

PREVENTIVE FIRE PROTECTION

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

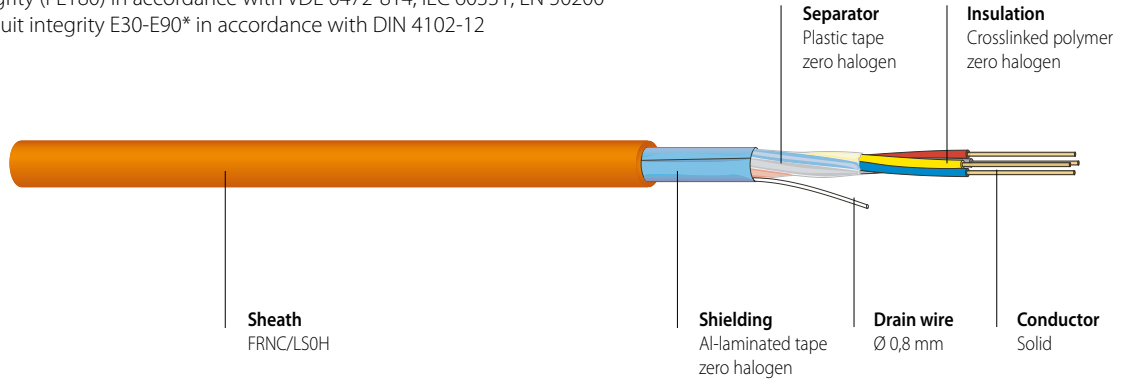
Wiring cable for industrial electronics max. 225V, pyrofil® Keram

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



PRODUCT INFORMATION



APPLICATION

Safety cables are used in all situations that require special protection against fire and flame damage for people and equipment and where a high degree of safety conditions 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 +70°C.

CONSTRUCTION

Conductor	Bare copper, solid, 0.8mm diameter, VDE 0815
Insulation	Fire-resistant, crosslinked, high-performance Keram special compound, EN 50290-2-26
Core colours	VDE 0815, bundles identified by numbered tape
Separator	PEPT "Plastic Tape"
Shielding	Al-laminated tape with tinned copper drain wire Ø 0.8mm
Outer sheath	Flame retardant polyolefin compound, VDE 0819 part 107, EN 50290-2-27 and VDE 0250-214 „HM 2“
Sheath colour	Orange
Imprint	DATWYLER PYROFIL KERAM JE-H(ST)H...BD FE180 E30-E90 „N X 2 X MM“ VDE REG. NO.9361 „ORDER NO.“ SWISS MADE „METRE MARKING“, or on request

ELECTRICAL PROPERTIES

Insulation resistance	min. 100 MΩ x km
Loop resistance	max. 73.2 Ω/km at 0.80 mm
Capacitance unbalance	max. 120 nF/km at 800 Hz
Capacitance coupling	K max. 200 pF/100m at 800 Hz
Rated voltage	max. 225 V
Test voltage	500 V, 50 Hz Core/Core 2000 V, 50Hz, Core/Screen

GENERAL PROPERTIES

Minimum bending radius	during installation	7,5 x D (D = outer diameter)
	permanent installation	2,5 x D
Crush resistance	≥ 1000 N/10 cm	
Impact	≥ 10 Impacts	
Operating temperature	permanent installation	-30°C to +70°C
	during installation	-5°C to +50°C

	Zero halogen, non corrosive gases
	Flame propagation
	Flame spread
	Smoke density
	Circuit integrity [FE/PH]
	System Circuit integrity [E30-E90]*

IEC 60754-2, EN 50267-2-2, VDE 0482-267-2-2
IEC 60332-1-2, EN 60332-1-2, VDE 0482-332-1-2
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
IEC 61034-1/-2, EN 61034-1/-2, VDE 0482-1034-1/-2
IEC 60331-11/-21 (180 minutes), VDE 0472 part 814 (FE180), IEC 60331-2, EN 50200, VDE 0482-200

DIN 4102 part 12, NBN 713-020 (Rf 1½)

* Circuit integrity is dependent on installation method.

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Article No.	No. of cores x conductor diameter				Cu content kg/km	Total weight app. kg/km	Outer diameter app. mm	Fire load kWh/m
	n x mm							
188 092	1	x	2	x 0.80	15	40	5.5	0.095
188 097	2	x	2	x 0.80	25	56	6.0	0.123
188 099	4	x	2	x 0.80	45	96	8.7	0.21
188 102	8	x	2	x 0.80	85	218	13.7	0.52
188 104	12	x	2	x 0.80	126	270	14.6	0.58
188 106	16	x	2	x 0.80	166	337	16.0	0.69
188 108	20	x	2	x 0.80	206	403	18.0	0.80
188 111	32	x	2	x 0.80	326	570	21.8	1.02
188 113	40	x	2	x 0.80	407	739	25.3	1.38
188 115	52	x	2	x 0.80	529	906	27.6	1.59

Additional dimensions available on request.