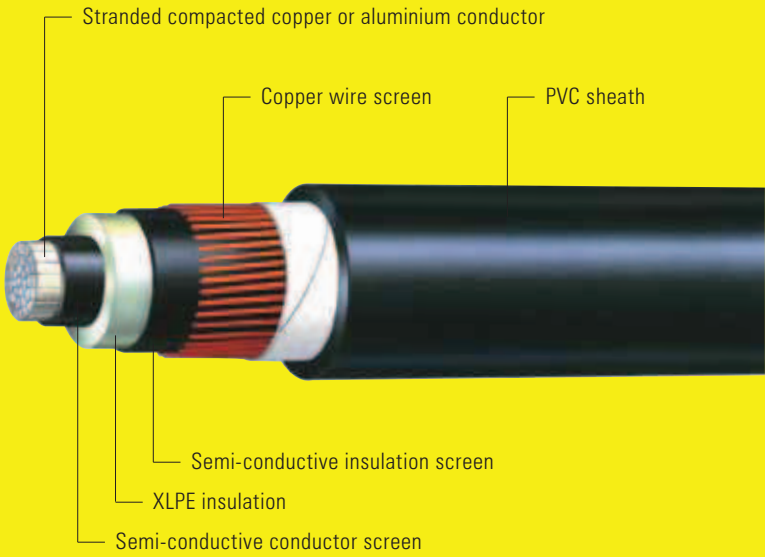
gle Core

3.8/6.6 to 19/33kV



Nexans Olex

19/33kV 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		
mm^2	mm	mm	mm	mm^2	no/mm	mm	mm	kg/100m		kN	mm	mm	mm	mm
50	8.0	8.0	25.5	48.7	34/1.35	29.8	34.3	170	XNHP19AA001	3.5	620	410	63	100
70	9.6	8.0	27.1	68.7	48/1.35	31.4	36.1	215	XNHP20AA001	4.9	650	430	63	100
95	11.5	8.0	29.0	68.7	48/1.35	33.3	38.0	245	XNHP22AA001	6.7	680	460	65	150
120	13.1	8.0	30.6	68.7	48/1.35	34.9	39.8	280	XNHP23AA001	8.4	720	480	65	150
150	14.5	8.0	32.0	68.7	48/1.35	36.5	41.4	310	XNHP24AA001	11	750	500	65	150
185	16.1	8.0	33.6	68.7	48/1.35	38.1	43.2	345	XNHP25AA001	13	780	520	65	150
240	18.5	8.0	36.0	68.7	48/1.35	40.5	45.9	410	XNHP26AA001	17	830	550	65	150
300	20.7	8.0	38.4	68.7	48/1.35	42.9	48.4	475	XNHP27AA001	21	870	580	80	150
400	23.6	8.0	41.3	68.7	48/1.35	45.8	51.5	575	XNHP28AA001	28	930	620	80	150
500	26.5	8.0	44.2	68.7	48/1.35	48.7	54.9	685	XNHP30AA001	35	990	660	80	200
630	29.9	8.0	47.9	68.7	48/1.35	52.4	58.8	815	XNHP32AA001	44	1060	710	100	200
800	35.9	8.0	54.0	68.7	48/1.35	58.5	65.3	1020	XNHP33AA001	56	1180	780	100	200
1000	40.2	8.0	59.5	68.7	48/1.35	64.0	71.0	1220	XNHP34AA001	70	1280	850	125	200
1200	43.8	8.0	63.5	68.7	48/1.35	68.0	75.2	1420	XNHP50AA001	84	1350	900	125	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					
	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.	Screen
mm^2													kA	kA
50	224	250	210	221	160	208	209	205	187	186	185	174	7.15	7.22
70	276	306	259	273	202	251	249	249	223	219	223	216	10.0	10.1
95	333	369	315	332	242	297	292	297	265	258	267	258	13.6	10.1
120	381	420	361	381	276	335	327	336	296	287	300	292	17.1	10.2
150	429	469	407	430	308	372	359	375	327	313	333	325	21.4	10.2
185	485	527	463	490	348	414	397	421	362	343	372	366	26.4	10.2
240	563	605	542	574	402	471	444	485	408	382	425	420	34.3	10.2
300	634	674	616	653	452	521	485	542	446	413	471	469	42.9	10.2
400	719	756	706	750	533	579	531	610	492	449	526	547	57.2	10.2
500	807	837	803	854	600	637	574	682	539	484	585	611	71.5	10.2
630	902	924	911	969	672	697	619	759	576	513	635	680	90.0	10.2
800	1012	1026	1036	1103	748	756	664	838	630	552	705	748	114	10.2
1000	1160	1131	1219	1300	888	845	713	966	661	578	749	880	143	10.2
1200	1252	1204	1337	1426	963	896	745	1043	698	603	801	948	171	10.2

Electrical Characteristics

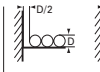
Nominal conductor area	Maximum Conductor DC resistance at 20°C	Cond. AC resistance at 50Hz and 90°C		Inductive reactance at 50Hz and 90°C			Insulation resistance at 20°C	Conductor to screen capacitance	Charging current per phase	Dielectric loss per phase	Maximum dielectric stress	Screen DC resistance 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
50	0.387	0.494	0.494	0.163	0.178	0.224	18000	0.133	0.796	60.5	4.05	0.372	0.759	0.0999
70	0.268	0.342	0.342	0.154	0.169	0.215	16000	0.148	0.883	67.1	3.82	0.263	0.531	0.0919
95	0.193	0.247	0.247	0.143	0.158	0.204	15000	0.165	0.984	74.8	3.61	0.263	0.457	0.0817
120	0.153	0.195	0.195	0.137	0.153	0.198	14000	0.179	1.07	81.1	3.48	0.263	0.416	0.0767
150	0.124	0.159	0.159	0.133	0.148	0.194	13000	0.191	1.14	86.8	3.38	0.264	0.389	0.0731
185	0.0991	0.127	0.127	0.129	0.144	0.190	12000	0.205	1.23	93.2	3.29	0.264	0.364	0.0693
240	0.0754	0.0976	0.0972	0.124	0.139	0.185	11000	0.227	1.35	103	3.17	0.263	0.340	0.0645
300	0.0601	0.0786	0.0779	0.120	0.135	0.181	9800	0.247	1.48	112	3.09	0.264	0.325	0.0612
400	0.0470	0.0625	0.0616	0.115	0.130	0.176	8900	0.272	1.62	123	3.00	0.263	0.312	0.0564
500	0.0366	0.0499	0.0487	0.111	0.126	0.172	8100	0.297	1.77	135	2.93	0.263	0.302	0.0531
630	0.0283	0.0403	0.0387	0.108	0.123	0.169	7300	0.329	1.96	149	2.86	0.263	0.294	0.0504
800	0.0221	0.0336	0.0315	0.102	0.117	0.163	6300	0.381	2.27	173	2.78	0.263	0.289	0.0452
1000	0.0182	0.0245	0.0240	0.100	0.115	0.161	5600	0.427	2.55	194	2.72	0.263	0.282	0.0441
1200	0.0150	0.0207	0.0201	0.0984	0.114	0.159	5200	0.461	2.75	209	2.68	0.263	0.279	0.0426

19/33kV 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
50	8.1	8.0	25.6	32.9	23/1.35	29.9	34.4	125	XNHA19AA001	2.5	620	410	63	100
70	9.6	8.0	27.2	45.8	32/1.35	31.5	36.2	150	XNHA20AA001	3.5	650	430	63	100
95	11.4	8.0	28.9	61.5	43/1.35	33.2	37.9	180	XNHA22AA001	4.8	680	450	63	150
120	12.8	8.0	30.3	68.7	48/1.35	34.6	39.5	200	XNHA23AA001	6.0	710	470	65	150
150	14.2	8.0	31.7	68.7	48/1.35	36.2	41.1	215	XNHA24AA001	7.5	740	490	65	150
185	15.7	8.0	33.2	68.7	48/1.35	37.7	42.8	230	XNHA25AA001	9.3	770	510	65	150
240	18.0	8.0	35.5	68.7	48/1.35	40.0	45.1	255	XNHA26AA001	12	810	540	65	150
300	20.1	8.0	37.8	68.7	48/1.35	42.3	47.8	285	XNHA27AA001	15	860	570	80	150
400	23.0	8.0	40.7	68.7	48/1.35	45.2	50.9	320	XNHA28AA001	20	920	610	80	150
500	26.5	8.0	44.2	68.7	48/1.35	48.7	54.6	370	XNHA30AA001	25	980	660	80	200
630	29.9	8.0	48.0	68.7	48/1.35	52.5	58.6	430	XNHA32AA001	32	1050	700	100	200
800	34.2	8.0	52.3	68.7	48/1.35	56.8	63.4	500	XNHA33AA001	40	1140	760	100	200
1000	40.2	8.0	59.5	68.7	48/1.35	64.0	70.8	600	XNHA34AA001	50	1270	850	100	200
1200	43.8	8.0	63.5	68.7	48/1.35	68.0	75.0	680	XNHA50AA001	60	1350	900	125	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
50	175	197	163	172	125	162	164	159	147	148	145	135	4.73	4.88
70	217	243	202	213	158	198	199	194	178	178	175	169	6.62	6.79
95	262	292	245	258	189	234	234	232	209	207	208	201	8.99	9.13
120	299	332	281	296	215	264	262	262	237	233	237	228	11.4	10.2
150	337	374	317	335	241	294	290	293	263	257	264	254	14.2	10.2
185	383	422	362	382	272	330	323	330	293	285	296	287	17.5	10.2
240	448	491	425	450	316	378	366	382	334	321	340	331	22.7	10.2
300	508	551	484	513	357	421	404	428	370	352	381	371	28.4	10.2
400	584	628	561	595	425	475	449	487	414	389	430	437	37.8	10.2
500	671	714	651	691	487	533	497	554	462	428	486	497	47.3	10.2
630	764	802	748	795	553	593	545	625	507	464	541	560	59.6	10.2
800	862	895	855	910	623	654	591	699	556	501	602	625	75.7	10.2
1000	997	1007	1006	1072	736	733	644	801	619	546	681	730	94.6	10.2
1200	1089	1085	1113	1187	805	786	681	873	639	565	710	794	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
50	0.641	0.821	0.821	0.163	0.178	0.223	18000	0.134	0.798	60.7	4.04	0.550	1.19	0.0997
70	0.443	0.568	0.568	0.151	0.166	0.212	16000	0.148	0.885	67.3	3.81	0.394	0.838	0.0890
95	0.320	0.410	0.410	0.143	0.159	0.204	15000	0.164	0.977	74.3	3.62	0.294	0.613	0.0822
120	0.253	0.325	0.325	0.138	0.154	0.199	14000	0.176	1.05	79.9	3.50	0.263	0.516	0.0776
150	0.206	0.264	0.264	0.134	0.149	0.195	13000	0.189	1.13	85.5	3.40	0.263	0.470	0.0740
185	0.164	0.211	0.211	0.130	0.145	0.191	12000	0.202	1.20	91.5	3.31	0.263	0.428	0.0703
240	0.125	0.161	0.161	0.125	0.140	0.186	11000	0.222	1.32	101	3.20	0.263	0.388	0.0655
300	0.100	0.129	0.129	0.121	0.136	0.182	10000	0.242	1.44	110	3.11	0.263	0.364	0.0622
400	0.0778	0.101	0.101	0.116	0.131	0.177	9100	0.267	1.59	121	3.02	0.263	0.342	0.0573
500	0.0605	0.0797	0.0789	0.111	0.126	0.172	8100	0.297	1.77	135	2.93	0.263	0.325	0.0531
630	0.0469	0.0629	0.0618	0.108	0.123	0.168	7300	0.329	1.96	149	2.86	0.263	0.312	0.0504
800	0.0367	0.0507	0.0492	0.104	0.119	0.165	6600	0.366	2.19	166	2.80	0.263	0.301	0.0470
1000	0.0298	0.0390	0.0387	0.1000	0.115	0.161	5600	0.427	2.55	194	2.72	0.263	0.293	0.0441
1200	0.0247	0.0327	0.0323	0.0981	0.113	0.159	5200	0.461	2.75	209	2.68	0.263	0.289	0.0426