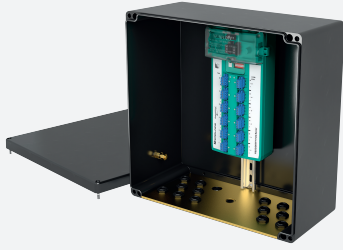


FieldBarrier Junction Box, Polyester (GRP)



F.FB1.P14.A**.1.*.***.***.***

- 8, 10, 12 outputs Ex ia
- Impact resistance enclosure, IP66
- Configurable cable entries for trunk and spurs
- Packaged certified solution
- For FOUNDATION Fieldbus H1 and PROFIBUS PA
- Installation in Zone 1

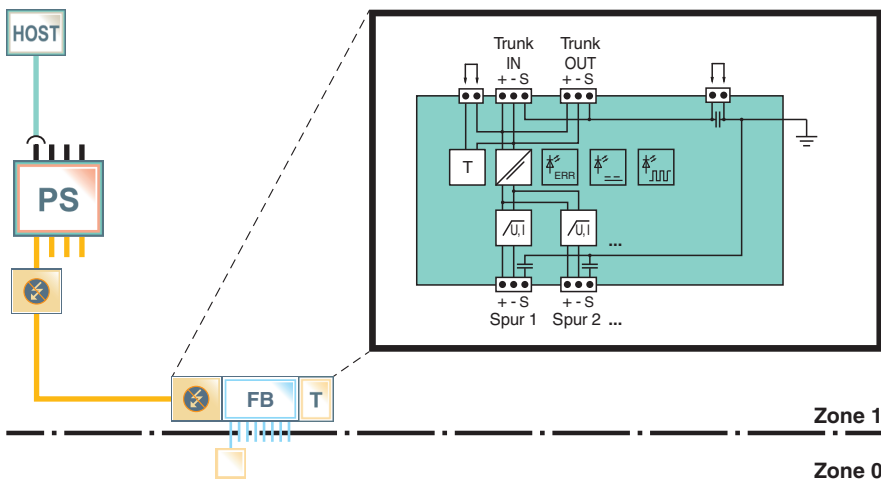


Function

This Junction Box is a device coupler with a diagnostic-enabled FieldConnex® FieldBarrier for Zone 1. Devices can be located in Zone 0. Glass fiber-reinforced polyester provides corrosion resistance and is light weight. The surface resistance avoids electrostatic charge. Trunk and spur entries can be selected individually from a range of cable glands and stopping plugs. A breather is included by default. Tag plate, grounding bar, surge protection for trunk and spurs are available as options. For the spurs, surge protection is available with integrated diagnostics.

This junction box is available pre-wired, with all accessories, for fast ordering, delivery, site installation, and commissioning.

Connection



Technical Data

General specifications	
Design / Mounting	Outside installation
Installed components	FieldBarrier R4D0-FB-IA* For technical data on installed electronic component see data sheet.
Conformity	
Degree of protection	EN 60529
Impact resistance	EN 60079-0
Ambient conditions	
Ambient temperature	-30 ... 55 °C (-22 ... 131 °F) , (extended temperature range available on request)
Storage temperature	-40 ... 70 °C (-40 ... 158 °F)
Relative humidity	< 75 % (annual mean) < 95 % (30 d/year), no moisture condensation

Release date: 2022-07-04 Date of issue: 2022-07-04 Filename: t167042_eng.pdf

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

Pepperl+Fuchs Group
www.pepperl-fuchs.com

USA: +1 330 486 0002
pa-info@us.pepperl-fuchs.com

Germany: +49 621 776 2222
pa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091
pa-info@sg.pepperl-fuchs.com

PEPPERL+FUCHS

Technical Data

Impact resistance	7J
Mechanical specifications	
Enclosure cover	detachable cover with retaining screws
Degree of protection	IP66
Cable entry	cable gland and stopping plug options see separate table
Material	
Housing	polyester , impact resistant, glass fiber reinforced
Grounding plate	brass
Surface	black (RAL 9011)
Surface resistance	< 10 ⁹ Ω
Water absorption	< 6 %
Seal	silicone , one-piece
Material thickness	grounding plate: 3 mm
Dimensions	(W x H x D) 405 x 400 x 200 mm
Mounting	thru-holes Ø6.5 mm
Grounding	grounding bolt M6 , brass
Data for application in connection with hazardous areas	
EU-type examination certificate	PTB 07 ATEX 1061 X (assembled Junction Box) , for additional certificates see www.pepperl-fuchs.com
Marking	⊕ II 2(1)G Ex db eb ib mb [ia Ga] IIC T4 Gb ⊕ II 2(1)D Ex tb [ia Da] IIIC T135°C Db Note: The marking is based on the maximum value and can be reduced depending on the selected options accordingly.
Directive conformity	
Directive 2014/34/EU	EN 60079-0:2012 , EN 60079-1:2014 , EN 60079-7:2015 , EN 60079-11:2012 , EN 60079-18:2009 , EN 60079-31:2014
International approvals	
IECEX approval	IECEX PTB 07.0036 X , suitable Junction Box on request
INMETRO approval	TÜV 13.1143
General information	
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 www.pepperl-fuchs.com .

Assembly



Release date: 2022-07-04 Date of issue: 2022-07-04 Filename: t167042_eng.pdf

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

Pepperl+Fuchs Group
www.pepperl-fuchs.com

USA: +1 330 486 0002
pa-info@us.pepperl-fuchs.com

Germany: +49 621 776 2222
pa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091
pa-info@sg.pepperl-fuchs.com

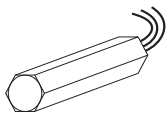
Product Versions

Cable Gland Versions

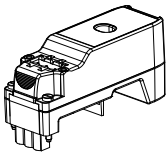
Type	Cable gland					Stopping plug		
	GP2	GB2	GS2	GN2	GA2	H02	H03	H04
Mechanical specifications								
Protection degree	IP66	IP66	IP66	IP66	IP66	IP66	IP66	IP66
Material	polyamide	nickel-plated brass	stainless steel	nickel plated brass	stainless steel	polyamide	nickel-plated brass	stainless steel
Thread	M20	M20	M20	M20	M20	M20	M20	M20
Inner sheath (mm)	-	-	-	7 ... 12	7 ... 12	-	-	-
Outer sheath (mm)	5.5 ... 13	3 ... 12	3 ... 12	10 ... 16	10 ... 16	-	-	-
Cable								
Suitable for armored cable	no	no	no	yes	yes	-	-	-
Data for application in conjunction with hazardous areas								
Type of protection	Ex e	Ex de	Ex de	Ex de	Ex de	Ex e	Ex de	Ex de

Accessories

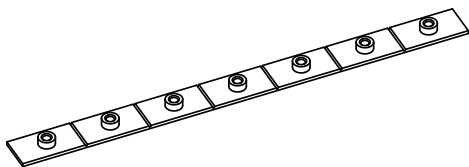
F*-LBF-D1.32 Surge Protector for trunk connection



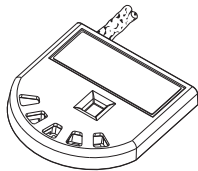
Spur surge protector
 SCP-LBF-IA1.36.IE0: Surge Protector for spur connection, shield grounded via gas discharge tube
 or
 SCP-LBF-IA1.36.IE1: Surge Protector for spur connection, diagnostic included, shield grounded via gas discharge tube
 Installation on spur connection of device coupler, for example FieldBarrier



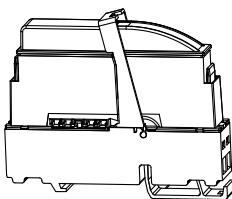
ACC-LBF-EB.6 grounding rail
 Installation on up to six SCP-LBF-IA1.36.IE* spur surge protector modules to provide a common earth point and mechanical support



Enclosure Leakage Sensor ELS-1 for water ingress detection



Multi Function Terminal MFT-2L.1600 and MFT-BASE.4P for the trunk connection of the FieldBarrier. The MFT allows live disconnect and maintenance in Zone 1 without requiring a hot work permit.



Release date: 2022-07-04 Date of issue: 2022-07-04 Filename: t167042_eng.pdf

Type Code

Electronic type

F.FB1 Enclosure solution for R4D0-FB-IAxx.x

Enclosure material

- S** Stainless steel 316 electropolished, IP66
- P** Glass-fiber reinforced polyester, IP66

Installed device with number of outputs

- 14.A08** 1 x R4D0-FB-IA08.x
- 14.A10** 1 x R4D0-FB-IA10.x
- 14.A12** 1 x R4D0-FB-IA12.x

Fieldbus type

- 1** Suitable for FOUNDATION Fieldbus H1 and PROFIBUS PA

Terminals + trunk options

- 0** Screw terminals (R4D0-FB-IAxx.0)
- 3** Spring terminals (R4D0-FB-IAxx.1)
- 6** Screw terminals + multi function terminal (MFT) for trunk disconnection
- 8** Screw terminals + multi function terminal (MFT) for trunk disconnection + spare terminals
- A** Spring terminals + multi function terminal (MFT) for trunk disconnection
- C** Spring terminals + multi function terminal (MFT) for trunk disconnection + spare terminals

Trunk entries

Spur entries

- GP2** **GP2** Cable gland M20, polyamide
- GB2** **GB2** Cable gland M20, nickel plated brass
- GS2** **GS2** Cable gland M20, stainless steel
- GN2** **GN2** Cable gland M20, nickel plated brass for armored cable
- GA2** **GA2** Cable gland M20, stainless steel for armored cable
- H02** **H02** Stopping plug M20, polyamide
- H03** **H03** Stopping plug M20, nickel plated brass
- H04** **H04** Stopping plug M20, stainless steel

Tag plate

- A** Tag plate, traffolyte
- B** Tag plate, stainless steel
- 0** No tag plate

Grounding bar

- 0** No grounding bar installed

Surge protection

- 0** No surge protection
- 3** Surge protection on the trunk
- 5** Surge protection on spurs
- 7** Surge protection on spurs with diagnosis
- 8** Surge protection on the trunk and spurs
- A** Surge protection for trunk and spurs with diagnosis

Additional accessories

- 0** No additional accessories
- L** Enclosure Leakage Sensor
- D** Document pocket (A4)
- 5** Enclosure Leakage Sensor + document pocket (A4)

F.FB1	.	.	.	1	0
-------	---	---	---	---	---	---	---	---	---	---

Predefined characters indicate preset attributes.

Release date: 2022-07-04 Date of issue: 2022-07-04 Filename: t167042_eng.pdf