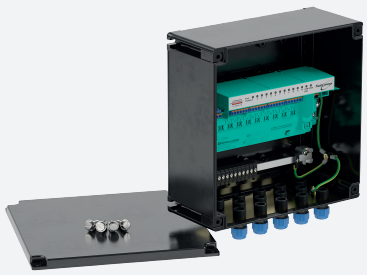


Multi-Input/Output Junction Box, Polyester (GRP)

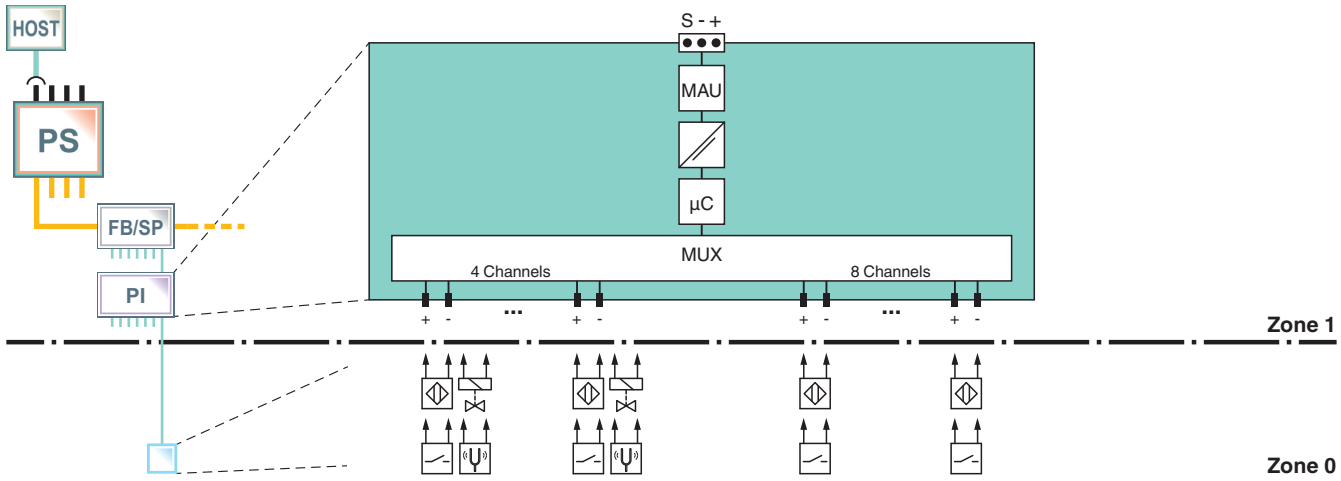
F.MIO.P12.*12.P.*.***.***.**00

- For discrete inputs and outputs
- Glass fiber reinforced polyester, impact resistant, IP66
- Configurable cable entries for bus lines and field signal lines
- International approvals
- For PROFIBUS PA
- Installation in Zone 1/Div. 1, intrinsically safe
- Sensors in Zone 0/Div. 1

Function

This fieldbus junction box holds a multi-input/output (MIO) for transferring signals from discrete inputs and valves to the control system. The MIO offers the same functionality as components FD0-VC-Ex* and FD0-BI-*. The fieldbus junction box can be installed in Zone 1 with sensors and actuators located in Zone 0.
Glass fiber reinforced polyester provides corrosion resistance and is lightweight. The surface resistance avoids electrostatic charge.
Bus and field signal line entries can be chosen individually from a range of cable glands and stopping plugs. A breather drain is included by default. Tag plate and grounding bar are available as options.
This fieldbus 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	Binary multi-input/output R8D0-MIO-Ex12.PA* , For technical data on installed electronic component see data sheet.
Fieldbus connection	
Fieldbus type	PROFIBUS PA
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)

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Technical Data

Storage temperature		-40 ... 70 °C (-40 ... 158 °F)
Relative humidity		< 75 % (annual mean) < 95 % (30 d/year), no moisture condensation
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
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		Ⓔx II 2(1)G Ex ib [ia Ga] IIC T4 Gb Ⓔx II 2(1)D Ex tb [ia Da] IIIC T135°C Db
Certificate		PTB 17 ATEX 1011 X (assembled Junction Box) , for additional certificates see www.pepperl-fuchs.com
Marking		Ⓔx II 3(1)G Ex ic [ia Ga] IIC T4 Gc Ⓔx II 3(1)G Ex ec [ia Ga] IIC T4 Gc Ⓔx II 3(1)D Ex tc [ia Da] IIIC T135°C Dc
Directive conformity		
Directive 2014/34/EU		EN 60079-0:2012 , EN 60079-7:2015 , EN 60079-11:2012 , EN 60079-31:2014
International approvals		
IECEx approval		IECEx PTB 07.0036 X , Zone 1 , suitable Junction Box on request IECEx PTB 09.0016 X , Zone 2 , 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.

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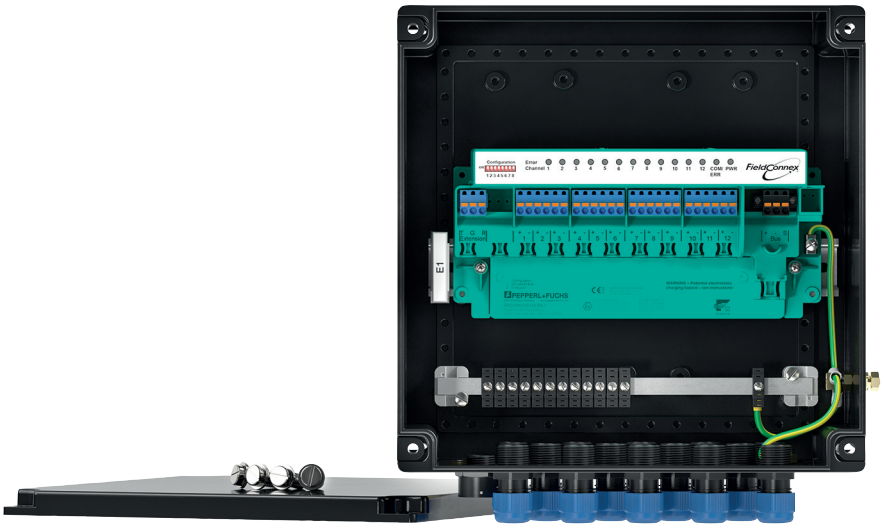
Assembly



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Product Versions

Cable Gland Versions

Type	Cable gland					Stopping plug		
	GP2	GB2	GS2	GN2	GA2	H02	H03	H04
Mechanical specifications								
Degree of protection	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)	–	–	–	6 ... 11	6 ... 11	–	–	–
Outer sheath (mm)	6 ... 12	4 ... 12	4 ... 12	8 ... 15	8 ... 15	–	–	–
Cable								
Suitable for armored cable	no	no	no	yes	yes	–	–	–
Data for application 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.MIO Enclosure solution for R8D0-MIO-Ex12.PA*

Enclosure material

P Glass fiber reinforced polyester, IP66

Number of installed devices

12.A12 1 x R8D0-MIO-Ex12.PA* for installation in Zone 1

12.B12 1 x R8D0-MIO-Ex12.PA* for installation in Zone 2

Fieldbus type

P Suitable for PROFIBUS PA

Terminals

0 Screw terminals

3 Spring terminals

Bus line entries

Field signal line 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 armored cable
GA2	**GA2**	Cable gland M20, stainless steel, Ex de, IP66, for armored 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

D Tag plate, stainless steel, 95 mm x 20 mm

C Tag plate, plastic, 95 mm x 20 mm

0 No tag plate

Grounding bar

2 With isolated grounding bar

1 With grounding bar connected to potential equalization

0 No grounding bar installed

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