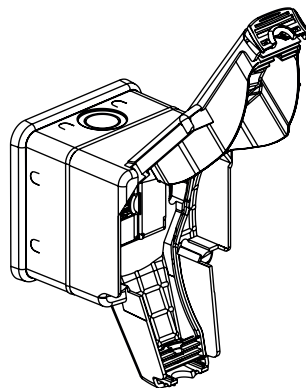**Plexo™ 66**
FTP Category 6 RJ45 socket
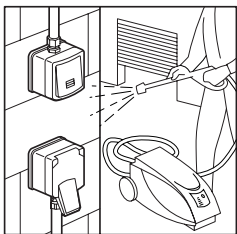
1. INTRODUCTION

90° FTP Category 6 RJ45 socket.
Weatherproof product for installation inside or outside premises exposed to:
- frequent cleaning (high-pressure cleaning at 70 to 90 bar, 70 to 80°C
- disinfectants
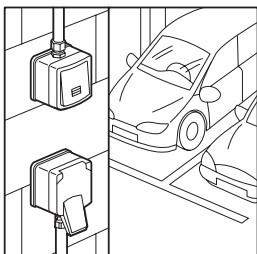- chemical attack
- inclement weather
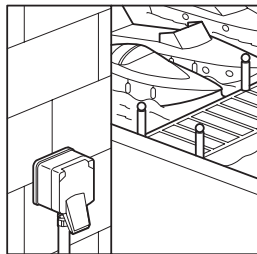- impacts

2. USAGE ENVIRONMENTS

2.1 COMMERCIAL

High-pressure cleaning
or with foam gun
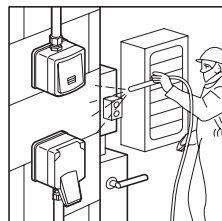(food processing industry)
< 90 bars, < 80°

Garage
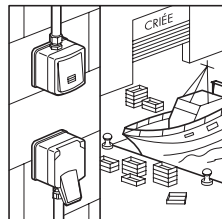

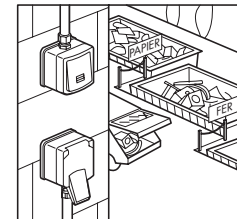
Port

2.2 SEMI-INDUSTRIAL

Wash station and
platform

Fish auctions
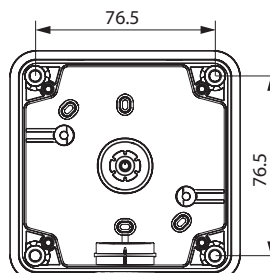Ports

Risk of impact
Warehouse - Moving around
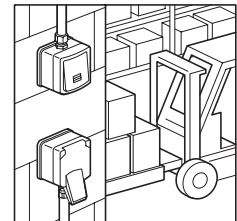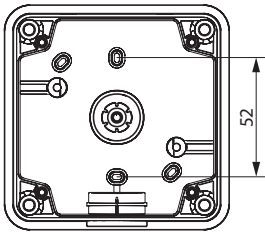

Organic waste storage site
(dump, farm)
Off-gas

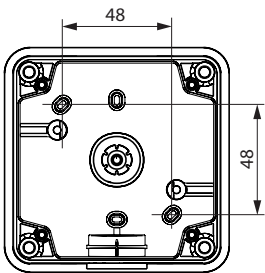
3. FITTING

3.1 FIXING
- Backbox screwed onto the support using 2 Ø 4 to 4.5 mm screws
IP 66 weatherproof fixing for all types of surface

76.5
76.5

Vertical fixing (Plexo 55 fixing centre) IP 66 IK 08

52

Diagonal fixing for all types of surface (Plexo 55 fixing centre)

48

48

4. TECHNICAL CHARACTERISTICS

4.1 Protection class
Protection against solid bodies and liquids:
  - IP 66 closed flap IK 07
  - IP 66 closed flap plug inserted
Protection against impacts: IK 08

4.2 Materials
Contacts: gold/nickel, minimum gold thickness >0.8 µm
- Metal parts: bronze, nickel, platinum, gold
- Polycarbonate, PBT, PP
For STP products, the body and the spreader are made of metal alloy with copper/nickel coating.
- Box and cover: glass fibre reinforced polypropylene in light grey T029
- Flap: ABS charcoal grey RAL 7016
- Mechanism: polycarbonate grey RAL 7016
- Terminal and cover fixing screws: stainless steel
- Seal: grey elastomer

Base and cove Plate do not contain Halogens
UV resistant
Resistant to the following products: - chlorine pH 10-11
                                       - alkaline pH 9-10
                                       - acid pH 3
Salt spray resistance: 7 days (168 hrs)

Self-extinguishing:
+ 850°C/30 s for insulating parts holding live parts in place
+ 650°C/30 s for other parts made of insulating materials

4.3 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 90w (Type 4).

4.4 Mechanical characteristics
Max. number of connections and disconnections: 5 without replacing the wire
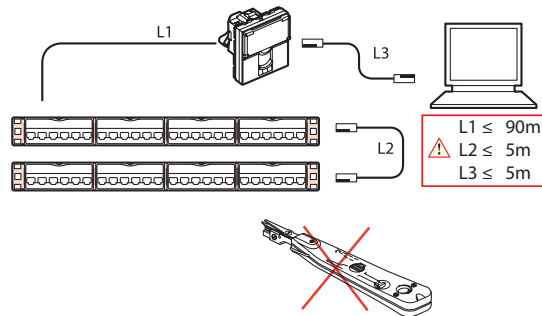Endurance: 2500 operations (mating/extraction)
IK03

4.5 Climate characteristics
Operating temperatures: -10°C to +60°C
Humid heat 21-day cycle

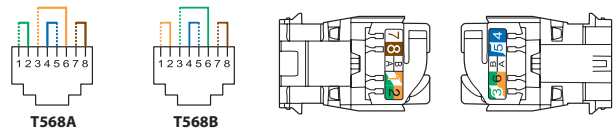## 5. INSTALLATION

L1

L3

L2

L1 ≤ 90m
⚠ L2 ≤ 5m
L3 ≤ 5m

6. TYPICAL RJ45 CONNECTION

Takes the following plugs:
RJ11 (4 contacts), RJ12 (6 contacts), RJ45 (9 contacts).
T568A and T568B dual colour code on FTP 9-contact terminals

1 2 3 4 5 6 7 8   1 2 3 4 5 6 7 8
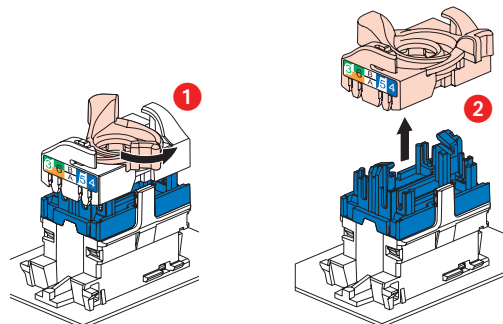
T568A   **T568B**

Permissible conductors:
- Solid/stranded: 0.4 to 0.65 mm, AWG 26 to 22
- Polyethylene conductor insulation: Ø 0.85 to 1.7 mm on insulation

Number of wires to be connected per connection: 1

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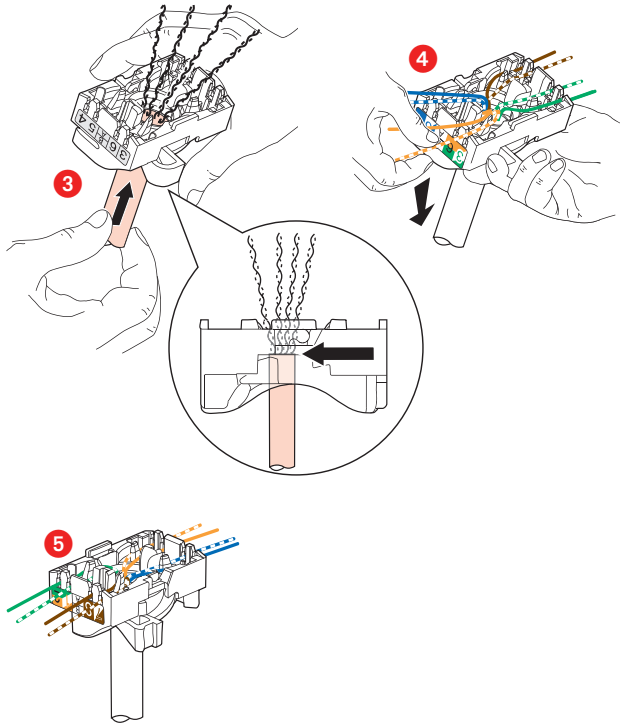
Spreading the cables allows you to ensure that a pair-breakage distance of 13 mm is kept between each pair.
Spreading pairs at 90° to the cable ensures the best possible performance.

7. ASSEMBLY

The front part (cover mechanism) is screwed onto the box using 4 coarse pitch screws (minimum tightening torque for IP 66: 0.5 Nm).
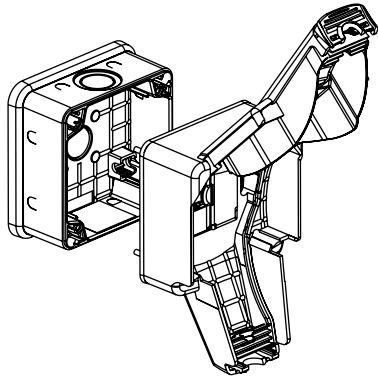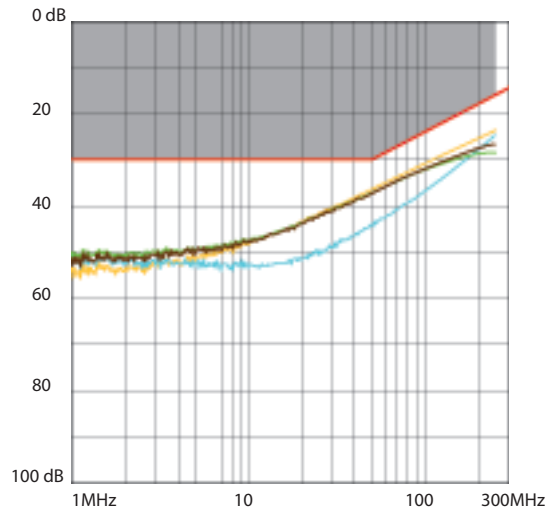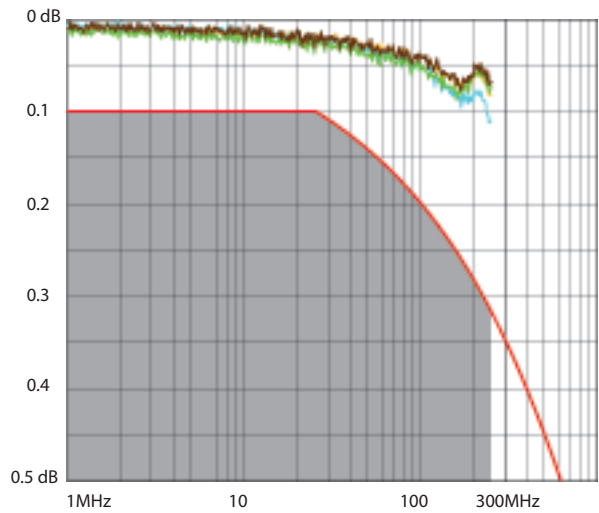

8. DIMENSIONS
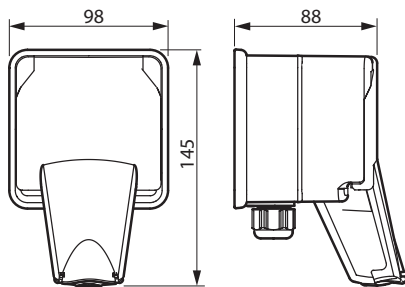
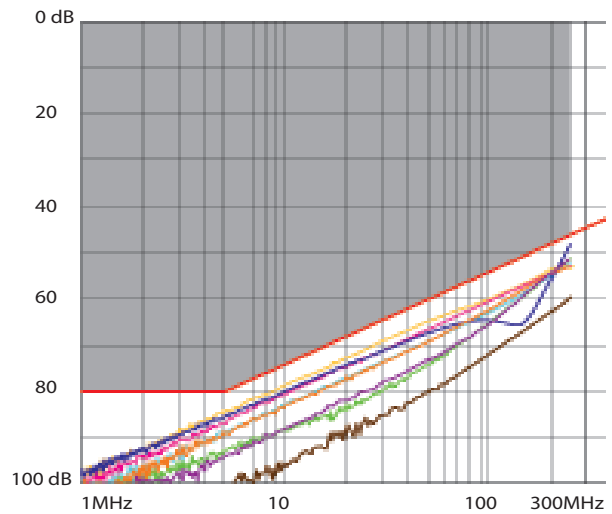## 9. PERFORMANCE

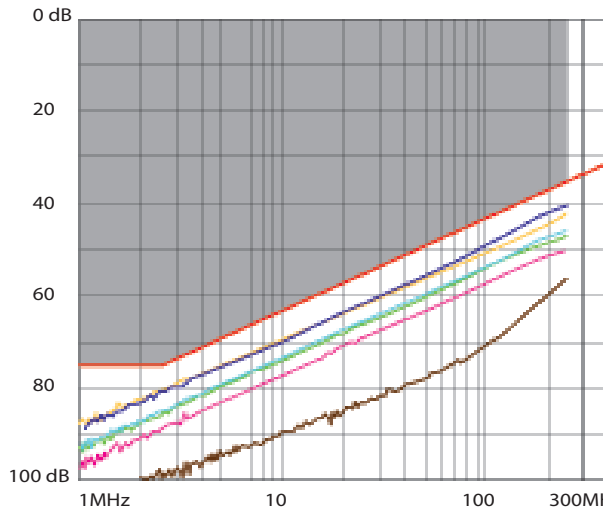**9.1** Performance of components (RJ45 connectors)
Return loss

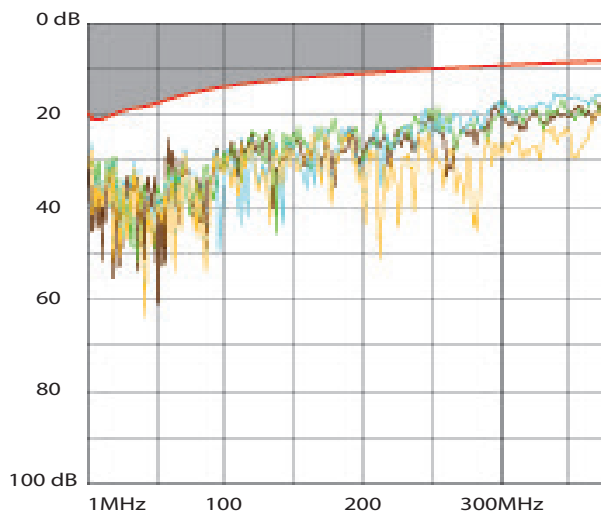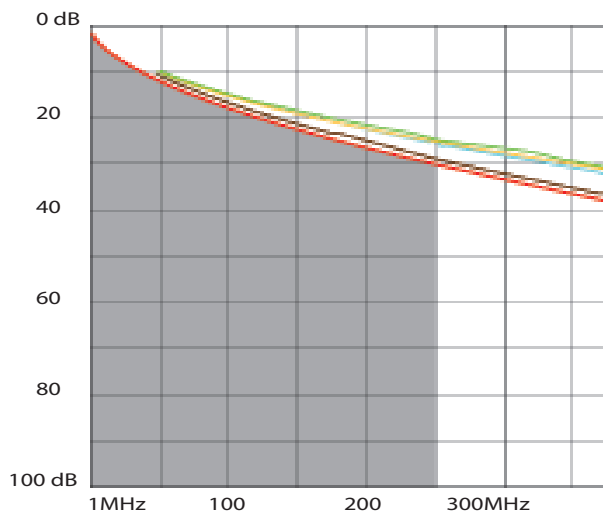Attenuation

NEXT (Near end Crosstalk Attenuation)

FEXT (Far end Crosstalk Attenuation)

NEXT (Near end Crosstalk Attenuation)

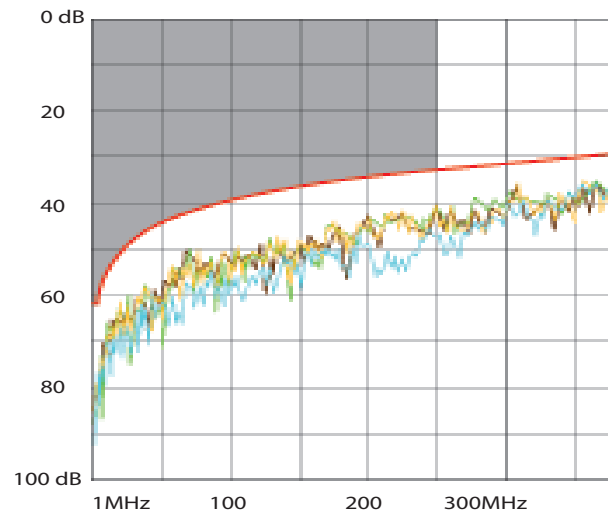**9.2** Performance of permanent link with F/UTP cable
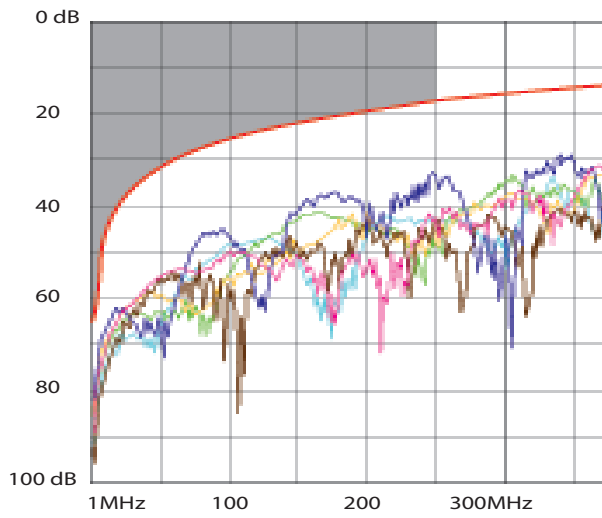Return loss
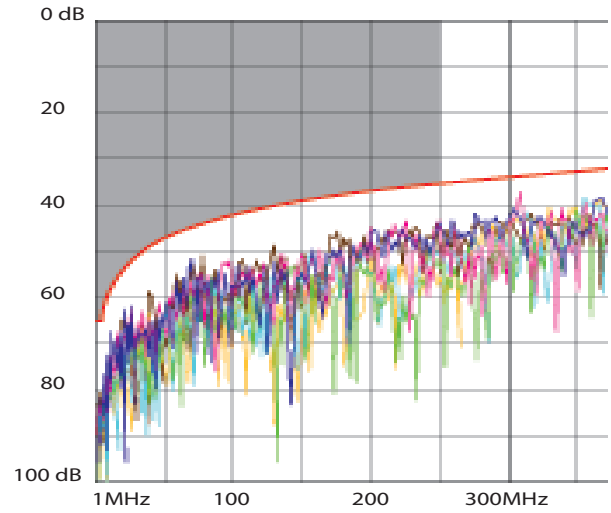
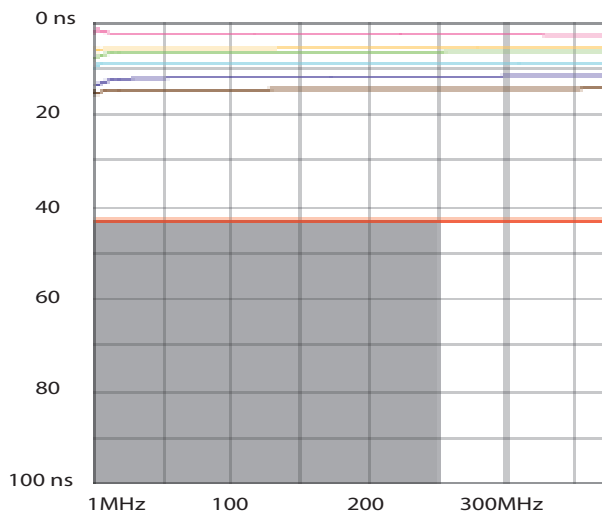PS NEXT (Power Sum NEXT)

Attenuation

ACR (Attenuation to Crosstalk Ratio)
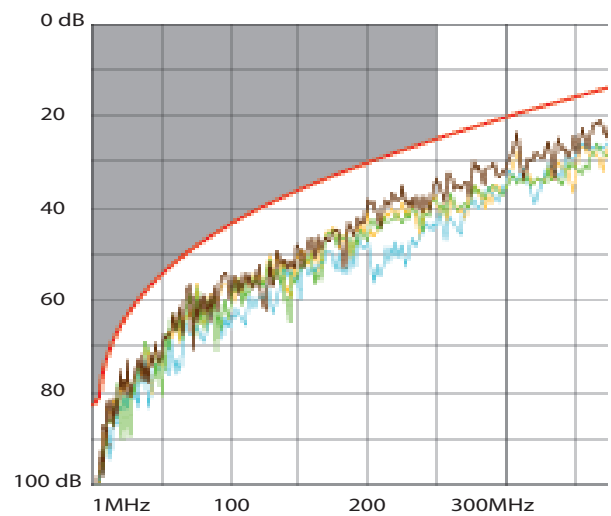
ELFEXT (Equal Level Far End Crosstalk Attenuation)

Delay skew

10. 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

IEEE 802.3af , IEEE 802.3at , IEEE 802.3bt : "Power over Ethernet", Types 1 to 4, up to 90W.