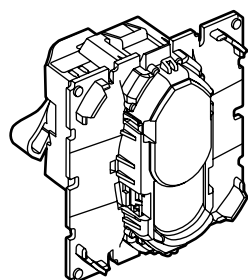
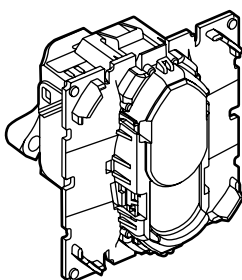


Céliane™ LCS² Cat. 6 RJ45 socket

Catalogue number(s): 673 44/45/96



673 44/45



673 96

CONTENTS

Page

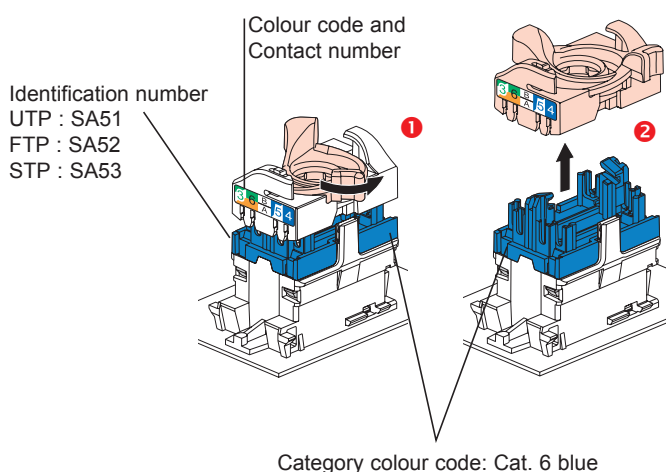
1. General characteristics	1
2. Presentation	1
3. Installation	1
4. Technical characteristics	1
5. Connection	2
6. Overall dimensions	2
7. Usual connection of RJ45 sockets	2
8. Standards and approvals	2
9. Performance	3-4

1. GENERAL CHARACTERISTICS

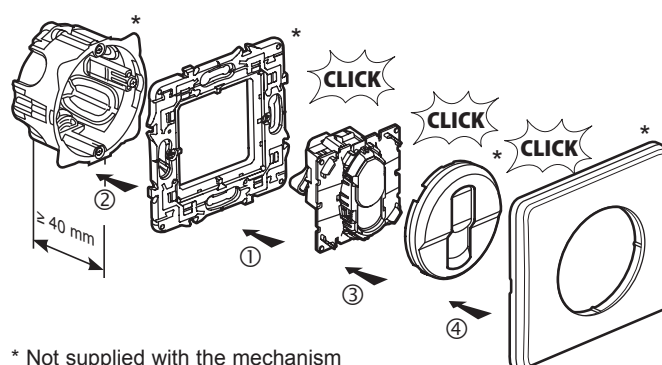
Category 6 RJ45 socket.
Enables high speed data transmission (Gigabit Ethernet).

	Designation	UTP	FTP	STP	Weight (g)
	Cat. 6 UTP RJ45 Socket	673 44			13
	Cat. 6 UTP RJ45 socket		673 45		13
	Cat. 6 STP RJ45 Socket			673 96	29

2. PRESENTATION

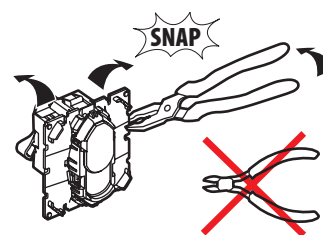


3. INSTALLATION



- 1 - Clip the mechanism onto the support frame from the front.
- 2 - Screw the mechanism/support frame assembly to the flush-mounting box.
- 3 - Clip the cover plate onto the mechanism.
- 4 - Clip the plate onto the support frame.

Can be fitted with all Céliane finishes.
Multi-gang horizontal and vertical mounting.
Can be double-mounted after breaking off fins.



4. TECHNICAL CHARACTERISTICS

4.1 Material characteristics

Contacts: gold/nickel, thickness of gold > 0.8 µm min.
Metal parts: bronze, nickel, platinum, gold
PBT polycarbonate
For STP products the body and the separator are made of metal alloy with a copper/nickel coating.

4.2 Electrical characteristics

Breakdown voltage ≥ 1000 V.
Contact resistance ≤ 20 mΩ.
Insulation resistance ≥ 500 MΩ at 100 V DC.
Compatible remote powering "PoE" up to 100w. (IEEE 802.3af, IEEE 802.3at, IEEE 802.3bt).

4. TECHNICAL CHARACTERISTICS (cont.)

4.3 Mechanical characteristics

Max. number of connections and disconnections: 5 without refreshing the cable

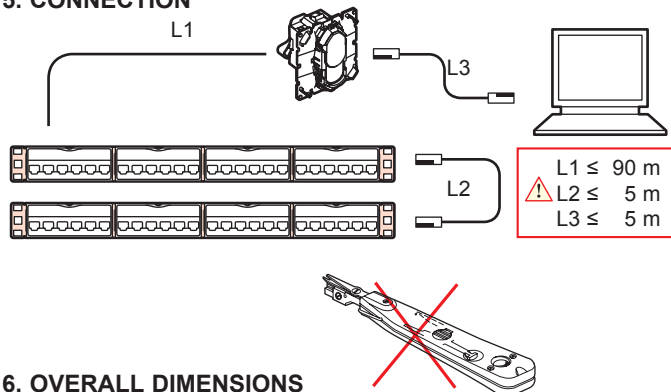
Endurance: 2500 movements (plug insertion/withdrawal)
 IK03

4.4 Climatic characteristics

Operating temperature: - 40°C to + 70°C

Humid heat cycle 21 days

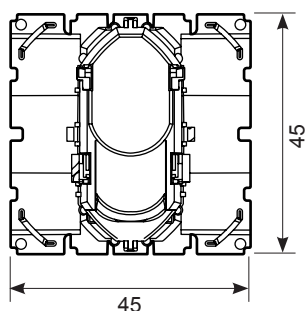
5. CONNECTION



6. OVERALL DIMENSIONS

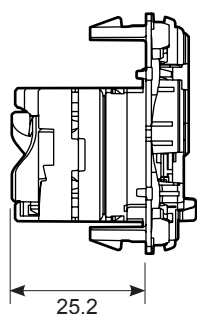
Front view:

673 44/45/96

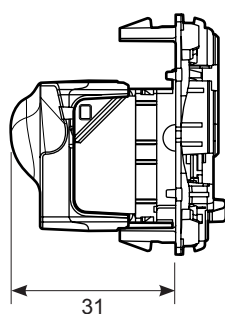


Side view:

673 44/45



673 96



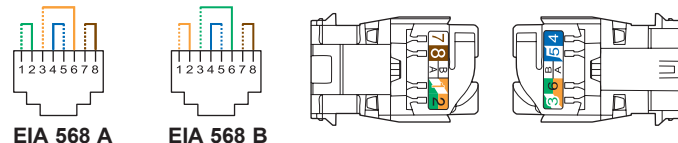
7. USUAL CONNECTION OF RJ45 SOCKETS

Accepts the following cable connectors:

RJ11 (4 contacts), RJ12 (6 contacts), RJ45 (9 contacts).

Double colour code EIA - TIA 568 A and B on terminals:

- UTP 8 contacts
- FTP 9 contacts
- STP 9 contacts with 360° shield

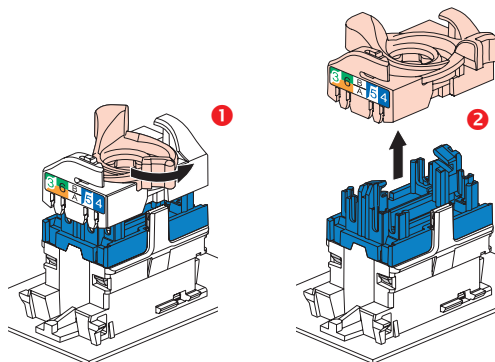


7. USUAL CONNECTION OF RJ45 SOCKETS (cont.)

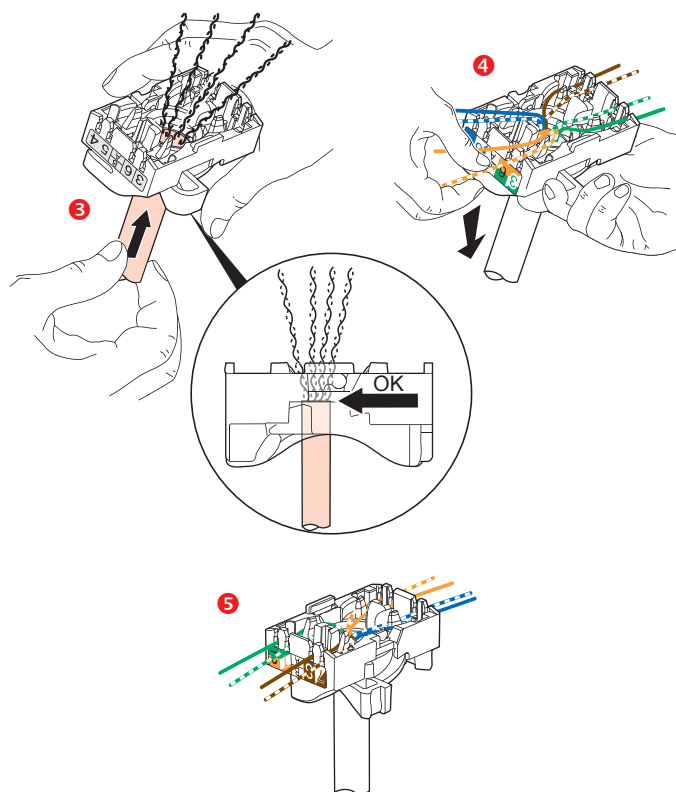
Conductors supported:

- Single-strand: 0.5 to 0.65 mm, AWG 22 to 25
- Multi-strand: AWG 26
- Polyethylene conductor insulation: max. Ø with insulation 1.58 mm

The RJ45 connectors are equipped with a rotating locking system that does not require special tools and enables rewiring in the event of error.



This system allows the wire pairs to be spread easily before attaching them to the connector.



Spreading the wires ensures that pairs are separated by the required 13 mm.

Spreading the pairs at 90° in relation to the cable ensures the best performance levels.

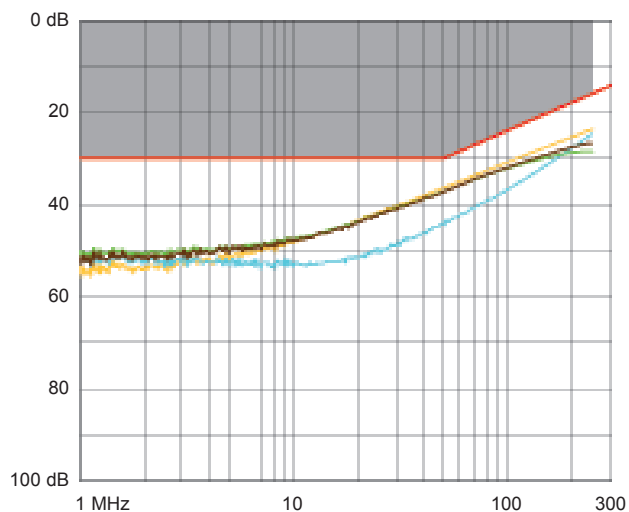
8. STANDARDS AND APPROVALS

Conforms to standards: ISO/IEC 11801 Edition 2
 CENELEC EN 50173-1 2007
 ANSI/TIA 568.2-D
 IEC series 60603-7
 IEEE 802.3bt : PoE++

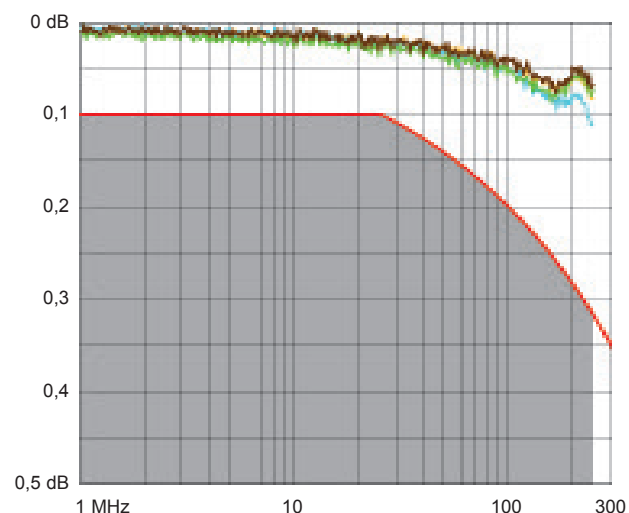
9. PERFORMANCE

9.1 Component performance (RJ45 connectors)

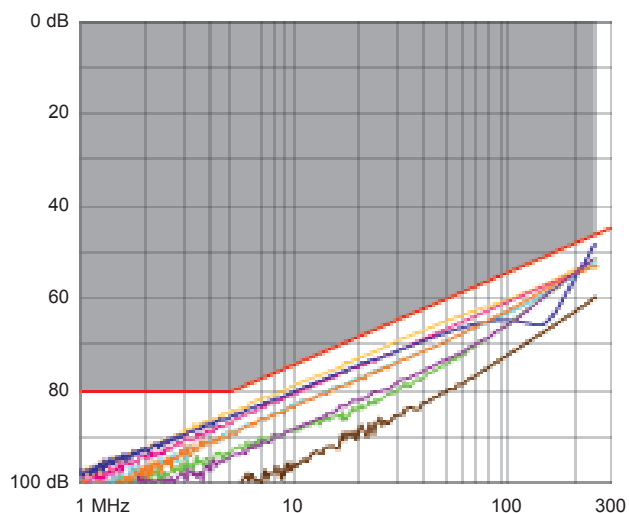
Return loss



Attenuation



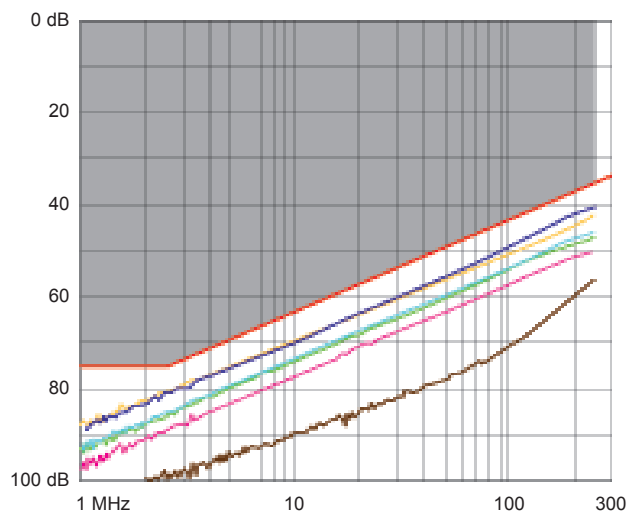
NEXT (Near end Crosstalk Attenuation)



9. PERFORMANCE (cont.)

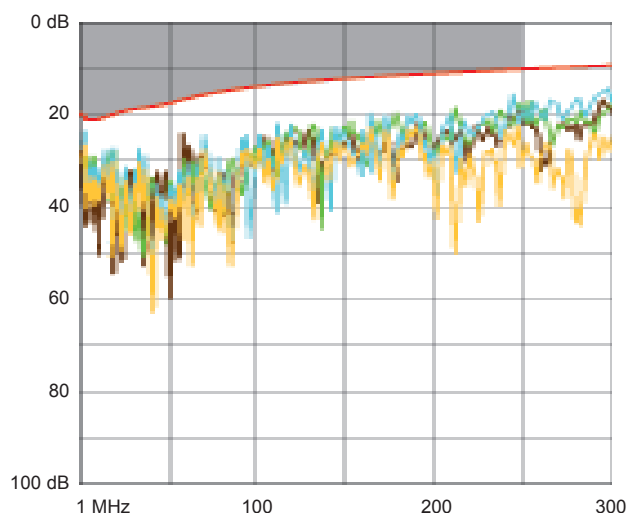
9.1 Component performance (RJ45 connectors) (cont.)

FEXT (Far end Crosstalk Attenuation)

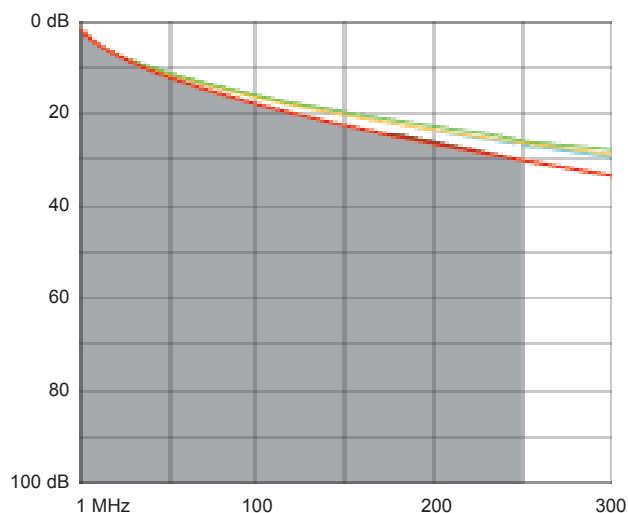


9.2 Permanent link performance with F/UTP cable

Return loss



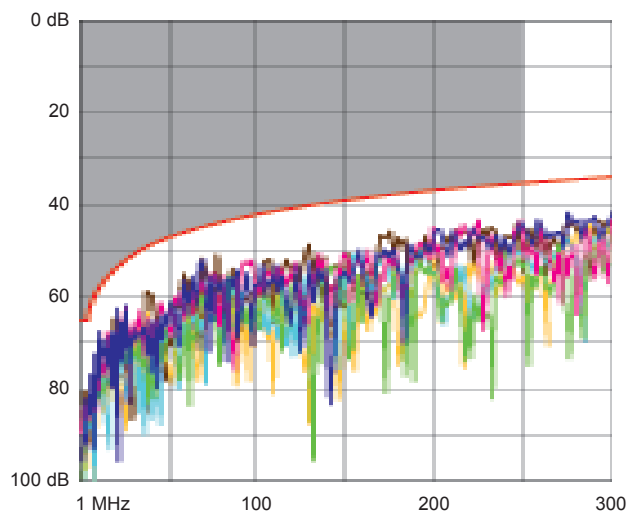
Attenuation



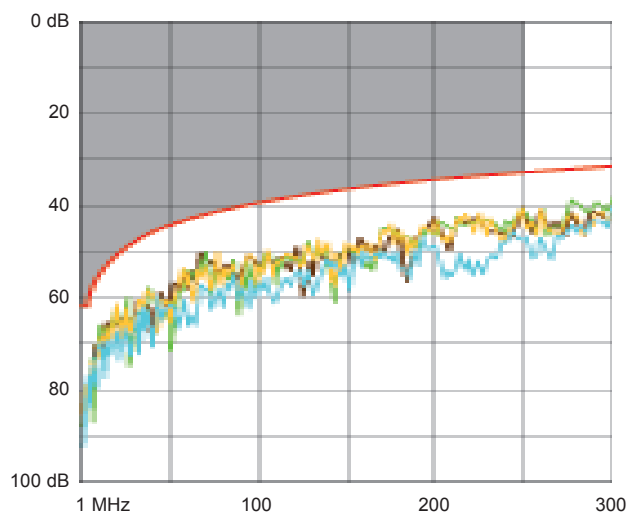
9. PERFORMANCE (cont.)

9.2 Permanent link performance with F/UTP cable (cont.)

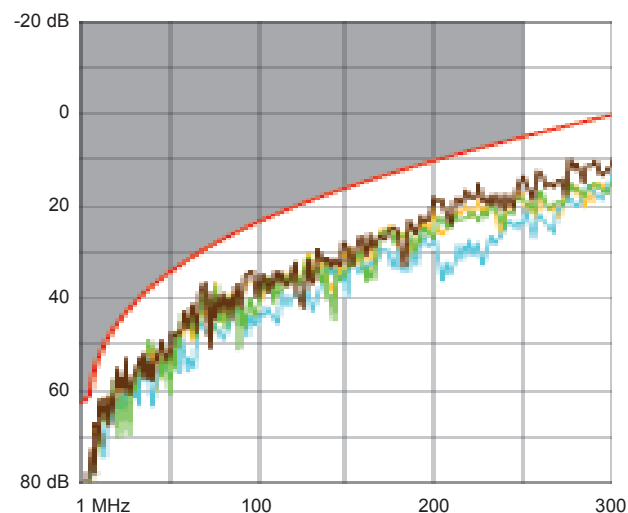
NEXT (Near end Crosstalk Attenuation)



PS NEXT (Power Sum NEXT)



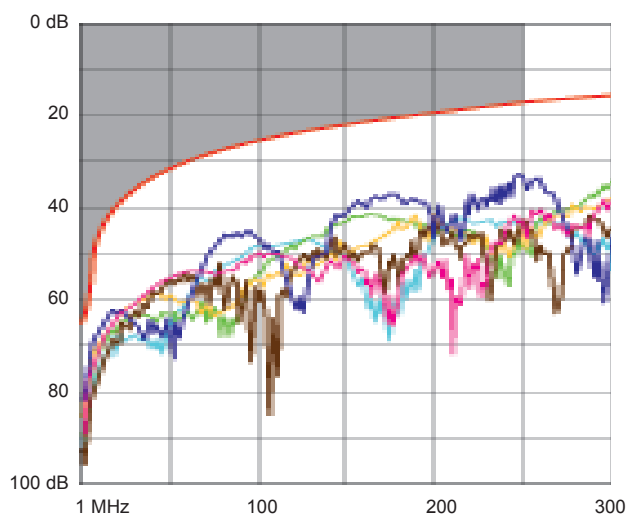
ACR (Attenuation to Crosstalk Ratio)



9. PERFORMANCE (cont.)

9.2 Permanent link performance with F/UTP cable (cont.)

ELFEXT (Equal Level End Crosstalk Attenuation)



Delay skew

