

XLPE/PVC Single core

Single core, 0.6/1kV X-90 insulated, PVC sheathed to AS/NZS 5000.1, and Manufactured to PVC Best Practice Guidelines.

Description

- Single core, 0.6/1kV X-90 insulated,
- PVC sheathed to AS/NZS 5000.1,
- Copper or aluminium conductors, 90°C.



Standards

National AS/NZS 5000.1

Characteristics

Construction characteristics	
Outer sheath	PVC
Insulation	X-90
Electrical characteristics	
Rated Voltage U ₀ /U (Um)	0.6/1 kV



Rated Voltage U₀/U (Um)
0.6/1 kV

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Copper conductor

Cross section [mm ²]	Type of conductor	Nom. insulation thick. [mm]	Nom. outer sheath thick. [mm]	Nom. overall diam. [mm]	Approx. weight [kg/100m]	Nexans ref.
25	Compact copper	0.9	1.4	10.5	30.0	BDBC17AA001
35	Compact copper	0.9	1.4	11.5	40.0	BDBC18AA001
50	Compact copper	1.0	1.4	12.9	52.0	BDBC19AA001
70	Compact copper	1.1	1.4	14.7	73.0	BDBC20AA001
95	Compressed copper	1.1	1.5	17.2	101.0	BDBC22AA001
16	Stranded copper	0.8	1.4	9.3	21.0	BDBP15AA001
120	Compressed copper	1.2	1.5	19.6	123.0	BDBP23AA001
150	Compressed copper	1.4	1.6	21.3	152.0	BDBP24AA001
185	Compressed copper	1.6	1.6	23.5	189.0	BDBP25AA001
240	Compressed copper	1.7	1.7	26.6	246.0	BDBP26AA001
300	Compressed copper	1.8	1.8	29.4	306.0	BDBP27AA001
400	Stranded copper	2.0	1.9	33.3	386.0	BDBP28AA001
500	Stranded copper	2.2	2.0	37.0	491.0	BDBP30AA001
630	Stranded copper	2.4	2.2	41.4	635.0	BDBP32AA001

Aluminium conductor

Cross section [mm ²]	Type of conductor	Nom. insulation thick. [mm]	Nom. outer sheath thick. [mm]	Nom. overall diam. [mm]	Approx. weight [kg/100m]	Nexans ref.
35	Compact aluminium	0.9	1.4	11.8	18.0	BDBA18AA001
50	Compact aluminium	1.0	1.4	13.1	23.0	BDBA19AA001
70	Compact aluminium	1.1	1.4	14.9	31.0	BDBA20AA001
95	Compact aluminium	1.1	1.5	16.8	40.0	BDBA22AA001
120	Compact aluminium	1.2	1.5	18.4	49.0	BDBA23AA001
150	Compact aluminium	1.4	1.6	20.5	60.0	BDBA24AA001
185	Compact aluminium	1.6	1.6	22.4	72.0	BDBA25AA001
240	Compact aluminium	1.7	1.7	25.1	91.0	BDBA26AA001
300	Compact aluminium	1.8	1.8	27.6	112.0	BDBA27AA001
400	Compact aluminium	2.0	1.9	31.1	142.0	BDBA28AA001
500	Compact aluminium	2.2	2.0	35.3	185.0	BDBA30AA001

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Cross section [mm ²]	Type of conductor	Nom. insulation thick. [mm]	Nom. outer sheath thick. [mm]	Nom. overall diam. [mm]	Approx. weight [kg/100m]	Nexans ref.
630	Compact aluminium	2.4	2.2	39.5	233.0	BDBA32AA001

Current carrying capacity table single phase (in Amps)

Insulation type: X-90, X-HF-90, R-EP-90, R-CPE-90, R-HF-90 OR R-CSP-90 Maximum conductor temperature: 90°C
 Reference ambient temperature: 40°C IN AIR, 25°C IN GROUND

Conductor cross-section mm ²																		
	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al		
16	112	87	108	84	86	67	84	65	67	52	43	33	139	107	100	78	112	87
25	151	117	145	112	117	91	113	87	90	70	58	45	179	139	131	102	146	114
35	186	144	177	137	144	111	135	105	108	84	72	56	215	167	157	122	175	136
50	228	177	216	167	176	136	166	129	133	103	-	-	255	198	189	147	211	164
70	291	226	273	212	224	174	204	159	164	127	-	-	313	243	233	181	258	200
95	361	280	338	262	278	216	255	198	204	158	-	-	375	291	285	221	309	239
120	422	328	393	305	325	253	292	226	233	181	-	-	427	332	325	252	358	278
150	486	377	451	350	375	291	329	255	263	204	-	-	480	372	365	283	401	311
185	565	439	522	406	436	340	387	301	309	241	-	-	543	423	423	329	463	359
240	678	527	622	485	522	408	461	360	369	288	-	-	630	492	497	388	536	417
300	787	612	718	562	605	473	-	-	-	-	-	-	711	556	562	440	620	482
400	923	723	836	660	708	559	-	-	-	-	-	-	808	638	653	516	706	553
500	1078	850	966	772	821	656	-	-	-	-	-	-	913	729	739	590	800	632
630	1261	1003	1113	904	950	772	-	-	-	-	-	-	1026	833	856	695	930	740

-  Unenclosed spaced
-  Unenclosed spaced from surface
-  Unenclosed touching
-  Enclosed conduit in air
-  Enclosed, partially surrounded by thermal insulation
-  Enclosed, completely surrounded by thermal insulation
-  Buried direct
-  Underground ducts A
-  Underground ducts B

XLPE/PVC Single core

Current carrying capacity table three phase (in Amps)

Insulation type: X-90, X-HF-90, R-EP-90, R-CPE-90, R-HF-90 OR R-CSP-90 Maximum conductor temperature: 90°C
 Reference ambient temperature: 40°C IN AIR, 25°C IN GROUND

Conductor cross-section mm ²																		
	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al
16	108	84	92	71	86	67	72	56	58	45	43	33	117	91	86	66	101	79
25	146	113	125	97	117	91	97	75	77	60	58	45	151	117	113	87	132	103
35	180	140	154	119	144	111	120	93	96	75	72	56	180	140	137	106	158	122
50	221	171	188	146	176	136	143	111	114	89	-	-	214	166	163	126	190	147
70	282	219	240	186	224	174	183	142	146	114	-	-	262	203	203	158	232	180
95	350	271	298	232	278	216	220	171	176	137	-	-	313	243	244	190	276	214
120	410	318	349	271	325	253	261	203	209	162	-	-	356	277	284	221	320	248
150	472	366	403	313	375	291	295	229	236	183	-	-	400	310	320	249	358	277
185	550	427	468	365	435	339	335	261	268	209	-	-	452	352	363	283	413	321
240	660	513	560	438	521	407	399	312	320	250	-	-	523	409	426	333	477	371
300	766	596	648	508	602	472	469	368	375	294	-	-	589	463	491	385	552	430
400	899	705	756	599	702	557	534	424	427	339	-	-	668	530	557	442	626	491
500	1051	829	874	703	812	652	633	509	506	407	-	-	752	604	648	520	707	559
630	1230	978	1010	824	938	765	714	583	571	466	-	-	843	688	727	593	820	654

