

# FO Splice Boxes in Glass-Fiber Reinforced Polyester

## GR.TFO.\*



- Safe protection of fiber optic cable splices in hazardous areas
- Up to 8 splice trays, 12 fusion-type splices per tray
- Installation in Zone 1, Zone 2, Zone 21 and Zone 22
- Ex op pr and Ex tb certified
- Carbon loaded, antistatic glass-fiber reinforced polyester
- Modern design with high impact resistance
- Easy installation due to easily accessible mounting points
- Easy cover opening without damage due to multiple pry points
- Wide range of cable glands and stopping plugs



### Function

The GR.TFO.\* series is a range of fiber optic splice boxes designed for protection of optical fiber cable splices in hazardous areas. Up to 8 splice trays are installed inside the sturdy GRP enclosure. The splice trays are according to DIN 47662 and Telecom standards, each tray can hold up to 12 fusion-type splices and is equipped with appropriate splice protection holders and FO strain reliefs. The enclosure series GR\* consists of carbon-loaded, glass-fiber reinforced polyester with stainless steel cover screws. It provides an anti-static, UV stabilized and corrosion resistant solution. Many features provide for easy installation and handling. It is certified for operation in low temperatures of down to -50 °C and thus can be applied in many applications as a replacement for stainless steel.

### Technical Data

#### Mechanical specifications

Enclosure cover	fully detachable
Cover fixing	
Screws	M6 stainless steel combination Phillips and slotted screw
Number	see data table
Cover seal	foamed silicone
Degree of protection	IP66
Cable entry	see data table
Material	
Enclosure	carbon loaded, antistatic glass-fiber reinforced polyester (GRP)
Finish	inherent color black
Grounding plate	2 mm brass optional
Mass	see data table
Dimensions	see data table
Mounting	see data table
Grounding	none as standard optional M6 or M8 internal/external brass nickel-plated grounding bolt optional M6 or M8 internal/external stainless steel grounding bolt
Fiber optic splice tray	
Number	see data table
Dimensions	142 mm x 92 mm x 8 mm
Quantity of splice connections per tray	12
Type of splices	fusion with 60 mm heatshrink protectors
Fiber optic splicing protection holders per tray	2 for heatshrink splice protectors 60 mm, 6 splices each
Fiber optic strain relief per tray	2 each for 12 fibers with 0.9 mm or 1.1 mm insulation, removeable
Fiber optic cables min. bending radius	35 mm

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## Technical Data

Fiber optic cables frequency range	10 ... 10000 MHz
Standards	DIN 47662 and Telecom standards
<b>Ambient conditions</b>	
Ambient temperature	-40 ... 55 °C (-40 ... 131 °F) -50 °C (-58 °F) on request
<b>Data for application in connection with hazardous areas</b>	
EU-type examination certificate	CML 17 ATEX 3255X BASEEFA 14 ATEX 0368U
Marking	⊕ II 2 GD Ex op pr IIC T* Gb Ex tb IIIC T** °C Db T6/T80 °C @ Ta +40 °C T5/T95 °C @ Ta +55 °C
<b>International approvals</b>	
IECEx approval	IECEx CML 17.0144X IECEx BAS 14.0169U
UKCA approval	CML 21 UKEX 3896X
ECAS approval	22-10-53257/E22-09-052274/NB0002
CCC approval	2020322303002568
<b>Conformity</b>	
Degree of protection	EN 60529
CE marking	0102
<b>General information</b>	
Supplementary information	EC-Type Examination Certificate, Statement of Conformity, Declaration of Conformity, Attestation of Conformity and instructions have to be observed where applicable. For information see <a href="http://www.pepperl-fuchs.com">www.pepperl-fuchs.com</a> .
<b>Accessories</b>	
Optional accessories	M6 or M8 internal/external brass nickel-plated grounding bolts M6 or M8 internal/external stainless steel grounding bolts

## Type Code

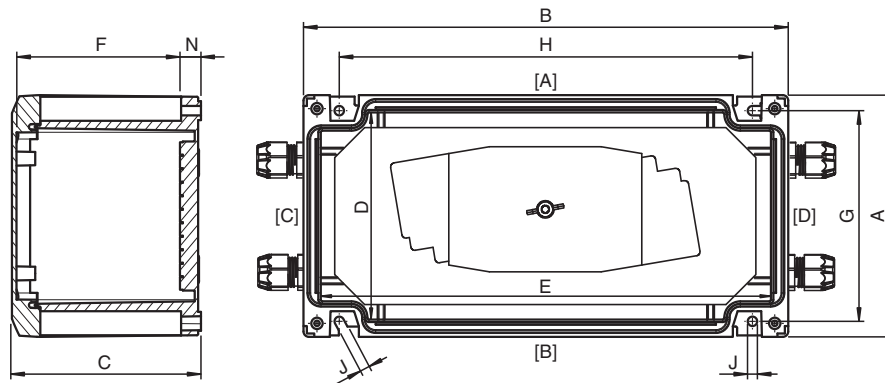
1	2	3	4	5	6	7	8
GR	***	**	**	**	*	*	****
GR	TFO	18	36	10	B	S	0002

Example: GR.TFO.18.36.10.B-S0002

Fiber optic splice box, material glass fiber reinforced polyester, size 18x36x10 cm, landscape orientation with face B at bottom, two splice trays, standard product

<b>1</b>	<b>Enclosure type</b>
GR	glass fiber reinforced polyester (GRP)
<b>2</b>	<b>Type of solution</b>
TFO	fiber optice splice box (Ex op pr)
<b>3</b>	<b>Height [cm]</b>
n	see dimensions data table
<b>4</b>	<b>Width [cm]</b>
n	see dimensions data table
<b>5</b>	<b>Depth [cm]</b>
n	see dimensions data table
<b>6</b>	<b>Cable entry face orientation</b>
B	landscape, face [B] at bottom
<b>7</b>	<b>Variant</b>
S	standard product
C	configured product
Y	engineered product
<b>8</b>	<b>Variant number</b>
xxxx	consecutive item number

**Dimensions and Enclosure Details**



Type	External dimensions [mm]			Internal dimensions [mm]			Mounting [mm]				Cover screws			
	A	B	C	D	E	F	G	H	J	N	screws qty.	Mx	qty.	Torque [Nm]
GR.TFO.18.36.10.B	179	359	104	156	336	71.5	156	306	7	18	4	M6	4	3.5
GR.TFO.18.36.17.B	179	359	166.5	156	336	144	156	306	7	18	4	M6	4	3.5

Values might differ slightly due to manufacturing tolerances

**Cable Entries**

Type	Splice trays qty.	Mass approx. [kg]	Cable entries faces C and D				
			qty.	Series	Type	Clamping Range [mm]	Note
GR.TFO.18.36.10.B-S0001	1	2.4	1	Cable Glands, Plastic	CG.PEDS1.M20.PA.S.10	6 ... 12	All spare entries fitted with stopping plugs
GR.TFO.18.36.10.B-S0002	2	2.4	2				
GR.TFO.18.36.10.B-S0004	4	2.6	4				
GR.TFO.18.36.10.B-S0006	6	2.8	6				
GR.TFO.18.36.17.B-S0008	8	3.8	8				

Mass is valid for basic enclosure, it will increase according to enclosure accessories, integrated components and entry devices

Cable gland standard type: polyamide Ex e cable glands

For other types of cable glands and combinations of different gland sizes please contact Pepperl+Fuchs

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