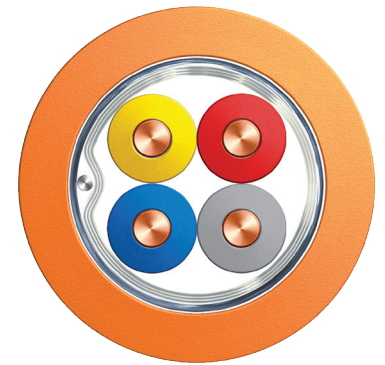


# JE-H(St)H Bd FE180/PH120/E90

LSZH FireFighter® FFCi



## Application

Flame Retardant Characteristics / Low Smoke Emission / Without Poisoned and Corrosive Gases / Circuit Integrity 180 Minutes / Circuit Integrity with Mechanical Shock PH120/E90

- Indoors where people are densely populated
- In places where there is electromagnetic interference
- Instrumentation and control engineering
- Industrial electronics
- For signal transmission
- Indoor communication systems
- In safety and fire alarm systems
- In places where human life and valuable materials and equipment need to be protected

## Cable Design

|              |   |
|--------------|---|
| Conductor    | IEC 60228; VDE 0295; EN 60228 Class Electrolytic Copper |
| Insulation   | Cross-linked Ceramic Forming Polymer Compound           |
| Colour code  | VDE 0815  |
| Wrapping     | Pes Tape + Glass Fibre Tape                             |
| Screen       | Tinned Copper Drain Wire + Al-Pes Tape                  |
| Outer Jacket | EN 50290-2-27 HFFR Compound                             |
| Colour       | RAL 3000 Red or RAL 2003 Orange                         |

## Flame Performance Tests

|  |                   |
|--|-------------------|
| Flame Retardant Test                       | EN IEC 60332-1-2  |
| Flame Propagation Test                     | EN IEC 60332-3-24 |
| Smoke Density Test                         | EN IEC 61034-2    |
| Corrosive Gas Test                         | EN IEC 60754-2    |
| Halogen Free Test                          | EN IEC 60754-1    |
| Circuit Integrity Test (FE180)             | IEC 60331-23/-21  |
| Circuit Integrity With Shock Test (Ph 120) | EN 50200          |
| Circuit Integrity Test (E90)               | DIN 4102-12       |



# JE-H(St)H Bd FE180/PH120/E90

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## Technical Characteristics

| Insulation Resistance (Min)<br>[MΩxkm] | Mutual Capacitance (Max)<br>[nF/km] | Operating Voltage<br>[V] | Bending Radius (Min)<br>[mm] | Test Voltage (50 Hz 1 Min) Core/Core<br>[V] | Test Voltage (50 Hz 1 Min) Core/Screen<br>[V] | Temperature Range Fixed<br>[°C] | Temperature Range Flexing<br>[°C] |
|--|-------------------------------------|--------------------------|------------------------------|---|---|---------------------------------|-----------------------------------|
| 100                                    | 120                                 | 225                      | 10 x Ø                       | 0,8mm: 500<br>≥1,0mm: 1000                  | 2000  | -30 to +70                      | -30 to +70                        |

## Specification

| Formation<br>[No. of Pairs] | Overall Diameter<br>[mm] | Cable Weight<br>[kg/km] | Conductor Loop Resistance<br>[Ω/km] |
|-----------------------------|--------------------------|-------------------------|-------------------------------------|
| 1x2x0,8 mm                  | 6,0                      | 55                      | 73,2                                |
| 2x2x0,8 mm                  | 6,7                      | 75                      | 73,2                                |
| 4x2x0,8 mm                  | 9,4                      | 120                     | 73,2                                |
| 8x2x0,8 mm                  | 15,2                     | 285                     | 73,2                                |
| 12x2x0,8 mm                 | 15,9                     | 315                     | 73,2                                |
| 1x2x1,0 mm <sup>2</sup>     | 6,4                      | 65                      | 44,6                                |
| 2x2x1,0 mm <sup>2</sup>     | 7,2                      | 90                      | 44,6                                |
| 4x2x1,0 mm <sup>2</sup>     | 10,2                     | 160                     | 44,6                                |
| 1x2x1,5 mm <sup>2</sup>     | 8,0                      | 95                      | 24,6                                |
| 2x2x1,5 mm <sup>2</sup>     | 9,2                      | 145                     | 24,6                                |
| 4x2x1,5 mm <sup>2</sup>     | 12,6                     | 235                     | 24,6                                |
| 1x2x2,5 mm <sup>2</sup>     | 8,8                      | 120                     | 15,1                                |
| 2x2x2,5 mm <sup>2</sup>     | 10,1                     | 95                      | 15,1                                |