

Power Cables



Catalog Number	No. and Nominal cross sectional area of conductors	Minimum Nos. of wires in phase conductor	Nominal insulation thickness mm	Nominal sheath thickness mm	Approximate outer diameter mm	Approximate cable weight kg/km	Minimum bending radius mm	Maximum conductor resistance at 20 °C Ω/km	Short circuit rating (1) sec		Current rating (2)		Voltage Drop (3)		Standard supply lengths m
									In Air (3)	Buried (4)	A	A	Single Phase AC	Three Phase AC	
NAZXY FRI COPPER ROUND CONDUCTORS															
18320896	5x1.5	1	0.7	1.8	13	240	156	12.1	0.21	24	30	-	-	2.7	1000
18330596	5x2.5	1	0.7	1.8	14	310	168	7.41	0.36	32	40	-	-	1.6	1000
18340596	5x4	1	0.7	1.8	15	410	180	4.61	0.57	42	52	-	-	1.0	1000
18350596	5x6	1	0.7	1.8	16.5	520	198	3.08	0.86	53	64	-	-	0.8	1000
18103396	5x10	6	0.7	1.8	19.5	770	234	1.83	1.43	73	86	-	-	4.0	1000
18103896	5x16	6	0.7	1.8	22.5	1150	270	1.15	2.29	96	111	-	-	2.5	1000
18332896	5x25	6	0.9	1.8	26.5	1700	318	0.727	3.6	130	143	-	-	1.62	1000
18109496	5x35	6	0.9	1.8	31	2250	372	0.524	5.0	160	173	-	-	1.15	1000
NAZXY FRI COPPER SHAPED CONDUCTORS															
18106196	3x25+16	6	0.9/0.7	1.8	23	1200	276	0.727	3.6	130	143	-	-	1.62	1000
18106296	3x35+16	6	0.9/0.7	1.8	25	1520	300	0.524	5.0	160	173	-	-	1.15	1000
18106796	3x50+25	6	1.0/0.9	1.8	29	2050	348	0.387	7.2	195	205	-	-	0.87	1000
18107396	3x70+35	12	1.1/1.0	1.9	33	2800	396	0.268	10.0	247	252	-	-	0.60	1000
181077196	3x95+50	15	1.1/1.0	2.1	37	3300	444	0.193	13.6	305	303	-	-	0.45	500
18108096	3x120+70	18	1.2/1.1	2.2	40.5	4650	486	0.153	17.2	335	346	-	-	0.37	500
18108396	3x150+70	18	1.4/1.1	2.3	45	5530	540	0.124	21.5	407	390	-	-	0.30	500
18108496	3x185+95	30	1.6/1.1	2.5	51	7150	612	0.0991	26.5	469	441	-	-	0.26	250
18108596	3x240+120	34	1.7/1.2	2.7	56.5	9200	678	0.0754	34.3	551	511	-	-	0.21	250
18109796	3x300+150	34	1.8/1.4	2.9	63	11400	756	0.0601	42.9	638	580	-	-	0.185	250
18109196	4x25	6	0.9	1.8	23	1280	276	0.727	3.6	130	143	-	-	1.62	1000
18109696	4x35	6	0.9	1.8	25	1690	300	0.524	5.0	160	173	-	-	1.15	1000
18110696	4x50	6	1.0	1.9	29	2200	348	0.387	7.2	195	205	-	-	0.87	1000
18110996	4x70	12	1.1	2.0	33	3100	396	0.268	10.0	247	252	-	-	0.60	500
18402896	4x95	15	1.1	2.1	37	4200	444	0.193	13.6	305	303	-	-	0.45	500
18110396	4x120	18	1.2	2.3	40.5	5300	486	0.153	17.2	335	346	-	-	0.37	500
18110796	4x150	18	1.4	2.4	45	6500	540	0.124	21.5	407	390	-	-	0.30	250
18408696	4x185	30	1.6	2.6	51	8070	612	0.0991	26.5	469	441	-	-	0.26	250
18119497	4x240	34	1.7	2.8	56.5	10470	678	0.0754	34.3	551	511	-	-	0.21	250
NAZXY FRI COPPER ROUND CONDUCTORS, ENHANCED FLAME RETARDANT BEHAVIOUR															
18335396	3x1.5	1	0.7	1.8	11	775	132	12.1	0.21	24	30	-	-	2.7	1000
18335696	3x2.5	1	0.7	1.8	12	210	144	7.41	0.36	32	40	-	-	1.6	1000
18147696	3x4	1	0.7	1.8	13	280	156	4.61	0.57	42	52	-	-	1.0	1000
18340896	3x6	1	0.7	1.8	14	360	168	3.08	0.86	53	64	-	-	0.8	1000
18333796	4x1.5	1	0.7	1.8	12	208	144	12.1	0.21	24	30	-	-	2.7	1000
18120996	4x2.5	1	0.7	1.8	13	260	156	7.41	0.36	32	40	-	-	1.6	1000
18355196	4x4	1	0.7	1.8	14	340	168	4.61	0.57	42	52	-	-	1.0	1000
18355296	4x6	1	0.7	1.8	15.5	430	186	3.08	0.86	53	64	-	-	0.8	1000
18122196	5x1.5	1	0.7	1.8	13	240	156	12.1	0.21	24	30	-	-	2.7	1000
18356696	5x2.5	1	0.7	1.8	14	310	168	7.41	0.36	32	40	-	-	1.6	1000
18356796	5x4	1	0.7	1.8	15	410	180	4.61	0.57	42	52	-	-	1.0	1000
18381896	5x6	1	0.7	1.8	16.5	520	198	3.08	0.86	53	64	-	-	0.8	1000
NAZXY FRI ALUMINIUM ROUND CONDUCTORS															
33709696	3x25+16	6	0.9/0.7	1.8	23.5	730	282	1.200	2.35	100	111	-	-	2.7	1000
33709796	3x35+16	6	0.9/0.7	1.8	25.5	900	306	0.868	3.29	122	132	-	-	1.95	1000
33710296	3x50+25	6	1.0/0.9	1.8	29	1150	348	0.641	4.7	147	157	-	-	1.45	1000
33711096	3x70+35	12	1.1/1.0	1.9	35	1650	420	0.443	6.6	189	195	-	-	0.97	1000
33711996	3x95+50	15	1.1/1.0	2.1	37.5	2100	450	0.320	8.9	232	233	-	-	0.72	1000
33713096	3x120+70	15	1.2/1.1	2.2	41.5	2700	498	0.253	11.3	270	266	-	-	0.58	1000
33714096	3x150+70	15	1.4/1.1	2.3	45	3050	540	0.206	14.1	308	299	-	-	0.47	500
33715096	3x185+95	30	1.6/1.1	2.5	51	3950	612	0.164	17.4	357	340	-	-	0.39	500
33716096	3x240+120	30	1.7/1.2	2.7	57	5050	684	0.125	22.6	435	401	-	-	0.31	500
NAZXY FRI ALUMINIUM SHAPED CONDUCTORS															
33709896	4x25	6	0.9	1.8	23	700	276	1.200	2.35	100	111	-	-	2.7	1000
33709996	4x35	6	0.9	1.8	25	800	300	0.868	3.29	122	132	-	-	1.95	1000
33710096	4x50	6	1.0	1.9	29	1000	348	0.641	4.7	147	157	-	-	1.45	1000
33711296	4x70	12	1.1	2.0	33	1300	420	0.443	6.6	189	195	-	-	0.97	1000
33712096	4x95	15	1.1	2.1	37	1750	444	0.320	8.9	232	233	-	-	0.72	1000
33713196	4x120	15	1.2	2.3	40.5	2200	486	0.253	11.3	270	266	-	-	0.58	1000
33714396	4x150	15	1.4	2.4	45	2750	540	0.206	14.1	308	299	-	-	0.47	500
33715396	4x185	30	1.6	2.6	51	3300	612	0.164	17.4	357	340	-	-	0.39	500
33716196	4x240	30	1.7	2.8	56.5	4200	678	0.125	22.6	435	401	-	-	0.31	500

(1) Short circuit rating is based on an initial conductor temperature of 90 °C and a final temperature of 250 °C.

(2) Current rating based upon operation at 90 °C conductor, three-phase a.c. load. According to VDE 0298.

(3) Single cable laid in freely circulating air at 30 °C, protected against direct thermal radiation due to sun, etc.

(4) Single cable directly buried at 0.7 m deep in soil at 20 °C, with 1 K · m/W thermal resistivity. Load factor 0.7.

(5) Voltage drop according to BS 7671:1992.3 assuming that the conductor temperature is 90 °C, the load is balanced and the phase angle of the cable equals that of the load. Single-phase or three-phase.

TEMPERATURE RATING FACTORS (Protection against short-circuit only). According to BS 7671:1992.3

Ambient Temperature °C	20	25	30	35	40	45	50	55	60	65
Correction factor air	1.08	1.04	1.00	0.96	0.91	0.87	0.82	0.76	-	-
Correction factor ground	1.00	0.96	0.93	0.89	0.85	0.80	0.76	-	-	-

The information given in this page is subject to change without notice.