






The Ultimate Guardian



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IGNIS
Polycab Fire Survival Cables

Index

Sl. No.		Page No.
1	About IGNIS Fire Survival Cable	3
2	Time-Temperature Curve	5
3	Performance of cables in the event of fire	6
4	Technical Data - Cable Construction / Electrical Characteristics	
	1. POLYCAB IGNIS 200	8
	2. POLYCAB IGNIS 210	12
	3. POLYCAB IGNIS 220	16
	4. POLYCAB IGNIS 230	20
	5. POLYCAB IGNIS 211	24
	6. POLYCAB IGNIS 212	26
	7. POLYCAB IGNIS 213	28
	8. POLYCAB IGNIS 214	30
	9. POLYCAB IGNIS 215	32
	10. POLYCAB IGNIS 240	34
	11. POLYCAB IGNIS 241	36
	12. POLYCAB IGNIS 242	38

IGNIS Fire Survival Cable

In today's building & installation, electrical cables & wires have a significant role in fire safety. Generally electrical insulation and sheathing compound catch fire unless it is fire retardant or fire resistant. This results in overheating of wires & cables arching, short circuit or electrical fault. Cables contribute significantly to the spread of fire and heat emission, increased smoke emission, increased carbon monoxide level, production & release of corrosive gasses.

Polycab IGNIS fire survival cable (low smoke zero halogen - LSZH) are suitable for 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. Polycab IGNIS Fire Survival Cable conforms to various IEC and BS specification. The cables are tested in leading labs and approved by many Indian public sector company and other industries.

Polycab IGNIS Fire Survival cable is a result of continuous research & development and innovation in highly sophisticated and modern R& D centre.

In order to meet the latest demands of environmentally friendly cables with increased safety in the event of a fire, Polycab offers a high range of product that meets:

1. The green & healthy environment
2. Halogen free environment which contributes to less corrosive gases and prevents the damage of human beings and equipments near the fire.
3. No emission of toxic gases which allows fire fighters to work and people to exit.
4. No release of dense smoke that improves the visibility of the exit routes and facilitates the rescue operation.
5. Takes much more time than the traditional cables to catch fire which helps in the evacuation of operation.
6. Excellent flame retardant properties that prevent the spreading of fire.
7. Maintains the circuit integrity of those vital instruments which help in the rescue operation, fire fighting and exit as follows:

a. Booster pump system	e. Rescue elevators
b. Water sprinkling system	f. Alarm hooters
c. Emergency lighting	g. Ventilation system
d. Fire & smoke detector system	



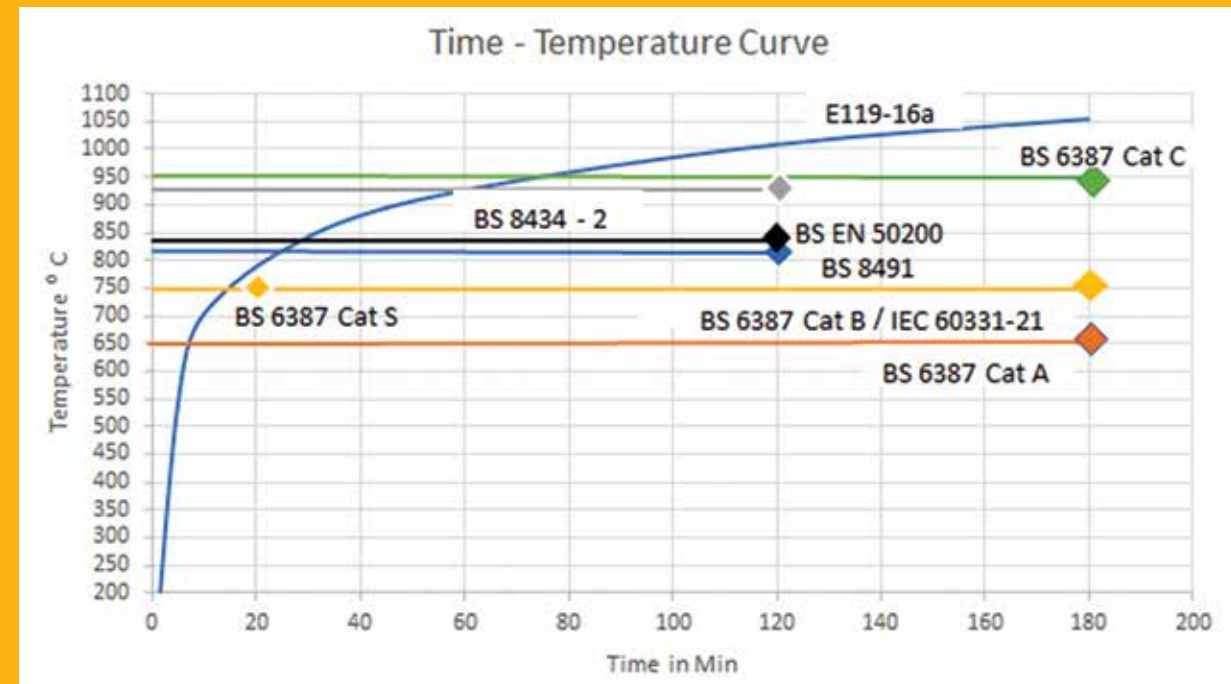


Polycab IGNIS Fire Survival Cables

Polycab fire rated cables are designed to maintain electrical continuity during high fire situation to keep essential life safety and fire-fighting equipment operational for as long as possible, to facilitate evacuation, visibility and firefighting devices to be operational.

Time -temperature Curve

The time-temperature curve shown in the picture below is the standard scale for measurement of fire test severity and shows the growth of fire propagation.



To assess the performance of the cable under different fire load, various specifications are described. The time-temperature curve for the standard fire endurance test, ASTM E 119 [13] goes up to 1260°C but this takes 8hrs. Therefore cable performance below this level has described in BS 6387CWZ, BS 8434-2, BS EN 50200, BS 8491 & IEC 60331-21.

Performance of cables in the event of Fire

In the event of fire, the cable develops hazards in respect of flame propagation, evaluation of smoke, heat development and toxic gasses etc. To evaluate the potential performance of the cable, many tests have been developed over the years.

The performance of the cable under fire condition is specified in several international standard as follows:

1. Flame Propagation Test : IEC 60332-1, BS EN 60332-1
2. Flame spread test : IEC 60332-3, BS EN 60332-3
3. Fire Resistance test : IEC 60331, BS 6387
4. Resistant to Fire with water : BS 6387
5. Acid Gas emission test : IEC 60754, BS EN 50267
6. Determination of Acidity : IEC 60754, BS EN 50267
7. Smoke emission test : IEC 61034, BS EN 61034
8. Limiting Oxygen Index(LOI) : BS EN ISO 4589, ASTM D 2863

Polycab IGNIS Fire Survival cable maintains Circuit Integrity in the following category

Category A 650 ±40°C for 3 hours

Category B 750 ±40°C for 3 hours

Category C 950 ±40°C for 3 hours

BS 6387-2013 describes following Circuit Integrity tests under CWZ conditions, as below:

- a) Protocol C subjects the cable under test to a flame via direct impingement corresponding to a temperature attack of 950°C ±40°C.
- b) Protocol W subjects the cable under test to a flame via direct impingement corresponding to a temperature attack of 650°C ±40°C with direct application of water simulating a sprinkler system.
- c) Protocol Z subjects the cable under test to a flame via direct impingement corresponding to a temperature attack of 950°C ±40°C with indirect application of mechanical shock.

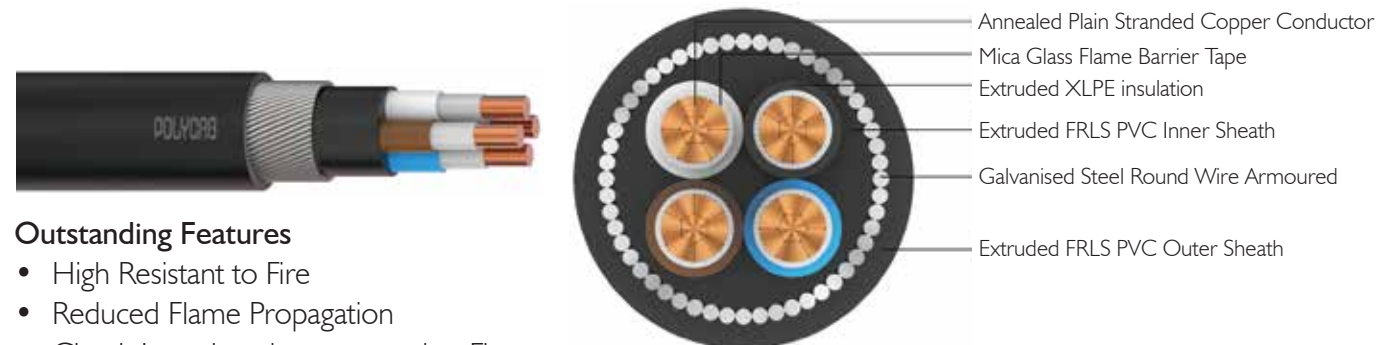
Also, BS 6387 specifies that

Cables shall be designated by category according to their fire resistance characteristics as follows:

- a) Category F2. Resistance to fire, resistance to fire with water, resistance to fire with mechanical shock, assessed separately, when tested in accordance with 17.6.2 of BS 7846;
- b) Category F30. Resistance to fire with direct mechanical impact and water jet assessed in combination, when tested in accordance with BS 8491 for 30 min;
- c) Category F60. Resistance to fire with direct mechanical impact and water jet assessed in combination, when tested in accordance with BS 8491 for 60 min;
- d) Category F120. Resistance to fire with direct mechanical impact and water jet assessed in combination, when tested in accordance with BS 8491 for 120 min.



POLYCAB IGNIS 200
Fire Survival Cable, 600/1000 V AC



Outstanding Features

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

Application

POLYCAB FS-YL 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.

Voltage Rating

0.6/1KV

Operation Temperature

-40°C to +90°C
Short Circuit Temperature 250°C

Construction

- Annealed plain stranded copper conductor as per IEC 60228, Class-2.
- Mica Glass flame barrier tape.
- Extruded XLPE insulation.
- Insulated Cores assembled together.
- Extruded FRLS PVC Inner Sheath.
- Galvanised Steel Round Wire Armoured.
(also available with Galvanised Steel Flat Strip Armour, dimensions and weights changes accordingly)
- Extruded FRLS PVC 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)

Bending Radius

Min. 12 x Overall Diameter

Standard Follows:

EN 60228:2005
BS 7846:2016

Test Voltage

3500V AC at (20±5)°C

Compliance

Fire Resistant BS 7846-F2 / BS 6387 CWZ/
BS EN 50200 (PH 60) /
BS 8434 / BS 8491 /
EN 60331-3
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



POLYCAB IGNIS 200
Fire Survival Cable, 600/1000 V AC

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)
FSBS07CXSWYL002C1.5SA00IP	2	1.5 A)	0.60	10.9	13.5	340
FSBS07CXSWYL002C2.5SA00IP	2	2.5 A)	0.70	12.1	14.9	410
FSBS07CXSWYL002C004SA00IP	2	4 A)	0.70	13.2	16.0	470
FSBS07CXSWYL002C006SA00IP	2	6 A)	0.70	14.3	17.2	540
FSBS07CXSWYL002C010SA00IP	2	10 A)	0.70	16.2	19.2	690
FSBS07CXSWYL002C016SA00IP	2	16 A)	0.70	19.0	22.0	1010
FSBS07CXSWYL002C025SA00IP	2	25 A)	0.90	22.4	25.7	1330
FSBS07CXSWYL002C025SA00IP	2	25 B)	0.90	18.7	22.0	1170
FSBS07CXSWYL002C035SA00IP	2	35 A)	0.90	25.8	29.2	1830
FSBS07CXSWYL002C035SA00IP	2	35 B)	0.90	21.4	25.0	1590
FSBS07CXSWYL002C050SA00IP	2	50 B)	1.00	24.0	27.8	2030
FSBS07CXSWYL002C070SA00IP	2	70 B)	1.10	26.8	30.8	2550
FSBS07CXSWYL002C095SA00IP	2	95 B)	1.10	30.4	34.6	3420
FSBS07CXSWYL002C120SA00IP	2	120 B)	1.20	32.1	36.5	4020
FSBS07CXSWYL002C150SA00IP	2	150 B)	1.40	35.1	39.7	4780
FSBS07CXSWYL002C185SA00IP	2	185 B)	1.60	39.7	44.7	6100
FSBS07CXSWYL002C240SA00IP	2	240 B)	1.70	43.3	48.6	7410
FSBS07CXSWYL002C300SA00IP	2	300 B)	1.80	47.4	52.8	8890
FSBS07CXSWYL002C400SA00IP	2	400 B)	2.00	51.7	57.6	10660
FSBS07CXSWYL003C1.5SA00IP	3	1.5 A)	0.60	11.5	14.1	385
FSBS07CXSWYL003C2.5SA00IP	3	2.5 A)	0.70	12.8	15.6	470
FSBS07CXSWYL003C004SA00IP	3	4 A)	0.70	14.0	16.8	550
FSBS07CXSWYL003C004SA00IP	3	4 A)	0.70	14.7	17.5	655
FSBS07CXSWYL003C006SA00IP	3	6 A)	0.70	15.2	18.0	650
FSBS07CXSWYL003C006SA00IP	3	6 A)	0.70	15.9	18.7	760
FSBS07CXSWYL003C010SA00IP	3	10 A)	0.70	17.9	20.9	970
FSBS07CXSWYL003C016SA00IP	3	16 A)	0.70	20.2	23.4	1250
FSBS07CXSWYL003C025SA00IP	3	25 A)	0.90	25.0	28.4	1890
FSBS07CXSWYL003C025SA00IP	3	25 B)	0.90	21.5	24.9	1700
FSBS07CXSWYL003C035SA00IP	3	35 A)	0.90	27.5	31.0	2300
FSBS07CXSWYL003C035SA00IP	3	35 B)	0.90	23.3	26.9	2070
FSBS07CXSWYL003C050SA00IP	3	50 B)	1.00	26.2	30.0	2660
FSBS07CXSWYL003C070SA00IP	3	70 B)	1.10	29.3	33.1	3400
FSBS07CXSWYL003C095SA00IP	3	95 B)	1.10	33.3	37.6	4580
FSBS07CXSWYL003C120SA00IP	3	120 B)	1.20	36.0	40.5	5470
FSBS07CXSWYL003C150SA00IP	3	150 B)	1.40	40.5	45.1	6950
FSBS07CXSWYL003C185SA00IP	3	185 B)	1.60	44.6	49.4	8300
FSBS07CXSWYL003C240SA00IP	3	240 B)	1.70	48.9	54.1	10210
FSBS07CXSWYL003C300SA00IP	3	300 B)	1.80	53.5	58.9	12350
FSBS07CXSWYL003C400SA00IP	3	400 B)	2.00	58.6	64.4	14890

Note:

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

POLYCAB IGNIS 200
Fire Survival Cable, 600/1000 V AC

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)
FSBS07CXSWYL004C1.5SA001P	4	1.5 A)	0.60	12.5	15.1	435
FSBS07CXSWYL004C2.5SA001P	4	2.5 A)	0.70	14.0	16.7	530
FSBS07CXSWYL004C004SA001P	4	4 A)	0.70	15.3	18.1	640
FSBS07CXSWYL004C006SA001P	4	6 A)	0.70	17.3	20.3	890
FSBS07CXSWYL004C010SA001P	4	10 A)	0.70	19.6	22.6	1140
FSBS07CXSWYL004C016SA001P	4	16 A)	0.70	22.1	25.3	1470
FSBS07CXSWYL004C025SA001P	4	25 A)	0.90	27.4	30.8	2250
FSBS07CXSWYL004C025SA001P	4	25 B)	0.90	24.7	28.1	2100
FSBS07CXSWYL004C035SA001P	4	35 A)	0.90	30.2	33.7	2780
FSBS07CXSWYL004C035SA001P	4	35 B)	0.90	27.0	30.6	2580
FSBS07CXSWYL004C050SA001P	4	50 B)	1.00	30.6	34.4	3360
FSBS07CXSWYL004C070SA001P	4	70 B)	1.10	35.7	40.0	4680
FSBS07CXSWYL004C095SA001P	4	95 B)	1.10	39.3	43.7	5840
FSBS07CXSWYL004C120SA001P	4	120 B)	1.20	43.1	47.7	7420
FSBS07CXSWYL004C150SA001P	4	150 B)	1.40	47.2	52.0	8910
FSBS07CXSWYL004C185SA001P	4	185 B)	1.60	51.6	56.8	10620
FSBS07CXSWYL004C240SA001P	4	240 B)	1.70	57.1	62.5	13130
FSBS07CXSWYL004C300SA001P	4	300 B)	1.80	62.3	68.0	15890
FSBS07CXSWYL004C400SA001P	4	400 B)	2.00	70.0	76.4	20250
FSBS07CXSWYL005C1.5SA001P	5	1.5	0.60	13.5	16.3	495
FSBS07CXSWYL005C2.5SA001P	5	2.5	0.70	15.2	18.0	605
FSBS07CXSWYL005C004SA001P	5	4	0.70	16.6	19.7	740
FSBS07CXSWYL005C006SA001P	5	6	0.70	18.9	21.9	1020
FSBS07CXSWYL005C010SA001P	5	10	0.70	21.4	24.6	1330
FSBS07CXSWYL005C016SA001P	5	16	0.70	25.3	28.7	1950
FSBS07CXSWYL005C025SA001P	5	25	0.90	30.0	33.6	2650
FSBS07CXSWYL005C035SA001P	5	35	0.90	33.0	36.9	3280
FSBS07CXSWYL005C050SA001P	5	50	1.00	39.1	43.0	4640
FSBS07CXSWYL005C070SA001P	5	70	1.10	43.8	48.2	5840
FSBS07CXSWYL007C1.5SA001P	7	1.5	0.60	14.6	17.5	580
FSBS07CXSWYL012C1.5SA001P	12	1.5	0.60	19.7	22.7	990
FSBS07CXSWYL019C1.5SA001P	19	1.5	0.60	22.8	26.1	1300
FSBS07CXSWYL027C1.5SA001P	27	1.5	0.60	28.2	31.7	1920
FSBS07CXSWYL037C1.5SA001P	37	1.5	0.60	31.4	34.9	2315
FSBS07CXSWYL007C2.5SA001P	7	2.5	0.70	16.5	19.3	720
FSBS07CXSWYL012C2.5SA001P	12	2.5	0.70	22.2	25.5	1230
FSBS07CXSWYL019C2.5SA001P	19	2.5	0.70	27.0	30.5	1860
FSBS07CXSWYL027C2.5SA001P	27	2.5	0.70	32.0	36.7	2410
FSBS07CXSWYL037C2.5SA001P	37	2.5	0.70	35.7	39.4	2970
FSBS07CXSWYL007C004SA001P	7	4.0	0.70	18.8	21.8	1020
FSBS07CXSWYL012C004SA001P	12	4.0	0.70	25.6	28.8	1725
FSBS07CXSWYL019C004SA001P	19	4.0	0.70	29.7	33.2	2300
FSBS07CXSWYL027C004SA001P	27	4.0	0.70	35.3	39.2	3025
FSBS07CXSWYL037C004SA001P	37	4.0	0.70	40.7	44.8	4140

Note: A) Circular or compacted circular stranded conductor (Class 2). B) Shaped stranded conductor (Class 2).

POLYCAB IGNIS 200
Fire Survival Cable, 600/1000 V AC

ELECTRICAL CHARACTERISTICS:

Conductor cross-sectional area	Max. Conductor Resistance		Current Carrying Capacity (Amperes)						
			Air Ambient Temperature - 30°C Ground Ambient Temperature - 20°C Conductor operating Temperature - 90°C						
			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)		
mm ²	Ohm/km	at 20°C DC	at 90°C AC	I two-core cable, single-phase AC or DC	I three- or I four-core cable, three-phase AC	I two-core cable, single-phase AC or DC	I three- or I four-core cable, three-phase AC	I two-core cable, single-phase AC or DC	I three- or I four-core cable, three-phase AC
1.5	12.1	15.4	27	23	29	25	25	21	
2.5	7.41	9.45	36	31	39	33	33	28	
4	4.61	5.88	49	42	52	44	43	36	
6	3.08	3.93	62	53	66	56	53	44	
10	1.83	2.33	85	73	90	78	71	58	
16	1.15	1.47	110	94	115	99	91	75	
25	0.727	0.927	146	124	152	131	116	96	
35	0.524	0.668	180	154	188	162	139	115	
50	0.387	0.493	219	187	228	197	164	135	
70	0.268	0.342	279	238	291	251	203	167	
95	0.193	0.246	338	289	354	304	239	197	
120	0.153	0.195	392	335	410	353	271	223	
150	0.124	0.158	451	386	472	406	306	251	
185	0.0991	0.126	515	441	539	463	343	281	
240	0.0754	0.0961	607	520	636	546	395	324	
300	0.0601	0.0766	698	599	732	628	446	365	
400	0.0470	0.0599	787	673	847	728	-	-	

The above table is in accordance with Table 4E4A of BS 7671-2018

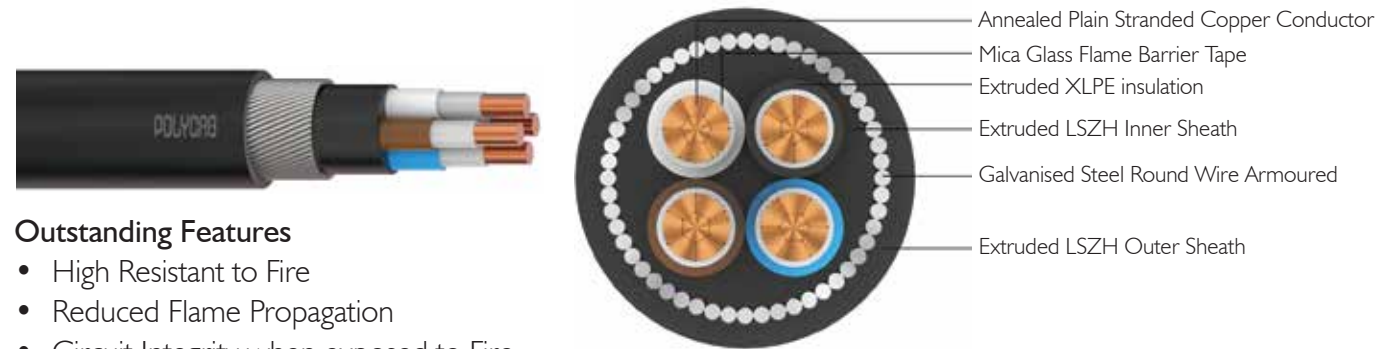
Current rating de-rating factors for other than 30°C ambient air temperature.

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

POLYCAB IGNIS 210
Fire Survival Cable, 600/1000V AC



Outstanding Features

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

Application

POLYCAB FS 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.

Voltage Rating

0.6/1KV

Operation Temperature

-40°C to +90°C
Short Circuit Temperature 250°C

Construction

- Annealed plain stranded copper conductor as per IEC 60228, Class-2.
- Mica Glass flame barrier tape.
- Extruded XLPE insulation.
- Insulated Cores assembled together.
- Extruded LSZH Inner Sheath
- Galvanised Steel Round Wire Armoured (also available with Galvanised Steel Flat Strip Armour, dimensions and weights changes accordingly)
- Extruded LSZH Outer Sheath, Colour: Black. (other colour as per request).

Bending Radius

Min. 12 x Overall Diameter

Standard Follows:

EN 60228:2005
BS 7846:2016

Test Voltage

3500V AC at (20±5)°C

Compliance

Fire Resistant BS 7846-F2 / BS 6387 CWZ /
BS EN 50200 (PH 60) /
BS 8434 / BS 8491 /
EN 60331-3
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

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)



POLYCAB IGNIS 210
Fire Survival Cable, 600/1000V AC

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)
FSBS07CXSWLS002C1.5SA001P	2	1.5 A)	0.60	10.9	13.5	340
FSBS07CXSWLS002C2.5SA001P	2	2.5 A)	0.70	12.1	14.9	410
FSBS07CXSWLS002C004SA001P	2	4 A)	0.70	13.2	16.0	470
FSBS07CXSWLS002C006SA001P	2	6 A)	0.70	14.3	17.2	540
FSBS07CXSWLS002C010SA001P	2	10 A)	0.70	16.2	19.2	690
FSBS07CXSWLS002C016SA001P	2	16 A)	0.70	19.0	22.0	1010
FSBS07CXSWLS002C025SA001P	2	25 A)	0.90	22.4	25.7	1330
FSBS07CXSWLS002C025SA001P	2	25 B)	0.90	18.7	22.0	1170
FSBS07CXSWLS002C035SA001P	2	35 A)	0.90	25.8	29.2	1830
FSBS07CXSWLS002C035SA001P	2	35 B)	0.90	21.4	25.0	1590
FSBS07CXSWLS002C050SA001P	2	50 B)	1.00	24.0	27.8	2030
FSBS07CXSWLS002C070SA001P	2	70 B)	1.10	26.8	30.8	2550
FSBS07CXSWLS002C095SA001P	2	95 B)	1.10	30.4	34.6	3420
FSBS07CXSWLS002C120SA001P	2	120 B)	1.20	32.1	36.5	4020
FSBS07CXSWLS002C150SA001P	2	150 B)	1.40	35.1	39.7	4780
FSBS07CXSWLS002C185SA001P	2	185 B)	1.60	39.7	44.7	6100
FSBS07CXSWLS002C240SA001P	2	240 B)	1.70	43.3	48.6	7410
FSBS07CXSWLS002C300SA001P	2	300 B)	1.80	47.4	52.8	8890
FSBS07CXSWLS002C400SA001P	2	400 B)	2.00	51.7	57.6	10660
FSBS07CXSWLS003C1.5SA001P	3	1.5 A)	0.60	11.5	14.1	385
FSBS07CXSWLS003C2.5SA001P	3	2.5 A)	0.70	12.8	15.6	470
FSBS07CXSWLS003C004SA001P	3	4 A)	0.70	14.0	16.8	550
FSBS07CXSWLS003C006SA001P	3	6 A)	0.70	15.2	18.0	650
FSBS07CXSWLS003C010SA001P	3	10 A)	0.70	17.9	20.9	970
FSBS07CXSWLS003C016SA001P	3	16 A)	0.70	20.2	23.4	1250
FSBS07CXSWLS003C025SA001P	3	25 A)	0.90	25.0	28.4	1890
FSBS07CXSWLS003C025SA001P	3	25 B)	0.90	21.5	24.9	1700
FSBS07CXSWLS003C035SA001P	3	35 A)	0.90	27.5	31.0	2300
FSBS07CXSWLS003C035SA001P	3	35 B)	0.90	23.3	26.9	2070
FSBS07CXSWLS003C050SA001P	3	50 B)	1.00	26.2	30.0	2660
FSBS07CXSWLS003C070SA001P	3	70 B)	1.10	29.3	33.1	3400
FSBS07CXSWLS003C095SA001P	3	95 B)	1.10	33.3	37.6	4580
FSBS07CXSWLS003C120SA001P	3	120 B)	1.20	36.0	40.5	5470
FSBS07CXSWLS003C150SA001P	3	150 B)	1.40	40.5	45.1	6950
FSBS07CXSWLS003C185SA001P	3	185 B)	1.60	44.6	49.4	8300
FSBS07CXSWLS003C240SA001P	3	240 B)	1.70	48.9	54.1	10210
FSBS07CXSWLS003C300SA001P	3	300 B)	1.80	53.5	58.9	12350
FSBS07CXSWLS003C400SA001P	3	400 B)	2.00	58.6	64.4	14890

Note:

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

POLYCAB IGNIS 210
Fire Survival Cable, 600/1000V AC

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)
FSBS07CXSWLS004C1.5SA00IP	4	1.5 A)	0.60	12.5	15.1	435
FSBS07CXSWLS004C2.5SA00IP	4	2.5 A)	0.70	14.0	16.7	530
FSBS07CXSWLS004C004SA00IP	4	4 A)	0.70	15.3	18.1	640
FSBS07CXSWLS004C006SA00IP	4	6 A)	0.70	17.3	20.3	890
FSBS07CXSWLS004C010SA00IP	4	10 A)	0.70	19.6	22.6	1140
FSBS07CXSWLS004C016SA00IP	4	16 A)	0.70	22.1	25.3	1470
FSBS07CXSWLS004C025SA00IP	4	25 A)	0.90	27.4	30.8	2250
FSBS07CXSWLS004C025SA00IP	4	25 B)	0.90	24.7	28.1	2100
FSBS07CXSWLS004C035SA00IP	4	35 A)	0.90	30.2	33.7	2780
FSBS07CXSWLS004C035SA00IP	4	35 B)	0.90	27.0	30.6	2580
FSBS07CXSWLS004C050SA00IP	4	50 B)	1.00	30.6	34.4	3360
FSBS07CXSWLS004C070SA00IP	4	70 B)	1.10	35.7	40.0	4680
FSBS07CXSWLS004C095SA00IP	4	95 B)	1.10	39.3	43.7	5840
FSBS07CXSWLS004C120SA00IP	4	120 B)	1.20	43.1	47.7	7420
FSBS07CXSWLS004C150SA00IP	4	150 B)	1.40	47.2	52.0	8910
FSBS07CXSWLS004C185SA00IP	4	185 B)	1.60	51.6	56.8	10620
FSBS07CXSWLS004C240SA00IP	4	240 B)	1.70	57.1	62.5	13130
FSBS07CXSWLS004C300SA00IP	4	300 B)	1.80	62.3	68.0	15890
FSBS07CXSWLS004C400SA00IP	4	400 B)	2.00	70.0	76.4	20250
FSBS07CXSWLS005C1.5SA00IP	5	1.5	0.60	13.5	16.3	495
FSBS07CXSWLS005C2.5SA00IP	5	2.5	0.70	15.2	18.0	605
FSBS07CXSWLS005C004SA00IP	5	4	0.70	16.6	19.7	740
FSBS07CXSWLS005C006SA00IP	5	6	0.70	18.9	21.9	1020
FSBS07CXSWLS005C010SA00IP	5	10	0.70	21.4	24.6	1330
FSBS07CXSWLS005C016SA00IP	5	16	0.70	25.3	28.7	1950
FSBS07CXSWLS005C025SA00IP	5	25	0.90	30.0	33.6	2650
FSBS07CXSWLS005C035SA00IP	5	35	0.90	33.0	36.9	3280
FSBS07CXSWLS005C050SA00IP	5	50	1.00	39.1	43.0	4640
FSBS07CXSWLS005C070SA00IP	5	70	1.10	43.8	48.2	5840
FSBS07CXSWLS007C1.5SA00IP	7	1.5	0.60	14.6	17.5	580
FSBS07CXSWLS012C1.5SA00IP	12	1.5	0.60	19.7	22.7	990
FSBS07CXSWLS019C1.5SA00IP	19	1.5	0.60	22.8	26.1	1300
FSBS07CXSWLS027C1.5SA00IP	27	1.5	0.60	28.2	31.7	1920
FSBS07CXSWLS037C1.5SA00IP	37	1.5	0.60	31.4	34.9	2315
FSBS07CXSWLS007C2.5SA00IP	7	2.5	0.70	16.5	19.3	720
FSBS07CXSWLS012C2.5SA00IP	12	2.5	0.70	22.2	25.5	1230
FSBS07CXSWLS019C2.5SA00IP	19	2.5	0.70	27.0	30.5	1860
FSBS07CXSWLS027C2.5SA00IP	27	2.5	0.70	32.0	36.7	2410
FSBS07CXSWLS037C2.5SA00IP	37	2.5	0.70	35.7	39.4	2970
FSBS07CXSWLS007C004SA00IP	7	4.0	0.70	18.8	21.8	1020
FSBS07CXSWLS012C004SA00IP	12	4.0	0.70	25.6	28.8	1725
FSBS07CXSWLS019C004SA00IP	19	4.0	0.70	29.7	33.2	2300
FSBS07CXSWLS027C004SA00IP	27	4.0	0.70	35.3	39.2	3025
FSBS07CXSWLS037C004SA00IP	37	4.0	0.70	40.7	44.8	4140

Note for dimensions and weights: A) Circular or compacted circular stranded conductor (Class 2). B) Shaped stranded conductor (Class 2).

POLYCAB IGNIS 210
Fire Survival Cable, 600/1000V AC

ELECTRICAL CHARACTERISTICS:

Conductor cross-sectional area	Max. Conductor Resistance		Current Carrying Capacity (Amperes)						
			Air Ambient Temperature - 30°C Ground Ambient Temperature - 20°C Conductor operating Temperature - 90°C						
			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)		
mm ²	Ohm/km	at 20°C DC	at 90°C AC	I two-core cable, single-phase AC or DC	I three- or I four-core cable, three-phase AC	I two-core cable, single-phase AC or DC	I three- or I four-core cable, three-phase AC	I two-core cable, single-phase AC or DC	I three- or I four-core cable, three-phase AC
1.5	12.1	15.4	27	23	29	25	25	21	
2.5	7.41	9.45	36	31	39	33	33	28	
4	4.61	5.88	49	42	52	44	43	36	
6	3.08	3.93	62	53	66	56	53	44	
10	1.83	2.33	85	73	90	78	71	58	
16	1.15	1.47	110	94	115	99	91	75	
25	0.727	0.927	146	124	152	131	116	96	
35	0.524	0.668	180	154	188	162	139	115	
50	0.387	0.493	219	187	228	197	164	135	
70	0.268	0.342	279	238	291	251	203	167	
95	0.193	0.246	338	289	354	304	239	197	
120	0.153	0.195	392	335	410	353	271	223	
150	0.124	0.158	451	386	472	406	306	251	
185	0.0991	0.126	515	441	539	463	343	281	
240	0.0754	0.0961	607	520	636	546	395	324	
300	0.0601	0.0766	698	599	732	628	446	365	
400	0.0470	0.0599	787	673	847	728	-	-	

The above table is in accordance with Table 4E4A of BS 7671-2018

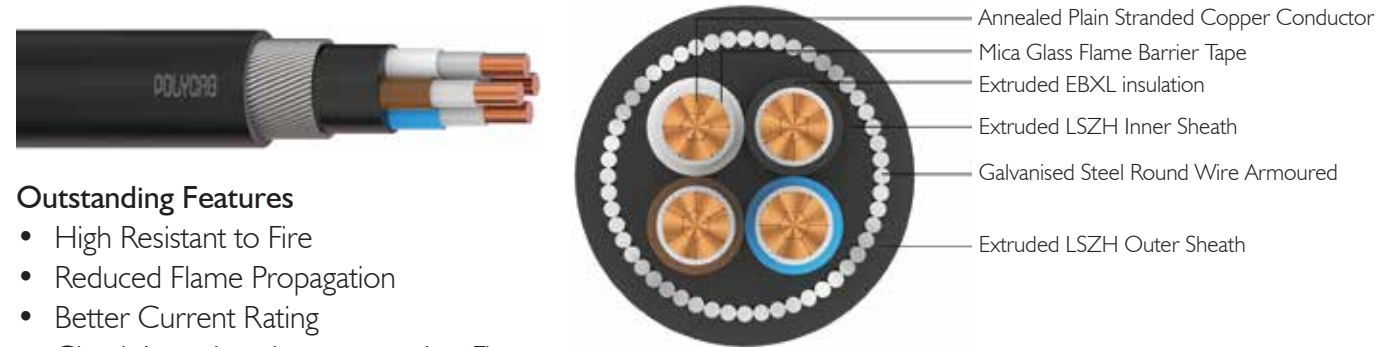
Current rating de-rating factors for other than 30°C ambient air temperature.

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

POLYCAB IGNIS 220
Fire Survival Cable - Plus, 600/1000V AC



Outstanding Features

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

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.

Voltage Rating

0.6/1KV

Operation Temperature

-40°C to +105°C
Short Circuit Temperature 280°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 Round Wire Armoured (also available with Galvanised Steel Flat Strip Armour, dimensions and weights changes accordingly)
- 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)

Bending Radius

Min. 12 x Overall Diameter

Standard Follows:

EN 60228:2005
BS 7846:2016

Test Voltage

3500V AC at (20±5)°C

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



POLYCAB IGNIS 220
Fire Survival Cable - Plus, 600/1000V AC

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)
FSBS07CLSWLS002C1.5SA001P	2	1.5 A)	0.60	10.9	13.5	350
FSBS07CLSWLS002C2.5SA001P	2	2.5 A)	0.70	12.1	14.9	420
FSBS07CLSWLS002C004SA001P	2	4 A)	0.70	13.2	16.0	480
FSBS07CLSWLS002C006SA001P	2	6 A)	0.70	14.3	17.2	555
FSBS07CLSWLS002C010SA001P	2	10 A)	0.70	16.2	19.2	705
FSBS07CLSWLS002C016SA001P	2	16 A)	0.70	19.0	22.0	1030
FSBS07CLSWLS002C025SA001P	2	25 A)	0.90	22.4	25.7	1360
FSBS07CLSWLS002C025SA001P	2	25 B)	0.90	18.7	22.0	1190
FSBS07CLSWLS002C035SA001P	2	35 A)	0.90	25.8	29.2	1860
FSBS07CLSWLS002C035SA001P	2	35 B)	0.90	21.4	25.0	1615
FSBS07CLSWLS002C050SA001P	2	50 B)	1.00	24.0	27.8	2060
FSBS07CLSWLS002C070SA001P	2	70 B)	1.10	26.8	30.8	2590
FSBS07CLSWLS002C095SA001P	2	95 B)	1.10	30.4	34.6	3465
FSBS07CLSWLS002C120SA001P	2	120 B)	1.20	32.1	36.5	4075
FSBS07CLSWLS002C150SA001P	2	150 B)	1.40	35.1	39.7	4850
FSBS07CLSWLS002C185SA001P	2	185 B)	1.60	39.7	44.7	6190
FSBS07CLSWLS002C240SA001P	2	240 B)	1.70	43.3	48.6	7515
FSBS07CLSWLS002C300SA001P	2	300 B)	1.80	47.4	52.8	9010
FSBS07CLSWLS002C400SA001P	2	400 B)	2.00	51.7	57.6	10810
FSBS07CLSWLS003C1.5SA001P	3	1.5 A)	0.60	11.5	14.1	400
FSBS07CLSWLS003C2.5SA001P	3	2.5 A)	0.70	12.8	15.6	485
FSBS07CLSWLS003C004SA001P	3	4 A)	0.70	14.0	16.8	570
FSBS07CLSWLS003C006SA001P	3	6 A)	0.70	15.2	18.0	670
FSBS07CLSWLS003C010SA001P	3	10 A)	0.70	17.9	20.9	990
FSBS07CLSWLS003C016SA001P	3	16 A)	0.70	20.2	23.4	1270
FSBS07CLSWLS003C025SA001P	3	25 A)	0.90	25.0	28.4	1930
FSBS07CLSWLS003C025SA001P	3	25 B)	0.90	21.5	24.9	1730
FSBS07CLSWLS003C035SA001P	3	35 A)	0.90	27.5	31.0	2350
FSBS07CLSWLS003C035SA001P	3	35 B)	0.90	23.3	26.9	2110
FSBS07CLSWLS003C050SA001P	3	50 B)	1.00	26.2	30.0	2710
FSBS07CLSWLS003C070SA001P	3	70 B)	1.10	29.3	33.1	3455
FSBS07CLSWLS003C095SA001P	3	95 B)	1.10	33.3	37.6	4650
FSBS07CLSWLS003C120SA001P	3	120 B)	1.20	36.0	40.5	5560
FSBS07CLSWLS003C150SA001P	3	150 B)	1.40	40.5	45.1	7060
FSBS07CLSWLS003C185SA001P	3	185 B)	1.60	44.6	49.4	8450
FSBS07CLSWLS003C240SA001P	3	240 B)	1.70	48.9	54.1	10385
FSBS07CLSWLS003C300SA001P	3	300 B)	1.80	53.5	58.9	12545
FSBS07CLSWLS003C400SA001P	3	400 B)	2.00	58.6	64.4	15145

Note:

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

POLYCAB IGNIS 220
Fire Survival Cable - Plus, 600/1000V AC

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)
FSBS07CLSWLS004C1.5SA001P	4	1.5 A)	0.60	12.5	15.1	455
FSBS07CLSWLS004C2.5SA001P	4	2.5 A)	0.70	14.0	16.7	555
FSBS07CLSWLS004C004SA001P	4	4 A)	0.70	15.3	18.1	660
FSBS07CLSWLS004C006SA001P	4	6 A)	0.70	17.3	20.3	915
FSBS07CLSWLS004C010SA001P	4	10 A)	0.70	19.6	22.6	1170
FSBS07CLSWLS004C016SA001P	4	16 A)	0.70	22.1	25.3	1510
FSBS07CLSWLS004C025SA001P	4	25 A)	0.90	27.4	30.8	2305
FSBS07CLSWLS004C025SA001P	4	25 B)	0.90	24.7	28.1	2160
FSBS07CLSWLS004C035SA001P	4	35 A)	0.90	30.2	33.7	2840
FSBS07CLSWLS004C035SA001P	4	35 B)	0.90	27.0	30.6	2640
FSBS07CLSWLS004C050SA001P	4	50 B)	1.00	30.6	34.4	3440
FSBS07CLSWLS004C070SA001P	4	70 B)	1.10	35.7	40.0	4780
FSBS07CLSWLS004C095SA001P	4	95 B)	1.10	39.3	43.7	5950
FSBS07CLSWLS004C120SA001P	4	120 B)	1.20	43.1	47.7	7550
FSBS07CLSWLS004C150SA001P	4	150 B)	1.40	47.2	52.0	9080
FSBS07CLSWLS004C185SA001P	4	185 B)	1.60	51.6	56.8	10830
FSBS07CLSWLS004C240SA001P	4	240 B)	1.70	57.1	62.5	13380
FSBS07CLSWLS004C300SA001P	4	300 B)	1.80	62.3	68.0	16180
FSBS07CLSWLS004C400SA001P	4	400 B)	2.00	70.0	76.4	20610
FSBS07CLSWLS005C1.5SA001P	5	1.5	0.60	13.5	16.3	515
FSBS07CLSWLS005C2.5SA001P	5	2.5	0.70	15.2	18.0	630
FSBS07CLSWLS005C004SA001P	5	4	0.70	16.6	19.7	765
FSBS07CLSWLS005C006SA001P	5	6	0.70	18.9	21.9	1050
FSBS07CLSWLS005C010SA001P	5	10	0.70	21.4	24.6	1365
FSBS07CLSWLS005C016SA001P	5	16	0.70	25.3	28.7	1990
FSBS07CLSWLS005C025SA001P	5	25	0.90	30.0	33.6	2720
FSBS07CLSWLS005C035SA001P	5	35	0.90	33.0	36.9	3360
FSBS07CLSWLS005C050SA001P	5	50	1.00	39.1	43.0	4745
FSBS07CLSWLS005C070SA001P	5	70	1.10	43.8	48.2	5970
FSBS07CLSWLS007C1.5SA001P	7	1.5	0.60	14.6	17.5	610
FSBS07CLSWLS012C1.5SA001P	12	1.5	0.60	19.7	22.7	1030
FSBS07CLSWLS019C1.5SA001P	19	1.5	0.60	22.8	26.1	1370
FSBS07CLSWLS027C1.5SA001P	27	1.5	0.60	28.2	31.7	2010
FSBS07CLSWLS037C1.5SA001P	37	1.5	0.60	31.4	34.9	2450
FSBS07CLSWLS007C2.5SA001P	7	2.5	0.70	16.5	19.3	755
FSBS07CLSWLS012C2.5SA001P	12	2.5	0.70	22.2	25.5	1290
FSBS07CLSWLS019C2.5SA001P	19	2.5	0.70	27.0	30.5	1950
FSBS07CLSWLS027C2.5SA001P	27	2.5	0.70	32.0	36.7	2540
FSBS07CLSWLS037C2.5SA001P	37	2.5	0.70	35.7	39.4	3150
FSBS07CLSWLS007C004SA001P	7	4.0	0.70	18.8	21.8	1060
FSBS07CLSWLS012C004SA001P	12	4.0	0.70	25.6	28.8	1790
FSBS07CLSWLS019C004SA001P	19	4.0	0.70	29.7	33.2	2410
FSBS07CLSWLS027C004SA001P	27	4.0	0.70	35.3	39.2	3180
FSBS07CLSWLS037C004SA001P	37	4.0	0.70	40.7	44.8	4350

Note: A) Circular or compacted circular stranded conductor (Class 2). B) Shaped stranded conductor (Class 2).

POLYCAB IGNIS 220
Fire Survival Cable - Plus, 600/1000V AC

ELECTRICAL CHARACTERISTICS:

Conductor cross-sectional area	Max. Conductor Resistance		Current Carrying Capacity (Amperes)								
			Air Ambient Temperature - 30°C Ground Ambient Temperature - 20°C Conductor operating Temperature - 105°C								
			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)				
mm ²	Ohm/km	at 20°C DC	at 90°C AC	I two-core cable, single-phase AC or DC	I three- or I four-core cable, three-phase AC	I two-core cable, single-phase AC or DC	I three- or I four-core cable, three-phase AC	I two-core cable, single-phase AC or DC	I three- or I four-core cable, three-phase AC	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	0.0470	0.0599	861	736	927	797	-	-			

The above table is in accordance with BS 7671-2018

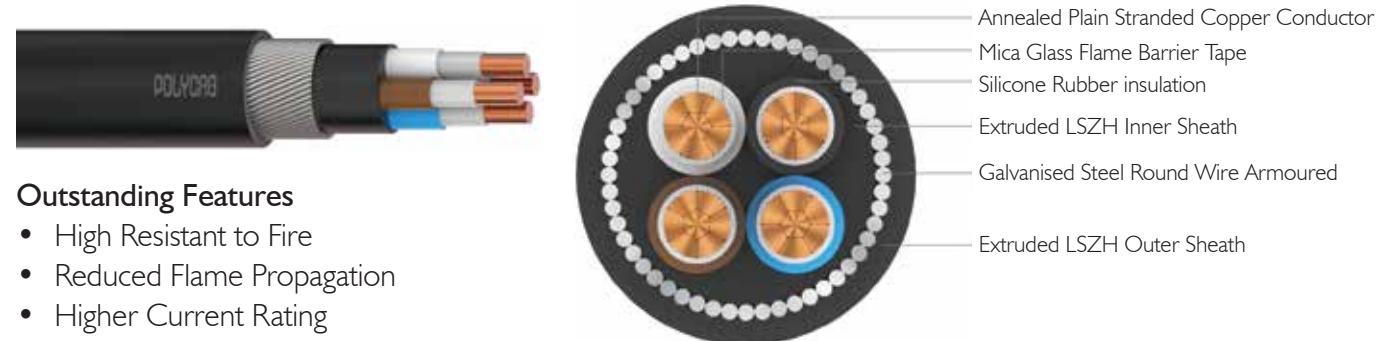
Current rating de-rating factors for other than 30°C ambient air temperature.

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

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



Outstanding Features

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

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 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.

Voltage Rating

0.6/1KV

Bending Radius

Min. 12 x Overall Diameter

Operation Temperature

-40°C to +150°C

Short Circuit Temperature 350°C

Standard Follows:

EN 60228:2005

BS 7846:2016

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 Round Wire Armoured (also available with Galvanised Steel Flat Strip Armour, dimensions and weights changes accordingly)
- Extruded LSZH Outer Sheath, Colour: Black. (other colour as per request).

Test Voltage

3500V AC at (20±5)°C

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



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)

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

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	0.60	10.9	13.5	345
FSBS07CSSWLS002C2.5SA001P	2	2.5	0.70	12.1	14.9	415
FSBS07CSSWLS002C004SA001P	2	4	0.70	13.2	16.0	475
FSBS07CSSWLS002C006SA001P	2	6	0.70	14.3	17.2	550
FSBS07CSSWLS002C010SA001P	2	10	0.70	16.2	19.2	700
FSBS07CSSWLS002C016SA001P	2	16	0.70	19.0	22.0	1010
FSBS07CSSWLS002C025SA001P	2	25	0.90	22.4	25.7	1345
FSBS07CSSWLS002C035SA001P	2	35	0.90	25.8	28.5	1790
FSBS07CSSWLS002C050SA001P	2	50	1.00	24.0	26.5	2245
FSBS07CSSWLS002C070SA001P	2	70	1.10	26.8	30.0	2795
FSBS07CSSWLS002C095SA001P	2	95	1.10	30.4	34.0	3770
FSBS07CSSWLS002C120SA001P	2	120	1.20	32.1	37.0	4455
FSBS07CSSWLS002C150SA001P	2	150	1.40	35.1	40.0	5290
FSBS07CSSWLS002C185SA001P	2	185	1.60	39.7	46.0	6815
FSBS07CSSWLS002C240SA001P	2	240	1.70	43.3	50.0	8225
FSBS07CSSWLS002C300SA001P	2	300	1.80	47.4	55.0	9790
FSBS07CSSWLS002C400SA001P	2	400	2.00	51.7	60.0	12250
FSBS07CSSWLS003C1.5SA001P	3	1.5	0.60	11.5	14.1	390
FSBS07CSSWLS003C2.5SA001P	3	2.5	0.70	12.8	15.6	480
FSBS07CSSWLS003C004SA001P	3	4	0.70	14.0	16.8	560
FSBS07CSSWLS003C006SA001P	3	6	0.70	15.2	18.0	660
FSBS07CSSWLS003C010SA001P	3	10	0.70	17.9	20.9	980
FSBS07CSSWLS003C016SA001P	3	16	0.70	20.2	23.4	1255
FSBS07CSSWLS003C025SA001P	3	25	0.90	25.0	28.4	1910
FSBS07CSSWLS003C035SA001P	3	35	0.90	27.5	31.0	2330
FSBS07CSSWLS003C050SA001P	3	50	1.00	26.2	32.5	2835
FSBS07CSSWLS003C070SA001P	3	70	1.10	29.3	36.5	3600
FSBS07CSSWLS003C095SA001P	3	95	1.10	33.3	41.5	4885
FSBS07CSSWLS003C120SA001P	3	120	1.20	36.0	45.0	5825
FSBS07CSSWLS003C150SA001P	3	150	1.40	40.5	50.0	7450
FSBS07CSSWLS003C185SA001P	3	185	1.60	44.6	55.0	8840
FSBS07CSSWLS003C240SA001P	3	240	1.70	48.9	60.5	10860
FSBS07CSSWLS003C300SA001P	3	300	1.80	53.5	66.0	13020
FSBS07CSSWLS003C400SA001P	3	400	2.00	58.6	73.5	16485

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

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)
FSBS07CSSWLS004C1.5SA001P	4	1.5	0.60	12.5	15.1	445
FSBS07CSSWLS004C2.5SA001P	4	2.5	0.70	14.0	16.7	545
FSBS07CSSWLS004C004SA001P	4	4	0.70	15.3	18.1	650
FSBS07CSSWLS004C006SA001P	4	6	0.70	17.3	20.3	900
FSBS07CSSWLS004C010SA001P	4	10	0.70	19.6	22.6	1155
FSBS07CSSWLS004C016SA001P	4	16	0.70	22.1	25.3	1490
FSBS07CSSWLS004C025SA001P	4	25	0.90	27.4	30.8	2280
FSBS07CSSWLS004C035SA001P	4	35	0.90	30.2	33.7	2810
FSBS07CSSWLS004C050SA001P	4	50	1.00	30.6	35.0	3460
FSBS07CSSWLS004C070SA001P	4	70	1.10	35.7	40.5	4800
FSBS07CSSWLS004C095SA001P	4	95	1.10	39.3	44.5	5995
FSBS07CSSWLS004C120SA001P	4	120	1.20	43.1	50.0	7685
FSBS07CSSWLS004C150SA001P	4	150	1.40	47.2	54.5	9225
FSBS07CSSWLS004C185SA001P	4	185	1.60	51.6	59.5	10985
FSBS07CSSWLS004C240SA001P	4	240	1.70	57.1	66.0	13575
FSBS07CSSWLS004C300SA001P	4	300	1.80	62.3	71.5	16340
FSBS07CSSWLS004C400SA001P	4	400	2.00	70.0	82.0	21895
FSBS07CSSWLS005C1.5SA001P	5	1.5	0.60	13.5	16.3	510
FSBS07CSSWLS005C2.5SA001P	5	2.5	0.70	15.2	18.0	620
FSBS07CSSWLS005C004SA001P	5	4	0.70	16.6	19.7	750
FSBS07CSSWLS005C006SA001P	5	6	0.70	18.9	21.9	1040
FSBS07CSSWLS005C010SA001P	5	10	0.70	21.4	24.6	1350
FSBS07CSSWLS005C016SA001P	5	16	0.70	25.3	28.7	1970
FSBS07CSSWLS005C025SA001P	5	25	0.90	30.0	33.6	2690
FSBS07CSSWLS005C035SA001P	5	35	0.90	33.0	36.9	3330
FSBS07CSSWLS005C050SA001P	5	50	1.00	39.1	43.0	4700
FSBS07CSSWLS005C070SA001P	5	70	1.10	43.8	48.2	5910
FSBS07CSSWLS007C1.5SA001P	7	1.5	0.60	14.6	17.5	600
FSBS07CSSWLS012C1.5SA001P	12	1.5	0.60	19.7	22.7	1010
FSBS07CSSWLS019C1.5SA001P	19	1.5	0.60	22.8	26.1	1340
FSBS07CSSWLS027C1.5SA001P	27	1.5	0.60	28.2	31.7	1970
FSBS07CSSWLS037C1.5SA001P	37	1.5	0.60	31.4	34.9	2390
FSBS07CSSWLS007C2.5SA001P	7	2.5	0.70	16.5	19.3	740
FSBS07CSSWLS012C2.5SA001P	12	2.5	0.70	22.2	25.5	1260
FSBS07CSSWLS019C2.5SA001P	19	2.5	0.70	27.0	30.5	1910
FSBS07CSSWLS027C2.5SA001P	27	2.5	0.70	32.0	36.7	2480
FSBS07CSSWLS037C2.5SA001P	37	2.5	0.70	35.7	39.4	3060
FSBS07CSSWLS007C004SA001P	7	4.0	0.70	18.8	21.8	1040
FSBS07CSSWLS012C004SA001P	12	4.0	0.70	25.6	28.8	1760
FSBS07CSSWLS019C004SA001P	19	4.0	0.70	29.7	33.2	2360
FSBS07CSSWLS027C004SA001P	27	4.0	0.70	35.3	39.2	3110
FSBS07CSSWLS037C004SA001P	37	4.0	0.70	40.7	44.8	4255

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

ELECTRICAL CHARACTERISTICS:

Conductor cross-sectional area	Max. Conductor Resistance		Current Carrying Capacity (Amperes)						
			Air Ambient Temperature - 30°C Ground Ambient Temperature - 20°C Conductor operating Temperature - 150°C						
			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)		
mm ²	Ohm/km	at 20°C DC	at 90°C AC	I two-core cable, single-phase AC or DC	I three- or I four-core cable, three-phase AC	I two-core cable, single-phase AC or DC	I three- or I four-core cable, three-phase AC	I two-core cable, single-phase AC or DC	I three- or I four-core cable, three-phase AC
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	0.0470	0.0599	1026	877	1104	949	-	-	

The above table is in accordance with BS 7671-2018

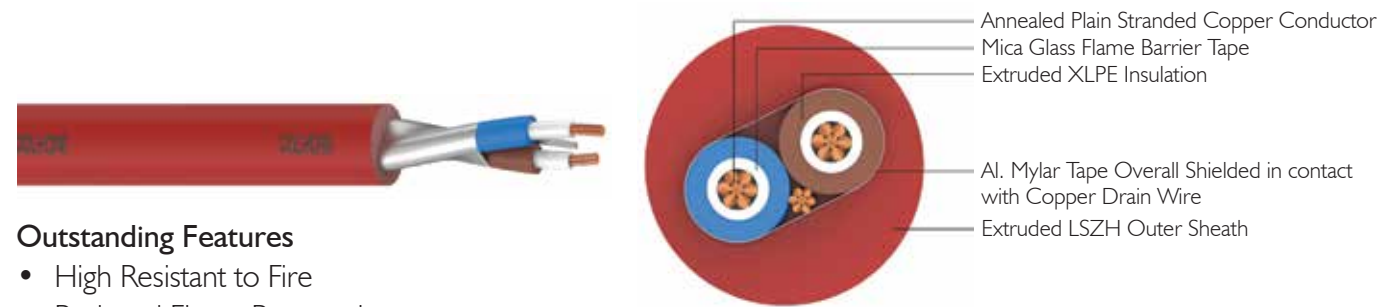
Current rating de-rating factors for other than 30°C ambient air temperature.

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 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

POLYCAB IGNIS 2 I I
Fire Survival Cable, 300/500V AC



Outstanding Features

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

Application

POLYCAB FS Multicore Shielded cable is suitable to use in various indoor & outdoor applications where control supply to the emergency devices during the event of fire, is highly essential and corrosive gas evaluation could be a cause of hazard to the people in high rise building, schools, hospitals, hotels, Malls, Subways etc.

Voltage Rating

300/500V AC

Operation Temperature

-40°C to +90°C
Short Circuit Temperature 250°C

Construction

- Annealed plain stranded copper conductor as per IEC 60228, Class-2.
- Mica Glass flame barrier tape.
- Extruded XLPE insulation.
- Insulated Cores assembled together.
- Al.Mylar Tape Overall Shielded along with Drain wire
- Extruded LSZH Outer Sheath, Colour: Red or White (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;
- 7 cores: Centre- Brown, 1st layer: Brown, Black & remaining 4 cores white
- 12 cores: Centre- Brown, Black, White, 1st layer: Brown, Black & remaining 7 cores white
- 19 cores: Centre- Brown, 1st layer: Brown, Black & remaining 4 cores white, 2nd layer: Brown, Black & remaining 10 cores white

Bending Radius

Min. 6 x Overall Diameter

Standard Follows:

EN 60228:2005
BS 7629-1:2015

Test Voltage

2000V AC at (20±5)°C

Compliance

Fire Resistant
BS 7629-1 / BS 6387 CWZ /
BS EN 50200 (PH 120) /
BS 8434 / EN 60331-3
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



POLYCAB IGNIS 2 I I
Fire Survival Cable, 300/500V AC

DIMENSIONS AND WEIGHTS:

Product Code	No. of Cores	Cross Sectional Area (mm ²)	Nom. Insulation Thickness (mm)	Nom. Cable Overall Dia. (mm)	Cable Weight Approx. (kg / km)
Solid					
FSBS04CLUALS002C1.0SA001P	2	1.0	0.60	7.9	80
FSBS04CLUALS002C1.5SA001P	2	1.5	0.70	8.8	105
FSBS04CLUALS002C2.5SA001P	2	2.5	0.80	10.1	145
FSBS04CLUALS003C1.0SA001P	3	1.0	0.60	8.4	100
FSBS04CLUALS003C1.5SA001P	3	1.5	0.70	9.3	130
FSBS04CLUALS003C2.5SA001P	3	2.5	0.80	10.8	185
FSBS04CLUALS004C1.0SA001P	4	1.0	0.60	9.3	125
FSBS04CLUALS004C1.5SA001P	4	1.5	0.70	10.4	165
FSBS04CLUALS004C2.5SA001P	4	2.5	0.80	12.0	230
FSBS04CLUALS007C1.0SA001P	7	1.0	0.60	11.1	180
FSBS04CLUALS007C1.5SA001P	7	1.5	0.70	12.6	245
FSBS04CLUALS007C2.5SA001P	7	2.5	0.80	14.5	340
FSBS04CLUALS012C1.0SA001P	12	1.0	0.60	14.9	300
FSBS04CLUALS012C1.5SA001P	12	1.5	0.70	16.8	395
FSBS04CLUALS012C2.5SA001P	12	2.5	0.80	20.0	570
FSBS04CLUALS019C1.0SA001P	19	1.0	0.60	17.4	440
FSBS04CLUALS019C1.5SA001P	19	1.5	0.70	19.8	595
Stranded					
FSBS04CLUALS002C1.0SA001P	2	1.0	0.60	8.2	85
FSBS04CLUALS002C1.5SA001P	2	1.5	0.70	9.2	110
FSBS04CLUALS002C2.5SA001P	2	2.5	0.80	10.7	150
FSBS04CLUALS002C4.0SA001P	2	4.0	0.80	11.9	210
FSBS04CLUALS003C1.0SA001P	3	1.0	0.60	9.7	110
FSBS04CLUALS003C1.5SA001P	3	1.5	0.70	9.8	135
FSBS04CLUALS003C2.5SA001P	3	2.5	0.80	11.3	190
FSBS04CLUALS003C4.0SA001P	3	4.0	0.80	12.7	270
FSBS04CLUALS004C1.0SA001P	4	1.0	0.60	9.7	135
FSBS04CLUALS004C1.5SA001P	4	1.5	0.70	10.9	170
FSBS04CLUALS004C2.5SA001P	4	2.5	0.80	12.6	245
FSBS04CLUALS004C4.0SA001P	4	4.0	0.80	14.1	340

ELECTRICAL CHARACTERISTICS:

Conductor cross-sectional area	Max. Conductor Resistance		Current Carrying Capacity (Amperes)							
			Air Ambient Temperature - 30°C				Conductor operating Temperature - 90°C			
	at 20°C DC	at 90°C AC	Reference Method A (enclosed in conduit in thermally insulating wall etc)	Reference Method B (enclosed in conduit on a wall or in trunking etc)	Reference Method C (clipped direct)	Reference Method E (free air or on a perforated cable tray etc, horizontal or vertical)				
mm ²	Ohm/km	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.
1.0	18.1	23.1	14.5	13	17	15	19	17	21	18
1.5	12.1	15.4	18.5	16.5	22	19.5	24	22	26	23
2.5	7.41	9.45	25	22	30	26	33	30	36	32
4.0	4.61	5.88	33	30	40	35	45	40	49	42

The above table is in accordance with Table 4E2A of 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

POLYCAB IGNIS 212
Fire Survival Cable, 300/500V AC



Outstanding Features

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

Application

POLYCAB FS Multicore Shielded cable is suitable to use in various indoor & outdoor applications where control supply to the emergency devices during the event of fire, is highly essential and corrosive gas evaluation could be a cause of hazard to the people in high rise building, schools, hospitals, hotels, Malls, Subways etc.

Voltage Rating

300/500V AC

Operation Temperature

-40°C to +90°C

Construction

- Annealed plain stranded copper conductor as per IEC 60228, Class-2.
- Mica Glass flame barrier tape.
- Extruded XLPE insulation.
- Insulated Cores twisted to form pairs and assembled together.
- Al.Mylar Tape Overall Shielded in contact with Drain wire
- Extruded LSZH Outer Sheath, Colour: Red or White (other colour as per request).

Standard Follows:

EN 60228:2005
Generally conforming to BS 7629-1:2015

Test Voltage

2000V AC at (20±5)°C

Compliance

Fire Resistant	IEC 60331-23
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



Core Identification

- Colour Coding or Number Printing
As per BS EN 50288-7

Bending Radius

Min. 12 x Overall Diameter

POLYCAB IGNIS 212
Fire Survival Cable, 300/500V AC

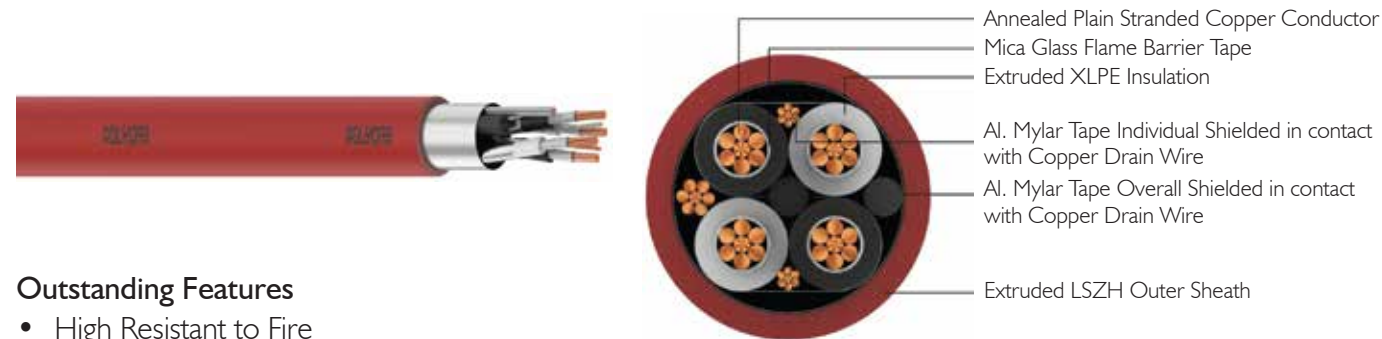
DIMENSIONS AND WEIGHTS:

Product Code	No. of Pairs	No. of Cores	Cross Sectional Area (mm ²)	Min. Insulation Thickness (mm)	Nom. Cable Overall Dia. (mm)	Cable Weight Approx. (kg / km)
FSBS04CXUALS001P.75SA001P	1	2	0.75	0.44	7.60	65
FSBS04CXUALS002P.75SA001P	2	4	0.75	0.44	10.9	120
FSBS04CXUALS005P.75SA001P	5	10	0.75	0.44	14.6	215
FSBS04CXUALS010P.75SA001P	10	20	0.75	0.44	20.3	390
FSBS04CXUALS015P.75SA001P	15	30	0.75	0.44	24.3	545
FSBS04CXUALS020P.75SA001P	20	40	0.75	0.44	27.4	695
FSBS04CXUALS001P1.0SA001P	1	2	1.0	0.44	8.10	75
FSBS04CXUALS002P1.0SA001P	2	4	1.0	0.44	11.6	135
FSBS04CXUALS005P1.0SA001P	5	10	1.0	0.44	15.5	260
FSBS04CXUALS010P1.0SA001P	10	20	1.0	0.44	21.5	460
FSBS04CXUALS015P1.0SA001P	15	30	1.0	0.44	25.8	655
FSBS04CXUALS020P1.0SA001P	20	40	1.0	0.44	29.3	845
FSBS04CXUALS001P1.5SA001P	1	2	1.5	0.44	8.90	90
FSBS04CXUALS002P1.5SA001P	2	4	1.5	0.44	12.9	170
FSBS04CXUALS005P1.5SA001P	5	10	1.5	0.44	17.4	335
FSBS04CXUALS010P1.5SA001P	10	20	1.5	0.44	24.3	610
FSBS04CXUALS015P1.5SA001P	15	30	1.5	0.44	29.2	865
FSBS04CXUALS020P1.5SA001P	20	40	1.5	0.44	33.0	1125

ELECTRICAL CHARACTERISTICS:

Cross Sectional Area (mm ²)	Conductor Resistance (Ohms/Km)		Insulation Resistance (MOhms-Km)	Approx. Capacitance (nF/km)	Approx. Inductance to Resistance ratio, L/R (μH/Ohm)
	Single pair	Multi pair			
0.75	34.5	35.2	1000	150	25
1.0	18.1	18.5	1000	150	25
1.5	12.1	12.3	1000	150	40

POLYCAB IGNIS 213
Fire Survival Cable, 300/500V AC



Outstanding Features

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

Application

POLYCAB FS Multipair Individual & Overall Shielded cable is suitable to use in various indoor & outdoor applications where signal transmission during the event of fire, is highly essential and corrosive gas evaluation could be a cause of hazard to the people in high rise building, schools, hospitals, hotels, Malls, Subways etc.

Voltage Rating
300/500V AC

Bending Radius
Min. 12 x Overall Diameter

Operation Temperature
-40°C to +90°C

Standard Follows:
EN 60228:2005
Generally conforming to BS 7629-1:201

Construction

- Annealed plain stranded copper conductor as per IEC 60228, Class-2.
- Mica Glass flame barrier tape.
- Extruded XLPE insulation.
- Insulated Cores twisted to form pairs
- Al.Mylar Tape Individual Shielded in contact with Drain wire
- Shielded Pairs assembled together
- Al.Mylar Tape Overall Shielded in contact with Drain wire
- Extruded LSZH Outer Sheath, Colour: Red or White (other colour as per request).

Test Voltage
2000V AC at (20±5)°C

Compliance

Fire Resistant	EN 50200 PH 120
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



Core Identification

- Colour Coding or Number Printing

POLYCAB IGNIS 213
Fire Survival Cable, 300/500V AC

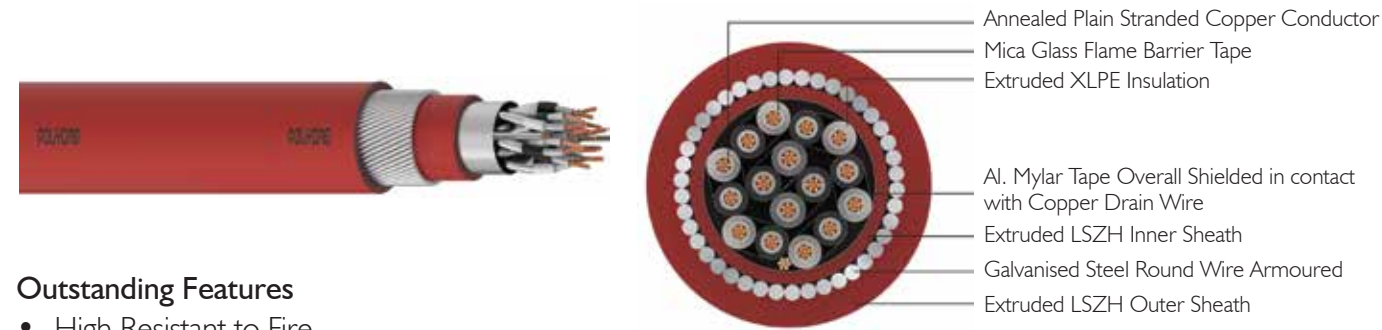
DIMENSIONS AND WEIGHTS:

Product Code	No. of Pairs	No. of Cores	Cross Sectional Area (mm ²)	Min. Insulation Thickness (mm)	Nom. Cable Overall Dia. (mm)	Cable Weight Approx. (kg / km)
FSBS04CXUALS001P0.5SA001P	1	2	0.50	0.45	6.70	60
FSBS04CXUALS002P0.5SA001P	2	4	0.50	0.45	10.8	120
FSBS04CXUALS001P.75SA001P	1	2	0.75	0.45	7.10	70
FSBS04CXUALS002P.75SA001P	2	4	0.75	0.45	11.5	135
FSBS04CXUALS001P1.0SA001P	1	2	1.0	0.45	7.50	80
FSBS04CXUALS002P1.0SA001P	2	4	1.0	0.45	12.1	155
FSBS04CXUALS001P1.5SA001P	1	2	1.5	0.45	8.10	95
FSBS04CXUALS002P1.5SA001P	2	4	1.5	0.45	13.4	190
FSBS04CXUALS001P2.5SA001P	1	2	2.5	0.5	9.20	120
FSBS04CXUALS002P2.5SA001P	2	4	2.5	0.5	14.8	265

ELECTRICAL CHARACTERISTICS:

Cross Sectional Area (mm ²)	Conductor Resistance (Ohms/Km)	Conductor Resistance (Ohms/Km)	Insulation Resistance (MOhms-Km)	Approx. Capacitance (nF/km)	Approx. Inductance to Resistance ratio, L/R (μH/Ohm)
	Single pair	Multi pair			
0.50	36	36.7	1000	150	25
0.75	34.5	35.2	1000	150	25
1.0	18.1	18.5	1000	150	25
1.5	12.1	12.3	1000	150	40
2.5	7.41	7.56	1000	150	40

POLYCAB IGNIS 214
Fire Survival Cable, 300/500V AC



Outstanding Features

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

Application

POLYCAB FS Multipair Shielded Armoured cable is suitable to use in various indoor & outdoor applications where signal transmission during emergency services during the event of fire, is highly essential and corrosive gas evaluation could be a cause of hazard to the people in high rise building, schools, hospitals, hotels, Malls, Subways etc.

Voltage Rating

300/500V AC

Operation Temperature

-40°C to +90°C

Construction

- Annealed plain stranded copper conductor as per IEC 60228, Class-2.
- Mica Glass flame barrier tape.
- Extruded XLPE insulation.
- Insulated Cores twisted to form pairs and assembled together.
- Al.Mylar Tape Overall Shielded in contact with Drain wire
- Extruded LSZH Inner Sheath
- Galvanised Steel Round Wire Armoured (also available with GalvanisedA Steel Flat Strip Armour, dimensions and weights changes accordingly)
- Extruded LSZH Outer Sheath, Colour: Black. (other colour as per request).

Bending Radius

Min. 15 x Overall Diameter

Standard Follows:

EN 60228:2005
Generally conforming to BS 7629-1:2015

Test Voltage

2000V AC at (20±5)°C

Compliance

Fire Resistant	IEC 60331-23
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



Core Identification

- Colour Coding or Number Printing
As per BS EN 50288-7

POLYCAB IGNIS 214
Fire Survival Cable, 300/500V AC

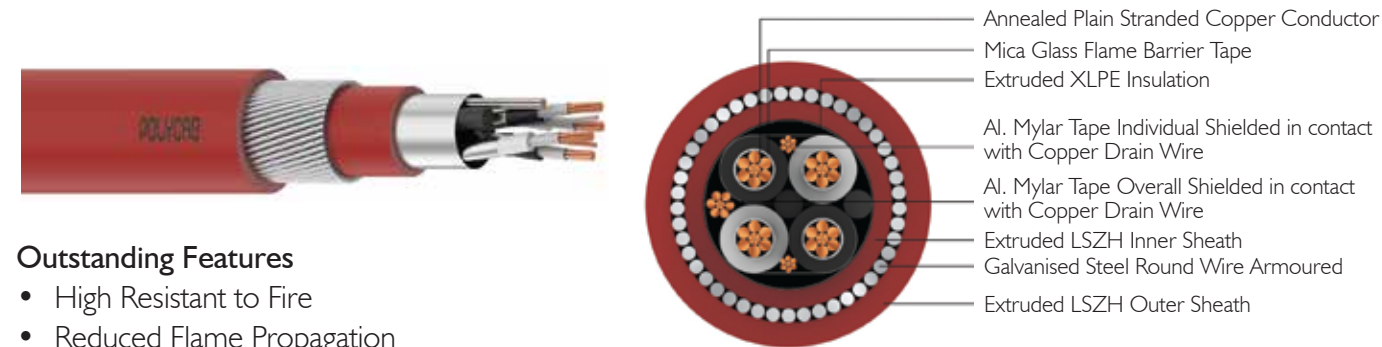
DIMENSIONS AND WEIGHTS:

Product Code	No. of Pairs	No. of Cores	Cross Sectional Area (mm ²)	Min. Insulation Thickness (mm)	Nom. over Armour (mm)	Nom. Cable Overall Dia. (mm)	Cable Weight Approx. (kg / km)
FSBS04CXSWLS001P75SA001P	1	2	0.75	0.44	9.3	12.2	290
FSBS04CXSWLS002P75SA001P	2	4	0.75	0.44	12.9	15.7	470
FSBS04CXSWLS005P75SA001P	5	10	0.75	0.44	16.1	20.8	665
FSBS04CXSWLS010P75SA001P	10	20	0.75	0.44	23.1	26.2	1085
FSBS04CXSWLS015P75SA001P	15	30	0.75	0.44	26.3	30.6	1440
FSBS04CXSWLS020P75SA001P	20	40	0.75	0.44	30.0	34.3	1820
FSBS04CXSWLS001PI.0SA001P	1	2	1.0	0.44	9.7	12.6	315
FSBS04CXSWLS002PI.0SA001P	2	4	1.0	0.44	13.5	17.4	510
FSBS04CXSWLS005PI.0SA001P	5	10	1.0	0.44	17.8	22.4	810
FSBS04CXSWLS010PI.0SA001P	10	20	1.0	0.44	24.3	28.3	1275
FSBS04CXSWLS015PI.0SA001P	15	30	1.0	0.44	28.4	32.6	1705
FSBS04CXSWLS020PI.0SA001P	20	40	1.0	0.44	31.5	36.2	2045
FSBS04CXSWLS001PI.5SA001P	1	2	1.5	0.44	10.3	13.4	345
FSBS04CXSWLS002PI.5SA001P	2	4	1.5	0.44	14.7	18.7	585
FSBS04CXSWLS005PI.5SA001P	5	10	1.5	0.44	19.2	24.0	940
FSBS04CXSWLS010PI.5SA001P	10	20	1.5	0.44	26.4	30.8	1525
FSBS04CXSWLS015PI.5SA001P	15	30	1.5	0.44	30.9	35.4	2040
FSBS04CXSWLS020PI.5SA001P	20	40	1.5	0.44	34.6	39.8	2595

ELECTRICAL CHARACTERISTICS:

Cross Sectional Area (mm ²)	Conductor Resistance (Ohms/Km)		Insulation Resistance (MOhms-Km)	Approx. Capacitance (nF/km)	Approx. Inductance to Resistance ratio, L/R (μH/Ohm)
	Single pair	Multi pair			
0.75	34.5	35.2	1000	150	25
1.0	18.1	18.5	1000	150	25
1.5	12.1	12.3	1000	150	40

POLYCAB IGNIS 2 I 5
Fire Survival Cable, 300/500V AC



Outstanding Features

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

Application

POLYCAB FS Multipair Individual & Overall Shielded Armoured cable is suitable to use in various indoor & outdoor applications where signal transmission during emergency services during the event of fire, is highly essential and corrosive gas evaluation could be a cause of hazard to the people in high rise building, schools, hospitals, hotels, Malls, Subways etc.

Voltage Rating

300/500V AC

Operation Temperature

-40°C to +90°C

Construction

- Annealed plain stranded copper conductor as per IEC 60228, Class-2.
- Mica Glass flame barrier tape.
- Extruded XLPE insulation.
- Insulated Cores twisted to form pairs
- Al.Mylar Tape Individual Shielded in contact with Drain wire
- Shielded Pairs assembled together
- Al.Mylar Tape Overall Shielded in contact with Drain wire
- Extruded LSZH Inner Sheath
- Galvanised Steel Round Wire Armoured (also available with Galvanised Steel Flat Strip Armour, dimensions and weights changes accordingly)
- Extruded LSZH Outer Sheath, Colour: Red or White (other colour as per request).

Bending Radius

Min. 15 x Overall Diameter

Standard Follows:

EN 60228:2005
Generally conforming to BS 7629-1:2015

Test Voltage

2000V AC at (20±5)°C

Compliance

Fire Resistant EN 50200 PH 120
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



Core Identification

- Colour Coding or Number Printing
As per BS EN 50288-7

POLYCAB IGNIS 2 I 5
Fire Survival Cable, 300/500V AC

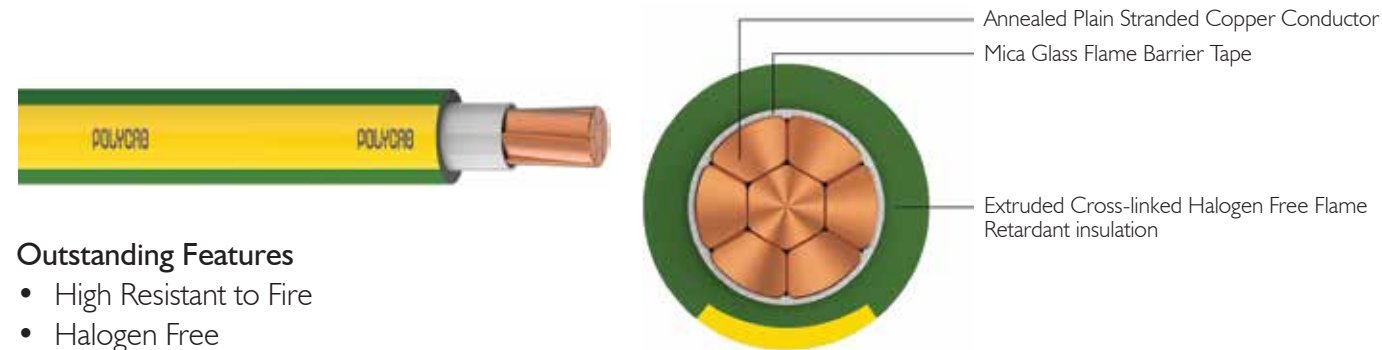
DIMENSIONS AND WEIGHTS:

Product Code	No. of Pairs	No. of Cores	Cross Sectional Area (mm ²)	Min. Insulation Thickness (mm)	Nom. Dia. over Armour (mm)	Nom. Cable Overall Dia. (mm)	Cable Weight Approx. (kg / km)
FSBS04CXSWSL001P0.5SA001P	1	2	0.50	0.45	8.50	11.3	265
FSBS04CXSWSL002P0.5SA001P	2	4	0.50	0.45	12.6	15.6	430
FSBS04CXSWSL001P.75SA001P	1	2	0.75	0.45	9.10	11.9	290
FSBS04CXSWSL002P.75SA001P	2	4	0.75	0.45	13.3	16.3	465
FSBS04CXSWSL001P1.0SA001P	1	2	1.0	0.45	9.50	12.3	305
FSBS04CXSWSL002P1.0SA001P	2	4	1.0	0.45	13.9	16.9	500
FSBS04CXSWSL001P1.5SA001P	1	2	1.5	0.45	10.1	12.9	340
FSBS04CXSWSL002P1.5SA001P	2	4	1.5	0.45	15.2	18.4	575
FSBS04CXSWSL001P2.5SA001P	1	2	2.5	0.5	10.9	14.0	370
FSBS04CXSWSL002P2.5SA001P	2	4	2.5	0.5	16.7	19.9	665

ELECTRICAL CHARACTERISTICS:

Cross Sectional Area (mm ²)	Conductor Resistance (Ohms/Km)	Conductor Resistance (Ohms/Km)	Insulation Resistance (MOhms-Km)	Approx. Capacitance (nF/km)	Approx. Inductance to Resistance ratio, L/R (μH/Ohm)
	Single pair	Multi pair			
0.50	36	36.7	1000	150	25
0.75	34.5	35.2	1000	150	25
1.0	18.1	18.5	1000	150	25
1.5	12.1	12.3	1000	150	40
2.5	7.41	7.56	1000	150	40

POLYCAB IGNIS 240
Fire Survival Cable, 450/750V AC



Outstanding Features

- High Resistant to Fire
- Halogen Free
- Reduced Flame Propagation
- Circuit Integrity when exposed to Fire
- Low Toxicity
- Fire Barrier

Application

POLYCAB FS Single Core cable is suitable to use in various indoor & outdoor applications such as tunnels, high rise building, schools, hospitals, hotels, Malls, Subways for emergency lighting during the event of fire.

Voltage Rating

450/750V AC
Can be extended to 1000V

Operation Temperature

-20°C to +90°C
Short Circuit Temperature 250°C

Construction

- Annealed plain stranded copper conductor as per IEC 60228, Class-2.
- Mica Glass flame barrier tape.
- Extruded Cross-linked Halogen Free Flame Retardant Insulation

Core Colour

- Green-Yellow or any mono colour

Bending Radius

Min. 8 x Overall Diameter

Standard Follows:

EN 60228:2005
BS 8592:2016

Compliance

Fire Resistant IEC 60331-3
Flame Propagation EN 60332-1-2
Fire Retardant EN 60332-3 (Cat.C)
Halogen free material EN 60754-1
Smoke Density EN 61034-2
Toxicity NES 02-713



POLYCAB IGNIS 240
Fire Survival Cable, 450/750V AC

DIMENSIONS & WEIGHTS AND CONDUCTOR RESISTANCE:

Product Code	No. of Cores	Cross Sectional Area (mm ²)	Nom. Cable Overall Dia. (mm)	Max. Conductor Resistance, DC at 20°C (Ohms/Km)	Max. Conductor Resistance, AC at 90°C (Ohms/Km)	Cable Weight Approx. (kg / km)
FSBS06CLUALS001C1.5SA001P	1	1.5	3.5	12.1	15.4	27
FSBS06CLUALS001C2.5SA001P	1	2.5	4.1	7.41	9.45	40
FSBS06CLUALS001C004SA001P	1	4	4.6	4.61	5.88	55
FSBS06CLUALS001C006SA001P	1	6	5.1	3.08	3.93	75
FSBS06CLUALS001C010SA001P	1	10	6.5	1.83	2.33	120
FSBS06CLUALS001C016SA001P	1	16	7.6	1.15	1.47	180
FSBS06CLUALS001C025SA001P	1	25	9.3	0.727	0.927	280
FSBS06CLUALS001C035SA001P	1	35	10.4	0.524	0.668	380
FSBS06CLUALS001C050SA001P	1	50	12.1	0.387	0.494	510
FSBS06CLUALS001C070SA001P	1	70	13.9	0.268	0.342	715
FSBS06CLUALS001C095SA001P	1	95	16.0	0.193	0.247	950
FSBS06CLUALS001C120SA001P	1	120	17.7	0.153	0.196	1225
FSBS06CLUALS001C150SA001P	1	150	19.8	0.124	0.160	1500
FSBS06CLUALS001C185SA001P	1	185	21.9	0.0991	0.129	1875
FSBS06CLUALS001C240SA001P	1	240	24.7	0.0754	0.0988	2415
FSBS06CLUALS001C300SA001P	1	300	27.5	0.0601	0.0804	3000

ELECTRICAL CHARACTERISTICS:

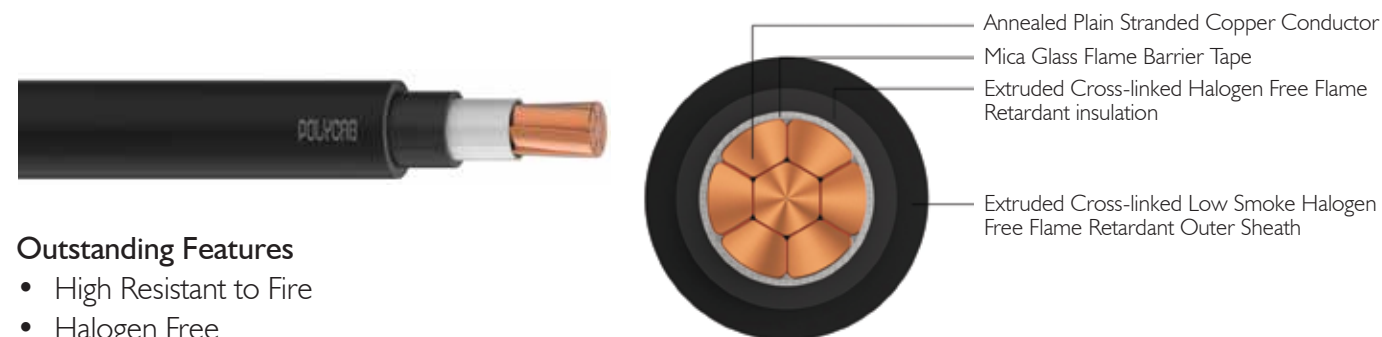
Conductor cross-sectional area	Current Carrying Capacity (Amperes)															
	Reference Method A (enclosed in conduit in thermally insulating wall etc)						Reference Method B (enclosed in conduit on a wall or in trunking etc)				Reference Method C (clipped direct)		Reference Method F (in free air or on a perforated cable tray etc horizontal or vertical etc) Touching		Reference Method G (in free air) Spaced by one cable diameter	
	2 cables, single-phase AC or DC	3 or 4 cables, three-phase AC	2 cables, single-phase AC or DC	3 or 4 cables, three-phase AC	2 cables, single-phase AC or DC flat and touching	3 or 4 cables, three-phase AC flat and touching or trefoil	2 cables, single-phase AC or DC flat	3 cables, three-phase AC flat	3 cables, three-phase AC trefoil	2 cables, single-phase AC or DC or 3 cables three-phase AC flat	Horizontal	Vertical				
mm ²	Ohm/km	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.				
1.5	19	17	23	20	25	23	-	-	-	-	-	-				
4	35	31	42	37	46	41	-	-	-	-	-	-				
6	45	40	54	48	59	54	-	-	-	-	-	-				
10	61	54	75	66	81	74	-	-	-	-	-	-				
16	81	73	100	88	109	99	-	-	-	-	-	-				
25	106	95	133	117	143	130	161	141	135	182	161	-				
35	131	117	164	144	176	161	200	176	169	226	201	-				
50	158	141	198	175	228	209	242	216	207	275	246	-				
70	200	179	253	222	293	268	310	279	268	353	318	-				
95	241	216	306	269	355	326	377	342	328	430	389	-				
120	278	249	354	312	413	379	437	400	383	500	454	-				
150	318	285	393	342	476	436	504	464	444	577	527	-				
185	362	324	449	384	545	500	575	533	510	661	605	-				
240	424	380	528	450	644	590	679	634	607	781	719	-				
300	486	435	603	514	743	681	783	736	703	902	833	-				

The above table is in accordance with Table 4E1A of 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

POLYCAB IGNIS 24 I
Fire Survival Cable, 450/750V AC



Outstanding Features

- High Resistant to Fire
- Halogen Free
- Reduced Flame Propagation
- Circuit Integrity when exposed to Fire
- Low Toxicity
- Fire Barrier

Application

POLYCAB FS Single Core Sheathed cable is suitable to use in various indoor & outdoor applications such as tunnels, high rise building, schools, hospitals, hotels, Malls, Subways for emergency lighting during the event of fire.

Voltage Rating

450/750V AC
Can be extended to 1000V

Operation Temperature

-40°C to +90°C
Short Circuit Temperature 250°C

Construction

- Annealed plain stranded copper conductor as per IEC 60228, Class-2.
- Mica Glass flame barrier tape.
- Extruded Cross-linked Halogen Free Flame Retardant Insulation
- Extruded Cross-linked Low Smoke Halogen Free Flame Retardant Outer Sheath

Core Colour

- Black or any mono colour

Bending Radius

Min. 8 x Overall Diameter

Standard Follows:

EN 60228:2005
Generally conforming to BS 7211

Test Voltage:

3500V AC at (20±5)°C

Compliance

Fire Resistant IEC 60331-3
Flame Propagation EN 60332-1-2
Fire Retardant EN 60332-3 (Cat.C)
Halogen free material EN 60754-1
Smoke Density EN 61034-2
Toxicity NES 02-713



POLYCAB IGNIS 24 I
Fire Survival Cable, 450/750V AC

DIMENSIONS & WEIGHTS AND CONDUCTOR RESISTANCE:

Product Code	No. of Cores	Cross Sectional Area (mm ²)	Nom. Cable Overall Dia. (mm)	Max. Conductor Resistance, DC at 20°C (Ohms/Km)	Max. Conductor Resistance, AC at 90°C (Ohms/Km)	Cable Weight Approx. (kg / km)
FSBS07CLUALS00IC004SA00IP	1	4.0	6.90	4.61	5.88	80
FSBS07CLUALS00IC006SA00IP	1	6.0	7.50	3.08	3.93	100
FSBS07CLUALS00IC010SA00IP	1	10	7.90	1.83	2.33	140
FSBS07CLUALS00IC016SA00IP	1	16	8.90	1.15	1.47	200
FSBS07CLUALS00IC025SA00IP	1	25	11.0	0.727	0.927	310
FSBS07CLUALS00IC035SA00IP	1	35	11.0	0.524	0.668	400
FSBS07CLUALS00IC050SA00IP	1	50	13.0	0.387	0.494	525
FSBS07CLUALS00IC070SA00IP	1	70	15.0	0.268	0.342	735
FSBS07CLUALS00IC095SA00IP	1	95	17.0	0.193	0.247	980
FSBS07CLUALS00IC120SA00IP	1	120	19.0	0.153	0.196	1250
FSBS07CLUALS00IC150SA00IP	1	150	20.0	0.124	0.160	1540
FSBS07CLUALS00IC185SA00IP	1	185	22.0	0.0991	0.129	1890
FSBS07CLUALS00IC240SA00IP	1	240	25.0	0.0754	0.0988	2500

ELECTRICAL CHARACTERISTICS:

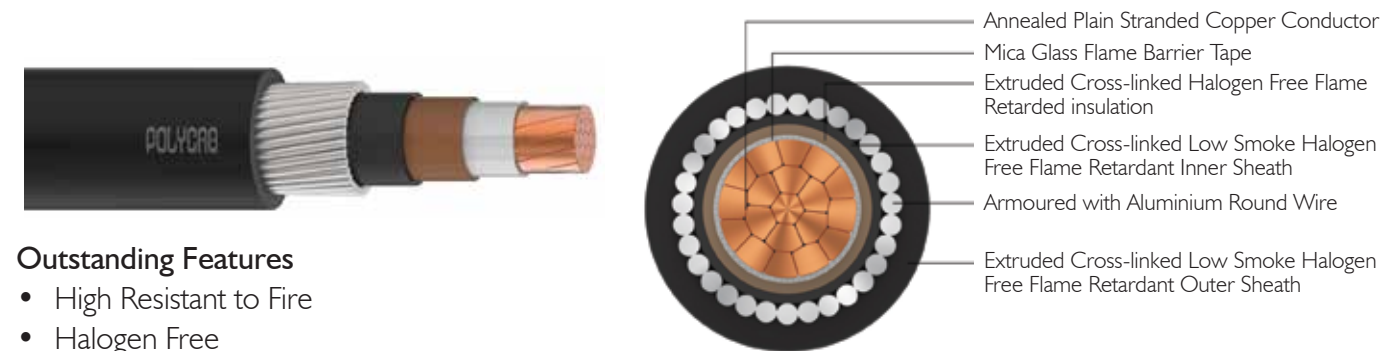
Conductor cross-sectional area	Current Carrying Capacity (Amperes)													
	Reference Method A (enclosed in conduit in thermally insulating wall etc)						Reference Method B (enclosed in conduit on a wall or in trunking etc)		Reference Method C (clipped direct)		Reference Method F (in free air or on a perforated cable tray etc horizontal or vertical etc) Touching		Reference Method G (in free air) Spaced by one cable diameter	
	2 cables, single-phase AC or DC	3 or 4 cables, three-phase AC	2 cables, single-phase AC or DC	3 or 4 cables, three-phase AC	2 cables, single-phase AC or DC flat and touching	3 or 4 cables, three-phase AC flat and touching or trefoil	2 cables, single-phase AC or DC flat	3 cables, three-phase AC flat	3 cables, three-phase AC trefoil	2 cables, single-phase AC or DC or 3 cables three-phase AC flat	Horizontal	Vertical		
mm ²	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.		
4.0	35	31	42	37	46	41	-	-	-	-	-	-		
6.0	45	40	54	48	59	54	-	-	-	-	-	-		
10	61	54	75	66	81	74	-	-	-	-	-	-		
16	81	73	100	88	109	99	-	-	-	-	-	-		
25	106	95	133	117	143	130	161	141	135	182	161			
35	131	117	164	144	176	161	200	176	169	226	201			
50	158	141	198	175	228	209	242	216	207	275	246			
70	200	179	253	222	293	268	310	279	268	353	318			
95	241	216	306	269	355	326	377	342	328	430	389			
120	278	249	354	312	413	379	437	400	383	500	454			
150	318	285	393	342	476	436	504	464	444	577	527			
185	362	324	449	384	545	500	575	533	510	661	605			
240	424	380	528	450	644	590	679	634	607	781	719			

The above table is in accordance with Table 4E1A of 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

POLYCAB IGNIS 242
Fire Survival Cable, 600/1000V AC



Outstanding Features

- High Resistant to Fire
- Halogen Free
- Reduced Flame Propagation
- Circuit Integrity when exposed to Fire
- Low Toxicity
- Fire Barrier

Application

POLYCAB FS Single Core Armoured and Sheathed cable is suitable to use in various indoor & outdoor applications such as tunnels, high rise building, schools, hospitals, hotels, Malls, Subways for emergency lighting during the event of fire.

Voltage Rating

600/1000V AC

Operation Temperature

-20°C to +90°C

Short Circuit Temperature 250°C

Construction

- Annealed plain stranded copper conductor as per IEC 60228, Class-2.
- Mica Glass flame barrier tape.
- Extruded Cross-linked Halogen Free Flame Retardant Insulation
- Extruded Cross-linked Low Smoke Halogen Free Flame Retardant Inner sheath
- Armoured with Aluminium round wire
- Extruded Cross-linked Low Smoke Halogen Free Flame Retardant Outer Sheath

Core Colour

Brown or Blue

Bending Radius

Min. 8 x Overall Diameter

Standard Follows:

EN 60228:2005

Generally conforming to BS 6724

Test Voltage:

3500V AC at (20±5)°C

Compliance

Fire Resistant	IEC 60331-3
Flame Propagation	EN 60332-1-2
Fire Retardant	EN 60332-3 (Cat.C)
Halogen free material	EN 60754-1
Smoke Density	EN 61034-2
Toxicity	NES 02-713



POLYCAB IGNIS 242
Fire Survival Cable, 600/1000V AC

DIMENSIONS & WEIGHTS AND CONDUCTOR RESISTANCE:

Product Code	No. of Cores	Cross Sectional Area (mm ²)	Nom. Cable Overall Dia. (mm)	Max. Conductor Resistance, DC at 20°C (Ohms/Km)	Max. Conductor Resistance, AC at 90°C (Ohms/Km)	Cable Weight Approx. (kg / km)
FSBS07CLAWLS00IC050SA00IP	1	50	18.4	0.387	0.494	760
FSBS07CLAWLS00IC070SA00IP	1	70	20.8	0.268	0.342	1050
FSBS07CLAWLS00IC095SA00IP	1	95	23.0	0.193	0.247	1340
FSBS07CLAWLS00IC120SA00IP	1	120	24.6	0.153	0.196	1620
FSBS07CLAWLS00IC150SA00IP	1	150	27.5	0.124	0.160	2035
FSBS07CLAWLS00IC185SA00IP	1	185	30.0	0.0991	0.129	2470
FSBS07CLAWLS00IC240SA00IP	1	240	33.8	0.0754	0.0988	3060
FSBS07CLAWLS00IC300SA00IP	1	300	36.4	0.0601	0.0804	3715
FSBS07CLAWLS00IC400SA00IP	1	400	41.1	0.0470	0.0647	4830
FSBS07CLAWLS00IC500SA00IP	1	500	45.0	0.0366	0.0527	5930
FSBS07CLAWLS00IC630SA00IP	1	630	49.7	0.0283	0.0434	7400

ELECTRICAL CHARACTERISTICS:

Conductor cross-sectional area	Current Carrying Capacity (Amperes)														
	Reference method C (clipped direct)						Reference Method F (in free air or on a perforated cable tray, horizontal or vertical)								
	2 cables single-phase a.c or d.c flat		3 or 4 cables, three phase a.c flat		2 cables single phase a.c or d.c flat		3 cables single phase a.c flat		3 cables three phase a.c trefoil		Spaced by one cable diameter				
	Horizontal		Vertical		Horizontal		Vertical		2 cables, d.c		2 cables, single-phase a.c		3 or 4 cables, three phase a.c		
mm ²	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.
50	237	220	253	232	222	284	270	282	266	288	266				
70	303	277	322	293	285	356	349	357	337	358	331				
95	367	333	389	352	346	446	426	436	412	425	393				
120	425	383	449	405	402	519	497	504	477	485	449				
150	488	437	516	462	463	600	575	566	539	549	510				
185	557	496	587	524	529	688	680	643	614	618	574				
240	656	579	689	612	625	815	782	749	714	715	666				
300	755	662	792	700	720	943	906	842	805	810	755				
400	853	717	899	767	815	1137	1094	929	889	848	797				
500	962	791	1016	851	918	1314	1266	1032	989	923	871				
630	1082	861	1146	935	1027	1528	1474	1139	1092	992	940				

The above table is in accordance with Table 4E3A of 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