

ISO 9001 TL 9000 ISO 14001

tBL® - DIN rail splice housing MM 6x SC Duplex OM2, splice ready prepared



# tBL® - 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.



### tde® trans data elektronik GmbH

#### Headquarter address:

Lingener Str. 2 D-49626 Bippen/Ohrte Tel.: +49 5435 9511 0 Fax.: +49 5435 9511 32

#### Sales office address:

Prinz-Friedrich-Karl-Str. 46 D-44135 Dortmund Tel.: +49 231 8805 61 13 Fax.: +49 231 8805 61 15

info@tde.de | www.tde.de



# **Technical Data**

Pre-mounted	<ul> <li>6 SC duplex adapters MM</li> <li>12 SC Fiber pigtails 50/125μ OM2 2.0 meters 12 x Colors, splice ready prepared</li> <li>12 Crimp Splice protectors</li> <li>1 Splice cassette</li> <li>1 Splice holder</li> <li>1 Cabel entry vertical</li> <li>1 Mounting clip (for mounting on rail housing)</li> <li>1 Gland M20 for cable entry</li> </ul>
Alternative pre-mounted	TBL-H06-xxSCD50yz (see below)
хх	(01 - 06) quantity of adapters
у	(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**

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



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	$\leq 0.25 \text{ dB}$	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 (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

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	$0.200 \pm 0.015$

#### **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 <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)
Cromatic Dispersion	Zero Dispersion Wavelength ( $\lambda$ 0): 1300 nm $\leq \lambda 0 \leq$ 1320 nm Zero Dispersion Slope (S0): $\leq$ 0.101 ps/(nm <sup>2*</sup> km)

## **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

Туре	Cable tie
Dimensions	75 x 2.5 mm

## **FO Splice Accessories**

Туре	Cable gland M20
Color	light grey

Туре	Locknut for cable gland M20
Color	light grey

## FO DIN rail splice module

Colour	Alu-zinc

## FO DIN rail splice module

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### FO DIN rail splice module

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

## FO DIN rail splice module

1	tde® TBL-H06-06SCD50S	Vers. 08.03.2018 © tde GmbH, all rights reserved, errors excepted.	age 5 / 6
	Cable entry	over metric gland	
	Colour	powdered in RAL 7035 (grey)	
	Housing	Alu-sheet, 1 mm	



Attachment

mounting clip

# Product variants & accessories

ArtNo.	Description
TBL-H06-06SCAD9AS	tBL® - DIN rail splice housing SM 6x SC APC Duplex OS2, splice ready prepared
TBL-H06-06SCD50-3S	tBL® - DIN rail splice housing MM 6x SC Duplex OM3, splice ready prepared
TBL-H06-06SCD50-4S	tBL® - DIN rail splice housing MM 6x SC Duplex OM4, splice ready prepared
TBL-H06-06SCD50S	tBL® - DIN rail splice housing MM 6x SC Duplex OM2, splice ready prepared
TBL-H06-06SCD62S	tBL® - DIN rail splice housing MM 6x SC Duplex OM1, splice ready prepared
TBL-H06-06SCD9S	tBL® - DIN rail splice housing SM 6x SC Duplex OS2, splice ready prepared