

tBL® - FO Splice box 19" 1U MM 12x SC Duplex OM1, splice ready prepared



tBL® - tde Basic Link (FO Enclosures)

The FO enclosures of the tBL® - 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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Technical Data

Pre-mounted	12 SC duplex adapters MM 24 SC Fiber pigtails 62.5/125µ OM1 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-xxSCD62yz (see below)
xx	(01 - 24) quantity of adapters
у	(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	

C	olor	RAL 7035 light grey matt
L	abeling	1 - 24 silk screen
C	onfiguration	Attachment up to 24x SC Duplex or LC Quad adapter

FO Adapters

Туре	SC Duplex	
Application	Multimode OM2/OM1	
Design	One-Piece with flange	
Connector style	SC Duplex	
Color	Beige	
Material	Plastic	
Sleeve	Zirconia Straight Split	
Shutter		
Manufacturer	tde	

FO Pigtails Standard

FO Connectors

Connector Type	SC Simplex
Housing	Plastic, Beige
Ferrule	Zirconia 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	150 N
Manufacturer	tde

Optical performance

Fiber	Туре	Wavelength	Insertion loss typ.	Insertion loss max.	Return loss min.
50/125μ OM2	SC	850 nm	≤ 0.25 dB	0.45 dB	30 dB
62.5/125μ OM1	SC	850 nm	$\leq 0.25 \text{ dB}$	0.45 dB	

FO Cables

Tight Buffer	Low smoke (IEC 61034 and EN 50268) and free of halogens (LS0H)
	Non corrosive after IEC 60754-2 and EN 50267
	Flame resistent after IEC 60332-3C and EN 50266-2-4
	Completly 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

Туре	Corning 62.5/125µ OM1 multimode fiber
Manufacturer	Corning

Optical Specifications

Bandwidth	160/200 at 850 nm / 500 at 1300 nm



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Attenuation	At 850 nm max. \leq 3.0 dB/km At 1300 nm max. \leq 0.7 dB/km
Numerical Aperture	0.275 ± 0.015

Dimensional Specifications

Core Diameter	62.5 ± 3.0 μm
Cladding Diameter	125.0 ± 2.0 μm
Core-Clad Concentricity	≤ 3.0 µm
Cladding Non-Circularity	< 2.0%
Core Non-Circularity	≤ 5.0%
Coating Diameter	245 ± 5 μm
Coating-Cladding Concentricity	< 12 μm

Environmental Specifications

Enviromental Test	Test Condition	Induced Attenuation 850 nm and 1300 nm (dB/km)
Temperature Dependence	-60°C to +85°C	≤ 0.20
Temperature Humidity Cycling	-10°C to +85°C and 4% to 98% RH	≤ 0.20
Operating Temperature Range	-60°C to +85°C	

Mechanical Specifications

Proof Test	The entire fiber length is subjected to a tensile stress ≥ 100 kpsi (0.7 GN/m ²).
Length	Fiber lengths available up to 17.6 km/spool.

Performance Characterizations

Refractive Index Difference	2%
Effective Group Index of Refraction	850 nm: 1.496 1300 nm: 1.491
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)
Cromatic Dispersion	Zero Dispersion Wavelength ($\lambda 0$): 1332 nm $\leq \lambda 0 \leq$ 1354 nm Zero Dispersion Slope (S0): \leq 0.097 ps/(nm ^{2*} km)

FO Splice Accessories

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

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FO Splice Accessories

Туре	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

Туре	Crimp splice protector
Dimensions	31 x 3 x 1 mm

FO Splice Accessories

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

Туре	Cable tie
Dimensions	75 x 2.5 mm

Type	Locknut for cable gland M20
Color	light grey

Туре	Cable gland M20
Color	light grey

Туре	FO Blind stopper
Application	For covering of unused adapter slots

FO Splice Accessories

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

Product variants & accessories

ArtNo.	Description
TBL-F24-12SCAD9AS	tBL® - FO Splice box 19" 1U SM 12x SC APC Duplex OS2, splice ready prepared
TBL-F24-12SCD50-3S	tBL® - FO Splice box 19" 1U MM 12x SC Duplex OM3, splice ready prepared





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ArtNo.	Description
TBL-F24-12SCD50-4S	tBL® - FO Splice box 19" 1U MM 12x SC Duplex OM4, splice ready prepared
TBL-F24-12SCD50S	tBL® - FO Splice box 19" 1U MM 12x SC Duplex OM2, splice ready prepared
TBL-F24-12SCD62S	tBL® - FO Splice box 19" 1U MM 12x SC Duplex OM1, splice ready prepared
TBL-F24-12SCD9S	tBL® - FO Splice box 19" 1U SM 12x SC Duplex OS2, splice ready prepared