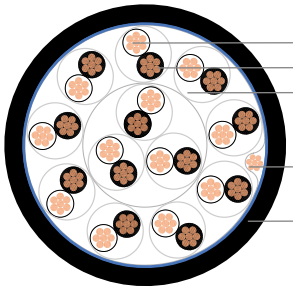
# MSR-2X(St)Yv



Reference standard: EN 50288-7
XLPE insulated, pair twisted, overall screened, unarmoured, reinforced PVC sheathed instrumentation cable


## Construction



1. Conductor: bare stranded copper
2. Insulation: cross-linked PE (XLPE)
3. Cabling elements: pair(s)
   colour identification: BLACK/WHITE, 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: reinforced, flame-retardant PVC
   Outer sheath color: black or blue or according to customer specification
   Outer sheath marking: EUPEN MSR-2X(St)Yv 12x2x1,3 mm² 300 V
   + year + meter-marking
   or according to customer specification

## Electrical Properties

| Voltage rating (V) | 300 V | | | | | |
|---|---|---|---|---|---|---|
| Conductor cross-section (mm²) | **0,5** | **0,75** | **1,0** | **1,3** | **1,5** | **2,5** |
| Conductor resistance @ 20 °C (Ω/km) | ≤36,7 | ≤25,0 | ≤18,5 | ≤14,2 | ≤12,3 | ≤7,56 |
| Mutual capacitance (nF/km) | <150 | <150 | <150 | <150 | <150 | <150 |
| L/R ratio (µH/Ω) | <25 | <25 | <25 | <40 | <40 | <60 |
| Capacitance unbalance between pairs | < 500pF / 500m | | | | | |
| Test voltage core/core ($V_{ac}$) | 1000 | | | | | |
| Test voltage core/screen ($V_{ac}$) | 1000 | | | | | |
| Insulation resistance @ 20 °C (MΩ*km) | >1000 | | | | | |

## Laying conditions

| | |
|---|---|
| Operating temperature | -30 °C to +90 °C |
| Laying temperature | -5 °C to +50 °C |
| Min. bending radius | 7,5 x outer diameter |
| Oil resistance | ICEA S-82-552 |

## Fire behaviour

| | |
|---|---|
| Fire propagation | IEC 60332-1 |
| | IEC 60332-3-22 Cat. A |
| | IEC 60332-3-24 Cat. C |

## Application

Transmission of analog and digital signals for indoor and outdoor applications

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| Number of pairs | Insulation thickness<br>min. mm | Outer sheath thickness nominal<br>mm | Outer diameter<br>approx. mm | Weight<br>approx. kg/km |
|---|---|---|---|---|
| **Cross section 0,5 mm² / 7** | | | | |
| 1 | 0,26 | 1,8 | 7,6 | 68 |
| 2 | 0,26 | 1,8 | 10,2 | 112 |
| 4 | 0,26 | 1,8 | 11,3 | 142 |
| 8 | 0,26 | 1,8 | 14,2 | 218 |
| 12 | 0,26 | 1,8 | 16,2 | 286 |
| 16 | 0,26 | 1,8 | 17,7 | 358 |
| 24 | 0,26 | 1,8 | 21,3 | 487 |
| **Cross section 0,75 mm² / 7** | | | | |
| 1 | 0,26 | 1,8 | 8,0 | 77 |
| 2 | 0,26 | 1,8 | 10,8 | 128 |
| 4 | 0,26 | 1,8 | 12,1 | 171 |
| 8 | 0,26 | 1,8 | 15,4 | 271 |
| 12 | 0,26 | 1,8 | 17,6 | 363 |
| 16 | 0,26 | 1,8 | 19,3 | 463 |
| 24 | 0,26 | 1,8 | 23,0 | 621 |
| **Cross section 1,3 mm² / 7** | | | | |
| 1 | 0,26 | 1,8 | 8,8 | 96 |
| 2 | 0,26 | 1,8 | 12,1 | 172 |
| 4 | 0,26 | 1,8 | 13,7 | 237 |
| 6 | 0,26 | 1,8 | 15,9 | 337 |
| 8 | 0,26 | 1,8 | 17,6 | 389 |
| 12 | 0,26 | 1,8 | 20,3 | 534 |
| 16 | 0,26 | 1,8 | 22,1 | 677 |
| 24 | 0,26 | 1,8 | 26,9 | 945 |