

LT POWER & CONTROL CABLES

Features

- » Dielectric losses are very small.
- » Higher current carrying capacity.
- » Jointing and Termination is easy.
- » Light in weight
- » Higher short circuit rating of 250°C as against 160°C for PVC
- » Has better resistance to most chemicals, oils, acids, etc.

Application

» The Cables are suitable for use on AC single phase or three phase (earthed or unearthed) systems for rated Voltage up to 1100 Volts.

Outer Sheath Armour Inner Sheath Insulation Conductor





Technical Data

- 1.1 kV (A.C) & 1.5 kV (D.C) to Earth
- » Construction: 3.5 and 4 cores AL conductor, XLPE insulated, galvanised steel strip / wire armoured cables as per IS 7098 Part 1.
- » Conductor: AL up to 10 Sq. mm conductor are solid Cl.1 as per IS-8130. & above 10 Sq. mm conductor are stranded compact shape Cl. 2 as per IS-8130

Outer Sheath

Armour Inner Sheath

Insulation

» Insulation : Cross linked polyethylene (XLPE)

- » Core Color : Red, yellow, blue, black
- » Inner Sheath: PVC / PVC tape as per IS 7098 (P-1)
- » Armouring: Single armouring of galvanised steel strip / wire
- » Outer Sheath: PVC Type ST-2 as per IS 5831 (FR/FRLS Type)
- » Cable Color: Black (Other Colours available as per requirement)

SPECIFICATION OF UNARMOURED & ARMOURED LT POWER CABLES

3.5 CORE XLPE INSULATED PVC SHEATHED UNARMOURED & ARMOURED POWER CABLES OF 1100 V GRADE GENERALLY CONFORMING TO IS 7098 (PART-1) WITH ALUMINIUM SHAPED CONDUCTOR											
conductor	Nominal Thickness of XLPE Insulation	of PVC Inner	Unarmoured		Formed wire/ Strip Armoured			Round Wire Armoured Cable			Current
			Nominal Thickness of PVC Outer sheath	Approx. Overall Diameter of Cable	Nominal Dimension of GI Flat Strip	Min. Thickness of PVC Outer Sheath	Approx. Overall Diameter of Cable	Nominal Dimension of GI Round Wire	Min. Thickness of PVC Outer Sheath	Approx. Overall Diameter of Cable	Rating in Air
Sq. mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	Amps
25/16	0.9/0.7	0.3	2	22	0.8 x 4.0	1.4	23	1.6	1.4	25	99
35/16	0.9/0.7	0.3	2	24	0.8 x 4.0	1.4	25	1.6	1.4	27	117
50/25	1.0/0.9	0.3	2	27.5	0.8 x 4.0	1.4	28	1.6	1.56	30	140
70/35	1.1/0.9	0.4	2.2	31	0.8 x 4.0	1.56	32	2	1.56	35	176
95/50	1.1/1.0	0.4	2.2	35	0.8 x 4.0	1.56	35	2	1.56	38	221
120/70	1.2/1.1	0.4	2.2	37.5	0.8 x 4.0	1.72	39	2	1.72	42	258
150/70	1.4/1.1	0.5	2.4	41	0.8 x 4.0	1.72	43	2	1.88	46	294
185/95	1.6/1.1	0.5	2.6	46.5	0.8 x 4.0	1.88	47	2.5	2.04	51	339
240/120	1.7/1.2	0.6	2.8	52.5	0.8 x 4.0	2.04	53	2.5	2.2	56	402
300/150	1.8/1.4	0.6	3	56	0.8 x 4.0	2.2	57	2.5	2.36	60	461

4 CORE XLPE INSULATED, UNARMOURED & GALVANISED STEEL STRIP / WIRE ARMOURED CABLES GENERALLY CONFORMING TO IS 7098 (PART-1) WITH ALUMINIUM CONDUCTOR											
Nominal size of conductor Sq. mm	Nominal Thickness of insulation (mm)	Min. Thickness of PVC Inner Sheath (mm)	Unarmoured		Formed wire/ Strip Armoured			Round Wire Armoured Cable			Current
			Nominal Thickness of PVC Outer sheath (mm)	Appox. Overall Diameter of Cable (mm)	Nominal Dimension of GI Flat Strip (mm)	Min. Thickness of PVC Outer Sheath (mm)	Approx. Overall Diameter of Cable (mm)	Nominal Dimension of GI Round Wire (mm)	Min. Thickness of PVC Outer Sheath (mm)	Approx. Overall Diameter of Cable (mm)	Rating in Air Amps
4	0.7	0.3	1.8	16	N/A	N/A	N/A	1.4	1.24	18	30
6	0.7	0.3	1.8	17	N/A	N/A	N/A	1.4	1.24	19	40
10	0.7	0.3	1.8	19	N/A	N/A	N/A	1.4	1.4	21	53
16	0.7	0.3	1.8	20	0.8 x 4.0	1.4	20	1.6	1.4	22	70
25	0.9	0.3	2	24	0.8 x 4.0	1.4	24	1.6	1.4	26	99
35	0.9	0.3	2	26	0.8 x 4.0	1.4	27	1.6	1.4	28	117
50	1	0.3	2	29	0.8 x 4.0	1.56	30	1.6	1.56	32	140
70	1.1	0.4	2.2	34	0.8 x 4.0	1.56	34	2	1.56	37	176
95	1.1	0.4	2.2	37	0.8 x 4.0	1.56	37	2	1.72	40	221
120	1.2	0.5	2.4	41	0.8 x 4.0	1.72	41	2	1.88	44	258
150	1.4	0.5	2.6	45	0.8 x 4.0	1.88	46	2.5	2.04	49	294
185	1.6	0.5	2.8	50	0.8 x 4.0	2.04	51	2.5	2.2	54	339

