

**PREVENTIVE FIRE PROTECTION**

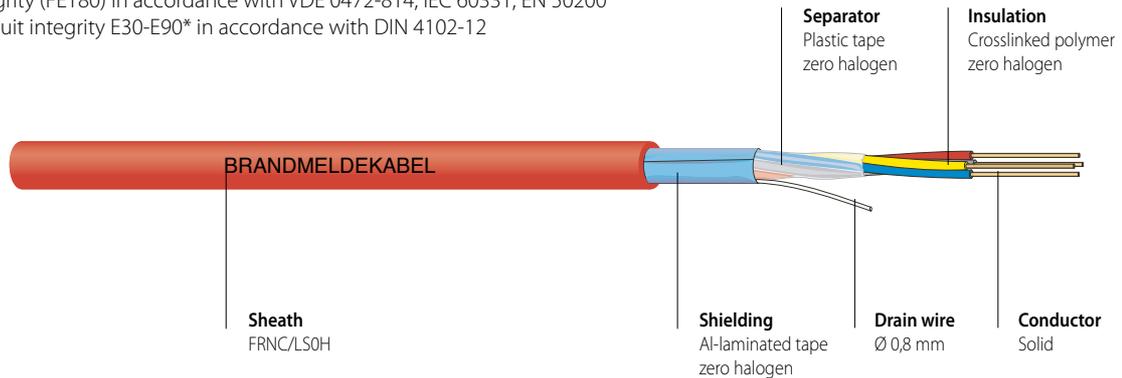
**JE-H(St)H...Bd FE180 E30-E90**

**Fire alarm cable 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" Red
Sheath colour	Red
Imprint	DATWYLER PYROFIL KERAM „BRANDMELDEKABEL“ 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	IEC 60754-2, EN 50267-2-2, VDE 0482-267-2-2
Flame propagation	IEC 60332-1-2, EN 60332-1-2, VDE 0482-332-1-2
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
Smoke density	IEC 61034-1/-2, EN 61034-1/-2, VDE 0482-1034-1/-2
Circuit integrity [FE/PH]	IEC 60331-11/-21 (180 minutes) , VDE 0472 part 814 (FE180), IEC 60331-2, EN 50200, VDE 0482-200
System Circuit integrity [E30-E90]*	DIN 4102 part 12, NBN 713-020 (Rf 1½) * Circuit integrity is dependent on installation method.

## PRODUCT INFORMATION

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	n x mm				
188 093	1	x	2 x 0.80	15	40	5.5	0.095
188 098	2	x	2 x 0.80	25	56	6.0	0.123
188 101	4	x	2 x 0.80	45	96	8.7	0.21
188 103	8	x	2 x 0.80	85	218	13.7	0.52
188 105	12	x	2 x 0.80	126	270	14.6	0.58
188 107	16	x	2 x 0.80	166	337	16.0	0.69
188 109	20	x	2 x 0.80	206	403	18.0	0.80
188 112	32	x	2 x 0.80	326	570	21.8	1.02
188 114	40	x	2 x 0.80	407	739	25.3	1.38
188 116	52	x	2 x 0.80	529	906	27.6	1.59

Additional dimensions available on request.