CUSTOM CABINETS AND JUNCTION BOXES

PEPPERL+FUCHS

PROTECTING YOUR PROCESS

We put things

Pepperl+Fuchs products are used throughout the world in applications involving industrial, hazardous and corrosive environments. By engineering a complete solution at our own facility, Pepperl+Fuchs is able to offer its world-class products in a variety of panels and enclosures designed and built according to your specifications.

We are capable of developing and manufacturing a wide range of solutions including:

- Field Junction Box
- Remote I/O Enclosures
- Purge & Pressurization Systems
- Cabinets

From the initial concept to start-up and commissioning, Pepperl+Fuchs will provide you with professional service and unmatched performance.

FIELD JUNCTION BOX
Customer- and industry-specific solutions for FieldConnex®

REMOTE I/O ENCLOSURES
Customer- and industry-specific solutions for Remote I/O

FIELD JUNCTION BOX

REMOTE I/O ENCLOSURES

together

PURGED CABINET SOLUTIONS

Customer- and industry-specific solutions for applications ranging from Type X, Y and Z, to Ex pz and Ex px.

PURGED CABINET SOLUTIONS

... and deliver solutions.

CABINETS

CABINETS

Customer- and industry-specific solutions including interface, marshalling, control room and fieldbus power types.

RANGE OF APPLICATION

Our stainless steel enclosures are ideal for use in process industries with highly corrosive environments.

GENERAL SYSTEM FEATURES

- Ex-approved installation solutions for fieldbus in zones 1 / 2 / 21 / 22 (PTB 07 ATEX 1061, IEC Ex PTB 07.0036)
- Electro polished surface
- Breather / drain
- Grounding bolt
- IP 66 and Type 4X ingress protection

CUSTOMER- AND INDUSTRY-SPECIFIC SOLUTIONS FOR FIELDCONNEX®

Each application has its own demands on design for fieldbus systems. Our Field Junction Boxes for the familiar FieldConnex® products will meet your requirements. A custom-fit solution for your application, the Field Junction Box reduces engineering costs and allows the fastest possible site installation.

TECHNICAL INFORMATION

Standardized housing dimensions	(300 x 200 x 120) mm / (11.81 x 7.87 x 4.72) ″ (380 x 380 x 175) mm / (14.96 x 14.96 x 6.30) ″ (480 x 400 x 175) mm / (18.90 x 15.75 x 6.30) ″	
General housing features	SS316l, high-gloss polish Mounting brackets Door hinges M10 grounding screws DIN-rail mounted Mounting plate Gland plate II2GD Ex e II available	
Cable glands M20	Plastic Nickel-plated brass Stainless steel Nickel-plated brass for armored cable Stainless steel for armored cable	
Condensate drain / ventilation M20	Plastic Nickel-plated brass Stainless steel	
Terminals for Ex e	Screw terminals Spring terminals	Grey Grey
Terminals for Ex ia	Screw terminal with disconnect Spring terminal with disconnect	Blue Blue
Internal wiring	Fieldbus cable type A, orange Fieldbus cable type A, blue	Ex e Ex ia
Grounding bar	Isolated Non isolated	
Tag label	Traffolyte Stainless steel (SS304)	(120 x 30) mm / (4.72 x 1.22) ″ (120 x 30) mm / (4.72 x 1.22) ″
Environmental	Operating temperature Storage temperature Relative Humidity % RH (non condensing) IP rating Impact resistance	−40 °C to +55 °C −40 °C to +80 °C 5 to 95 % IP66 to EN 60529 Type 4X 7 Nm to EN 50014
Approvals	PTB 07 ATEX 1061 IEC Ex PTB 07.0036	

Other specifications available on request

FIELD JUNCTION BOX
POLYESTER (GRP) HOUSING

RANGE OF APPLICATION

For most aggressive environments our GRP enclosure range is an economic and lightweight choice.

GENERAL SYSTEM FEATURES

- Ex-approved installation solutions for fieldbus in zones 1 / 2 / 21 / 22
  (PTB 07 ATEX 1061, IEC Ex PTB 07.0036)
- Impact resistant GRP enclosure
- Breather / drain
- Earth continuity plate
- IP 66 and Type 4X ingress protection

CUSTOMER- AND INDUSTRY-SPECIFIC
SOLUTIONS FOR FIELDCONNEX®

Each application has its own demands on design for fieldbus systems. Our Field Junction Boxes for the familiar FieldConnex® products will meet your requirements. A custom-fit solution for your application, the Field Junction Box reduces engineering costs and allows the fastest possible site installation.

TECHNICAL INFORMATION

Standardized housing dimensions	(271 x 271 x 136) mm / (10.67 x 10.67 x 5.35) ″	
	(544 x 271 x 136) mm / (21.42 x 10.67 x 5.35) ″	
	(544 x 544 x 136) mm / (21.42 x 21.42 x 5.35) ″	
General housing features	Polyester (GRP)	
	Mounting brackets	Optional
	M10 grounding screws	
	DIN-rail mounted	
	Earth conduit plate	
	Gland plate	
	II 2GD Ex e II available	
Cable glands M20	Plastic	
	Nickel-plated brass	
	Stainless steel	
	Nickel-plated brass for armored cable	
	Stainless steel for armored cable	
Condensate drain / ventilation M20	Plastic	
	Nickel-plated brass	
	Stainless steel	
Terminals for Ex e	Screw terminals	Grey
	Spring terminals	Grey
Terminals for Ex ia	Screw terminal with disconnect	Blue
	Spring terminal with disconnect	Blue
Internal wiring	Fieldbus cable type A, orange	Ex e
	Fieldbus cable type A, blue	Ex ia
Grounding bar	Isolated	
	Non isolated	
Tag label	Traffolyte	(120 x 30) mm / (4.72 x 1.22) ″
	Stainless steel (SS304)	(120 x 30) mm / (4.72 x 1.22) ″
Environmental	Operating temperature	−40 °C to +55 °C
	Storage temperature	−40 °C to +80 °C
	Relative Humidity % RH (non condensing)	5 to 95 %
	IP rating	IP66 to EN 60529 Type 4X
	Impact resistance	7 Nm to EN 50014
Approvals	PTB 07 ATEX 1061	
	IEC Ex PTB 07.0036	

Other specifications available on request

FIELD JUNCTION BOX

RECOMMENDATIONS FOR ALUMINUM ENCLOSURES

For non-corrosive environments the economical choice is our aluminum field junction box. This is an ideal solution for most installations, with ingress protection ratings of IP67 and Type 4X.

GENERAL SYSTEM FEATURES

- Ex-approved installation solutions for fieldbus in zones 1 / 2 / 21 / 22 and Div. 1 / Div. 2
- Customer-oriented availability
- Customer- and industry-specific solutions for fieldbus distribution (non-Ex solutions also available)

CUSTOMER- AND INDUSTRY-SPECIFIC SOLUTIONS FOR FIELDCONNEX®

Our well-proven cast aluminum enclosure is the ideal solution for quick and easy site installation. It can be installed close to the field instruments, even in Zone 1, and keeps the wiring and engineering costs to a minimum. FieldConnex® electronics are fitted in the enclosure. There is a choice of cable glands and connectors to suit the demands of the process industries.
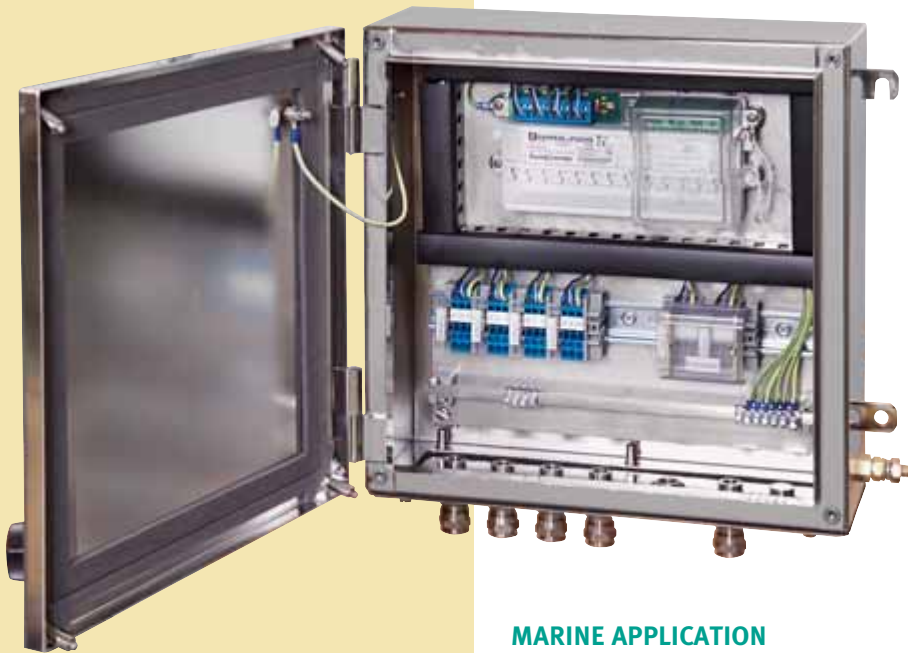
TECHNICAL INFORMATION

Standardized housing dimensions	(217 x 114 x 84) mm / (8.54 x 4.48 x 11.81) ″		
General housing features	Aluminum Mounting brackets Earthing point	ALSI12 (CU) DIN 1725 (Si 1,2%), anodised	
Cable glands M16 / M20	Plastic Nickel-plated brass Stainless steel Nickel-plated brass for armored cable		
Plug connection	Plug connection M12 x 1; stainless steel Plug connection M12 x 1; nickel-plated brass Plug connection 7/8″, stainless steel		
Environmental	Operating temperature operating temperature Operating temperature Operating temperature	−30 °C to +70 °C −40 °C to +70 °C −25 °C to +70 °C −40 °C to +70 °C	Plastic cable glands Metallic cable glands M12 x 1 plug connection 7/8″ plug connection
	Storage temperature IP rating	−40 °C to +85 °C IP66 to EN 60529	 Type 4X
Approvals	Canada CSA USA FM China Nepsi Europe PTB ATEX PTB IECEx	CoC 1592754 CoC 3015728 GYJ 04270 PTB 02 ATEX 2086 IECEx PTB 03.0003	

FIELD JUNCTION BOX
CUSTOMIZED APPLICATIONS

MARINE APPLICATION

- Standardized enclosure (380 x 380 x 160 mm)
- Type 316L stainless steel, high-gloss polish
- Gland plate
- Marine approved cable glands for armored cables
- Prewired with single wire in cable duct
- Fieldbarrier

APPLICATION WITH R2-SEGMENT PROTECTOR

- Enclosure (508 x 508 x 200 mm)
- Type 316L stainless steel, high-gloss polish
- Gland plate
- Segment protector R2-SP-N12

APPLICATION FOR ZONE 1
- Enclosure stainless steel 316L
- Gland plate
- Prewired with single wire in cable duct
- Fieldbarrier
- Valve box with 2:1 terminals
- Surge trunk
- Terminator

APPLICATION WITH FIELDBARRIER
- Enclosure (508 x 508 x 200 mm)
- Type 316L stainless steel, high-gloss polish
- Gland plate
- Prewired with Fieldbus cable Typ A
- Terminals for trunk and spurs
- Fieldbarrier

APPLICATION WITH FIELDBARRIER
- Polyester (GRP) enclosure
- Prewired with single wire and Fieldbus cable Typ A in cable duct
- Trunk life disconnect terminals
- Terminator with surge arrestor
- Fieldbarrier

REMOTE I/O ENCLOSURES

RECOMMENDATIONS FOR
STAINLESS STEEL ENCLOSURES

Our stainless steel enclosures are ideal for use in washdown applications where a complete watertight seal is required, or for highly corrosive areas where standard enclosures would not hold up, with IP68 and Type 6 ingress protection ratings.

GENERAL SYSTEM FEATURES

- Ex-approved installation solutions for fieldbus in zones 1 / 2 / 21 / 22 and Div. 1 / Div. 2
- Customer-oriented availability
- Customer- and industry-specific solutions for fieldbus distribution (non-Ex solutions also available)

CUSTOMER- AND INDUSTRY-SPECIFIC
SOLUTIONS FOR REMOTE I/O

No application is not quite the same as another; every application always places new demands on the design and features of a Remote I/O-box. That's why Pepperl+Fuchs delivers custom enclosure solutions for our familiar Remote I/O-products.
In addition to a custom-fit solution for your application, the Remote I/O enclosures reduce engineering costs and allow the fastest possible installation on location.

TECHNICAL INFORMATION

Standardized housing dimensions	(1000 x 800 x 300) mm / (39.37 x 34.49 x 11.81) ″	
	(800 x 800 x 300) mm / (34.49 x 34.49 x 11.81) ″	
others available on request	(600 x 600 x 210) mm / (23.62 x 23.62 x 8.27) ″	

General housing features	SS316l, High-gloss polish	DIN-rail mounted
	Mounting brackets	Mounting plate
	Door hinges	Gland plate
	M10 grounding screws	II 2GD Ex e II available

Cable glands M16, M20, M25	Plastic
	Nickel-plated brass
	Stainless steel
	Nickel-plated brass for armored cable
	Stainless steel for armored cable

Condensate drain / ventilation M20	Plastic
	Nickel-plated brass
	Stainless steel

Terminals for Ex e	Screw terminals	Grey
	Spring terminals	Grey

Terminals for Ex ia	Screw terminal with disconnect	Blue
	Spring terminal with disconnect	Blue
	Terminals with disconnect	Blue

Internal wiring in cable duct	Black	Ex e
	Blue	Ex ia

Grounding bar	Isolated
	Non isolated

Environmental	Operating temperature	−20 °C to +40 °C	FB Zone 1 T6
	Operating temperature	−20 °C to +55 °C	FB Zone 1 (T4)
	Operating temperature	−20 °C to +70 °C	LB Zone 2
	Operating temperature	−20 °C to +60 °C	LB Zone 2 and Ex i loops
	Storage temperature	-20 °C to +80 °C	
	Relative Humidity % RH (non condensing)	5 to 95 %	<75 %
	IP rating	IP66 to EN 60529	Typ 4X

Approvals	ATEX	PTB 97 ATEX 1075	FB Remote installation in Zone 2G
	ATEX	PTB 97 ATEX 1074U	FB Module installation in Zone 2G
	ATEX	PTB 03 ATEX 2042	LB Module installation in safe area
	ATEX	PTB 99 ATEX 2186	LB Module installation in Zone 3GD

Other specifications available on request

REMOTE I/O ENCLOSURES
POLYESTER (GRP) HOUSING

RECOMMENDATIONS FOR
POLYESTER (GRP) ENCLOSURES

For a lightweight solution, the economical choice is our GRP field junction box. This is an ideal solution for most installations, with IP66 and Type 4X ingress protection ratings.

GENERAL SYSTEM FEATURES

- Ex-approved installation solutions for fieldbus in zones 1 / 2 / 21 / 22 and Div. 1 / Div. 2
- Customer-oriented availability
- Customer- and industry-specific solutions for fieldbus distribution (non-Ex solutions also available)

CUSTOMER- AND INDUSTRY-SPECIFIC
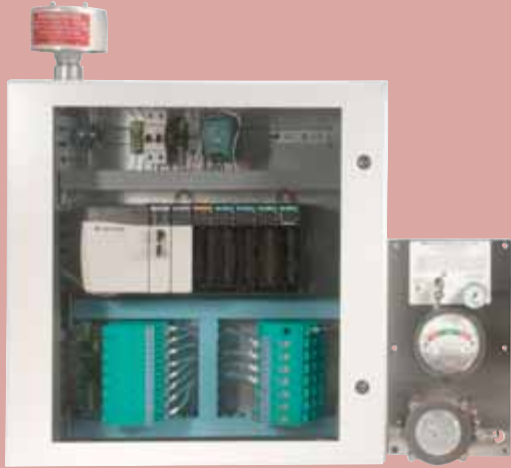### SOLUTIONS FOR REMOTE I/O

No application is not quite the same as another; every application always places new demands on the design and features of a Remote I/O-box. That's why Pepperl+Fuchs delivers custom enclosure solutions for our familiar Remote I/O-products.
In addition to a custom-fit solution for your application, the Remote I/O enclosures reduce engineering costs and allow the fastest possible installation on location.

TECHNICAL INFORMATION

Standardized housing dimensions	271 x 544 x 210 mm	407 x 544 x 210 mm	544 x 544 x 210 mm
	271 x 815 x 210 mm	407 x 815 x 210 mm	544 x 815 x 210 mm
		407 x 1088 x 210 mm	544 x 1088 x 210 mm
		407 x 1359 x 210 mm	544 x 1359 x 210 mm
others available on request			

General housing features	Polyester (GRP)	
	Mounting brackets	Optional
	M10 grounding screws	
	DIN-rail mounted	
	Earth conduit plate	Optional
	II 2GD Ex e II available	

Cable glands M16, M20, M25	Plastic
	Nickel-plated brass
	Stainless steel
	Nickel-plated brass for armored cable
	Stainless steel for armored cable

Condensate drain / ventilation M20	Plastic
	Nickel-plated brass
	Stainless steel

Terminals for Ex e	Screw terminals	Grey
	Spring terminals	Grey

Terminals for Ex ia	Screw terminal with disconnect	Blue
	Spring terminal with disconnect	Blue
	Terminals with disconnect	Blue

Internal wiring in cable duct	Black	Ex e
	Blue	Ex ia

Grounding bar	Isolated
	Non isolated

Environmental	Operating temperature	−20 °C to +40 °C	FB Zone 1 T6
	Operating temperature	−20 °C to +55 °C	FB Zone 1 (T4)
	Operating temperature	−20 °C to +70 °C	LB Zone 2
	Operating temperature	−20 °C to +60 °C	LB Zone 2 and Ex i loops
	Storage temperature	−20 °C to +80 °C	
	Relative Humidity % RH (non condensing)	5 to 95 %	<75 %
	IP rating	IP66 to EN 60529	Typ 4X

Approvals	ATEX	PTB 97 ATEX 1075	FB Remote installation in Zone 2G
	ATEX	PTB 97 ATEX 1074U	FB Module installation in Zone 2G
	ATEX	PTB 03 ATEX 2042	LB Module installation in safe area
	ATEX	PTB 99 ATEX 2186	LB Module installation in Zone 3GD

Other specifications available on request

PURGED CABINET SOLUTIONS

CUSTOMER- AND INDUSTRY-SPECIFIC SOLUTIONS

Pepperl+Fuchs is the global leader in the design and manufacturing of purge and pressurization systems, as well as in the implementation of purged cabinet solutions. Our purge systems are produced in accordance with ISO 9001 international standards, and are certified to global NFPA, ATEX, FM and UL requirements, for applications ranging from Type X, Y and Z, to Ex [nP] and Ex [p]. This will enable you to operate general-purpose equipment within hazardous or corrosive areas in most parts of the world. Our purged cabinet solutions offer the option of UL698 certification to complement those servicing the North American market.

As a manufacturer of purge systems and customized cabinets, Pepperl+Fuchs can offer a complete solution, whatever your needs may be. We can design and build an enclosure based on your specification, and install the necessary purge equipment, taking the guesswork out of your application. Additionally, Pepperl+Fuchs can mount your control equipment and P+F intrinsic safety barriers in these cabinets for a complete solution.

With multiple enclosure material types and sizes, choosing Pepperl+Fuchs custom cabinet solutions is the right choice for your purged and pressurized cabinet applications.

PURGE SYSTEM FEATURES

- Components mounted on stainless steel panel
- General-purpose equipment can be operated in a Div 2/Zone 2 area
- General-purpose equipment can be operated in a Div 1/Zone 1 area
- Div 2 rated equipment can be used in a Div 1 area
- Fully automatic systems for easy installation and operation
- Optional pressure loss alarm relay on Type Y, Z and Ex [nP] systems
- Filter-regulator with pressure gauge provides clean, protective gas to the enclosure
- LED indication for a fast overview of the status of the system on Type X, Ex px systems
- User friendly user interface with display, two lines each 20 characters and backlight screen
- Certified to NFPA, ISA, and ATEX standard
- EPCU (electronic power control unit) controls enclosure power and monitors system operation

ENCLOSURE FEATURES

- **316 stainless steel, aluminum, glass reinforced plastic enclosures (other materials available upon request)**
- **Enclosure sizes up to 250 ft³ (7.08 m³)**
- **Purge system pre-assembled to enclosure for easy customer installation**
- **UL698 system certification**
- **NEMA 4X/ IP66 enclosure rating**
- **Customer-specific solutions available**

CLASS I APPLICATIONS

Type	Div	Group	Equipment	90 ft³ (2.54 m³)	250 ft³ (7.08 m³)
Z	2	A-D	General-purpose	3003-LPS-CI / 3003-WPSA-CI	3004-LPS-CI / 3004-WPSA-CI
		C&D	General-purpose	3003-LPS-CI / 3003-WPS-CI	3004-LPS-CI / 3004-WPS-CI
X	1	A-D	General-purpose	6000 Series	6000 Series
Y	1	A-D	Div. 2	3003-LPS-CI / 3003-WPSA-CI	3004-LPS-CI / 3004-WPSA-CI
		C&D	Div. 2	3003-LPS-CI / 3003-WPS-CI	3004-LPS-CI / 3004-WPS-CI

Note: Class II systems also available

ZONE APPLICATIONS

Type	Div	Group	Equipment	90 ft³ (2.54 m³)	250 ft³ (7.08 m³)
Ex pz	2	IIC	General-purpose	3003-LPS-CI	3004-LPS-CI
		IIB+H2	General-purpose	3003-WPSA-CI	3004-WPSA-CI
Ex px	1	IIB+H2	General-purpose	6000 Series	6000 Series

Pepperl+Fuchs supports a wide range of cabinet solutions including interface, marshalling, control room and fieldbus power types. We are able to integrate our full line of products into a cabinet that reduces your commissioning time, and most importantly, reduces your upfront costs. Our intrinsic safety, purge & pressurization, fieldbus, power supply and HART interface products can be combined into a complete project solution to meet the exact requirements of your application.

Pepperl+Fuchs supports you during all project phases

Initial concept

Basic design

Detailed design

Factory/site acceptance testing (FAT/SAT)

Start-up and commissioning

As a leading manufacturer of process interface equipment, our products are easily integrated into any panel design for maximum uptime and superior performance.

We can integrate any of your products into custom-designed cabinet solutions for your applications. Our cabinets are engineered and assembled to your specifications and our design team is available to assist you during any phase of your project.

PROCESS AUTOMATION – PROTECTING YOUR PROCESS

For over a half century, Pepperl+Fuchs has been continually providing new concepts for the world of process automation. Our company sets standards in quality and innovative technology. We develop, produce and distribute electronic interface modules, Human-Machine Interfaces and hazardous location protection equipment on a global scale, meeting the most demanding needs of industry. Resulting from our world-wide presence and our high flexibility in production and customer service, we are able to individually offer complete solutions – wherever and whenever you need us. We are the recognized experts in our technologies – Pepperl+Fuchs has earned a strong reputation by supplying the world's largest process industry companies with the broadest line of proven components for a diverse range of applications.

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