Telegärtner
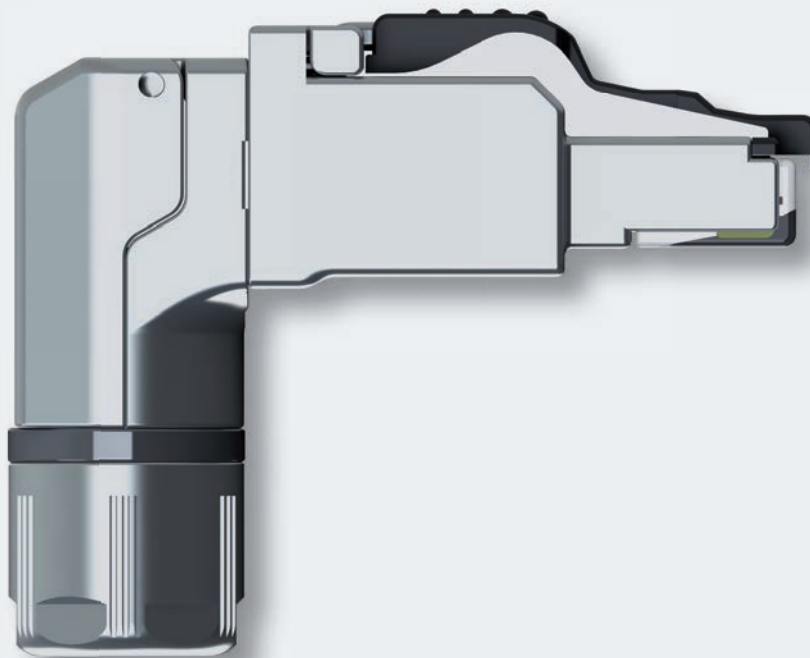KARL GÄRTNER GMBH

NETWORKING COMPONENTS

COAXIAL CONNECTORS

CABLE ASSEMBLIES

PRECISION TURNED PARTS

PLASTIC INJECTION MOULD PARTS

INDUSTRIAL ELECTRONICS

Simpler all over.
Simpler all round.

90° | Cat.6$_A$ | 10 GB Ether. | 500 MHz | fully shielded | PoE+

Data Voice
MFP8 Cat.6$_A$
Field assembly RJ45 plug

Less fuss. More flexibility.

Here's the situation: An existing network needs extending. A cable link needs to be repaired or replaced. A peripheral device needs to be connected quickly. Your customer expects a fast and reliable solution but you don't have a cable assembly ready at hand. Sound familiar?

Now you can keep cool when faced with such demands – with the field assembly MFP8 Cat.6$_A$ plug developed by Telegärtner.

The MFP8 Cat.6$_A$ is the RJ45 plug for time-saving and efficient on-site assembly for all networks, from Voice right through to 10 Gigabit Ethernet. It can be assembled on all standard types of cable in just 60 seconds – and no special tools are required.

Whether in the office, data centers, in industry or in home networks – the MFP8 Cat.6$_A$ offers unprecedented flexibility and saves time and money on installation, repairs and maintenance.

## Simpler all over: MFP8 Cat.6$_A$ applications

The field assembly MFP8 Cat.6$_A$ is the number one choice whenever efficient and reliable connections are needed without major expense or effort, whether for classic cabling systems in office buildings, data centers, in industry or for home cabling systems. Needless to say, it also supports Power over Ethernet plus (PoE+).
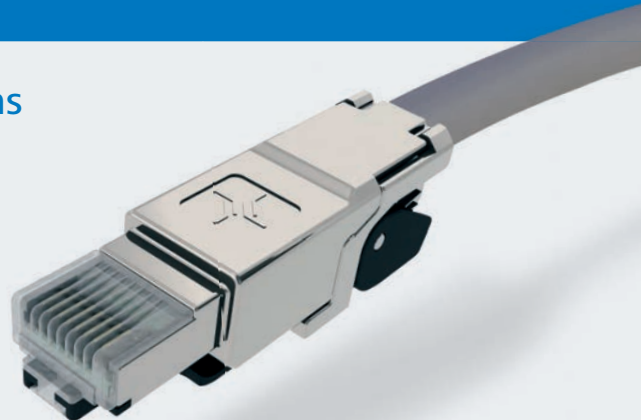
Office/premise cabling and data centers

With the MFP8 Cat.6$_A$, installers and network professionals now have access to a RJ45 plug which will enable them to respond with speed and flexibility, even at short notice, to any requirement, be it cabling for workstations, connections for equipment or backbone extensions.

Connections can be made with all standard cable types, even with transfer rates of 10 Gigabit Ethernet/s (10GBase-T), without requiring hours of preparation and the need for special tools. It is particularly cost-effective for connections in data centers where every centimeter counts. Space problems due to surplus cable are consigned to history books. Thanks to its compact design and suitability for multiport applications, the MFP8 Cat.6$_A$ can also be used where space is at an absolute premium.
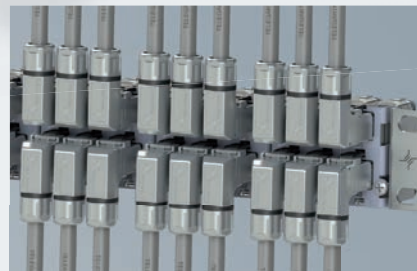
Industrial cabling (IP20)

Whether used in industrial control cabinets or distribution boxes in production, the MFP8 Cat.6$_A$ can also be relied upon in industry. 360° shielding and full metal housing guarantee secure and reliable data transmission, including with 10 Gigabit Ethernet/s and even with outside electric interference. And the use of full range of cable types with solid or stranded conductors from AWG24/1 to 22/1 and AWG27/7 to 22/7 make it an universal product fit for all purposes.
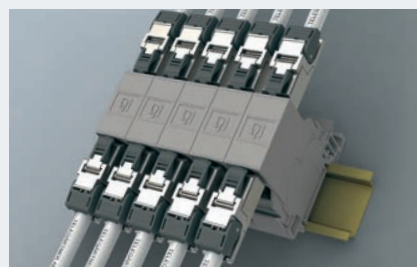
Cabling in the home

When it comes to home networks or cabling for the home-based office, adhering to a minimum footprint is normally a major requirement, and only very rarely is there an outlet just where one is needed. In order to be able to connect PC, router or printer quickly, easily and cheaply, a plug is needed which can be fitted without special tools to full range of cable types with solid or stranded wires. The MFP8 Cat.6$_A$ enables to assemble and customise cables – as and where they are needed – and to establish efficient and reliable connections without spending a great deal of time and money.

MFP8 Cat.6ₐ
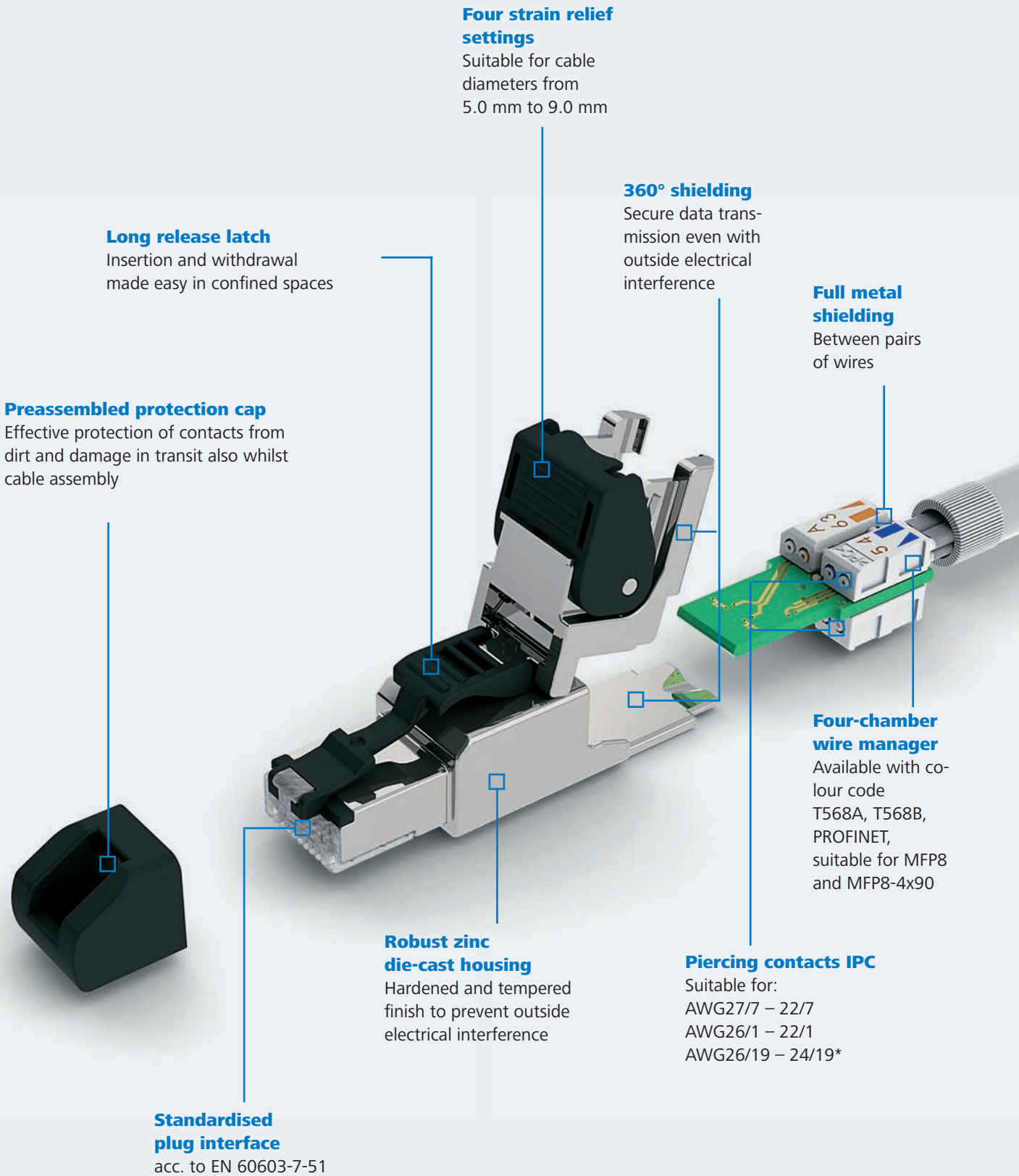
Four strain relief settings
Suitable for cable diameters from 5.0 mm to 9.0 mm

360° shielding
Secure data transmission even with outside electrical interference

Full metal shielding
Between pairs of wires

Long release latch
Insertion and withdrawal made easy in confined spaces

Preassembled protection cap
Effective protection of contacts from dirt and damage in transit also whilst cable assembly

Four-chamber wire manager
Available with colour code T568A, T568B, PROFINET, suitable for MFP8 and MFP8-4x90

Robust zinc die-cast housing
Hardened and tempered finish to prevent outside electrical interference

Piercing contacts IPC
Suitable for:
AWG27/7 – 22/7
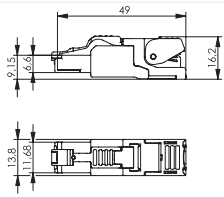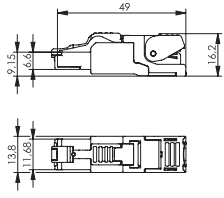AWG26/1 – 22/1
AWG26/19 – 24/19*
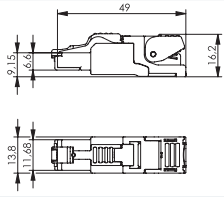
Standardised plug interface
acc. to EN 60603-7-51

Specifications MFP8 Cat.6$_A$:

- Category 6$_A$ acc.to ISO/IEC 11801
- Plug: IEC 60603-7-51 compliant
- Life: ≥ 750 mating cycles
- Contact finish material: Ni1,2Au0,8
- Shielding housing material: die-cast nickel-plated zinc
- Cu conductor diameter:
  (J00026A2000, -1, -2, -2110, -2111, -2112)
  solid 0.51 – 0.64 mm (AWG24/1 – 22/1)
  stranded 0.46 – 0.76 mm (AWG27/7 – 22/7)
  stranded 0.61 – 0.78 mm (AWG24/19 – 22/19)*
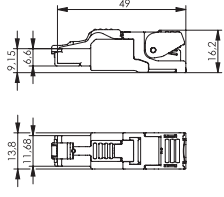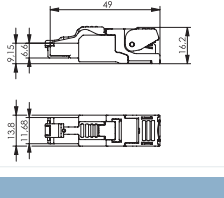 core diameter: 1.0 – 1.6 mm

- Cu conductor diameter:
  (J00026A2003, -4, -2113, -2114)
  solid 0.41 – 0.51 mm (AWG26/1 – 24/1)
  stranded 0.46 – 0.61 mm (AWG27/7 – 24/7)
  stranded 0.51 (AWG26/19)*
  core diameter: 0.85 – 1.1 mm
- Outer diameter: 5.0 – 9.0 mm
- Reusable IPC: ≤ 4 cycles
- Temperature range: -40°C to 85°C
- Power over Ethernet plus (PoE+) acc. to IEEE 802.3at
- IP20

* approval of cable by Telegärtner Karl Gärtner GmbH required

MFP8 Cat.6$_A$ for AWG24-22/1; AWG27-22/7; AWG24-22/19*		Order no.	Description	PU
		J00026A2000	MFP8 T568A Cat.6$_A$ incl. pre-assembled dust protection cap AWG24/1-22/1, AWG27/7-22/7	1 / 10 in carton
		J00026A2001	MFP8 T568B Cat.6$_A$ incl. pre-assembled dust protection cap AWG24/1-22/1, AWG27/7-22/7	1 / 10 in carton
		J00026A2110	MFP8 T568A Cat.6$_A$ incl. pre-assembled dust protection cap, blister package AWG24/1-22/1, AWG27/7-22/7	10
		J00026A2111	MFP8 T568B Cat.6$_A$ incl. pre-assembled dust protection cap, blister package AWG24/1-22/1, AWG27/7-22/7	10
MFP8 Cat.6$_A$ for AWG26-24/1; AWG27-24/7; AWG26/19*		Order no.	Description	PU
		J00026A2004	MFP8 T568A Cat.6$_A$ incl. pre-assembled dust protection cap, AWG26/1-24/1, AWG27/7-24/7	1 / 10 in carton
		J00026A2003	MFP8 T568B Cat.6$_A$ incl. pre-assembled dust protection cap, AWG26/1-24/1, AWG27/7-24/7	1 / 10 in carton
		J00026A2114	MFP8 T568A Cat.6$_A$ incl. pre-assembled dust protection cap, blister package AWG26/1 - 24/1, AWG27/7-24/7	10
		J00026A2113	MFP8 T568B Cat.6$_A$ incl. pre-assembled dust protection cap, blister package AWG26/1-24/1, AWG27/7-24/7	10
MFP8 for PROFINET AWG24-22/1; AWG27-22/7 AWG24-22/19*		Order no.	Description	PU
		J00026A2002	MFP8 PROFINET incl. pre-assembled dust protection cap	1 / 10 in carton
		J00026A2112	MFP8 PROFINET incl. pre-assembled dust protection cap, blister package	10
MFP8 Wire Manager		Order no.	Description	PU
		F00020A2130	MFP8 wire manager T568A AWG24/1-AWG22/1, AWG27/7-AWG22/7	30
		F00020A2131	MFP8 wire manager T568B AWG24/1-AWG22/1, AWG27/7-AWG22/7	30
		F00020A2132	MFP8 wire manager PROFINET AWG24/1-AWG22/1, AWG27/7-AWG22/7	30
		F00020A2134	MFP8 wire manager T568A AWG26/1-AWG24/1, AWG27/7-AWG24/7	30
		F00020A2133	MFP8 wire manager T568B AWG26/1-AWG24/1, AWG27/7-AWG24/7	30

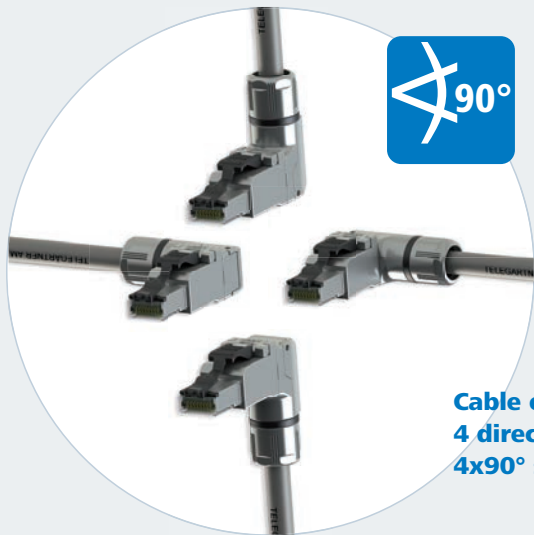* approval of cable by Telegärtner Karl Gärtner GmbH required

Specifications MFP8-4x90 Cat.6$_A$:

- Cable entry from 4 directions (4x90°)
- Category 6$_A$ acc. to ISO/IEC 11801
- Plug: IEC 60603-7-51 compliant
- Life: ≥ 750 cycles
- Contact finish material: Ni1,2Au0,8
- Shielding housing material: die-cast nickel-plated zinc
- Cu conductor diameter:
  (J00026A4000, -1, -2, -4110, -4111, -4112)
  solid 0.51 – 0.64 mm (AWG24/1 – 22/1)
  stranded 0.46 – 0.76 mm (AWG27/7 – 22/7)
  stranded 0.61 – 0.78 mm (AWG24/19 – 22/19)*
  core diameter: 1.0 – 1.6 mm

- Cu conductor diameter:
  (J00026A4003, -4, -4113, -4114)
  solid 0.41 – 0.51 mm (AWG26/1 – 24/1)
  stranded 0.46 – 0.61 mm (AWG27/7 – 24/7)
  stranded 0.51 (AWG26/19)*
  core diameter: 0.85 – 1.1 mm
- Outer diameter: 6.0 – 10.0 mm
- Reusable IDC: ≤ 4 cycles
- Temperature range: -40°C to 85°C
- Power over Ethernet plus (PoE+) acc. to IEEE 802.3at
- IP20
- Cable strain relief: AF13

MFP8-4x90 Cat.6$_A$ for AWG24-22/1; AWG27-22/7; AWG24-22/19*	Order no.	Description	PU
	J00026A4000	MFP8-4x90 T568A Cat.6$_A$ incl. pre-assembled dust protection cap AWG24/1-22/1, AWG27/7-22/7	1 / 10 in carton
	J00026A4001	MFP8-4x90 T568B Cat.6$_A$ incl. pre-assembled dust protection cap AWG24/1-22/1, AWG27/7-22/7	1 / 10 in carton
	J00026A4110	MFP8-4x90 T568A Cat.6$_A$, incl. pre-assembled dust protection cap, blister p. AWG24/1-22/1, AWG27/7-22/7	10
	J00026A4111	MFP8-4x90 T568B Cat.6$_A$ incl. pre-assembled dust protection cap, blister p. AWG24/1-22/1, AWG27/7-22/7	10

MFP8-4x90 Cat.6$_A$ for AWG26-24/1; AWG27-24/7; AWG26/19*	Order no.	Description	PU
	J00026A4004	MFP8-4x90 T568A Cat.6$_A$ incl. pre-assembled dust protection cap AWG26/1-24/1, AWG27/7-24/7	1 / 10 in carton
	J00026A4003	MFP8-4x90 T568B Cat.6$_A$ incl. pre-assembled dust protection cap AWG26/1-24/1, AWG27/7-24/7	1 / 10 in carton
	J00026A4114	MFP8-4x90 T568A Cat.6$_A$ incl. pre-assembled dust protection cap, blister p. AWG26/1-24/1, AWG27/7-24/7	10
	J00026A4113	MFP8-4x90 T568B Cat.6$_A$ incl. pre-assembled dust protection cap, blister p. AWG26/1-24/1, AWG27/7-24/7	10

MFP8-4x90 for PROFINET AWG24-22/1; AWG27-22/7 AWG24-22/19*	Order no.	Description	PU
	J00026A4002	MFP8-4x90 PROFINET incl. pre-assembled dust protection cap	1 / 10 in carton
	J00026A4112	MFP8-4x90 PROFINET incl. pre-assembled dust protection cap blister package	10

MFP8 Wire Manager	Order no.	Description	PU
	F00020A2130	MFP8 wire manager T568A AWG24/1-AWG22/1, AWG27/7-AWG22/7	30
	F00020A2131	MFP8 wire manager T568B AWG24/1-AWG22/1, AWG27/7-AWG22/7	30
	F00020A2132	MFP8 wire manager PROFINET AWG24/1-AWG22/1, AWG27/7-AWG22/7	30
	F00020A2134	MFP8 wire manager T568A AWG26/1-AWG24/1, AWG27/7-AWG24/7	30
	F00020A2133	MFP8 wire manager T568B AWG26/1-AWG24/1, AWG27/7-AWG24/7	30

* approval of cable by Telegärtner Karl Gärtner GmbH required

MFP8-4x90 Cat.6A

90°

360° shielding
Secure data transmission even with outside electrical interference

Cable entry from 4 directions in 4x90° steps

Four-chamber wire manager
Available with colour code T568A, T568B, PROFINET suitable for MFP8 and MFP8-4x90

Long release latch
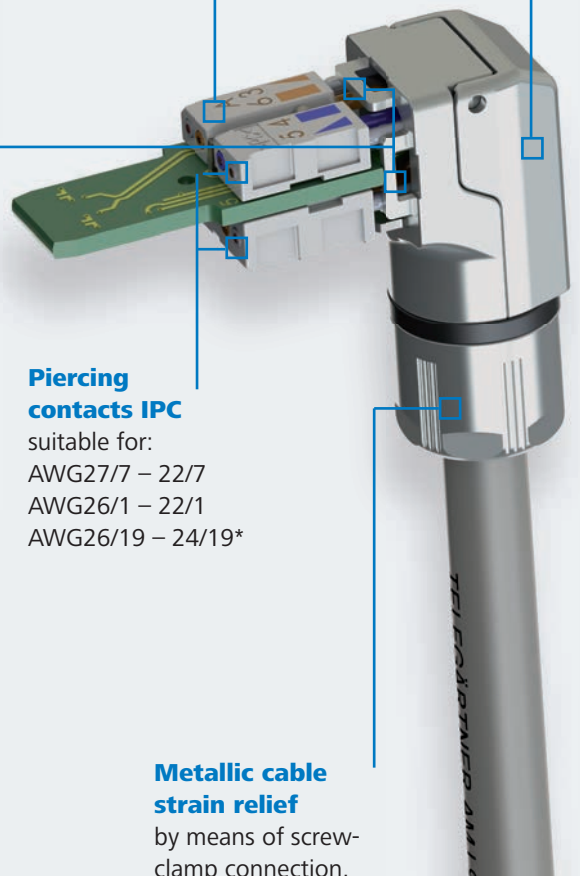Insertion and withdrawal made easy in confined spaces

Piercing contacts IPC
suitable for:
AWG27/7 – 22/7
AWG26/1 – 22/1
AWG26/19 – 24/19*

Standardised plug interface
acc. to EN 60603-7-51

Robust zinc die-cast housing
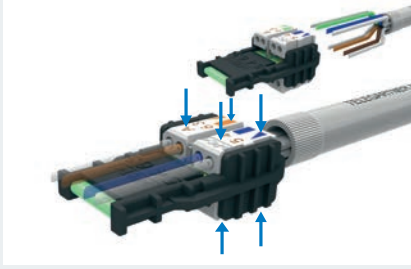Hardened and tempered finish to prevent outside electrical interference

Metallic cable strain relief
by means of screw-clamp connection. Suitable for cable Ø 6.0 - 10.0 mm

Pre-assembled protection cap
Effective protection of contacts from dirt and damage in transit also whilst cable assembly

Assembly of MFP8 Cat.6$_A$

Step 1:
Connect cable

Remove cable jacket, fold braid shield backwards and prepare wires by untwisting pairs and inserting them in the wire manager. Integrated assembling aid protects the board and facilitates this process. The print is highly visible and is available in colour code T568A, T568B or PROFINET. Press wire manager together with a plier and cut off excess wires.
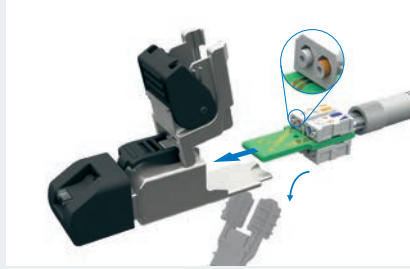

Step 2:
Insert in plug housing

Remove assembly aid and insert wire manager with wires connected in plug housing. The wire manager is designed so that it can only be inserted in the housing right way up.
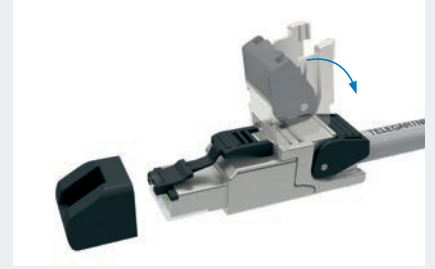

Step 3:
Close plug

The cable relief is hinged to ensure 360° shielding and effective strain relief on the cable. The snap-in mechanism can be adjusted to tailor the amount of grip to cable diameter in any given case. And the cap protects plug contacts from dust and dirt.

Assembly of MFP8-4x90 Cat.6$_A$
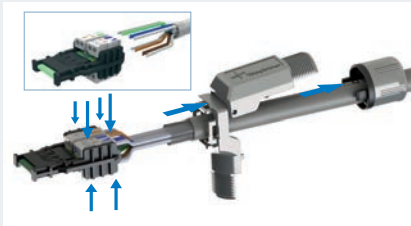
Step 1:
Cable outlet on cable
& bonding of cable

Slide cable strain relief and cable outlet on cable. Remove cable jacket, fold braid shield backwards, presort pairs and remove pair screen, untwist and insert pairs into wire manager. Press together wire manager with plier-wrench or parallel press tool and cut off excess wires.
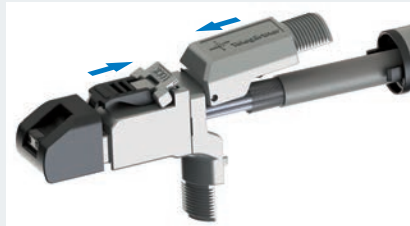
Step 2:
Insertion into plug body
and location of cable outlet

Remove assembly aid and insert wire manager into plug body. The wire manager is mechanically coded therefore it can only be inserted into plug housing with right orientation. The cable outlet can be hooked in with 4 x 90° steps.

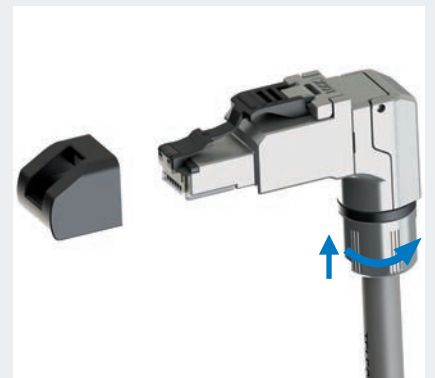### Step 3:
Locking

Press down locking lever until it locks.

Cable outlet can be hooked in
with 4 different positions!

Step 4:
Locate cable on adaptor & close lid

Bring cable into favored cable entry direction and lay braid shield in shield contact area. Clap down lid.

Step 5:
Screw together cable strain relief

Connect lid and cable outlet with nut AF13. Cable strain relief is suitable for cable diameters of 6.0-10.0 mm.

Other Telegärtner products for industrial premises and machinery cabling

Industrial Ethernet connector STX

Whether it involves factory, machinery or facility cabling: With the industrial connectors of Variant 1, Variant 4, Variant 5 and Variant 14 from the STX platform and industrial connectors of Variant 6 Telegärtner offers you top class standard compliant Industrial Ethernet solutions.

The STX platform concept for industrial connectors enables the use of inserts with identic dimensions in different housings. There is nothing easier and at the same time more reliable for modern, future proof 10 Gbit networks for industrial premises.

More information and a detailed list of products can be found at

www.telegaertner.com/stx

DataVoice Industry catalogue

All Telegärtner network components for the industrial sector can be found in our DataVoice Industry catalogue. Download or order at

www.telegaertner.com

Online catalogue

All products with technical data sheets and installation instructions can be downloaded free as pdfs in our online catalogue at

www.telegaertner.com