



## Single Core Double Insulated Cables – SDI 450/750V

V-90 insulated, PVC sheathed.

**Application:** Double insulated, Easy-peel sheath for general wiring, unenclosed, and closed in conduit buried direct or in underground ducts for domestic, commercial and industrial installations where not subject to mechanical damage.

**Conductor:** Plain annealed copper (AS/NZS 1125)

**Sheath:** PVC 3V-90 White

**Insulation:** PVC V90 Black or Red

**Voltage:** 450/750V

**Standard:** AS/NZS 5000.2

**Package Length:** 100m, 500m

**Normal Operating Temperature:** 90°C

### Typical Features:

Electra Cables Part No.	Nom. Area mm <sup>2</sup>	Stranding No./mm	Insulation Thickness mm	Sheath Thickness mm	Nom. O/D mm	Min. Installed Bending Radius mm	Approx. Mass Kg/Km
SDI 1010V	1.0	1x1/1.13	0.6	0.8	4.1	20	30
SDI 1015V*	1.5	1x7/0.50	0.6	0.8	4.5	20	40
SDI 1025V	2.5	1x7/0.67	0.7	0.8	5.2	25	55
SDI 1040V	4.0	1x7/0.85	0.8	0.9	6.2	25	80
SDI 1060V	6.0	1x7/1.04	0.8	0.9	6.8	30	100
SDI 1100V	10	1x7/1.35	1.0	0.9	8.2	35	145
SDI 1160V	16	1x7/1.70	1.0	1.0	9.4	40	225
SDI 1250V	25	1x19/1.35	1.2	1.1	11.5	45	355

- \*SDI1015V is also available in BLU/BLU, RED/RED, ORE/ORE and BRN/BRN

## Current Rating and Electrical Characteristics (450/750V SDI)

Conductor	Current Rating (a)			Electrical Characteristics			
Nominal Area mm <sup>2</sup>	Unenclosed Touching	Surrounded by thermal Insulation	Buried in Ducts	Max. DC Resistance @20°C Ω/Km	Max. AC Resistance @20°C Ω/Km	Resistance Ω/Km	(b) 3 Phase Voltage Drop @75°C mV/A.m
1	13	6	18	18.1	25.8	0.168	51.6
1.5	16	8	24	13.6	16.5	0.157	33
2.5	23	12	33	7.41	9.01	0.143	18
4	31	16	42	4.61	5.61	0.137	11.2
6	40	20	53	3.08	3.75	0.128	7.5
10	54	27	71	1.83	2.23	0.118	4.46
16	72	36	91	1.15	1.40	0.111	2.81
25	97	48	120	0.727	0.893	0.104	1.78

(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) For single phase voltage drop, multiply by 1.155

The above information is from the following sources:

AS/NZ 3008.1.1

AS/NZS 1125

For current rating using other installation conditions refer to AS/NZS3008.1.1

Do not install in direct with polystyrene or polyurethane insulation materials



## Single Core Double Insulated Cables – SDI 0.6/1kV

V-90 insulated, PVC sheathed.

**Application:** Double insulated, Easy-peel sheath for general wiring, unenclosed, and closed in conduit buried direct or in underground ducts for domestic, commercial and industrial installations where not subject to mechanical damage.

**Conductor:** Plain annealed copper (AS/NZS 1125)

**Insulation:** PVC V90 Black or Red

**Sheath:** PVC 3V-90

**Voltage:** 0.6/1kV

**Standard:** AS/NZS 5000.1

**Normal Operating Temperature:** 90°C

### Typical Features:

Electra Cables Part No.	Nom. Area mm <sup>2</sup>	Stranding No./mm	Insulation Thickness mm	Sheath Thickness mm	Nom. O/D mm	Min. Installed Bending Radius mm	Approx. Mass Kg/Km
SDI 1160	16	7/1.70	1.2	1.0	10.2	40	235
SDI 1250	25	19/1.35	1.2	1.4	12.1	48	365
SDI 1350	35	19/1.53	1.2	1.4	13.2	50	450
SDI 1500	50	19/1.78	1.4	1.4	14.8	65	600
SDI 1700	70	19/2.14	1.4	1.4	16.6	70	800
SDI 1950*	95	37/1.78	1.6	1.5	19.2	75	1115
SDI 11200*	120	37/2.03	1.6	1.5	21.0	85	1370
SDI 11500*	150	37/2.25	1.8	1.6	23.0	90	1665
SDI 11850*	185	37/2.52	2.0	1.7	25.5	100	2060
SDI 12400*	240	61/2.25	2.2	1.8	28.6	165	2550
SDI 13000*	300	61/2.52	2.4	1.9	31.7	185	3475
SDI 14000*	400	61/2.85	2.6	2.0	34.9	205	4300

- \* Those items are subject to minimum order Quantity. Please contact our sales team for details

## Current Rating and Electrical Characteristics (0.6/1kV SDI)

Conductor	Current Rating (a)				Electrical Characteristics		
	Three Phase		Single Phase		Max. DC Resistance @20°C Ω/Km	Max.AC Resistance @20°C Ω/Km	(b) 3 Phase Voltage Drop Touching @90°C mV/A.m
Nominal Area mm <sup>2</sup>	In conduit in air	Buried in ducts	In conduit in air	Buried in ducts			
16	56	125	63	88	1.15	1.47	2.81
25	79	150	88	115	0.727	0.927	1.78
35	100	125	115	145	0.524	0.638	1.12
50	125	150	140	170	0.387	0.471	0.834
70	155	185	175	210	0.268	0.327	0.589
95	185	225	210	260	0.193	0.236	0.439
120	220	260	250	295	0.153	0.188	0.359
150	250	290	280	335	0.124	0.153	0.305
185	285	335	325	380	0.0991	0.123	0.261
240	340	390	385	450	0.0754	0.0948	0.221
300	390	450	-	510	0.0601	0.0770	0.198
400	455	510	-	590	0.0470	0.0620	0.181

(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) For single phase voltage drop, multiply by 1.155

The above information is from the following sources:

AS/NZ 3008.1.1

AS/NZS 1125

For current rating using other installation conditions refer to AS/NZS3008.1.1

Do not install in direct with polystyrene or polyurethane insulation materials