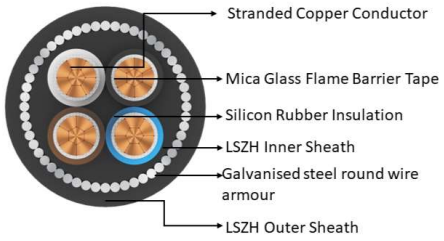
POLYCAB IGNIS 230.
Fire Survival Cable - Enhanced, 600/1000 V



Images not to scale. Follow table for dimensions

APPLICATION

POLYCAB FS E Multicore core Armoured cable is suitable to use in various indoor & outdoor applications where continuity of power supply during the event of ?re, is highly essential and corrosive gas evaluation could be a cause of hazard to the people or the precision instruments in high rise building, schools, hospitals, hotels, Malls, Subways etc.

CHARACTERISTICS

Voltage Rating
0.6/1KV

Operation Temperature
-40°C to +150°C
Short Circuit Temperature 350°C

Bending Radius
Min. 12 x Overall Diameter

Test Voltage
3500 V AC at (20±5) °C

CONSTRUCTION

- Annealed plain stranded copper conductor as per IEC 60228, Class-2.
- Mica Glass flame barrier tape.
- Extruded Silicone Rubber insulation.
- Insulated Cores assembled together.
- Extruded LSZH Inner Sheath
- Galvanised Steel Wire Armoured.
- Extruded LSZH Outer Sheath, Colour: Black.(other colour as per request).

Core Identification

- 2 core: brown, blue;
- 3 core: brown, black, grey;
- 4 core: blue, brown, black, grey;
- 5 core: green-and-yellow, blue, brown, black, grey;
- Above 5 core can be supplied with number printing
- (All cores: optional number printing)

OUTSTANDING FEATURES

- High Resistant to Fire
- Reduced Flame Propagation
- Higher Current Rating
- Circuit Integrity when exposed to Fire
- Low Toxicity
- Fire Barrier

STANDARD FOLLOWS

EN 60228:2005
BS 7846:2016

COMPLIANCE

Fire Resistant	BS 7846-F2 / BS 6387 CWZ / BS EN 50200 (PH 60) / BS 8434 / BS 8491
Flame Propagation	EN 60332-1-2
Fire Retardant	EN 60332-3-24 (Cat.C)
Halogen free material	EN 60754-1
Smoke Density	EN 61034-2
Toxicity	NES 02-713

OUR ACCREDITATIONS

APPROVAL

POLYCAB IGNIS 230.
Fire Survival Cable - Enhanced, 600/1000 V

POLYCAB
IDEAS. CONNECTED.

DIMENSIONS AND WEIGHTS:

Product code	No. of Cores	Cross Sectional Area (mm^2)	Nom. Insulation Thickness(mm)	Nom. Dia. over Armour (mm)	Nom. Cable Overall Dia. (mm)	Cable Weight Approx. (kg/km)
FSBS07CSSWLS002C1.5SA001P	2	1.5	0.6	10.9	13.5	345
FSBS07CSSWLS002C2.5SA001P	2	2.5	0.7	12.1	14.9	415
FSBS07CSSWLS002C004SA001P	2	4	0.7	13.2	16	475
FSBS07CSSWLS002C006SA001P	2	6	0.7	14.3	17.2	550
FSBS07CSSWLS002C010SA001P	2	10	0.7	16.2	19.2	700
FSBS07CSSWLS002C016SA001P	2	16	0.7	19	22	1010
FSBS07CSSWLS002C025SA001P	2	25	0.9	22.4	25.7	1345
FSBS07CSSWLS002C035SA001P	2	35	0.9	25.8	28.5	1790
FSBS07CSSWLS002C050SA001P	2	50	1	24	26.5	2245
FSBS07CSSWLS002C070SA001P	2	70	1.1	26.8	30	2795
FSBS07CSSWLS002C095SA001P	2	95	1.1	30.4	34	3770
FSBS07CSSWLS002C120SA001P	2	120	1.2	32.1	37	4455
FSBS07CSSWLS002C150SA001P	2	150	1.4	35.1	40	5290
FSBS07CSSWLS002C185SA001P	2	185	1.6	39.7	46	6815
FSBS07CSSWLS002C240SA001P	2	240	1.7	43.3	50	8225
FSBS07CSSWLS002C300SA001P	2	300	1.8	47.4	55	9790
FSBS07CSSWLS002C400SA001P	2	400	2	51.7	60	12250
FSBS07CSSWLS003C1.5SA001P	3	1.5	0.6	11.5	14.1	390
FSBS07CSSWLS003C2.5SA001P	3	2.5	0.7	12.8	15.6	480
FSBS07CSSWLS003C004SA001P	3	4	0.7	14	16.8	560
FSBS07CSSWLS003C006SA001P	3	6	0.7	15.2	18	660
FSBS07CSSWLS003C010SA001P	3	10	0.7	17.9	20.9	980
FSBS07CSSWLS003C016SA001P	3	16	0.7	20.2	23.4	1255
FSBS07CSSWLS003C025SA001P	3	25	0.9	25	28.4	1910
FSBS07CSSWLS003C035SA001P	3	35	0.9	27.5	31	2330
FSBS07CSSWLS003C050SA001P	3	50	1	26.2	32.5	2835
FSBS07CSSWLS003C070SA001P	3	70	1.1	29.3	36.5	3600
FSBS07CSSWLS003C095SA001P	3	95	1.1	33.3	41.5	4885
FSBS07CSSWLS003C120SA001P	3	120	1.2	36	45	5825
FSBS07CSSWLS003C150SA001P	3	150	1.4	40.5	50	7450

FSBS07CSSWLS003C185SA001P	3	185	1.6	44.6	55	8840
FSBS07CSSWLS003C240SA001P	3	240	1.7	48.9	60.5	10860
FSBS07CSSWLS003C300SA001P	3	300	1.8	53.5	66	13020
FSBS07CSSWLS003C400SA001P	3	400	2	58.6	73.5	16485
FSBS07CSSWLS004C1.5SA001P	4	1.5	0.6	12.5	15.1	445
FSBS07CSSWLS004C2.5SA001P	4	2.5	0.7	14	16.7	545
FSBS07CSSWLS004C004SA001P	4	4	0.7	15.3	18.1	650
FSBS07CSSWLS004C006SA001P	4	6	0.7	17.3	20.3	900
FSBS07CSSWLS004C010SA001P	4	10	0.7	19.6	22.6	1155
FSBS07CSSWLS004C016SA001P	4	16	0.7	22.1	25.3	1490
FSBS07CSSWLS004C025SA001P	4	25	0.9	27.4	30.8	2280
FSBS07CSSWLS004C035SA001P	4	35	0.9	30.2	33.7	2810
FSBS07CSSWLS004C050SA001P	4	50	1	30.6	35	3460
FSBS07CSSWLS004C070SA001P	4	70	1.1	35.7	40.5	4800
FSBS07CSSWLS004C095SA001P	4	95	1.1	39.3	44.5	5995
FSBS07CSSWLS004C120SA001P	4	120	1.2	43.1	50	7685
FSBS07CSSWLS004C150SA001P	4	150	1.4	47.2	54.5	9225
FSBS07CSSWLS004C185SA001P	4	185	1.6	51.6	59.5	10985
FSBS07CSSWLS004C240SA001P	4	240	1.7	57.1	66	13575
FSBS07CSSWLS004C300SA001P	4	300	1.8	62.3	71.5	16340
FSBS07CSSWLS004C400SA001P	4	400	2	70	82	21895
FSBS07CSSWLS005C1.5SA001P	5	1.5	0.6	13.5	16.3	510
FSBS07CSSWLS005C2.5SA001P	5	2.5	0.7	15.2	18	620
FSBS07CSSWLS005C004SA001P	5	4	0.7	16.6	19.7	750
FSBS07CSSWLS005C006SA001P	5	6	0.7	18.9	21.9	1040
FSBS07CSSWLS005C010SA001P	5	10	0.7	21.4	24.6	1350
FSBS07CSSWLS005C016SA001P	5	16	0.7	25.3	28.7	1970
FSBS07CSSWLS005C025SA001P	5	25	0.9	30	33.6	2690
FSBS07CSSWLS005C035SA001P	5	35	0.9	33	36.9	3330
FSBS07CSSWLS005C050SA001P	5	50	1	39.1	43	4700
FSBS07CSSWLS005C070SA001P	5	70	1.1	43.8	48.2	5910
FSBS07CSSWLS007C1.5SA001P	7	1.5	0.6	14.6	17.5	600
FSBS07CSSWLS012C1.5SA001P	12	1.5	0.6	19.7	22.7	1010
FSBS07CSSWLS019C1.5SA001P	19	1.5	0.6	22.8	26.1	1340

FSBS07CSSWLS027C1.5SA001P	27	1.5	0.6	28.2	31.7	1970
FSBS07CSSWLS037C1.5SA001P	37	1.5	0.6	31.4	34.9	2390
FSBS07CSSWLS007C2.5SA001P	7	2.5	0.7	16.5	19.3	740
FSBS07CSSWLS012C2.5SA001P	12	2.5	0.7	22.2	25.5	1260
FSBS07CSSWLS019C2.5SA001P	19	2.5	0.7	27	30.5	1910
FSBS07CSSWLS027C2.5SA001P	27	2.5	0.7	32	36.7	2480
FSBS07CSSWLS037C2.5SA001P	37	2.5	0.7	35.7	39.4	3060
FSBS07CSSWLS007C004SA001P	7	4	0.7	18.8	21.8	1040
FSBS07CSSWLS012C004SA001P	12	4	0.7	25.6	28.8	1760
FSBS07CSSWLS019C004SA001P	19	4	0.7	29.7	33.2	2360
FSBS07CSSWLS027C004SA001P	27	4	0.7	35.3	39.2	3110
FSBS07CSSWLS037C004SA001P	37	4	0.7	40.7	44.8	4255

ELECTRICAL CHARACTERISTICS:

			Current Carrying Capacity (Amperes) Air Ambient Temperature - 30°C Ground Ambient Temperature - 20°C Conductor operating Temperature - 150°C					
	Max. Conductor Resistance		Reference Method C (clipped direct)		Reference Method E(in free air or on a perforated cable tray etc, horizontal or vertical)		Reference Method D (direct in ground or in ducting in ground, in or around buildings)	
Conductor cross-sectional area	at 20°C DC	at 90°C AC	1 two-core cable, single-phase AC or DC	1 three- or 1 four-core cable, three-phase AC	single-phase AC or DC	1 three- or 1 four-core cable, three-phase AC	1 two-core cable, single-phase AC or DC	1 three- or 1 four-core cable, three-phase AC
mm2	Ohm/km		Amp.	Amp.	Amp.	Amp.	Amp.	Amp.
1.5	12.1	15.4	35	30	38	33	33	27
2.5	7.41	9.45	47	40	51	43	43	37
4	4.61	5.88	64	55	68	57	56	47
6	3.08	3.93	81	69	86	73	69	57
10	1.83	2.33	111	95	117	102	93	76
16	1.15	1.47	143	123	150	129	119	98
25	0.727	0.927	190	162	198	171	151	125
35	0.524	0.668	235	201	245	211	181	150
50	0.387	0.493	286	244	297	257	214	176

70	0.268	0.342	364	310	379	327	265	218
95	0.193	0.246	441	377	462	396	312	257
120	0.153	0.195	511	437	535	460	353	291
150	0.124	0.158	588	503	615	529	399	327
185	0.0991	0.126	671	575	703	604	447	366
240	0.0754	0.0961	791	678	829	712	515	422
300	0.0601	0.0766	910	781	954	819	582	476
400	0.047	0.0599	1026	877	1104	949	-	-

The above table is in accordance with BS 7671-2018

Current rating de-rating factors for other than 30°C ambient air temperature.

Air Temperature	25	30	35	40	45	50	55	60	65	70	75	80
De-rating factor	1.02	1.00	0.96	0.91	0.87	0.82	0.76	0.71	0.65	0.58	0.50	0.41

Current rating de-rating factors for other than 20°C ground temperature.

Air Temp.	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80
De-rating factor	1.07	1.04	1.00	0.96	0.93	0.89	0.85	0.80	0.76	0.71	0.65	0.60	0.53	0.46	0.38