



3.8/6.6kV Three Core Individual Screened & PVC/SWA/PVC Sheathed (Cu Conductor)

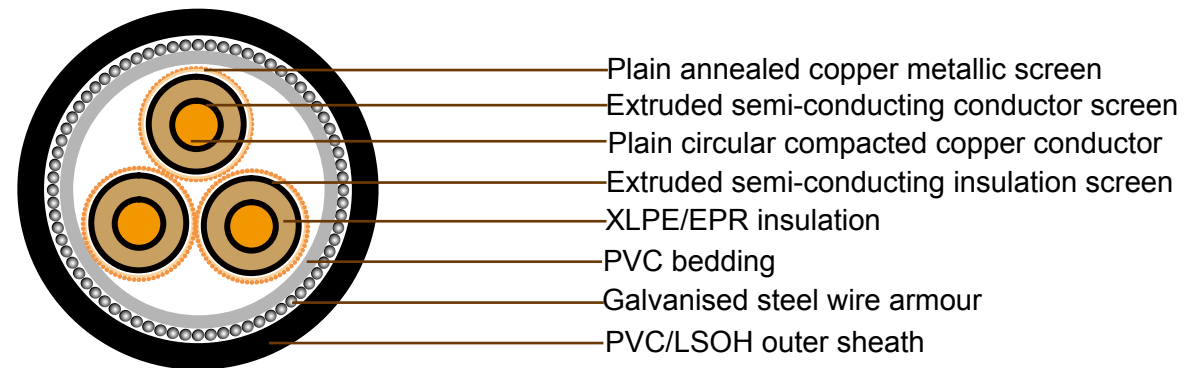
Application

These cables are designed to be used for the supply of electrical energy in fixed applications up to the rated voltages at a nominal power frequency between 49Hz and 61Hz., they are suitable for use in distribution installation, electrical power station , they are applied for installation, outdoors, underground where subject to mechanical damage.

Standard

AS/NZS 1429.1

Cable Construction



CONDUCTOR: Plain circular compacted copper to AS/NZS1125

Maximum Continuous Operating Temperature: 90°C

CONDUCTOR SCREEN: Extruded semi-conducting compound, bonded to the insulation and applied in the same operation as the insulation

INSULATION: Cross Linked Polyethylene (XLPE) – standard

Ethylene Propylene Rubber (EPR) – alternative

INSULATION SCREEN: Extruded semi-conducting compound

METALLIC SCREEN: Plain annealed copper wire: 10kA for nominal 1 second(HEAVY DUTY)

BEDDING: PVC

ARMOURING: Galvanised steel wires



Addison Industrial Cables Australian Standard

SHEATH: Black 5V-90 polyvinyl chloride (PVC) – standard

Orange 5V-90 PVC inner plus black high density polyethylene (HDPE) outer – alternative

Low smoke zero halogen (LSOH) – alternative

Technical Characteristics

Nominal conductor area	Maximum Conductor DC resistance at 20°C	Cond. AC resistance at 50Hz and 90°C	Inductive reactance at 50Hz	Insulation resistance at 20°C	Conductor to screen capacitance	Charging current per phase	Dielectric loss per phrase	Maximum dielectric stress	Screen DC resistance at 20°C	Armour DC resistance at 20°C	Zero sequence resistance at 20°C	Zero seq. react. at 50Hz
mm ²	Ohm/km	Ohm/km	Ohm/km	MegOhm. km	µF x km	A x km	W x km	kV x mm	Ohm/km	Ohm/km	Ohm/km	Ohm/km
16	1.15	1.47	0.134	11000	0.221	0.263	4	2.06	1.06	0.857	2.58	0.0842
25	0.727	0.927	0.127	9700	0.248	0.296	4.5	1.99	0.706	0.811	1.86	0.077
35	0.524	0.668	0.12	8700	0.276	0.33	5.01	1.93	0.533	0.657	1.41	0.0712
50	0.387	0.494	0.115	7800	0.308	0.368	5.59	1.87	0.366	0.616	1.08	0.066
70	0.268	0.342	0.109	6900	0.352	0.42	6.39	1.82	0.265	0.559	0.807	0.0603
95	0.193	0.247	0.101	6000	0.404	0.482	7.33	1.77	0.265	0.521	0.721	0.0525
120	0.153	0.196	0.0969	5400	0.447	0.534	8.11	1.74	0.266	0.487	0.669	0.0491
150	0.124	0.16	0.0942	5000	0.486	0.58	8.81	1.72	0.265	0.458	0.629	0.0467
185	0.0991	0.128	0.0917	4600	0.53	0.632	9.61	1.69	0.265	0.431	0.593	0.0443
240	0.0754	0.0986	0.089	4200	0.576	0.687	10.4	1.61	0.266	0.307	0.504	0.0418
300	0.0601	0.0798	0.0879	4000	0.597	0.713	10.8	1.49	0.265	0.284	0.473	0.0409
400	0.047	0.064	0.0852	3800	0.627	0.749	11.4	1.38	0.265	0.257	0.44	0.0384



Cable Parameter

Sectional Area of Conductor	Nom. Conductor Diameter	Nom. Insulation Thickness	Nom. Diameter Over insulation	Screen Area on cores	No. and Diameter of Screened Wires	Nom. Diameter Over Screened Wires	Nom. Diameter Over Bedding	Nom. Diameter of Armour	Nom. Diameter Over Armour	Nom. Overall Diameter	Approx. mass
mm ²	mm	mm	mm	mm ²	no x mm	mm	mm	mm	mm	mm	kg/100m
16	4.8	2.5	11	17	10 x 0.85	14.3	34	2	38	42.6	295
25	5.8	2.5	12	25.5	15 x 0.85	15.3	36.1	2	40.1	44.9	345
35	6.8	2.5	13	34	20 x 0.85	16.3	38.5	2.5	43.5	48.7	440
50	8	2.5	14.1	49.4	29 x 0.85	17.4	41	2.5	46	51.4	515
70	9.6	2.5	15.7	68.1	40 x 0.85	19	44.6	2.5	49.6	55.2	630
95	11.5	2.5	17.6	68.1	40 x 0.85	20.9	48.9	2.5	53.9	59.7	745
120	13.1	2.5	19.2	68.1	40 x 0.85	22.5	52.3	2.5	57.3	63.3	850
150	14.5	2.5	20.6	68.1	40 x 0.85	23.9	55.7	2.5	60.7	66.9	960
185	16.1	2.5	22.2	68.1	40 x 0.85	25.5	59.4	2.5	64.4	70.8	1090
240	18.5	2.6	24.9	68.1	40 x 0.85	28.2	65.3	3.15	71.6	78.6	1410
300	20.7	2.8	27.6	68.1	40 x 0.85	30.9	71.4	3.15	77.7	85.2	1660
400	23.6	3	30.9	68.1	40 x 0.85	34.2	78.8	3.15	85.1	92.9	2030