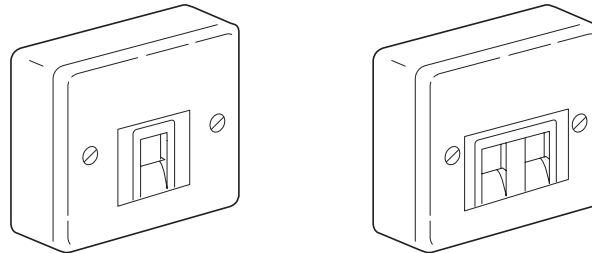


Synergy™
Cat. 6 UTP RJ45 sockets
Metalclad

Cat. Nos: 7 338 56/57



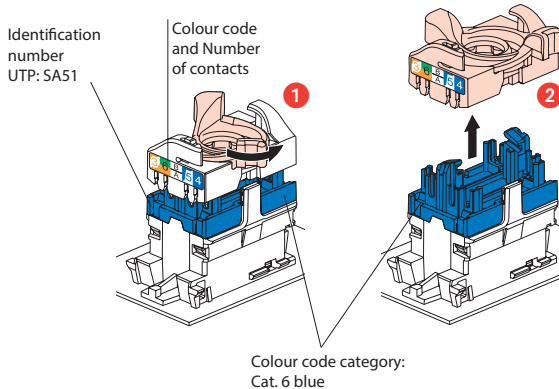
1. USE

Category 6 RJ45 socket.
 Allows high-speed transmissions (Gigabit Ethernet).

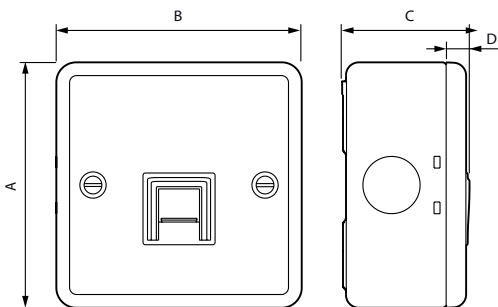
2. RANGE

Cat. 6 UTP RJ45 Single	7 338 56
Cat. 6 UTP RJ45 Twin	7 338 57

3. PRESENTATION



4. OVERALL DIMENSIONS (mm)



Cat. Nos.	A	B	C	D
7 338 56 - 7 338 57	86	86	43	7

5. TECHNICAL CHARACTERISTICS

5.1 Mechanical characteristics

Maximum number of connections and disconnections : 5 without replacing the wire.
 Endurance: 2500 operations (plugging in/unplugging).
 Impact test : IK 08
 Penetration by solid bodies/liquids : IP 20

5.2 Material characteristics

Motor : - Contacts: gold/nickel, thickness of gold > 0.8 em minimum
 - Metal parts: bronze, nickel, platinum, gold
 - Polycarbonate PBT

Front plate : grey epoxy coated steel

Halogen free
 UV resistant

5.3 Electrical characteristics

Breakdown voltage ≥ 1000 VDC
 Contact resistance ≤ 20 m Ω
 Insulation resistance ≥ 500 m Ω at 100 VDC
 Connector tested and guaranteed under POE signal stress, standard IEEE 802.3af and POE+, draft standard 802.3at, up to 500 load connections/disconnections.
 Tests are carried out with 2 simultaneous POE+ circuits for a minimum total power of 60 VDC and 0.7 A.

5.4 Climate characteristics

Storage temperature : -10°C to 70°C
 Use temperature : -5°C to +35°C

6. CLEANING

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

Caution: An initial test is required for the use of other special maintenance products

7. STANDARDS AND APPROVALS

Compliance with standards of installation and manufacturing.
 See e.catalogue

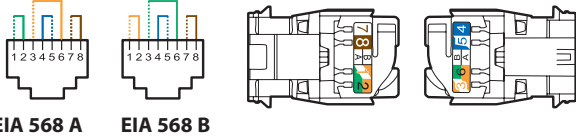
8. STANDARD RJ45 CONNECTION

Takes the following plugs:

RJ45 (9 contacts).

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

- UTP/STP (9 contacts)



Permissible conductors:

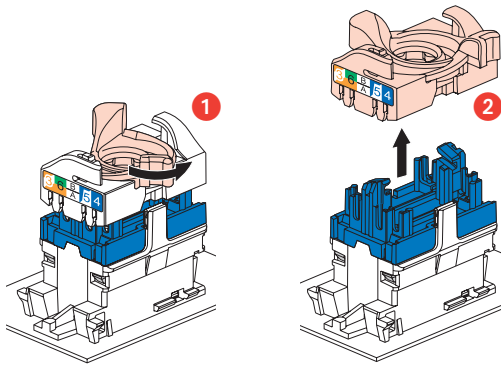
- Single-core: AWG 22 to 25

- Multicore: AWG 26

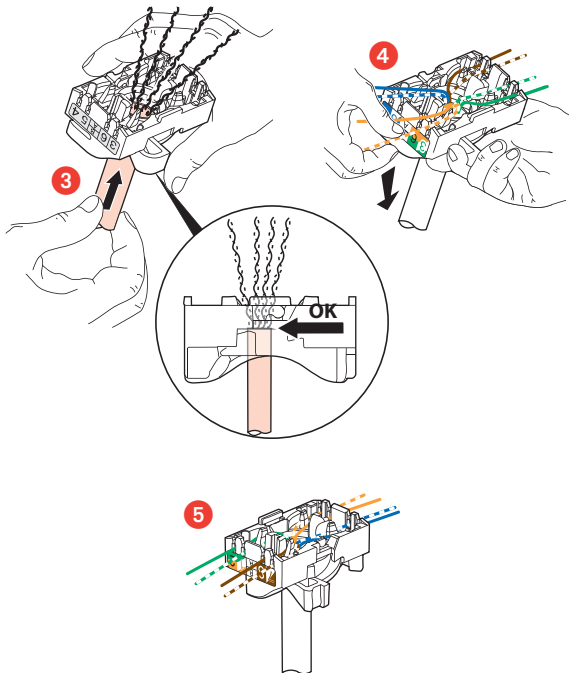
- Polyethylene conductor insulation: maximum Ø on insulation 1.58 mm

RJ45 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 ensures that a pair-breakage distance of 13 mm is kept between each pair.

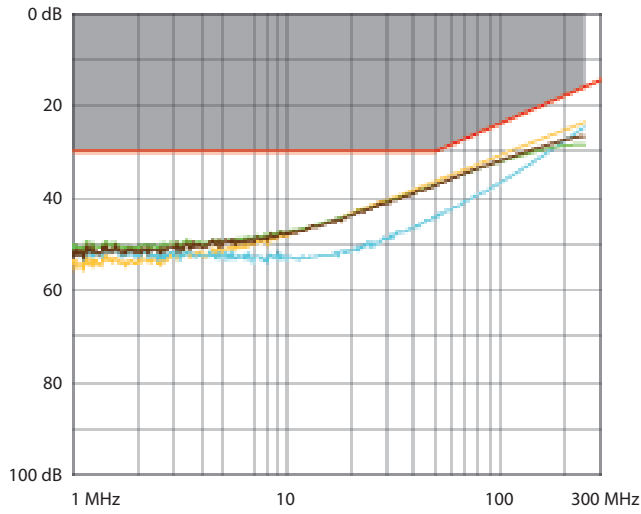


Spreading pairs at 90° to the cable ensures the best possible performance.

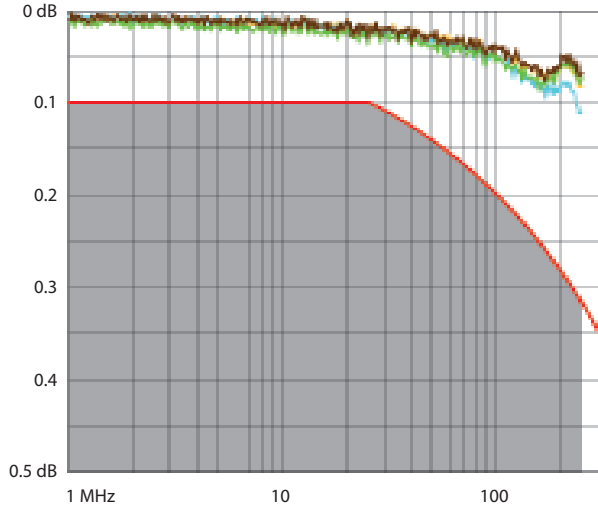
9. PERFORMANCE

■ **9.1 Performance of components (RJ45 connectors)**

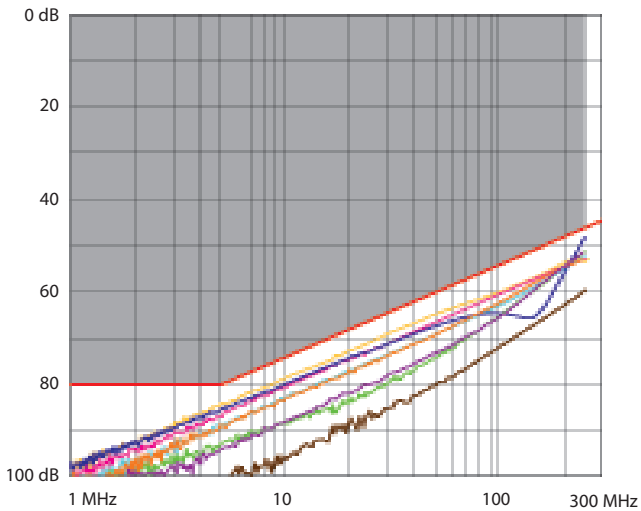
Return loss



Attenuation



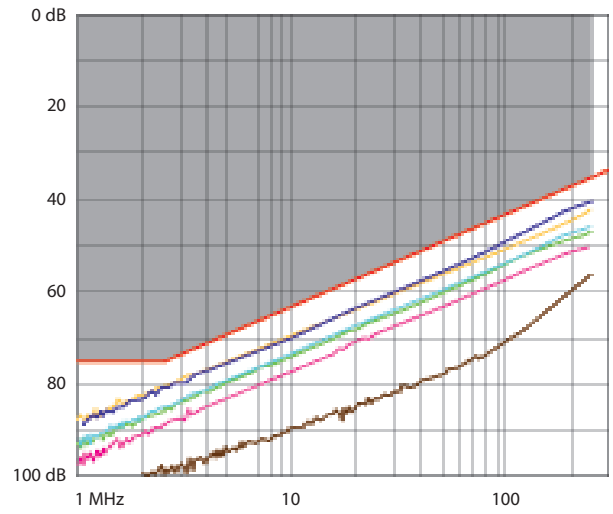
NEXT (Near End Crosstalk Attenuation)



9. PERFORMANCE (continued)

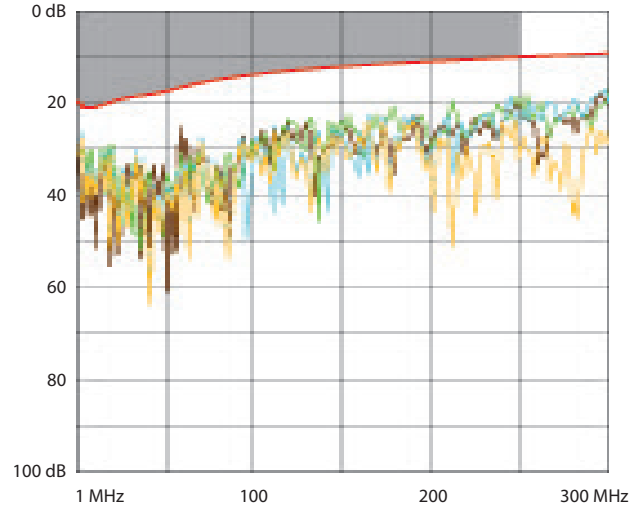
■ **9.1 Performance of components (RJ45 connectors)**

FEXT (Far End Crosstalk Attenuation)

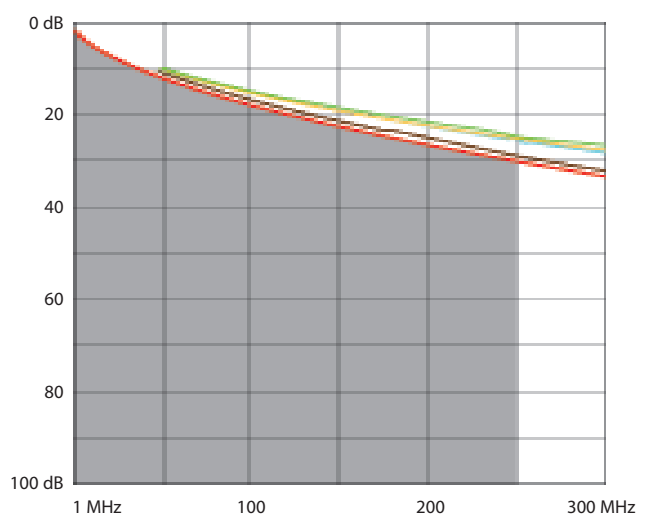


■ **9.2 Performance of permanent link with F/UTP cable**

Return loss

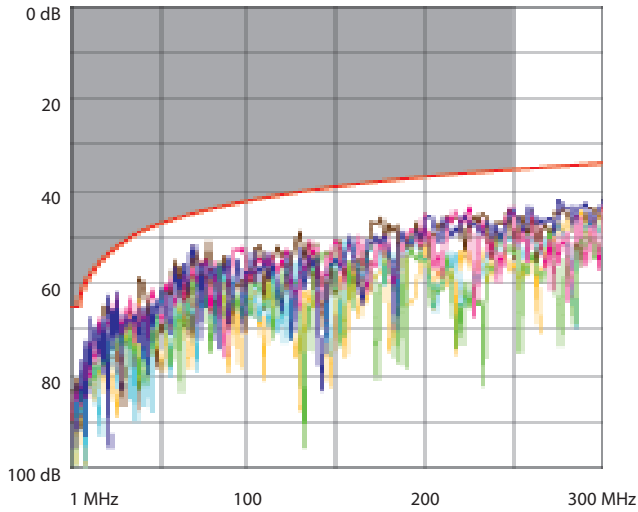


Attenuation

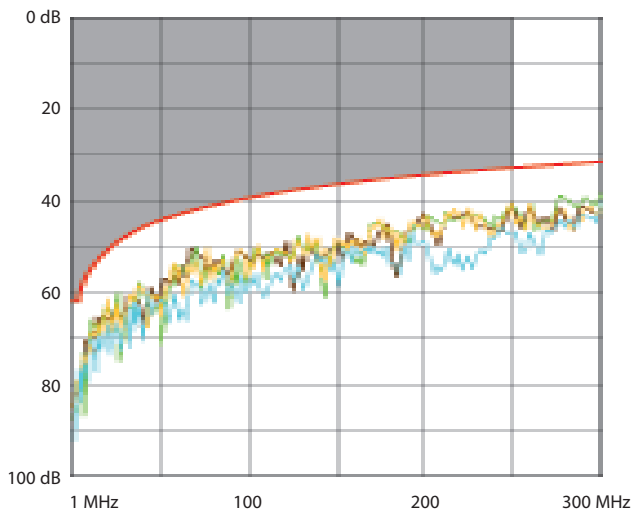


9. PERFORMANCE (continued)

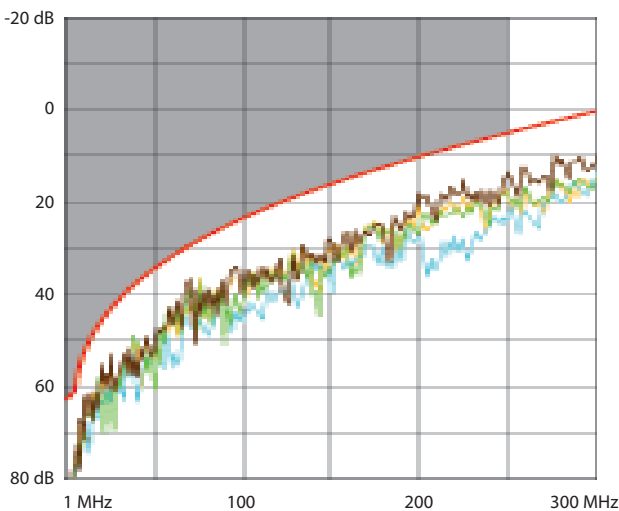
■ **9.2 Performance of permanent link with F/UTP cable**
 NEXT (Near End Crosstalk Attenuation)



PS NEXT (Power Sum NEXT)

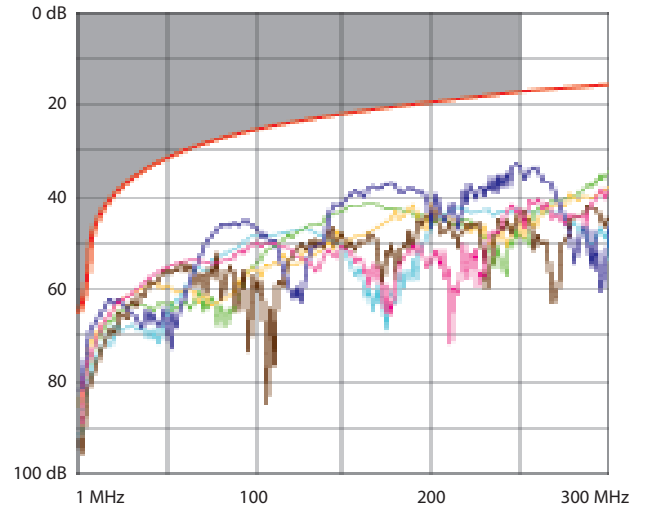


ACR (Attenuation to Crosstalk Ratio)



9. PERFORMANCE (continued)

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



Delay skew

