
49140GG2041M15	4G1,5 re	15	58	325	16
49140GG2041M25	4G2,5 re	16	96	385	14
49140GG2041M40	4G4 re	17	154	470	12
49140GG2041M60	4G6 re	18	230	580	10
49140GG2041M61	4G10 re	20	384	790	8
49140GG2041M62	4G16 re	22	614	1100	6
49140GG2041M63	4G25 re	27	960	1650	4
49140GG2041M64	4G35 re	30	1344	2150	2
49140GG2041M65	4G50	34	1920	2800	1
49140GG2041M66	4G70	39	2688	3800	2/0
49140GG2041M67	4G95	44	3648	5050	3/0
49140GG2041M68	4G120	47	4608	6150	4/0
49140GG2051M15	5G1,5	16	72	375	16
49140GG2051M25	5G2,5	17	120	445	14
49140GG2051M40	5G4	18	192	560	12
49140GG2051M60	5G6	20	288	690	10
49140GG2051M61	5G10	22	480	950	8
49140GG2051M62	5G16	24	768	1300	6
49140GG2051M63	5G25	29	1200	1980	4
49140GG2051M64	5G35	33	1680	2350	2
49140GG2051M65	5G50	38	2500	3100	1
49140GG0071M15	7G1,5	19	101	560	16
49140GG0071M25	7G2,5	21	168	650	14
49140GG0101M15	10G1,5	23	144	750	16
49140GG0101M25	10G2,5	25	240	910	14
49140GG0121M15	12G1,5	25	173	850	16
49140GG0121M25	12G2,5	26	288	1000	14

Other dimensions and colours available on request.

SECURITY CABLES

NHXCH-FE 180/E 90



CE

ELETTROTEK KABEL® NHXCH-FE 180/E 90

Construction:

Conductor:	Solid or stranded red copper conductor Cl. 1 or 2, acc. to IEC 60228 DIN VDE 0259
Insulation:	double core insulation of mica tape and cross-linked polymer type HI1, to DIN VDE 0207 part 23
Colour cores:	acc. to DIN VDE 0293-308, HD 308 S2
Stranding:	cores stranded in layers
Wrapping:	glass-fibre. (also for each single core)
Screen:	red copper wires and one or two copper tape(s) applied helically
Outer sheath:	orange (RAL 2003), polymer compound DIN VDE 0207 part 24, flame retardant

Resistance:



Flame retardant acc. to:
IEC 60332-3
EN 50266-2
DIN VDE 0482 part.266-2



Halogen free acc. to:
EN 50267-2-1
IEC 60754-1
DIN VDE 0482 part.267-2-1



Low corrosiveness combustion gases acc.to:
EN 50267-2,
IEC 60754-2,
DIN VDE 0482 part.267-2



Low smoke emission acc. to:
EN 50268-2
IEC 61034-2
DIN VDE 0482 part. 268-2

Technical data:

Nominal voltage:	0,6/1 kV
Test voltage:	4 kV
Temperature range:	- 30 °C / + 70 °C
Min. bending radius:	12 x d
Radiation resistance:	up to 200x10 ⁶ cJ/kg

Features:


Security cable, 0,6/1 kV, with improved fire characteristics


Insulation integrity under flame propagation to VDE 0472 part 814 IEC 60331


Burning behavior in fire (functionality) of the complete cable system to DIN 4102 part 12 (90 min.)


FE 180: insulation integrity for 180 min. Test to DIN VDE 0472 part.814 IEC 60331

E 90: functionally for 90 min. Test to DIN 4102 part.12

 re: circular solid conductor

 rm: circular stranded conductor

 sm: sector-shaped stranded conductor

 se: sector-shaped solid conductor

SECURITY CABLES

NHXCH-FE 180/E 90



CE

ELETTROTEK KABEL® NHXCH-FE 180/E 90

Part no.	No. of cores x cross section n x mm ²	Outer-Ø ca. mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	AWG no. *)
49150GG2031M15	3G1,5/1,5 re	16,9	66	380	16
49150GG2031M25	3G2,5/2,5 re	18	104	430	14
49150GG2031M40	3G4/4 re	19	161	530	12
49150GG2031M60	3G6/6 re	20,1	240	640	10
49150GG2031M61	3G10/10 re	22	408	850	8
49150GG2031M62	3G16/16 rm	24	643	1150	6
49150GG2031M63	3G25/16 rm	28	902	1700	4
49150GG2031M64	3G35/16 rm	30	1190	2150	2
49150GG2031M65	3G50/25 rm	34	1723	2800	1
49150GG2031M66	3G70/35 rm	38	2410	3800	2/0
49150GG2031M67	3G95/50 rm	44	3296	5100	3/0
49150GG2031M68	3G120/70 rm	47	4236	6250	4/0
49150GG2031M69	3G150/70 rm	51	4992	6900	250 MCM
49150GG2031M70	3G185/95 rm	56	6383	8550	350 MCM
49150GG2031M71	3G240/120 rm	65	8242	11150	450 MCM
49150GG2041M15	4G1,5/1,5 re	18	81	435	16
49150GG2041M25	4G2,5/2,5 re	18,9	128	500	14
49150GG2041M40	4G4/4 re	20	200	610	12
49150GG2041M60	4G6/6 re	21	297	740	10
49150GG2041M61	4G10/10 re	23	504	1050	8
49150GG2041M62	4G16/16 re	25	796	1350	6
49150GG2041M63	4G25/16 re	30	1142	1950	4
49150GG2041M64	4G35/16 re	33	1526	2400	2
49150GG2041M65	4G50/25 rm	37	2203	3200	1
49150GG2041M66	4G70/35 rm	42	3082	4300	2/0
49150GG2041M67	4G95/50 rm	47	4208	5750	3/0
49150GG2041M68	4G120/70 rm	51	5388	7100	4/0
49150GG2041M69	4G150/70 rm	56	6540	8550	250 MCM
49150GG2041M70	4G185/95 rm	68	8159	11020	350 MCM
49150GG2041M71	4G240/120 rm	70	10546	14140	450 MCM
49150GG2051M25	5G2,5/2,5 re	-	152	480	14
49150GG0071M15	7G1,5/2,5 re	21	133	520	16
49150GG0071M25	7G2,5/2,5 re	21	200	630	14
49150GG0121M15	12G1,5/2,5 re	27	205	770	16
49150GG0121M25	12G2,5/4 re	28	334	950	14
49150GG0241M15	24G1,5/6 re	37	413	1380	16
49150GG0241M25	24G2,5/10 re	37,5	696	1750	14
49150GG0301M15	30G1,5/6 re	39	499	1360	16
49150GG0301M25	30G2,5/10 re	39,5	840	2080	14

Other dimensions and colours available on request.

SECURITY CABLES

FG4OHM1 PH 30 100/100V





ELETTROTEK KABEL® FG4OHM1 PH 30

Construction:

Conductor:	flexible red copper conductor Cl. 5, acc to IEC 60228
Insulation:	silicon, type EI2
Colour cores:	red/black
Screen:	electrostatic screen of plastic and aluminium tape + tinned drain-wire
Outer sheath:	red (RAL 3000), thermoplastic polyolefine, halogen-free compound, type M1

Resistance:

	Halogen free acc. to: EN 50267-2-1 IEC 60754-1, DIN VDE 0482 part.267-2-1
	Fire resistant acc. to: IEC 60331 EN 50200

Technical data:

Nominal voltage:	100/100 V
Test voltage:	2 kV
Temperature at conductor	
<i>in service:</i>	+ 90°C
<i>in short circuit:</i>	+ 250°C
Min. bending radius:	14 x d

Features:

Fire warning installation cable

PH30: at 830 °C flame and shock for 30 minutes

Suitable for installation in a single conduit or channel or bridge, without interposing separators, with cable system of Category I^o marked "450/750" or "0,6/1 kV" (as required by CEI-UNEL 36762)

Part no.	No. of cores x cross section n x mm ²	Outer-Ø ca. mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	AWG no. *)
49160BRM020M05	2X0,5	6,1	14,4	39	20
49160BRM020M07	2X0,75	6,4	19,2	49	18
49160BRM020M10	2X1	7,1	24	61	17
49160BRM020M15	2X1,5	8,1	33,6	83	16
49160BRM020M25	2X2,5	9,3	52,8	107	14

Other dimensions and colours available on request.

SECURITY CABLES

GAALFIRE 90 450/750 V



CE



Construction:

- Conductor:** stranded red copper conductor Cl. 2, acc to IEC 60228
- Insulation:** high performance silicon
- Colour cores:** acc. to DIN VDE 0293-308, HD 308 S2
- Outer sheath:** red (RAL 3000),thermoplastic halogen-free compound

Resistance:



Halogen free acc. to:
EN 50267-2-1
IEC 60754-1,
DIN VDE 0482 part.267-2-1



Fire resistant acc. to:
IEC 60331
EN 50200

Technical data:

- Nominal voltage:** 450/750 V
- Temperature range:** - 40 °C / + 90 °C
- Min. bending radius:** 10 x d

Features:

- Fire warning installation cable
- PH90: at 830 °C flame and shock for 90 minutes

Part no.	No.of cores x cross section n x mm ²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	AWG no.*)
49170ER3020M15	2x1,5	7,8	27	96	16
49170ER3030M15	3x1,5	8,3	43,2	116	16
49170ER3040M15	4x1,5	9,3	57,6	147	16
49170ER3050M15	5x1,5	10,5	72	180	16
49170ER3020M25	2x2,5	9,2	52,8	138	14
49170ER3030M25	3x2,5	9,8	72	169	14
49170ER3040M25	4x2,5	11,3	96	222	14
49170ER3050M25	5x2,5	12,3	120	259	14
49170ER3020M40	2x4	10,5	76,8	189	12
49170ER3030M40	3x4	11,6	115,2	146	12
49170ER3040M40	4x4	12,5	153,6	299	12
49170ER3050M40	5x4	14	192	359	12

Other dimensions and colours available on request.

SECURITY CABLES

GAALFIRE I20 450/750 V



ELETTROTEK KABEL® GAALFIRE 120 450/750 V

Construction:

- Conductor:** flexible red copper conductor Cl. 5, acc to IEC 60228
- Insulation:** high performance silicon
- Colour cores:** acc. to DIN VDE 0293-308, HD 308 S2
- Screen:** electrostatic screen of plastic and aluminium tape + tinned drain-wire
- Outer sheath:** red (RAL 3000),thermoplastic halogen-free compound

Resistance:

-  **Halogen free acc. to:**
EN 50267-2-1
IEC 60754-1,
DIN VDE 0482 part.267-2-1
-  **Fire resistant acc. to:**
IEC 60331
EN 50200

Technical data:

- Nominal voltage:** 450/750 V
- Temperature range:** - 40 °C / + 90 °C
- Min. bending radius:** 8 x d

Features:

- Fire warning installation cable
- PH120: at 830 °C flame and shock for 120 minutes

Part no.	No.of cores x cross section n x mm ²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	AWG no.*)
49180ER3020M07	2X0,75	7,6	19,2	69	18
49180ER3030M07	3X0,75	8	26,4	84	18
49180ER3040M07	4X0,75	8,7	33,6	103	18
49180ER3020M10	2X1	8	24	78	17
49180ER3030M10	3X1	8,2	33,6	86	17
49180ER3040M10	4X1	8,9	43,2	110	17
49180ER3070M10	7X1	70,8	72	176	17
49180ER3120M10	12X1	13,9	120	275	17
49180ER3190M10	19X1	16,4	187,2	408	17
49180ER3020M15	2X1,5	8,3	33,6	88	16
49180ER3030M15	3X1,5	8,8	48	112	16
49180ER3040M15	4X1,5	9,8	62,4	141	16
49180ER3070M15	7X1,5	11,7	105,6	218	16
49180ER3120M15	12X1,5	15,3	177,6	352	16
49180ER3190M15	19X1,5	18,2	278,4	535	16
49180ER3020M25	2X2,5	9,8	52,8	123	14
49180ER3030M25	3X2,5	10,4	76,8	159	14
49180ER3040M25	4X2,5	11,4	100,8	196	14
49180ER3070M25	7X2,5	13,4	172,8	305	14
49180ER3120M25	12X2,5	17,9	292,8	505	14
49180ER3190M25	19X2,5	21,1	460,8	750	14

Other dimensions and colours available on request.