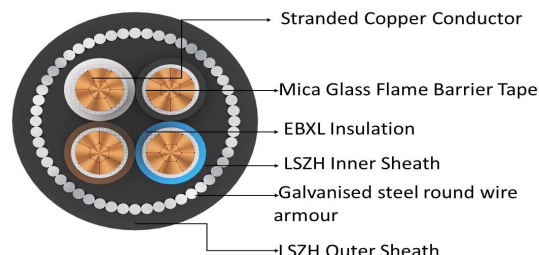
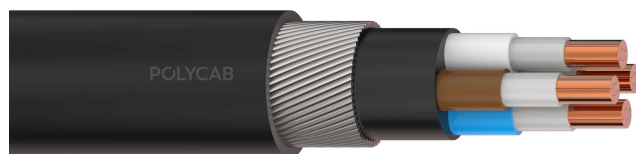


# POLYCAB IGNIS 220

## Fire Survival Cable - Plus, 600/1000 V AC



Images not to scale. Follow table for dimensions

### APPLICATION

POLYCAB FS P Multicore core Armoured cable is suitable to use in various indoor & outdoor applications where continuity of power supply during the event of fire, 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 +105°C  
Short Circuit Temperature 280°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 EBXL 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
- Better 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 220

## Fire Survival Cable - Plus, 600/1000 V AC

### DIMENSIONS AND WEIGHTS:

Product Code	No. of Cores	Cross Sectional Area (mm <sup>2</sup> )	Nom. Insulation Thickness (mm)	Nom. Dia over Armour (mm)	Nom. Cable Overall Dia. (mm)	Cable Weight Approx. (kg / km)
FSBS07CLSWLS002C1.5SA001P	2	1.5 A)	0.6	10.9	13.5	350
FSBS07CLSWLS002C2.5SA001P	2	2.5 A)	0.7	12.1	14.9	420
FSBS07CLSWLS002C004SA001P	2	4 A)	0.7	13.2	16	480
FSBS07CLSWLS002C006SA001P	2	6 A)	0.7	14.3	17.2	555
FSBS07CLSWLS002C010SA001P	2	10 A)	0.7	16.2	19.2	705
FSBS07CLSWLS002C016SA001P	2	16 A)	0.7	19	22	1030
FSBS07CLSWLS002C025SA001P	2	25 A)	0.9	22.4	25.7	1360
FSBS07CLSWLS002C025SA001P	2	25 B)	0.9	18.7	22	1190
FSBS07CLSWLS002C035SA001P	2	35 A)	0.9	25.8	29.2	1860
FSBS07CLSWLS002C035SA001P	2	35 B)	0.9	21.4	25	1615
FSBS07CLSWLS002C050SA001P	2	50 B)	1	24	27.8	2060
FSBS07CLSWLS002C070SA001P	2	70 B)	1.1	26.8	30.8	2590
FSBS07CLSWLS002C095SA001P	2	95 B)	1.1	30.4	34.6	3465
FSBS07CLSWLS002C120SA001P	2	120 B)	1.2	32.1	36.5	4075
FSBS07CLSWLS002C150SA001P	2	150 B)	1.4	35.1	39.7	4850
FSBS07CLSWLS002C185SA001P	2	185 B)	1.6	39.7	44.7	6190
FSBS07CLSWLS002C240SA001P	2	240 B)	1.7	43.3	48.6	7515
FSBS07CLSWLS002C300SA001P	2	300 B)	1.8	47.4	52.8	9010
FSBS07CLSWLS002C400SA001P	2	400 B)	2	51.7	57.6	10810
FSBS07CLSWLS003C1.5SA001P	3	1.5 A)	0.6	11.5	14.1	400
FSBS07CLSWLS003C2.5SA001P	3	2.5 A)	0.7	12.8	15.6	485
FSBS07CLSWLS003C004SA001P	3	4 A)	0.7	14	16.8	570
FSBS07CLSWLS003C006SA001P	3	6 A)	0.7	15.2	18	670
FSBS07CLSWLS003C010SA001P	3	10 A)	0.7	17.9	20.9	990
FSBS07CLSWLS003C016SA001P	3	16 A)	0.7	20.2	23.4	1270
FSBS07CLSWLS003C025SA001P	3	25 A)	0.9	25	28.4	1930
FSBS07CLSWLS003C025SA001P	3	25 B)	0.9	21.5	24.9	1730
FSBS07CLSWLS003C035SA001P	3	35 A)	0.9	27.5	31	2350
FSBS07CLSWLS003C035SA001P	3	35 B)	0.9	23.3	26.9	2110
FSBS07CLSWLS003C050SA001P	3	50 B)	1	26.2	30	2710
FSBS07CLSWLS003C070SA001P	3	70 B)	1.1	29.3	33.1	3455
FSBS07CLSWLS003C095SA001P	3	95 B)	1.1	33.3	37.6	4650
FSBS07CLSWLS003C120SA001P	3	120 B)	1.2	36	40.5	5560

# POLYCAB IGNIS 220

## Fire Survival Cable - Plus, 600/1000 V AC

Product Code	No. of Cores	Cross Sectional Area (mm <sup>2</sup> )	Nom. Insulation Thickness (mm)	Nom. Dia over Armour (mm)	Nom. Cable Overall Dia. (mm)	Cable Weight Approx. (kg / km)
FSBS07CLSWLS003C150SA001P	3	150 B)	1.4	40.5	45.1	7060
FSBS07CLSWLS003C185SA001P	3	185 B)	1.6	44.6	49.4	8450
FSBS07CLSWLS003C240SA001P	3	240 B)	1.7	48.9	54.1	10385
FSBS07CLSWLS003C300SA001P	3	300 B)	1.8	53.5	58.9	12545
FSBS07CLSWLS003C400SA001P	3	400 B)	2	58.6	64.4	15145
FSBS07CLSWLS004C1.5SA001P	4	1.5 A)	0.6	12.5	15.1	455
FSBS07CLSWLS004C2.5SA001P	4	2.5 A)	0.7	14	16.7	555
FSBS07CLSWLS004C004SA001P	4	4 A)	0.7	15.3	18.1	660
FSBS07CLSWLS004C006SA001P	4	6 A)	0.7	17.3	20.3	915
FSBS07CLSWLS004C010SA001P	4	10 A)	0.7	19.6	22.6	1170
FSBS07CLSWLS004C016SA001P	4	16 A)	0.7	22.1	25.3	1510
FSBS07CLSWLS004C025SA001P	4	25 A)	0.9	27.4	30.8	2305
FSBS07CLSWLS004C025SA001P	4	25 B)	0.9	24.7	28.1	2160
FSBS07CLSWLS004C035SA001P	4	35 A)	0.9	30.2	33.7	2840
FSBS07CLSWLS004C035SA001P	4	35 B)	0.9	27	30.6	2640
FSBS07CLSWLS004C050SA001P	4	50 B)	1	30.6	34.4	3440
FSBS07CLSWLS004C070SA001P	4	70 B)	1.1	35.7	40	4780
FSBS07CLSWLS004C095SA001P	4	95 B)	1.1	39.3	43.7	5950
FSBS07CLSWLS004C120SA001P	4	120 B)	1.2	43.1	47.7	7550
FSBS07CLSWLS004C150SA001P	4	150 B)	1.4	47.2	52	9080
FSBS07CLSWLS004C185SA001P	4	185 B)	1.6	51.6	56.8	10830
FSBS07CLSWLS004C240SA001P	4	240 B)	1.7	57.1	62.5	13380
FSBS07CLSWLS004C300SA001P	4	300 B)	1.8	62.3	68	16180
FSBS07CLSWLS004C400SA001P	4	400 B)	2	70	76.4	20610
FSBS07CLSWLS005C1.5SA001P	5	1.5	0.6	13.5	16.3	515
FSBS07CLSWLS005C2.5SA001P	5	2.5	0.7	15.2	18	630
FSBS07CLSWLS005C004SA001P	5	4	0.7	16.6	19.7	765
FSBS07CLSWLS005C004SA001P	5	4 A)	0.7	17.3	20.4	890
FSBS07CLSWLS005C006SA001P	5	6	0.7	18.9	21.9	1050
FSBS07CLSWLS005C010SA001P	5	10	0.7	21.4	24.6	1365
FSBS07CLSWLS005C016SA001P	5	16	0.7	25.3	28.7	1990
FSBS07CLSWLS005C025SA001P	5	25	0.9	30	33.6	2720
FSBS07CLSWLS005C035SA001P	5	35	0.9	33	36.9	3360
FSBS07CLSWLS005C050SA001P	5	50	1	39.1	43	4745
FSBS07CLSWLS005C070SA001P	5	70	1.1	43.8	48.2	5970

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# POLYCAB IGNIS 220

## Fire Survival Cable - Plus, 600/1000 V AC

Product Code	No. of Cores	Cross Sectional Area (mm <sup>2</sup> )	Nom. Insulation Thickness (mm)	Nom. Dia over Armour (mm)	Nom. Cable Overall Dia. (mm)	Cable Weight Approx. (kg / km)
FSBS07CLSWLS007C1.5SA001P	7	1.5	0.6	14.6	17.5	610
FSBS07CLSWLS007C1.5SA001P	7	1.5 A)	0.6	15.3	18.2	720
FSBS07CLSWLS012C1.5SA001P	12	1.5	0.6	19.7	22.7	1030
FSBS07CLSWLS019C1.5SA001P	19	1.5	0.6	22.8	26.1	1370
FSBS07CLSWLS027C1.5SA001P	27	1.5	0.6	28.2	31.7	2010
FSBS07CLSWLS037C1.5SA001P	37	1.5	0.6	31.4	34.9	2450
FSBS07CLSWLS007C2.5SA001P	7	2.5	0.7	16.5	19.3	755
FSBS07CLSWLS007C2.5SA001P	7	2.5 A)	0.7	17.2	20	875
FSBS07CLSWLS012C2.5SA001P	12	2.5	0.7	22.2	25.5	1290
FSBS07CLSWLS019C2.5SA001P	19	2.5	0.7	27	30.5	1950
FSBS07CLSWLS027C2.5SA001P	27	2.5	0.7	32	36.7	2540
FSBS07CLSWLS037C2.5SA001P	37	2.5	0.7	35.7	39.4	3150
FSBS07CLSWLS007C004SA001P	7	4	0.7	18.8	21.8	1060
FSBS07CLSWLS012C004SA001P	12	4	0.7	25.6	28.8	1790
FSBS07CLSWLS019C004SA001P	19	4	0.7	29.7	33.2	2410
FSBS07CLSWLS027C004SA001P	27	4	0.7	35.3	39.2	3180
FSBS07CLSWLS037C004SA001P	37	4	0.7	40.7	44.8	4350

Note:

A) Circular or compacted circular stranded conductor (Class 2).

B) Shaped stranded conductor (Class 2).

### ELECTRICAL CHARACTERISTICS:

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# POLYCAB IGNIS 220

## Fire Survival Cable - Plus, 600/1000 V AC

Current Carrying Capacity (Amperes)								
Air Ambient Temperature - 30°C								
Ground Ambient Temperature - 20°C								
Conductor operating Temperature - 105°C								
Conductor cross-sectional area	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)	
	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	1 two-core cable, 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
	mm <sup>2</sup>	Ohm/km	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.
1.5	12.1	15.4	30	25	32	27	27	23
2.5	7.41	9.45	39	34	43	36	36	31
4	4.61	5.88	54	46	57	48	47	39
6	3.08	3.93	68	58	72	61	58	48
10	1.83	2.33	93	80	98	85	78	63
16	1.15	1.47	120	103	126	108	100	82
25	0.727	0.927	160	136	166	143	127	105
35	0.524	0.668	197	169	206	177	152	126
50	0.387	0.493	240	205	249	216	179	148
70	0.268	0.342	305	260	318	275	222	183
95	0.193	0.246	370	316	387	333	262	216
120	0.153	0.195	429	367	449	386	297	244
150	0.124	0.158	493	422	516	444	335	275
185	0.0991	0.126	563	483	590	507	375	307
240	0.0754	0.0961	664	569	696	597	432	355
300	0.0601	0.0766	764	655	801	687	488	399
400	0.047	0.0599	861	736	927	797	-	-

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 Temperature	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