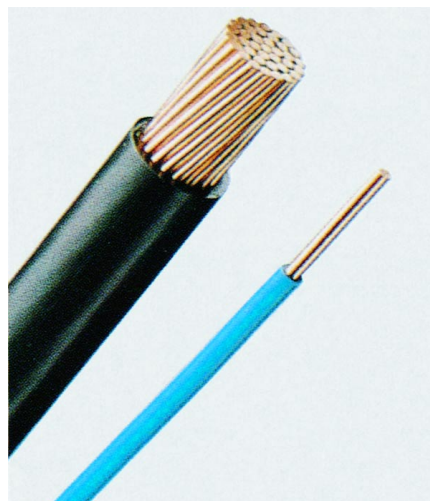


**H05Z-U  
H07Z-U  
H07Z-R**

## Halogen-Free Single Core Wire

according to DIN VDE 0282-9



### Construction

Solid and above 6 mm<sup>2</sup> stranded bare or tinned copper conductor, insulated with cross-linked polyolefin-copolymerisate (HI3), flame retardant and halogen-free.

### Application

This wire is well suited for internal wiring in switchboards, appliances, and lighting fittings as well as for house installations but not for outdoors.

### Temperature range

- 20°C till + 80°C

Admissible conductor temperature + 90°C

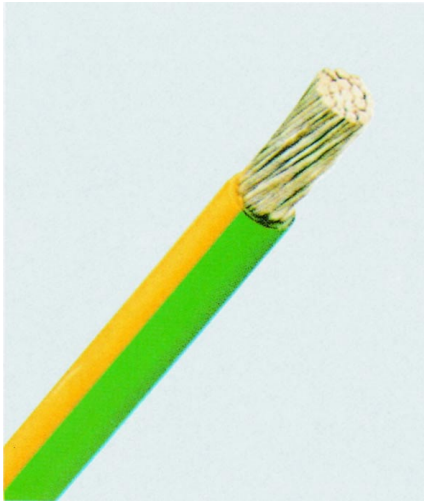
Nominal cross section mm <sup>2</sup>	Colours	Price EUR / km	Copper figure kg / km	Conductor construction (approx. value) mm	Overall diameter ca. mm	Weight ca. kg / km	Calorific potential kWh/m
<b>H05Z-U 300/500 V</b>							
0,5	bla/br/blu	352,25	5,0	1 x 0,80	2,2	9	0,22
	gy	387,55	5,0	1 x 0,80	2,2	9	0,22
0,75	bla/br/blu	379,09	7,5	1 x 0,98	2,4	11	0,23
	gy	416,96	7,5	1 x 0,98	2,4	11	0,23
1	bla/br/blu	399,23	10,0	1 x 1,13	2,6	14	0,26
	gy	440,08	10,0	1 x 1,13	2,6	14	0,26
<b>H07Z-U 450/750 V</b>							
1,5	bla/br/blu	<b>441,41</b>	15,0	1 x 1,38	3,0	20	0,37
	gy	<b>485,57</b>	15,0	1 x 1,38	3,0	20	0,37
2,5	bla/br/blu	<b>537,78</b>	25,0	1 x 1,78	3,4	30	0,44
	gy	<b>591,55</b>	25,0	1 x 1,78	3,4	30	0,44
4	bla/br/blu	641,93	40,0	1 x 2,25	4,1	45	0,52
	gy	706,07	40,0	1 x 2,25	4,1	45	0,52
<b>H07Z-R 450/750 V</b>							
6	bla/br/blu	760,18	60,0	7 x 1,05	4,5	65	0,61
	gy	836,16	60,0	7 x 1,05	4,5	65	0,61
10	bla/br/blu	1.148,89	100,0	7 x 1,35	5,4	110	0,74
	gy	1.263,82	100,0	7 x 1,35	5,4	110	0,74
16	bla/br/blu	1.967,65	160,0	7 x 1,70	7,0	170	1,00
	gy	2.164,45	160,0	7 x 1,70	7,0	170	1,00

Other dimensions and colours on request.

**H05Z-K  
H07Z-K**

**Halogen-Free Single Core Wire**

according to DIN VDE 0282-9



**Construction**

fine-stranded bare or tinned copper conductor, insulated with cross-linked polyolefin-copolymerisate (HI3), flame retardant and halogen-free, polymer compound according to VDE 207, part 23 HI 1.

**Application**

This wire is well suited for internal wiring in switchboards, appliances, lighting fittings as well as for house installations, but not for outdoors.

**Temperature range**

- 20°C till + 90°C

Admissible conductor temperature + 90°C

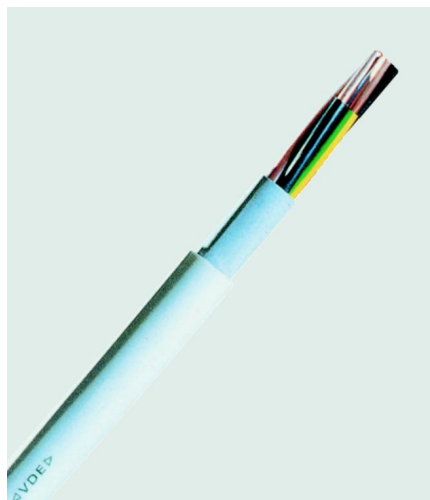
Nominal cross section	Colours	Price	Copper figure	Conductor construction (approx. value)	Overall diameter	Weight	Calorific potential
mm <sup>2</sup>		EUR / km	kg / km	mm	ca. mm	ca. kg / km	kWh/m
<b>H05Z-K 300/500 V</b>							
0,5	bla/br/blu gy/gr	357,97	5,0	16 x 0,21	2,4	9	0,23
		393,68	5,0	16 x 0,21	2,4	9	0,23
0,75	bla/br/blu gy/gr	<b>389,54</b>	7,5	24 x 0,21	2,6	11	0,26
		428,48	7,5	24 x 0,21	2,6	11	0,26
1	bla/br/blu gy/gr	<b>415,89</b>	10,0	32 x 0,21	2,8	14	0,29
		457,40	10,0	32 x 0,21	2,8	14	0,29
<b>H07Z-K 450/750 V</b>							
1,5	bla/br/blu gy/rd/gr	<b>455,33</b>	15,0	30 x 0,26	3,3	20	0,40
		<b>500,90</b>	15,0	30 x 0,26	3,3	20	0,40
2,5	bla/br/blu gy/gr	<b>632,16</b>	25,0	50 x 0,26	3,8	30	0,49
		<b>695,46</b>	25,0	50 x 0,26	3,8	30	0,49
4	bla/br/blu gy/gr	<b>881,24</b>	40,0	56 x 0,31	4,6	45	0,59
		<b>969,49</b>	40,0	56 x 0,31	4,6	45	0,59
6	bla/br/blu gy/gr	<b>1.149,88</b>	60,0	84 x 0,31	5,2	65	0,71
		<b>1.264,89</b>	60,0	84 x 0,31	5,2	65	0,71
10	bla/br/blu gy/gr	<b>1.637,69</b>	100,0	80 x 0,41	6,2	110	0,89
		<b>1.801,51</b>	100,0	80 x 0,41	6,2	110	0,89
16	bla/br/blu gy/gr	<b>2.049,35</b>	160,0	128 x 0,41	7,1	170	1,20
		<b>2.254,35</b>	160,0	128 x 0,41	7,1	170	1,20
25	bla gy	<b>3.172,47</b> <b>3.479,71</b>	250,0	200 x 0,41	10,0	260	1,80
35	bla	3.913,01	350,0	280 x 0,41	11,9	360	2,20
50	bla gy	<b>5.285,87</b> <b>5.814,40</b>	500,0	400 x 0,41	13,7	510	2,90
70	bla	7.178,61	700,0	356 x 0,51	16,4	710	3,70
95	bla	<b>9.145,60</b>	950,0	485 x 0,51	19,2	915	4,30

Other dimensions and colours on request.

## NHXMH

## Halogen-Free Sheathed Wire with Improved Fire Behaviour

according to DIN VDE 0250-214



### Construction

Solid or stranded bare copper conductor, insulated with cross-linked polyethylene (2X11), core colours according to VDE 0293, cores are stranded, above 7 cores they are also layered, common core covering of a halogen-free filling compound, outer sheath of a halogen-free compound HM2, light grey (RAL 7035) with black marking.

### Application

To be installed in buildings or industrial plants where many people and goods are concentrated. As they don't develop corrosive and halogen gases under the impact of fire, and the smoke and fume generation is also minimal, the damage caused is much smaller. They are destined for the installation on, in and under the wall-surface in dry, humid and wet locations as well as in brickwork or outdoors but not directly into the earth.

### Temperature range

During laying	- 5°C till + 70°C
After laying	- 40°C till + 70°C
Admissible conductor temperature	+ 70°C

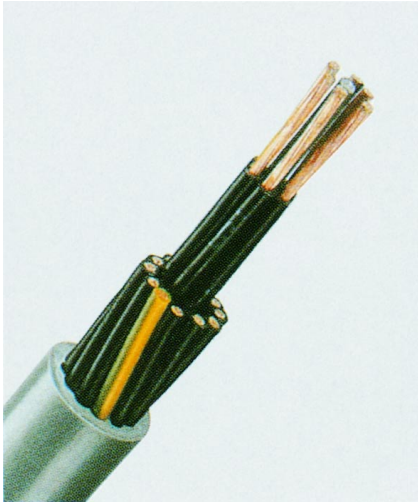
Number of cores and Nominal cross section mm <sup>2</sup>	Price EUR / km	Copper figure kg / km	Conductor construction (approx. value) mm	Overall diameter ca. mm	Weight ca. kg / km	Calorific potential kWh/m
<b>NHXMH 300/500 V</b>						
2 x 1,5	<b>1.572,39</b>	30	1 x 1,38	8,5	110	0,36
3 x 1,5	<b>1.735,80</b>	45	1 x 1,38	8,7	126	0,42
3 x 2,5	<b>2.185,16</b>	75	1 x 1,78	9,5	167	0,47
4 x 1,5	<b>2.134,12</b>	60	1 x 1,38	9,5	150	0,47
4 x 2,5	<b>2.688,96</b>	100	1 x 1,78	10,5	200	0,56
4 x 4	3.333,96	160	1 x 2,25	12,5	300	0,78
4 x 6	4.216,70	240	1 x 2,76	14,0	395	0,94
4 x 10 RE	6.243,73	400	1 x 3,56	18,0	680	1,30
4 x 16 RM	10.724,50	640	7 x 1,70	22,0	1030	1,80
5 x 1,5	<b>2.625,82</b>	75	1 x 1,38	10,0	175	0,56
5 x 2,5	<b>3.366,11</b>	125	1 x 1,78	11,0	235	0,64
5 x 4	<b>4.289,45</b>	200	1 x 2,25	14,0	350	0,98
5 x 6	<b>5.302,61</b>	300	1 x 2,76	15,0	480	1,10
5 x 10 RE	<b>7.204,84</b>	500	1 x 3,56	21,0	830	1,50
5 x 16 RM	<b>13.849,10</b>	800	7 x 1,70	24,0	1280	2,20
7 x 1,5	<b>3.062,01</b>	105	1 x 1,38	10,7	214	0,64
10 x 1,5 *	<b>3.842,90</b>	150	1 x 1,38	11,6	264	0,95
12 x 1,5 *	4.365,93	180	1 x 1,38	12,9	354	1,00

\* Adapted to VDE.

**Remark:** Halogen-free according to DIN VDE 0472-813.  
Corrosiveness of combustion gases (halogen content) according to DIN VDE 0472-813  
Fire behaviour (nonflameability) according to DIN VDE 0472-804, test C.

## HSLH

## Halogen-Free Control Cable with Improved Fire Behaviour - FRNC



### Construction

Stranded bare copper wires, VDE 0295 class 5, there is a green-yellow core (not in OZ - types), all the other cores are black with consecutive white numbers, core insulation and outer sheath are of halogen-free polyolefin-copolymer with improved fire behaviour, sheath colour is light grey.

### Application

For installations in dry, damp and wet locations, but not outdoors. These cables are used for fix or for flexible applications – but not with high tensile load or for forced bending.

### Temperature range

During laying	- 25°C till + 70°C
After laying	- 40°C till + 80°C
Admissible conductor temperature	+ 90°C

Number of cores and nominal cross section mm <sup>2</sup>	Price EUR / km	Copper figure kg / km	Wire construction (approx. value) mm	Overall diameter ca. mm	Weight ca. kg / km
<b>HSLH 300/500 V</b>					
2 x 0,75	1.401,70	15,0	24 x 0,21	5,7	53
3 x 0,75	1.774,30	22,5	24 x 0,21	6,0	63
4 x 0,75	1.833,00	30,0	24 x 0,21	6,5	77
5 x 0,75	2.159,90	37,5	24 x 0,21	7,1	94
7 x 0,75	3.247,50	52,5	24 x 0,21	7,5	116
12 x 0,75	4.405,30	90,0	24 x 0,21	10,2	187
18 x 0,75	7.092,10	135,0	24 x 0,21	11,9	285
25 x 0,75	9.405,70	187,5	24 x 0,21	13,85	397
2 x 1	<b>1.434,90</b>	20,0	32 x 0,21	6,1	62
3 x 1	1.766,00	30,0	32 x 0,21	6,4	74
4 x 1	2.142,90	40,0	32 x 0,21	7,0	91
5 x 1	2.452,90	50,0	32 x 0,21	7,6	111
7 x 1	3.404,40	70,0	32 x 0,21	8,1	140
12 x 1	5.093,10	120,0	32 x 0,21	11,1	232
18 x 1	7.585,80	180,0	32 x 0,21	13,4	332
25 x 1	10.461,50	250,0	32 x 0,21	15,4	464
2 x 1,5	<b>1.737,70</b>	30,0	30 x 0,26	6,9	84
3 x 1,5	<b>2.042,60</b>	45,0	30 x 0,26	7,3	102
4 x 1,5	<b>2.465,40</b>	60,0	30 x 0,26	7,9	125
5 x 1,5	<b>3.144,80</b>	75,0	30 x 0,26	8,9	154
7 x 1,5	<b>4.345,70</b>	105,0	30 x 0,26	9,8	193
12 x 1,5	<b>6.971,90</b>	180,0	30 x 0,26	13,2	323
18 x 1,5	<b>10.210,40</b>	270,0	30 x 0,26	15,9	479
25 x 1,5	<b>13.845,20</b>	375,0	30 x 0,26	18,5	678
34 x 1,5	19.175,90	510	30 x 0,26	22,0	922
2 x 2,5	<b>2.470,50</b>	50,0	48 x 0,26	8,5	123
3 x 2,5	<b>3.007,20</b>	75,0	48 x 0,26	9,0	151
4 x 2,5	<b>4.087,20</b>	100,0	48 x 0,26	10,0	188
5 x 2,5	<b>4.698,00</b>	125,0	48 x 0,26	11,0	234
7 x 2,5	6.279,30	175,0	48 x 0,26	12,7	306
12 x 2,5	10.261,10	300,0	48 x 0,26	16,0	508
4 x 4	6.714,90	160,0	56 x 0,31	12,8	301
5 x 4	<b>8.305,00</b>	200,0	56 x 0,31	14,5	355
4 x 6	<b>9.689,40</b>	240,0	84 x 0,31	14,6	380
5 x 6	<b>11.679,50</b>	420,0	84 x 0,31	16,4	490
5 x 10	<b>19.935,60</b>	500,0	80 x 0,41	22,4	840

## HSLCH

## Halogen-Free Control Cable with EMV-Optimised Braided Screen and Improved Fire Behaviour - FRNC



### Construction

Fine-stranded bare copper wires acc. to VDE 0295 class 5, there is a green-yellow core (not in OZ - types), all the other cores are black with consecutive white numbers, screen of tinned copper wire braiding, core insulation and outer sheath are of halogen-free polyolefin-copolymer with improved fire behaviour, sheath colour is light grey.

### Application

For installations in dry, damp and wet locations but not outdoors. These cables are used for fix or for flexible applications – but not with high tensile load and for forced bending. Suitable as a signal and impulse cable in the control, measuring and signal technology. The copper braiding optimises protection against external interferences, like electro-magnetic fields and stray frequencies.

### Temperature range

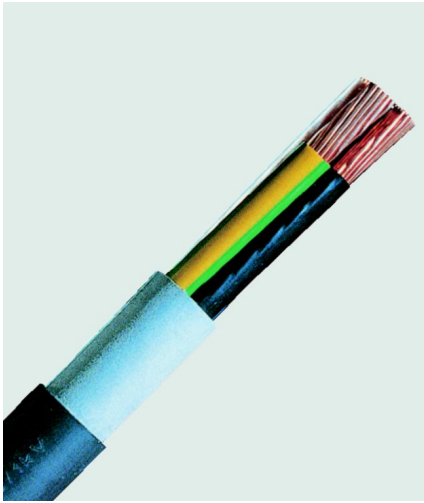
During laying - 25°C till + 70°C  
 After laying - 40°C till + 80°C  
 Admissible conductor temperature + 90°C

Number of cores and nominal cross section mm <sup>2</sup>	Price EUR / km	Copper figure kg / km	Wire construction (approx. value) mm	Overall diameter ca. mm	Weight ca. kg / km
<b>HSLCH 300/500 V</b>					
2 x 0,75	1.769,10	43	24 x 0,21	6,7	53
3 x 0,75	2.064,70	52	24 x 0,21	7,0	63
4 x 0,75	2.552,60	61	24 x 0,21	7,5	77
5 x 0,75	3.111,10	72	24 x 0,21	8,1	94
7 x 0,75	4.202,50	89	24 x 0,21	8,7	116
12 x 0,75	6.474,50	138	24 x 0,21	11,4	187
18 x 0,75	8.941,80	211	24 x 0,21	13,3	285
25 x 0,75	12.736,10	280	24 x 0,21	16,0	397
2 x 1	<b>1.904,10</b>	51	32 x 0,21	7,1	62
3 x 1	2.460,00	62	32 x 0,21	7,4	74
4 x 1	2.970,90	74	32 x 0,21	8,0	91
5 x 1	3.945,80	88	32 x 0,21	8,7	111
7 x 1	4.728,50	112	32 x 0,21	9,3	140
12 x 1	7.331,60	185	32 x 0,21	12,3	232
18 x 1	10.712,40	268	32 x 0,21	14,7	332
25 x 1	15.032,80	354	32 x 0,21	17,7	464
2 x 1,5	2.597,60	65	30 x 0,26	8,0	84
3 x 1,5	<b>3.038,00</b>	82	30 x 0,26	8,4	102
4 x 1,5	3.852,30	100	30 x 0,26	9,1	125
5 x 1,5	<b>4.583,00</b>	119	30 x 0,26	9,9	154
7 x 1,5	7.103,70	154	30 x 0,26	11,1	193
12 x 1,5	9.844,70	268	30 x 0,26	14,7	323
18 x 1,5	14.229,10	373	30 x 0,26	17,3	479
25 x 1,5	20.222,10	530	30 x 0,26	21,0	678
2 x 2,5	3.910,90	92	48 x 0,26	9,7	123
3 x 2,5	<b>4.550,10</b>	118	48 x 0,26	10,2	151
4 x 2,5	5.727,20	147	48 x 0,26	11,1	188
5 x 2,5	<b>6.569,10</b>	176	48 x 0,26	12,1	234
7 x 2,5	8.671,30	253	48 x 0,26	13,9	306

## N2XH

## Halogen-Free Cable with Improved Fire Behaviour

according to DIN VDE 0276-604



### Construction

Solid or stranded bare copper conductor, insulation of halogen-free and cross-linked polyethylene compound, common core covering, outer sheath of flame retardant and halogen-free polymer compound, black.

### Application

Safety cables are used in all locations where a high degree of protection against fire and fire-damage has to be provided for human life and equipment and are, therefore, subject to high security requirements. These cables may be used indoors and outdoors. They may not be installed directly into the ground and into the water. Safety cables are considered as protectively insulated.

### Temperature range

During laying	- 5°C till + 70°C
After laying	- 40°C till + 70°C
Admissible conductor temperature	+ 90°C

Number of cores and nominal cross section	Price	Copper figure (approx. value)	Conductor construction	Overall diameter ca.	Weight	
mm <sup>2</sup>	EUR / km	kg / km	mm	ca. mm	kg / km	
<b>N2XH 0,6/1 KV</b>	<b>J</b>	<b>O</b>				
1 x 16 RE		3.403,05	160	1 x 4,51	12,0	270
1 x 25 RM		4.722,26	250	7 x 2,13	14,0	380
1 x 35 RM		5.669,80	350	7 x 2,52	15,0	490
1 x 50 RM		7.261,74	500	19 x 1,83	16,0	620
1 x 70 RM		9.373,77	700	19 x 2,17	18,0	830
1 x 95 RM		11.892,59	950	19 x 2,52	20,0	1200
1 x 120 RM		14.192,68	1200	37 x 2,03	22,0	1500
1 x 150 RM		17.283,81	1500	37 x 2,27	24,0	1700
1 x 185 RM		20.856,92	1850	37 x 2,52	26,0	2200
1 x 240 RM		26.277,13	2400	61 x 2,24	29,0	2750
1 x 300 RM		32.536,60	3000	61 x 2,50	33,0	3300
2 x 1,5 RE		2.671,54	30	1 x 1,38	12,0	180
2 x 2,5 RE		3.129,38	50	1 x 1,78	12,0	210
2 x 4 RE		3.609,88	80	1 x 2,25	13,0	270
2 x 6 RE		4.232,25	120	1 x 2,76	14,0	340
2 x 10 RE		5.511,56	200	1 x 3,56	16,0	450
2 x 16 RE		7.227,57	320	1 x 4,51	18,0	600
3 x 1,5 RE	<b>2.708,45</b>		45	1 x 1,38	12,0	200
3 x 2,5 RE	<b>3.349,75</b>		75	1 x 1,78	13,0	250
3 x 4 RE	<b>3.979,29</b>		120	1 x 1,25	14,0	330
3 x 6 RE	5.061,49		180	1 x 2,76	15,0	410
3 x 10 RE	6.688,45		300	1 x 3,56	16,0	550
3 x 16 RE	8.873,60		480	1 x 4,51	20,0	790
3 x 25 RM	13.692,50		750	7 x 2,13	24,0	1200
3 x 35 RM	16.508,23		1050	7 x 2,52	27,0	1600
3 x 50 RM	21.727,64		1500	19 x 1,83	29,0	1800

Number of cores and nominal cross section  mm <sup>2</sup>	Price		Copper  kg / km	Conductor figure (approx. value) mm	Overall construction ca. mm	Weight diameter ca. kg / km
	J	O				
<b>N2XH 0,6/1 KV</b>						
3 x 50/ 25 RM	24.645,59		1750	19 x 1,83	32,0	2200
3 x 70/ 35 RM	31.144,81		2450	19 x 2,17	37,0	2950
3 x 95/ 50 RM	39.542,72		3350	19 x 2,52	41,0	3900
3 x 120/ 70 RM	48.683,83		4300	37 x 2,03	45,0	4800
3 x 150/ 70 RM	58.110,16		5200	37 x 2,27	49,0	5750
3 x 185/ 95 RM	71.450,44		6500	37 x 2,52	55,0	7200
3 x 240/120 RM	91.878,50		8400	61 x 2,24	62,0	9150
4 x 1,5 RE	<b>3.128,26</b>		60	1 x 1,38	13,0	230
4 x 2,5 RE	<b>3.840,19</b>		100	1 x 1,78	14,0	290
4 x 4 RE	<b>4.573,29</b>		160	1 x 2,25	15,0	380
4 x 6 RE	<b>5.845,82</b>		240	1 x 2,76	16,0	490
4 x 10 RE	<b>7.976,06</b>		400	1 x 3,56	18,0	670
4 x 16 RE	<b>10.818,81</b>		640	1 x 4,51	20,0	930
4 x 25 RM	<b>17.318,11</b>		1000	7 x 2,13	26,0	1450
4 x 35 RM	<b>20.781,79</b>		1400	7 x 2,52	29,0	1900
4 x 50 RM	27.562,00		2000	19 x 1,83	32,0	2300
4 x 70 RM	36.933,77		2800	19 x 2,17	37,0	3200
4 x 95 RM	47.296,02		3800	19 x 2,52	41,0	4200
4 x 120 RM	58.517,82		4800	37 x 2,03	45,0	4300
4 x 150 RM	70.765,66		6000	37 x 2,27	50,0	6350
5 x 1,5 RE	<b>3.801,48</b>		75	1 x 1,38	14,0	270
5 x 2,5 RE	<b>4.739,01</b>		125	1 x 1,78	15,0	340
5 x 4 RE	<b>5.475,16</b>		200	1 x 2,25	16,0	450
5 x 6 RE	<b>6.871,77</b>		300	1 x 2,76	17,0	560
5 x 10 RE	<b>9.144,98</b>		500	1 x 3,56	19,0	790
5 x 16 RE	<b>12.244,64</b>		800	1 x 4,51	22,0	1150
5 x 25 RM	20.771,89		1250	7 x 2,13	27,0	1420
7 x 1,5 RE	4.568,67		105	1 x 1,38	14,0	310
10 x 1,5 RE	5.877,84		150	1 x 1,38	17,0	420
12 x 1,5 RE	6.728,35		180	1 x 1,38	18,0	460
14 x 1,5 RE	7.553,89		210	1 x 1,38	20,0	540
19 x 1,5 RE	9.455,22		285	1 x 1,38	21,0	650
24 x 1,5 RE	11.189,80		360	1 x 1,38	22,0	760
30 x 1,5 RE	13.349,72		450	1 x 1,38	24,0	900
7 x 2,5 RE	5.569,82		175	1 x 1,78	15,0	400
10 x 2,5 RE	7.329,45		250	1 x 1,78	18,0	540
12 x 2,5 RE	8.421,97		300	1 x 1,78	19,0	600
14 x 2,5 RE	9.612,02		350	1 x 1,78	20,0	670
19 x 2,5 RE	12.099,91		475	1 x 1,78	22,0	840
24 x 2,5 RE	14.523,68		600	1 x 1,78	25,0	1050
30 x 2,5 RE	17.439,53		750	1 x 1,78	27,0	1230

## N2XCH

## Halogen-Free Cable with Concentric Conductor with Improved Fire Behaviour

according to DIN VDE 0276-604



### Construction

Solid or stranded bare copper conductor, insulation of halogen-free and cross-linked polyethylene compound, common core covering, concentric conductor formed by copper wires with counter helix of copper tape, outer sheath of flame retardant and halogen-free polymer compound, black.

### Application

Safety cables are used in all locations where a high degree of protection against fire and fire-damage has to be provided for human life and equipment and are, therefore, subject to high security requirements. These cables may be used indoors and outdoors. They may not be installed directly into the ground and into the water. Safety cables are considered as protectively insulated.

### Temperature range

During laying - 5°C till + 70°C  
 After laying - 40°C till + 70°C  
 Admissible conductor temperature + 90°C

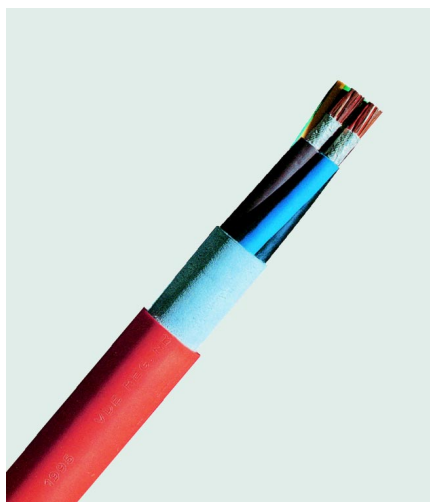
Number of cores and nominal cross section	Price	Copper figure	Conductor construction (approx. value)	Overall diameter	Weight
mm <sup>2</sup>	EUR / km	kg / km	mm	ca. mm	ca. kg / km
<b>N2XCH 0,6/1 KV</b>					
2 x 1,5 RE / 1,5	4.283,89	54	1 x 1,38	13,0	260
2 x 2,5 RE / 2,5	4.793,30	83	1 x 1,78	13,0	270
3 x 1,5 RE / 1,5	4.540,61	73	1 x 1,38	13,0	240
3 x 2,5 RE / 2,5	5.308,92	113	1 x 1,78	14,0	290
3 x 4 RE / 4	6.330,92	168	1 x 2,25	15,0	380
3 x 6 RE / 6	8.060,73	250	1 x 2,76	16,0	470
3 x 10 RE / 10	9.932,27	425	1 x 3,56	18,0	640
3 x 16 RE / 16	13.347,92	670	1 x 4,51	20,0	920
3 x 25 RM / 25	18.975,61	1045	7 x 2,13	25,0	1430
3 x 35 RM / 35	23.912,43	1460	7 x 2,52	29,0	1900
4 x 1,5 RE / 1,5	4.752,16	88	1 x 1,38	14,0	260
4 x 2,5 RE / 2,5	5.611,45	138	1 x 1,78	15,0	330
4 x 4 RE / 4	6.843,77	208	1 x 2,25	16,0	440
4 x 6 RE / 6	8.811,69	309	1 x 2,76	17,0	550
4 x 10 RE / 10	11.042,20	525	1 x 3,56	19,0	760
4 x 16 RE / 16	14.908,71	829	1 x 4,51	22,0	1130
4 x 25 RM / 16	22.794,84	1190	7 x 2,13	28,0	1700
4 x 35 RM / 16	25.700,92	1590	7 x 2,52	31,0	2150
4 x 50 RM / 25	32.745,58	2295	19 x 1,83	34,0	2600
4 x 70 RM / 35	43.098,15	3210	19 x 2,17	40,0	3550
4 x 95 RM / 50	55.870,20	4383	19 x 2,52	45,0	4800
4 x 120 RM / 70	67.769,18	5613	37 x 2,03	51,0	6500
4 x 150 RM / 70	81.663,33	6813	37 x 2,27	56,0	7950
4 x 185 RM / 95	103.387,06	8499	37 x 2,52	63,0	9850
4 x 240 RM / 120	119.055,68	10985	61 x 2,24	68,0	12900
7 x 1,5 RE / 2,5	6.037,09	139	1 x 1,38	15,0	360
12 x 1,5 RE / 2,5	8.244,08	214	1 x 1,38	19,0	530
30 x 1,5 RE / 6	16.787,13	520	1 x 1,38	25,0	1020
7 x 2,5 RE / 2,5	7.131,61	208	1 x 1,78	17,0	450
12 x 2,5 RE / 4	10.300,52	348	1 x 1,78	21,0	700
30 x 2,5 RE / 10	20.489,65	875	1 x 1,78	28,0	1400



## NHXH E 30

## Halogen-Free Cable with Circuit Integrity of 30 Minutes

according to DIN VDE 0266-2 and DIN 4102-12



### Construction

Solid or stranded bare copper conductor, insulation of a halogen-free cross-linked polymeric compound, common core covering, outer sheath of flame retardant and halogen-free polymer compound, orange.

### Application

Safety cables are used in all locations where a high degree of protection against fire and fire-damage has to be provided for human life and equipment and are, therefore, subject to high security requirements. These cables may be used indoors and outdoors. They may not be installed directly into the ground and into the water. Safety cables are considered as protectively insulated.

Circuit integrity of 30 minutes (system) and insulation integrity of 180 minutes.

### Temperature range

During laying	- 5°C till + 70°C
After laying	- 40°C till + 70°C
Admissible conductor temperature	+ 90°C

Number of cores and nominal cross section	Price	Copper figure	Conductor construction (approx. value)	Overall diameter	Weight
mm <sup>2</sup>	EUR / km	kg / km	mm	ca. mm	ca. kg / km
<b>NHXH E 30</b> 0,6/1 KV	J	O			
1 x 16 RE	4.698,39	160	1 x 4,51	10,0	230
1 x 25 RM	6.464,33	250	7 x 2,13	11,0	340
1 x 35 RM	7.898,94	350	7 x 2,52	12,0	440
1 x 50 RM	9.655,36	500	19 x 1,83	14,0	620
1 x 70 RM	12.493,23	700	19 x 2,17	16,0	850
1 x 95 RM	15.263,37	950	19 x 2,52	18,0	1100
1 x 120 RM	17.903,36	1200	37 x 2,03	19,0	1350
1 x 150 RM	20.622,32	1500	37 x 2,27	22,0	1650
1 x 185 RM	24.731,75	1850	37 x 2,52	24,0	2200
1 x 240 RM	31.564,95	2400	61 x 2,24	27,0	2800
1 x 300 RM	35.679,49	3000	61 x 2,50	30,0	3400
2 x 1,5 RE	<b>4.392,10</b>	30	1 x 1,38	12,0	180
2 x 2,5 RE	<b>4.805,50</b>	50	1 x 1,78	13,0	210
2 x 4 RE	6.025,43	80	1 x 2,25	14,0	260
2 x 6 RE	7.650,66	120	1 x 2,76	15,0	320
2 x 10 RE	10.611,98	200	1 x 3,56	16,0	440
2 x 16 RE	12.589,36	320	1 x 4,51	19,0	620
3 x 1,5 RE	<b>4.843,20</b>	45	1 x 1,38	13,0	200
3 x 2,5 RE	<b>5.832,53</b>	75	1 x 1,78	14,0	250
3 x 4 RE	<b>7.331,29</b>	120	1 x 1,25	15,0	320
3 x 6 RE	<b>9.194,81</b>	180	1 x 2,76	16,0	400
3 x 10 RE	<b>11.695,01</b>	300	1 x 3,56	18,0	550
3 x 16 RM	<b>14.194,57</b>	480	1 x 4,51	20,0	800
3 x 25 RM	21.538,19	750	7 x 2,13	23,0	1200
3 x 35 RM	30.488,27	1050	7 x 2,52	28,0	1813
3 x 50 RM	33.336,67	1500	19 x 1,83	30,0	2369
3 x 70 RM	41.349,64	2100	19 x 2,17	33,0	3152
3 x 95 RM	53.996,28	2850	19 x 2,52	39,0	4169

Number of cores and nominal cross section	Price	Copper figure	Conductor construction (approx. value)	Overall diameter	Weight
mm <sup>2</sup>	EUR / km	kg / km	mm	ca. mm	ca. kg / km
<b>NHXH E 30 0,6/1 KV</b>	<b>J</b>	<b>O</b>			
3 x 25/ 16 RM	27.664,06	910	7 x 2,13	26,0	1524
3 x 35/ 16 RM	31.203,92	1210	7 x 2,52	27,0	1700
3 x 50/ 25 RM	35.495,72	1750	19 x 1,83	31,0	2250
3 x 70/ 35 RM	45.069,57	2450	19 x 2,17	36,0	3200
3 x 95/ 50 RM	59.619,83	3350	19 x 2,52	41,0	4200
3 x 120/ 70 RM	75.681,86	4300	37 x 2,03	46,0	5300
3 x 150/ 70 RM	92.011,39	5200	37 x 2,27	49,0	6300
3 x 185/ 95 RM	111.999,67	6500	37 x 2,52	56,0	7900
3 x 240/120 RM	141.866,48	8400	61 x 2,24	64,0	10200
4 x 1,5 RE	<b>5.347,42</b>	60	1 x 1,38	14,0	240
4 x 2,5 RE	<b>6.334,26</b>	100	1 x 1,78	15,0	300
4 x 4 RE	<b>9.672,11</b>	160	1 x 2,25	17,0	400
4 x 6 RE	<b>11.644,85</b>	240	1 x 2,76	18,0	500
4 x 10 RE	<b>15.590,14</b>	400	1 x 3,56	20,0	680
4 x 16 RM	<b>24.690,68</b>	640	1 x 4,51	23,0	1000
4 x 25 RM	<b>33.005,58</b>	1000	7 x 2,13	26,0	1500
4 x 35 RM	<b>39.554,71</b>	1400	7 x 2,52	28,0	2297
4 x 50 RM	<b>52.392,25</b>	2000	19 x 1,83	33,0	2972
4 x 70 RM	66.456,70	2800	19 x 2,17	37,0	3914
4 x 95 RM	80.846,38	3800	19 x 2,52	43,0	5397
4 x 120 RM	107.236,99	4800	37 x 2,03	47,0	6906
4 x 150 RM	128.789,06	6000	37 x 2,27	53,0	7725
5 x 1,5 RE	<b>8.220,02</b>	75	1 x 1,38	15,0	280
5 x 2,5 RE	<b>9.507,48</b>	125	1 x 1,78	17,0	350
5 x 4 RE	<b>13.310,90</b>	200	1 x 2,25	18,0	450
5 x 6 RE	<b>14.933,09</b>	300	1 x 2,76	20,0	560
5 x 10 RE	<b>19.580,39</b>	500	1 x 3,56	21,0	840
5 x 16 RM	<b>29.994,77</b>	800	1 x 4,51	23,0	1200
5 x 25 RM	<b>39.491,17</b>	1250	7 x 2,13	29,0	1800
7 x 1,5 RE	<b>9.507,48</b>	105	1 x 1,38	16,0	410
10 x 1,5 RE	12.172,81	150	1 x 1,38	19,0	620
12 x 1,5 RE	<b>13.532,22</b>	180	1 x 1,38	20,0	680
14 x 1,5 RE	16.119,53	210	1 x 1,38	21,0	750
19 x 1,5 RE	22.565,38	285	1 x 1,38	23,0	900
24 x 1,5 RE	27.064,93	360	1 x 1,38	26,0	1100
30 x 1,5 RE	31.854,69	450	1 x 1,38	28,0	1300
7 x 2,5 RE	<b>11.915,60</b>	175	1 x 1,78	20,0	540
10 x 2,5 RE	14.629,17	250	1 x 1,78	25,0	710
12 x 2,5 RE	16.085,62	300	1 x 1,78	26,0	800
14 x 2,5 RE	17.786,63	350	1 x 1,78	27,0	900
19 x 2,5 RE	25.308,02	475	1 x 1,78	28,0	1150
24 x 2,5 RE	30.508,65	600	1 x 1,78	34,0	1400
30 x 2,5 RE	36.083,89	750	1 x 1,78	36,0	1600

**Remark:** Insulation integrity under the impact of flames > 180 min. according to DIN VDE 0472-814 / 8.83  
function integrity of electrical cable installations > 30 min. according to DIN 4102-12.  
in compliance with VDE 0107 and 0108.

## NHXCH E 30

## Halogen-free Cable with Concentric Conductor and Circuit Integrity of 30 Minutes

according to DIN VDE 0266-2 and DIN 4102-12



### Construction

Solid or stranded bare copper conductor, insulation of a halogen-free cross-linked polymeric compound, common core covering, concentric conductor formed by copper wires with counter helix of copper tape, outer sheath of flame retardant and halogen-free polymer compound, orange.

### Application

Safety cables are used in all locations where a high degree of protection against fire and fire-damage has to be provided for human life and equipment and are, therefore, subject to high security requirements. These cables may be used indoors and outdoors. They may not be installed directly into the ground and into the water. Safety cables are considered as protectively insulated.

Circuit integrity of 30 minutes (system) and insulation integrity of 180 minutes.

### Temperature range

During laying	- 5°C till + 70°C
After laying	- 40°C till + 70°C
Admissible conductor temperature	+ 90°C

Number of cores and nominal cross section	Price	Copper figure	Conductor construction (approx. value)	Overall diameter	Weight
mm <sup>2</sup>	EUR / km	kg / km	mm	ca. mm	ca. kg / km
<b>NHXCH E 30 0,6/1 KV</b>					
2 x 1,5 RE / 1,5	<b>5.857,55</b>	54	1 x 1,38	15,0	250
2 x 2,5 RE / 2,5	<b>6.529,82</b>	83	1 x 1,78	16,0	280
3 x 1,5 RE / 1,5	<b>6.699,82</b>	73	1 x 1,38	15,0	250
3 x 2,5 RE / 2,5	7.271,59	113	1 x 1,78	16,0	320
3 x 4 RE / 4	8.903,84	168	1 x 2,25	17,0	400
3 x 6 RE / 6	11.426,70	250	1 x 2,76	18,0	500
3 x 10 RE / 10	14.089,97	425	1 x 3,56	20,0	750
3 x 16 RE / 16	17.824,81	670	1 x 4,51	23,0	1100
3 x 25 RM / 16	24.641,81	940	7 x 2,13	27,0	1500
3 x 35 RM / 16	32.382,37	1240	7 x 2,52	30,0	1900
3 x 50 RM / 25	40.243,49	1795	19 x 1,83	33,0	2300
3 x 70 RM / 35	52.894,86	2510	19 x 2,17	38,0	3200
3 x 95 RM / 50	67.658,88	3433	19 x 2,52	44,0	4200
3 x 120 RM / 70	85.473,87	4413	37 x 2,03	48,0	5350
3 x 150 RM / 70	98.816,26	5313	37 x 2,27	53,0	6400
3 x 185 RM / 95	122.671,01	6649	37 x 2,52	58,0	7900
3 x 240 RM / 120	136.990,97	8585	61 x 2,24	65,0	9800

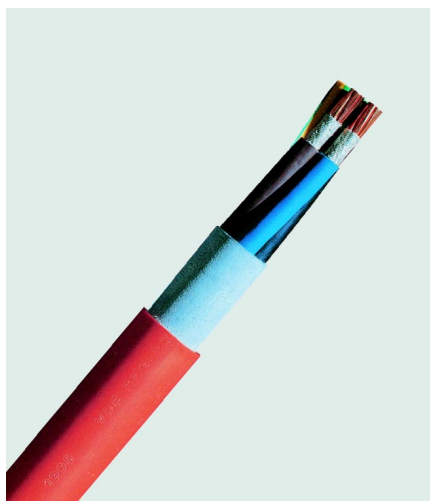
Number of cores and nominal cross section	Price	Copper figure	Conductor construction (approx. value)	Overall diameter	Weight
mm <sup>2</sup>	EUR / km	kg / km	mm	ca. mm	ca. kg / km
<b>NHXCH E 30 0,6/1 KV</b>					
4 x 1,5 RE / 1,5	7.548,30	88	1 x 1,38	17,0	300
4 x 2,5 RE / 2,5	8.327,70	138	1 x 1,78	18,0	400
4 x 4 RE / 4	10.308,48	208	1 x 2,25	19,0	470
4 x 6 RE / 6	12.757,73	309	1 x 2,76	21,0	600
4 x 10 RE / 10	18.428,73	525	1 x 3,56	23,0	850
4 x 16 RE / 16	<b>24.306,78</b>	829	1 x 4,51	26,0	1250
4 x 25 RM / 16	<b>30.981,19</b>	1190	7 x 2,13	30,0	1800
4 x 35 RM / 16	<b>37.407,43</b>	1590	7 x 2,52	33,0	2300
4 x 50 RM / 25	<b>45.269,59</b>	2295	19 x 1,83	37,0	3000
4 x 70 RM / 35	<b>55.945,41</b>	3210	19 x 2,17	42,0	4200
4 x 95 RM / 50	<b>74.700,39</b>	4383	19 x 2,52	47,0	5700
4 x 120 RM / 70	<b>97.413,70</b>	5613	37 x 2,03	53,0	7200
4 x 150 RM / 70	114.792,84	6813	37 x 2,27	58,0	8700
4 x 185 RM / 95	141.217,86	8499	37 x 2,52	65,0	10500
4 x 240 RM / 120	168.940,97	10985	61 x 2,24	70,0	14000
7 x 1,5 RE / 2,5	10.724,90	139	1 x 1,38	18,0	480
10 x 1,5 RE / 2,5	14.708,74	183	1 x 1,38	22,0	630
12 x 1,5 RE / 2,5	17.224,89	214	1 x 1,38	22,0	700
16 x 1,5 RE / 4	21.406,14	280	1 x 1,38	23,0	850
21 x 1,5 RE / 4	27.810,60	384	1 x 1,38	25,0	1050
24 x 1,5 RE / 6	31.703,14	430	1 x 1,38	29,0	1200
30 x 1,5 RE / 6	35.483,50	520	1 x 1,38	31,0	1400
7 x 2,5 RE / 2,5	12.739,32	208	1 x 1,78	20,0	600
10 x 2,5 RE / 4	16.853,64	298	1 x 1,78	24,0	800
12 x 2,5 RE / 4	19.541,08	348	1 x 1,78	24,0	900
16 x 2,5 RE / 6	23.421,14	470	1 x 1,78	26,0	1100
21 x 2,5 RE / 6	29.039,14	595	1 x 1,78	29,0	1350
24 x 2,5 RE / 10	35.195,31	725	1 x 1,78	32,0	1500
30 x 2,5 RE / 10	41.473,32	875	1 x 1,78	34,0	1800

**Remark:** Insulation integrity under the impact of flames > 180 min. according to DIN VDE 0472-814 / 8.83  
function integrity of electrical cable installations > 30 min. according to DIN 4102-12.  
in compliance with VDE 0107 and 0108.

## NHXH E 90

## Halogen-Free Cable with Circuit Integrity of 90 Minutes

according to DIN VDE 0266-3 and DIN 4102-12



### Construction

Solid or stranded bare copper conductor, insulation of a halogen-free cross-linked polymeric compound, common core covering, flame protective wrapping, outer sheath of flame retardant and halogen-free polymer compound, orange.

### Application

Safety cables are used in all locations where a high degree of protection against fire and fire-damage has to be provided for human life and equipment and are, therefore, subject to high security requirements. These cables may be used indoors and outdoors. They may not be installed directly into the ground and into the water. Safety cables are considered as protectively insulated.

Circuit integrity of 90 minutes (system) and insulation integrity of 180 minutes.

### Temperature range

During laying	- 5°C till + 70°C
After laying	- 40°C till + 70°C
Admissible conductor temperature	+ 90°C

Number of cores and nominal cross section	Price	Copper figure	Conductor construction (approx. value)	Overall diameter	Weight
mm <sup>2</sup>	EUR / km	kg / km	mm	ca. mm	ca. kg / km
<b>NHXH E 90 0,6/1 KV</b>					
1 x 16 RE	10.659,45	160	1 x 4,51	12,5	273
1 x 25 RM	14.938,67	250	7 x 2,13	14,0	412
1 x 35 RM	22.697,62	350	7 x 2,52	16,0	530
1 x 50 RM	26.979,21	500	19 x 1,83	17,0	700
1 x 70 RM	29.895,43	700	19 x 2,17	19,0	922
1 x 95 RM	38.305,06	950	19 x 2,52	20,0	1205
1 x 120 RM	46.836,62	1200	37 x 2,03	22,0	1514
1 x 150 RM	55.748,70	1500	37 x 2,27	24,0	1782
1 x 185 RM	69.698,62	1850	37 x 2,52	26,0	2194
1 x 240 RM	83.340,01	2400	61 x 2,24	29,0	2848
1 x 300 RM	108.420,81	3000	61 x 2,50	32,0	3703
2 x 1,5 RE	11.148,03	30	1 x 1,38	15,0	280
2 x 2,5 RE	11.729,42	50	1 x 1,78	16,0	320
2 x 4 RE	12.825,30	80	1 x 2,25	17,0	380
2 x 6 RE	14.745,08	120	1 x 2,76	18,0	450
2 x 10 RE	18.012,95	200	1 x 3,56	20,0	600
2 x 16 RE	28.784,92	320	1 x 4,51	22,0	800
3 x 1,5 RE	<b>11.625,56</b>	45	1 x 1,38	16,0	300
3 x 2,5 RE	<b>13.717,84</b>	75	1 x 1,78	17,0	380
3 x 4 RE	<b>14.490,89</b>	120	1 x 1,25	18,0	450
3 x 6 RE	<b>16.464,10</b>	180	1 x 2,76	19,0	550
3 x 10 RE	20.899,93	300	1 x 3,56	21,0	750
3 x 16 RM	33.461,61	480	1 x 4,51	23,0	1000
3 x 25 RM	53.304,60	750	7 x 2,13	28,0	1500
3 x 35 RM	60.935,80	1050	7 x 2,52	31,0	1900
3 x 50 RM	69.045,12	1500	19 x 1,83	33,0	2400
3 x 70 RM	79.906,37	2100	19 x 2,17	35,0	3152
3 x 95 RM	100.757,63	2850	19 x 2,52	39,0	4169

Number of cores and nominal cross section	Price	Copper figure	Conductor construction (approx. value)	Overall diameter	Weight
mm <sup>2</sup>	EUR / km	kg / km	mm	ca. mm	ca. kg / km
<b>NHXH E 90 0,6/1 KV</b>					
3 x 25/ 16 RM	47.226,16	910	7 x 2,13	27,0	1524
3 x 35/ 16 RM	59.250,69	1210	7 x 2,52	31,0	2000
3 x 50/ 25 RM	64.657,16	1750	19 x 1,83	36,0	2700
3 x 70/ 35 RM	79.942,64	2450	19 x 2,17	40,0	3600
3 x 95/ 50 RM	103.003,10	3350	19 x 2,52	46,0	4800
3 x 120/ 70 RM	128.770,62	4300	37 x 2,03	51,0	6000
3 x 150/ 70 RM	170.055,51	5200	37 x 2,27	54,0	7000
3 x 185/ 95 RM	210.913,08	6500	37 x 2,52	61,0	8800
3 x 240/120 RM	245.698,08	8400	61 x 2,24	68,0	11300
4 x 1,5 RE	<b>13.594,14</b>	60	1 x 1,38	17,0	350
4 x 2,5 RE	<b>15.513,71</b>	100	1 x 1,78	18,0	420
4 x 4 RE	<b>16.970,52</b>	160	1 x 2,25	19,0	550
4 x 6 RE	19.340,61	240	1 x 2,76	20,0	650
4 x 10 RE	<b>25.456,19</b>	400	1 x 3,56	23,0	900
4 x 16 RM	<b>42.210,48</b>	640	1 x 4,51	26,0	1200
4 x 25 RM	<b>58.748,55</b>	1000	7 x 2,13	30,0	1800
4 x 35 RM	<b>66.019,03</b>	1400	7 x 2,52	32,0	2297
4 x 50 RM	78.932,15	2000	19 x 1,83	35,0	2972
4 x 70 RM	97.516,77	2800	19 x 2,17	39,0	3914
4 x 95 RM	130.388,28	3800	19 x 2,52	43,0	5397
4 x 120 RM	159.079,20	4800	37 x 2,03	49,0	6906
4 x 150 RM	223.624,18	6000	37 x 2,27	53,0	7725
5 x 1,5 RE	<b>15.968,97</b>	75	1 x 1,38	18,0	400
5 x 2,5 RE	<b>19.311,52</b>	125	1 x 1,78	19,0	480
5 x 4 RE	<b>21.385,41</b>	200	1 x 2,25	21,0	600
5 x 6 RE	<b>24.881,86</b>	300	1 x 2,76	22,0	750
5 x 10 RE	<b>30.211,63</b>	500	1 x 3,56	25,0	1100
5 x 16 RM	<b>50.469,17</b>	800	1 x 4,51	28,0	1400
5 x 25 RM	71.163,45	1250	7 x 2,13	30,5	2081
7 x 1,5 RE	<b>20.855,47</b>	105	1 x 1,38	20,0	480
10 x 1,5 RE	32.571,85	150	1 x 1,38	25,0	700
12 x 1,5 RE	<b>34.545,21</b>	180	1 x 1,38	26,0	800
14 x 1,5 RE	40.700,87	210	1 x 1,38	28,0	780
19 x 1,5 RE	59.087,55	285	1 x 1,38	28,0	950
24 x 1,5 RE	63.851,89	360	1 x 1,38	30,0	1200
30 x 1,5 RE	82.303,51	450	1 x 1,38	33,0	1350
7 x 2,5 RE	26.450,37	175	1 x 1,78	22,0	600
10 x 2,5 RE	36.098,91	250	1 x 1,78	27,0	850
12 x 2,5 RE	41.166,81	300	1 x 1,78	28,0	900
14 x 2,5 RE	44.546,55	350	1 x 1,78	29,0	960
19 x 2,5 RE	63.924,00	475	1 x 1,78	32,0	1250
24 x 2,5 RE	76.538,31	600	1 x 1,78	35,0	1580
30 x 2,5 RE	89.431,45	750	1 x 1,78	37,0	1750

**Remark:** Insulation integrity under the impact of flames > 180 min. according to DIN VDE 0472-814 / 8.83  
function integrity of electrical cable installations > 90 min. according to DIN 4102-12.  
in compliance with VDE 0107 and 0108.

## NHXCH E 90

## Halogen-Free Cable with Concentric Conductor and Circuit Integrity of 90 Minutes

according to DIN VDE 0266-3 and DIN 4102-12



### Construction

Solid or stranded bare copper conductor, insulation of a halogen-free cross-linked polymeric compound, common core covering, concentric conductor formed by copper wires with counter helix of copper tape, flame protective wrapping, outer sheath of flame retardant and halogen-free polymer compound, orange.

### Application

Safety cables are used in all locations where a high degree of protection against fire and fire-damage has to be provided for human life and equipment and are, therefore, subject to high security requirements. These cables may be used indoors and outdoors. They may not be installed directly into the ground and into the water. Safety cables are considered as protectively insulated.

Circuit integrity of 90 minutes (system) and insulation integrity of 180 minutes.

### Temperature range

During laying	- 5°C till + 70°C
After laying	- 40°C till + 70°C
Admissible conductor temperature	+ 90°C

Number of cores and nominal cross section	Price	Copper figure	Conductor construction (approx. value)	Overall diameter	Weight
mm <sup>2</sup>	EUR / km	kg / km	mm	ca. mm	ca. kg / km
<b>NHXCH E 90 0,6/1 KV</b>					
2 x 1,5 RE / 1,5	12.995,97	54	1 x 1,38	16,0	300
2 x 2,5 RE / 2,5	13.722,35	83	1 x 1,78	17,0	350
3 x 1,5 RE / 1,5	<b>14.914,37</b>	73	1 x 1,38	17,0	320
3 x 2,5 RE / 2,5	16.065,18	113	1 x 1,78	18,0	380
3 x 4 RE / 4	18.262,70	168	1 x 2,25	19,0	480
3 x 6 RE / 6	20.915,40	250	1 x 2,76	20,0	600
3 x 10 RE / 10	24.781,79	425	1 x 3,56	23,0	850
3 x 16 RM / 16	33.105,24	670	1 x 4,51	26,0	1200
3 x 25 RM / 25	49.267,24	1045	7 x 2,13	30,0	1700
3 x 35 RM / 35	59.088,08	1460	7 x 2,52	32,0	2200
3 x 50 RM / 50	68.644,58	2083	19 x 1,83	37,0	2900
3 x 70 RM / 70	94.020,34	2913	19 x 2,17	42,0	3900
3 x 95 RM / 95	125.735,97	3949	19 x 2,52	48,0	5200
3 x 120 RM / 120	155.433,57	4985	37 x 2,03	52,0	6400
3 x 150 RM / 70	179.339,22	5313	37 x 2,27	56,0	7100
3 x 185 RM / 95	220.370,43	6649	37 x 2,52	62,0	8800
3 x 240 RM / 120	251.459,52	8585	61 x 2,24	70,0	11300

Number of cores and nominal cross section	Price	Copper figure	Conductor construction (approx. value)	Overall diameter	Weight
mm <sup>2</sup>	EUR / km	kg / km	mm	ca. mm	ca. kg / km
<b>NHXCH E 90 0,6/1 KV</b>					
4 x 1,5 RE / 1,5	18.559,95	88	1 x 1,38	18,0	450
4 x 2,5 RE / 2,5	19.716,97	138	1 x 1,78	19,0	500
4 x 4 RE / 4	22.167,59	208	1 x 2,25	21,0	600
4 x 6 RE / 6	24.518,34	309	1 x 2,76	22,0	750
4 x 10 RE / 10	31.436,02	525	1 x 3,56	25,0	1100
4 x 16 RM / 16	<b>44.593,54</b>	829	1 x 4,51	29,0	1500
4 x 25 RM / 16	<b>59.416,61</b>	1190	7 x 2,13	32,0	2000
4 x 35 RM / 16	<b>66.095,02</b>	1590	7 x 2,52	35,0	2500
4 x 50 RM / 25	<b>76.022,85</b>	2295	19 x 1,83	40,0	3300
4 x 70 RM / 35	<b>99.701,48</b>	3210	19 x 2,17	44,0	4400
4 x 95 RM / 50	<b>135.118,78</b>	4383	19 x 2,52	52,0	6100
4 x 120 RM / 70	<b>167.701,14</b>	5613	37 x 2,03	57,0	7500
4 x 150 RM / 70	<b>200.976,80</b>	6813	37 x 2,27	62,0	9000
4 x 185 RM / 95	<b>255.120,05</b>	8499	37 x 2,52	68,0	11000
4 x 240 RM / 120	<b>327.467,62</b>	10985	61 x 2,24	76,0	14500
7 x 1,5 RE / 2,5	26.690,09	139	1 x 1,38	22,0	600
10 x 1,5 RE / 2,5	36.844,88	183	1 x 1,38	25,0	700
12 x 1,5 RE / 2,5	40.878,97	214	1 x 1,38	27,0	750
16 x 1,5 RE / 4	52.319,04	280	1 x 1,38	29,0	900
21 x 1,5 RE / 4	68.085,58	384	1 x 1,38	31,0	1100
24 x 1,5 RE / 6	77.767,06	430	1 x 1,38	34,0	1300
30 x 1,5 RE / 6	93.447,86	520	1 x 1,38	36,0	1500
7 x 2,5 RE / 2,5	30.051,68	208	1 x 1,78	22,0	650
10 x 2,5 RE / 4	41.036,31	298	1 x 1,78	27,0	900
12 x 2,5 RE / 4	45.694,60	348	1 x 1,78	28,0	950
16 x 2,5 RE / 6	58.047,12	470	1 x 1,78	30,0	1200
21 x 2,5 RE / 6	76.326,29	595	1 x 1,78	33,0	1400
24 x 2,5 RE / 10	87.588,36	725	1 x 1,78	37,0	1700
30 x 2,5 RE / 10	105.402,00	875	1 x 1,78	39,0	1900

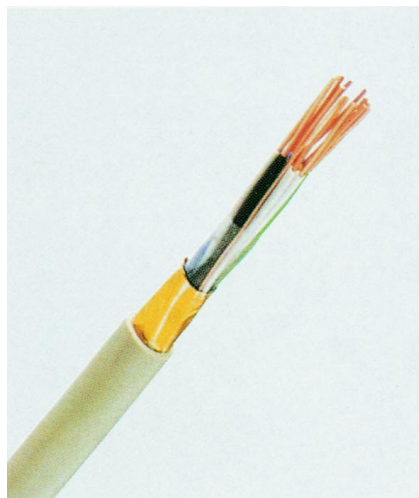
**Remark:** Insulation integrity under the impact of flames > 180 min. according to DIN VDE 0472-814 / 8.83  
function integrity of electrical cable installations > 90 min. according to DIN 4102-12.  
in compliance with VDE 0107 and 0108.



## J-H(ST)H ... Bd

## Halogen-Free and Flame Retardant Telecommunication Cable

according to DIN VDE 0815



### Construction

Solid bare copper conductors (diameter 0.6 mm or 0.8 mm), core insulation of a halogen-free compound (HI2), cores are stranded to form star quads and 5 quads are stranded to bundles, bundles are identified by coloured plastic tapes, one layer of a halogen-free foil, static screen of plastic coated aluminium foil with drain wire, wrapping with a protective foil, outer sheath of a halogen-free compound, flame retardant, grey.

### Application

These installation cables are suitable for fixed installations in telecommunication and are to be used in locations with fire hazard to reduce damage in case of fire.

### Temperature range

In motion - 5°C till + 50°C  
For fixed installation - 30°C till + 70°C

### Electrical properties at 20°C

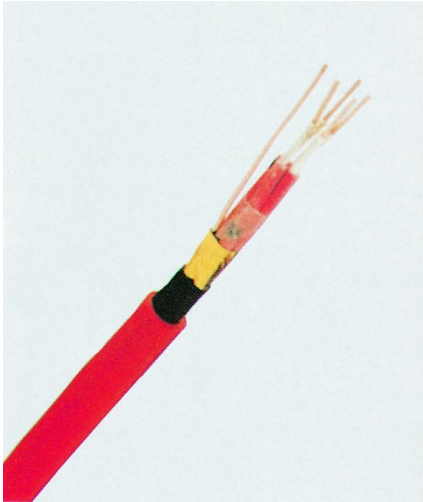
		0,6	0,8
Conductor loop resistance	max.	130 Ohm/km	73,2 Ohm/km
Insulation resistance	min.	100 MOhm x km	100 MOhm x km
Operating capacity	max.	120 nF/km	120 nF/km
Attenuation at 800 Hz	ca.	1,5 dB/km	1,2 dB/km
Capacitance coupling for 100 m	max.	200 pF	200 pF

Number of pairs and nominal conductor diameter mm	Price EUR / km	Copper figure kg / km	Thickness of the outer sheath ca. mm	Overall diameter ca. mm	Weight ca. kg / km
<b>J-H(ST)H ... Bd 300 V</b>					
2 x 2 x 0,6	<b>1.539,83</b>	13	1,0	5,2	60
4 x 2 x 0,6	<b>2.304,98</b>	24	1,0	7,5	90
6 x 2 x 0,6	<b>2.890,24</b>	36	1,0	8,0	115
10 x 2 x 0,6	<b>3.872,49</b>	59	1,0	9,8	144
16 x 2 x 0,6	5.176,66	93	1,0	11,4	200
20 x 2 x 0,6	<b>5.956,22</b>	116	1,0	12,5	233
24 x 2 x 0,6	6.758,72	139	1,0	13,6	280
30 x 2 x 0,6	7.949,64	172	1,0	14,9	320
40 x 2 x 0,6	9.739,72	228	1,0	17,0	405
50 x 2 x 0,6	11.523,00	285	1,4	19,1	485
60 x 2 x 0,6	13.126,13	342	1,4	20,2	660
80 x 2 x 0,6	16.316,99	455	1,6	23,5	820
100 x 2 x 0,6	19.530,48	568	1,6	25,9	920
2 x 2 x 0,8	<b>2.288,08</b>	21	1,0	6,7	77
4 x 2 x 0,8	<b>3.501,43</b>	41	1,0	9,9	123
6 x 2 x 0,8	<b>4.467,69</b>	62	1,0	10,4	152
10 x 2 x 0,8	<b>6.264,14</b>	103	1,2	12,8	220
16 x 2 x 0,8	8.733,45	164	1,4	18,0	290
20 x 2 x 0,8	<b>10.288,51</b>	203	1,4	19,0	350
24 x 2 x 0,8	11.716,58	243	1,4	19,3	405
30 x 2 x 0,8	13.802,62	304	1,4	20,1	495
40 x 2 x 0,8	16.925,78	404	1,4	21,2	635
50 x 2 x 0,8	20.049,19	505	1,6	24,9	788
60 x 2 x 0,8	23.157,61	606	1,6	27,2	1020
80 x 2 x 0,8	29.517,04	807	1,8	29,9	1270
100 x 2 x 0,8	35.920,89	1008	2,0	35,7	1520

## JB-H(ST)H ... Bd

## Halogen-Free and Flame Retardant Fire Alarm Cable

adapted to DIN VDE 0815



### Construction

Solid bare copper conductors (diameter 0.8 mm), core insulation of a halogen-free compound (HI2), cores are stranded to form star quads and 5 quads are stranded to bundles, bundles are identified by coloured plastic tapes, one layer of a halogen-free foil, static screen of plastic coated aluminium foil with drain wire, wrapping with a protective foil, outer sheath of a halogen-free compound, flame retardant, red with the marking "BRANDMELDEKABEL" (fire alarm cable).

### Application

These installation cables are suitable for fixed installations in fire detection circuits. They should be used in locations with fire hazard to reduce damage in case of fire.

### Temperature range

In motion - 5°C till + 50°C  
For fixed installation - 30°C till + 70°C

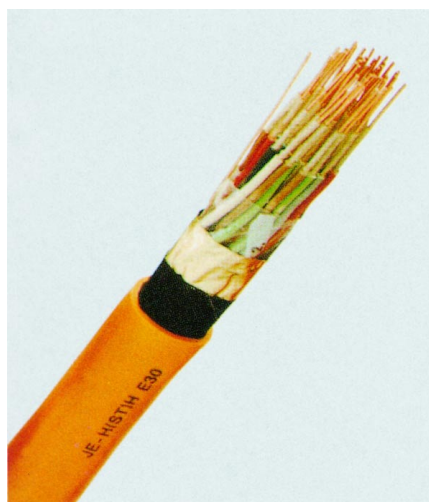
### Electrical properties at 20°C

Conductor loop resistance	max.	73,2 Ohm/km
Insulation resistance	min.	100 MOhm x km
Operating capacity	max.	120 nF/km
Attenuation at 800 Hz	ca.	1,2 dB/km
Capacitance coupling for 100 m	max.	200 pF

Number of pairs and nominal conductor diameter mm	Price EUR / km	Copper figure kg / km	Thickness of the outer sheath ca. mm	Overall diameter ca. mm	Weight ca. kg / km
<b>JB-H(ST)H ... Bd 300 V</b>					
1 x 2 x 0,8	<b>2.114,65</b>	11	1,0	6,5	60
2 x 2 x 0,8	<b>2.288,08</b>	21	1,0	6,7	77
4 x 2 x 0,8	<b>3.501,43</b>	41	1,0	9,9	123
6 x 2 x 0,8	<b>4.467,69</b>	62	1,0	10,4	152
10 x 2 x 0,8	6.264,14	103	1,2	12,8	220
16 x 2 x 0,8	8.733,45	164	1,4	18,0	290
20 x 2 x 0,8	10.288,51	203	1,4	19,0	350
24 x 2 x 0,8	11.716,58	243	1,4	19,3	405
30 x 2 x 0,8	13.802,62	304	1,4	20,1	495
40 x 2 x 0,8	16.925,78	404	1,4	21,2	635
50 x 2 x 0,8	20.049,19	505	1,6	24,9	788
60 x 2 x 0,8	23.157,61	606	1,6	27,2	1020
80 x 2 x 0,8	29.517,04	807	1,8	29,9	1270
100 x 2 x 0,8	35.920,89	1008	2,0	35,7	1520

## Halogen-Free and Flame Retardant Installation Cable for Industrial Electronics with Circuit Integrity of 30 Minutes

according to DIN VDE 0815 and DIN 4102-12



### Construction

Solid bare copper conductors (diameter 0.8 mm), core insulation of a halogen-free elastomer compound, cores are stranded to pairs, 4 pairs are stranded to form bundles and the bundles are stranded in layers, bundles are identified by coloured plastic tapes, static screen of plastic coated metal foil with a solid tinned drain wire, wrapping with a protective foil, outer sheath of a halogen-free flame retardant polymer compound, orange.

### Application

These installation cables are suitable for fixed installations in telecommunication. They are to be used in locations with fire hazard and where an insulation integrity of at least 180 minutes and a circuit integrity of at least 30 minutes are required.

### Temperature range

In motion - 5°C till + 50°C  
For fixed installation - 30°C till + 70°C

### Electrical properties at 20°C

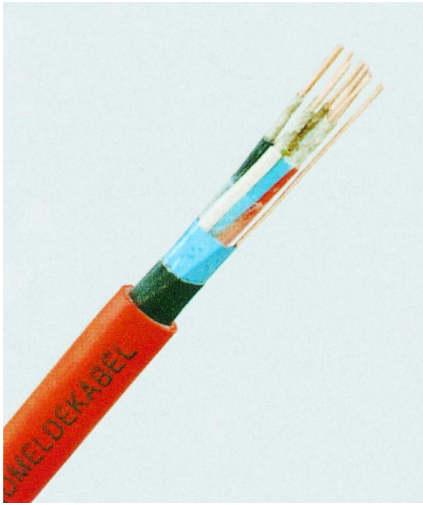
Conductor loop resistance	max.	73,2 Ohm/km
Insulation resistance	min.	100 MOhm x km
Operating capacity	max.	120 nF/km
Attenuation at 800 Hz	ca.	1,2 dB/km
Capacitance coupling for 100 m	max.	200 pF

Number of pairs and nominal conductor diameter mm	Price EUR / km	Copper figure kg / km	Thickness of the outer sheath ca. mm	Overall diameter ca. mm	Weight ca. kg / km
<b>JE-H(ST)H ... Bd E 30 225 V</b>					
2 x 2 x 0,8	<b>6.306,15</b>	25	1,0	7,5	76
4 x 2 x 0,8	<b>10.472,39</b>	45	1,0	10,9	130
8 x 2 x 0,8	<b>16.948,98</b>	85	1,2	14,5	232
12 x 2 x 0,8	<b>23.479,61</b>	126	1,2	17,1	318
16 x 2 x 0,8	28.520,79	166	1,4	19,6	430
20 x 2 x 0,8	35.958,75	206	1,4	21,5	514

**Remark:** Insulation integrity under the impact of flames > 180 min. according to DIN VDE 0472-814 / 8.83  
function integrity of electrical cable installations > 30 min. according to DIN 4102-12.  
in compliance with VDE 0107 and 0108.

## Halogen-Free and Flame Retardant Installation Cable for Fire Detection Circuits with Circuit Integrity of 30 Minutes

according to DIN VDE 0815 and DIN 4102-12



### Construction

Solid bare copper conductors (diameter 0.8 mm), core insulation of a halogen-free elastomer compound, cores are stranded to pairs, 4 pairs are stranded to form bundles and the bundles are stranded in layers, bundles are identified by coloured plastic tapes, static screen of plastic coated metal foil with a solid tinned drain wire, wrapping with a protective foil, outer sheath of a halogen-free flame retardant polymer compound, red, with the marking 'BRANDMELDEKABEL' (fire alarm cable).

### Application

These installation cables are suitable for fixed installations in fire detection circuits. They are to be used in locations with fire hazard and where an insulation integrity of at least 180 minutes and a circuit integrity of at least 30 minutes are required.

### Temperature range

In motion - 5°C till + 50°C  
 For fixed installation - 30°C till + 70°C

### Electrical properties at 20°C

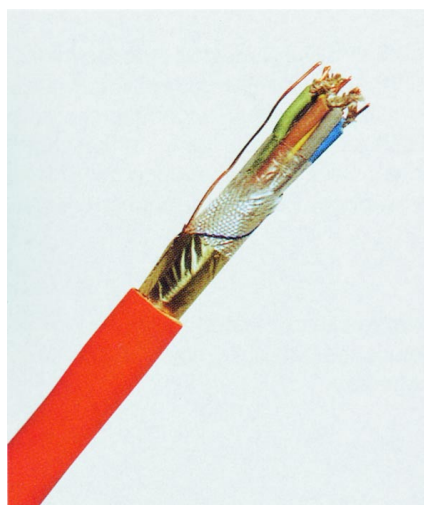
Conductor loop resistance	max.	73,2 Ohm/km
Insulation resistance	min.	100 MOhm x km
Operating capacity	max.	120 nF/km
Attenuation at 800 Hz	ca.	1,2 dB/km
Capacitance coupling for 100 m	max.	200 pF

Number of pairs and nominal conductor diameter mm	Price EUR / km	Copper figure kg / km	Thickness of the outer sheath ca. mm	Overall diameter ca. mm	Weight ca. kg / km
<b>JB-H(ST)H ... Bd E 30 225 V</b>					
2 x 2 x 0,8	<b>6.306,15</b>	25	1,0	7,5	76
4 x 2 x 0,8	<b>10.472,39</b>	45	1,0	10,9	130
8 x 2 x 0,8	16.948,98	85	1,2	14,5	232
12 x 2 x 0,8	23.479,61	126	1,2	17,1	318
16 x 2 x 0,8	28.520,79	166	1,4	19,6	430
20 x 2 x 0,8	35.958,75	206	1,4	21,5	514

**Remark:** Insulation integrity under the impact of flames > 180 min. according to DIN VDE 0472-814 / 8.83  
 function integrity of electrical cable installations > 30 min. according to DIN 4102-12.  
 in compliance with VDE 0107 and 0108.

## Halogen-Free and Flame Retardant Installation Cables for Industrial Electronics with Circuit Integrity of 90 Minutes

according to DIN VDE 0815 and DIN 4102-12



### Construction

Solid bare copper conductors (diameter 0.8 mm), core insulation of a halogen-free elastomer compound, cores are stranded to pairs, 4 pairs are stranded to form bundles and the bundles are stranded in layers, bundles are identified by coloured plastic tapes, static screen of plastic coated metal foil with a solid tinned drain wire, wrapping with a protective foil, outer sheath of a halogen-free flame retardant polymer compound, orange. It is also available in red with the marking 'BRANDMELDEKABEL' (fire alarm cable).

### Application

These installation cables are suitable for fixed installations in telecommunication. They are to be used in locations with fire hazard and where an insulation integrity of at least 180 minutes and a circuit integrity of at least 90 minutes are required.

### Temperature range

In motion - 5°C till + 50°C  
For fixed installation - 30°C till + 70°C

### Electrical properties at 20°C

Conductor loop resistance	max.	73,2 Ohm/km
Insulation resistance	min.	100 MOhm x km
Operating capacity	max.	120 nF/km
Attenuation at 800 Hz	ca.	1,2 dB/km
Capacitance coupling for 100 m	max.	200 pF

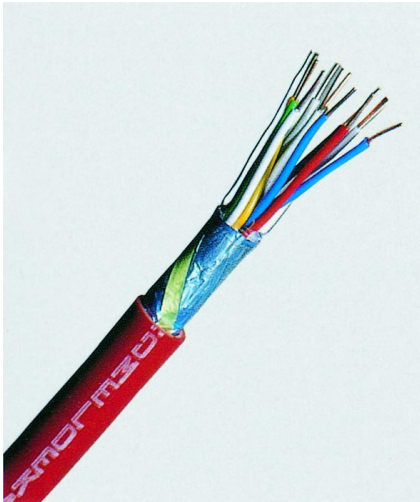
Number of pairs and nominal conductor diameter mm	Price EUR / km	Copper figure kg / km	Thickness of the outer sheath ca. mm	Overall diameter ca. mm	Weight ca. kg / km
<b>JE-H(ST)H ... Bd E 90 225 V</b>					
2 x 2 x 0,8	7.791,87	25	1,0	10,7	135
4 x 2 x 0,8	12.938,62	45	1,0	15,0	190
8 x 2 x 0,8	20.943,86	85	1,2	18,0	310
12 x 2 x 0,8	29.008,68	126	1,2	20,0	420
16 x 2 x 0,8	37.476,29	166	1,4	22,5	490
20 x 2 x 0,8	44.421,89	206	1,4	25,0	560
<b>JB-H(ST)H ... Bd E 90 225 V</b>					
2 x 2 x 0,8	7.791,87	25	1,0	10,7	135
4 x 2 x 0,8	12.938,62	45	1,0	15,0	190
8 x 2 x 0,8	20.943,86	85	1,2	18,0	310
12 x 2 x 0,8	29.008,68	126	1,2	20,0	420
16 x 2 x 0,8	37.476,29	166	1,4	22,5	490
20 x 2 x 0,8	44.421,89	206	1,4	25,0	560

**Remark:** Insulation integrity under the impact of flames > 180 min. according to DIN VDE 0472-814 / 8.83  
function integrity of electrical cable installations > 90 min. according to DIN 4102-12.  
in compliance with VDE 0107 and 0108.

**JB-YY  
JB-Y(ST)Y**

**Fire Alarm Cable**

according to DIN VDE 0815



**Construction**

JB-YY

Solid bare copper conductors (diameter 0.8 mm), core insulation of PVC, cores are stranded, outer sheath of red PVC with the marking "BRANDMELDEKABEL" (Fire alarm cable).

JB-Y(ST)Y

Solid bare copper conductors (diameter 0.8 mm), core insulation of PVC, cores are stranded to pairs and the pairs are stranded in layers, one layer of plastic foil, static screen of plastic coated aluminium foil with a drain wire, outer sheath of red PVC with the marking "BRANDMELDEKABEL" (Fire alarm cable).

**Application**

They are suitable for fixed installation indoors and are used for fire detection circuits.

**Temperature range**

In motion - 5°C till + 50°C  
For fixed installation - 30°C till + 70°C

**Electrical properties at 20°C**

Conductor loop resistance	max.	73,2 Ohm/km
Insulation resistance	min.	100 MOhm x km
Operating capacity	max.	100 nF/km
Capacitance coupling for 100 m	max.	300 pF

Number of pairs and nominal conductor diameter mm	Price EUR / km	Copper figure kg / km	Thickness of the outer sheath ca. mm	Overall diameter ca. mm	Weight ca. kg / km
<b>JB-YY 300 V</b>					
2 x 0,8	<b>432,60</b>	10	1,0	4,8	35
3 x 0,8	<b>523,24</b>	15	1,0	5,2	44
4 x 0,8	<b>633,45</b>	20	1,0	5,5	50
<b>JB-Y(ST)Y 300 V</b>					
1 x 2 x 0,8	<b>708,43</b>	11	1,0	5,7	41
2 x 2 x 0,8	<b>791,83</b>	21	1,0	6,4	60
4 x 2 x 0,8	<b>1.359,28</b>	41	1,0	9,5	100
5 x 2 x 0,8	<b>1.854,10</b>	52	1,0	9,8	123
6 x 2 x 0,8	<b>2.098,82</b>	62	1,0	10,7	145
10 x 2 x 0,8	<b>2.732,08</b>	103	1,0	13,2	220
12 x 2 x 0,8	<b>3.522,54</b>	123	1,0	14,3	255
20 x 2 x 0,8	<b>4.627,28</b>	203	1,2	17,1	390
30 x 2 x 0,8	<b>7.131,71</b>	304	1,2	20,4	570
40 x 2 x 0,8	<b>9.199,82</b>	404	1,4	23,0	730
50 x 2 x 0,8	<b>11.383,05</b>	505	1,4	26,0	920