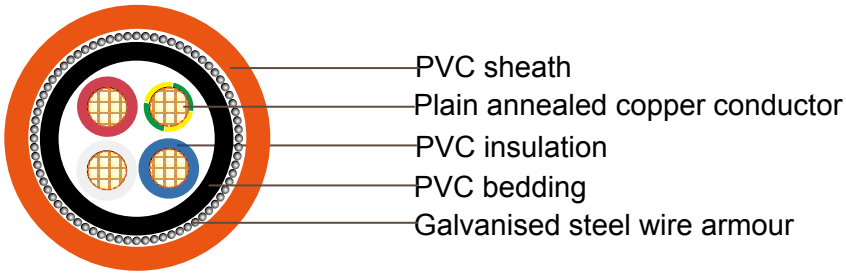
PVC Insulated, PVC Sheathed 3 core+E Armored Cables 0.6/1kV

Application

These cables are used 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.

Standard

AS/NZS 5000.1
AS/NZS 3008
AS/NZS 1125



Cable Construction

Conductor: Plain annealed copper
Insulation: Polyvinylchloride compound PVC V-90
Insulation colour: 3C + E – Red, White, Blue, Green/yellow
Bedding: Polyvinylchloride compound PVC 5V-90
Bedding colour: Black
Armour: Galvanised Steel Wire
Sheath: Polyvinylchloride compound PVC 5V-90
Sheath colour: Orange, other colors are available upon request

Technical Characteristics

Conductor	Current Ratings			Electrical Characteristics			
Nominal Area mm^2	Unenclosed In Air A	Buried Direct A	Buried In Ducts A	Maximum DC Resistance @20°C Ohm/km	Maximum AC Resistance @75°C Ohm/km	Reactance Ohm/km	Three Phase Voltage Drop @75°C mV/Am
1.5	15	24	19	13.6	16.5	0.111	28.6
2.5	22	34	26	7.41	9.01	0.102	15.6

Australian Standard

Conductor	Current Ratings			Electrical Characteristics			
Nominal Area mm^2	Unenclosed In Air A	Buried Direct A	Buried In Ducts A	Maximum DC Resistance @20°C Ohm/km	Maximum AC Resistance @75°C Ohm/km	Reactance Ohm/km	Three Phase Voltage Drop @75C mV/Am
4	29	44	34	4.61	5.61	0.102	9.71
6	37	55	43	3.08	3.75	0.0967	6.49
10	51	74	57	1.83	2.23	0.0906	3.86
16	68	96	74	1.15	1.40	0.0861	2.43
25	91	125	96	0.727	0.884	0.0853	1.54
35	110	150	115	0.524	0.638	0.0826	1.11
50	135	180	140	0.387	0.471	0.0797	0.829
70	170	220	175	0.268	0.327	0.0770	0.583
95	215	265	210	0.193	0.236	0.0766	0.431
120	245	300	240	0.153	0.188	0.0743	0.351
150	280	335	270	0.124	0.153	0.0745	0.296
185	325	380	310	0.0991	0.123	0.0744	0.251
240	385	440	370	0.0754	0.0955	0.0735	0.210

Cable Parameter

Nom. conductor area mm^2	Conductor No./ OD	Nom. insulation thickness mm	Nom. earth conductor area mm^2	Nom. earth conductor insulation thickness mm	Nom. diameter over bedding mm	Armour diameter mm	Nom. overall diameter mm	Approx. mass kg/km
1.5	7/0.50	0.8	1.5	0.8	9.8	0.9	15.4	400
2.5	7/0.67	0.8	2.5	0.8	10.9	0.9	16.5	545
4	7/0.85	1.0	2.5	0.8	12.5	1.25	18.8	770
6	7/1.04	1.0	2.5	0.8	13.7	1.25	20.0	880
10	7/1.35	1.0	4.0	1.0	15.8	1.25	22.1	1160
16	7/1.70	1.0	6.0	1.0	18.1	1.6	25.1	1560
25	7/2.14	1.2	6.0	1.0	21.8	1.6	28.8	2100
35	7/2.65	1.2	10	1.0	23.8	1.6	30.3	2480
50	19/1.89	1.4	16	1.0	26.7	2.0	34.1	3140
70	19/2.24	1.4	25	1.2	31.4	2.0	39.8	4455
95	19/2.65	1.6	25	1.2	35.9	2.5	43.9	5520
120	19/2.94	1.6	35	1.2	39.5	2.5	47.5	6790
150	19/3.28	1.8	50	1.4	43.2	2.5	53.4	7970
185	37/2.65	2.0	70	1.4	48.0	2.5	58.7	9660
240	37/2.94	2.2	95	1.6	54.9	2.5	66.0	12330