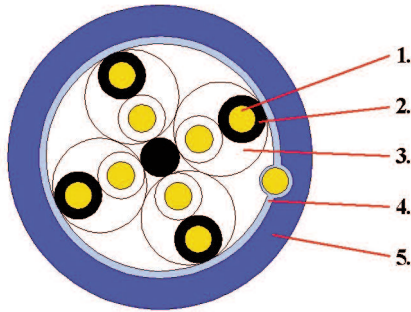


MSR-HX(St)H

1/1

Fire resistant, ceramic insulated, overall screened, unarmoured, halogen-free instrumentation cable

Construction



1. Conductor: bare annealed copper, stranded, cl. 2 acc. IEC 60228
2. Insulation: cross-linked halogen-free ceramic forming polymer compound
3. Cabling elements: pairs or triples
 colour identification: pairs: BLACK/WHITE, each core numbered
 triples: BLACK/WHITE/RED, each core numbered
 Cabling elements assembled in concentric layers
4. Overall screening: laminated Alu/PET tape (9 µm Alu/12 µm PET) in contact with a tinned copper drain wire 0,5 mm² (7x0,30 mm)
5. Outer sheath: halogen-free, fire-retardant polymer compound
 Outer sheath color: black or blue or according to customer specification
 Outer sheath marking: EUPEN MSR-HX(St)H 4x2x1,0 mm² 300 V
 + year + meter-marking
 or according to customer specification

Electrical Properties acc. to EN 50288-7 (valid for single- and multi pair/triple types)

| Voltage rating (V) | 300 V | | | | 500 V | | | |
|---|-------|-------|-------|-------|-------|-------|-------|-------|
| | 0,5 | 0,75 | 1,0 | 1,5 | 0,75 | 1,0 | 1,5 | 2,5 |
| Conductor cross-section (mm ²) | 0,5 | 0,75 | 1,0 | 1,5 | 0,75 | 1,0 | 1,5 | 2,5 |
| Conductor resistance @ 20 °C (Ω/km) | ≤36,7 | ≤25,0 | ≤18,5 | ≤12,3 | ≤25,0 | ≤18,5 | ≤12,3 | ≤7,56 |
| Mutual capacitance * (nF/km) | | | | | | | | |
| single pair: | ≤200 | ≤200 | ≤200 | ≤200 | ≤200 | ≤200 | ≤200 | ≤200 |
| ≤ 4 pairs: | ≤190 | ≤190 | ≤190 | ≤190 | ≤190 | ≤190 | ≤190 | ≤190 |
| > 4 pairs: | ≤160 | ≤160 | ≤160 | ≤160 | ≤160 | ≤160 | ≤160 | ≤160 |
| L/R ratio * (µH/Ω) | <25 | <25 | <25 | <40 | <25 | <25 | <40 | <60 |
| Test voltage core/core (V _{ac}) | | 1000 | | | | 2000 | | |
| Test voltage core/screen (V _{ac}) | | 1000 | | | | 2000 | | |
| Insulation resistance @ 20 °C (MΩ*km) | | >1000 | | | | >1000 | | |

* valid for pair cables

Laying conditions

| | |
|-----------------------|----------------------|
| Operating temperature | -30 °C to +90 °C |
| Laying temperature | -5 °C to +50 °C |
| Min. bending radius | 7,5 x outer diameter |

Fire behaviour

| | |
|-------------------------------|--|
| Fire propagation | IEC 60332-3 Cat. C (Cat. A on request) |
| Fire resistance | IEC 60331-21 |
| Smoke density | IEC 61034-1+2 |
| Corrosivity of combustion gas | IEC 60754-2 |
| Toxicity of combustion gas | NF X 70-100 |

Application

Transmission of analog and digital signals for indoor and outdoor (in suitable cable trays) applications where improved fire behaviour is requested.