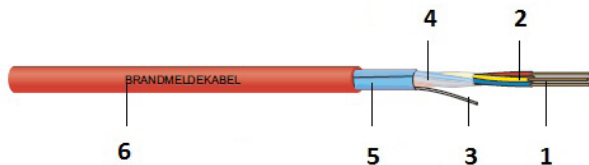


## JE-H(St)H...Bd FE180 E30-E90 fire alarm

Fire alarm cable, max. 225V, Keram

halogen-free, with improved fire characteristics,  
with reference to VDE 0815,  
circuit integrity (FE180) in accordance with VDE 0472-814, IEC 60331, EN 50200,  
System Circuit Integrity E30-E90\* in accordance with DIN 4102-12



- 1 Conductor: solid
- 2 Insulation: cross-linked polymer, zero halogen
- 3 Drain wire: Ø 0.8 mm
- 4 Separator: plastic tape, zero halogen
- 5 Shielding: Al-laminated tape, zero halogen
- 6 Sheath: FRNC/LSZH



### Description

Cables with intrinsic fire resistance are installed in all areas that require special protection of people and equipment against fire and fire damages and where strict security requirements must be fulfilled. Suitable for indoor applications. For outdoor applications, protection must be provided against exposure to direct sunlight. The cable should only be laid directly in earth or water if a protective conduit is used. These cables correspond to the demands of System Circuit Integrity E30-E90\* in accordance with DIN 4102-12. System Circuit Integrity is guaranteed at an operating voltage up to 110V. Permitted operating temperature at conductor of +70°C.

### Construction

Conductor	Bare copper, solid, 0.8 mm diameter, VDE 0815
Core colours	DIN VDE 0815
Insulation	Fire-resistant, cross-linked, high-performance Keram special compound, EN 50290-2-36
Shielding	Al-laminated tape with copper drain wire Ø 0.8 mm

### General properties

Circuit Integrity	E90
Insulation integrity	FE 180
Installation temperature	-5 °C - +50 °C
Operating temperature	-30 °C - +70 °C
Outer sheath material	Flame retardant polyolefin compound VDE 0819 part 107, EN 50290-2-27 and VDE 0250-214 "HM 2"

## Electrical properties

Capacitive coupling 0,8 mm, 100m @ 800Hz	200 pF/km
Maximum loop resistance 0,8 mm	73.2 Ω/km
Minimum insulation resistance	100 MΩ x km
operating capacity, 1km @ 800Hz	120 nF/km
peak voltage	225 V
Test voltage 50Hz, core/core	500 V
Test voltage 50Hz, core/screen	2,000 V

## Mechanical properties

Minimal crush resistance / 10cm	1,000 N
Minimum bending during installation (multi core)	7.5 x D
Minimum bending radius permanent (multi core)	7.5 x D

## Standards

Insulation Integrity (FE180)	IEC 60331-11/-21 (180 minutes), VDE 0472-814 (FE180), BS 6387 C/W/Z, IEC 60331-1 (120 minutes), IEC 60331-2 (120 minutes), EN 50200 (PH120 minutes), NBN 713-020 (Rf 1 1/2), VDE 0482-200 (PH120), VDE 0482-362, AREI-RGIE Art.104-FR1
Zero halogen no corrosive gases	IEC 60754-1/-2, EN 60754-1/-2, VDE 0482-754-1/-2, AREI-RGIE Art.104-SA
Flame propagation	IEC 60332-1-2, EN 60332-1-2, VDE 0482-332-1-2, AREI-RGIE Art.104-F1
Flame spread	IEC 60332-3-22/-24 Cat. A/C, EN 60332-3-22/-24 Cat. A/C, VDE 0482-332-3-22/-24 Cat. A/C, AREI-RGIE Art.104-F2
Smoke density	IEC 61034-1/-2, EN 61034-1/-2, VDE 0482-1034-1/-2, AREI-RGIE Art.104-SD
System circuit integrity	DIN 4102-12, AREI-RGIE Art.104-FR2

## Note

System Circuit Integrity is dependent on installation method.

## Versions

Material number	Product	Outer sheath colour	Number of Cores	Outer sheath diameter [mm]	CU rate [kg/km]	Weight [kg/km]	Fire load [kWh/m]	Packing unit
188093	JE-H(ST)H...Bd FE180 E30-E90 fire alarm 1x2x0.8 mm	red	2	5.6	15	42	0.095	by the metre
188098	JE-H(ST)H...Bd FE180 E30-E90 fire alarm 2x2x0.8 mm	red	2	6.3	25	59	0.123	by the metre
188101	JE-H(ST)H...Bd FE180 E30-E90 fire alarm 4x2x0.8 mm	red	2	9	45	101	0.21	by the metre
188103	JE-H(ST)H...Bd FE180 E30-E90 fire alarm 8x2x0.8 mm	red	2	13.9	85	221	0.52	by the metre
188105	JE-H(ST)H...Bd FE180 E30-E90 fire alarm 12x2x0.8 mm	red	2	14.8	126	281	0.58	by the metre
188109	JE-H(ST)H...Bd FE180 E30-E90 fire alarm 20x2x0.8 mm	red	2	18.8	206	422	0.80	by the metre
188107	JE-H(ST)H...Bd FE180 E30-E90 fire alarm 16x2x0.8 mm	red	2	16.6	166	325	0.69	by the metre

Material number	Product	Outer sheath colour	Number of Cores	Outer sheath diameter [mm]	CU rate [kg/km]	Weight [kg/km]	Fire load [kWh/m]	Packing unit
188112	JE-H(St)H...Bd FE180 E30-E90 fire alarm 32x2x0.8 mm	red	2	22	326	588	1.02	by the metre
188114	JE-H(St)H...Bd FE180 E30-E90 fire alarm 40x2x0.8 mm	red	2	25.5	407	759	1.38	by the metre
188116	JE-H(St)H...Bd FE180 E30-E90 fire alarm 52x2x0.8 mm	red	2	27.8	529	931	1.59	by the metre

Additional dimensions available on request.

Subject to technical modification

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