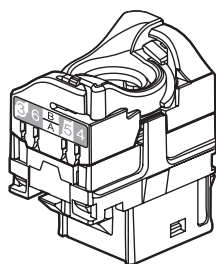


Keystone RJ45 socket cat. 6



UTP

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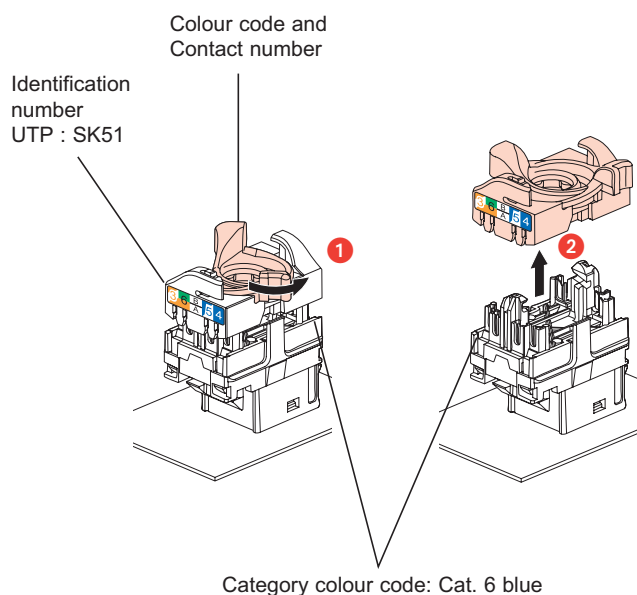
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1. GENERAL CHARACTERISTICS

Category 6 RJ45 socket.

Enables high speed data transmission (Gigabit Ethernet).

2. PRESENTATION



3. TECHNICAL CHARACTERISTICS

3.1 Material characteristics

Contacts: gold/nickel, thickness of gold > 0.8 µm min.

Metal parts: bronze, nickel, platinum, gold

PBT polycarbonate

3.2 Electrical characteristics

Breakdown voltage ≥ 1000 V.

Contact resistance ≤ 20 m.

Insulation resistance ≥ 500 M at 100 V DC.

Connector tested and guaranteed to support POE signals, standard IEEE 802.3af and POE+, draft standards 802.3at, up to 2500 connections and disconnections with load.

Tests are carried out with 2 simultaneous POE+ circuits producing a minimum total power of 50W.

3.3 Mechanical characteristics

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

Endurance: 2500 movements (plug insertion/withdrawal)

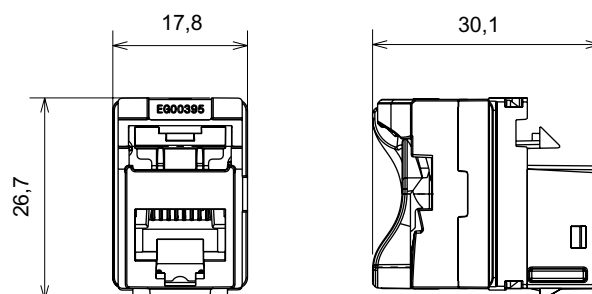
IK03

3.4 Climatic characteristics

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

Humid heat cycle 21 days

4. OVERALL DIMENSIONS



Keystone RJ45 socket cat. 6

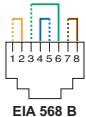
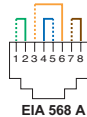
5. USUAL CONNECTION OF RJ45 SOCKETS

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



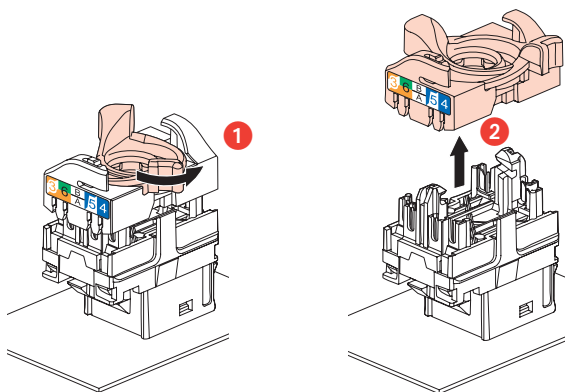
Conductors supported:

- 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

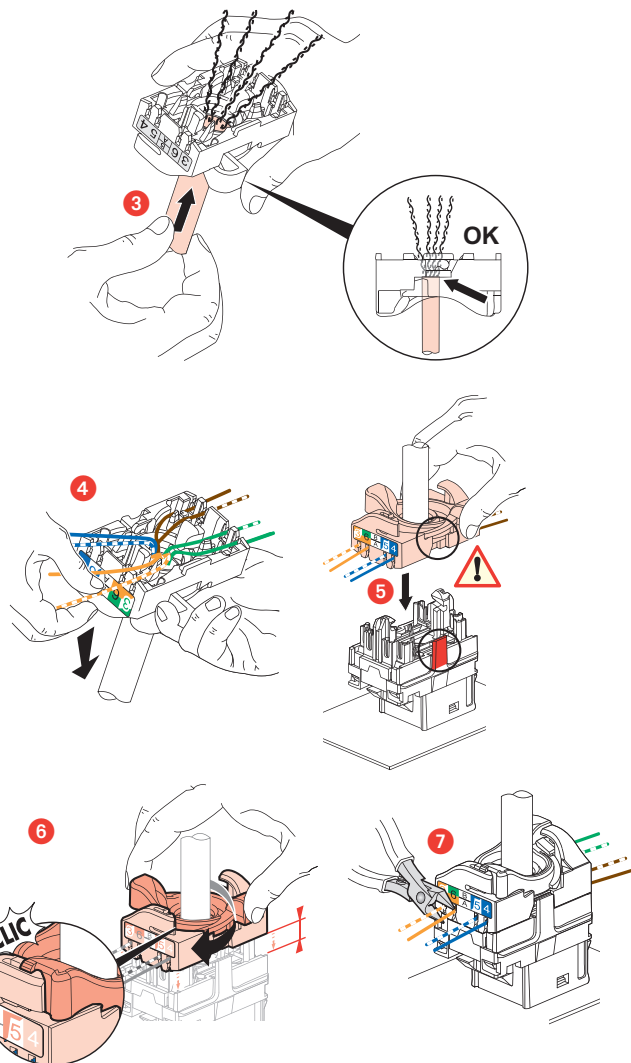
The RJ45 connectors are equipped with a rotating locking system that does not require special tools and enables rewiring in the event of error.



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.



6. STANDARDS AND APPROVALS

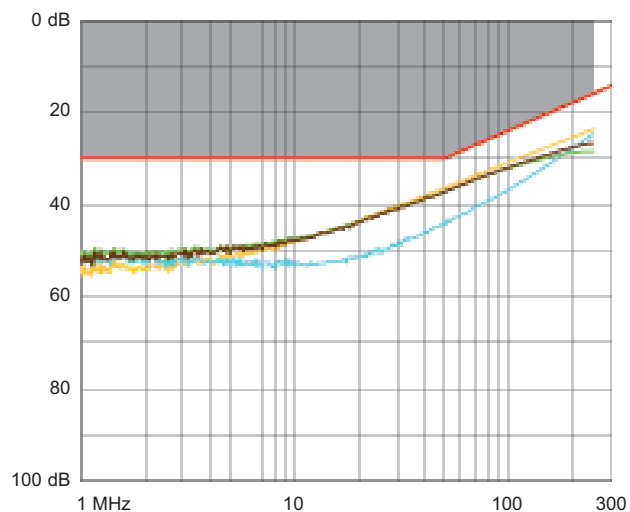
Conforms to standards: ISO/IEC 11801 Edition 2
CENELEC EN 50173-1 2007
ANSI/EIA/TIA 568-B.2-1
IEC series 60603-7

Keystone RJ45 socket cat. 6

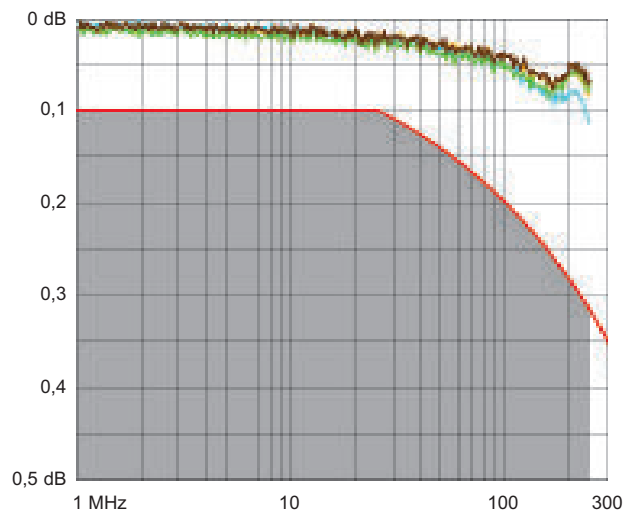
7. PERFORMANCE

7.1 Component performance (RJ45 connectors)

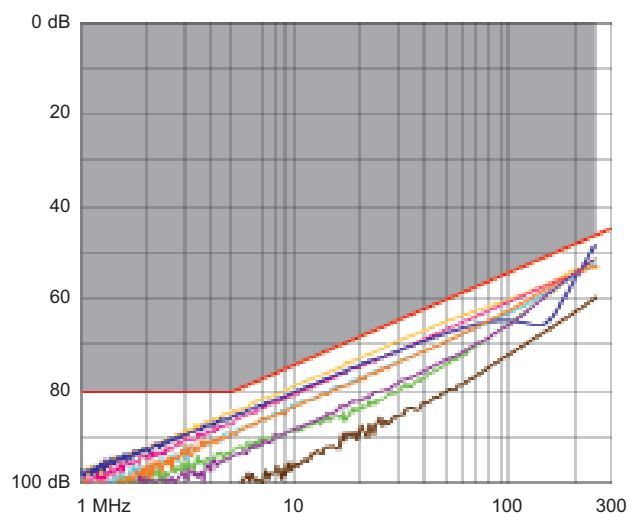
Return loss



Attenuation



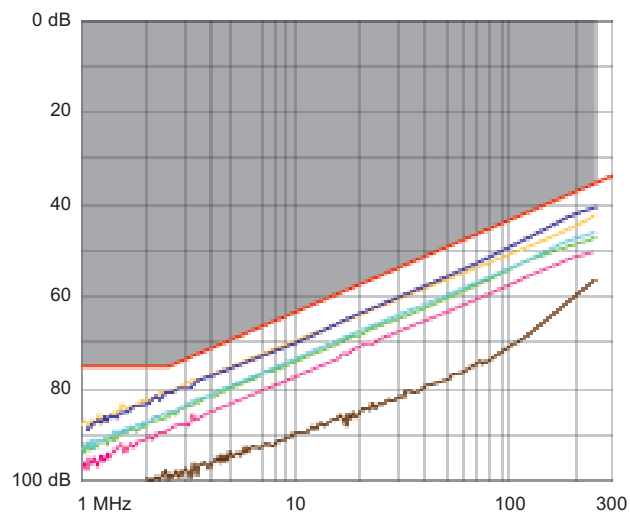
NEXT (Near end Crosstalk Attenuation)



7. PERFORMANCE (cont.)

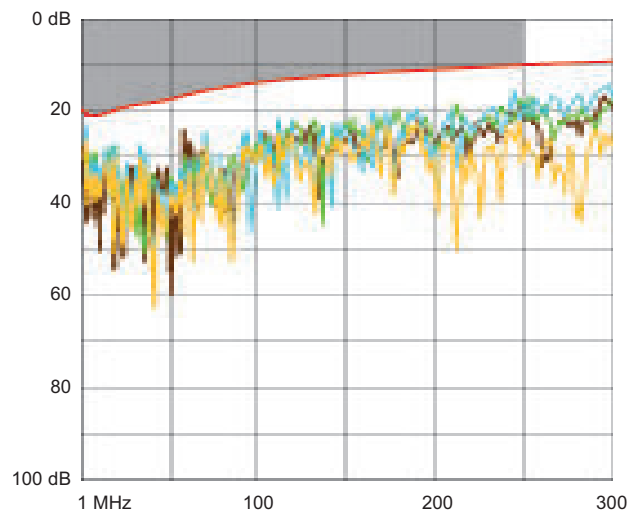
7.1 Component performance (RJ45 connectors) (cont.)

FEXT (Far end Crosstalk Attenuation)

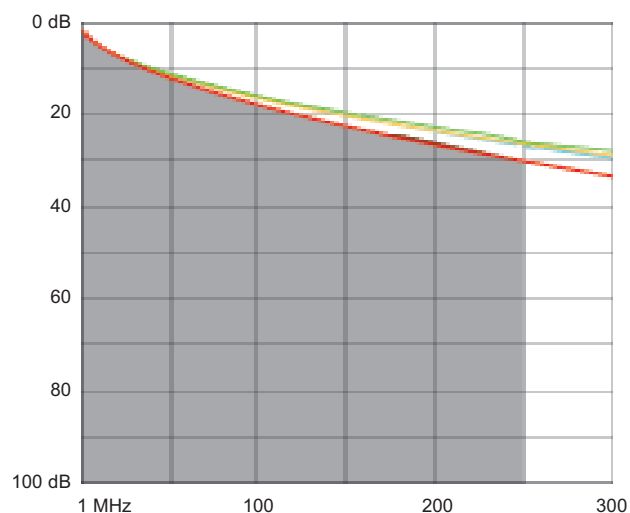


7.2 Permanent link performance with F/UTP cable

Return loss



Attenuation

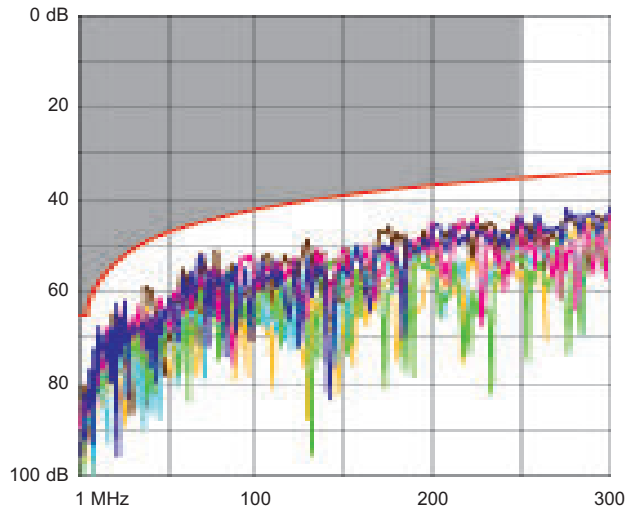


Keystone RJ45 socket cat. 6

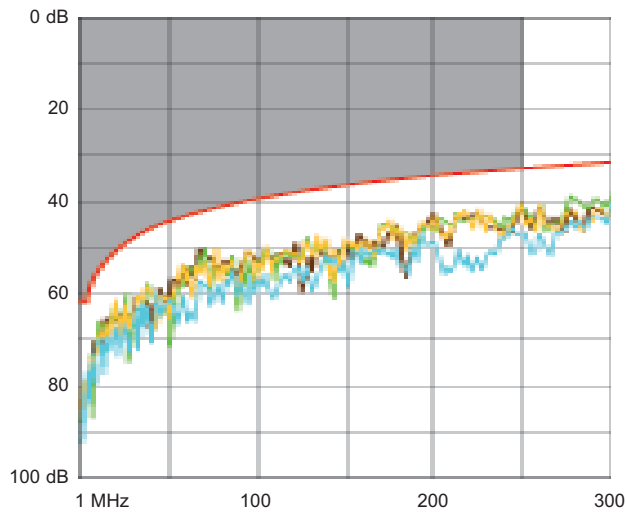
7. PERFORMANCE (cont.)

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

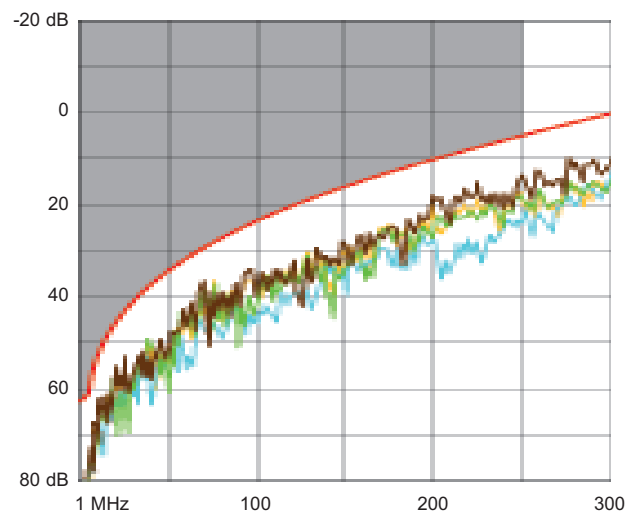
NEXT (Near end Crosstalk Attenuation)



PS NEXT (Power Sum NEXT)



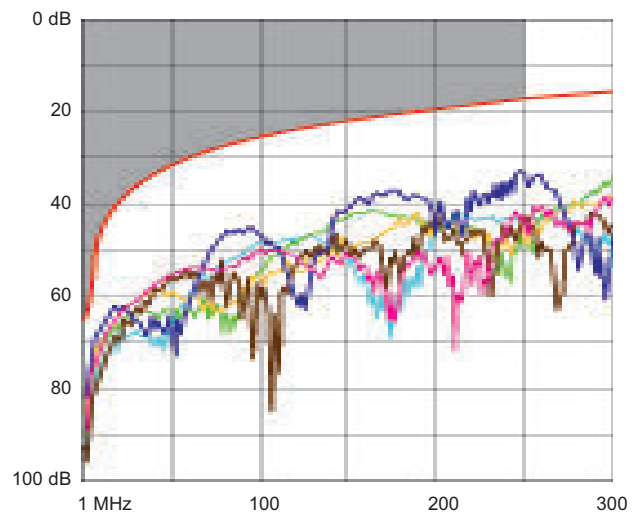
ACR (Attenuation to Crosstalk Ratio)



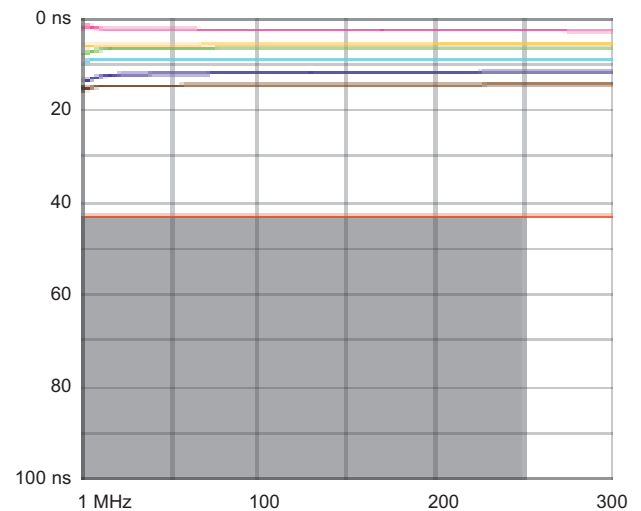
7. PERFORMANCE (cont.)

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

ELFEXT (Equal Level End Crosstalk Attenuation)



Delay skew



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