tBL® - DIN rail splice housing MM 12x E2000 OM2, 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.



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Technical Data

Pre-mounted	12 E2000 adapters MM 12 E2000 Fiber pigtails 50/125µ OM2 2.0 meters 12 x Colors, splice ready prepared 12 Crimp Splice protectors 1 Splice cassette 1 Splice holder 1 Cabel entry vertical 1 Mounting clip (for mounting on rail housing) 1 Gland M20 for cable entry
Alternative pre-mounted	TBL-H12-xxE2-50yz (see below)
XX	(01 - 12) quantity of adapters
у	(S)plice ready prepared
Z	With(0)ut Crimp Splice protectors

FO DIN rail splice module

Housing	Alu-sheet, 1 mm	
Dimensions	141.4 x 141 x 42.8 mm	
Colour	powdered in RAL 9005 (black)	

FO DIN rail splice module

Front panel	Alu-sheet
	incl. labeling strip
Configuration	Attachment up to 12x SC simplex or 12x E2000 Simplex adapters

FO Adapters

Standardisation	acc. to IEC61754-15, DIN EN 186270	
Connector class	coupling Adapter	
Number of connectors (A)	1	
Connector type (A):	E2000™	
Protection class (IP) connector (A)	20	
Polishing connector (A):	PC	
Attenuation grade IL - connector (A)	M	
Delta insertion loss	\leq 0.2 dB, testing method acc. to IEC 61300-3-4	
Mating cycles	min. 1000	
Pull-out force	min. 70 N	
Connector color (A)	beige	
Lever- frame-coding connector (A)	color	
Frame color connector (A)	orange	
Sleeve material	ceramic	
Adapter fastening method	end cap	
Fiber type	Multimode (MM)	
Dimensions	74.7 / 42 x 22 x 9.35 mm	



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Material	plastic: PBT, fiber-glass reinforced (halogen-free)
Manufacturer	R&M

FO Pigtails Standard

FO Connectors

Туре	E2000
Ferrule	Ceramic
Ferrule Hole	126 μ
Connector colour	Beige
Lever colour	Black
Boot colour	Black
Manufacturer	RDM

Optical performance

Fiber	Туре	Wavelength	Insertion loss typ.	Insertion loss max.	Return loss min.
50/125μ OM2	E2000	850 nm	$\leq 0.25 \text{ dB}$	0.45 dB	30 dB
62.5/125µ OM1	E2000	850 nm	≤ 0.25 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



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FO Fiber

Туре	Corning 50/125µ OM2 multimode fiber
Manufacturer	Corning

Optical Specifications

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

Dimensional Specifications

Core Diameter	50.0 ± 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 \geq 100 kpsi (0.7 GN/m ²).
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)
Cromatic Dispersion	Zero Dispersion Wavelength ($\lambda 0$): 1300 nm $\leq \lambda 0 \leq$ 1320 nm Zero Dispersion Slope (S0): \leq 0.101 ps/(nm²*km)



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FO Splice Accessories

Туре	splice cassette for DIN rail splice housing
Material	sheet steel
Colour	powdered in RAL 9005 (black)
Configuration	uo to 2x 12 splices

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

Product variants & accessories

ArtNo.	Description
TBL-H12-12E2-50-3S	tBL® - DIN rail splice housing MM 12x E2000 OM3, splice ready prepared
TBL-H12-12E2-50-4S	tBL® - DIN rail splice housing MM 12x E2000 OM4, splice ready prepared
TBL-H12-12E2-50S	tBL® - DIN rail splice housing MM 12x E2000 OM2, splice ready prepared
TBL-H12-12E2A9AS	tBL® - DIN rail splice housing SM 12x E2000 APC OS2, splice ready prepared