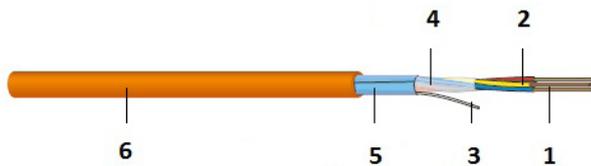


JE-H(St)H...Bd FE180 E30-E90 B2_{ca}

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
Fire behaviour according to EN 50575, EN 13601-6



- 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. Suitable according to VKF fire protection guideline in escape routes and in tunnels according to Astra guideline 13022.

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"
Outer sheath colour	orange

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), IEC 60331-1 (120 minutes), IEC 60331-2 (120 minutes), EN 50200 (PH120 minutes), NBN 713-020, VDE 0482-200 (PH120), AREI-RGIE Art.104-FR1
System circuit integrity	DIN 4102-12, AREI-RGIE Art.104-FR2
Reaction to fire (Euroclasses)	EN 13501-6: B2 _{ca} , EN 50399
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	Reaction to fire	Outer sheath diameter [mm]	CU rate [kg/km]	Weight [kg/km]	Fire load [kWh/m]	Packing unit
18809200BZ	JE-H(St)H...Bd FE180 E30-E90 1x2x0.8 mm	B2 _{ca} -s1a,d1,a1	5.6	15	43	0.108	by the metre
18809700BZ	JE-H(St)H...Bd FE180 E30-E90 2x2x0.8 mm	B2 _{ca} -s1a,d1,a1	6.3	25	60	0.138	by the metre
18809900BZ	JE-H(St)H...Bd FE180 E30-E90 4x2x0.8 mm	B2 _{ca} -s1a,d1,a1	9.0	45	102	0.224	by the metre
18810200BZ	JE-H(St)H...Bd FE180 E30-E90 8x2x0.8 mm	B2 _{ca} -s1a,d1,a1	13.9	85	222	0.522	by the metre
18810400BZ	JE-H(St)H...Bd FE180 E30-E90 12x2x0.8 mm	B2 _{ca} -s1a,d1,a1	14.8	126	282	0.605	by the metre
18810600BZ	JE-H(St)H...Bd FE180 E30-E90 16x2x0.8 mm	B2 _{ca} -s1a,d1,a1	16.6	166	326	0.628	by the metre
18810800BZ	JE-H(St)H...Bd FE180 E30-E90 20x2x0.8 mm	B2 _{ca} -s1a,d1,a1	18.8	206	423	0.842	by the metre

Additional dimensions available on request.