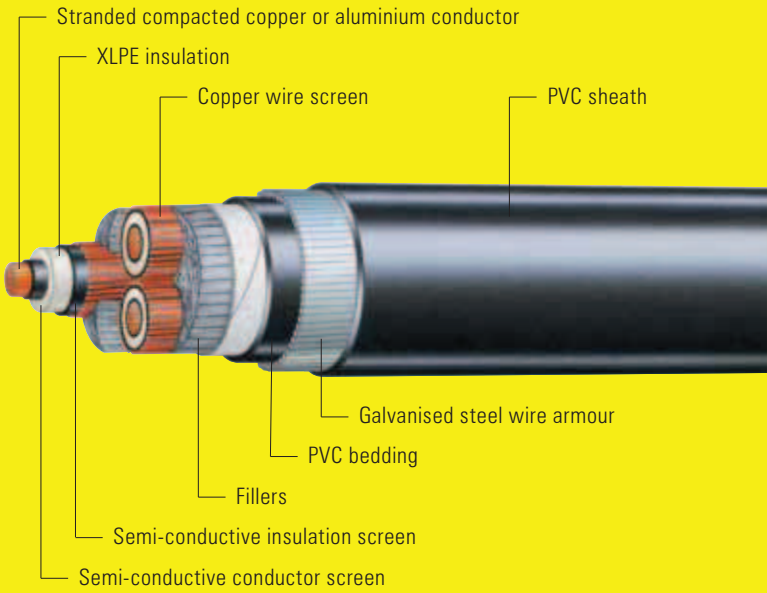
ee Core

3.8/6.6 to 19/33kV SWA



Nexans

Olex

12.7/22kV Three Core
Ind. Screened PVC/SWA/PVC Sheathed

Copper Conductors, up to 10kA Fault Level

Nominal conductor area mm²	Nominal conductor diameter mm	Nominal insulation thickness mm	Nominal diameter over insulation mm	Nominal screen area mm²	Number and nominal diameter of screen wires no/mm	Nominal diameter over wire screen mm	Nominal diameter over armour bedding mm	Normal Armour wire diameter mm	Nominal diameter over armour mm	Nominal overall diameter mm	Approx. mass kg/100m	Product code
35	6.8	5.5	19.1	34.0	20/0.85	22.4	52.1	2.5	57.1	63.2	610	XLJP18AA003
50	8.0	5.5	20.3	49.4	29/0.85	23.6	54.8	2.5	59.8	66.0	685	XLJP19AA003
70	9.6	5.5	21.9	68.1	40/0.85	25.2	58.5	2.5	63.5	70.1	810	XLJP20AA003
95	11.5	5.5	23.8	68.1	40/0.85	27.1	62.6	2.5	67.6	74.4	935	XLJP22AA003
120	13.1	5.5	25.3	68.1	40/0.85	28.6	66.3	3.15	72.6	79.6	1140	XLJP23AA003
150	14.5	5.5	26.8	68.1	40/0.85	30.1	69.6	3.15	75.9	83.1	1270	XLJP24AA003
185	16.1	5.5	28.4	68.1	40/0.85	31.7	73.0	3.15	79.3	87.0	1400	XLJP25AA003
240	18.5	5.5	30.8	68.1	40/0.85	34.1	78.5	3.15	84.8	92.6	1640	XLJP26AA003
300	20.7	5.5	33.2	68.1	40/0.85	36.7	84.2	3.15	90.5	98.8	1900	XLJP27AA003
400	23.6	5.5	36.1	68.1	40/0.85	39.6	90.7	3.15	97.0	105.6	2260	XLJP28AA003
500	26.5	5.5	39.0	68.1	40/0.85	42.5	97.1	3.15	103.4	112.5	2640	XLJP30AA003

Current Ratings

Nominal conductor area mm²	Continuous current-carrying capacity, A In air			In ground		Fault current carrying capacity for 1 second Conductor kA	Screen kA
35	167	178	130	171	142	5.00	5.05
50	199	212	153	201	167	7.15	7.32
70	245	261	187	245	203	10.0	10.1
95	296	316	231	292	248	13.6	10.1
120	339	363	262	330	280	17.1	10.1
150	380	408	292	366	311	21.4	10.1
185	430	462	328	410	349	26.4	10.1
240	499	538	377	469	398	34.3	10.1
300	561	606	421	521	442	42.9	10.1
400	634	687	490	580	508	57.2	10.1
500	705	766	539	635	556	71.5	10.1

Installation

Maximum pulling tension Conductor kN	Armour kN	Minimum bending radius During pulling mm	Set in position mm	Nominal duct dia. mm
7.4	40	1140	760	100
11	41	1190	790	100
15	44	1260	840	100
20	47	1340	890	125
25	64	1430	960	125
32	67	1500	1000	125
39	70	1570	1040	125
50	75	1670	1110	150
63	80	1780	1190	150
84	86	1900	1270	200
105	92	2020	1350	200

Electrical Characteristics

Nominal conductor area mm²	Maximum Conductor DC resistance at 20°C Ohm/km	Conductor AC resistance at 50Hz and 90°C Ohm/km	Inductive reactance at 50Hz Ohm/km	Insulation resistance at 20°C MegOhm.km	Conductor to screen capacitance μF/km	Charging current per phase A/km	Dielectric loss per phase W/km	Maximum dielectric stress kV/mm	DC resistance of screens at 20°C Ohm/km	Armour DC resistance at 20°C Ohm/km	Zero sequence resistance at 20°C Ohm/km	Zero seq. react. at 50Hz Ohm/km
35	0.524	0.668	0.141	16000	0.156	0.622	31.6	3.63	0.531	0.487	1.29	0.0923
50	0.387	0.494	0.134	14000	0.171	0.682	34.7	3.48	0.367	0.465	1.00	0.0858
70	0.268	0.342	0.127	13000	0.192	0.765	38.9	3.31	0.265	0.438	0.763	0.0786
95	0.193	0.247	0.117	11000	0.216	0.862	43.8	3.16	0.265	0.408	0.675	0.0693
120	0.153	0.196	0.112	10000	0.236	0.942	47.8	3.07	0.265	0.302	0.577	0.0648
150	0.124	0.160	0.109	9500	0.254	1.01	51.5	3.00	0.266	0.288	0.540	0.0615
185	0.0991	0.128	0.105	8800	0.274	1.09	55.6	2.93	0.266	0.276	0.506	0.0582
240	0.0754	0.0981	0.101	7900	0.305	1.22	61.8	2.85	0.265	0.257	0.468	0.0542
300	0.0601	0.0792	0.0988	7200	0.334	1.33	67.8	2.79	0.265	0.241	0.440	0.0519
400	0.0470	0.0633	0.0944	6500	0.371	1.48	75.1	2.73	0.265	0.224	0.413	0.0477
500	0.0373	0.0518	0.0915	5900	0.407	1.62	82.4	2.69	0.265	0.209	0.390	0.0450

12.7/22kV Three Core
Ind. Screened PVC/SWA/PVC Sheathed

Aluminium Conductors, up to 10kA Fault Level

Nominal conductor area mm²	Nominal conductor diameter mm	Nominal insulation thickness mm	Nominal diameter over insulation mm	Nominal screen area mm²	Number and nominal diameter of screen wires no/mm	Nominal diameter over wire screen mm	Nominal diameter over armour bedding mm	Normal Armour wire diameter mm	Nominal diameter over armour mm	Nominal overall diameter mm	Approx. mass kg/100m	Product code
35	6.9	5.5	19.2	23.8	14/0.85	22.5	52.3	2.5	57.3	63.3	535	XLJA18AA003
50	8.1	5.5	20.3	32.3	19/0.85	23.6	54.9	2.5	59.9	66.1	585	XLJA19AA003
70	9.6	5.5	21.9	46.0	27/0.85	25.2	58.6	2.5	63.6	70.0	665	XLJA20AA003
95	11.4	5.5	23.6	61.3	36/0.85	26.9	62.3	2.5	67.3	74.1	750	XLJA22AA003
120	12.8	5.5	25.0	68.1	40/0.85	28.3	65.5	3.15	71.8	78.8	900	XLJA23AA003
150	14.2	5.5	26.4	68.1	40/0.85	29.7	68.7	3.15	75.0	82.3	975	XLJA24AA003
185	15.7	5.5	27.9	68.1	40/0.85	31.2	72.0	3.15	78.3	85.9	1040	XLJA25AA003
240	18.0	5.5	30.3	68.1	40/0.85	33.6	77.1	3.15	83.4	91.3	1160	XLJA26AA003
300	20.1	5.5	32.6	68.1	40/0.85	36.1	82.8	3.15	89.1	97.3	1300	XLJA27AA003
400	23.0	5.5	35.4	68.1	40/0.85	38.9	89.3	3.15	95.6	104.2	1480	XLJA28AA003
500	26.5	5.5	39.0	68.1	40/0.85	42.5	97.1	3.15	103.4	112.5	1700	XLJA30AA003

Current Ratings

Nominal conductor area mm²	Continuous current-carrying capacity, A In air			In ground		Fault current carrying capacity for 1 second Conductor kA	Screen kA
							
35	130	138	101	133	111	3.31	3.53
50	155	165	119	157	130	4.73	4.80
70	191	204	146	191	159	6.62	6.82
95	230	246	180	227	193	8.99	9.09
120	264	283	205	258	219	11.4	10.1
150	297	319	229	287	244	14.2	10.1
185	337	362	258	323	275	17.5	10.1
240	394	424	299	372	316	22.7	10.1
300	446	481	336	416	353	28.4	10.1
400	510	552	396	469	412	37.8	10.1
500	579	628	445	524	459	47.3	10.1

Installation

Maximum pulling tension Conductor kN	Armour kN	Minimum bending radius During pulling mm	Set in position mm	Nominal duct dia. mm
5.3	40	1140	760	100
7.5	41	1190	790	100
11	45	1260	840	100
14	47	1330	890	125
18	63	1420	950	125
23	66	1480	990	125
28	69	1550	1030	125
36	74	1640	1100	150
45	79	1750	1170	150
60	85	1880	1250	200
75	92	2020	1350	200

Electrical Characteristics

Nominal conductor area mm²	Maximum Conductor DC resistance at 20°C Ohm/km	Conductor AC resistance at 50Hz and 90°C Ohm/km	Inductive reactance at 50Hz Ohm/km	Insulation resistance at 20°C MegOhm.km	Conductor to screen capacitance μF/km	Charging current per phase A/km	Dielectric loss per phase W/km	Maximum dielectric stress kV/mm	DC resistance of screens at 20°C Ohm/km	Armour DC resistance at 20°C Ohm/km	Zero sequence resistance at 20°C Ohm/km	Zero seq. react. at 50Hz Ohm/km
35	0.868	1.11	0.140	15000	0.157	0.626	31.8	3.62	0.759	0.487	1.76	0.0919
50	0.641	0.821	0.134	14000	0.172	0.685	34.8	3.47	0.560	0.465	1.40	0.0855
70	0.443	0.568	0.124	13000	0.192	0.768	39.0	3.30	0.393	0.431	1.06	0.0757
95	0.320	0.410	0.117	11000	0.214	0.855	43.4	3.17	0.294	0.408	0.833	0.0697
120	0.253	0.325	0.113	10000	0.232	0.926	47.0	3.08	0.265	0.307	0.680	0.0657
150	0.206	0.265	0.110	9700	0.250	0.997	50.7	3.01	0.266	0.293	0.624	0.0622
185	0.164	0.211	0.106	9000	0.269	1.07	54.5	2.95	0.265	0.280	0.573	0.0591
240	0.125	0.161	0.102	8100	0.298	1.19	60.4	2.87	0.265	0.261	0.520	0.0550
300	0.100	0.130	0.0996	7400	0.327	1.30	66.3	2.81	0.265	0.244	0.482	0.0527
400	0.0778	0.102	0.0951	6700	0.363	1.45	73.5	2.75	0.266	0.226	0.446	0.0484
500	0.0617	0.0819	0.0915	5900	0.407	1.62	82.4	2.69	0.265	0.209	0.414	0.0450