

## R&M Single Pair Ethernet IEC 63171-1 Patch Cords



### GENERAL DESCRIPTION

R&M Single Pair Ethernet patch cords are used for point-to-point connections between network equipment and device or between active equipment and patch panels or telecommunications outlets.

Using the patent pending R&M SPE LC-Cu plug with its IDC termination technology and crimped strain relief / shield connection and a stranded wire AWG 26/7 S/FTP cable, they are suitable for power delivery (PoDL) up to the highest levels (Class 15). They are suitable for high data rate applications and frequencies of up to 600 MHz

### FEATURES

- Fulfills the requirements of Class T1-A and Class T1-B according to the proposed ISO/IEC 11801-1 Am.1
- Connectivity complies with IEC 63171 and IEC 63171-1 components standard for SPE connectivity
- Supports 1000Base-T1 (IEEE 802.3bp), 100Base-T1 (IEEE 802.3bw), 10Base-T1L (IEEE 802.3cg) and 10Base-T1S (IEEE 802.3cg)
- Supports PoDL classes 1 - 15 (IEEE 802.3bu and IEEE 802.3cg)
- Slim plug dimensions: 12.4 mm x 6.5 mm x 40 mm (height x width x depth)
- IDC wire termination according to IEC 60352-3 / Ultra-stable strain relief
- Stranded AWG 26 cable according to IEC 61156-12
- Low diameter S/FTP cable of nom. 3.6 mm diameter / Impedance of 100Ω / LSZH cable jacket
- Each individual patch cord is tested
- Lengths from 0.5 to 15 m available

### MATERIAL

DESCRIPTION		MATERIAL	SURFACE PLATING
General		Halogen free and ROHS III compliant materials	
Plug Housing		PC, UL 94-V0, transparent	
Anti-kink Boot		PP, UL 94-HB, white	
Signal Contact:	Interface area	Bronze (CuSn6)	0,7 µm gold plated over nickel
	IDC area	Bronze (CuSn6)	3 µm tin plated over nickel
Shielding		Bronze (CuSn6)	3 µm tin plated

### CABLE CHARACTERISTICS

DESCRIPTION	MATERIAL
Cable Construction Type	S/FTP
Inner conductor diameter	AWG 26/7
Number of pairs	1
Screen per pair	AL/ Foil
Outer screen	Tin plated Cu-braid
Jacket	LSZH
Bending radius	≥28 mm minimum bending radius static; ≥58 mm repeated bending
Outer diameter	Nominal 3.6 mm
Jacket colour	Grey

### TECHNICAL DATA

DESCRIPTION	VALUE / VALUE RANGE	STANDARD
Number of ports	1	According to IEC 63171-1
Number of contacts	2	

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### ELECTRICAL DATA

DESCRIPTION	VALUE / VALUE RANGE	STANDARD
Transmission Characteristics	Category B	IEC 63171
Current Rating	1.5A @ 25°C	
Dielectric Withstanding Voltage	1000 Vdc	@ 1 min.
Insulation Resistance	5000 MΩ * km	@ 500Vdc

### MECHANICAL DATA

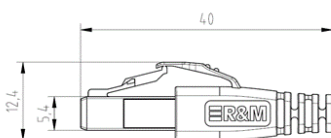
DESCRIPTION	VALUE / VALUE RANGE	STANDARD
Mechanical Characteristics	MPL750	IEC 63171,
Interface Dimensions and Tolerances		IEC 63171-1

### CLIMATICAL DATA

DESCRIPTION	TEMPERATURE RANGE	HUMIDITY
Operating	-20 °C to +60 °C	< 95% (non-condensing)
Installation	0 °C to +50 °C	

PRODUCT-NO	PRODUCT DESCRIPTION	PU
R817085	Patch SPE T1B SF LSZH GY LC 0.5m	10
R817086	Patch SPE T1B SF LSZH GY LC 1.0m	10
R817087	Patch SPE T1B SF LSZH GY LC 1.5m	10
R817088	Patch SPE T1B SF LSZH GY LC 2.0m	10
R817089	Patch SPE T1B SF LSZH GY LC 3.0m	10
R817090	Patch SPE T1B SF LSZH GY LC 5.0m	10
R817091	Patch SPE T1B SF LSZH GY LC 7.5m	10
R817092	Patch SPE T1B SF LSZH GY LC 10m	10
R817093	Patch SPE T1B SF LSZH GY LC 12m	10
R817094	Patch SPE T1B SF LSZH GY LC 15m	10

### TECHNICAL DRAWING / DIMENSIONS:



Length (L)	Tolerance (t)
10.0m to 20.0m	100mm
3.0m to 9.9m	50mm
1.5m to 2.9m	40mm
0.5m to 1.4m	35mm

### PACKAGING INFORMATION

DESCRIPTION	VALUE / VALUE RANGE
Cardboard box	10 Patch Cords in rings per box