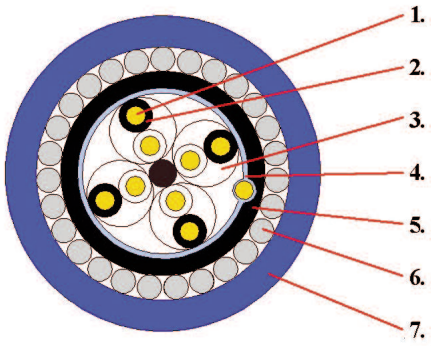
# MSR-2X(St)YRY



XLPE insulated, overall screened, armoured, PVC sheathed instrumentation cable

## Construction




1. Conductor: bare annealed copper, stranded, cl. 2 acc. IEC 60228
2. Insulation: cross-linked PE (XLPE)
3. Cabling elements: pairs or triples
   colour identification: pairs: BLACK/WHITE, each core numbered
   tripels: 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: flame-retardant PVC
6. Armoring: one layer of galvanized steel wires
7. Outer sheath: flame-retardant PVC
   Outer sheath color: black or blue or according to customer specification
   Outer sheath marking: EUPEN MSR-2X(St)YRY 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 | | | |
|---|---|---|---|---|---|---|---|---|
| Conductor cross-section (mm²) | **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: | ≤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 ($V_{ac}$) | 1000 | | | | 2000 | | | |
| Test voltage core/screen ($V_{ac}$) | 1000 | | | | 2000 | | | |
| Insulation resistance @ 20 °C (MΩ*km) | >5000 | | | | >5000 | | | |

* 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 |
| Oil resistance | ICEA S-82-552 |

## Fire behaviour

| | |
|---|---|
| Fire propagation | IEC 60332-1 (IEC 60332-3 Cat. A or Cat.C on request) |

## Application

Transmission of analog and digital signals for indoor and outdoor applications and suitable for strong mechanical requirements