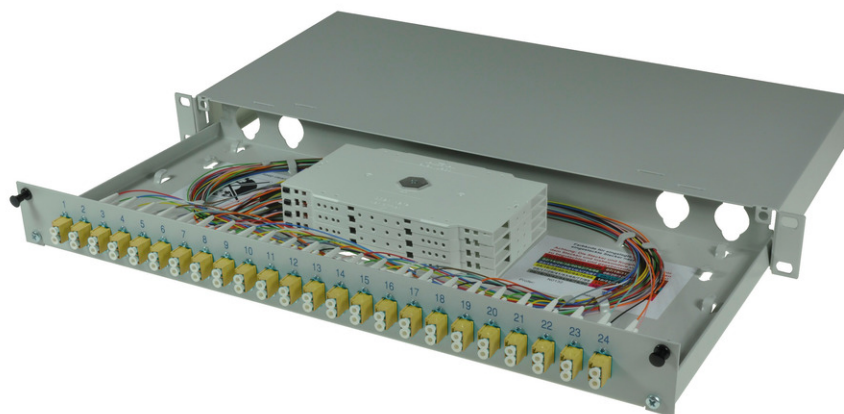


tBL<sup>®</sup> - FO Splice box 19" 1U MM 12x LC Duplex OM2, splice ready prepared



## tBL<sup>®</sup> - tde Basic Link (FO Enclosures)

The FO enclosures of the tBL<sup>®</sup> - tde Basic Link series are optimized products with a high functionality and an easy handling at the installation. The program includes splice and breakout boxes for 19 inch, wall and DIN rail mounting. These products are characterized by a high port density and an optimal fiber management, so that the permissible bending radii can't be undercut. Moreover, there are no sharp corners or edges, to avoid damage to the pigtails and buffer tubes. The front plates are removable. There are versions for E2000, FC, PC, LC, MPO / MTP, MTRJ, MU, SC, and ST. These products can be obtained with or without equipment. In addition, there are also special versions with IP66 for outdoor and offshore applications.

19" Splice box with extendable drawer and cover. For up to 24 x FO adapters, 1U 210mm deep. The splice box is optional equipped with colored fiber pigtails and splice ready prepared.



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tBL® - FO Splice box 19" 1U MM 12x LC Duplex OM2, splice ready prepared

## Technical Data

Pre-mounted	12 LC duplex adapters MM 24 LC Fiber pigtails 50/125µ OM2 2.0 meters 12 x Colors, splice ready prepared 24 Crimp Splice protectors 2 Splice cassettes 2 Splice holder 1 Splice cover 1 Glands M20 for cable entry 1 set cage nuts and screws (M5)
Alternative pre-mounted	TBL-F24-xxLCD50yz (see below)
xx	(01 - 24) quantity of adapters
y	(S)plice ready prepared
z	With(O)ut Crimp Splice protectors

## FO Splice Boxes

Housing	Sheet steel, extendable drawer, front panel removable
Color	RAL 7035
Cable entry	On the back: Each over 2x metric cable glands (left and right)
Dimensions	19" 1U 210mm depth

Front panel color	RAL 7035 light grey matt
Labeling	1 - 24 silk screen
Configuration	Attachment up to 24x SC Simplex, LC Duplex, E2000 Simplex or MPO adapter

## FO Adapters

Type	LC Duplex
Application	Multimode OM2
Design	One-Piece with Flange
Connector style	SC Simplex
Color	Beige
Material	Plastic
Sleeve	Zirkonia Straight Split
Shutter	-
Manufacturer	tde

## FO Pigtails Standard

### FO Connectors

Connector Type	LC Unibody Simplex
Housing	Plastic, Beige
Ferrule	Zirkonia Straight Split, Spring-loaded Axially

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Ferrule Hole	126 µ
Mating Cycles	1.000
Operating Temperature	-40°C up to +75°C
Strain Relief to	100 N
Manufacturer	tde

### Optical performance

Fiber	Type	Wavelength	Insertion loss typ.	Insertion loss max.	Return loss min.
50/125µ OM2	LC	850 nm	≤ 0.25 dB	0.45 dB	30 dB
62.5/125µ OM1	LC	850 nm	≤ 0.25 dB	0.45 dB	

### FO Cables

Tight Buffer	Low smoke (IEC 61034 and EN 50268) and free of halogens (LSOH)
	Non corrosive after IEC 60754-2 and EN 50267
	Flame resistant after IEC 60332-3C and EN 50266-2-4
	Completely dry design
	Free from metal, no grounding problems and potential differences
	Tight Buffer for simple and direct connector mounting

### Characteristics

Fiber Count	1 (Tight Buffer)
Core-Ø	0.9 mm
Coreweight	1 kg/km
Min. Bending radius - Installation	30 mm
Min. Bending radius - Operation	30 mm
Removal	1500 mm
Fire load	0.15 MJ/m
Temperature range - Installation	-5 to +50°C
Temperature range - Operation	-20 to +60°C
Temperature range - Transport / Lagerung	-25 to +70°C

### FO Fiber

Type	Corning 50/125µ OM2 multimode fiber
Manufacturer	Corning

### Optical Specifications

Bandwidth	500 at 850 nm / 500 at 1300 nm
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Attenuation	At 850 nm max. $\leq 2.5$ dB/km At 1300 nm max. $\leq 0.8$ dB/km
Numerical Aperture	$0.200 \pm 0.015$

### Dimensional Specifications

Core Diameter	$50.0 \pm 3.0$ $\mu\text{m}$
Cladding Diameter	$125.0 \pm 2.0$ $\mu\text{m}$
Core-Clad Concentricity	$\leq 3.0$ $\mu\text{m}$
Cladding Non-Circularity	$< 2.0\%$
Core Non-Circularity	$\leq 5.0\%$
Coating Diameter	$245 \pm 5$ $\mu\text{m}$
Coating-Cladding Concentricity	$< 12$ $\mu\text{m}$

### Environmental Specifications

Environmental Test	Test Condition	Induced Attenuation 850 nm and 1300 nm (dB/km)
Temperature Dependence	$-60^{\circ}\text{C}$ to $+85^{\circ}\text{C}$	$\leq 0.20$
Temperature Humidity Cycling	$-10^{\circ}\text{C}$ to $+85^{\circ}\text{C}$ and 4% to 98% RH	$\leq 0.20$
Operating Temperature Range	$-60^{\circ}\text{C}$ to $+85^{\circ}\text{C}$	

### Mechanical Specifications

Proof Test	The entire fiber length is subjected to a tensile stress $\geq 100$ kpsi ( $0.7$ GN/m <sup>2</sup> ).
Length	Fiber lengths available up to 8.8 km/spool.

### Performance Characterizations

Refractive Index Difference	2%
Effective Group Index of Refraction	850 nm: 1.490 1300 nm: 1.486
Fatigue Resistance Parameter (nd)	20
Coating Strip Force	Dry: 0.6 lbs (2.7N) Wet: 14 days in 23°C water soak: 0.6 lbs (2.7N)
Chromatic Dispersion	Zero Dispersion Wavelength ( $\lambda_0$ ): $1300 \text{ nm} \leq \lambda_0 \leq 1320 \text{ nm}$ Zero Dispersion Slope (S0): $\leq 0.101$ ps/(nm <sup>2</sup> *km)

### FO Splice Accessories

Type	Splice cassette
Dimensions	155 x 92 x 8 mm
Material	Bright ABS, similar RAL 1013

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## FO Splice Accessories

Type	FO Splice holder for 12 x Crimp splice protectors
Dimensions	40 x 26 x 6 mm
Material	Bright ABS, similar RAL 1013

## FO Splice Accessories

Type	Crimp splice protector
Dimensions	31 x 3 x 1 mm

## FO Splice Accessories

Type	Cassette cover long
Dimensions	155 x 92 x 2 mm
Material	Bright ABS, similar RAL 1013

Type	Cable tie
Dimensions	75 x 2.5 mm

Type	Mounting set M5
	Set of 4 (cage nuts and screws)

Type	Locknut for cable gland M20
Color	light grey

Type	Cable gland M20
Color	light grey

Type	FO Blind stopper
Application	For covering of unused adapter slots

## FO Splice Accessories

## Product variants & accessories

Art.-No.	Description
TBL-F24-12LCAD9AS	tBL® - FO Splice box 19" 1U SM 12x LC APC Duplex OS2, splice ready prepared
TBL-F24-12LCD50-3S	tBL® - FO Splice box 19" 1U MM 12x LC Duplex OM3, splice ready prepared

## tBL<sup>®</sup> - FO Splice box 19" 1U MM 12x LC Duplex OM2, splice ready prepared

Art.-No.	Description
TBL-F24-12LCD50-4S	tBL <sup>®</sup> - FO Splice box 19" 1U MM 12x LC Duplex OM4, splice ready prepared
TBL-F24-12LCD50S	tBL <sup>®</sup> - FO Splice box 19" 1U MM 12x LC Duplex OM2, splice ready prepared
TBL-F24-12LCD9S	tBL <sup>®</sup> - FO Splice box 19" 1U SM 12x LC Duplex OS2, splice ready prepared