

## ARMoured/UNARMoured PVC SHEATHED INSTRUMENTATION CABLES

As per IS: 1554 (Part I)

'POLYFLEX' 1.1 KV ANNEALED HIGH CONDUCTIVITY SOLID COPPER CONDUCTOR, 1.5 Sq. mm., PVC INSULATED, INNER SHEATHED, ARMoured/UNARMoured PVC SHEATHED CABLES CONFORMING TO IS : 1554(PART-I)AMENDED UPTO DATE

No. of cores	Nomi. thick-ness of Insulation mm	Min. thick-ness of Inner sheath mm	Armour		Nomi. Sheath thick-ness for Un-armd. mm	Min. Sheath thick-ness for Armd. mm	Approx. overall diameter		Approx wt. of cable		Max. DC conductor resistance at 20° C Ohm/km	Current Ratings		
			Gal. Round Steel Wira Nominal Dia. mm	Gal. Flat Steel Strip Nominal Thick-ness mm			Un-armd mm	Armd. mm	Approx wt. of cable	Armd. kg/km		Direct in Ground Amps	In Ducts Amps	In Air Amps
2	0.8	0.3	1.4	-	1.8	1.24	10.4	12.0	170	390	12.1	23	20	20
3	0.8	0.3	1.4	-	1.8	1.24	10.9	12.7	195	430	12.1	21	17	17
4	0.8	0.3	1.4	-	1.8	1.24	11.7	13.3	225	480	12.1	21	17	17
5	0.8	0.3	1.4	-	1.8	1.24	12.6	14.2	275	560	12.1	21	17	17
6	0.8	0.3	1.4	-	1.8	1.24	13.4	15.0	325	625	12.1	15	13	13
7	0.8	0.3	1.4	-	1.8	1.24	13.4	15.0	345	645	12.1	14	13	13
10	0.8	0.3	1.4	-	1.8	1.40	16.5	18.2	460	810	12.1	13	11	11
12	0.8	0.3	-	0.8	1.8	1.24	17.0	17.3	520	815	12.1	12	10	10
14	0.8	0.3	-	0.8	1.8	1.40	17.7	18.3	580	885	12.1	11	10	10
16	0.8	0.3	-	0.8	2.0	1.40	19.0	19.1	680	980	12.1	11	9	9
19	0.8	0.3	-	0.8	2.0	1.40	19.9	20.0	780	1100	12.1	10	9	9
24	0.8	0.3	-	0.8	2.0	1.40	23.0	23.0	950	1300	12.1	9	8	8
30	0.8	0.3	-	0.8	2.0	1.40	24.2	24.3	1150	1540	12.1	9	7	7
37	0.8	0.3	-	0.8	2.0	1.40	26.0	26.0	1350	1800	12.1	8	7	7
61	0.8	0.4	-	0.8	2.2	1.40	32.7	38.6	2100	2670	12.1	7	6	6

Unarmd :- Unarmoured

Armd :- Armoured

Nomi :- Nominal

'POLYFLEX' 1.1 KV ANNEALED HIGH CONDUCTIVITY SOLID COPPER CONDUCTOR, 2.5 Sq. mm., PVC INSULATED, INNER SHEATHED, ARMOURED/UNARMOURED PVC SHEATHED CABLES CONFORMING TO IS : 1554 (PART-I) AMENDED UPTO DATE

No. of cores	Nomi. thick-ness of Insulation mm	Min. thick-ness of Inner sheath mm	Armour		Nomi. Sheath thick-ness for Unarmd. mm	Min. Sheath thick-ness for Armd. mm	Approx. overall diameter		Approx wt. of cable		Max. DC conductor resistance at 20°C Ohm/km	Current Ratings		
			Gal. Round Steel Wire Nomi. Dia. mm	Gal. Flat Steel Strip Nomi. Thick-ness mm			Unarmd mm	Armd mm	Unarmd kg/km	Armd kg/km		Direct in Ground Amps	In Ducts Amps	In Air Amps
2	0.9	0.3	1.4	-	1.8	1.24	11.6	13.2	210	460	7.41	32	27	27
3	0.9	0.3	1.4	-	1.8	1.24	12.2	13.8	254	515	7.41	27	24	24
4	0.9	0.3	1.4	-	1.8	1.24	13.1	14.7	305	590	7.41	27	24	24
5	0.9	0.3	1.4	-	1.8	1.24	14.2	15.8	356	665	7.41	27	24	24
6	0.9	0.3	1.4	-	1.8	1.24	15.2	16.8	415	740	7.41	20	18	18
7	0.9	0.3	1.4	-	1.8	1.24	15.2	16.8	445	775	7.41	20	17	17
10	0.9	0.3	-	0.8	2.0	1.40	19.3	19.4	615	940	7.41	18	15	15
12	0.9	0.3	-	0.8	2.0	1.40	19.8	20.0	710	1014	7.41	17	14	14
14	0.9	0.3	-	0.8	2.0	1.40	20.8	20.9	790	1130	7.41	16	13	13
16	0.9	0.3	-	0.8	2.0	1.40	21.9	21.9	900	1240	7.41	15	13	13
19	0.9	0.3	-	0.8	2.0	1.40	22.9	23.0	1025	1380	7.41	14	12	12
24	0.9	0.3	-	0.8	2.0	1.40	26.6	26.6	1275	1730	7.41	13	11	11
30	0.9	0.3	-	0.8	2.0	1.56	28.1	28.5	1520	2000	7.41	12	10	10
37	0.9	0.4	-	0.8	2.2	1.56	30.8	30.8	1850	2350	7.41	11	10	10
61	0.9	0.4	-	0.8	2.2	1.56	38.1	38.0	2910	3600	7.41	9	8	8

Unarmd :- Unarmoured

Armd :- Armoured

Instrumentation cable annealed tinned copper conductor with PVC insulated type 'C' colour core number printing will be provided for identification core twisted to form a pair and the pair will be laid up to form a round symmetrical shape plain polyester tape and screened by annealed tinned copper wire braided / or aluminium miller tape, with 95% coverage. Innersheath will extruded P.V.C. (ST 1) armour with G.I. wire 1.0mm. outersheath with P.V.C.