

BiTflame® A(St)

Halogen-free control, power supply and telecommunication cable



Technical data:

Thermal parameters:

Temperature range:

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

0,6 mm: 135,8 Ω/km

0,8 mm: 75 Ω/km

1,0 mm: 48 Ω/km

Mutual capacitance of pair at 1 kHz
(maximum): 150 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 colors:

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

Screen:

aluminium backed polyester type with tinned copper drain

Outer sheath:

wire, 0,4 mm diameter

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). Static screen protects the cable against interferences of external magnetic fields.

The cables are CPR classification acc. to EN 50575.

Tests:

Flame propagation test for a single insulated cable:

EN 60332-1-2, IEC 60332-1-2

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]
BF0068	2x2x0,6	5,3	30	10,3
BF0069	3x2x0,6	5,7	39	15,4
BF0070	1x2x0,8	4,5	26	10,9
BF0071	1x4x0,8	5,1	40	20,5
BF0072	2x2x0,8	6,2	44	20,5
BF0073	3x2x0,8	7,0	61	30,1
BF0074	4x2x0,8	7,9	77	39,8
BF0075	5x2x0,8	8,6	92	49,4
BF0082	1x2x1,0	5,3	38	16,3
BF0083	1x4x1,0	6,3	60	31,3
BF0084	2x2x1,0	7,7	65	31,3
BF0085	3x2x1,0	8,6	91	46,4
BF0086	4x2x1,0	9,9	116	61,5
BF0087	5x2x1,0	11,0	139	76,6

*Outer diameter tolerance: +/- 5%

BITNER Factory reserves the right to modify specifications without prior notification

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