

# POLYCAT FS SC 750V LSZH Fire Survival Cable, 450/750 V AC

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Images not to scale. Follow table for dimensions

## APPLICATION

POLYCAT 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.

## CHARACTERISTICS

### Voltage Rating

450/750V AC

Can be extended to 1000V

### Operation Temperature

-40°C to +90°C

Short Circuit Temperature 250°C

### Bending Radius

Min. 8 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 Cross-linked Halogen Free Flame Retardant Insulation
- Extruded Cross-linked Low Smoke Halogen Free Flame Retardant Sheath

### Core Identification

Black or any mono colour

## OUTSTANDING FEATURES

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

## STANDARD FOLLOWS

EN 60228:2005

Generally conforming to BS 7211

## 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

## OUR ACCREDITATIONS



## APPROVAL



**POLY CAB FS SC 750V LSZH**  
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**DIMENSIONS AND WEIGHTS:**

Product Code	No. of Cores	Cross Sectional Area (mm <sup>2</sup> )	Approx. 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)
FSBS07CLUALS001C004SA001P	1	4	6.9	4.61	5.88	80
FSBS07CLUALS001C006SA001P	1	6	7.5	3.08	3.93	100
FSBS07CLUALS001C010SA001P	1	10	7.9	1.83	2.33	140
FSBS07CLUALS001C016SA001P	1	16	8.9	1.15	1.47	200
FSBS07CLUALS001C025SA001P	1	25	11	0.727	0.927	310
FSBS07CLUALS001C035SA001P	1	35	11	0.524	0.668	400
FSBS07CLUALS001C050SA001P	1	50	13	0.387	0.494	525
FSBS07CLUALS001C070SA001P	1	70	15	0.268	0.342	735
FSBS07CLUALS001C095SA001P	1	95	17	0.193	0.247	980
FSBS07CLUALS001C120SA001P	1	120	19	0.153	0.196	1250
FSBS07CLUALS001C150SA001P	1	150	20	0.124	0.16	1540
FSBS07CLUALS001C185SA001P	1	185	22	0.0991	0.129	1890
FSBS07CLUALS001C240SA001P	1	240	25	0.0754	0.0988	2500

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### ELECTRICAL CHARACTERISTICS:

Conductor cross-sectional area	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	
mm <sup>2</sup>	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.
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

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