



<b>APPLICATION</b>  For mains, submains and subcircuits unenclosed, enclosed in conduit, buried direct or in underground ducts for buildings and industrial plants where not subject to mechanical damage. Suitable where space is at a premium and/or where conditions of overload may occur.  Suitable for glanding.	<b>STANDARD VOLTAGE</b>	AS/NZS 5000.1 600/1000V
	<b>CONDUCTOR INSULATION</b>	Copper 16 – 630mm <sup>2</sup> XLPE, X-90 Natural
	<b>SHEATH</b>	PVC, 5V-90 Black
	<b>MAX. OPERATING TEMP.</b>	90°C

Item Number	Conductor		Overall Diameter		Approx. Mass	Minimum Installed Bending Radius
	mm <sup>2</sup>	(No./mm)	Minimum (mm)	Maximum (mm)	Kg/Km	mm
DC189/X	16	7/1.70	9.5	10	210	75
DC199/X	25	19/1.35	11.55	12.05	330	90
DC1109/X	35	19/1.53	12.45	12.95	410	95
DC1119/X	50	19/1.78	13.9	14.4	540	105
DC1129/X	70	19/2.14	16.1	16.6	740	120
DC1139/X	95	37/1.78	17.86	18.51	1000	135
DC1149/X	120	37/2.03	20.01	20.66	1270	150
DC1159/X	150	37/2.25	21.95	22.66	1560	165
DC1169/X	185	37/2.52	24.44	25.09	1940	185
DC1179/X	240	61/2.25	27.45	28.15	2520	205
DC1189/X	300	61/2.52	30.28	30.98	3130	230
DC1199/X	400	61/2.85	33.85	34.65	3880	255
DC11109/X	500	61/3.20	37.6	38.4	4990	285
DC11119/X	630	90/3.00	42.16	43.06	6440	320

CONDUCTOR	CURRENT RATING (a)				ELECTRICAL CHARACTERISTICS			
	Three Phase		Single Phase		Maximum DC Resistance @20°C	Maximum AC Resistance @90°C	Equivalent Star Reactance (Trefoil)	3 Phase Voltage Drop (Trefoil)
Nominal Area	In Conduit In Air	Buried In Ducts	In Conduit In Air	Buried In Ducts				
mm <sup>2</sup>	A	A	A	A				
16	72	86	84	100	1.15	1.47	0.106	2.55
25	97	113	113	131	0.727	0.927	0.102	1.62
35	120	137	135	157	0.524	0.668	0.0982	1.17
50	143	163	166	189	0.387	0.494	0.0924	0.872
70	183	203	204	233	0.268	0.342	0.0893	0.615
95	220	244	255	285	0.193	0.247	0.0868	0.457
120	261	284	292	325	0.153	0.197	0.0844	0.373
150	295	320	329	365	0.124	0.160	0.0844	0.316
185	335	363	387	423	0.0991	0.129	0.0835	0.269
240	399	426	401	497	0.0754	0.0991	0.0818	0.227
300	469	491		522	0.0601	0.0803	0.0809	0.202
400	534	557		653	0.0470	0.0646	0.0802	0.183
500	633	648		739	0.0366	0.0525	0.0796	0.170
630	714	727		856	0.02833	0.0432	0.0787	0.159

(a) Based on 40°C ambient air temperature and where applicable, burial depth of 0.5m, soil temperature of 25°C and soil resistivity of 1.2°C.m/W.

(b) Assumes formation with cables touching.

(c) For single phase voltage drop, multiple by 1.155.

The above information is from the following sources:

AS/NZS 3008.1.1:2009 (tables 5, 8, 30, 34, 40)

**AS 1125:2001 (table 2.3)**

For installation with thermal insulation refer to AS/NZS 3008 for de-rating factors.

Do not put in direct contact with polystyrene, polyurethane or similar thermal insulation materials.

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