

# MSR-2X(St)HRH Pimf

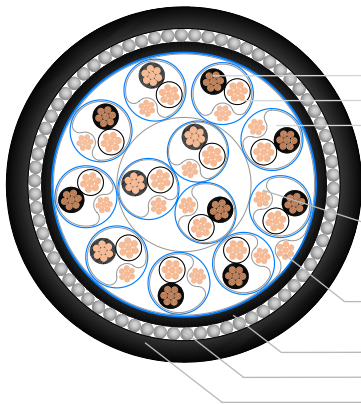
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Reference standard: EN 50288-7

XLPE insulated, pair twisted, individual &amp; overall screened, armoured, halogen-free instrumentation cable



## Construction



1. Conductor: bare stranded copper
2. Insulation: cross-linked PE (XLPE)
3. Cabling elements: pairs  
 colour identification: - insulation: BLACK/WHITE, each core numbered  
 - additional black numbered yellow tape above each individual screened pair
4. Individual 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)  
 Cabling elements assembled in concentric layers
5. 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)
6. Inner sheath: halogen-free, fire-retardant polymer compound
7. Armoring: one layer of galvanized steel wires
8. 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 Pimf 12x2x1,0 mm<sup>2</sup> 300 V  
 + 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> )						
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 <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	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 pairs	Insulation thickness min. mm	Inner sheath thickness nominal mm	Diameter over inner sheath approx. mm	Steel wire armour diameter nominal 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>							
2	0,26	0,8	8,9	0,9	1,4	13,5	334
4	0,26	0,8	10,2	0,9	1,4	14,8	404
8	0,26	1,0	14,0	0,9	1,5	18,8	609
12	0,26	1,0	16,4	0,9	1,5	21,2	759
16	0,26	1,0	18,2	1,25	1,6	23,9	1054
24	0,26	1,0	22,4	1,25	1,7	29,1	1392
<b>Cross section 0,75 mm<sup>2</sup> / 7</b>							
2	0,26	0,8	9,6	0,9	1,4	14,2	364
4	0,26	0,8	11,1	0,9	1,4	15,7	452
8	0,26	1,0	15,3	0,9	1,5	20,1	688
12	0,26	1,0	17,9	1,25	1,6	23,6	1018
16	0,26	1,0	19,9	1,25	1,6	26,4	1222
24	0,26	1,1	24,8	1,25	1,8	31,7	1640
<b>Cross section 1,0 mm<sup>2</sup> / 7</b>							
2	0,26	0,8	10,3	0,9	1,4	14,9	404
4	0,26	1,0	12,3	0,9	1,4	16,9	519
8	0,26	1,0	16,5	0,9	1,5	21,3	771
12	0,26	1,0	19,3	1,25	1,6	25,0	1150
16	0,26	1,0	21,5	1,25	1,7	28,2	1394
24	0,26	1,1	26,9	1,25	1,8	33,8	1863
<b>Cross section 1,3 mm<sup>2</sup> / 7</b>							
2	0,26	0,8	11,0	0,9	1,4	15,6	441
4	0,26	1,0	13,2	0,9	1,5	18,0	579
8	0,26	1,0	17,7	1,25	1,6	23,4	1014
12	0,26	1,0	20,8	1,25	1,7	27,5	1304
16	0,26	1,0	23,2	1,25	1,7	29,9	1561
24	0,26	1,1	29,0	1,25	1,8	35,9	2100
<b>Cross section 1,5 mm<sup>2</sup> / 7</b>							
2	0,35	1,0	12,5	0,9	1,5	17,3	514
4	0,35	1,0	14,5	0,9	1,5	19,3	651
8	0,35	1,0	19,6	1,25	1,6	26,1	1148
12	0,35	1,0	23,0	1,25	1,7	29,7	1474
16	0,35	1,1	25,9	1,25	1,8	32,8	1797
24	0,35	1,2	32,4	1,6	2,0	40,4	2688

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