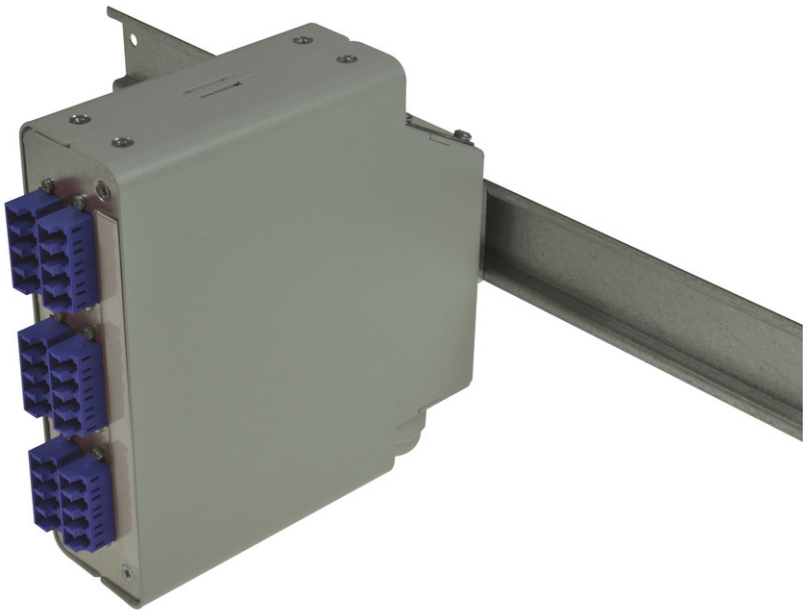
tBL® - HD DIN rail splice housing SM 6x LC Quad OS2, splice ready prepared



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.

The tBL® HD module can be used only in combination with the tde HD patch cord.

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Technical Data

Pre-mounted	6 LC quad adapters SM 24 LC Fiber pigtails 9/125µ OS2 2.0 meters tde attenuation class B, 12 x Colors, splice ready prepared 24 Crimp Splice protectors 1 Splice cassette 2 Splice holder 1 Cabel entry vertical 1 Mounting clip (for mounting on rail housing) 1 Gland M20 for cable entry
Alternative pre-mounted	TBL-H06-xxLCQ9Pyz (see below)
xx	(01 - 06) quantity of adapters
y	(S)plice ready prepared
z	With(O)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 6x SC Duplex, 6x LC Quad (6x LCD), 6x ST Duplex adapters

FO Adapters

Type	LC Quad
Application	Singlemode OS2 PC
Design	without flange
Footprint	SC Duplex
Color	Blue
Material	Plastic
Sleeve	Zirconia Straight Split
Shutter	--
Manufacturer	tde

FO Pigtails Premium

FO Connectors

Connector Type	LC UPC Unibody Simplex
Housing	Plastic, Blue
Ferrule	Zirconia Straight Split, Spring-loaded Axially

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Ferrul Hole	125.5 µ
Ferrule Concentricity	≤ 0.6 µ
Mating Cycles	500
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.
9/125µ	LC UPC	1310 / 1550 nm	≤ 0.10 dB	0.25 dB	55 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 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

Type	Corning Ultra SMF-28® 09/125µ OS2 singlemode fiber
Maximum Attenuation	At 1310 nm max. 0.32 dB/km At 1383 nm max. 0.32 dB/km At 1490 nm max. 0.21 dB/km At 1550 nm max. 0.18 dB/km At 1625 nm max. 0.20 dB/km
Attenuation vs. Wavelength	Range: 1285 - 1330 mm; Ref. λ: 1310 nm; Max. Difference: 0.03 dB/km Range: 1525 - 1575 mm; Ref. λ: 1550 nm; Max. Difference: 0.02 dB/km

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Macrobend Loss	Mandrel Radius: 10mm; Number of Turns: 1; Wavelength: 1550nm; Induced Attenuation: ≤ 0.50 dB Mandrel Radius: 10mm; Number of Turns: 1; Wavelength: 1625nm; Induced Attenuation: ≤ 1.5 dB Mandrel Radius: 15mm; Number of Turns: 10; Wavelength: 1550nm; Induced Attenuation: ≤ 0.05 dB Mandrel Radius: 15mm; Number of Turns: 10; Wavelength: 1625nm; Induced Attenuation: ≤ 0.30 dB Mandrel Radius: 25mm; Number of Turns: 100; Wavelength: 1310nm, 1550nm, 1625nm; Induced Attenuation: ≤ 0.01 dB
Point Discontinuity	Wavelength: 1310 nm; Point Discontinuity: ≤ 0.05 dB Wavelength: 1550 nm; Point Discontinuity: ≤ 0.05 dB
Cable Cutoff Wavelength (λccf)	λccf ≤ 1260 nm
Mode-Field Diameter	At 1310 nm = 9.2 ± 0.4 µm At 1550 nm = 10.4 ± 0.5 µm
Dispersion	At 1550 nm = ≤ 18.0 [ps/(nm*km)] At 1625 nm = ≤ 22.0 [ps/(nm*km)]
	Zero Dispersion Wavelength (λ_0): 1304 nm ≤λ_0≤ 1324 nm Zero Dispersion Slope (S_0): ≤ 0.092 ps/(nm² *km)
Polarization Mode Dispersion (PMD)	PMD Link Design Value = ≤ 0.04 ps/√km Maximum Individual Fiber = ≤ 0.1 ps/√km

Dimensional Specifications

Fiber Curl	≥ 4.0 m radius of curvature
Cladding Diameter	125.0 ± 0.7 µm
Core-Clad Concentricity	≤ 0.5 µm
Cladding Non-Circularity	≤ 0.7%
Coating Diameter	242 ± 5 µm
Coating-Cladding Concentricity	< 12 µm

Environmental Specifications

Environmental Test	Test Condition	Induced Attenuation 1310 nm, 1550 nm & 1625 nm
Temperature Dependence	-60°C to +85°C	≤ 0.05
Temperature Humidity Cycling	-10°C to +85°C up to 98% RH	≤ 0.05
Water Immersion	23°C ± 2°C	≤ 0.05
Heat Aging	85°C ± 2°C	≤ 0.05
Operating Temperature Range	-60°C to +85°C	

Mechanical Specifications

Proof Test	The entire fiber length is subjected to a tensile stress ≥ 100 kpsi (0.69 GPa).
Length	Fiber lengths available up to 63.0 km/spool.

Performance Characterizations

Core Diameter	8.2 µm
Numerical Aperture	0.14
Effective Group Index of Refraction	1310 nm: 1.4676 1550 nm: 1.4682

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Fatigue Resistance Parameter (nd)	20
Coating Strip Force	Dry: 0.6 lbs (3N) Wet: 14 days room temperature: 0.6 lbs (3N)
Rayleigh Backscatter Coefficient (for 1 ns Pulse Width)	1310 nm: -77 dB 1550 nm: -82 dB

FO Splice Accessories

Type	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

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

Type	Cable tie
Dimensions	75 x 2.5 mm

FO Splice Accessories

Type	Cable gland M20
Color	light grey

Type	Locknut for cable gland M20
Color	light grey

FO DIN rail splice module

Colour	Alu-zinc

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FO DIN rail splice module

Colour	zinced

FO DIN rail splice module

Colour	Alu-zinc
Opening	for 1x M20 (PG13.5)

FO DIN rail splice module

Housing	Alu-sheet, 1 mm
Colour	powdered in RAL 7035 (grey)
Cable entry	over metric gland
Attachment	mounting clip

Product variants & accessories

Art.-No.	Description
TBL-H06-06LCQ50-3PS	tBL® - HD DIN rail splice housing MM 6x LC Quad OM3, splice ready prepared
TBL-H06-06LCQ50-4PS	tBL® - HD DIN rail splice housing MM 6x LC Quad OM4, splice ready prepared
TBL-H06-06LCQ9PS	tBL® - HD DIN rail splice housing SM 6x LC Quad OS2, splice ready prepared

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