




<b>APPLICATION</b>  For control circuits unenclosed, enclosed in conduit, buried direct or in underground ducts for commercial, industrial, mining and electricity authority systems where not subject to mechanical damage.  Suitable for glanding.	<b>STANDARD VOLTAGE</b>	AS/NZS 5000.3 600/1000V
	<b>CONDUCTOR INSULATION</b>	Copper 2.5mm <sup>2</sup> PVC, V-90 White (with markings) & Green/Yellow
	<b>SHEATH</b>	PVC, 5V-90 Black
	<b>MAX. OPERATING TEMP.</b>	90 °C

Item Number	Conductor			Overall Diameter		Approx. Mass kg/km	Minimum Installed Bending Radius mm
	Number of Cores	mm <sup>2</sup>	(No./mm)	Min mm	Max mm		
DC640	5 + E	2.5	7/0.67	14.4	15.2	340	95
DC740	6 + E	2.5	7/0.67	14.4	15.2	365	95
DC840	7 + E	2.5	7/0.67	15.4	16.3	410	100
DC940	8 + E	2.5	7/0.67	16.5	17.5	450	105
DC1140	10 + E	2.5	7/0.67	18.5	19.5	540	120
DC1340	12 + E	2.5	7/0.67	19.4	20.5	620	125
DC1640	15 + E	2.5	7/0.67	20.4	21.5	750	130
DC2140	20 + E	2.5	7/0.67	25.1	26.4	950	160
DC2640	25 + E	2.5	7/0.67	25.6	27.0	1160	165
DC3140	30 + E	2.5	7/0.67	27.6	29.0	1360	175
DC4140	40 + E	2.5	7/0.67	32.6	34.3	1770	200
DC5140	50 + E	2.5	7/0.67	34.1	35.8	2180	215

CONDUCTOR	CURRENT RATING (a)			ELECTRICAL CHARACTERISTICS				
	Number of Cores	Unenclosed In Air	Non-metallic wiring enclosure in air	Buried In Ducts	Maximum DC Resistance @20°C	Maximum AC Resistance @90°C	Equivalent Star Reactance	3 Phase Voltage Drop @90°C
								
	A	A	A	Ω/km	Ω/km	Ω/km	mV/Am (b)	
2	22	20	25	7.41	9.45	0.102	16.4	
3 - 50	22	20	25	7.41	9.45	0.102	16.4	

(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. Based on 2 to 4 cores fully loaded with the remainder of the cores <35% loaded.

(b) For single phase voltage drop, multiply by 1.155.

The above information is from the following sources: AS/NZS 3008.1.1:2009 (tables 13, 30, 35, 42)  
AS 1125:2008 (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.

ACTIVE / CONDUCTOR				EARTH		
Number of Cores	Number & Diameter of Wires No/mm	Nominal Diameter mm	Minimum Insulation Thickness mm	Nominal Area. mm <sup>2</sup>	Number & Diameter of Wires No/mm	Minimum Insulation Thickness mm
2 - 50	7/0.67	2.0	0.8	2.5	7/0.67	0.7

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