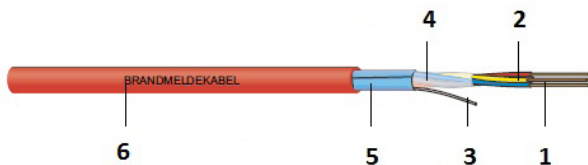


# JE-H(St)H...Bd FE180 E30-E90 fire alarm

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
Insulation	Fire-resistant, cross-linked, high-performance Keram special compound, EN 50290-2-36
Core colours	VDE 0815
Shielding	Al-laminated tape with copper drain wire Ø 0.8 mm
Outer sheath material	Flame retardant polyolefin compound VDE 0819-107, EN 50290-2-27 and VDE 0250-214 "HM 2"

## General properties

Circuit Integrity	E90
Insulation integrity	FE 180
Installation temperature	-5 °C - +50 °C
Operating temperature	-30 °C - +70 °C

## 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), AREI-RGIE Art.104-FR1
System circuit integrity	DIN 4102-12, AREI-RGIE Art.104-FR2
Smoke density	IEC 61034-1/-2, EN 61034-1/-2, VDE 0482-1034-1/-2, AREI-RGIE Art.104-SD
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, EN 60332-3-22/-24, VDE 0482-332-3-22/-24, AREI-RGIE Art.104-F2

## Note

System Circuit Integrity is dependent on installation method.

## Versions

Material number	Product	Outer sheath colour	Outer sheath diameter [mm]	CU rate [kg/km]	Weight [kg/km]	Fire load [kWh/m]	Packing unit	GTIN / EAN
188093	JE-H(St)H...Bd FE180 E30-E90 fire alarm 1x2x0.8 mm	red	5.6	15	42	0.095	by the metre	40393910073164
188098	JE-H(St)H...Bd FE180 E30-E90 fire alarm 2x2x0.8 mm	red	6.3	25	59	0.123	by the metre	40393910073126
188101	JE-H(St)H...Bd FE180 E30-E90 fire alarm 4x2x0.8 mm	red	9	45	101	0.21	by the metre	40393910073102
188103	JE-H(St)H...Bd FE180 E30-E90 fire alarm 8x2x0.8 mm	red	13.9	85	221	0.52	by the metre	40393910073089
188105	JE-H(St)H...Bd FE180 E30-E90 fire alarm 12x2x0.8 mm	red	14.8	126	281	0.58	by the metre	40393910073065
188109	JE-H(St)H...Bd FE180 E30-E90 fire alarm 20x2x0.8 mm	red	18.8	206	421	0.80	by the metre	40393910073027
188107	JE-H(St)H...Bd FE180 E30-E90 fire alarm 16x2x0.8 mm	red	16.6	166	325	0.69	by the metre	40393910073041

Material number	Product	Outer sheath colour	Outer sheath diameter [mm]	CU rate [kg/km]	Weight [kg/km]	Fire load [kWh/m]	Packing unit	GTIN / EAN
188112	JE-H(St)H...Bd FE180 E30-E90 fire alarm 32x2x0.8 mm	red	22	326	589	1.02	by the metre	40393910072990
188114	JE-H(St)H...Bd FE180 E30-E90 fire alarm 40x2x0.8 mm	red	25.5	407	761	1.38	by the metre	40393910072976
188116	JE-H(St)H...Bd FE180 E30-E90 fire alarm 52x2x0.8 mm	red	27.8	529	933	1.59	by the metre	40393910072952

Additional dimensions available on request.

Subject to technical modification

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