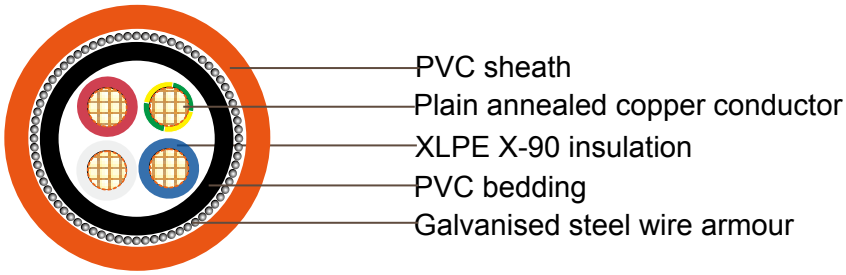
XLPE Insulated, PVC Sheathed 3 core+E Armored Cables 0.6/1kV

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: XLPE X-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 @90°C Ohm/km	Reactance Ohm/km	Three Phase Voltage Drop @90°C mV/Am
16	83	110	83	1.15	1.47	0.0805	2.55
25	110	145	110	0.727	0.927	0.0808	1.61

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 @90°C Ohm/km	Reactance Ohm/km	Three Phase Voltage Drop @90°C mV/Am
35	135	170	135	0.524	0.669	0.0786	1.17
50	170	205	160	0.387	0.494	0.0751	0.868
70	215	250	200	0.268	0.343	0.0741	0.609
95	265	300	240	0.193	0.248	0.0725	0.450
120	305	345	275	0.153	0.197	0.0713	0.366
150	350	385	310	0.124	0.160	0.0718	0.307
185	405	435	355	0.0991	0.129	0.0720	0.259
240	480	500	420	0.0754	0.0998	0.0709	0.216

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
16	7/1.70	0.7	6	0.7	17.5	1.25	22.8	1285
25	7/2.14	0.9	6	0.7	22.2	1.6	26.7	1845
35	7/2.65	0.9	10	0.7	23.5	1.6	28.7	2315
50	19/1.89	1.0	16	0.7	26.7	1.6	32.0	2935
70	19/2.24	1.1	25	0.9	31.7	2.0	38.3	3880
95	19/2.65	1.1	25	0.9	25.6	2.0	43.1	5250
120	19/2.94	1.2	35	0.9	39.9	2.0	45.4	5765
150	19/3.28	1.4	50	1.0	41.1	2.5	51.4	7560
185	37/2.65	1.6	70	1.1	46.1	2.5	56.6	9220
240	37/2.94	1.7	95	1.1	52.4	2.5	63.3	11740