# JE-H(St)H Bd fire warning cable, FE 180/E 30 to E 90 (red), halogen-free





## **BRANDMELDEKABEL**



#### **Technical data**

- Flame retardant, halogen-free installation cable, adapted to DIN VDE 0815
- Loop resistance max. 73,2 Ohm/km
- Temperature range flexing -5°C to +50°C fixed installation -30°C to +70°C
- Operating peak voltage 225 V (not for purposes of high current and power installation)
- Test voltage core/core 500 V core/screen 2000 V
- Insulation resistance min. 100 MOhm x km
- Mutual capacitance max. 120 nF/km at 800 Hz (this values may be extended at 20% with a make-up up to 4 pairs)
- Capacitance unbalance max. 200 pF/100 m (20% of the values, but one value up to 400 pF is allowed)
- Minimum bending radius 6x cable Ø
- Radiation resistance up to 100x10<sup>6</sup> cJ/kg (up to 100 Mrad)
- Caloric load values see Technical Informations

## **Cable structure**

- Bare copper-conductor, single-wire
- Core insulation halogen-free, cross-linked polymer HI1, flame retardant (E90 with special foil wrapping over conductor)
- Core identification with colour rings and ring-groups to DIN VDE 0815
- Cores twisted to pairs, each 4 pairs consist to unit, several units stranded to layers
- Units identified with numbered tape
- Core wrapping with special polyester and glass-fibre tape
- Screening with alu-laminated polyester tape and solid copper drain wire 0,8 mm Ø
- Outer sheath halogen-free, flame retardant to DIN VDE 0207 part 24, HM2
- Sheath colour red, RAL 3000 with imprint "BRANDMELDEKABEL"

#### Tests

- Flame test acc. to
   DIN VDE 0482-332-3, BS 4066 part 3,
   DIN EN 60332-3, IEC 60332-3 (previously
   DIN VDE 0472 part 804 test method C)
- Corrosiveness of combustion gases acc. to DIN VDE 0482 part 267, DIN EN 50267-2-2, IEC 60754-2 (equivalent DIN VDE 0472 part 813)
- Smoke density acc. to DIN VDE 0482 part 1034-1+2, DIN EN 61034-1+2, IEC 61034-1+2, BS 7622 part 1+2 (previously DIN VDE 0472 part 816)

## Note

# • E 30 to E 90

Functionality (burning behaviour) is dependant on corresponding installation technique.

• **LSOH** = Low Smoke Zero Halogen

## **Properties**

- No fire propagation
- Low smoke density
- Not for purposes of high current and power installation as well as underground laying
- FE 180: Insulation integrity for 180 minutes. Tests acc.to DIN VDE 0472 part 814 ≜ IEC 60331.
  - **Insulation integrity** under direct flame propagation for the test period of 180 minutes.
- E 30: Functionality of electrical cable systems for minimum 30 minutes. Test to DIN 4102 part 12.

The **functionality** for 30 minutes assures when persons and animals are to be saved from a burning building. 30 minutes secures the functional performance of the fire warning and alarm systems, safety and spare lighting, passenger lifts with evacuation circuits, except the cables which are installed within the ladder shafts and engine rooms.

• E 90: Functionality of electrical cable systems for minimum 90 minutes. Test method to DIN 4102 part 12.

The **functionality** for 90 minutes assures the functional performance of water-pressure-rising stations for the supply to avoid smoke and heat in safety-stairs and inner rooms, ladder shafts and engine rooms for fire brigade lifts, emergency lifts for sickbeds in hospitals and the fire brigade lifts.

## **Application**

Static screened installation cables for telecommunication purposes. The static screen prevents strong interference impulse. Suitable for fixed installation everywhere, where in case of fire human life and material assets are to be protected and a safety conciousness take a special significance, e. g. in industrial complexes, public buildings, hotels, airports, under ground railway networks, hospitals.

C = The product is conformed with the EC Low-Voltage Directive 2006/95/EC.

### Functionality E 30 to E 90

Part no.	No.pairs x cross-sec. mm	Outer Ø app. mm	Cop. weight kg/km	Weight app. kg/km	
34091	2 x 2 x 0,8	7,4	25,0	74,0	-
34092	4 x 2 x 0,8	10,8	45,0	127,0	-
34093	8 x 2 x 0,8	16,9	85,0	300,0	-
34094	12 x 2 x 0,8	18,5	126,0	336,0	-
34095	16 x 2 x 0,8	20,1	166,0	426,0	-
34096	20 x 2 x 0,8	22,2	206,0	529,0	-
34097	32 x 2 x 0,8	29,1	326,0	859,0	-
34098	40 x 2 x 0,8	34,2	407,0	1094,0	-
3/1000	52 × 2 × 0 0	27.2	520.0	1200 0	

Dimensions and specifications may be changed without prior notice. (RQ02)

# Functionality E 30

Part no.	No.pairs x cross-sec. mm	Outer Ø app. mm	Cop. weight kg/km	Weight app. kg/ km	
34157	2 x 2 x 0,8	7,5	25,0	67,0	-
34158	4 x 2 x 0,8	9,3	45,0	103,0	-
34159	8 x 2 x 0,8	11,4	85,0	168,0	-
34160	12 x 2 x 0,8	13,0	126,0	237,0	-
34161	16 x 2 x 0,8	15,7	166,0	303,0	-
34162	20 x 2 x 0,8	16,5	206,0	361,0	-
34163	32 x 2 x 0,8	20,3	326,0	553,0	-
34164	40 x 2 x 0,8	23,4	407,0	699,0	-
24465	F2 2 0 0	25.2	E20.0	0.05.0	



