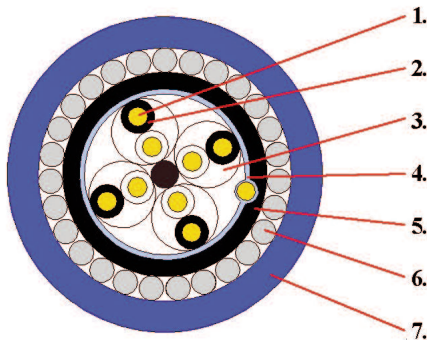


MSR-HX(St)HRH

1/1

Fire resistant, ceramic insulated, overall screened, armoured, 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: paires 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. Inner sheath: halogen-free, fire-retardant polymer compound
6. Armoring: one layer of galvanized steel wires
7. 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)HRH 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)								
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	10 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.
 With improved fire behaviour and suitable for strong mechanical requirements.