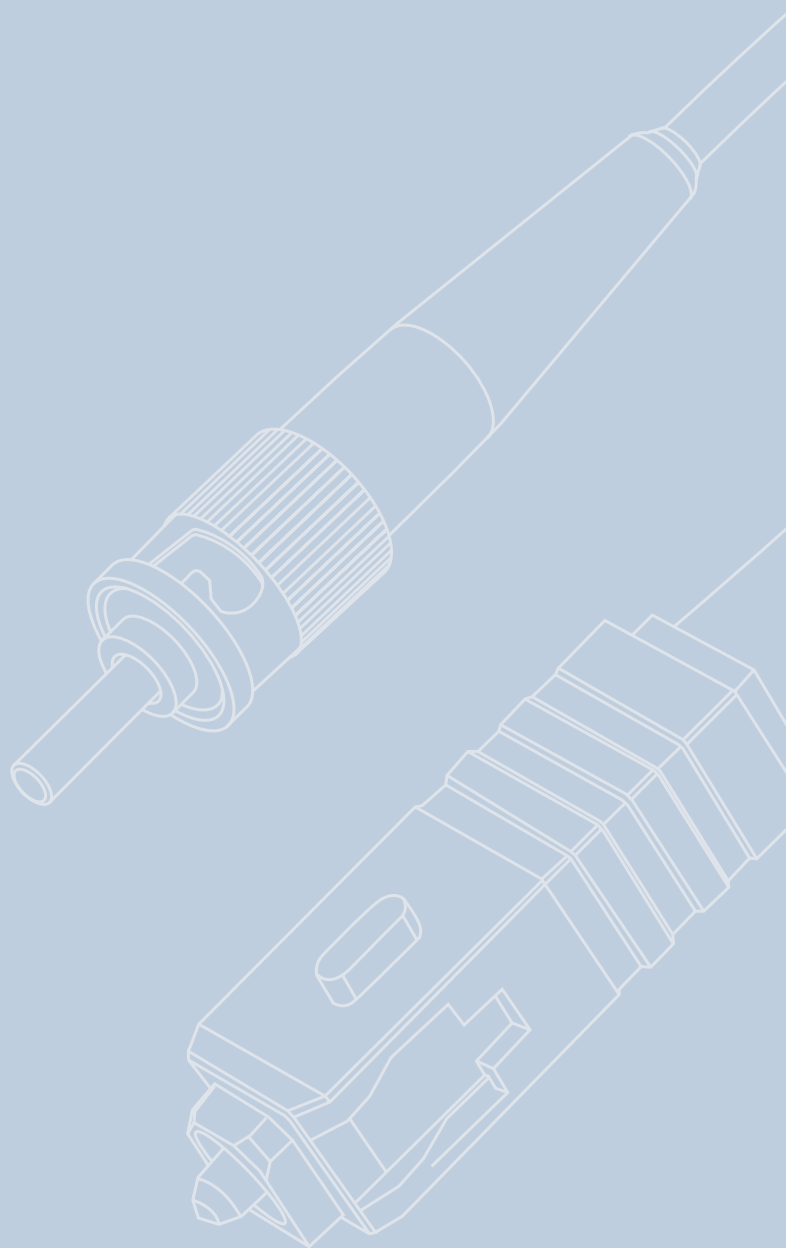
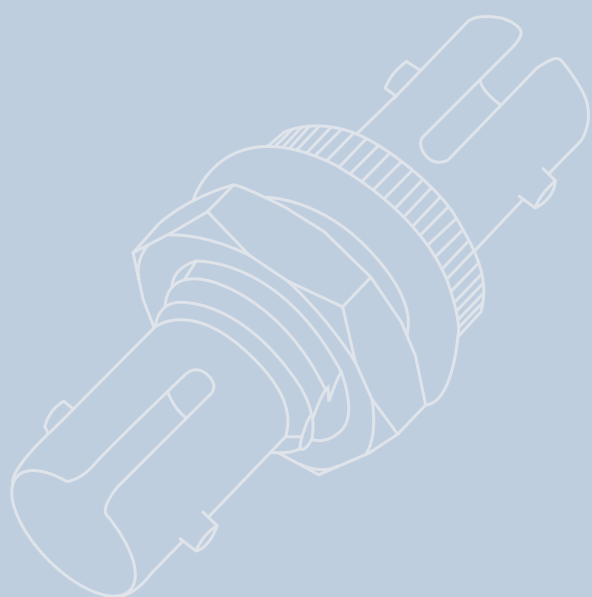
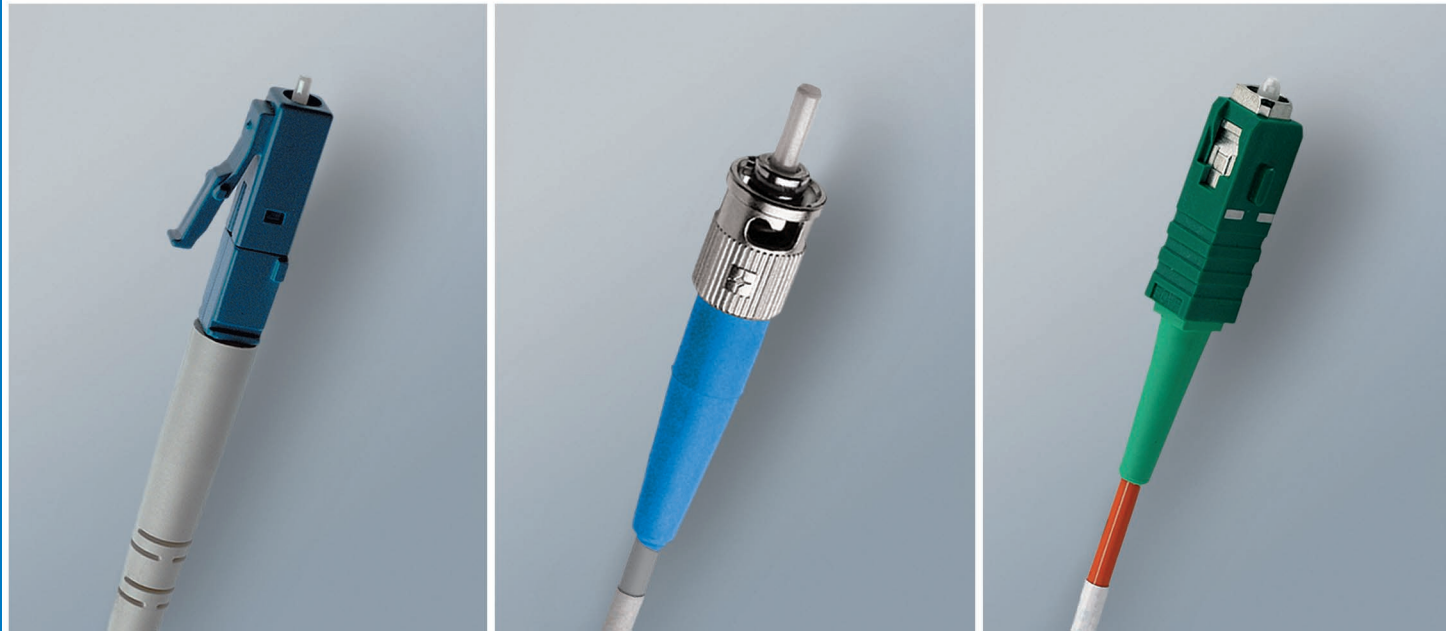


Light Duty FO Connectors





3

Light Duty FO Connectors

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Light Duty FO Connectors

3

Telegärtner FO connectors are equipped with ceramic ferrules and split sleeves which are essential for precision and endurance; termination to cables or fibres may be carried out using common tools and accessories. The preformed convex front end of the connector ferrule provides extremely short polishing duration and exceptional optical performance. All FO connectors comply with the current international standards.

The T-ST3 type provides an internal strain relief, which avoids signal interruption when pulling the cable (N.O.D.). For Plastic Fibres (POF) with 1 mm fibre diameter an economical metal connector is available providing extremely quick assembly using simple accessories without adhesive. The current requirements to achieve in FO applications

the same port density as with RJ45 connectors have led to newly developed FO connector systems named SFF (=Small Form Factor). Telegärtner offers the connector types MT-RJ and LC within this system. The space requirements in panels or outlets are only half of those required by common connector types such as ST or SC.

Telegärtner offers a complete range of components within this system: FO connectors, jacks for outlets prepared for direct field termination of fibres, adaptors, patch cables, adaptor cables, outlets with guaranteed bending radii and suitable for standard switching programs, patch panels with and without telescope operation as well as wall boxes in different sizes.

	ST	SC	LC
Compliance	IEC 61754-2	IEC 61754-4	IEC 61754-20
Type of Fibre	SM* (E9/125) MM** (G50/125, G62,5/125) POF (S980/1000)	SM* (E9/125) MM** (G50/125, G62,5/125) POF (S980/1000)	SM* (E9/125) MM** (G50/125, G62,5/125)
Insertion loss	SM*: max. 0,5 dB MM**: max. 0,4 dB POF: typ. 1,5 dB	SM*: max. 0,5 dB MM**: max. 0,4 dB POF: typ. 1,5 dB	SM*: max. 0,5 dB MM**: max. 0,4 dB
Durability	min. 1000 (POF: min. 500)	min. 1000 (POF: min. 500)	min. 1000
Plug ferrule	Zirconia ceramics or phosphorous bronze	Zirconia ceramics or phosphorous bronze	Zirconia ceramics
Adaptor split sleeve	SM*: ceramic MM**: ceramic or phosphorous bronze	SM*: ceramic MM**: ceramic or phosphorous bronze	SM*: ceramic MM**: phosphorous bronze
Adaptor housing	metal	plastic or metal	plastic
Locking	Bayonet	push/pull	snap-in
Anti-twist device	yes	yes	yes
POF	yes	yes	no

*SM = Singlemode
**MM = Multimode

3

Light Duty FO Connectors

3.1

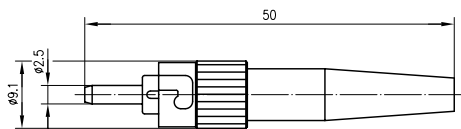
T-ST Connectors

Technical Data

	T-ST and T-ST3 Connectors	T-ST Connectors
Mechanical Characteristics		
Type	BFOC/2,5 acc. IEC 61754-2	BFOC/2,5 similar IEC 61754-2
Durability (mating cycles)	≥1000	≥500
Hex crimp size for strain relief	4.52 x 10 mm	4.52 x 10 mm (3.25 for cable Ø 2.2)
Strain relief	≥100 N	≥100 N (Ø 3.6); ≥60 N (Ø 2.2)
Material: Connector ferrule	Zirkonia ceramic	brass, nickel-plated
Material: Adaptor split sleeve	Zirkonia ceramic or phosphor bronze	
Material: Connector body (T-ST3, T-ST for POF), fixing parts for adaptor	brass, nickel-plated	brass, nickel-plated
Material: Bayonet coupling nut, connector body (T-ST), adaptor housing	zinc diecast, nickel-plated	zinc diecast, nickel-plated
Material: Crimp sleeve	copper, nickel-plated	copper, nickel-plated
Material: Cable boot, dust caps	elastomer, flame retardant, non halogen	elastomer, flame retardant, non halogen
Climatic Characteristics		
Operating temperature	-20°...80° C	-20°...80° C
Storage temperature	-40°...90° C	-40°...90° C
Optical Characteristics		
Insertion loss: Plug (factory assembly)	Multimode: max. 0.4 dB ¹ ; Singlemode: max. 0.5 dB ²	
Insertion loss: Adaptor (ceramic)	Multimode/Singlemode: max. 0.2 dB ³	
Insertion loss: Adaptor (phosphorous bronze)	Multimode: max. 0.2dB ³	
Return loss	Multimode: min. 30 dB ⁴ ; Singlemode: min. 40 dB ⁴	
Insertion loss with fibre 980/1000 µm		typ. 1.5 dB

- 1) Measurement procedure acc. to IEC 61300-3-4 (CECC 86000), method B, at 1310 nm
- 2) Measurement procedure acc. to IEC 61300-3-6 (CECC 8600), method 1, at 1300 nm
- 3) Measurement procedure acc. to IEC 61300-3-4, method B, at 1300 nm
- 4) Measurement procedure acc. to IEC 61300-3-6, method 1

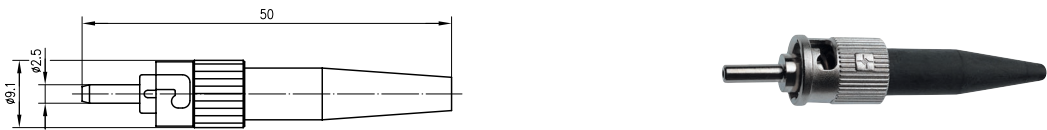
3.1.1 T-ST Plugs



Order no.	Description	Fibre type	Remarks
J08010A0008	T-ST Connector Singlemode, ceramic/metal	E9/125	for cables Ø 2,6 - 3,0 mm
J08010A00036	T-ST Connector Singlemode, ceramic/metal	E9/125	for cables Ø 2,0 mm
J08010A0009	T-ST Connector Singlemode, ceramic/metal	E9/125	for fibres with secondary coating Ø 0,9 mm
J08010A00027	T-ST3 Connector Singlemode, ceramic/metal, N.O.D	E9/125	for cables Ø 2,6 - 3,0 mm
J08010A00007	T-ST Connector Multimode, ceramic/metal	G50/125, G62,5/125	for cables Ø 2,6 - 3,0 mm
J08010A00035	T-ST Connector Multimode, ceramic/metal	G50/125, G62,5/125	for cables Ø 2,0 mm
J08010A00005	T-ST Connector Multimode, ceramic/metal	G50/125, G62,5/125	for fibres with secondary coating Ø 0,9 mm
J08010A00026	T-ST3 Connector Multimode, ceramic/ metal, N.O.D.	G50/125, G62,5/125	for cables Ø 2,6 - 3,0 mm

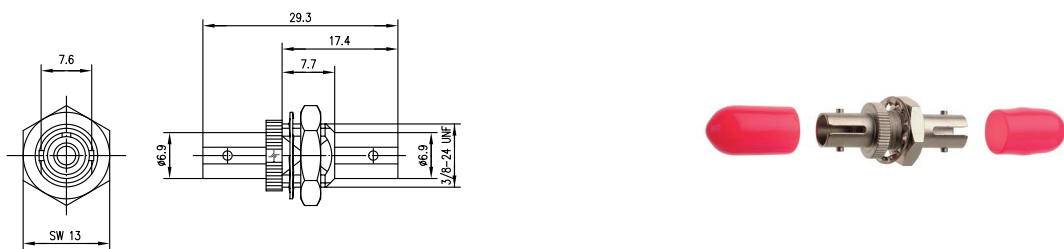
Light Duty FO Connectors

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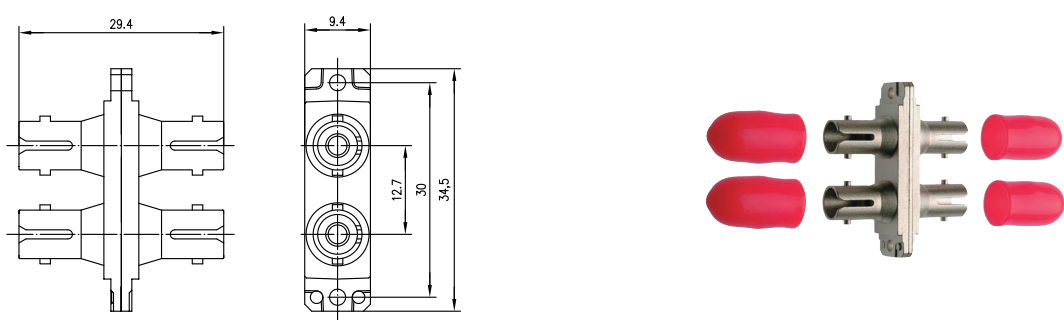


Order no.	Description	Fibre type	Remarks
J08010A0016	T-ST Connector for POF, metal	S980/1000	for cables Ø 2,2 mm without strain relief or Ø 3,6 mm with strain relief

T-ST Adaptors | 3.1.2



Order no.	Description	Installation	Mount. dim.
J08011A0002	T-ST Adaptor, Multimode and Singlemode, ceramic sleeve, metal housing	single hole mounting	Z64
J08011A0003	T-ST Adaptor, Multimode, phosphor bronze sleeve, metal housing	single hole mounting	Z64



Order no.	Description	Installation	Mount. dim.
J08011A0017	T-ST-Duplex Adaptor, Multimode and Singlemode, Ceramic sleeve, metal housing, incl. tapping screws	Flange mounting	Z70
J08011A0014	T-ST-Duplex Adaptor, Multimode, Phosphorous bronze sleeve, Plastic housing, incl. tapping screws	Flange mounting	Z70

Technical Data

Mechanical Characteristics

Type	Connector type SC acc. to IEC 61754-4 and NTT-SC standard
Durability (mating cycles)	≥1000
Hex crimp size for strain relief	4.52 x 10 mm
Strain relief	≥100 N
Material: Connector ferrule	ceramic, POF: brass
Material: Adaptor split sleeve	zirconia ceramic or phosphor bronze
Material: Connector body	copper alloy, nickel-plated
Material: Plug housing, boot, dust caps	thermoplastic, flame retardant, non halogen
Material: Adaptor housing	thermoplastic, flame retardant, non halogen, or zinc diecast, nickel-plated
Material: Retaining clip (adaptor)	stainless steel
Colour: Connector housing / adaptor housing	Multimode: beige or blue; Singlemode: blue; Singlemode APC: green; POF: yellow; PCF: red

Climatic Characteristics

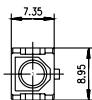
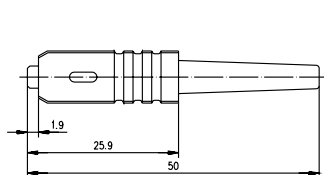
Operating temperature	-20°...80° C
Storage temperature	-40°...90° C

Optical Characteristics

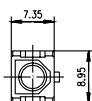
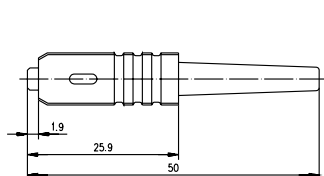
Insertion loss: Plug (factory assembly)	Multimode: max. 0.4 dB ¹ ; Singlemode/Singlemode APC: max. 0.5 dB ² ; POF: 1.5 dB
Insertion loss: Adaptor	Multimode/Singlemode: max. 0.2 dB ³ ; Singlemode APC: 0.5 dB ³
Return loss: plug (factory assembly)	Multimode: min. 30 dB ⁴ ; Singlemode: min. 40 dB ⁴ ; Singlemode APC: min. 60 dB ⁴

- 1) Measurement procedure acc. to IEC 61300-3-4 (CECC 86000), method B, at 1310 nm
- 2) Measurement procedure acc. to IEC 61300-3-6 (CECC 8600), method 1, at 1300 nm
- 3) Measurement procedure acc. to IEC 61300-3-4, method B, at 1300 nm
- 4) Measurement procedure acc. to IEC 61300-3-6, method 1

3.2.1 T-SC Plugs



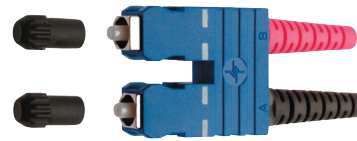
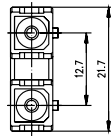
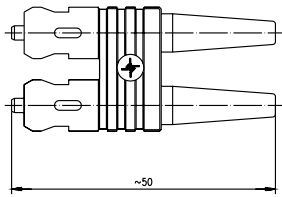
Order no.	Description	Fibre type	Remarks	Housing Colour
J08080A0005	T-SC Connector Singlemode, ceramic	E9/125	for cables Ø 2,6 - 3,0 mm	blue
J08080A0018	T-SC Connector Singlemode, ceramic	E9/125	for cables Ø 2,0 mm	blue
J08080A0006	T-SC Connector Singlemode, ceramic	E9/125	for fibres with secondary coating Ø 0,9 mm	blue
J08080A0016	T-SC Connector Multimode, ceramic	G50/125, G62,5/125	for cables Ø 2,0 mm	blue
J08080A0002	T-SC Connector Multimode, ceramic	G50/125, G62,5/125	for fibres with secondary coating Ø 0,9 mm	blue
J08080A0036	T-SC Connector Multimode, ceramic	G50/125, G62,5/125	for cables Ø 2,6 - 3,0 mm	beige
J08080A0037	T-SC Connector Multimode, ceramic	G50/125, G62,5/125	for fibres with secondary coating Ø 0,9 mm	beige



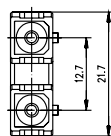
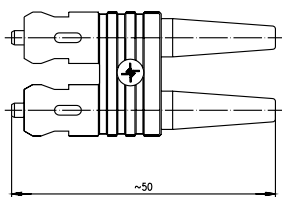
Order no.	Description	Fibre type	Remarks	Housing Colour
J88080A0000	STX IP20 SC Connector	POF	for cable Ø 2,2 - 3,6 mm	yellow

Light Duty FO Connectors

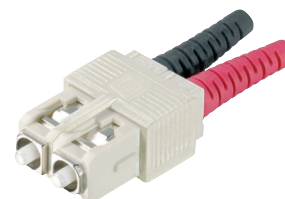
3



Order no.	Description	Fibre type	Remarks	Housing
J08080B0012	T-SC Duplex Connector Singlemode, ceramic	E9/125	for cables Ø 2,6 - 3,0 mm	blue
J08080B0016	T-SC Duplex Connector Singlemode, ceramic	E9/125	for cables Ø 2,0 mm	blue
J08080B0013	T-SC Duplex Connector Singlemode, ceramic	E9/125	for fibres with secondary coating Ø 0,9 mm	blue
J08080B0007	T-SC Duplex Connector Multimode, ceramic	G50/125, G62,5/125	for cables Ø 2,6 - 3,0 mm	blue
J08080B0014	T-SC Duplex Connector Multimode, ceramic	G50/125, G62,5/125	for cables Ø 2,0 mm	blue
J08080B0008	T-SC Duplex Connector Multimode, ceramic	G50/125, G62,5/125	for fibres with secondary coating Ø 0,9 mm	blue
J08080B0019	T-SC Duplex Connector Multimode, ceramic	G50/125, G62,5/125	for cables Ø 2,6 - 3,0 mm	beige
J08080B0020	T-SC Duplex Connector Multimode, ceramic	G50/125, G62,5/125	for fibres with secondary coating Ø 0,9 mm	beige



Order no.	Description	Fibre type	Remarks	Housing Colour
J88080A0002	STX IP20 SC-Duplex Connector	Singlemode	for cable Ø 2,5 - 3,2 mm	blue
J88080A0001	STX IP20 SC-Duplex Connector	Multimode	for cable Ø 2,5 - 3,2 mm	beige
J88080A0003	STX IP20 SC-Duplex Connector	POF	for cable Ø 2,5 - 3,2 mm	yellow



Order no.	Description	Fibre type	Remarks	Housing Colour
J88080A0005	STX IP20 SC-RJ Connector	Singlemode	for cable Ø 2,5 - 3,2 mm	blue
J88080A0004	STX IP20 SC-RJ Connector	Multimode	for cable Ø 2,5 - 3,2 mm	beige
J88080A0006	STX IP20 SC-RJ Connector	POF	for cable Ø 2,5 - 3,2 mm	yellow

3.2

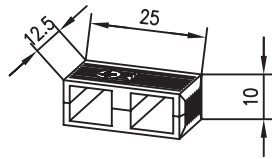
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Light Duty FO Connectors

3.2

T-SC Connectors

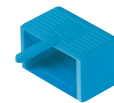
3.2.1 T-SC Plugs



Order no.	Description	Remarks	Housing Colour
B00042A0101	Clamp for SC connector (spacing acc. to SC Duplex)	packaging unit 10 pcs.	beige (Multimode)
B00042A0102	Clamp for SC connector (spacing acc. to SC Duplex)	packaging unit 10 pcs.	green (APC)
B00042A0103	Clamp for SC connector (spacing acc. to SC Duplex)	packaging unit 10 pcs.	blue (Singlemode)

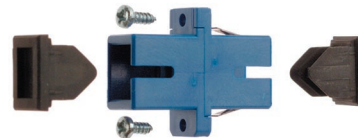
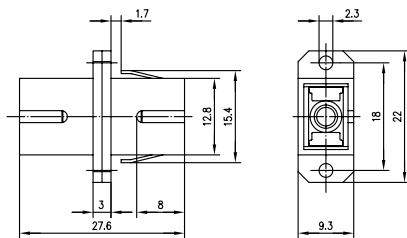


Order no.	Description	Remarks	Housing Colour
B00042A0105	Clamp for SC connector (spacing acc. to SC Duplex)	packaging unit 10 pcs.	yellow (POF)
B00042A0107	Clamp for SC connector (spacing acc. to SC Duplex)	packaging unit 10 pcs.	red (PCF)



Order no.	Description	Remarks	Housing Colour
B80042A0201	STX clamp for SC connector (spacing acc. to SC Duplex)	packaging unit 10 pcs.	beige (Multimode)
B80042A0203	STX clamp for SC connector (spacing acc. to SC Duplex)	packaging unit 10 pcs.	blue (Singlemode)
B80042A0205	STX clamp for SC connector (spacing acc. to SC Duplex)	packaging unit 10 pcs.	yellow (POF)
B80042A0207	STX clamp for SC connector (spacing acc. to SC Duplex)	packaging unit 10 pcs.	red (PCF)

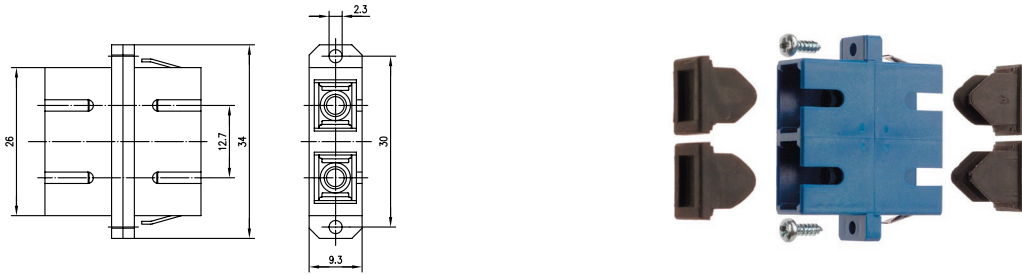
3.2.2 T-SC Adaptors



Order no.	Description	Installation	Mount.	Housing Colour
J08081A0000	T-SC Adaptor, Multimode and Singlemode, Ceramic sleeve, Plastic housing, incl. tapping screws	Snap-in or screw mounting	Z77	blue
J08081A0004	T-SC Adaptor, Multimode and Singlemode, Ceramic sleeve, metal housing , incl. tapping screws	Snap-in or screw mounting	Z77	metallic bright
J08081A0010	T-SC/APC Adaptor, Singlemode, Ceramic sleeve, plastic housing, incl. tapping screws	Snap-in or screw mounting	Z77	green
J08081A0001	T-SC Adaptor, Multimode, Phosphorous bronze sleeve, Plastic housing, incl. tapping screws	Snap-in or screw mounting	Z77	blue
J08081A0015	T-SC Adaptor, Multimode, Phosphorous bronze sleeve, Plastic housing, incl. tapping screws	Snap-in or screw mounting	Z77	beige

Light Duty FO Connectors

3

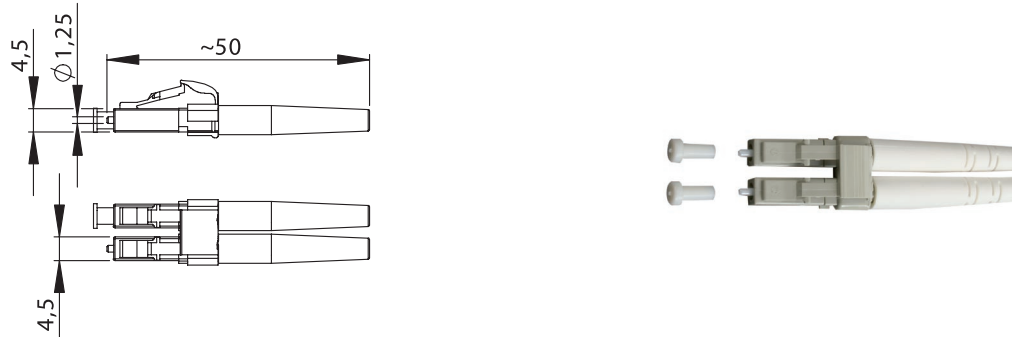


Order no.	Description	Installation	Mount.	Housing
J08081A0002	T-SC Duplex Adaptor, Multimode and Singlemode, Ceramic sleeve, Plastic housing, incl. tapping screws	Snap-in or screw mounting	Z70	blue
J08081A0006	T-SC Duplex Adaptor, Multimode and Singlemode, Ceramic sleeve, metal housing , incl. tapping screws	Snap-in or screw mounting	Z70	metallic bright
J08081A0011	T-SC/APC Duplex Adaptor, Singlemode, Ceramic sleeve, plastic housing, incl. tapping screws	Snap-in or screw mounting	Z70	green
J08081A0003	T-SC Duplex Adaptor, Multimode, Phosphorous bronze sleeve, Plastic housing, incl. tapping screws	Snap-in or screw mounting	Z70	blue
J08081A0016	T-SC Duplex Adaptor, Multimode, Ceramic sleeve, Plastic housing, incl. tapping screws	Snap-in or screw mounting	Z77	beige
J08081A0017	T-SC Duplex Adaptor, Multimode, Phosphorous bronze sleeve, Plastic housing, incl. tapping screws	Snap-in or screw mounting	Z77	beige

LC Connectors

3.3

LC Plug | 3.3.1



Order no.	Description	Fibre type	Remarks	Housing Colour
J08070A0009	LC Duplex Connector, Singlemode, ceramic	E9/125	for cables Ø 2,6 - 3,0 mm	blue
J08070A0000	LC Duplex Connector, Singlemode, ceramic	E9/125	for cables Ø 2,0 mm	blue
J08070A0010	LC Duplex Connector, Multimode, ceramic	G50/125; G62,5/125	for cables Ø 2,6 - 3,0 mm	beige
J08070A0002	LC Duplex Connector, Multimode, ceramic	G50/125; G62,5/125	for cables Ø 2,0 mm	beige

3.3

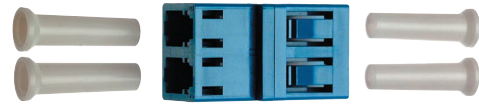
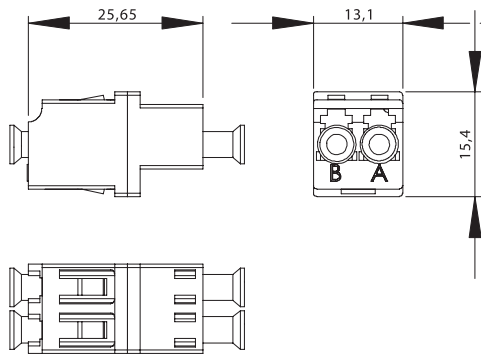
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Light Duty FO Connectors

3.3

LC Connectors

3.3.2 LC Adaptors

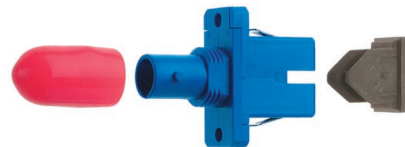
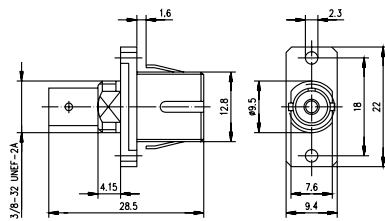


Order no.	Description	Installation	Mount. dim.	Housing Colour
J08071A0000	LC-Duplex adaptor, Multimode and Singlemode, ceramic sleeve, plastic housing	Snap-in mounting	Z99	blue
J08071A0002	LC-Duplex adaptor, Multimode, Phosphor bronze sleeve, plastic housing	Snap-in mounting	Z99	beige

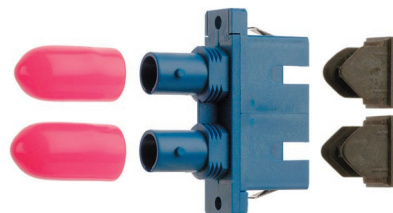
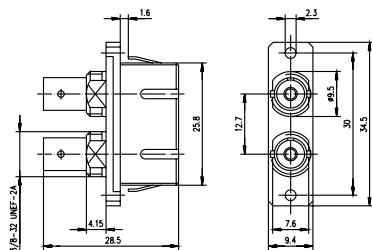
3.4

FO Adaptors between Series

3.4.1 ST/SC Adaptors



Order no.	Description	Installation	Mount. dim.	Housing Colour
J08082A0000	ST/SC Adaptor, Multimode and Singlemode, ceramic sleeve, plastic housing, incl. tapping screws	Snap-in or screw mounting	Z77	blue
J08082A0001	ST/SC Adaptor, Multimode, Phosphorous bronze sleeve, plastic housing, incl. tapping screws	Snap-in or screw mounting	Z77	blue
J08082A0005	ST/SC Adaptor, Multimode and Singlemode, ceramic sleeve, metal housing , incl. tapping screws	Snap-in or screw mounting	Z77	metallic bright



Order no.	Description	Installation	Mount. dim.	Housing Colour
J08082A0002	ST/SC-Duplex Adaptor, Multimode and Singlemode, ceramic sleeve, plastic housing, incl. tapping screws	Snap-in or screw mounting	Z70	blue
J08082A0003	ST/SC-Duplex Adaptor, Multimode, Phosphorous bronze sleeve, plastic housing, incl. tapping screws	Snap-in or screw mounting	Z70	blue
J08082A0007	ST/SC-Duplex Adaptor, Multimode and Singlemode, ceramic sleeve, metal housing , incl. tapping screws	Snap-in or screw mounting	Z70	metallic bright