



BFOI (ic) Cable Armoured 250V

Applications:	BFOI (ic) armoured cable
Conductor:	Stranded plain annealed copper wires as per IEC 60228, class 2.
Fire resisting layer:	Mica/glass tape
Insulation:	XLPE as per IEC60092-351
Twisting:	Two / Three insulated cores shall be twisted together to form a pair/triad.
Individual screen:	Screened by AL/PS tape with tinned copper drain wire. Each pair/triad is wrapped with polyester tape to prevent electrical contact with adjacent pairs/triads.
Cabling:	Screened pairs/triads shall be cabled. Flame retardant and non-hygroscopic fillers may be used. Suitable tape(s) may be applied to the cabled core.
Collective screen:	Screened by AL/PS tape with tinned copper drain wire. A suitable tape may be applied on the collective screen. In case of 250V BFOI (i) cable, collective screen is omitted.
Inner covering:	Non hygroscopic material
Armour:	Braid of plain annealed copper wire. Coverage density min. 90%
Sheath:	SHF1 as per IEC60092-359
Colour:	Black
Core Identification:	Pair: Light blue, black and numbered
Voltage:	250V
Standards:	Design Guide: IEC 60092-350 and IEC 60092-376 Insulation material: IEC 60092-351, XLPE Sheath material: IEC 60092-359, SHF1 Flame retardant: IEC60332-1 and IEC 60332-3 Category A Fire resistance: IEC 60331-21, 1, 2 Halogen content: IEC60754-1, 0.5%↓ Smoke emission: IEC 61034, 60%↑ Cold bend/impact: CSA22.22 Number 0.3 (-40°C / -35°C) Max rated conductor temperature: 90°C UL1581
Approvals:	ABS, Bureau Veritas and Lloyds Register

No of pairs	Conductor			Thickness of insulation	Nominal dia of inner covering	Dia of wire armour	Thickness of sheath	Overall diameter		Conductor resistance (at 20°C) (Max)	Insulation resistance (at 20°C) (Min)	Test voltage	Cable weight approx	BATT part no
	Nominal area	Min no. of wires	Max dia					Nominal	Tolerance					
	Sqmm	ea	mm					mm	±mm					
1P	0.75	7	1.2	0.5	6.1	0.2	1.1	9.4	0.6	26.0	1030	1500	120	-
2P	0.75	7	1.2	0.5	10.7	0.3	1.3	14.7	0.7	26.0	1030	1500	250	-
3P	0.75	7	1.2	0.5	11.5	0.3	1.3	15.5	0.8	26.0	1030	1500	300	-
4P	0.75	7	1.2	0.5	12.8	0.3	1.4	17.0	0.8	26.0	1030	1500	360	14468
7P	0.75	7	1.2	0.5	15.2	0.3	1.5	19.6	0.9	26.0	1030	1500	510	-
8P	0.75	7	1.2	0.5	16.9	0.3	1.5	21.3	0.9	26.0	1030	1500	580	-
10P	0.75	7	1.2	0.5	19.6	0.3	1.6	24.2	1.0	26.0	1030	1500	690	-
12P	0.75	7	1.2	0.5	20.5	0.3	1.7	25.3	1.1	26.0	1030	1500	780	-
14P	0.75	7	1.2	0.5	21.6	0.3	1.7	26.4	1.1	26.0	1030	1500	870	-
16P	0.75	7	1.2	0.5	23.4	0.3	1.8	28.4	1.2	26.0	1030	1500	980	-
19P	0.75	7	1.2	0.5	24.0	0.3	1.8	29.0	1.2	26.0	1030	1500	1090	-
24P	0.75	7	1.2	0.5	28.4	0.3	2.0	33.8	1.3	26.0	1030	1500	1380	-
30P	0.75	7	1.2	0.5	30.5	0.4	2.1	36.6	1.4	26.0	1030	1500	1730	-
32P	0.75	7	1.2	0.5	31.1	0.4	2.1	37.2	1.4	26.0	1030	1500	1810	-
37P	0.75	7	1.2	0.5	32.9	0.4	2.2	39.2	1.5	26.0	1030	1500	2030	-



No of pairs	Conductor			Thickness of insulation	Nominal dia of inner covering	Dia of wire armour	Thickness of sheath	Overall diameter		Conductor resistance (at 20°C) (Max)	Insulation resistance (at 20°C) (Min)	Test voltage	Cable weight approx	BATT part no
	Nominal area	Min no. of wires	Max dia					Nominal	Tolerance					
	Sqmm	ea	mm					mm	±mm					
1P	1.0	7	1.4	0.5	6.5	0.2	1.1	9.8	0.6	19.2	920	1500	130	-
2P	1.0	7	1.4	0.5	11.4	0.3	1.3	15.4	0.8	19.2	920	1500	280	-
3P	1.0	7	1.4	0.5	12.2	0.3	1.3	16.2	0.8	19.2	920	1500	340	-
4P	1.0	7	1.4	0.5	13.6	0.3	1.4	17.8	0.8	19.2	920	1500	410	-
7P	1.0	7	1.4	0.5	16.2	0.3	1.5	20.6	0.9	19.2	920	1500	590	-
8P	1.0	7	1.4	0.5	18.0	0.3	1.6	22.6	1.0	19.2	920	1500	670	-
10P	1.0	7	1.4	0.5	20.9	0.3	1.7	25.7	1.1	19.2	920	1500	810	-
12P	1.0	7	1.4	0.5	21.8	0.3	1.7	26.6	1.1	19.2	920	1500	910	-
14P	1.0	7	1.4	0.5	23.1	0.3	1.8	28.1	1.1	19.2	920	1500	1020	-
16P	1.0	7	1.4	0.5	25.0	0.3	1.8	30.0	1.2	19.2	920	1500	1150	-
19P	1.0	7	1.4	0.5	25.6	0.3	1.9	30.8	1.2	19.2	920	1500	1290	-
24P	1.0	7	1.4	0.5	30.3	0.4	2.1	36.4	1.4	19.2	920	1500	1720	-
30P	1.0	7	1.4	0.5	32.5	0.4	2.2	38.8	1.5	19.2	920	1500	2040	-
32P	1.0	7	1.4	0.5	33.2	0.4	2.2	39.5	1.5	19.2	920	1500	2140	-
37P	1.0	7	1.4	0.5	35.1	0.4	2.3	41.6	1.5	19.2	920	1500	2410	-

No of pairs	Conductor			Thickness of insulation	Nominal dia of inner covering	Dia of wire armour	Thickness of sheath	Overall diameter		Conductor resistance (at 20°C) (Max)	Insulation resistance (at 20°C) (Min)	Test voltage	Cable weight approx	BATT part no
	Nominal area	Min no. of wires	Max dia					Nominal	Tolerance					
	Sqmm	ea	mm					mm	±mm					
1P	1.5	7	1.7	0.6	7.3	0.2	1.1	10.6	0.6	12.8	910	1500	150	-
2P	1.5	7	1.7	0.6	12.8	0.3	1.4	17.0	0.8	12.8	910	1500	340	-
3P	1.5	7	1.7	0.6	13.7	0.3	1.4	17.9	0.8	12.8	910	1500	410	-
4P	1.5	7	1.7	0.6	15.3	0.3	1.5	19.7	0.9	12.8	910	1500	500	-
7P	1.5	7	1.7	0.6	18.2	0.3	1.6	22.8	1.0	12.8	910	1500	720	-
8P	1.5	7	1.7	0.6	20.3	0.3	1.7	25.1	1.1	12.8	910	1500	830	-
10P	1.5	7	1.7	0.6	23.5	0.3	1.8	28.5	1.2	12.8	910	1500	990	-
12P	1.5	7	1.7	0.6	24.5	0.3	1.8	29.5	1.2	12.8	910	1500	1120	-
14P	1.5	7	1.7	0.6	26.0	0.3	1.9	31.2	1.2	12.8	910	1500	1270	-
16P	1.5	7	1.7	0.6	28.1	0.3	2.0	33.5	1.3	12.8	910	1500	1430	-
19P	1.5	7	1.7	0.6	28.8	0.3	2.0	34.2	1.3	12.8	910	1500	1600	-
24P	1.5	7	1.7	0.6	34.1	0.4	2.2	40.4	1.5	12.8	910	1500	2130	-
30P	1.5	7	1.7	0.6	36.6	0.4	2.3	43.1	1.6	12.8	910	1500	2530	-
32P	1.5	7	1.7	0.6	37.3	0.4	2.4	44.0	1.6	12.8	910	1500	2670	-
37P	1.5	7	1.7	0.6	39.5	0.4	2.4	46.2	1.7	12.8	910	1500	2990	-

No of triples	Conductor			Thickness of insulation	Nominal dia of inner covering	Dia of wire armour	Thickness of sheath	Overall diameter		Conductor resistance (at 20°C) (Max)	Insulation resistance (at 20°C) (Min)	Test voltage	Cable weight approx	BATT part no
	Nominal area	Min no. of wires	Max dia					Nominal	Tolerance					
	Sqmm	ea	mm					mm	±mm					
1T	0.75	7	1.2	0.5	6.5	0.2	1.1	9.8	0.6	26.0	1030	1500	140	-
2T	0.75	7	1.2	0.5	11.5	0.3	1.3	15.5	0.8	26.0	1030	1500	300	-
3T	0.75	7	1.2	0.5	12.4	0.3	1.3	16.4	0.8	26.0	1030	1500	360	-
4T	0.75	7	1.2	0.5	13.8	0.3	1.4	18.0	0.8	26.0	1030	1500	430	-
7T	0.75	7	1.2	0.5	17.9	0.3	1.6	22.5	1.0	26.0	1030	1500	670	-
8T	0.75	7	1.2	0.5	19.4	0.3	1.6	24.0	1.0	26.0	1030	1500	750	-
10T	0.75	7	1.2	0.5	22.3	0.3	1.7	27.1	1.1	26.0	1030	1500	890	-
12T	0.75	7	1.2	0.5	23.8	0.3	1.8	28.8	1.2	26.0	1030	1500	1020	-
14T	0.75	7	1.2	0.5	25.0	0.3	1.8	30.0	1.2	26.0	1030	1500	1140	-
16T	0.75	7	1.2	0.5	26.7	0.3	1.9	31.9	1.3	26.0	1030	1500	1280	-
19T	0.75	7	1.2	0.5	29.1	0.3	2.0	34.5	1.3	26.0	1030	1500	1490	-
24T	0.75	7	1.2	0.5	32.6	0.4	2.2	38.9	1.5	26.0	1030	1500	1930	-
30T	0.75	7	1.2	0.5	36.4	0.4	2.3	42.9	1.6	26.0	1030	1500	2330	-
32T	0.75	7	1.2	0.5	37.9	0.4	2.4	44.5	1.6	26.0	1030	1500	2480	-
37T	0.75	7	1.2	0.5	39.9	0.4	2.5	46.8	1.7	26.0	1030	1500	2790	-



No of pairs	Conductor			Thickness of insulation	Nominal dia of inner covering	Dia of wire armour	Thickness of sheath	Overall diameter		Conductor resistance (at 20°C) (Max)	Insulation resistance (at 20°C) (Min)	Test voltage	Cable weight approx	BATT part no
	Nominal area	Min no. of wires	Max dia					Nominal	Tolerance					
	Sqmm	ea	mm					mm	±mm					
1T	1.0	7	1.4	0.5	7.0	0.2	1.1	10.3	0.6	19.2	920	1500	160	-
2T	1.0	7	1.4	0.5	12.4	0.3	1.3	16.4	0.8	19.2	920	1500	340	-
3T	1.0	7	1.4	0.5	13.3	0.3	1.4	17.5	0.8	19.2	920	1500	410	-
4T	1.0	7	1.4	0.5	14.9	0.3	1.4	19.1	0.9	19.2	920	1500	500	-
7T	1.0	7	1.4	0.5	19.3	0.3	1.6	23.9	1.0	19.2	920	1500	780	-
8T	1.0	7	1.4	0.5	20.9	0.3	1.7	25.7	1.1	19.2	920	1500	880	-
10T	1.0	7	1.4	0.5	24.1	0.3	1.8	29.1	1.2	19.2	920	1500	1050	-
12T	1.0	7	1.4	0.5	25.6	0.3	1.9	30.8	1.2	19.2	920	1500	1210	-
14T	1.0	7	1.4	0.5	26.9	0.3	1.9	32.1	1.3	19.2	920	1500	1350	-
16T	1.0	7	1.4	0.5	28.8	0.3	2.0	34.2	1.3	19.2	920	1500	1520	-
19T	1.0	7	1.4	0.5	31.4	0.4	2.1	37.5	1.4	19.2	920	1500	1870	-
24T	1.0	7	1.4	0.5	35.1	0.4	2.3	41.6	1.5	19.2	920	1500	2290	-
30T	1.0	7	1.4	0.5	39.2	0.4	2.4	45.9	1.7	19.2	920	1500	2770	-
32T	1.0	7	1.4	0.5	40.8	0.4	2.5	47.7	1.7	19.2	920	1500	2950	-
37T	1.0	7	1.4	0.5	43.0	0.4	2.6	50.1	1.8	19.2	920	1500	3320	-

No of pairs	Conductor			Thickness of insulation	Nominal dia of inner covering	Dia of wire armour	Thickness of sheath	Overall diameter		Conductor resistance (at 20°C) (Max)	Insulation resistance (at 20°C) (Min)	Test voltage	Cable weight approx	BATT part no
	Nominal area	Min no. of wires	Max dia					Nominal	Tolerance					
	Sqmm	ea	mm					mm	±mm					
1T	1.5	7	1.7	0.6	7.8	0.2	1.1	11.0	0.6	12.8	910	1500	190	-
2T	1.5	7	1.7	0.6	13.8	0.3	1.4	17.5	0.8	12.8	910	1500	400	-
3T	1.5	7	1.7	0.6	14.9	0.3	1.4	18.5	0.9	12.8	910	1500	500	-
4T	1.5	7	1.7	0.6	16.6	0.3	1.5	20.4	0.9	12.8	910	1500	610	-
7T	1.5	7	1.7	0.6	21.6	0.3	1.7	25.5	1.1	12.8	910	1500	960	-
8T	1.5	7	1.7	0.6	23.3	0.3	1.8	27.2	1.1	12.8	910	1500	1090	-
10T	1.5	7	1.7	0.6	26.9	0.3	1.9	31.0	1.2	12.8	910	1500	1300	-
12T	1.5	7	1.7	0.6	28.6	0.3	2.0	32.7	1.3	12.8	910	1500	1500	-
14T	1.5	7	1.7	0.6	30.0	0.3	2.0	34.3	1.3	12.8	910	1500	1690	-
16T	1.5	7	1.7	0.6	32.1	0.4	2.2	37.0	1.4	12.8	910	1500	2020	-
19T	1.5	7	1.7	0.6	35.0	0.4	2.3	39.9	1.5	12.8	910	1500	2340	-
24T	1.5	7	1.7	0.6	39.2	0.4	2.4	44.4	1.6	12.8	910	1500	2850	-
30T	1.5	7	1.7	0.6	43.8	0.4	2.6	49.2	1.8	12.8	910	1500	3480	-
32T	1.5	7	1.7	0.6	45.5	0.4	2.7	50.9	1.8	12.8	910	1500	3710	-
37T	1.5	7	1.7	0.6	48.0	0.4	2.8	53.4	1.9	12.8	910	1500	4190	-