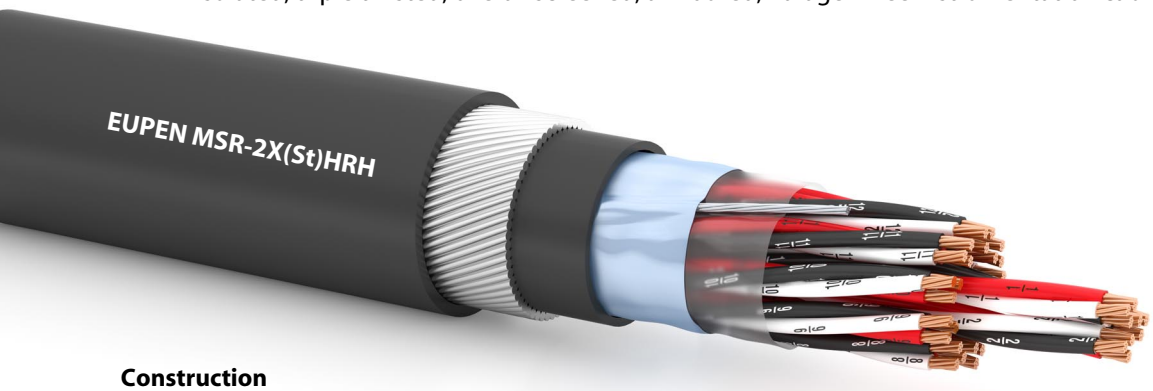
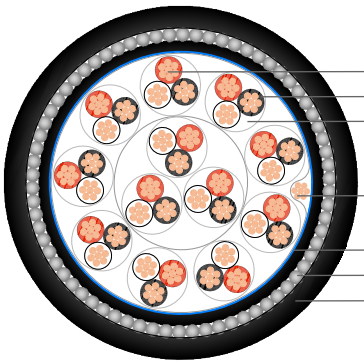
MSR-2X(St)HRH

Reference standard: EN 50288-7
XLPE insulated, triple twisted, overall screened, armoured, halogen-free instrumentation cable



Construction



1. Conductor: bare stranded copper
2. Insulation: cross-linked PE (XLPE)
3. Cabling elements: triple(s)
   colour identification: 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-2X(St)HRH 12x3x1,3 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
Test voltage core/core (V_{ac})	1000					
Test voltage core/screen (V_{ac})	1000					
Insulation resistance @ 20 °C (MΩ*km)	>5000					

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 60332-1
	IEC 60332-3-22 Cat. A
	IEC 60332-3-24 Cat. C
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.

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Number of triples	Insulation thickness Minimum mm	Inner sheath thickness Nominal mm	Diameter over inner sheath approx. mm	Steal wire armour diameter Nominal mm	Outer sheath thickness Nominal mm	Outer diameter approx. mm	Weight approx. kg/km
Cross section 0,5 mm² /7							
1	0,26	0,8	5,6	0,9	1,3	10,0	206
2	0,26	0,8	8,7	0,9	1,3	13,1	317
4	0,26	0,8	10,0	0,9	1,4	14,6	397
8	0,26	1,0	13,7	0,9	1,5	18,5	593
12	0,26	1,0	16,0	0,9	1,5	20,8	740
16	0,26	1,0	17,8	1,25	1,6	23,5	1026
24	0,26	1,0	21,9	1,25	1,7	28,6	1353
Cross section 0,75 mm² /7							
1	0,26	0,8	6,0	0,9	1,3	10,4	224
2	0,26	0,8	9,4	0,9	1,4	14,0	366
4	0,26	0,8	10,8	0,9	1,4	15,4	452
8	0,26	1,0	14,9	0,9	1,5	19,7	692
12	0,26	1,0	17,5	0,9	1,6	22,5	890
16	0,26	1,0	19,4	1,25	1,6	25,1	1218
24	0,26	1,0	24,0	1,25	1,7	30,7	1625
Cross section 1,3 mm² /7							
1	0,26	0,8	6,9	0,9	1,3	11,3	267
2	0,26	0,8	11,0	0,9	1,4	15,6	455
4	0,26	1,0	13,1	0,9	1,4	17,7	601
8	0,26	1,0	17,6	0,9	1,5	22,4	918
12	0,26	1,0	20,7	1,25	1,6	27,2	1381
16	0,26	1,0	23,1	1,25	1,7	29,8	1681
24	0,26	1,1	28,9	1,25	1,8	35,8	2277