

Connection and power cable – temperature resistant.
Application

Fixed and flexible application in dry, humid and wet rooms. Good weather and UV resistance. Extensively oil resistant. Intended for installation outdoors. Typical areas of application are connections of:

Lamps / Heating units / Electrical machinery (thermal class B)/ Switchboards / switch cabinets and distributors in apparatus, mechanical or plant engineering.

Standards / material properties

Halogenfree	IEC 60754-1, EN 50267-2-1
No corrosive gases	IEC 60754-2, EN 50267-2-2
No toxic gases	NF X 70-100
Low smoke density	IEC 61034, DIN EN 61034-2, EN 50268-2
Flame retardant	EN IEC 60332-1-2
Non-flame propagating	IEC 60332-3, DIN EN 60332-3, EN 50266-2
Low fire load	DIN 51900
Cross-linked insulating compound HF90	IEC 60092-360
Cross-linked sheathing compound SHF2	IEC 60092-360

Oil resistant	EN 50264-1, 72h/100°C, IRM 902
Fuel resistant	EN 50264-1, 168h/70°C, IRM 903

Fire properties acc. Construction Products Regulation (CPR)

Dca- s2, d2, a1	EN 50575, EN 13501-6
Fire performance Dca	EN 50399
Medium smoke emission s2	EN 50399
Drip off behavior d2	EN 50399
Low corrosive gases a1	EN 60754-2
CPR-identification code	CCHDA0000022

Construction

Conductor	Tinned fine copper strands acc. VDE 0295 / IEC 60228 class 5
Insulation	Polyolefin Copolymer, electronbeam cross-linked
Core identification	≤ 5 Cores according HD 308 S2, ≥ 6 Cores NR, NRPE
Outer sheath	Polyolefin Copolymer, electronbeam cross-linked SHF2, colour black

Technical properties

Nominal voltage	$U_0/U \leq 1 \text{ mm}^2$	300/500 V
	$U_0/U \geq 1,5 \text{ mm}^2$	470/750 V
	$U_0/U \geq 1,5 \text{ mm}^2$	600/1000 V AC (fixed and protected installation)
	$V_0/V \geq 1,5 \text{ mm}^2$	750/1500 V DC (fixed and protected installation)

Testing voltage	3500 V
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Temperature range	fixed installation	- 55 upto + 145°C
	occasionally moved	- 35 upto + 120°C
	short circuit	+ 280°C

Bending radius	fixed installation	> 4 x outer-Ø
	occasionally moved	> 8 x outer-Ø

Approvals

DNV / GL	Certificate - no. TAE00001RK
Lloyd's Register	Certifikate - no. LR2016000TA
BUREAU VERITAS	Certifikate - no. 13348 / DO BV

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Construction n x mm ²	Core- function	Core- Ø mm	Outer-Ø mm	Weight kg/km	Fire load kWh/m	Article no.
2 x 0,50	LN	1.85	5.1	30	0.08	214001
3 G 0,50	LNPE	1.85	5.5	46	0.13	☉
4 x 0,50	NR	1.85	5.9	49	0.13	☉
5 x 0,50	3LNPE	1.85	6.7	68	0.19	☉
7 x 0,50	NRPE	1.85	7.8	93	0.26	☉
2 x 0,75	LN	2.20	5.9	52	0.15	213874
2 x 0,75	NR	2.20	5.9	52	0.15	217588
3 G 0,75	LNPE	2.20	6.2	53	0.13	216630
3 x 0,75	NR	2.20	6.2	53	0.13	223848
4 x 0,75	NR	2.20	6.9	68	0.17	220752
4 G 0,75	3LPE	2.20	6.9	68	0.17	222788
4 G 0,75	2LNPE	2.20	6.9	68	0.17	216328
5 G 0,75	3LNPE	2.20	7.7	86	0.21	222910
5 x 0,75	NR	2.20	7.7	86	0.21	223774
6 x 0,75	NR	2.20	8.3	102	0.25	222161
6 G 0,75	NRPE	2.20	8.3	102	0.25	226089
7 G 0,75	NRPE	2.20	9.1	122	0.30	218510
8 G 0,75	NRPE	2.20	10.2	147	0.37	213641
10 x 0,75	NRPE	2.20	11.1	171	0.41	214566
10 G 0,75	NR	2.20	11.1	171	0.41	302843
12 G 0,75	NRPE	2.20	11.1	182	0.40	221971
14 G 0,75	NRPE	2.20	11.7	203	0.43	☉
16 G 0,75	NRPE	2.20	12.5	238	0.51	302844
1 x 1	L	2.4	3.9	25	0.06	☉
2 x 1	LN	2.40	6.3	49	0.12	219674
2 x 1	NR	2.40	6.3	49	0.12	218860
3 G 1	LNPE	2.40	6.8	65	0.15	214075
3 x 1	NR	2.40	6.8	65	0.15	301676
4 G 1	3LPE	2.40	7.4	83	0.19	222969
4 x 1	NR	2.40	7.4	83	0.19	224018
4 G 1	2LNPE	2.40	7.4	83	0.19	218509
5 G 1	3LNPE	2.40	8.3	105	0.24	222911
5 G 1	NRPE	2.40	8.3	105	0.24	218863
5 x 1	NR	2.40	8.3	105	0.24	220309
6 G 1	NRPE	2.40	8.9	124	0.28	☉
7 G 1	NRPE	2.40	9.9	152	0.35	218864
8 G 1	NRPE	2.40	11.0	181	0.43	☉
10 G 1	NRPE	2.40	12.1	222	0.47	☉
12 G 1	NRPE	2.40	12.1	226	0.46	218859
14 G 1	NRPE	2.40	12.7	252	0.50	☉
16 G 1	NRPE	2.40	13.6	290	0.59	☉
19 G 1	NRPE	2.40	15.1	365	0.77	223244
21 G 1	NRPE	2.40	16.0	380	0.78	☉
24 G 1	NRPE	2.40	17.1	437	1.28	☉
25 G 1	NRPE	2.40	17.1	463	0.94	218861

Construction n x mm ²	Core- function	Core- Ø mm	Outer-Ø mm	Weight kg/km	Fire load kWh/m	Article no.
27 G 1	NPPE	2.40	17.1	468	1.40	☉
30 G 1	NPPE	2.40	17.7	514	1.57	☉
33 G 1	NPPE	2.40	18.9	583	1.75	224020
37 G 1	NPPE	2.40	20.3	680	1.37	☉
1 x 1,5	L	2.95	4.3	32	0.07	☉
2 x 1,5	LN	2.95	7.6	69	0.17	211350
2 x 1,5	NR	2.95	7.6	69	0.17	217256
3 G 1,5	LNPE	2.95	8.1	91	0.21	211351
3 x 1,5	NR	2.95	8.1	91	0.21	217180
4 x 1,5	NR	2.95	8.8	115	0.26	215037
4 G 1,5	3LPE	2.95	8.8	115	0.26	222789
5 G 1,5	3LNPE	2.95	9.8	147	0.33	222778
5 x 1,5	NR	2.95	9.8	147	0.33	221932
6 G 1,5	NRPE	2.95	10.9	190	0.48	314931
7 G 1,5	NRPE	2.95	12.0	256	0.65	211355
10 G 1,5	NRPE	2.95	14.6	297	0.68	211357
12 G 1,5	NRPE	2.95	14.6	320	0.66	211358
14 G 1,5	NRPE	2.95	15.4	366	0.74	☉
16 G 1,5	NRPE	2.95	16.2	418	0.85	211359
19 G 1,5	NRPE	2.95	18.3	486	0.99	☉
21 G 1,5	NRPE	2.95	19.7	595	1.30	214968
24 G 1,5	NRPE	2.95	21.1	644	1.39	220314
25 G 1,5	NRPE	2.95	21.1	674	1.41	212866
27 G 1,5	NRPE	2.95	21.1	696	1.39	217181
30 G 1,5	NRPE	2.95	21.8	760	1.48	☉
33 G 1,5	NRPE	2.95	22.6	831	1.62	☉
37 G 1,5	NRPE	2.95	24.8	975	2.00	302217
1 x 2,5	L	3.65	5	45	0.1	☉
2 x 2,5	NR	3.65	9.0	99	0.22	211360
2 G 2,5	NR	3.65	9.0	99	0.22	216689
3 G 2,5	LNPE	3.65	9.8	138	0.30	211361
4 G 2,5	3LPE	3.65	10.8	176	0.37	222790
4 x 2,5	NR	3.65	10.8	176	0.37	218979
4 G 2,5	2LNPE	3.65	10.8	176	0.37	211362
5 G 2,5	3LNPE	3.65	12.0	225	0.47	222779
6 G 2,5	NRPE	3.65	13.2	288	0.62	307003
7 G 2,5	NRPE	3.65	14.6	331	0.72	211365
8 G 2,5	NRPE	3.65	15.7	372	0.80	216500
12 G 2,5	NRPE	3.65	17.7	486	0.92	211366
14 G 2,5	NRPE	3.65	19.0	576	1.12	301167
16 G 2,5	NRPE	3.65	20.1	651	1.25	☉
19 G 2,5	NRPE	3.65	20.7	765	1.48	☉
21 G 2,5	NRPE	3.65	22.7	857	1.49	☉
24 G 2,5	NRPE	3.65	25.8	984	2.21	☉

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Construction	Core-function	Core-Ø	Outer-Ø	Weight	Fire load	Article no.
n x mm ²		mm	mm	kg/km	kWh/m	
1 x 4	L	4.15	5.6	62	0.12	①
2 x 4	LN	4.15	10.2	154	0.35	212870
2 x 4	NR	4.15	10.2	154	0.35	300782
3 G 4	3LPE	4.15	10.9	190	0.35	216165
4 G 4	3LPE	4.15	12.2	249	0.45	223188
5 G 4	3LNPE	4.15	13.5	312	0.57	222913
6 G 4	NRPE	4.15	14.9	380	0.70	①
7 G 4	NRPE	4.15	16.4	456	0.86	①
8 G 4	NRPE	4.15	17.6	523	0.96	①
10 G 4	NRPE	4.15	20.1	674	0.17	①
12 G 4	NRPE	4.15	20.1	694	1.14	302379
14 G 4	NRPE	4.15	21.5	810	1.33	302380
1 x 6	L	4.70	6.1	83	0.13	222433
2 x 6	LN	4.70	11.6	209	0.43	①
2 x 6	NR	4.70	11.6	209	0.43	301418
3 G 6	LNPE	4.70	12.4	275	0.49	219627
4 G 6	3LPE	4.70	13.8	338	0.54	222791
4 G 6	2LNPE	4.70	13.8	338	0.54	213672
4 x 6	NR	4.70	13.8	338	0.54	224652
5 G 6	3LNPE	4.70	15.4	427	0.69	222780
6 x 6	NR	4.70	16.5	515	0.84	219630
7 G 6	NRPE	4.70	18.3	612	1.02	214964
1 x 10	L	6.10	7.7	133	0.20	①
2 x 10	LN	6.10	14.7	355	0.68	①
3 x 10	NR	6.10	15.7	443	0.76	219628
4 G 10	3LPE	6.10	17.5	574	0.94	223189
4 G 10	2LNPE	6.10	17.5	574	0.94	214969
5 G 10	3LNPE	6.10	19.6	727	1.33	222912
6 G 10	NRPE	6.10	21.7	856	1.21	①
7 G 10	NRPE	6.10	23.7	1000	1.61	①
1 x 16	L	7.20	8.8	194	0.24	①
2 x 16	LN	7.20	17.1	489	0.87	213749
3 G 16	LNPE	7.20	18.2	649	0.99	①
4 G 16	3LPE	7.20	20.6	857	1.29	303609
4 G 16	2LNPE	7.20	20.6	587	1.29	214979
5 G 16	3LNPE	7.20	23.2	1084	1.64	223190
6 G 16	NRPE	7.20	25.6	1295	1.95	①
7 G 16	NRPE	7.20	28.3	1494	2.20	①
1 x 25	L	8.60	10.4	287	0.33	①
2 x 25	LN	8.60	20.40	730	1.24	①
3 x 25	NR	8.60	21.80	972	1.37	223541
4 G 25	3LPE	8.60	24.40	1281	1.78	303610
5 G 25	3LNPE	8.60	27.10	1584	2.16	①
6 G 25	NRPE	8.60	30.30	1917	2.65	①
7 G 25	NRPE	8.60	33.50	2205	2.95	①
1 x 35	L	10.10	12.1	405	0.53	①
2 x 35	LN	10.10	23.70	1008	1.63	223191
3 G 35	LNPE	10.10	25.50	1353	1.83	301141
4 G 35	NRPE	10.10	28.40	1767	2.29	301143
5 G 35	3LNPE	10.10	31.30	2186	2.77	301144
1 x 50	L	12.50	14.7	578	0.62	①
2 x 50	LN	12.50	28.90	1419	2.23	①
3 G 50	LNPE	12.50	31.10	1965	2.71	①
4 G 50	3LPE	12.50	34.90	2578	3.44	302205
5 G 50	3LNPE	12.50	38.70	3193	4.19	306276
1 x 70	L	14.00	16.4	777	0.74	①
2 x 70	LN	14.00	32.30	1889	2.73	①
3 G 70	LNPE	14.00	34.70	2629	3.29	①
4 G 70	3LPE	14.00	38.60	3429	4.08	①
5 G 70	3LNPE	14.00	43.10	4253	4.97	①
1 x 95	L	16.00	18.4	1010	0.88	308543
2 x 95	LN	16.00	36.7	2459	3.39	①
3 G 95	LNPE	16.00	39.20	3374	3.86	303871
4 G 95	3LPE	16.00	44.10	4492	5.11	303913
5 G 95	3LNPE	16.00	49.90	5648	6.52	306423

Item marked gray = not CPR tested

Dimensional and weight deviations due to technical progress or changed manufacturing processes are reserved.