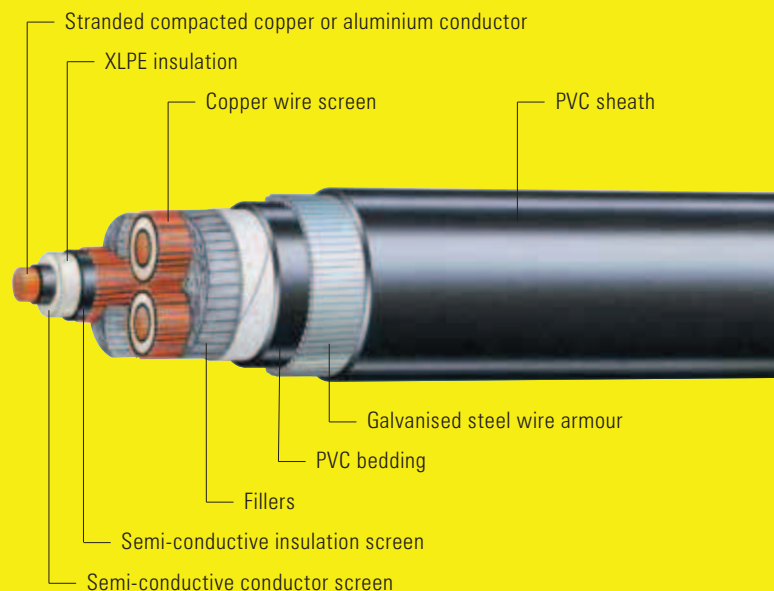




ee Core

3.8/6.6 to 19/33kV SWA



6.35/11kV Three Core

Ind. Screened PVC/SWA/PVC Sheathed

Copper Conductors, up to 10kA Fault Level

Nominal conductor area	Nominal conductor diameter	Nominal insulation thickness	Nominal diameter over insulation	Nominal screen area	Number and nominal diameter of screen wires	Nominal diameter over wire screen	Nominal diameter over armour bedding	Normal Armour wire diameter	Nominal diameter over armour	Nominal overall diameter	Approx. mass	Product code
mm ²	mm	mm	mm	mm ²	no/mm	mm	mm	mm	mm	mm	kg/100m	
16	4.8	3.4	12.8	17.0	10/0.85	16.1	37.9	2.0	41.9	46.9	330	XJJP15AA003
25	5.8	3.4	13.8	25.5	15/0.85	17.1	40.2	2.5	45.2	50.4	430	XJJP17AA003
35	6.8	3.4	14.8	34.0	20/0.85	18.1	42.6	2.5	47.6	53.0	490	XJJP18AA003
50	8.0	3.4	16.0	49.4	29/0.85	19.3	45.1	2.5	50.1	55.7	565	XJJP19AA003
70	9.6	3.4	17.6	68.1	40/0.85	20.9	48.8	2.5	53.8	59.6	680	XJJP20AA003
95	11.5	3.4	19.4	68.1	40/0.85	22.7	53.0	2.5	58.0	64.1	795	XJJP22AA003
120	13.1	3.4	21.0	68.1	40/0.85	24.3	56.4	2.5	61.4	67.9	910	XJJP23AA003
150	14.5	3.4	22.4	68.1	40/0.85	25.7	59.9	2.5	64.9	71.5	1020	XJJP24AA003
185	16.1	3.4	24.1	68.1	40/0.85	27.4	63.3	2.5	68.3	75.2	1150	XJJP25AA003
240	18.5	3.4	26.5	68.1	40/0.85	29.8	68.8	3.15	75.1	82.3	1470	XJJP26AA003
300	20.7	3.4	28.9	68.1	40/0.85	32.2	74.1	3.15	80.4	88.0	1710	XJJP27AA003
400	23.6	3.4	31.8	68.1	40/0.85	35.3	81.2	3.15	87.5	95.5	2070	XJJP28AA003
500	26.5	3.4	34.7	68.1	40/0.85	38.2	87.6	3.15	93.9	102.4	2450	XJJP30AA003

Current Ratings

Nominal conductor area	Continuous current-carrying capacity, A					Fault current carrying capacity for 1 second	
mm ²	In air	In air	In ground	In ground	In ground	Conductor kA	Screen kA
16	105	111	79	112	90	2.29	2.52
25	136	145	104	143	116	3.57	3.79
35	164	174	124	171	138	5.00	5.05
50	195	208	150	201	165	7.15	7.32
70	241	257	183	245	201	10.0	10.1
95	291	312	220	292	240	13.6	10.1
120	334	359	250	330	272	17.1	10.1
150	375	403	288	367	309	21.4	10.1
185	426	458	324	412	347	26.4	10.1
240	495	534	373	469	396	34.3	10.1
300	556	602	416	521	440	42.9	10.1
400	629	682	467	579	490	57.2	10.1
500	699	760	535	634	555	71.5	10.1

Installation

Maximum pulling tension		Minimum bending radius		Nominal duct dia.
Conductor	Armour	During pulling	Set in position	mm
kN	kN	mm	mm	
3.4	24	840	560	65
5.3	31	910	610	80
7.4	33	950	640	80
11	34	1000	670	100
15	37	1070	710	100
20	40	1150	770	100
25	43	1220	810	100
32	45	1290	860	125
39	48	1350	900	125
50	66	1480	990	125
63	71	1580	1060	150
84	77	1720	1150	150
105	83	1840	1230	200

Electrical Characteristics

Nominal conductor area	Maximum Conductor DC resistance at 20°C	Conductor AC resistance at 50Hz and 90°C	Inductive reactance at 50Hz	Insulation resistance at 20°C	Conductor to screen capacitance	Charging current per phase	Dielectric loss per phase	Maximum dielectric stress	DC resistance of screens at 20°C	Armour DC resistance at 20°C	Zero sequence resistance at 20°C	Zero seq. react. at 50Hz
mm ²	Ohm/km	Ohm/km	Ohm/km	MegOhm.km	μF/km	A/km	W/km	kV/mm	Ohm/km	Ohm/km	Ohm/km	Ohm/km
16	1.15	1.47	0.142	14000	0.177	0.354	8.98	2.77	1.06	0.770	2.49	0.0922
25	0.727	0.927	0.134	12000	0.198	0.394	10.0	2.65	0.707	0.629	1.73	0.0845
35	0.524	0.668	0.127	11000	0.219	0.436	11.1	2.55	0.530	0.592	1.36	0.0782
50	0.387	0.494	0.121	10000	0.242	0.484	12.3	2.46	0.366	0.559	1.05	0.0725
70	0.268	0.342	0.115	8800	0.275	0.549	13.9	2.37	0.265	0.521	0.795	0.0663
95	0.193	0.247	0.106	7700	0.314	0.626	15.9	2.30	0.265	0.479	0.706	0.0580
120	0.153	0.196	0.102	7000	0.346	0.689	17.5	2.25	0.265	0.451	0.655	0.0543
150	0.124	0.160	0.0990	6400	0.374	0.747	19.0	2.21	0.266	0.425	0.616	0.0515
185	0.0991	0.128	0.0961	5900	0.407	0.811	20.6	2.17	0.265	0.403	0.580	0.0488
240	0.0754	0.0985	0.0926	5300	0.456	0.909	23.1	2.13	0.266	0.293	0.495	0.0455
300	0.0601	0.0796	0.0904	4800	0.503	1.00	25.5	2.10	0.265	0.272	0.464	0.0434
400	0.0470	0.0638	0.0870	4300	0.561	1.12	28.5	2.07	0.265	0.250	0.435	0.0403
500	0.0373	0.0525	0.0847	3900	0.620	1.24	31.4	2.05	0.265	0.232	0.411	0.0381



6.35/11kV Three Core

Ind. Screened PVC/SWA/PVC Sheathed

Aluminium Conductors, up to 10kA Fault Level

Nominal conductor area	Nominal conductor diameter	Nominal insulation thickness	Nominal diameter over insulation	Nominal screen area	Number and nominal diameter of screen wires	Nominal diameter over wire screen	Nominal diameter over armour bedding	Normal Armour wire diameter	Nominal diameter over armour	Nominal overall diameter	Approx. mass	Product code
mm ²	mm	mm	mm	mm ²	no/mm	mm	mm	mm	mm	mm	kg/100m	
35	6.9	3.4	14.9	23.8	14/0.85	18.2	42.6	2.5	47.6	53.0	415	XJJA18AA003
50	8.1	3.4	16.0	32.3	19/0.85	19.3	45.2	2.5	50.2	55.8	460	XJJA19AA003
70	9.6	3.4	17.6	46.0	27/0.85	20.9	48.9	2.5	53.9	59.7	530	XJJA20AA003
95	11.4	3.4	19.3	61.3	36/0.85	22.6	52.8	2.5	57.8	63.8	610	XJJA22AA003
120	12.8	3.4	20.7	68.1	40/0.85	24.0	55.8	2.5	60.8	67.2	675	XJJA23AA003
150	14.2	3.4	22.1	68.1	40/0.85	25.4	59.0	2.5	64.0	70.7	730	XJJA24AA003
185	15.7	3.4	23.6	68.1	40/0.85	26.9	62.3	2.5	67.3	74.1	800	XJJA25AA003
240	18.0	3.4	25.9	68.1	40/0.85	29.2	67.4	3.15	73.7	81.0	990	XJJA26AA003
300	20.1	3.4	28.3	68.1	40/0.85	31.6	72.6	3.15	78.9	86.6	1110	XJJA27AA003
400	23.0	3.4	31.1	68.1	40/0.85	34.6	79.8	3.15	86.1	94.1	1290	XJJA28AA003
500	26.5	3.4	34.7	68.1	40/0.85	38.2	87.6	3.15	93.9	102.4	1500	XJJA30AA003

Current Ratings

Nominal conductor area	Continuous current-carrying capacity, A					Fault current carrying capacity for 1 second	
mm ²	In air	In air	In ground	In ground	In ground	Conductor kA	Screen kA
35	127	136	96	133	107	3.31	3.53
50	152	162	117	157	129	4.73	4.80
70	188	201	143	191	157	6.62	6.82
95	227	243	171	227	187	8.99	9.09
120	260	279	195	258	212	11.4	10.1
150	293	315	218	287	237	14.2	10.1
185	333	359	255	323	273	17.5	10.1
240	391	422	296	372	315	22.7	10.1
300	442	478	332	416	352	28.4	10.1
400	507	549	378	469	397	37.8	10.1
500	576	626	442	524	458	47.3	10.1

Installation

Maximum pulling tension		Minimum bending radius		Nominal duct dia.
Conductor	Armour	During pulling	Set in position	mm
kN	kN	mm	mm	
5.3	33	950	640	80
7.5	34	1010	670	100
11	37	1070	720	100
14	40	1150	770	100
18	42	1210	810	100
23	45	1270	850	100
28	47	1330	890	125
36	65	1460	970	125
45	69	1560	1040	125
60	76	1690	1130	150
75	83	1840	1230	200

Electrical Characteristics

Nominal conductor area	Maximum Conductor DC resistance at 20°C	Conductor AC resistance at 50Hz and 90°C	Inductive reactance at 50Hz	Insulation resistance at 20°C	Conductor to screen capacitance	Charging current per phase	Dielectric loss per phase	Maximum dielectric stress	DC resistance of screens at 20°C	Armour DC resistance at 20°C	Zero sequence resistance at 20°C	Zero seq. react. at 50Hz
mm ²	Ohm/km	Ohm/km	Ohm/km	MegOhm.km	μF/km	A/km	W/km	kV/mm	Ohm/km	Ohm/km	Ohm/km	Ohm/km
35	0.868	1.11	0.127	11000	0.220	0.439	11.1	2.54	0.758	0.592	1.87	0.0779
50	0.641	0.821	0.121	9900	0.243	0.486	12.3	2.46	0.559	0.559	1.48	0.0723
70	0.443	0.569	0.112	8700	0.276	0.551	14.0	2.37	0.393	0.521	1.12	0.0634
95	0.320	0.410	0.106	7800	0.311	0.620	15.8	2.30	0.295	0.479	0.868	0.0583
120	0.253	0.325	0.103	7100	0.339	0.677	17.2	2.25	0.265	0.458	0.757	0.0549
150	0.206	0.265	0.0996	6600	0.368	0.734	18.6	2.22	0.265	0.431	0.699	0.0520
185	0.164	0.211	0.0968	6100	0.398	0.794	20.2	2.18	0.265	0.408	0.646	0.0494
240	0.125	0.161	0.0933	5400	0.445	0.887	22.5	2.14	0.266	0.297	0.546	0.0461
300	0.100	0.130	0.0910	4900	0.491	0.980	24.9	2.11	0.266	0.280	0.510	0.0441
400	0.0778	0.102	0.0876	4400	0.548	1.09	27.8	2.08	0.266	0.254	0.468	0.0409
500	0.0617	0.0823	0.0847	3900	0.620	1.24	31.4	2.05	0.265	0.232	0.434	0.0381