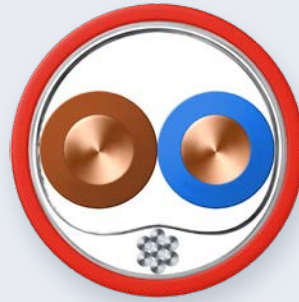


FR-SIR-F 90 Fire alarm cable – screened

BETAflam® Fire alarm cable, 300 / 500 V, circuit integrity acc. to BS 6387, LSOH



Advantages

- High safety standard: BS 6387 C.W.Z, fully tested and certified by LPCB
- Low Smoke Zero Halogen (LSOH)
- Operating temperature up to +90 °C
- In compliance with RoHS and REACH

Application

BETAflam® FR-SIR-F 90 is a shielded Fire Alarm Cable with excellent fire performance in case of fire and high circuit integrity characteristics.

Typical applications:

- Fire alarm circuits
- Fire detection circuits
- Emergency Control Circuits
- Voice Alarm Systems
- Emergency Lighting Systems
- Especially recommended in areas where human and animal life as well as valuable property are exposed to high risk in case of fire

Construction

- | | |
|----------------------------|--|
| ■ Conductor | Bare annealed solid cooper, acc. IEC 60228 class 1 |
| ■ Insulation | BETAflam® SIR silicone rubber, cross-linked |
| ■ Conductor identification | See table (further colours on request) |
| ■ Shield | Aluminium laminated foil |
| ■ Drain wire | Tinned stranded copper wires, acc. to IEC 60228 class 2 (full-sized) |
| ■ Inner covering | Halogen free plastic tape |
| ■ Sheath | BETAflam® mineral copolymer see table (other colours on request) |

Electrical characteristics

Rated voltage	U_0/U 300 / 500 V
Test voltage	2000 V

Thermal characteristics

Operation temperature	-30 °C to +90 °C
Laying temperature	-5 °C to +70 °C
Short circuit temperature (temperature peak < 5 s)	+250 °C

Bending radius

during laying	> 8 × outer Ø
fixed installed	> 6 × outer Ø

Laying conditions

For fixed indoor installation in trays, ladders, ducts and other common cable installation systems. Outdoors only when installed in dry and water-proofed cable laying systems, protected from direct sunlight and other external impacts.

Standards / Material properties / Fire performance

- Halogen free: IEC 60754-1; BS EN 60754-1
- No corrosive gases: IEC 60754-2; BS EN 60754-2
- No toxic gases: NES 02-713
- Low smoke density: IEC 61034-1 & -2; BS EN 61034-1 & -2
- Flame retardant: IEC 60332-1-2
- No flame spread on bunched cables: IEC 60332-3-22/-24 (Cat. A & C)
- Circuit integrity: IEC 60331-2/-21 and BS 6387 C.W.Z.

No. of cores	Cross section nom.	Conductor Ø nom.	Insulation thickness nom.	Core Ø nom.	Drain wire cross section	Sheath thickness	Cable Ø nom.	Weight approx.	Cap. at 800 Hz core/core nom.	Cap. at 800 Hz core/shield nom.	Fire load	Order no.			
												mm ²	mm	mm	mm ²
2C	1.5	1.38	0.7	2.8	1.5	1.2	8.3	100	130	185	0.22	RD	307892	305208	306010
	1.5	1.38	0.7	2.8	1.5	1.2	8.3	100	130	185	0.22	WH	*	309074	*
	2.5	1.74	0.7	3.2	2.5	1.2	9.4	142	150	210	0.27	RD	*	305210	306009
	2.5	1.74	0.7	3.2	2.5	1.2	9.4	142	150	210	0.27	WH	*	309012	*

● ● ● ● ● ●
BK+RD BU+BN BK+WH

* upon request