



19/33kV Three Core Individual Screened & PVC/SWA/PVC Sheathed (Cu Conductor)

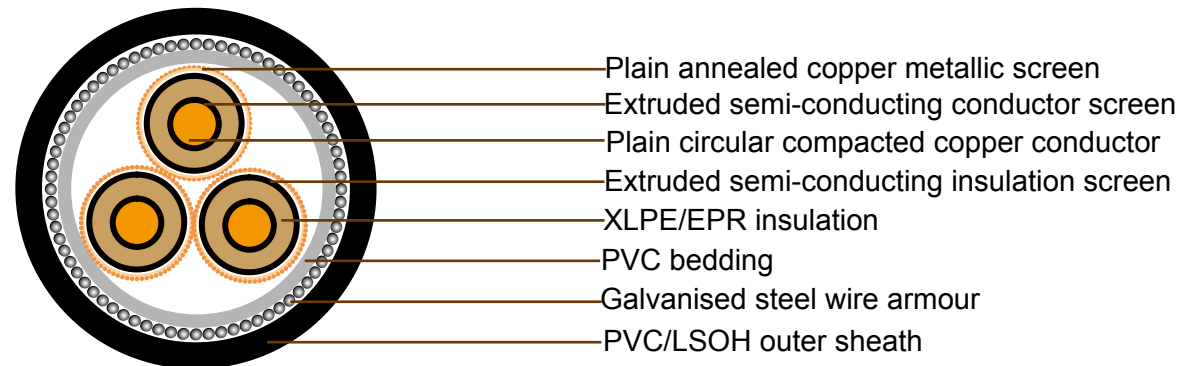
Application

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	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
50	0.387	0.494	0.147	18000	0.133	0.796	60.5	4.05	0.366	0.302	0.884	0.0988
70	0.268	0.342	0.139	16000	0.148	0.883	67.1	3.82	0.265	0.288	0.682	0.0909
95	0.193	0.247	0.128	15000	0.165	0.984	74.8	3.61	0.265	0.272	0.596	0.0807
120	0.153	0.196	0.123	14000	0.179	1.07	81.1	3.48	0.265	0.261	0.548	0.0757
150	0.124	0.159	0.12	13000	0.191	1.14	86.8	3.38	0.266	0.247	0.509	0.0722
185	0.0991	0.128	0.116	12000	0.205	1.23	93.2	3.29	0.266	0.238	0.476	0.0685
240	0.0754	0.0978	0.111	11000	0.227	1.35	103	3.17	0.265	0.224	0.441	0.0637
300	0.0601	0.0788	0.107	9800	0.247	1.48	112	3.09	0.266	0.211	0.415	0.0605
400	0.047	0.0628	0.102	8900	0.272	1.62	123	3	0.266	0.198	0.389	0.0557
500	0.0373	0.0513	0.099	8100	0.297	1.77	135	2.93	0.265	0.215	0.395	0.0524



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
50	8	8	25.5	49.4	29 x 0.85	28.8	66.5	3.15	72.8	80.1	950
70	9.6	8	27.1	68.1	40 x 0.85	30.4	70.2	3.15	76.5	83.9	1080
95	11.5	8	29	68.1	40 x 0.85	32.3	74.2	3.15	80.5	88.2	1220
120	13.1	8	30.6	68.1	40 x 0.85	33.9	78	3.15	84.3	92.1	1340
150	14.5	8	32	68.1	40 x 0.85	35.5	81.7	3.15	88	96	1490
185	16.1	8	33.6	68.1	40 x 0.85	37.1	85.2	3.15	91.5	99.9	1630
240	18.5	8	36	68.1	40 x 0.85	39.5	90.6	3.15	96.9	105.6	1880
300	20.7	8	38.4	68.1	40 x 0.85	41.9	95.9	3.15	102.2	111.3	2140
400	23.6	8	41.3	68.1	40 x 0.85	44.8	102.4	3.15	108.7	118.1	2510
500	26.5	8	44.2	68.1	40 x 0.85	47.7	109	3.15	115.3	125.2	2900