

# MSR-2X(St)H

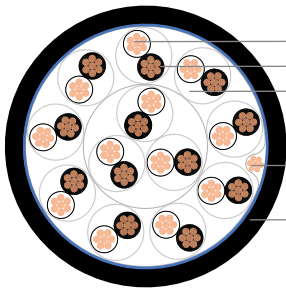
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Reference standard: EN 50288-7

XLPE insulated, pair twisted, overall screened, unarmoured, halogen-free 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 (9µm Alu/12µm PET) in contact with a tinned copper drain wire 0,5 mm<sup>2</sup> (7x0,30mm)
5. 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)H 12x2x1,0mm<sup>2</sup> 300V  
+ year + meter-marking  
or according to customer specification

## Electrical Properties

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

## 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 where improved fire behaviour is requested.



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Number of pairs	Insulation thickness min. mm	Outer sheath thickness nominal mm	Outer diameter approx. mm	Weight approx. kg/km
<b>Cross section 0,5 mm<sup>2</sup> / 7</b>				
1	0,26	0,8	5,6	40
2	0,26	0,9	8,3	76
4	0,26	0,9	9,4	101
8	0,26	1,0	12,5	171
12	0,26	1,1	14,7	239
16	0,26	1,1	16,2	306
24	0,26	1,2	20,0	434
<b>Cross section 0,75 mm<sup>2</sup> / 7</b>				
1	0,26	0,8	6,0	47
2	0,26	0,9	8,9	91
4	0,26	1,0	10,4	132
8	0,26	1,1	13,9	226
12	0,26	1,1	16,1	312
16	0,26	1,2	18,0	413
24	0,26	1,3	22,0	563
<b>Cross section 1,0 mm<sup>2</sup> / 7</b>				
1	0,26	0,8	6,4	55
2	0,26	0,9	9,6	106
4	0,26	1,0	11,2	161
8	0,26	1,1	15,0	279
12	0,26	1,2	17,6	398
16	0,26	1,2	19,5	516
24	0,26	1,3	24,0	714
<b>Cross section 1,3 mm<sup>2</sup> / 7</b>				
1	0,26	0,9	7,0	66
2	0,26	1,0	10,4	132
4	0,26	1,0	12,0	192
8	0,26	1,1	16,1	337
12	0,26	1,2	19,0	484
16	0,26	1,3	21,1	623
24	0,26	1,4	26,1	889

All information given is indicative only and not binding and can be subject to change without notice.



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Number of pairs	Insulation thickness min. mm	Outer sheath thickness nominal mm	Outer diameter approx. mm	Weight approx. kg/km
<b>Cross section 1,5 mm<sup>2</sup> / 7</b>				
1	0,35	0,9	7,6	76
2	0,35	1,0	11,4	156
4	0,35	1,1	13,4	229
8	0,35	1,2	18,0	404
12	0,35	1,3	21,0	560
16	0,35	1,4	23,6	748
24	0,35	1,5	29,3	1067
<b>Cross section 2,5 mm<sup>2</sup> / 7</b>				
1	0,35	0,9	8,4	98
4	0,35	1,1	15,0	318
12	0,35	1,4	24,0	814