



Halogen-free cables with circuit integrity in fire for duration of 60 or 90 min, acc. to STN EN 50399 for class of reaction on fire B2ca (s1,d1,a1).



Application:

Signal cables with circuit integrity in fire for the duration of 60 or 90 min. according to STN 92 0205 (DIN 4102 Teil 12, ZP- 27/2008), with resistance to flame propagation according to STN EN 60332-3... (STN EN 50266-2-...), halogen-free, with low density of smoke according to STN EN 61034-2 and low corrosivity of combustion gases according to STN EN 50267-2-3. Cables for class of reaction on fire B2ca (s1,d1,a1) according to STN EN 50399. Cables are functional in fire for time period 180 min. according to IEC 60331-23. These are used for fixed installation both in normal and moist environments (STN 33 2000-5-51). Cables can be used in the fire hazard conditions and can be installed on flammable material.

Cable construction:

- **Number of pairs:** 1 - 5
- **Cable cores:** copper conductor cl. 1
- **Nominal diameter:** 0,8 mm
- **Insulation:** mica-glass tape + cross-linked polyethylene or EPR and combinations
- Cores are stranded in pairs. 4 pairs are stranded in a unit. Units are stranded in layer.
- halogen-free, flame-retarding filler is placed above the coiled cores
- **Shield construction:** PET tape + AlPET tape with CuSn wire
- **Sheath cable:** halogen-free, flame-retardant material
- **Colour of sheath:** red

Technical data:

- **Nominal voltage:** 225 V
- **Test voltage :** 500 V
- **Effective resistance of conductor, max.:** 36,0 Ω/km
- **Insulation resistance, min.:** 100 MΩ.km
- **Mutual capacitance (at 800 Hz), max.:** 120 nF/km*
(* the value can exceed of 20% by cables up to 4-pairs)
- **Max. admissible conductor temperature:** +70 °C
- **Operating temperature:** -40 °C to +70 °C
- **Min. temperature for laying:** -5 °C
- **Min. bending radius:** 15 x cable diameter

Marking:

- Colour coded acc. to VDE 0815.

Pair	1		2		3		4	
Core	a	b	a	b	a	b	a	b
Colour	blue	red	grey	yellow	green	brown	white	black

Groups are distinguished by identify tape.

2-pair cable as X-shape:

1 in pair	a-conductor	blue	b-conductor	red
2 in pair	a-conductor	grey	b-conductor	yellow

Conductor colour in 5-pair cable: a-purple, b-orange