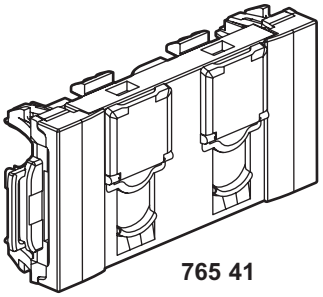
87045 LIMOGES Cedex
Telephone: (+33) 05 55 06 87 87 - Fax: (+33) 05 55 06 88 88

Mosaic™
LCS² Cat. 5e RJ 45 socket

Cat. no(s).: 765 41/42/51/52/54/55/97/98
794 51/52/54/55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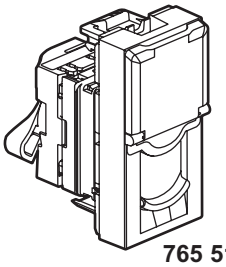
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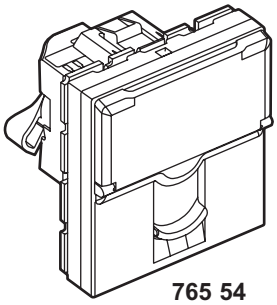
765 54

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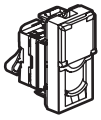
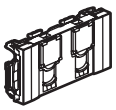
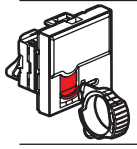
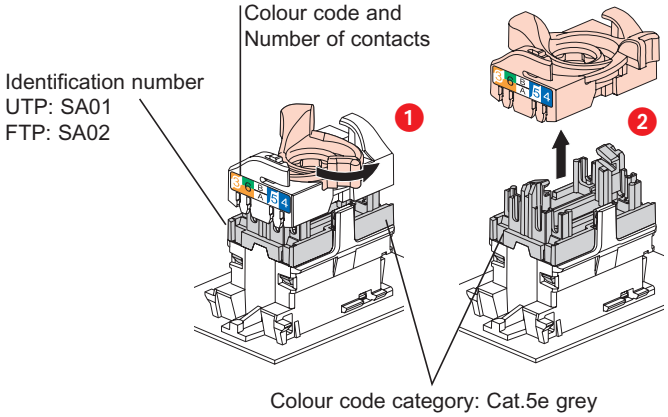
1. GENERAL CHARACTERISTICS

Category 5e RJ 45 socket
Allows high-speed transmissions (Gigabit Ethernet).

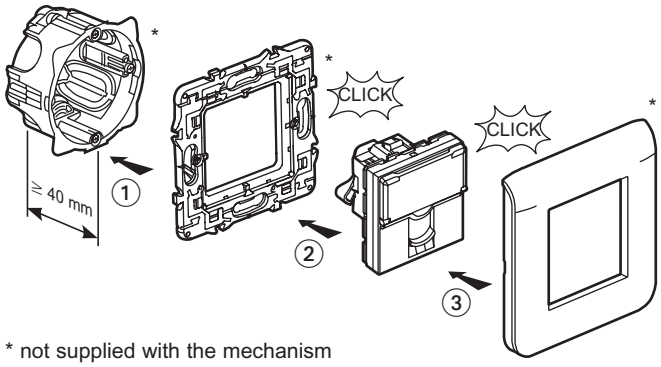
	Designation	No. of modules	UTP	FTP	Weight (g)
	RJ 45 socket, Cat. 5e UTP	1	765 51		13
	RJ 45 socket, Cat. 5e UTP aluminium	1	794 51		13
	RJ 45 socket, Cat. 5e FTP	1		765 52	13
	RJ 45 socket, Cat. 5e FTP aluminium			794 52	13
	RJ 45 socket, Cat. 5e UTP	2	765 54		18
	RJ 45 socket, Cat. 5e UTP aluminium	2	794 54		18
	RJ 45 socket, Cat. 5e FTP	2		765 55	18
	RJ 45 socket, Cat. 5e FTP aluminium	2		794 55	18
	2 x RJ 45 socket Cat. 5e UTP	4	765 41		
	2 x RJ 45 socket Cat. 5e FTP	4		765 42	
	RJ 45 safety socket Cat. 5e UTP	2	765 97		
	RJ 45 safety socket Cat. 5e FTP	2		765 98	

2. PRESENTATION



3. REAL LIFE SCENARIOS

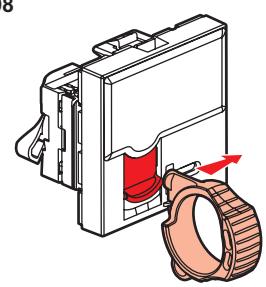
Mechanisms can be flush-mounted or surface-mounted.



* not supplied with the mechanism

Mounting on a modular support can be carried out using a Cat. No. 802 99 adapter (2 modules).
Mechanisms are mounted on thin walls with the following adaptors: Cat. No. 802 90 (1 module), Cat. No. 802 91 (2 modules), Cat. No. 802 92 (vertical 2 x 1 module).

Cat. No. 765 97/98
Unlocking



4. TECHNICAL FEATURES

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

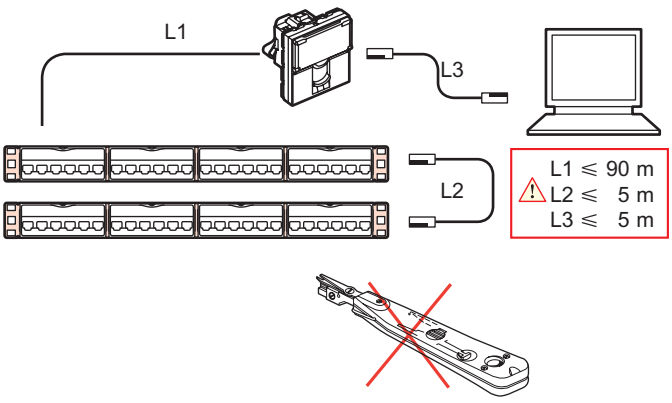
4.2 Electrical characteristics
Breakdown voltage ≥ 1000 V
Contact resistance ≤ 20 mΩ
Insulation resistance ≥ 500 MΩ under 100 V DC
Performance of resistance to a POE signal up to 50 W

4.3 Mechanical characteristics
Max. number of connections/ disconnections: 5 without re-preparing the wire
Endurance: 2500 operations (mating/extraction)
IK03

4.4 Climatic characteristics
Operating temperatures: -40°C to +70°C
Humid heat 21-day cycle

Technical data sheet: F00948EN/01 Updated on: 14/01/2011 Created on: 08/06/2009

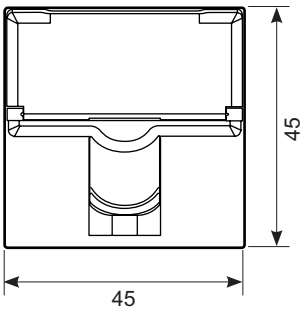
5. INSTALLATION



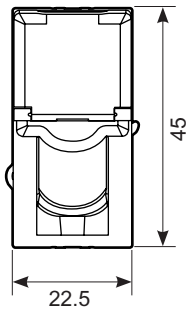
6. OVERALL DIMENSIONS

Front view:

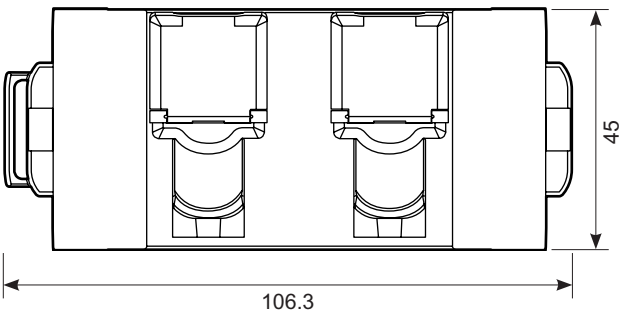
765 54/55/97/98 - 794 54/55



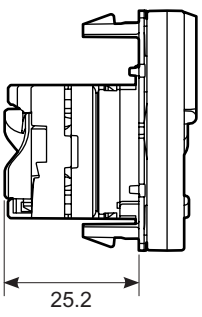
765 51/52 - 794 51/52



765 41/42



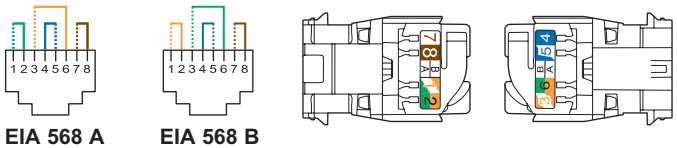
Side view:



7. STANDARD 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 8 contacts
- FTP 9 contacts

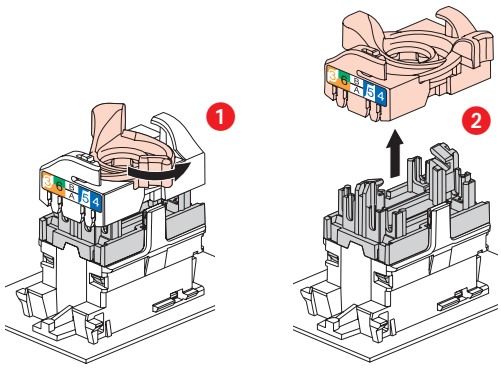


EIA 568 A **EIA 568 B**

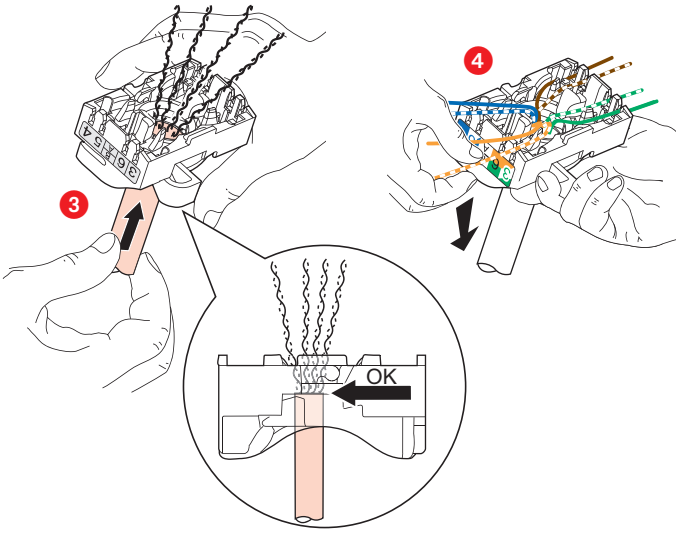
Permitted conductors:
- Single-core: 0.5 to 0.65 mm, AWG 22 to 25
- Multicore: AWG 26
- Polyethylene conductor insulation: Ø max. on 1.58 mm insulation

Number of wires to be connected per connection: 1

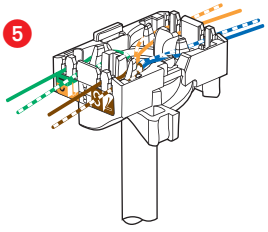
RJ 45 connectors are equipped with a locking nut. They do not require a special tool and can be re-wired if a mistake is made.



This system allows you to spread pairs with ease before fitting them onto the connector.



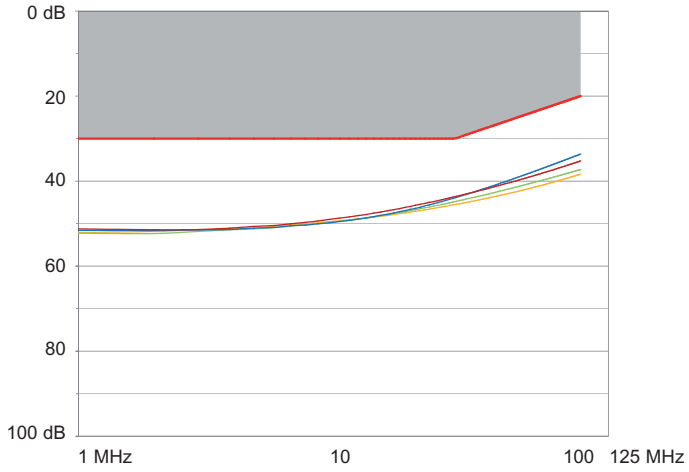
Spreading the cables allows you to ensure that a pair-breakage distance of 13 mm is kept between each pair.
Spreading pairs at 90° to the cable ensures the best possible performance.



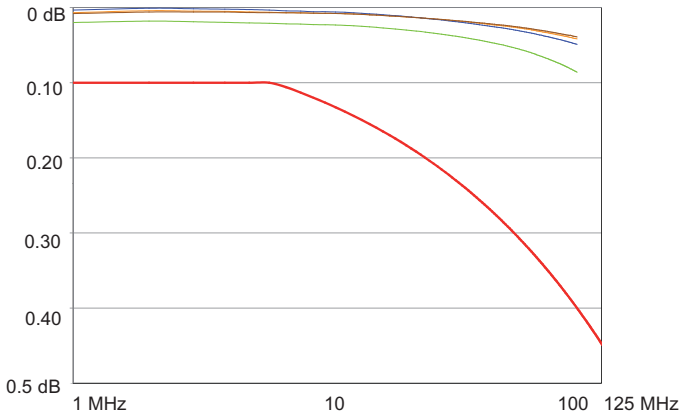
8. PERFORMANCE

8.1 Performance of components (RJ 45 connectors)

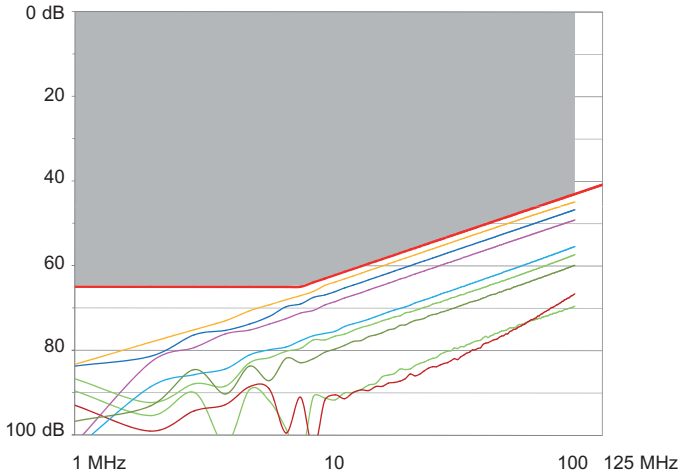
Return loss



Attenuation



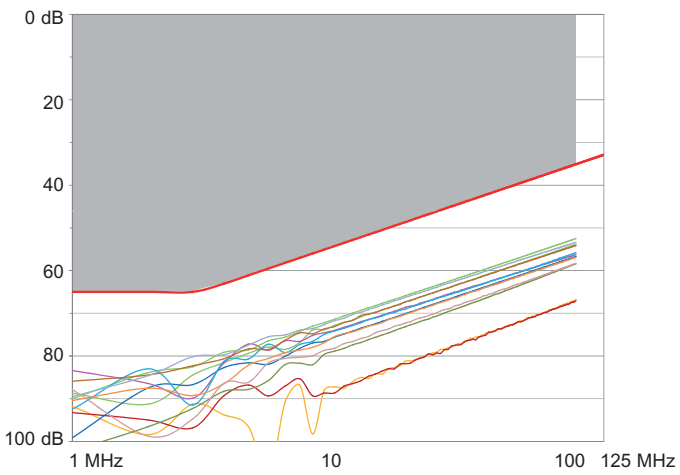
NEXT (Near end Crosstalk Attenuation)



8. PERFORMANCE *(continued)*

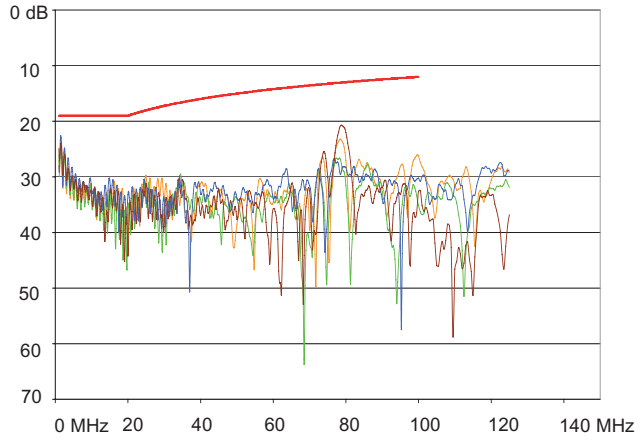
8.1 Performance of components (RJ 45 connectors) *(continued)*

FEXT (Far end Crosstalk Attenuation)

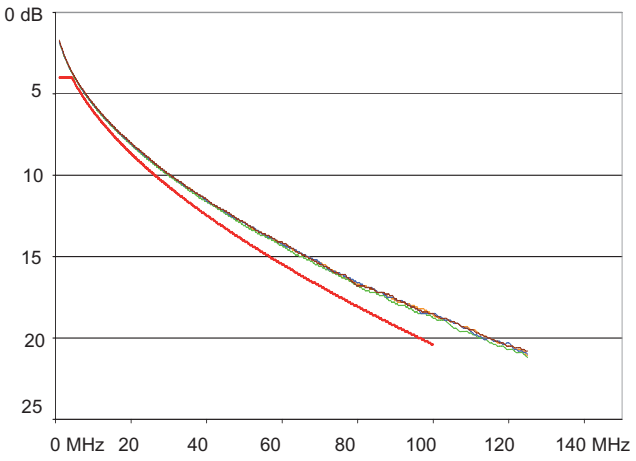


8.2 Performance of permanent link with F/UTP cable

Return loss

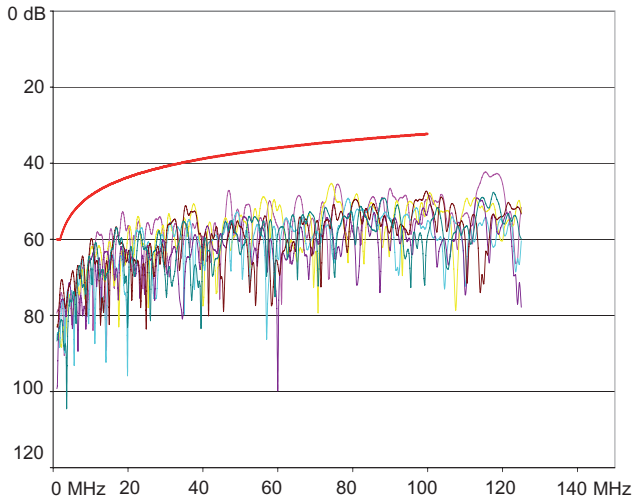


Attenuation

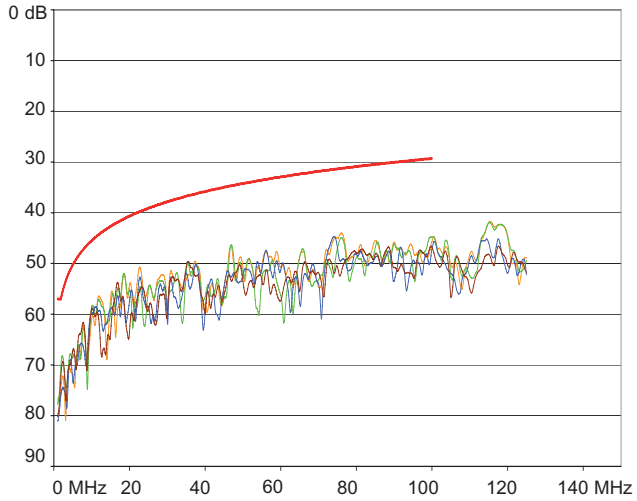


8. PERFORMANCE *(continued)*

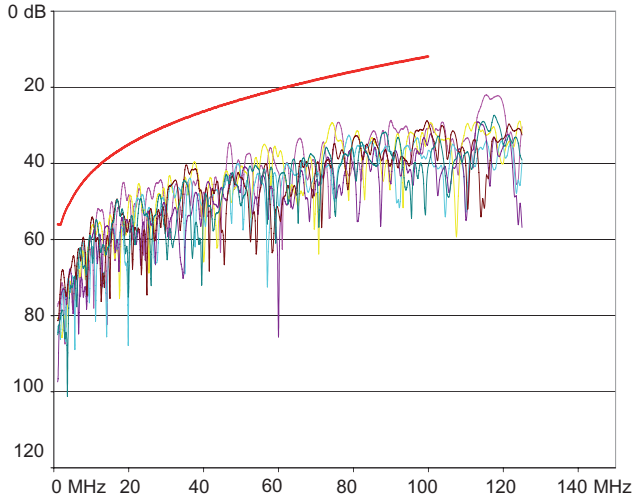
8.2 Performance of permanent link with F/UTP cable *(continued)*
NEXT (Near end Crosstalk Attenuation)



PS NEXT (Power Sum NEXT)

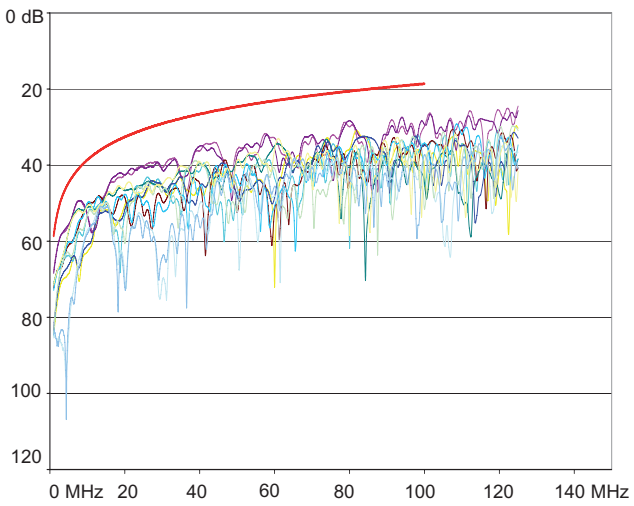


ACR (Attenuation to Crosstalk Ratio)



8. PERFORMANCE *(continued)*

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



9. STANDARDS AND APPROVALS

Conforms to standards: ISO/IEC 11801 Ed2 and Amd.
CENELEC EN 50173-1 2007
ANSI/EIA/TIA 568-C.2
IEC 60603-7 series