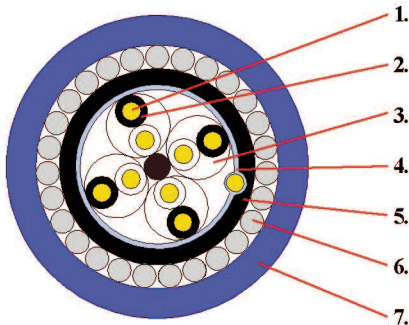


# MSR-2Y(St)HRH

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PE insulated, overall screened, armoured, halogen-free instrumentation cable

## Construction



1. Conductor: bare annealed copper, stranded, cl. 2 acc. IEC 60228
2. Insulation: PE
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 mm<sup>2</sup> (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-2Y(St)HRH 4x2x1,0 mm<sup>2</sup> 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 <sup>2</sup> )  | ≤36,7 | ≤25,0 | ≤18,5 | ≤12,3 | ≤25,0 | ≤18,5 | ≤12,3 | ≤7,56 |
| 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:                                | ≤115  | ≤115  | ≤115  | ≤115  | ≤115  | ≤115  | ≤115  | ≤115  |
| ≤ 4 pairs:                                  | ≤90   | ≤90   | ≤90   | ≤90   | ≤90   | ≤90   | ≤90   | ≤90   |
| > 4 pairs:                                  | ≤75   | ≤75   | ≤75   | ≤75   | ≤75   | ≤75   | ≤75   | ≤75   |
| L/R ratio * (µH/Ω)                          | <25   | <25   | <25   | <40   | <25   | <25   | <40   | <60   |
| Test voltage core/core (V <sub>ac</sub> )   |       | 1000  |       |       |       | 2000  |       |       |
| Test voltage core/screen (V <sub>ac</sub> ) |       | 1000  |       |       |       | 2000  |       |       |
| Insulation resistance @ 20 °C (MΩ*km)       |       | >5000 |       |       |       | >5000 |       |       |

\* valid for pair cables

## Laying conditions

|                       |                     |
|-----------------------|---------------------|
| Operating temperature | -30 °C to +70 °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) |
| 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.