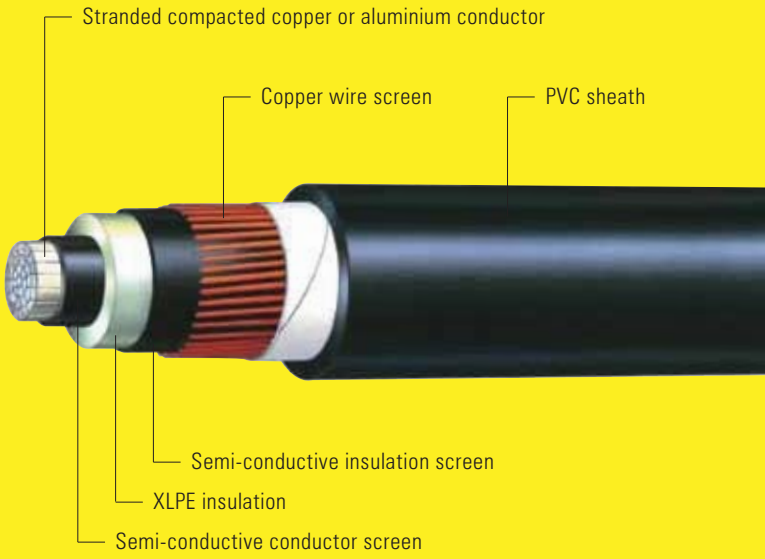
gle Core

3.8/6.6 to 19/33kV



Olex
a Nexans company

12.7/22kV Single Core Screened & 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 on each core	Number and nominal diameter of screen wires	Nominal diameter over wire screen	Nominal overall diameter	Approx. mass	Product code	Max. pulling tension	Min. bending radius		Nominal duct diameter	
											During pulling	Set in position	3 cables	1 cable
mm^2	mm	mm	mm	mm^2	no/mm	mm	mm	kg/100m		kN	mm	mm	mm	mm
35	6.8	5.5	19.1	34.4	24/1.35	23.4	27.5	115	XLHP18AA001	2.5	500	330	50	80
50	8.0	5.5	20.3	48.7	34/1.35	24.6	28.7	140	XLHP19AA001	3.5	520	340	50	80
70	9.6	5.5	21.9	68.7	48/1.35	26.2	30.5	185	XLHP20AA001	4.9	550	370	63	100
95	11.5	5.5	23.8	68.7	48/1.35	28.1	32.4	215	XLHP22AA001	6.7	580	390	63	100
120	13.1	5.5	25.3	68.7	48/1.35	29.6	34.1	245	XLHP23AA001	8.4	610	410	63	100
150	14.5	5.5	26.8	68.7	48/1.35	31.1	35.6	275	XLHP24AA001	11	640	430	63	100
185	16.1	5.5	28.4	68.7	48/1.35	32.7	37.4	310	XLHP25AA001	13	670	450	63	150
240	18.5	5.5	30.8	68.7	48/1.35	35.1	40.0	375	XLHP26AA001	17	720	480	65	150
300	20.7	5.5	33.2	68.7	48/1.35	37.7	42.6	440	XLHP27AA001	21	770	510	65	150
400	23.6	5.5	36.1	68.7	48/1.35	40.6	46.1	535	XLHP28AA001	28	830	550	65	150
500	26.5	5.5	39.0	68.7	48/1.35	43.5	49.0	640	XLHP30AA001	35	880	590	80	150
630	29.9	5.5	42.7	68.7	48/1.35	47.2	53.4	765	XLHP32AA001	44	960	640	80	200
800	35.9	5.5	48.8	68.7	48/1.35	53.3	59.7	965	XLHP33AA001	56	1070	720	100	200
1000	40.2	5.5	54.3	68.7	48/1.35	58.8	65.4	1160	XLHP34AA001	70	1180	780	100	200
1200	43.8	5.5	58.3	68.7	48/1.35	62.8	69.6	1360	XLHP50AA001	84	1250	840	100	200

Current Ratings

Nominal conductor area	Continuous current-carrying capacity, A												Fault current carrying capacity for 1 second	
	In air					In ground			In underground ducts					
														
mm^2	Solid Bond	Solid Bond	Solid Bond	Solid Bond	Solid Bond	Solid Bond	Solid Bond	Solid Bond	Solid Bond	Solid Bond	Solid Bond	Solid Bond	Cond. kA	Screen kA
35	186	212	173	182	130	177	179	174	157	157	155	144	5.00	5.09
50	221	251	206	217	157	208	208	205	183	182	181	172	7.15	7.22
70	272	307	254	269	192	251	248	249	220	217	221	209	10.0	10.1
95	329	369	309	327	230	297	292	297	259	252	261	249	13.6	10.1
120	376	420	355	377	262	335	326	336	290	280	294	282	17.1	10.2
150	423	469	400	425	293	371	358	374	319	305	326	314	21.4	10.2
185	479	526	456	485	342	413	394	421	354	335	365	362	26.4	10.2
240	556	604	534	568	396	469	441	483	399	373	417	417	34.3	10.2
300	627	674	608	647	446	519	482	541	440	406	465	466	42.9	10.2
400	710	752	697	743	504	574	526	607	485	441	520	523	57.2	10.2
500	798	835	794	847	567	632	570	679	526	472	572	585	71.5	10.2
630	889	916	898	959	662	689	612	752	574	508	635	673	90.0	10.2
800	999	1020	1022	1093	738	748	657	829	613	539	687	741	114	10.2
1000	1150	1125	1211	1295	861	839	707	961	674	579	772	856	143	10.2
1200	1239	1196	1326	1420	932	888	738	1036	715	606	832	921	171	10.2

Electrical Characteristics

Nominal conductor area	Maximum Conductor DC resistance at 20°C	Cond. AC resistance at 50Hz and 90°C		Inductive reactance at 50Hz and 90°C			Insulation resistance at 20°C	Conductor to screen capacitance	Charging current per phase	Dielectric loss per phase	Maximum dielectric stress	Screen DC resistance at 20°C	Zero sequence resistance at 20°C	Zero seq. react. at 50Hz
		Trefoil or flat touching	Flat spaced	Trefoil touching	Flat touching	Flat spaced								
mm^2	Ohm/km	Ohm/km	Ohm/km	Ohm/km	Ohm/km	Ohm/km	MegOhm.km	μF/km	A/km	W/km	kV/mm	Ohm/km	Ohm/km	Ohm/km
35	0.524	0.668	0.668	0.159	0.174	0.219	16000	0.156	0.622	31.6	3.63	0.526	1.05	0.0937
50	0.387	0.494	0.494	0.151	0.166	0.212	14000	0.171	0.682	34.7	3.48	0.371	0.758	0.0871
70	0.268	0.342	0.342	0.143	0.158	0.204	13000	0.192	0.765	38.9	3.31	0.263	0.531	0.0799
95	0.193	0.247	0.247	0.132	0.147	0.193	11000	0.216	0.862	43.8	3.16	0.263	0.457	0.0705
120	0.153	0.196	0.195	0.127	0.143	0.188	10000	0.236	0.942	47.8	3.07	0.263	0.417	0.0660
150	0.124	0.159	0.159	0.123	0.138	0.184	9500	0.254	1.01	51.5	3.00	0.262	0.387	0.0626
185	0.0991	0.128	0.127	0.119	0.135	0.180	8800	0.274	1.09	55.6	2.93	0.263	0.363	0.0593
240	0.0754	0.0978	0.0972	0.115	0.130	0.176	7900	0.305	1.22	61.8	2.85	0.263	0.340	0.0551
300	0.0601	0.0788	0.0780	0.112	0.127	0.172	7200	0.334	1.33	67.8	2.79	0.263	0.325	0.0528
400	0.0470	0.0628	0.0617	0.107	0.122	0.168	6500	0.371	1.48	75.1	2.73	0.263	0.312	0.0485
500	0.0366	0.0503	0.0488	0.104	0.119	0.165	5900	0.407	1.62	82.4	2.69	0.263	0.302	0.0457
630	0.0283	0.0407	0.0388	0.101	0.117	0.162	5300	0.453	1.81	91.8	2.64	0.263	0.294	0.0436
800	0.0221	0.0341	0.0317	0.0960	0.111	0.157	4600	0.528	2.11	107	2.58	0.263	0.288	0.0392
1000	0.0182	0.0246	0.0240	0.0948	0.110	0.156	4000	0.597	2.38	121	2.54	0.263	0.282	0.0387
1200	0.0150	0.0208	0.0201	0.0932	0.108	0.154	3700	0.646	2.58	131	2.51	0.263	0.279	0.0375

12.7/22kV Single Core Screened & 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 on each core	Number and nominal diameter of screen wires	Nominal diameter over wire screen	Nominal overall diameter	Approx. mass	Product code	Max. pulling tension	Min. bending radius		Nominal duct diameter	
											During pulling	Set in position		
mm^2	mm	mm	mm	mm^2	no/mm	mm	mm	kg/100m		kN	mm	mm	mm	mm
35	6.9	5.5	19.2	22.7	40/0.85	22.5	26.6	81	XLHA18AA001	1.8	480	320	50	80
50	8.1	5.5	20.3	32.9	23/1.35	24.6	28.7	98	XLHA19AA001	2.5	520	340	50	80
70	9.6	5.5	21.9	45.8	32/1.35	26.2	30.5	120	XLHA20AA001	3.5	550	370	63	100
95	11.4	5.5	23.6	61.5	43/1.35	27.9	32.2	150	XLHA22AA001	4.8	580	390	63	100
120	12.8	5.5	25.0	68.7	48/1.35	29.3	33.8	170	XLHA23AA001	6.0	610	410	63	100
150	14.2	5.5	26.4	68.7	48/1.35	30.7	35.2	180	XLHA24AA001	7.5	630	420	63	100
185	15.7	5.5	27.9	68.7	48/1.35	32.2	36.9	195	XLHA25AA001	9.3	670	440	63	100
240	18.0	5.5	30.3	68.7	48/1.35	34.6	39.5	220	XLHA26AA001	12	710	470	65	150
300	20.1	5.5	32.6	68.7	48/1.35	37.1	42.0	245	XLHA27AA001	15	760	500	65	150
400	23.0	5.5	35.4	68.7	48/1.35	39.9	45.2	280	XLHA28AA001	20	810	540	65	150
500	26.5	5.5	39.0	68.7	48/1.35	43.5	49.0	325	XLHA30AA001	25	880	590	80	150
630	29.9	5.5	42.7	68.7	48/1.35	47.2	53.1	380	XLHA32AA001	32	960	640	80	200
800	34.2	5.5	47.1	68.7	48/1.35	51.6	57.7	445	XLHA33AA001	40	1040	690	100	200
1000	40.2	5.5	54.3	68.7	48/1.35	58.8	65.1	540	XLHA34AA001	50	1170	780	100	200
1200	43.8	5.5	58.3	68.7	48/1.35	62.8	69.3	620	XLHA50AA001	60	1250	830	100	200

Current Ratings

Nominal conductor area	Continuous current-carrying capacity, A												Fault current carrying capacity for 1 second	
	In air					In ground			In underground ducts					
mm^2	Solid Bond	Solid Bond	Solid Bond	Solid Bond	Solid Bond	Solid Bond	Solid Bond	Solid Bond	Solid Bond	Solid Bond	Solid Bond	Solid Bond	Cond. kA	Screen kA
35	143	164	133	140	100	138	139	135	122	123	120	111	3.31	3.37
50	173	198	160	169	122	163	164	159	144	145	142	134	4.73	4.88
70	214	244	199	210	150	198	199	194	177	176	175	163	6.62	6.79
95	258	293	240	255	179	234	233	232	207	205	206	194	8.99	9.13
120	295	334	276	293	204	264	261	262	232	228	233	220	11.4	10.2
150	333	375	312	331	229	294	289	293	257	251	259	246	14.2	10.2
185	379	424	356	378	268	329	321	330	287	278	290	284	17.5	10.2
240	443	492	419	446	312	377	364	381	329	315	336	329	22.7	10.2
300	504	553	479	509	352	420	402	428	365	346	376	369	28.4	10.2
400	579	629	555	591	403	473	446	486	408	382	425	420	37.8	10.2
500	666	715	644	687	461	530	494	552	454	420	479	476	47.3	10.2
630	757	801	742	791	547	590	540	622	503	458	538	557	59.6	10.2
800	855	894	848	906	616	649	587	695	545	491	591	622	75.7	10.2
1000	993	1007	1002	1072	715	729	640	799	606	536	669	712	94.6	10.2
1200	1084	1083	1109	1186	782	781	675	870	648	565	725	773	114	10.2

Electrical Characteristics

Nominal conductor area	Maximum Conductor DC resistance at 20°C	Cond. AC resistance at 50Hz and 90°C		Inductive reactance at 50Hz and 90°C			Insulation resistance at 20°C	Conductor to screen capacitance	Charging current per phase	Dielectric loss per phase	Maximum dielectric stress	Screen DC resistance at 20°C	Zero sequence resistance at 20°C	Zero seq. react. at 50Hz
		Trefoil or flat touching	Flat spaced	Trefoil touching	Flat touching	Flat spaced								
mm^2	Ohm/km	Ohm/km	Ohm/km	Ohm/km	Ohm/km	Ohm/km	MegOhm.km	μF/km	A/km	W/km	kV/mm	Ohm/km	Ohm/km	Ohm/km
35	0.868	1.11	1.11	0.156	0.171	0.217	15000	0.157	0.626	31.8	3.62	0.797	1.67	0.0919
50	0.641	0.821	0.821	0.151	0.166	0.212	14000	0.172	0.685	34.8	3.47	0.549	1.19	0.0869
70	0.443	0.568	0.568	0.140	0.155	0.201	13000	0.192	0.768	39.0	3.30	0.395	0.838	0.0769
95	0.320	0.410	0.410	0.133	0.148	0.194	11000	0.214	0.855	43.4	3.17	0.293	0.613	0.0709
120	0.253	0.325	0.325	0.128	0.143	0.189	10000	0.232	0.926	47.0	3.08	0.263	0.516	0.0668
150	0.206	0.264	0.264	0.124	0.139	0.185	9700	0.250	0.997	50.7	3.01	0.262	0.469	0.0633
185	0.164	0.211	0.211	0.121	0.136	0.181	9000	0.269	1.07	54.5	2.95	0.263	0.428	0.0601
240	0.125	0.161	0.161	0.116	0.131	0.177	8100	0.298	1.19	60.4	2.87	0.263	0.388	0.0560
300	0.100	0.129	0.129	0.113	0.128	0.173	7400	0.327	1.30	66.3	2.81	0.263	0.364	0.0536
400	0.0778	0.102	0.101	0.108	0.123	0.169	6700	0.363	1.45	73.5	2.75	0.263	0.342	0.0492
500	0.0605	0.0800	0.0790	0.104	0.119	0.165	5900	0.407	1.62	82.4	2.69	0.263	0.325	0.0457
630	0.0469	0.0632	0.0619	0.101	0.116	0.162	5300	0.453	1.81	91.9	2.64	0.263	0.312	0.0436
800	0.0367	0.0511	0.0493	0.0976	0.113	0.159	4800	0.507	2.02	103	2.59	0.263	0.302	0.0408
1000	0.0298	0.0391	0.0387	0.0945	0.110	0.155	4000	0.597	2.38	121	2.54	0.263	0.294	0.0387
1200	0.0247	0.0328	0.0323	0.0930	0.108	0.154	3700	0.646	2.58	131	2.51	0.263	0.288	0.0375