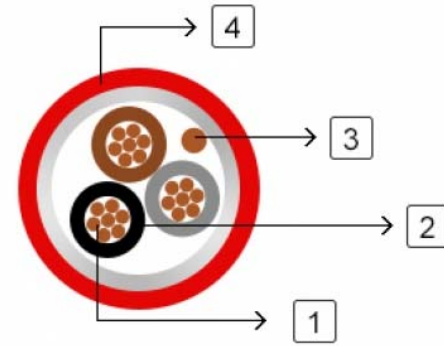


**225V SR Insulated & LSZH Sheathed Fire
Alarm Cables BMK***



JE-SH(St)H...Bd FE180 E30 BMK (CU/Mica+SR/OS/LSZH 225V Class 1)

The cables are used for the internal wiring of building when the circuit integrity during fire is paramount. The cables are intended for use in fire fighting plants with mica tapes, with and without Aluminum foil and LSZH outer sheath. The fire alarm cables with 30 to 90 minutes circuit integrity should be used for control voltages and data transfer in alarm and fire alarm systems, where a system circuit integrity E30/E60/E90 depending on lay system in accordance with DIN 4102-12 is required. The circuit integrity is guaranteed with a test voltage of 110V.

Application:

STANDARDS:

Basic design to VDE 0815

FIRE PERFORMANCE

Circuit Integrity	IEC 60331-23; BS 6387 CWZ; DIN VDE 0472-814(FE180); CEI 20-36/2-1; SS229-1; NBN C 30-004 (cat. F3); NF C32-070-2.3(CR1)
System circuit integrity	DIN 4102-12, E30 depending on lay system
Flame Retardance (Single Vertical Wire Test)	EN 60332-1-2; IEC 60332-1-2; BS EN 60332-1-2; VDE 0482-332-1 ; NBN C 30-004 (cat. F1); NF C32-070-2.1(C2); CEI 20-35/1-2; EN 50265-2-1*; DIN VDE 0482-265-2-1*
Reduced Fire Propagation (Vertically-mounted bundled wires & cable test)	EN 60332-3-24 (cat. C); IEC 60332-3-24; BS EN 60332-3-24; VDE 0482-332-3; NBN C 30-004 (cat. F2); NF C32-070-2.2(C1); CEI 20-22/3-4; EN 50266-2-4*; DIN VDE 0482-266-2-4
Halogen Free	IEC 60754-1; EN 50267-2-1; DIN VDE 0482-267-2-1; CEI 20-37/2-1 ; BS 6425-1*
No Corrosive Gas Emission	IEC 60754-2; EN 50267-2-2; DIN VDE 0482-267-2-2; CEI 20-37/2-2 ; BS 6425-2*
Minimum Smoke Emission	IEC 61034-1&2; EN 61034 -1&2; DIN VDE 0482-1034-1&2; CEI 20-37/3-1&2; EN 50268-1&2*; BS 7622-1&2*
No Toxic gases	NES 02-713; NF C 20-454

Note: Asterisk * denotes superseded standard.

CABLE CONSTRUCTION

1. Conductors: Plain annealed copper wire, sized 0.8mm solid according to IEC(EN) 60228 class 1.
2. Insulation: Fire resistant silicone rubber type HJ1 as per DIN VDE 0207-23.
3. Overall Screen: Aluminum/polyester tape with tinned copper drain wire.
4. Outer Sheath: Thermoplastic LSZH compound HM2 as per DIN VDE 0207-24

COLOUR CODE

Insulation Colour:
Each bunch blue - red / grey - yellow / green - brown / white - black
Bunch identification plastic numbered tape
Sheath Colour:
Colour red with printed " BMK - BRANDMELDEKABEL" denoting fire alarms.

TYPE CODE

JE- Fire alarm cable H Halogen free & zero halogen
Bd Unit stranding. (St) Static shield of Aluminum tape
FE180 Insulation integrity (950°C 180 minutes) E30 30 minutes system circuit integrity
STA Corrugated steel tape SWA Steel wire armour
SWB Steel wire braid

Physical AND THERMAL PROPERTIES

Temperature range during operation (fixed state): -30°C – +90°C
Temperature range during installation (mobile state): -20°C – +50°C

Minimum bending radius: 7.5 x Overall Diameter

Electrical PROPERTIES

Conductor Diameter	mm	0.8
Conductor Size	mm ²	0.5
Maximum Conductor Resistance @20°C	Ω/km	34.6
Maximum Loop Resistance @20°C	Ω/km	73.2
Minimum Insulation Resistance @500V DC @20°C	MΩ.km	100
Maximum Average Attenuation @0.8KHz	dB/km	1.2
Nominal Mutual Capacitance @0.8KHz	nF/km	120
Maximum Capacitance Unbalance K1 @0.8KHz pair-to-pair	pF/100m	200
Working Voltage	V	225
Nominal Insulation Thickness	mm	0.4
Nominal Insulated Conductor Diameter	mm	1.6

CONSTRUCTION PARAMETERS

Cable Code	Nominal Insulation Thickness	Nominal Sheath Thickness	Nominal Overall Diameter	Approx. Weight
mm ²	mm	mm	mm	kg/km
0.8mm Conductor, Solid 0,5 mm ² Section				
JE-SH(St)H...1X2x0.8 FE180/E30 BMK	0.4	1.0	6.1	52
JE-SH(St)H...2X2x0.8 (quad) FE180/E30 BMK	0.4	1.0	7.5	77
JE-SH(St)H...4X2x0.8 FE180/E30 BMK	0.4	1.0	10.5	133
0.8mm Conductor, Solid 0,5 mm ² Section				
JE-SH(St)H...8X2x0.8 Bd FE180/E30 BMK	0.4	1.0	17.4	296
JE-SH(St)H...12X2x0.8 Bd FE180/E30 BMK	0.4	1.2	18.9	368
JE-SH(St)H...16X2x0.8 Bd FE180/E30 BMK	0.4	1.2	20.7	442
JE-SH(St)H...20X2x0.8 Bd FE180/E30 BMK	0.4	1.2	22.7	508
JE-SH(St)H...32X2x0.8 Bd FE180/E30 BMK	0.4	1.4	24.5	772
JE-SH(St)H...40X2x0.8 Bd FE180/E30 BMK	0.4	1.4	26.5	946
JE-SH(St)H...52X2x0.8 Bd FE180/E30 BMK	0.4	1.6	28.0	1016