

FieldBarrier Junction Box

F.FB0.T**.*** .1.0.***.***.***



- 4, 8 or 12 outputs Ex ia
- Brushed enclosure, IP66
- Configurable cable entries for trunk and spurs
- Packaged certified solution
- For FOUNDATION Fieldbus H1 and PROFIBUS PA
- Installation in Zone 1

FieldBarrier Junction Box, Brushed Stainless Steel



Function

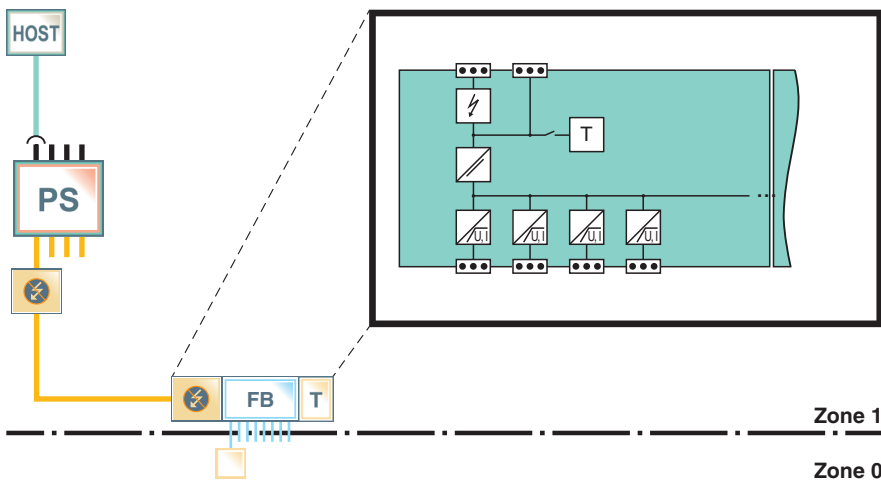
This Junction Box is a device coupler with FieldConnex® FieldBarriers for Zone 1. Devices can be located in Zone 0. The number of outputs and size can be selected.

Brushed stainless steel 316L provides high corrosion and impact resistance at a very wide temperature range.

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 the trunk, and bus termination are available as options.

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

Connection



Release date: 2022-07-04 Date of issue: 2022-07-04 Filename: t202512_eng.pdf

Technical Data

General specifications

Design / Mounting	Outside installation
Installed components	FieldBarrier RD0-FB-Ex4.COM For technical data on installed electronic component see data sheet.

Conformity

Degree of protection	EN 60529
Impact resistance	EN 60079-0

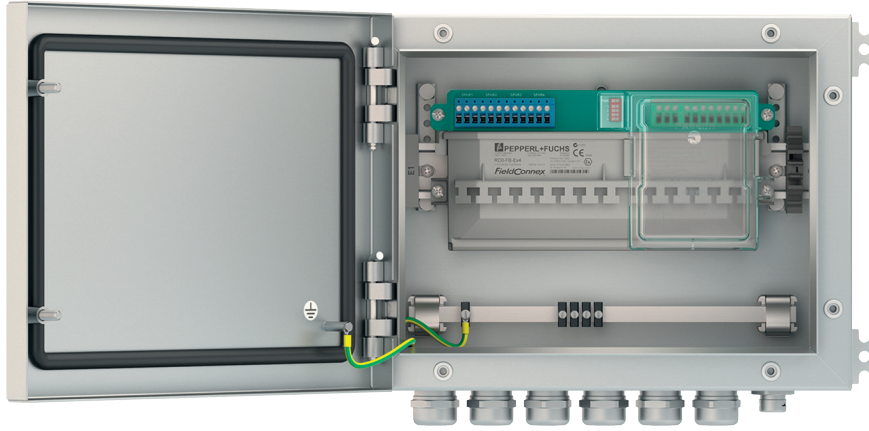
Ambient conditions

Ambient temperature	-40 ... 60 °C (-40 ... 140 °F)
Storage temperature	-40 ... 70 °C (-40 ... 158 °F)
Relative humidity	< 75 % (annual mean) < 95 % (30 d/year), no moisture condensation

Technical Data

Impact resistance	7J
Mechanical specifications	
Enclosure cover	Hinged door with captive retaining screws
Degree of protection	IP66
Cable entry	cable gland and stopping plug options see separate table
Material	
Housing	Stainless steel 1.4404 / AISI 316L
Surface	brushed
Seal	Silicone, fire-resistant, one piece, foamed
Material thickness	enclosure body, enclosure cover, mounting plate: 1.5 mm
Dimensions	(W x H x D) 300 x 230 x 160 mm (1 x RD0-FB-Ex4.COM) 380 x 380 x 220 mm (2 x RD0-FB-Ex4.COM) 480 x 380 x 220 mm (3 x RD0-FB-Ex4.COM)
Mounting	thru-holes Ø 7 mm
Grounding	grounding bolt M6 , brass, nickel-plated
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 mb [ia] 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 IEC 60079-0:2018+AC:2020 , EN 60079-1:2014+AC:2018 , EN IEC 60079-7:2015+A1:2018 , EN 60079-11:2012 , EN 60079-18:2015+Cor.2018 , 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



Type Code

1	2	3	4	5	6	7	8	9	10	11	12							
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Example:
F.FB0.T11.A04.1.0.H02.H02.0000

1	Electronic type
F.FB0	FieldBarrier junction box containing RD0-FB-Ex4.COM
2	Enclosure material - W x H x D
T11	Stainless steel 3.16 - brushed - 300 x 230 x 160 mm (SRM.23.30.16) *
T20	Stainless steel 3.16 - brushed - 380 x 380 x 220 mm (SRM.38.38.22)
T30	Stainless steel 3.16 - brushed - 480 x 380 x 200 mm (SRM.38.48.20)
3	Certification
A	ATEX (Zone 1 + Zone 21) *
G	ATEX + IECEx (Zone 1 + Zone 21)
4	Channels
04	1 x 4 channels (RD0-FB-Ex4.COM) *
08	2 x 4 channels (RD0-FB-Ex4.COM)
12	3 x 4 channels (RD0-FB-Ex4.COM)
5	Fieldbus type
1	Suitable for FOUNDATION Fieldbus H1 and PROFIBUS PA
6	Spur terminals
0	Directly wired to RD0-FB-Ex4.COM
7	Trunk entries
GP2	Cable gland M20, polyamide, Ex e, IP66, black
GB2	Cable gland M20, nickel-plated brass, Ex e, IP66
GS2	Cable gland, M20, stainless steel, Ex e, IP66
GN2	Cable gland M20, nickel-plated brass, Ex de, IP66, for armoured cable
GA2	Cable gland M20, stainless steel, Ex de, IP66, for armoured cable
H02	Stopping plug M20, polyamide, Ex e, IP66
H03	Stopping plug M20, nickel-plated brass, Ex de, IP66
H04	Stopping plug M20, stainless steel, Ex de, IP66

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8	Spur entries
GP2	Cable gland M20, polyamide, Ex e, IP66, blue
GB2	Cable gland M20, nickel-plated brass, Ex e, IP66
GS2	Cable gland, M20, stainless steel, Ex e, IP66
GN2	Cable gland M20, nickel-plated brass, Ex de, IP66, for armoured cable
GA2	Cable gland M20, stainless steel, Ex de, IP66, for armoured cable
H02	Stopping plug M20, polyamide, Ex e, IP66
H03	Stopping plug M20, nickel-plated brass, Ex de, IP66
H04	Stopping plug M20, stainless steel, Ex de, IP66

9	Tag plate
0	None
A	Plastic, 120 x 30 mm
B	Stainless steel, 120 x 30 mm
C	Plastic, 95 x 20 mm
D	Stainless steel, 95 x 20 mm

10	Grounding bar
0	None
1	With grounding bar, connected to equipotential bonding
2	With grounding bar, isolated

11	Surge protection
0	No surge protection
3	Surge protection for trunk (FS-LBF-D1.32) *

12	Additional accessories
0	None
T	External fieldbus terminator (FS-FT-Ex1.D.IEC) *
D	Document pocket (DIN A4), does not fit all enclosure sizes
3	External fieldbus terminator (FS-FT-Ex1.D.IEC) * and enclosure leakage sensor (ELS-1)
4	External fieldbus terminator (FS-FT-Ex1.D.IEC) * and document pocket (DIN A4)
5	Enclosure leakage sensor (ELS-1) and document pocket (DIN A4)
6	External fieldbus terminator (FS-FT-Ex1.D.IEC) *, enclosure leakage sensor (ELS-1), and document pocket (DIN A4)

* In conjunction with version FB0.T11.*04* variants, surge protection and external terminator are available on request.

Matching System Components

	RD0-FB-Ex4.*	FieldBarrier®
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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