

Segment Protector Junction Box, Polyester (GRP)



F.SPE.P**.A**.1.0.***.***.****

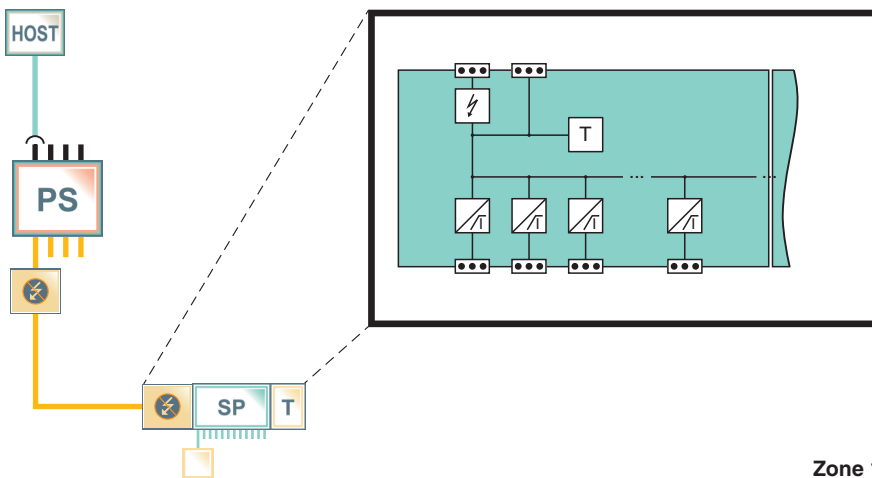
- Connection of Ex d certified devices
- Glass fiber reinforced polyester, impact resistant, IP66
- Configurable cable entries for trunk and spurs
- International approvals
- For FOUNDATION Fieldbus H1 and PROFIBUS PA
- Installation in Zone 1



Function

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



Zone 1

Technical Data

General specifications

Design / Mounting	Outside installation
Installed components	Segment Protector R-SP-E12 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: t47951_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

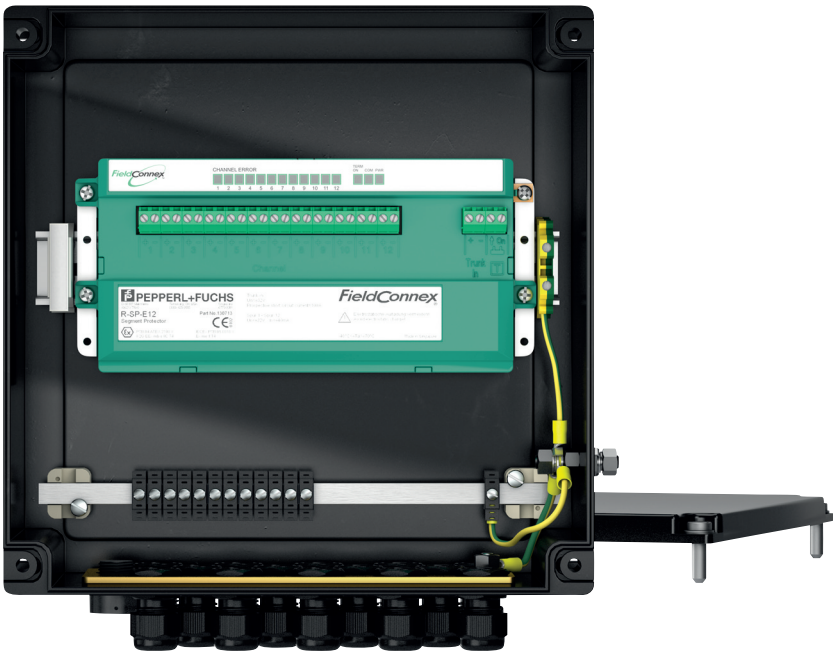
Singapore: +65 6779 9091
pa-info@sg.pepperl-fuchs.com

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
Surface	black molded finish (RAL 9005)
Surface resistance	< 10 ⁹ Ω
Water absorption	< 6 %
Seal	silicone , one-piece
Grounding plate	brass
Material thickness	grounding plate: 3 mm
Dimensions	(W x H x D) 271 x 271 x 136 mm (1 x R2-SP-E12) 544 x 271 x 136 mm (2 x R2-SP-E12)
Mounting	thru-holes Ø6.5 mm
Grounding	grounding bolt M6 , Stainless steel
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 2G Ex db eb mb IIC T4 Gb Ⓜ II 2D Ex tb 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 60079-1:2007 , EN 60079-7:2015 , 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: t47951_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

Type Code

Electronic type

F.SPE Enclosure solution for R-SP-E12

Enclosure material

P Glass-fiber reinforced polyester, IP66

Number of installed devices

12.A12 1 x R-SP-E12 ¹

20.A24 2 x R-SP-E12

Fieldbus type

1 Suitable for FOUNDATION Fieldbus H1 and PROFIBUS PA

Spur terminals

0 Spurs directly wired to R-SP-E12

Trunk entries

Spur entries

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

Tag plate

- A Tag plate, traffolyte, 120 x 30 mm
- B Tag plate, stainless steel, 120 x 30 mm
- 0 No tag plate

Grounding bar

- 1 Grounding bar 10 x 3 mm, equipped with grounding terminals
- 0 No grounding bar installed

Surge protection Trunk

- 3 Surge protection for Trunk FS-LBF-D1.32 installed ¹
- 0 No surge protection

External terminator

- 1 Fieldbus terminator FS-FT-Ex1.D.IEC installed ¹
- 0 No terminator installed

¹ In conjunction with version 12.A12 surge protection and external terminator are available on request.

F.SPE	.	P	.		.	1	.	0	
-------	---	---	---	--	---	---	---	---	---	--	---	--	---	--	---	--	---	--	---	--

Predefined characters indicate pre-set attributes.

Release date: 2022-07-04 Date of issue: 2022-07-04 Filename: t47951_eng.pdf

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