

BiTflame® A

Halogen-free control, power supply and telecommunication cable

RoHS 2015/863/EU



LVD 2014/35/EU



CPR 305/2011



internal application



EN 60332-1-2

IEC 60332-3-24
EN 60332-3-24halogen-free
EN 60754low smoke emission
EN 61034

CPR class

Technical data:

Thermal parameters:

Temperature range:

fixed installation: -40 °C to 80 °C
min. installation temp.: -5 °C
max. installation temp.: 50 °C

Electrical parameters:

Operating voltage: 150 V

Test voltage:

AC: 1500 V

DC: 2250 V

Insulation resistance (min.): 200 MΩ x km

Pair loop resistance at 20 °C (max.):

0,8 mm - 75 Ω/km

1,0 mm - 48 Ω/km

Mutual capacitance of pair at 1 kHz (maximum): 120 nF/km

Mechanical parameters:

Min. bending radius: 10 x Ø

Design:

Cores:

solid copper conductor class 1, acc. to EN 60228

Insulation:

halogen-free compound

Core colours:

acc. to table „conductor insulation colour“ in Technical Data chapter (acc. to PN-T-90321:1992)

Core arrangement:

cores twisted in pairs

Wrapping:

polyester tape

Outer sheath:

halogen-free polymer compound; colour: red

Application:

Halogen-free special cables for interconnecting station equipment, telephone and teletransmission equipment and data transmission devices by means of analogue and digital signals in control and signalling fire protection systems. The cables are used primarily as transmission and power supply lines for line equipment (sensors, linear modules) in supervised lines of fire signalling systems and autonomous fire extinguisher and smoke removal control systems. The cables are incorporated in systems used at the „0“ moment of fire origination (the moment of fire detection by the central detector). The cables can be used for transmitting trigger signals or conditions to auxiliary devices, which are activated by the central fire signalling mechanism upon detection of a fire (e.g. disconnection of a residential ventilation system, downward movement of passenger lifts, switching off of the power supply of building).

The cables are CPR classification acc. to **EN 50575**.

Tests:

Flame propagation test for a single insulated cable:

EN 60332-1, IEC 60332-1

Flame propagation test for vertically-mounted bunched cables:

EN 60332-3, IEC 60332-3

Test on corrosive gases emitted during burning:

EN 60754-2, IEC 60754-2

Smoke density emission during burning:

EN 61034-2, IEC 61034-2

Reaction to fire:

EN 50399

| Cat. no. | [n x mm] | Outer diameter* [mm] | Approximate cable weight [kg/km] | Cu [kg/km] |
|----------|----------|----------------------|----------------------------------|------------|
| BF0001 | 1x2x0,8 | 4,0 | 23 | 9,6 |
| BF0003 | 2x2x0,8 | 5,8 | 40 | 19,3 |
| BF0004 | 3x2x0,8 | 6,6 | 57 | 28,9 |
| BF0010 | 1x2x1,0 | 4,8 | 34 | 15,1 |
| BF0011 | 1x4x1,0 | 5,8 | 57 | 30,1 |
| BF0012 | 2x2x1,0 | 7,3 | 62 | 30,1 |
| BF0013 | 3x2x1,0 | 8,1 | 88 | 45,2 |
| BF0014 | 4x2x1,0 | 9,4 | 113 | 60,3 |
| BF0015 | 5x2x1,0 | 10,5 | 136 | 75,4 |

*Outer diameter tolerance: +/- 5%

Cable Factory BITNER reserves the right to modify specifications without prior notification

Note: on customer's request other cross sections or number of cores can be produced