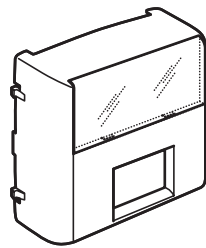


RJ 45 surface-mounting socket, LCS² Cat. 6



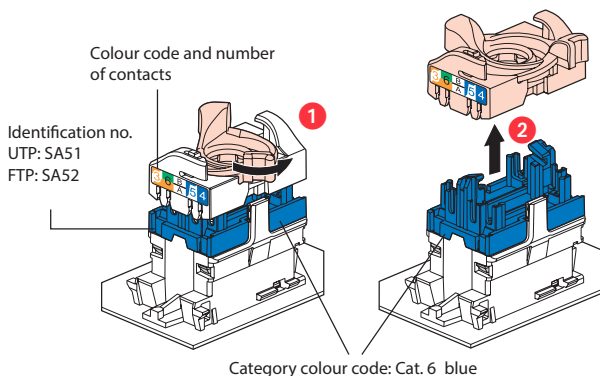
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1. USE

Category 6 RJ 45 socket.
Allows high-speed transmissions (Gigabit Ethernet).

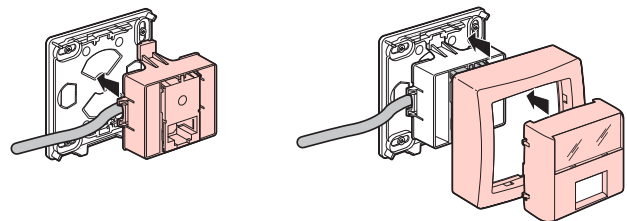
	UTP	FTP
	AL 51	AL 52
	0 860 44	0 860 47
	0 861 44	0 861 47

2. PRESENTATION



3. POSITIONING

Simply clips onto trunking and distribution columns for Mosaic wiring accessories, Batik flush-mounting box
- On Legrand Mosaic grids
- With Legrand Mosaic plates



4. TECHNICAL CHARACTERISTICS

4.1 Material characteristics

Contacts: gold/nickel, thickness of gold >0.8 µm minimum
Metal parts: bronze, nickel, platinum, gold
Polycarbonate PBT

4.2 Electrical characteristics

Breakdown voltage ≥ 1000 V
Contact resistance ≤ 20 mΩ
Insulation resistance ≥ 500 MΩ at 100 VDC
Tested and independently certified to comply with IEC 60512-99-001 and IEC 60512-99-002 for PoE support up to 90w (Type 4).

4.3 Mechanical characteristics

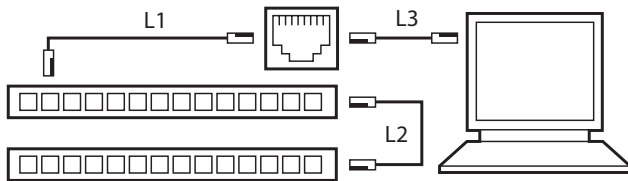
Max. number of connections and disconnections: 5 without replacing the wire
Endurance: 2500 operations (plugging in/unplugging)
IK03

4.4 Climate characteristics

Operating temperature: -10°C to +70°C
Operating temperature: -10°C to +60°C
Humid heat 21-day cycle

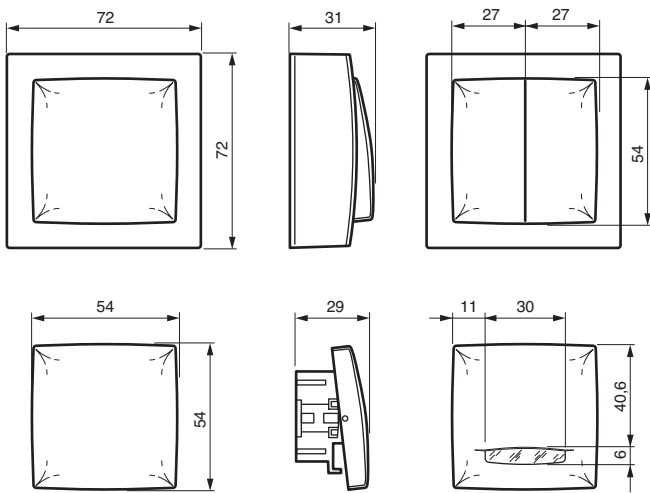
RJ 45 surface-mounting socket, LCS² Cat. 6

5. POSITIONING



⚠ L1 ≤ 90 m
L2 + L3 ≤ 10 m

6. DIMENSIONS



7. TYPICAL RJ 45 CONNECTION

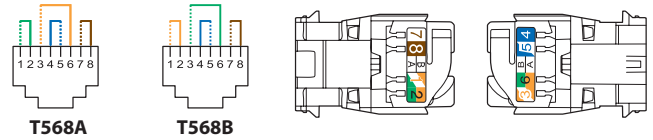
Takes the following plugs:

RJ 11 (4 contacts), RJ 12 (6 contacts), RJ 45 (9 contacts).

T568A and T568B dual colour code on terminals:

- UTP with 8 contacts
- FTP with 9 contacts

Permissible conductors:



- Solid/stranded: 0.4 to 0.65 mm, AWG 26 to 22

- Polyethylene conductor insulation: Ø 0.85 to 1.7 mm on insulation

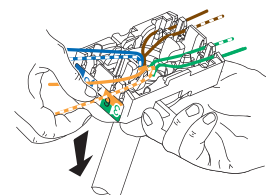
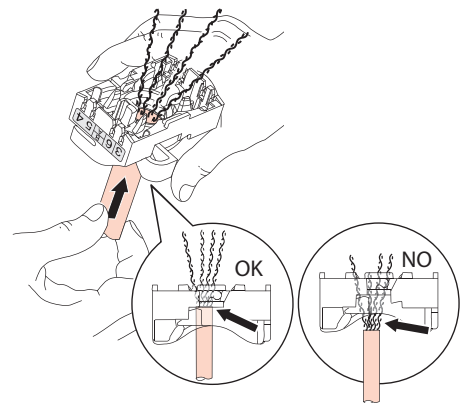
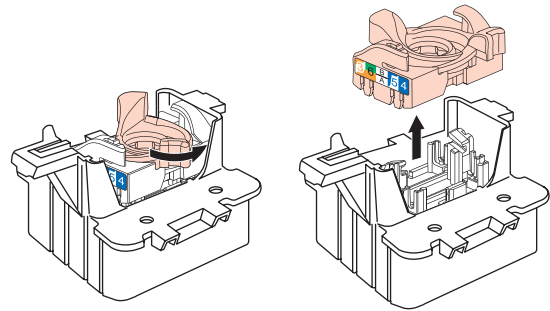
Number of wires to be connected per connection: 1

RJ 45 connectors are equipped with a locking nut. They do not require a special tool and can be re-wired if a mistake is made.

This system makes it easy to spread pairs before fitting them onto the connector.

Spreading the cables allows you to ensure that a pair-breakage distance of 13 mm is kept between each pair.

Spreading pairs at 90° to the cable ensures the best possible performance.

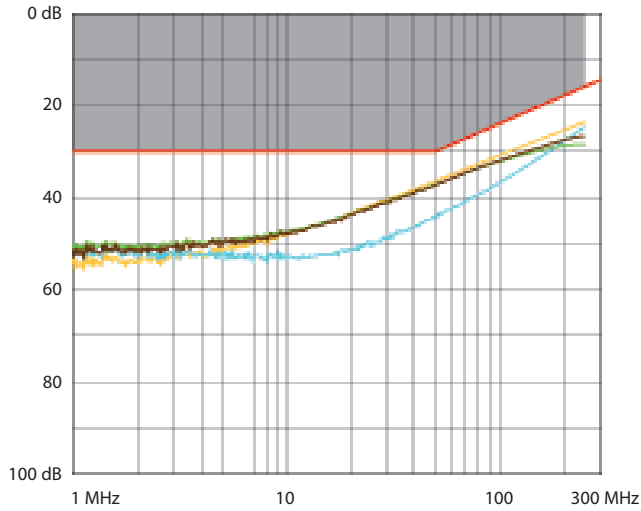


RJ 45 surface-mounting socket, LCS² Cat. 6

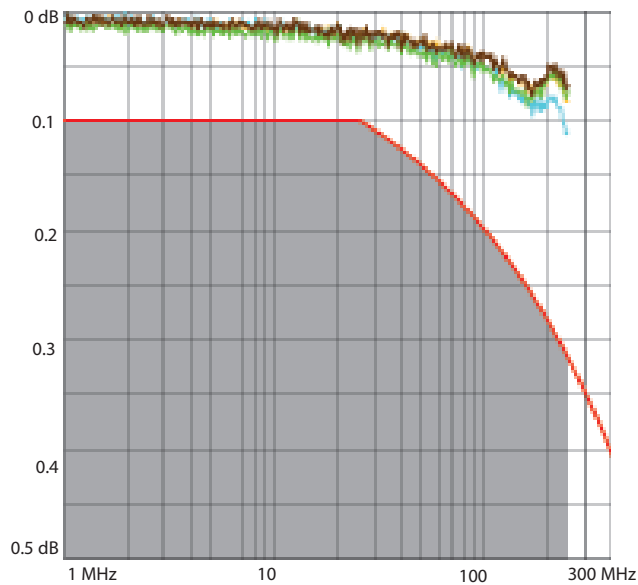
8. PERFORMANCE

8.1 Performance of components (RJ 45 connectors)

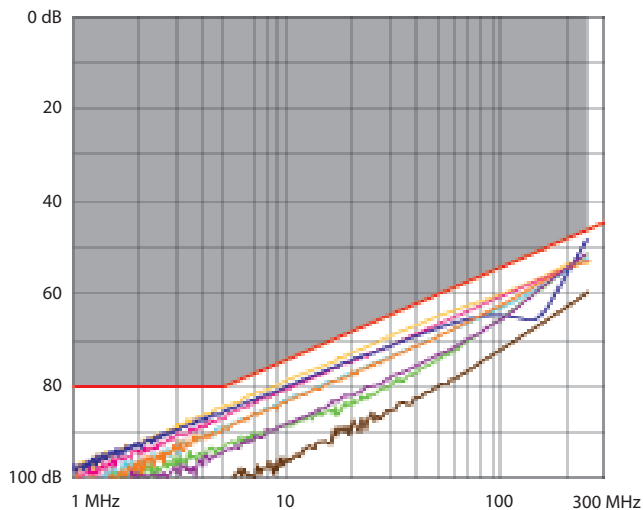
Return loss



Attenuation



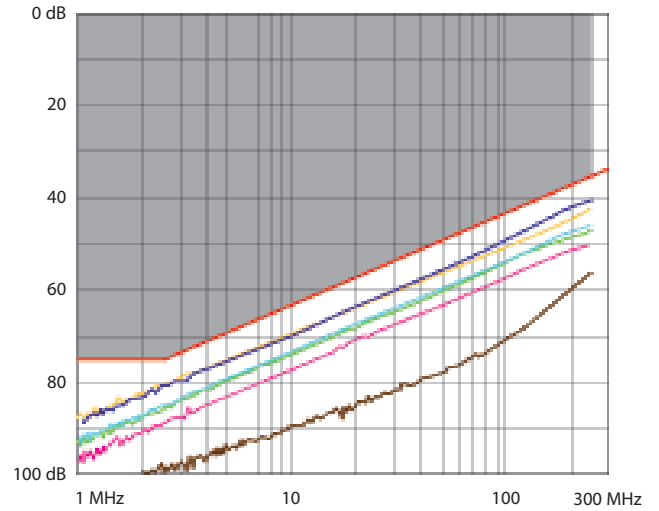
NEXT (Near End Crosstalk Attenuation)



8. PERFORMANCE (continued)

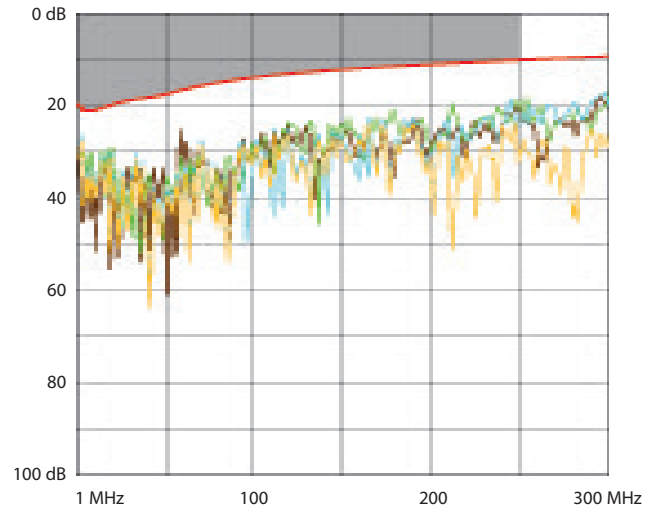
8.1 Performance of components (RJ 45 connectors) (continued)

FEXT (Far End Crosstalk Attenuation)

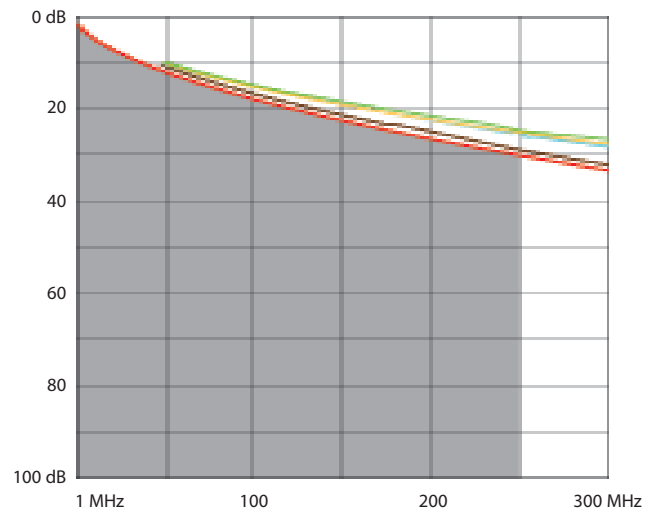


8.2 Performance of permanent link with F/UTP cable

Return loss



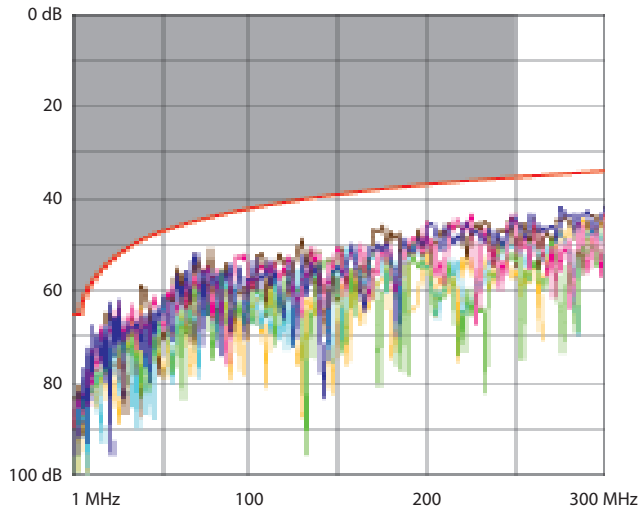
Attenuation



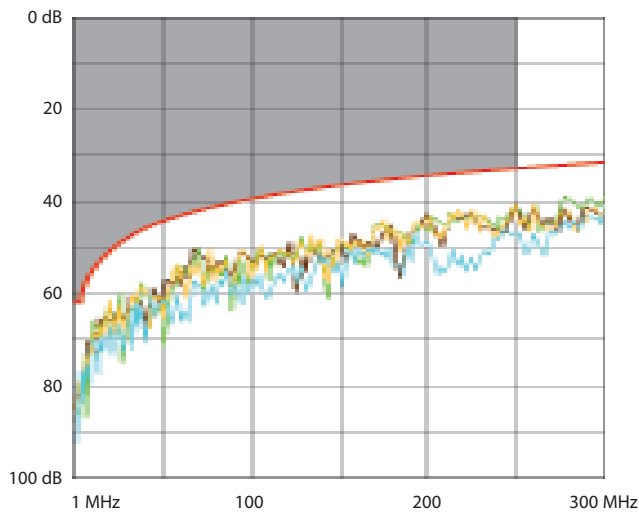
RJ 45 surface-mounting socket, LCS² Cat. 6

8. PERFORMANCE (continued)

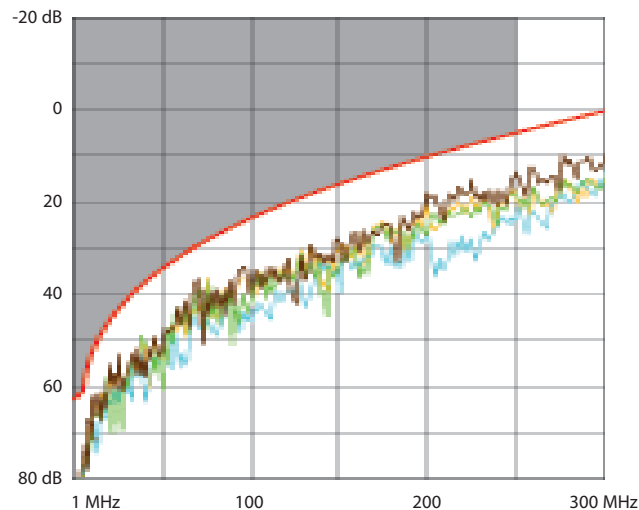
8.2 Performance of permanent link with F/UTP cable (continued) NEXT (Near End Crosstalk Attenuation)



PS NEXT (Power Sum NEXT)

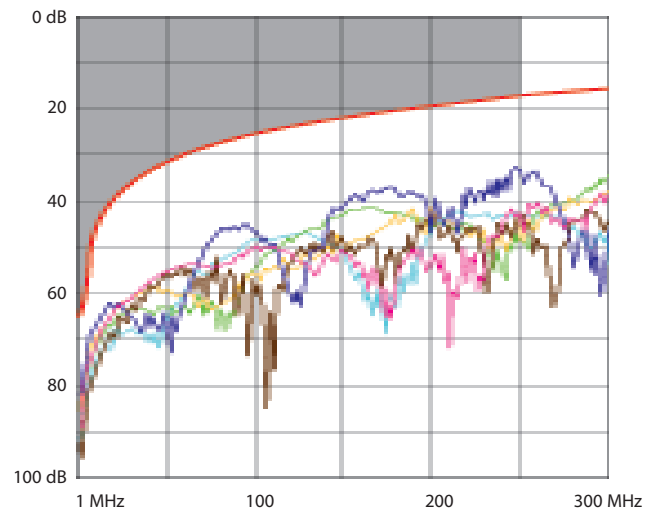


ACR (Attenuation to Crosstalk Ratio)

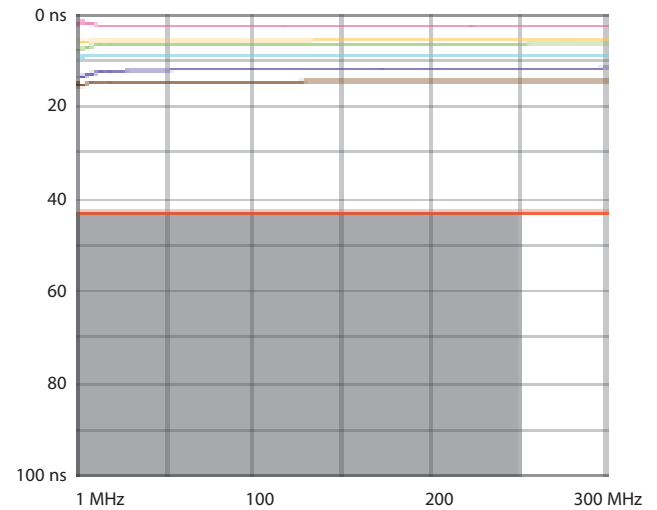


8. PERFORMANCE (continued)

8.2 Performance of permanent link with F/UTP cable (continued) ELFEXT (Equal Level End Crosstalk Attenuation)



Delay skew



9. STANDARDS AND APPROVALS

SO/IEC 11801 series : International standard for generic cabling for customer premises

ANSI/TIA 568 series : North American standard for generic cabling for customer premises

EN 50173 series : European standard for generic cabling for customer premises

IEC 60603-7 series : International standard for connector specifications

Connectors are compliant to requirements for the following remote powering applications

IEEE 802.3af , IEEE 802.3at , IEEE 802.3bt : "Power over Ethernet", Types 1 to 4, up to 90W.