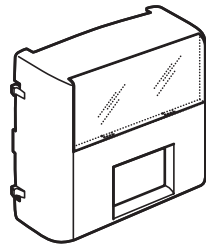


RJ 45 surface-mounting socket, LCS² Cat. 6








CONTENTS Page

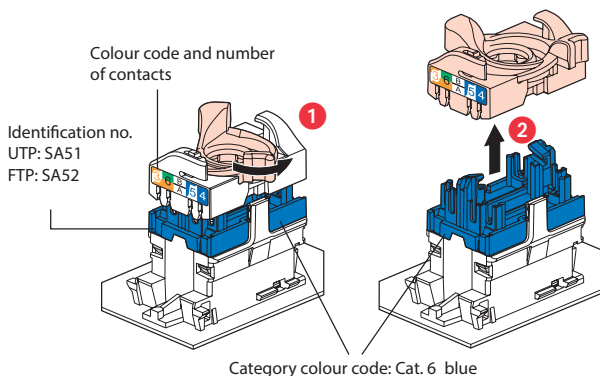
1. General characteristics	1
2. Presentation	1
3. Positioning	1
4. Technical characteristics	1
5. Installation	2
6. Dimensions	2
7. Typical RJ 45 connection	2
8. Performance	3
9. Standards and approvals	4

1. USE

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

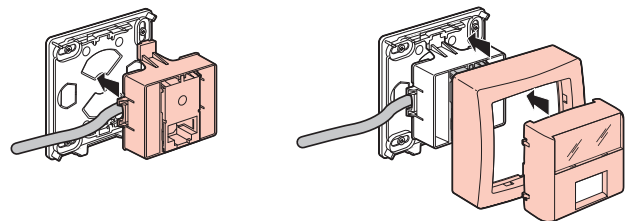
	UTP	FTP
		
	AL 51	AL 52
	0 860 44	0 860 47
	0 861 44	0 861 47

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
PoE remote power supply compatible up to 100 W (IEEE 802.3af, IEEE 802.3at, IEEE 802.3bt)

4.3 Mechanical characteristics

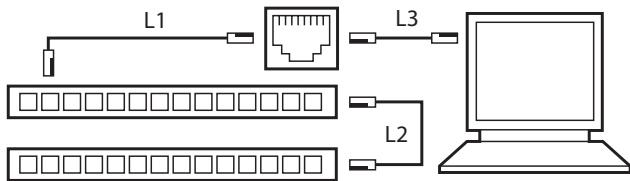
Max. number of connections and disconnections: 5 without replacing the wire
Endurance: 2500 operations (plugging in/unplugging)
IK03

4.4 Climate characteristics

Operating temperature: -40°C to +70°C
Humid heat 21-day cycle

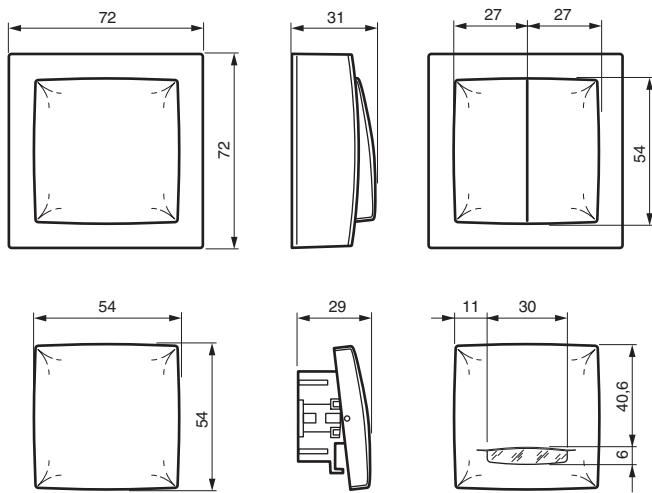
RJ 45 surface-mounting socket, LCS² Cat. 6

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).

EIA/TIA 568 A and B dual colour code on terminals:

- UTP with 8 contacts
- FTP with 9 contacts

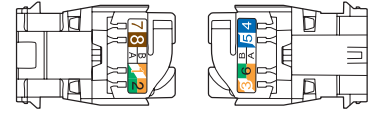
Permissible conductors:



EIA 568 A



EIA 568 B



- Single-core: 0.5 to 0.65 mm, AWG 22 to 25

- Multicore: AWG 26

- Polyethylene conductor insulation: max. insulation Ø 1.58 mm

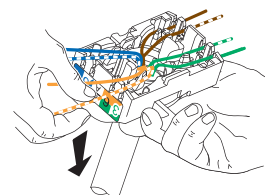
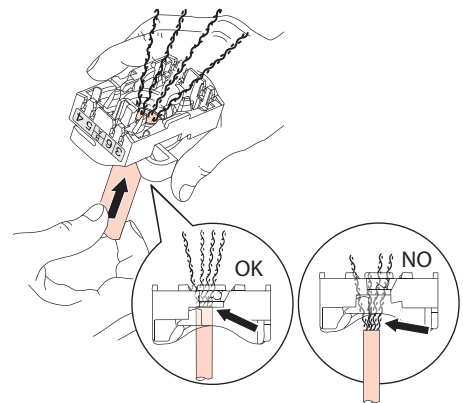
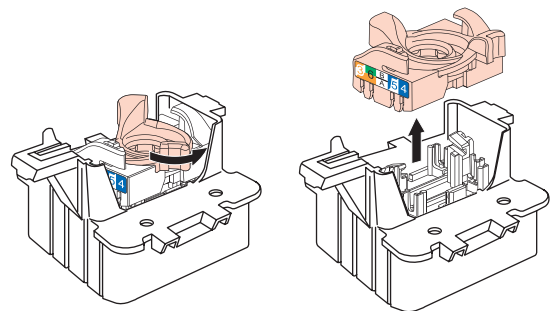
Number of wires to be connected per connection: 1

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.

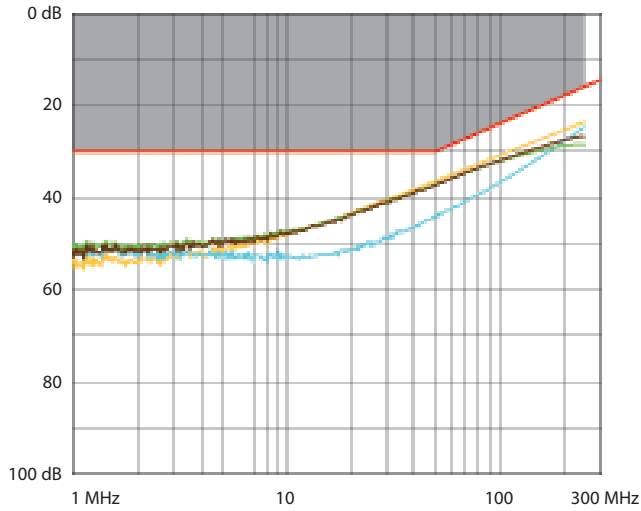


RJ 45 surface-mounting socket, LCS² Cat. 6

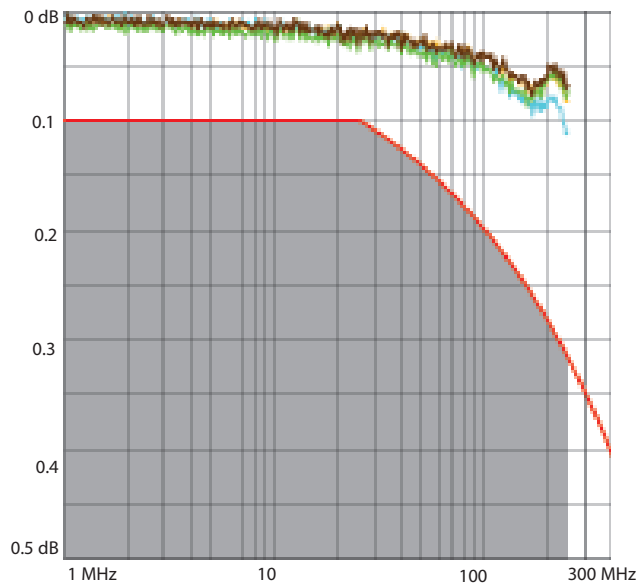
8. PERFORMANCE

8.1 Performance of components (RJ 45 connectors)

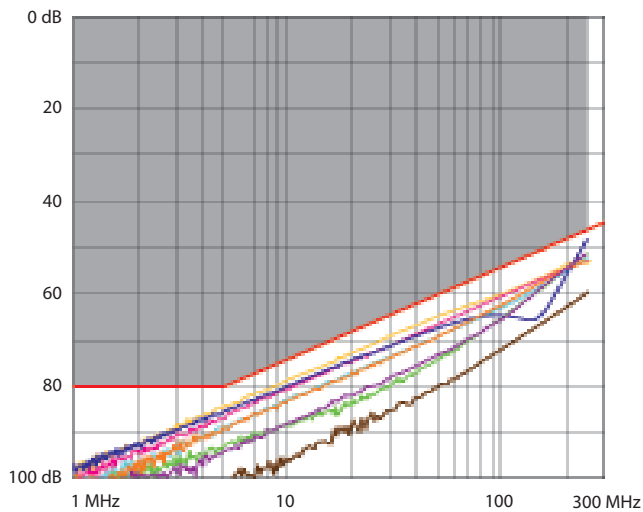
Return loss



Attenuation



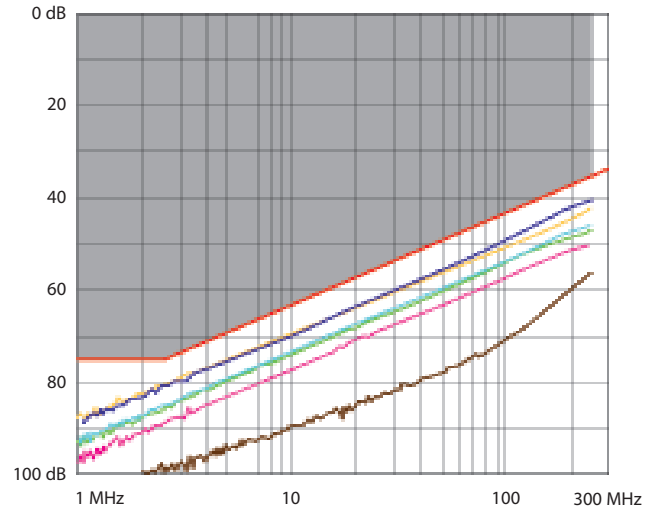
NEXT (Near End Crosstalk Attenuation)



8. PERFORMANCE (continued)

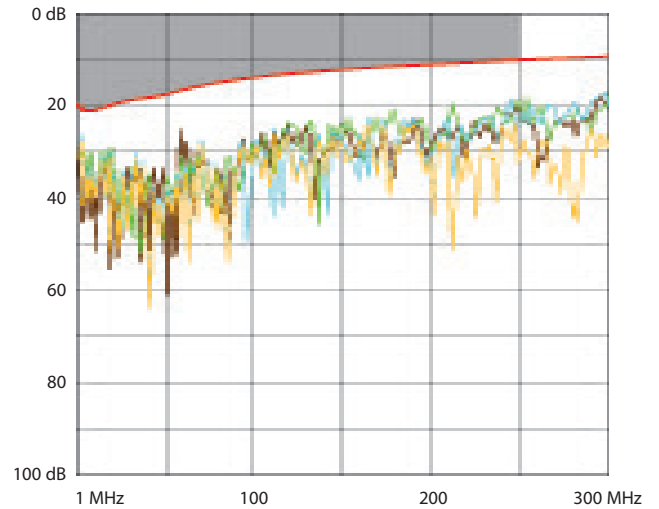
8.1 Performance of components (RJ 45 connectors) (continued)

FEXT (Far End Crosstalk Attenuation)

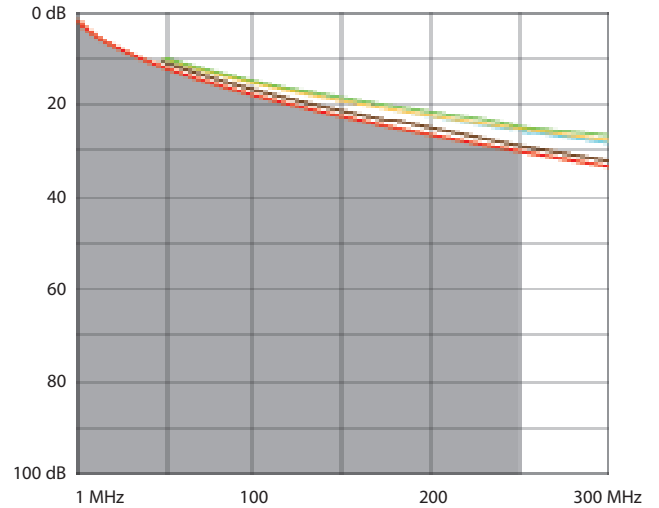


8.2 Performance of permanent link with F/UTP cable

Return loss



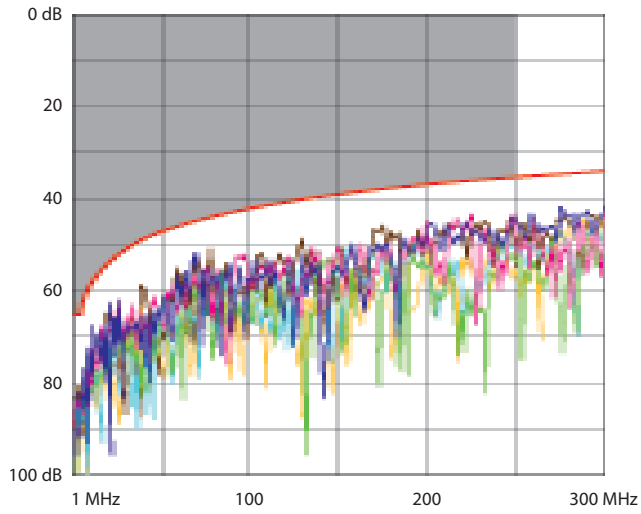
Attenuation



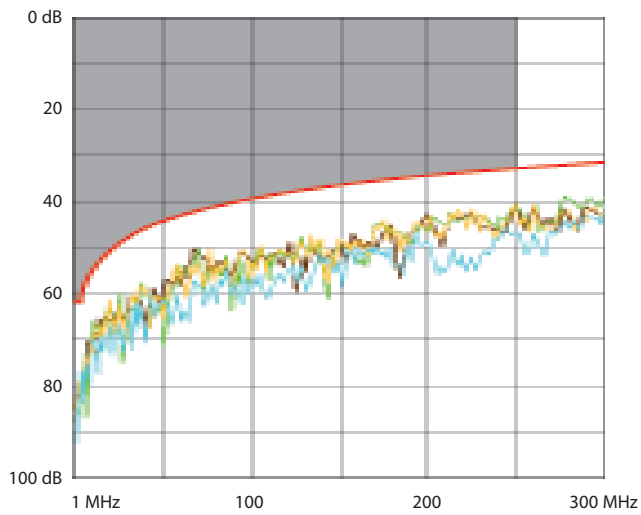
RJ 45 surface-mounting socket, LCS² Cat. 6

8. PERFORMANCE (continued)

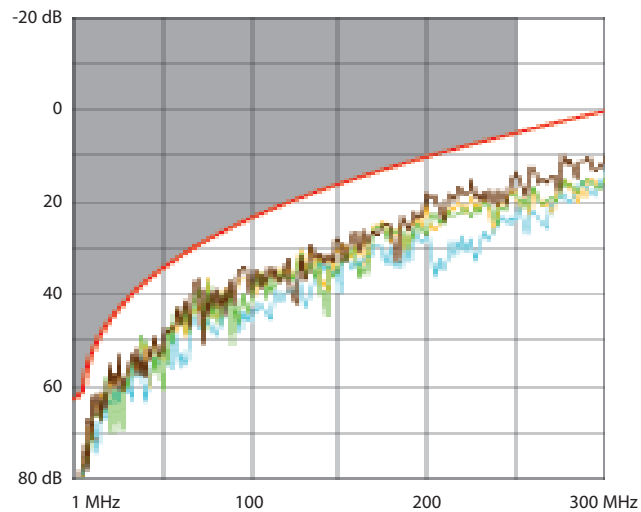
8.2 Performance of permanent link with F/UTP cable (continued) NEXT (Near End Crosstalk Attenuation)



PS NEXT (Power Sum NEXT)

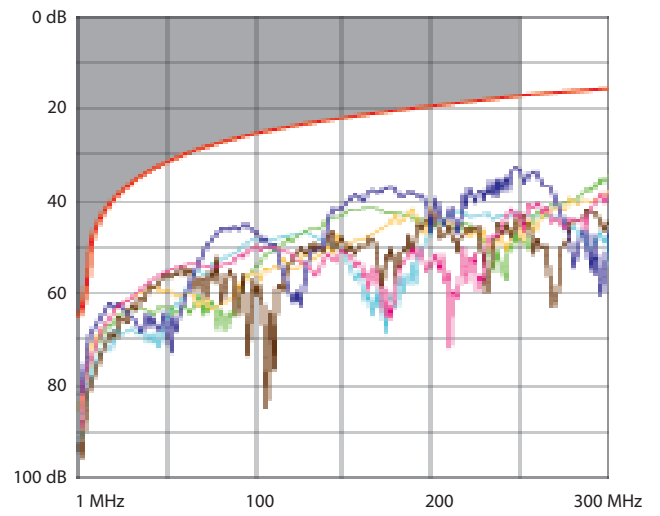


ACR (Attenuation to Crosstalk Ratio)



8. PERFORMANCE (continued)

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



Delay skew

