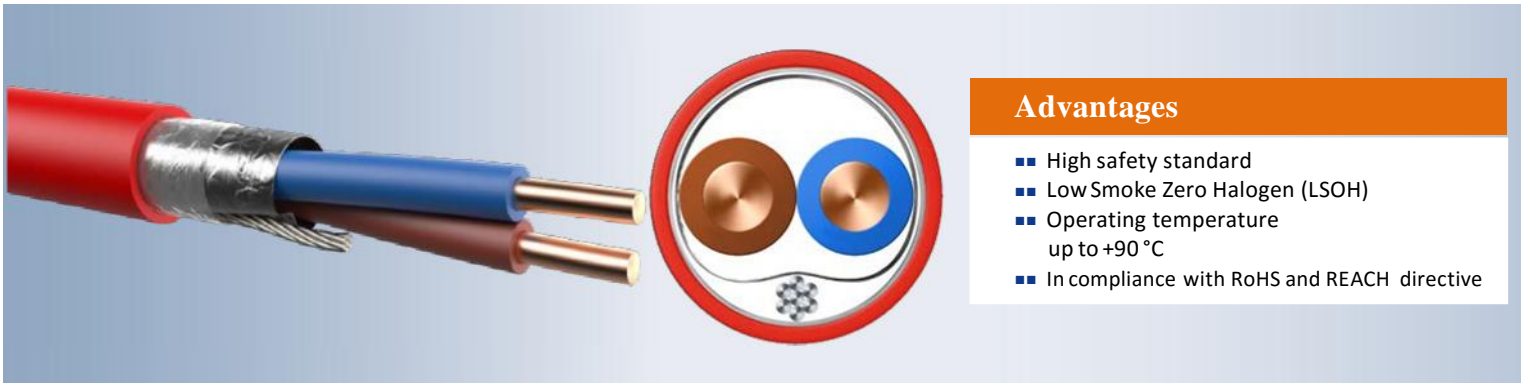




FR-SIR-F 90 Fire alarm cable – screened

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



Advantages

- High safety standard
- Low Smoke Zero Halogen (LSOH)
- Operating temperature up to +90 °C
- In compliance with RoHS and REACH directive

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
- Conductor identification See table (further colors on request)
- Shield Aluminum 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 colors on request)

Electrical characteristics

Rated voltage U₀ / 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 +250 °C (temperature peak < 5 s)

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 61034-2
- 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	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
	mm ²	mm	mm	mm	mm ²	mm	mm	kg/km	pF/m	pF/m	kWh/m
2C	1.5	1.38	0.7	2.8	1.5	1.2	8.3	100	130	185	0.22
	1.5	1.38	0.7	2.8	1.5	1.2	8.3	100	130	185	0.22
	2.5	1.74	0.7	3.2	2.5	1.2	9.4	142	150	210	0.27
	2.5	1.74	0.7	3.2	2.5	1.2	9.4	142	150	210	0.27

Order no.			
Sheath colour	Insulation colour		
	● ● ●	● ● ●	● ○
	BK+RD	BU+BN	BK+WH
RD	307892	305208	306010
WH	*	309074	*
RD	*	305210	306009
WH	*	309012	*