![Legrand logo]

128, av. du Maréchal-de-Lattre-de-Tassigny - 87045 LIMOGES Cedex
Tel.: 33(0)5 55 06 87 87 - Fax: 33(0)5 55 06 88 88
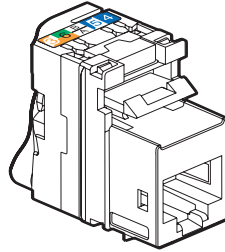www.legrand.com

Keystone Cat. 6 RJ 45 connector

Cat. No(s): 0 331 61/81

1. USE

Category 6 RJ 45 socket for high speed transmission (Gigabit Ethernet).
The mechanism can be flush-mounted or surface-mounted in 40 mm depth box min.
To be equipped with frame and plates.
Fixing with clips.

2. RANGE

|	Description	Cat. No
UTP	Keystone Cat. 6 RJ 45 connector - Grey UTP socket with fast connection	0 331 81
	Keystone Cat. 6 RJ 45 connector - White UTP socket with fast connection	0 331 61

3. DIMENSIONS (mm)
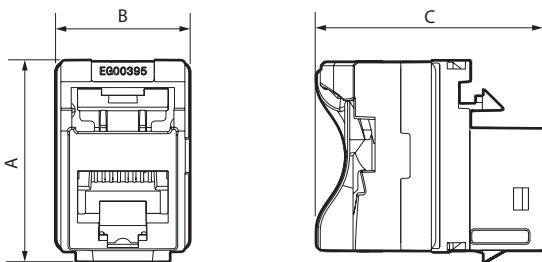
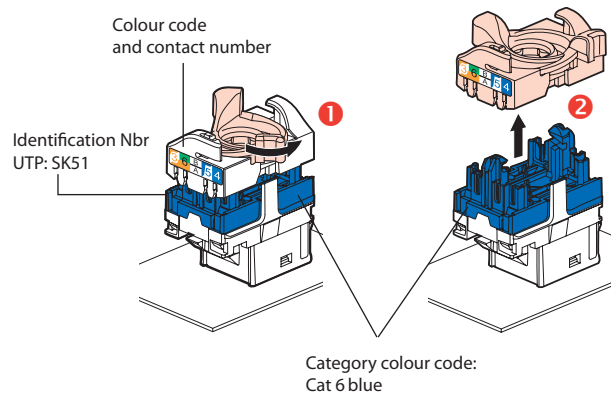| A	B	C
27	18	30

4. CONNECTION

Accepts the following cable connectors:
RJ 11 (4 contacts), RJ 12 (6 contacts), RJ 45 (9 contacts).

Double colour T568A and T568B on terminals:

UTP 8 contacts

T568A   T568B
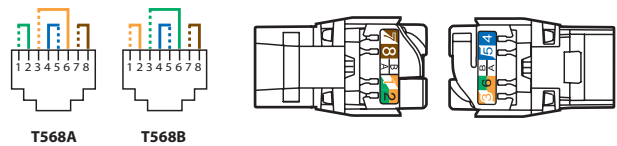
Conductors supported:
- Solid/stranded 0.4 to 0.65 mm, AWG 26 to 22
- Polyethylene conductor insulation Ø 0.85 to 1.7 mm on insulation.

RJ 45 connectors are equipped with a rotation locking that does not require special tool and enables re-wiring in the event of error.
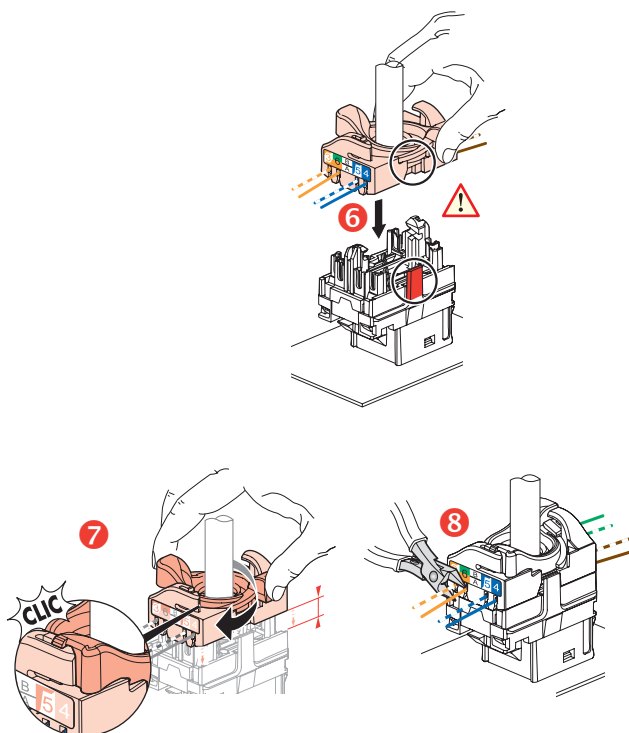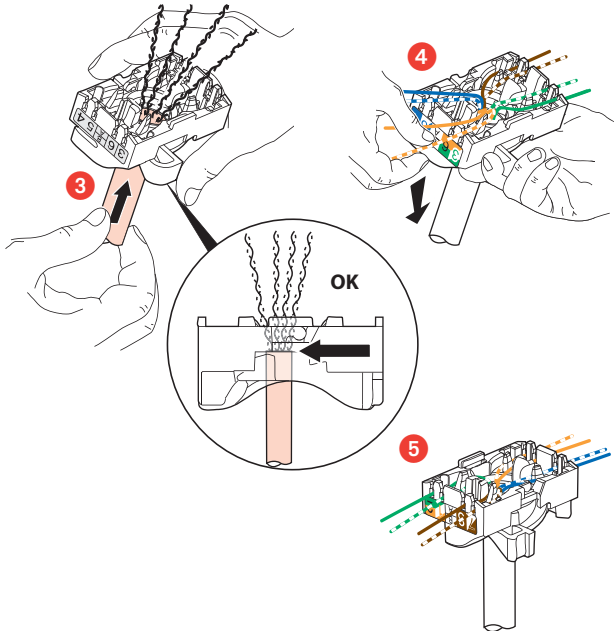

Colour code and contact number

Identification Nbr UTP: SK51

Category colour code: Cat 6 blue

---

4. CONNECTION *(continued*

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

Spreading cables ensures that each pair is separated by the specified 13 mm.

Spreading pairs by 90° in relation to the cable ensures optimum performance.

5. TECHNICAL CHARACTERISTICS

■ 5.1 Mechanical characteristics
Impact resistance: IK 03
Penetration against solid bodies and liquids: IP 20
Max. number of connections and disconnections: 5 without refreshing the wiring.
Endurance: 2500 movements (plug insertion/withdrawal).

■ 5.2 Material characteristics
Contacts: Gold/nickel, minimum thickness of gold > 0.8 μm
Metal parts: Bronze, nickel, platinum, gold

Base: Polycarbonate
Cat. No. 0 331 61: White RAL 9003
Cat. No. 0 331 81: Grey RAL 7016

Halogen-free
UV-resistant

Self-extinguishing:
850°C/30 s for insulating components holding live parts in place
650°C/30 s for the other insulating components

■ 5.3 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 90 W (Type 4).

■ 5.4 Climate characteristics
Storage temperature: -10°C to +70°C
Operating temperature: -10°C to +60°C

6. CLEANING

Clean the surface with a cloth.
Do not use acetone, tar-removing cleaning agents or trichloroethylene.

Caution: Always test before using other special cleaning products.

7. STANDARDS AND APPROVALS

ISO/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.
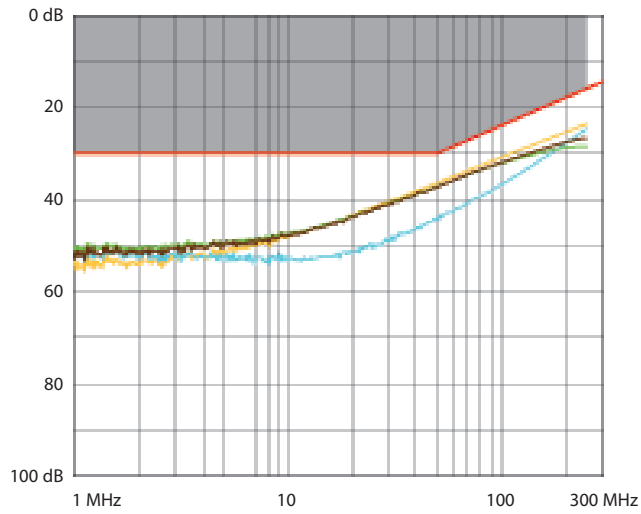IEC 60603-7 series : International standard for connector specifications.
Connectors are compliant to requirements for the following remote powering applications.

Compatible remote powering IEEE 802.3af, IEEE 802.3at, IEEE 802.3bt: «Power over Ethernet», Type 1 to 4 up to 90 W.
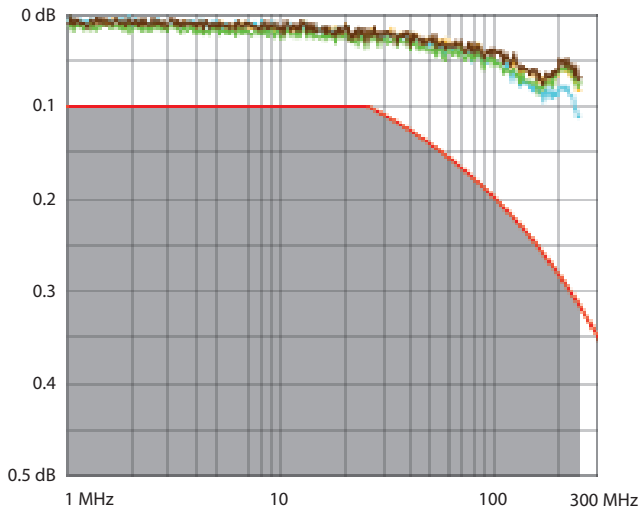
8. PERFORMANCE
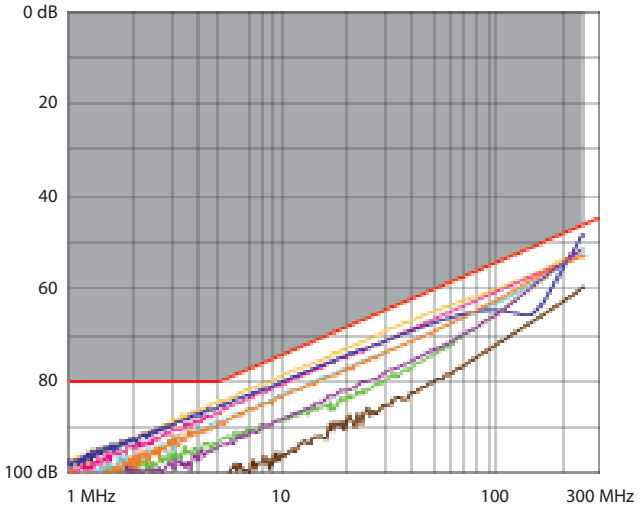
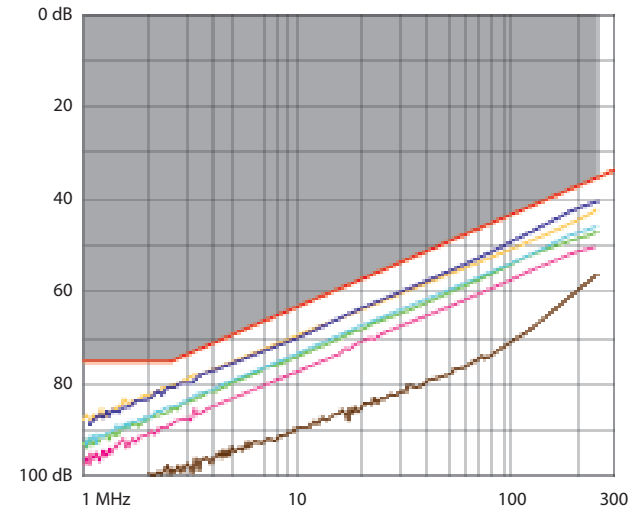### ■ 8.1 Component performance (RJ 45 connectors)
Return loss

Attenuation

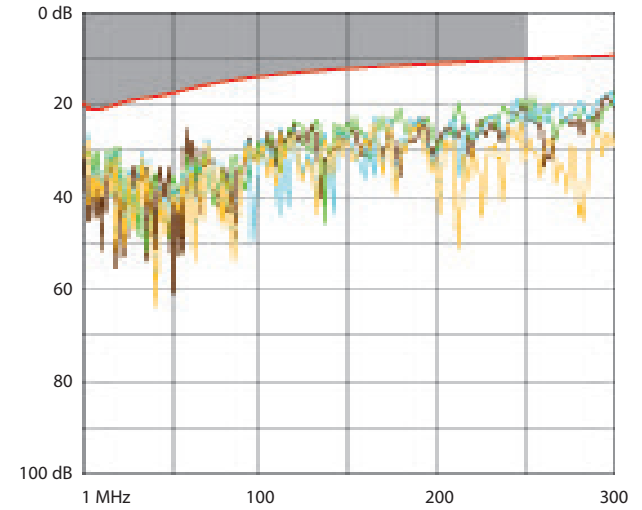NEXT (Near end Crosstalk Attenuation)

8. PERFORMANCE *(Cont.)*

■ 8.1 Component performance (RJ45 connectors) *(cont.)*
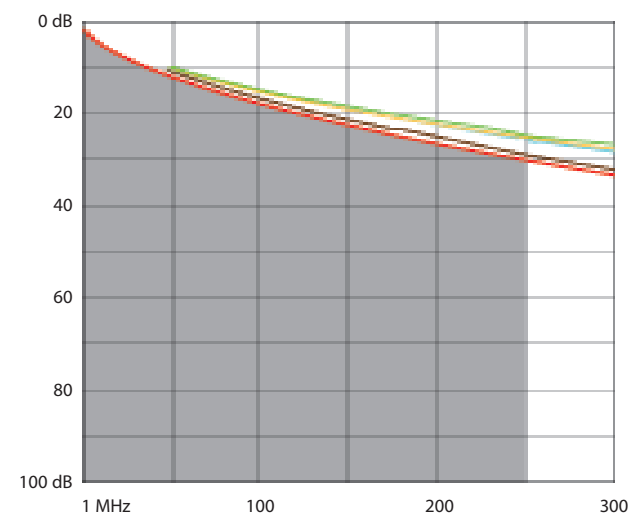FEXT (Far end Crosstalk Attenuation)

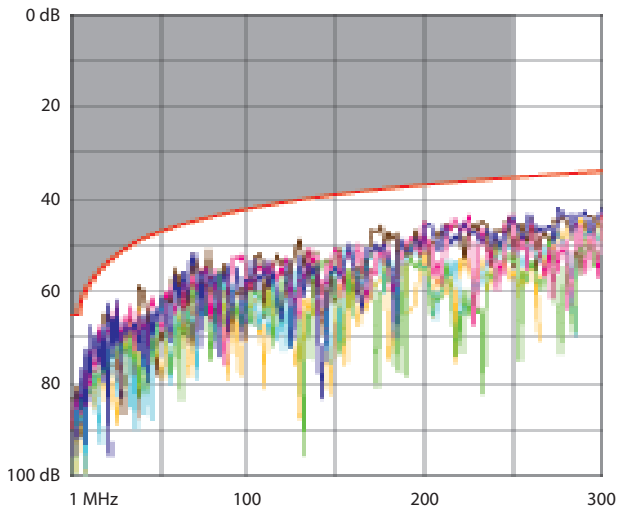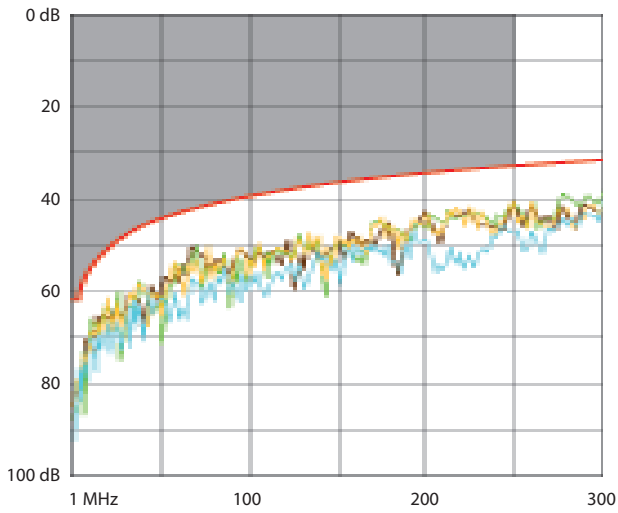### ■ 8.2 Permanent link performance with F/UTP cable
Return loss

Attenuation
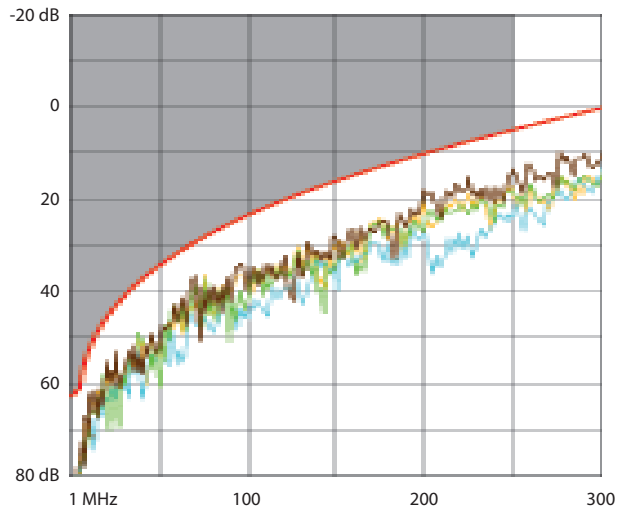
8. PERFORMANCE *(Cont.)*

■ **8.2 Permanent link performance with F/UTP cable** *(cont.)*
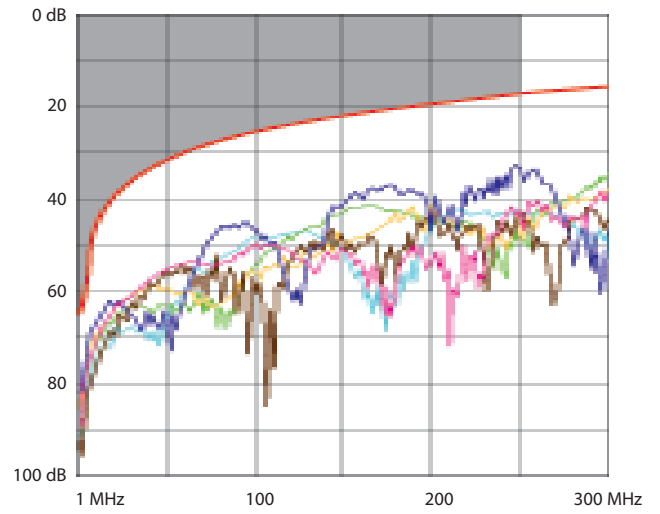NEXT (Near end Crosstalk Attenuation)

PS NEXT (Power Sum NEXT)

ACR (Attenuation to Crosstalk Ratio)

8. PERFORMANCE *(Cont.)*

■ **8.2 Permanent link performance with F/UTP cable** *(cont.)*
ELFEXT (Equal Level End Crosstalk Attenuation)

Delay skew