

BEST CONTACTS FOR YOUR SUCCESS



Telegärtner

KARL GÄRTNER GMBH

NETWORKING COMPONENTS

COAXIAL CONNECTORS

CABLE ASSEMBLIES

PRECISION TURNED PARTS

PLASTIC INJECTION MOULD PARTS

INDUSTRIAL ELECTRONICS

**Inside TOP.
Outside TOC.**



DataVoice

TOC - Series RJ45 and F0

Telecommunications Outdoor Connectors IP68

A new dimension in outdoor cabling components

TOC stands for Telecommunications Outdoor Connectors and offers cabling professionals the reliability and flexibility they need for toughest applications.

The handy, easy to install TOC connectors are used for data- and telecommunications in mobile radio, process-, utility- and traffic automation, or security applications but also in the harsh environment of machine and plant engineering. The TOC series is available in nickel-plated brass for RJ45 Cat.6A and FO LC Duplex and MPO/MTP®

connectors. Compliance with the specifications of protection class IP68 and due to its excellent material properties, the TOC series can be installed even in harsh conditions within a temperature range from -40° C to 85° C*. To lock, relief of strain and seal the connection, one turning movement is necessary and no further procedures are required. Customers benefit: fast, error free and easy installation, high transmission reliability and resilience and more flexibility in the network design.

TOC Series RJ45

The TOC series RJ45 coming with the field-assembly RJ45 plug MFP8 Cat.6A and RJ45 keystone AMJ-S Module Cat.6A is available as a set. They can be attached to solid and stranded conductor cables with cable outer diameter max. 9.5 mm on site without the need for special tools. For line extensions, the TOC Coupler IP68 is your first choice. It can be easily integrated with no negative effects on performance of the connection.

Performance Characteristics TOC Series RJ45

- suitable for 10 Gigabit Ethernet acc. to IEEE 802.3an
- suitable for PoE+ acc. to IEEE 802.3at
- 360° shielding
- temperature range: -40° C to +85° C*
- protection class IP68 acc. to IEC 60529
- protection cap with protection class IP68

TOC bulkhead set IP68 / TOC bulkhead outlet IP68

- RJ45 AMJ-S Module Cat.6A acc. to IEC 60603-7-51 (500 MHz)
- Cu-conductor:
 - solid: 0.41-0.64 mm (AWG26/1 – AWG22/1)
 - stranded: 0.46-0.76 mm (AWG27/7 – AWG22/7)
- insulation diameter: 0.9-1.6 mm
- RJ45 AMJ-S Module Cat.6A UL listet (E244889)

TOC plug set IP68 MFP8 T568B Cat.6A

- RJ45 plug MFP8 Cat.6A acc. to IEC 60603-7-51 (500 MHz)
- RJ45 plug MFP8 Cat.6A UL listed (E244889)
- Cu-conductor:
 - solid: 0.51-0.64 mm (AWG24/1 – AWG22/1)
 - stranded: 0.46-0.76 mm (AWG27/7 – AWG22/7)
- insulation diameter: 1.0-1.6 mm
- cable outer diameter: 4.0 - 9.5 mm

TOC coupler IP68 AMJ Coupler K

- RJ45 AMJ Coupler K acc. to IEC 60603-7-5 (500 MHz)
- RJ45 jack to RJ45 jack
- suitable for TOC plug set RJ45 IP68
- mounting on DIN rail TH35 by means of adaptors (H06000A0056)

TOC Series LC Duplex / MPO/MTP®

The TOC Series with LC Duplex resp. MPO/MTP® captivates due to its flexibility and ease of installation. Customer can work with pre-terminated cables feed into TOC plug.

By means of the elongated release latch the plugs can be mated & unmated into SFP transceivers or adaptors effortlessly even in confined installation environments. In addition, the several installation positions of SFP transceivers no longer form a problem. For line extensions, the TOC Coupler IP68 is your first choice. It can be easily integrated with no effective effects on performance of the connection.

Performance Characteristics TOC Series LC Duplex

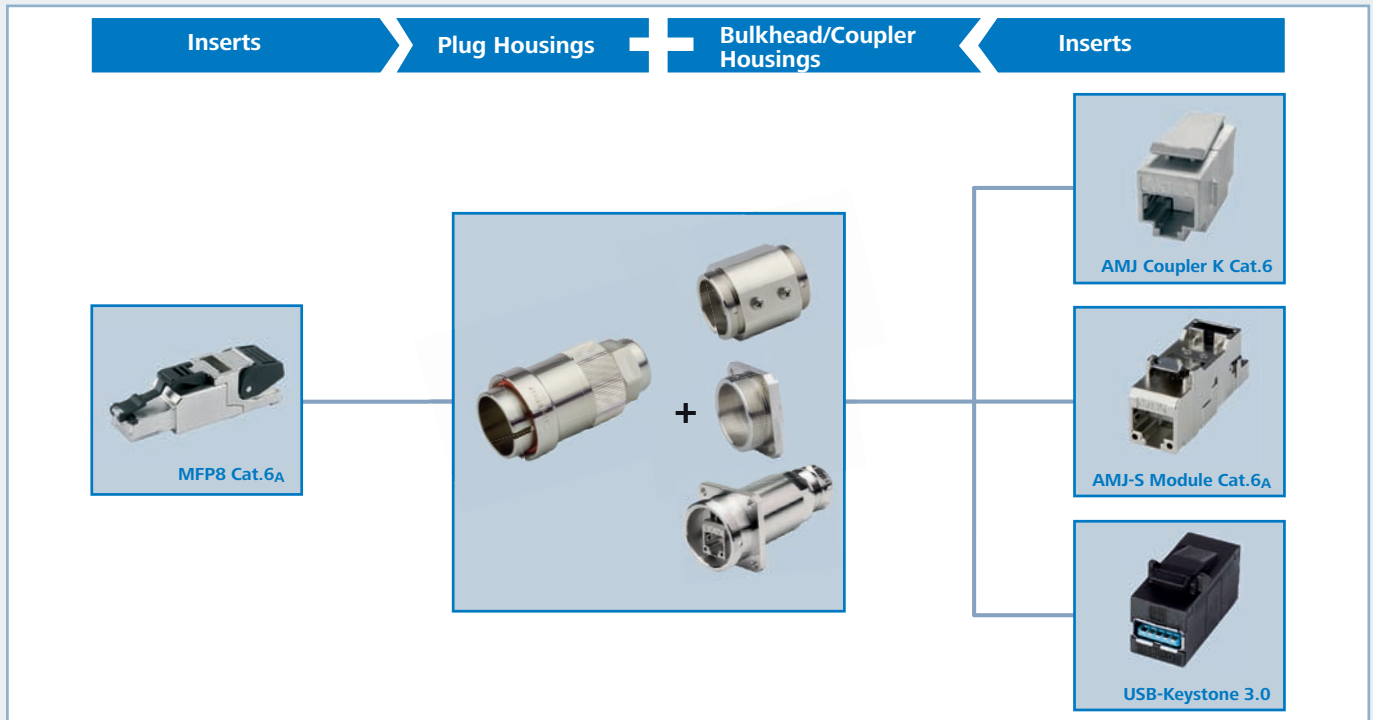
- plug & adaptor acc. to IEC 61754-20 (circonia ceramics)
- Multimode (PC) & Singlemode (APC) types
- Insertion Loss:
 - plug: Multimode max. 0.4 dB, Singlemode APC max. 0.5 dB
 - adaptor: Multimode max. 0.2 dB, Singlemode APC max. 0.5 dB
- Return Loss:
 - plug: Multimode min. 30 dB, Singlemode APC min. 60 dB
- temperature range: -40° C to +85° C*
- plug set LC Duplex: single cable diameter: 2.0 mm
- cable outer diameter: 4.0-9.5 mm
- protection class IP68 acc. to IEC 60529
- protection cap with protection class IP68

Performance Characteristics TOC Series MPO/MTP®

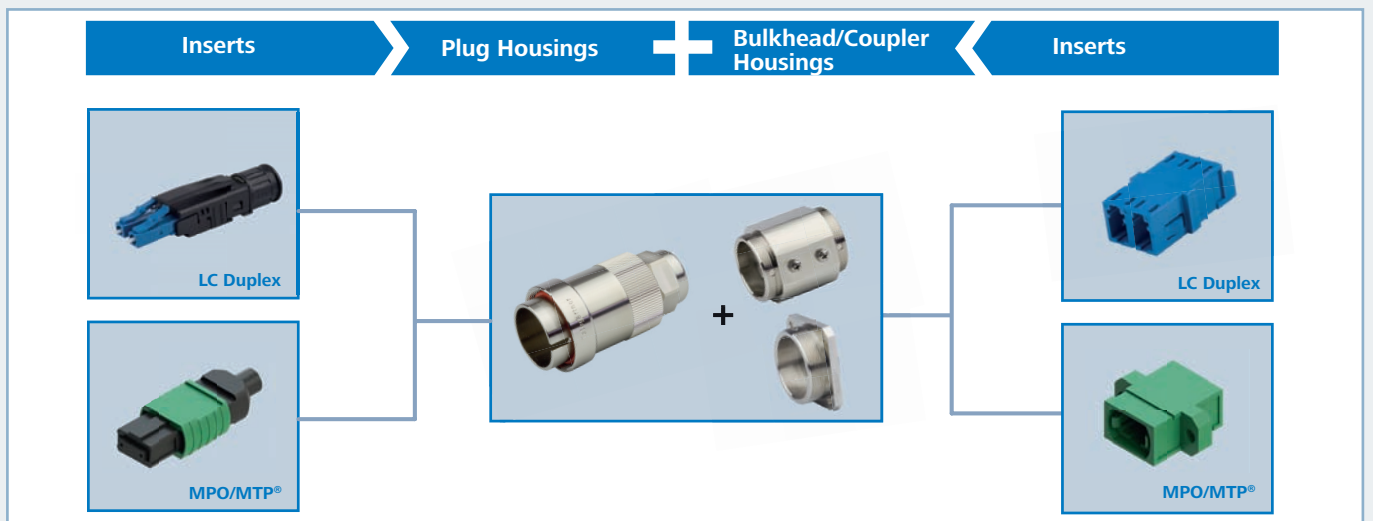
- plug & adaptor acc. to IEC 61755-3-1
- Multimode (PC) & Singlemode (APC) types
- Insertion Loss:
 - plug: Multimode max. 0.5 dB (typ. 0.2)
 - Singlemode APC max. 0.7 dB (typ. 0.25)
- Return Loss:
 - plug: Multimode min. 30 dB, Singlemode APC min. 60 dB
- temperature range: -40° C to +85° C*
- plug set MPO/MTP®: single cable diameter: 3.0 mm
- cable outer diameter: 4.0 - 9.5 mm
- protection class IP68 acc. to IEC 60529
- protection cap with protection class IP68

*Operating temperature depending on choice of cable and wire/fiber design

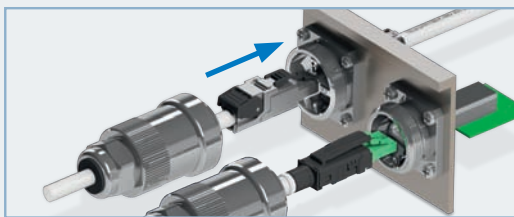
Overview TOC Series RJ45



Overview TOC Series FO

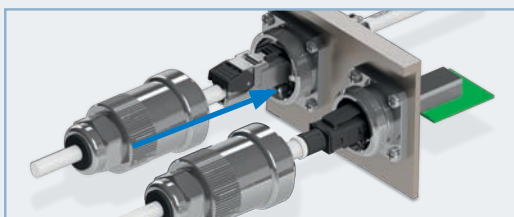


Assembly Steps



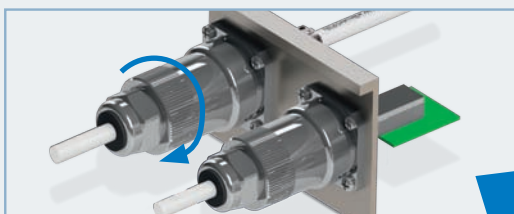
Step 1:
Slide plug into bulkhead

Slide plug into bulkhead insert regardless of the connector alignment.



Step 2:
Push housing over plug insert

Push the plug housing over the plug insert.



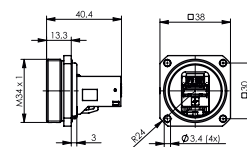
Step 3:
Lock - Seal - Relief of strain

Screw the plug to the bulkhead - interface is locked, sealed and relieved of strain by one turning movement.

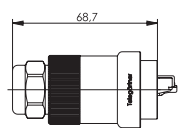
TOC FLEX
LOCK, SEAL AND RELIEF OF STRAIN
BY ONE TURNING MOVEMENT

TOC Series RJ45

Order No.	Short name	Description
J60020A0000	TOC bulkhead set IP68	AMJ-S Module T568B Cat.6 _A
J60020A0002	TOC bulkhead set IP68	AMJ Coupler K Cat.6 Class E _A
J60020A0004	TOC bulkhead set IP68	USB-Keystone 3.0 (f-f) Type A
J60026A0000	TOC plug set IP68	MFP8 T568B Cat.6 _A AWG22-27
J60029A0000	TOC coupler IP68	AMJ Coupler K Cat.6 Class E _A
J60023A0000	TOC bulkhead outlet IP68	AMJ-S Module T568B Cat.6 _A
H06000A0074	TOC bracket	gauge 38 mm and TH35



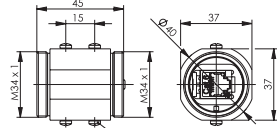
TOC bulkhead set USB-Keystone



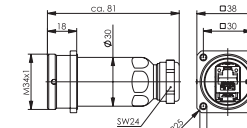
TOC plug set



TOC coupler



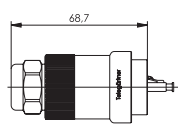
TOC bulkhead set AMJ-S Module



TOC bulkhead outlet

TOC Series LC Duplex

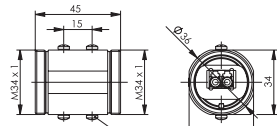
Order No.	Short name	Description
J68071A0000	TOC bulkhead set IP68	LC Duplex adaptor multimode
J68071A0001	TOC bulkhead set IP68	LC Duplex adaptor APC singlemode
J68070A0000	TOC plug set IP68	LC Duplex multimode
J68070A0001	TOC plug set IP68	LC Duplex /APC singlemode
J68071A0004	TOC coupler IP68	LC Duplex adaptor singlemode / multimode



TOC plug set



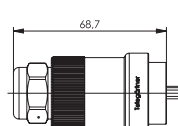
TOC coupler



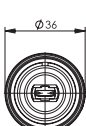
TOC bulkhead set

TOC Series MPO/MTP®

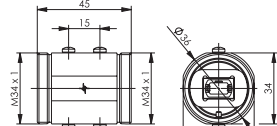
Order No.	Short name	Description
J68071A0006	TOC bulkhead set IP68	MPO/MTP® adaptor singlemode
J68070A0004	TOC plug set IP68	MPO/MTP® male, multimode
J68070A0005	TOC plug set IP68	MPO/MTP® male, APC singlemode
J68070A0006	TOC plug set IP68	MPO/MTP® female, multimode
J68070A0007	TOC plug set IP68	MPO/MTP® female, APC singlemode
J68071A0007	TOC coupler IP68	MPO/MTP® adaptor singlemode / multimode



TOC plug set



TOC coupler



TOC bulkhead set

Order No.	Short name	Description
H60030A0000	TOC bulkhead protection cap IP68	nickel-plated brass, with chain
H60030A0001	TOC plug protection cap IP68	nickel-plated brass, with chain

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