

PROCESS AUTOMATION

CUSTOM CABINETS AND JUNCTION BOXES



 **PEPPERL+FUCHS**
PROTECTING YOUR PROCESS

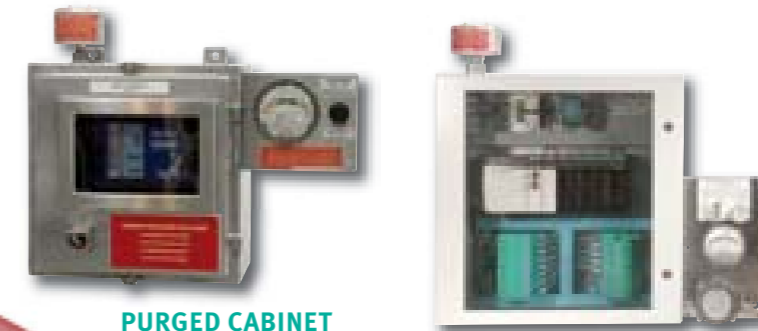
We put things together

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 enclosure
- Purge & Pressurization systems
- Cabinets

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



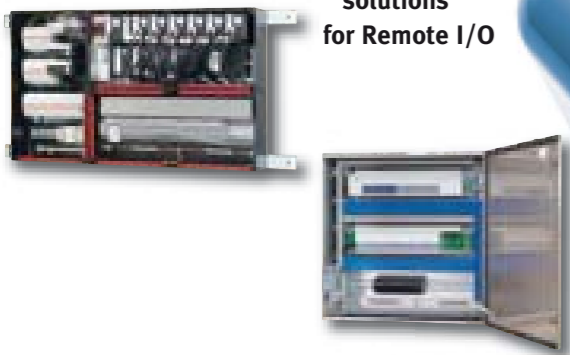
PURGED CABINET SOLUTIONS
Customer- and industry-specific solutions

... and deliver solutions.

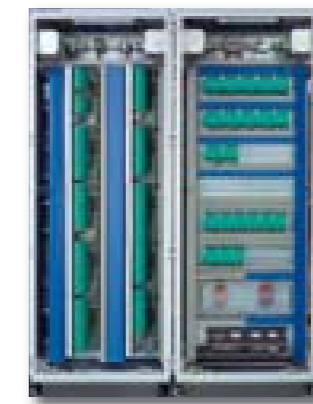
FIELD JUNCTION BOX
Customer- and industry-specific solutions for Fieldconnex



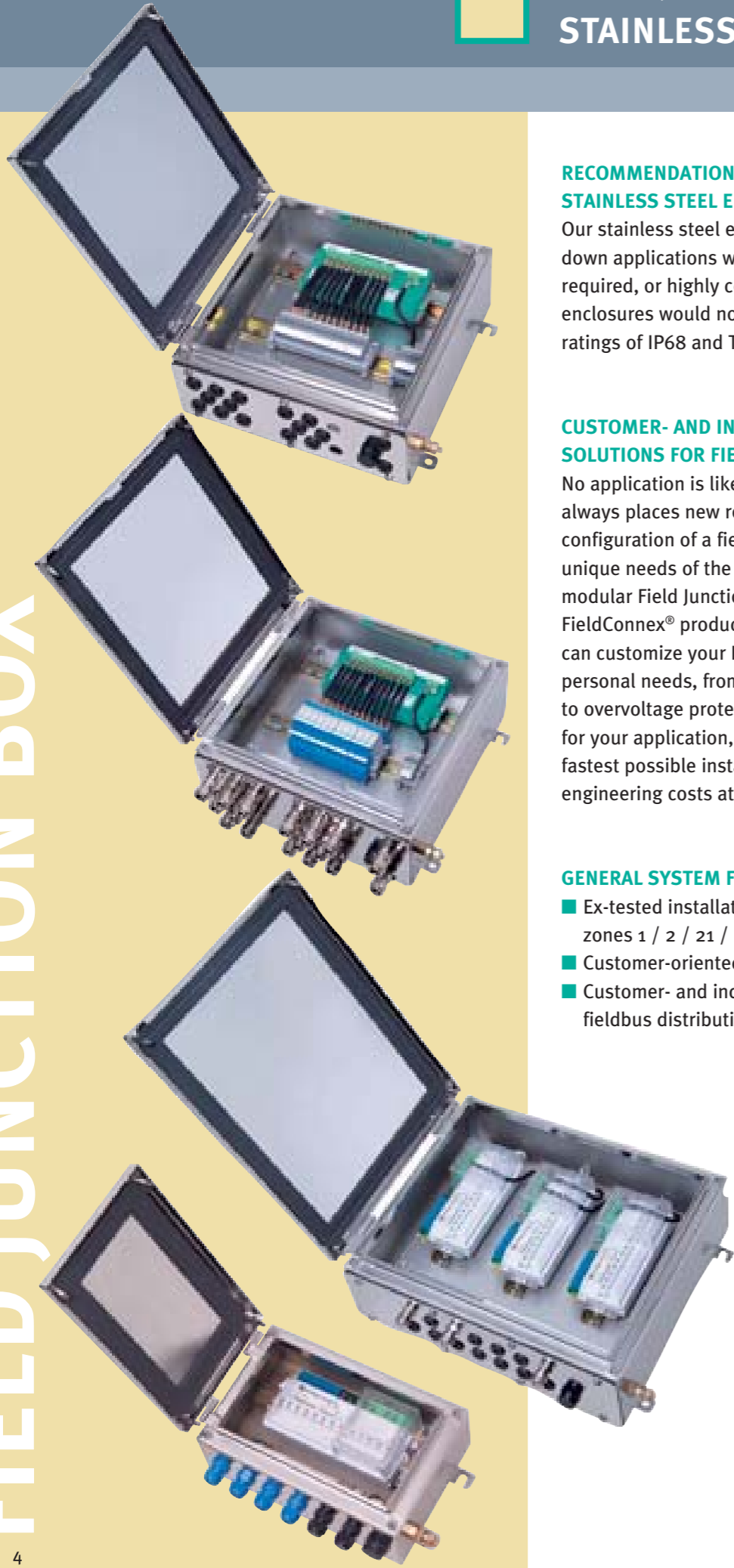
REMOTE I/O ENCLOSURES
Customer- and industry-specific solutions for Remote I/O



CABINETS
Customer- and industry-specific solutions



**FIELD JUNCTION BOX
STAINLESS STEEL HOUSING**



**RECOMMENDATIONS FOR
STAINLESS STEEL ENCLOSURES**

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

**CUSTOMER- AND INDUSTRY-SPECIFIC
SOLUTIONS FOR FIELDCONNEX**

No application is like the others; every application always places new requirements on the properties and configuration of a fieldbus junction box. To meet the unique needs of the customer, we introduce our new modular Field Junction Box System for our familiar FieldConnex® products. Besides the housing size, you can customize your Field Junction Box to your own personal needs, from the cable glands to the electronics to overvoltage protection. Besides a custom-fit solution for your application, the Field Junction Box allows the fastest possible installation on location, reducing engineering costs at the same time.

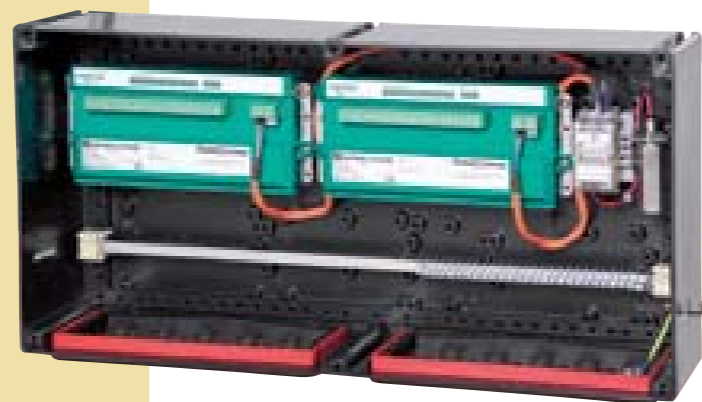
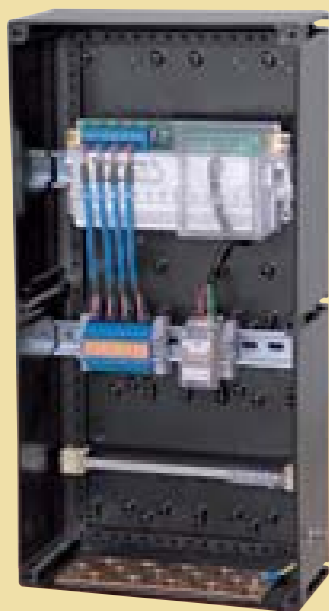
GENERAL SYSTEM FEATURES

- Ex-tested 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)

TECHNICAL INFORMATIONS		
Standardised housing dimensions	280 x 170 x 100 mm 300 x 200 x 120 mm 380 x 380 x 160 mm 480 x 400 x 160 mm	others available on request
General housing features	SS316L, High-gloss polish Mounting brackets Door hinges M10 grounding screws DIN-rail mounted mounting plate gland plate I/2GD EEx e II available	380 x 380 x160 and larger 380 x 380 x160 and larger
Cable glands M20	Plastic brass nickel plated stainless steel brass nickel plated for armoured cable stainless steel for armoured cable	
Condensate drain / ventilation M20	plastic brass nickel plated stainless steel	
Terminals for EEX e	screw terminals spring terminals	grey grey
Terminals for EEX ia	screw terminal with disconnect spring terminal with disconnect	blue blue
Internal wiring	fieldbus cable type A , orange fieldbus cable type A, blue	EEx e EEx ia
Grounding bar	isolated non isolated	
Tag label	traffolyte stainless steel (SS304)	120 x 30 mm 120 x 30 mm
Environmental	operating temperature storage temperature Relative Humidity % RH (non condensing) IP rating Impact resistance	-40 to +70°C -40 to +80°C 5 to 95% IP 66 to EN 60529 Type 4 X 7 Nm to EN 50014
Approvals	ATEX IEC	in preparation in preparation

Customer components are also available

**FIELD JUNCTION BOX
POLYESTER (GRP) HOUSING**



**RECOMMENDATIONS FOR
POLYESTER (GRP) ENCLOSURES**

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

**CUSTOMER- AND INDUSTRY-SPECIFIC
SOLUTIONS FOR FIELDCONNEX**

No application is like the others; every application always places new requirements on the properties and configuration of a fieldbus junction box. To meet the unique needs of the customer, we introduce our new modular Field Junction Box System for our familiar FieldConnex® products. Besides the housing size, you can customize your Field Junction Box to your own personal needs, from the cable glands to the electronics to overvoltage protection. Besides a custom-fit solution for your application, the Field Junction Box allows the fastest possible installation on location, reducing engineering costs at the same time.

GENERAL SYSTEM FEATURES

- Ex-tested 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)

TECHNICAL INFORMATIONS		
Standardised housing dimensions	271 x 271 x 136 mm 544 x 271 x 136 mm 544 x 544 x 136 mm	others available on request
General housing features	Polyester (GRP) Mounting brackets M10 grounding screws DIN-rail mounted earth conduit plate gland plate II 2GD EEx e II available	optional 544 x 271 x136 and larger
Cable glands M20	Plastic brass nickel plated stainless steel brass nickel plated for armoured cable stainless steel for armoured cable	
Condensate drain / ventilation M20	plastic brass nickel plated stainless steel	
Terminals for EEX e	screw terminals spring terminals	grey grey
Terminals for EEX ia	screw terminal with disconnect spring terminal with disconnect	blue blue
Internal wiring	fieldbus cable type A , orange fieldbus cable type A, blue	EEx e EEx ia
Grounding bar	isolated non isolated	
Tag label	traffolyte stainless steel (SS304)	120 x 30 mm 120 x 30 mm
Environmental	operating temperature storage temperature Relative Humidity % RH (non condensing) IP rating Impact resistance	-40 to +70°C -40 to +80°C 5 to 95% IP 66 to EN 60529 Type 4 X 7 Nm to EN 50014
Approvals	ATEX IEC	in preparation in preparation

Customer components are also available

**FIELD JUNCTION BOX
ALUMINIUM HOUSING**



**RECOMMENDATIONS FOR
ALUMINIUM ENCLOSURES**

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

**CUSTOMER- AND INDUSTRY-SPECIFIC
SOLUTIONS FOR FIELDCONNEX**

Our wellproven cast aluminium 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.

GENERAL SYSTEM FEATURES

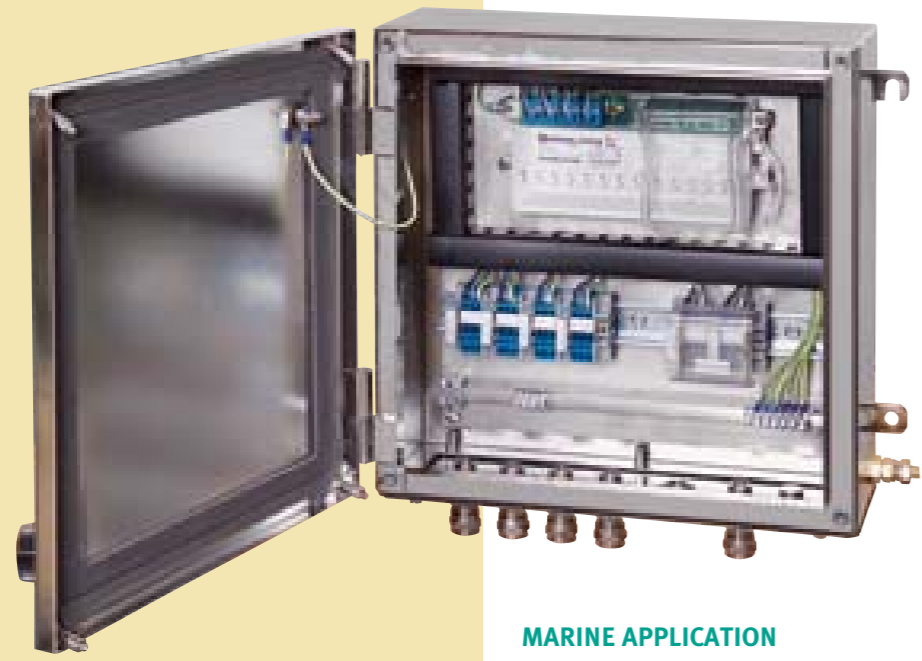
- Ex-tested installation solutions for fieldbus in zones 1 / 2 / 21 / 22 and Div. 1 / Div. 2
- Customer-oriented availability
- Customer- and industry-specific solutions for fieldbus distribution (non-Ex solutions also available)

TECHNICAL INFORMATIONS

Standardised housing dimensions	217 x 114 x 84 mm		
General housing features	aluminium Mounting brackets earthing point	ALSI12 (CU) DIN 1725 (Si 1,2%), anodised	
Cable glands M16 / M20	Plastic brass nickel plated stainless steel brass nickel plated for armoured 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	-30 to +70°C	cable glands plastic
	operating temperature	-40 to +70°C	cable glands metallic
	operating temperature	-25 to +70°C	M12 x 1 plug connection
	operating temperature	-40 to +70°C	7/8" plug connection
	storage temperature	-40 to +85°C	
	IP rating	IP 66 to EN 60529	Type 4 X
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	



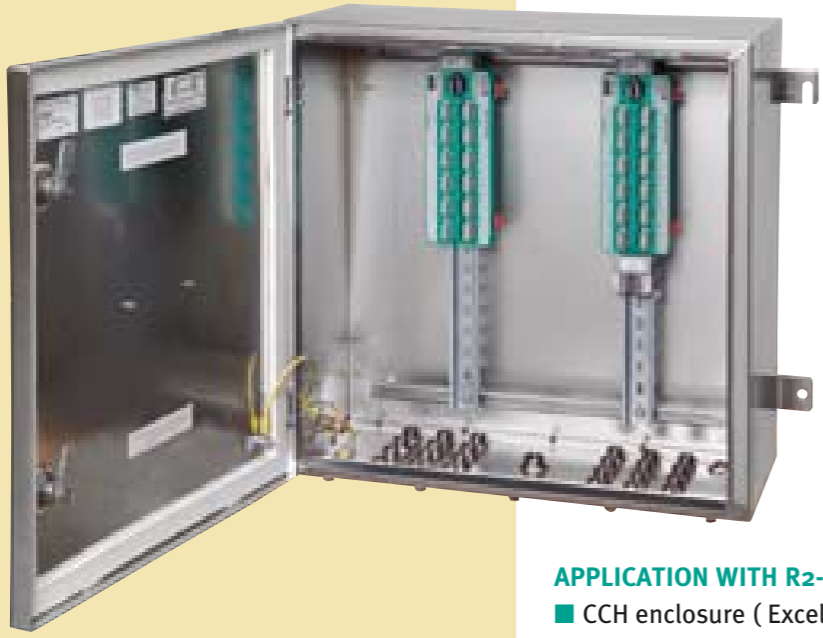
FIELD JUNCTION BOX
CUSTOMIZED APPLICATIONS



- MARINE APPLICATION**
- standardised Walsall enclosure (380 x 380 x 150 mm)
 - stainless steel 316 L , high polished
 - gland plate
 - marine approved cable glands for armoured cables
 - prewired with single wire in cable duct
 - Fieldbarriere



- APPLICATION FOR ZONE 1**
- CCH enclosure (ExCell)
 - stainless steel 316 L, high polished
 - gland plate
 - prewired with single wire in cable duct
 - Fieldbarriere
 - Valve box with 2:1 terminals
 - surge trunk
 - Terminator



- APPLICATION WITH R2- SEGMENTPROTECTOR**
- CCH enclosure (Excell 508x508x200 mm)
 - stainless steel 316 L, high polished
 - gland plate
 - Segmentprotector R2-SP-N12

- APPLICATION WITH FIELDBARRIERE**
- CCH enclosure (ExCell 508x508x200 mm)
 - stainless steel 316 L, high polished
 - gland plate
 - prewired with Fieldbus cable Typ A
 - terminals for trunk and spurs
 - Fieldbarriere



- APPLICATION WITH FIELDBARRIERE**
- Polyester (GRP) enclosure
 - prewired with single wire and Fieldbus cable Typ A in cable duct
 - trunk life disconnect terminals
 - terminator with surge arrestor
 - Fieldbarriere

REMOTE I/O ENCLOSURES
STAINLESS STEEL HOUSING



RECOMMENDATIONS FOR
STAINLESS STEEL ENCLOSURES

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

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

No application is like the others; every application always places new requirements on the properties and configuration of a Remote I/O-box. We bear witness to this fact with our enclosure solutions for our familiar Remote I/O-products.

Besides a custom-fit solution for your application, the Remote I/O enclosure allows the fastest possible installation on location, reducing engineering costs at the same time.

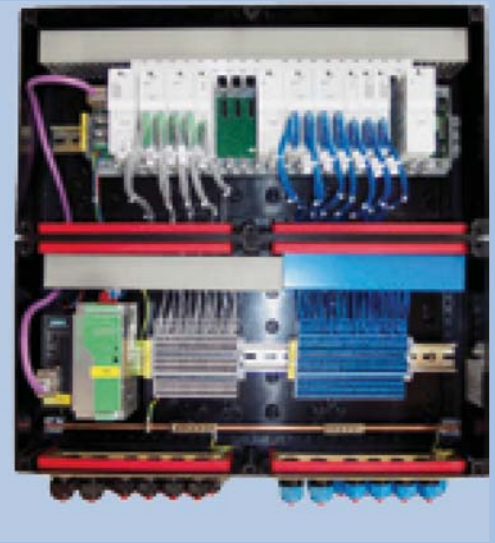
GENERAL SYSTEM FEATURES

- Ex-tested 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)

TECHNICAL INFORMATIONS			
Standardised housing dimensionsv	1000 x 800 x 300mm		
	800 x 800 x 300mm		
	600 x 600 x 210mm		others available on request
General housing features	SS316L, High-gloss polish		DIN-rail mounted mounting plate
	Mounting brackets		gland plate
	Door hinges		II2GD EEx e II available
	M10 grounding screws		
Cable glands M16, M20, M25	Plastic		
	brass nickel plated		
	stainless steel		
	brass nickel plated for armoured cable		stainless steel for armoured cable
Condensate drain / ventilation M20	plastic		
	brass nickel plated		
	stainless steel		
Terminals for EEX e	screw terminals		grey
	spring terminals		grey
Terminals for EEX ia	screw terminal with disconnect		blue
	spring terminal with disconnect		blue
	terminals with disconnect		blue
Internal wiring in cable duct	black		EEx e
	blue		EEx ia
Grounding bar	isolated		
	non isolated		
Environmental	operating temperature	-20 to +40°C	FB Zone 1 T6
	operating temperature	-20 to +55°C	FB Zone 1 (T4)
	operating temperature	-20 to +70°C	LB Zone 2
	operating temperature	-20 to +60°C	LB Zone 2 and EEx i loops
	storage temperature	-20 to +80°C	
	Relative Humidity % RH (non condensing)	5 to 95%	<75%
IP rating	IP 66 to EN 60529	Typ 4X	
Approvals	ATEX	PTB 97 ATEX 1075	FB Remote Errichtung in 2 G
	ATEX	PTB 97 ATEX 1074U	FB Module Errichtung in 2 G
	ATEX	PTB 03 ATEX 2042	LB Module Errichtung im sicheren Bereich
	ATEX	PTB 99 ATEX 2186	LB Module Errichtung in 3 GD

Customer components are also available

REMOTE I/O ENCLOSURES
POLYESTER (GRP) HOUSING



RECOMMENDATIONS FOR
POLYESTER (GRP) ENCLOSURES

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

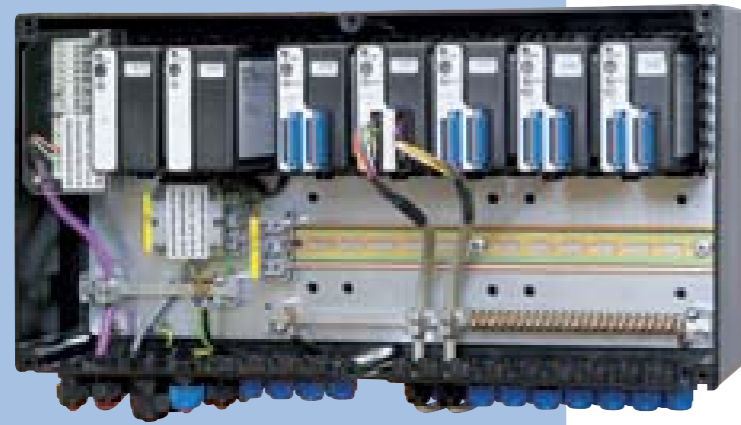
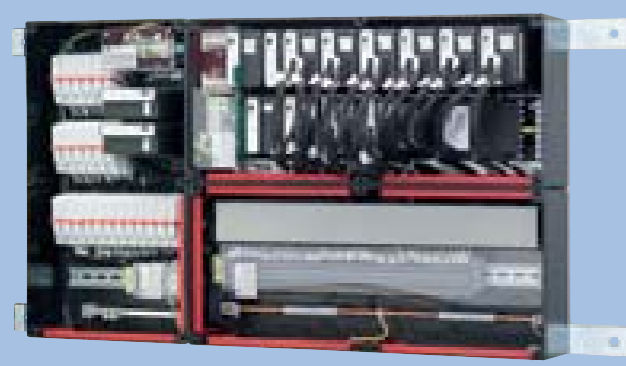
CUSTOMER- AND INDUSTRY-SPECIFIC
SOLUTIONS FOR REMOTE I/O

No application is like the others; every application always places new requirements on the properties and configuration of a Remote I/O-box. We bear witness to this fact with our enclosure solutions for our familiar Remote I/O-products.

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GENERAL SYSTEM FEATURES

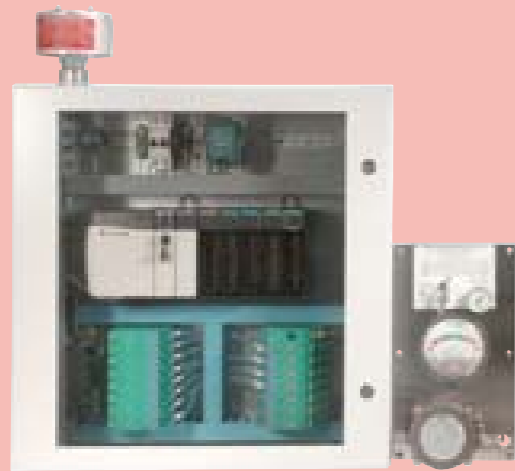
- Ex-tested installation solutions for fieldbus in zones 1 / 2 / 21 / 22 and Div. 1 / Div. 2
- Customer-oriented availability
- Customer- and industry-specific solutions for fieldbus distribution (non-Ex solutions also available)



TECHNICAL INFORMATIONS			
Standardised housing dimensionsv	271 x 544 x 210mm	407 x 544 x 210mm	544 x 544 x 210mm
	271 x 815 x 210mm	407 x 815 x 210mm	544 x 815 x 210mm
		407 x 1088 x 210mm	544 x 1088 x 210mm
		407 x 1359 x 210mm	544 x 1359 x 210mm
			others available on request
General housing features	Polyester (GRP)		
	Mounting brackets		optional
	M10 grounding screws		
	DIN-rail mounted		
	earth conduit plate		optional
	II 2GD EEx e II available		
Cable glands M16, M20, M25	Plastic		
	brass nickel plated		
	stainless steel		
	brass nickel plated for armoured cable		
	stainless steel for armoured cable		
Condensate drain / ventilation M20	plastic		
	brass nickel plated		
	stainless steel		
Terminals for EEx e	screw terminals		grey
	spring terminals		grey
Terminals for EEx ia	screw terminal with disconnect		blue
	spring terminal with disconnect		blue
	terminals with disconnect		blue
Internal wiring in cable duct	black		EEx e
	blue		EEx ia
Grounding bar	isolated		
	non isolated		
Environmental	operating temperature	-20 to +40°C	FB Zone 1 T6
	operating temperature	-20 to +55°C	FB Zone 1 (T4)
	operating temperature	-20 to +70°C	LB Zone 2
	operating temperature	-20 to +60°C	LB Zone 2 and EEx i loops
	storage temperature	-20 to +80°C	
	Relative Humidity % RH (non condensing)	5 to 95%	<75%
IP rating	IP 66 to EN 60529	Typ 4X	
Approvals	ATEX	PTB 97 ATEX 1075	FB Remote Errichtung in 2 G
	ATEX	PTB 97 ATEX 1074U	FB Module Errichtung in 2 G
	ATEX	PTB 03 ATEX 2042	LB Module Errichtung im sicheren Bereich
	ATEX	PTB 99 ATEX 2186	LB Module Errichtung in 3 GD

Customer components are also available

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 Pepperl+Fuchs 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 P+F can mount your control equipment and P+F intrinsic safety barriers in these cabinets for a complete solution.

With an offering of 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
- Enclosure sizes up to 250 cuft (7.08 m³)
- 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 and end-user interface display on Type X, Ex[p] systems
- Certified to NFPA, ISA, and ATEX standard
- EPCU (electronic power control unit) controls enclosure power and monitors system operation
- Fully automatic systems for easy installation and operation

ENCLOSURE FEATURES

- 316 stainless steel, aluminum, glass reinforced plastic enclosures (other materials available upon request)
- Enclosure sizes up to 250 cuft (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 Cu Ft (2.54 m ³)	250 Cu Ft (7.08 m ³)
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 Cu Ft (2.54 m ³)	250 Cu Ft (7.08 m ³)
Ex[nP]	2	IIC	General Purpose	3003-LPS-CI	3004-LPS-CI
		IIB+H2	General Purpose	3003-WPSA-CI	3004-WPSA-CI
Ex[p]	1	IIB+H2	General Purpose	6000 Series	6000 Series



CABINETS



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.

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.



CABINETS

Pepperl+Fuchs supports you during all project phases

Feasibility

Basic design

Detailed design

Factory/site acceptance testing (FAT/SAT)

Start-up and commissioning



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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