

JE-H(St)H...Bd FE180 E30-E90

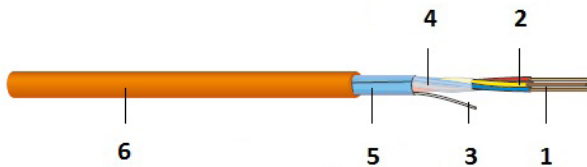
Wiring cable for industrial electronics, max. 225V, Keram

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 50290-2-26
Outer sheath material	Flame retardant polyolefin compound VDE 0819 part 107, EN 50290-2-27 and VDE 0250-214 "HM 2"
Shielding	Al-laminated tape with copper drain wire Ø 0.8 mm

General Properties

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
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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

Circuit integrity (FE180/PH120)	IEC 60331-11/-21 (180 minutes),VDE 0472-814 (FE180),BS 6387 C/W/Z,IEC 60331-1 (PH120),IEC 60331-2 (120 minutes),EN 50200 (PH120),NBN 713-020,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	Outer sheath diameter [mm]	CU rate [kg/km]	Weight [kg/km]	Fire load [kWh/m]	Packing unit
188092	JE-H(St)H...Bd FE180 E30-E90 1x2x0.8 mm	orange	5.6	15	42	0.095	by the metre
18809700ZK	JE-H(St)H...Bd FE180 E30-E90 2x2x0.8 mm	orange	6.1	25	57	0.123	1000 m drum
18809700ZL	JE-H(St)H...Bd FE180 E30-E90 2x2x0.8 mm	orange	6.1	25	57	0.123	500 m drum
18809700ZZ	JE-H(St)H...Bd FE180 E30-E90 2x2x0.8 mm	orange	6.1	25	59	0.123	by the metre
188099	JE-H(St)H...Bd FE180 E30-E90 4x2x0.8 mm	orange	9	45	101	0.21	by the metre
188102	JE-H(St)H...Bd FE180 E30-E90 8x2x0.8 mm	orange	13.9	85	220	0.52	by the metre
188104	JE-H(St)H...Bd FE180 E30-E90 12x2x0.8 mm	orange	14.8	126	280	0.58	by the metre
188108	JE-H(St)H...Bd FE180 E30-E90 20x2x0.8 mm	orange	18.8	206	421	0.80	by the metre
188106	JE-H(St)H...Bd FE180 E30-E90 16x2x0.8 mm	orange	16.6	166	324	0.69	by the metre
188111	JE-H(St)H...Bd FE180 E30-E90 32x2x0.8 mm	orange	22	326	587	1.02	by the metre
188113	JE-H(St)H...Bd FE180 E30-E90 40x2x0.8 mm	orange	25.5	407	759	1.38	by the metre
188115	JE-H(St)H...Bd FE180 E30-E90 52x2x0.8 mm	orange	27.8	529	930	1.59	by the metre

Additional dimensions available on request.