Sharing passion.
Cooperating as partners.
Finding solutions.

Dedicated Pepperl+Fuchs and
Yokogawa Solutions.

Solutions from the
Explosion Protection Experts.
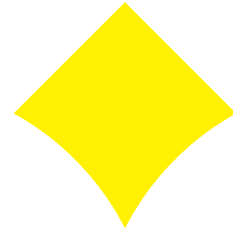
YOKOGAWA

Your automation, our passion.

PEPPERL+FUCHS

Yokogawa and Pepperl+Fuchs Strong Partners in Process Automation

Yokogawa and Pepperl+Fuchs have worked closely together for more than 20 years, developing a strong partnership in providing end-users the complete automation solutions for hazardous area applications. Through this partnership, a global install base has been created, optimizing the end-users' production facilities, thus being seen as trusted advisors from the leading end users in the process automation industry.

For over a decade, Pepperl+Fuchs has supported Yokogawa user conferences and events that promote close interaction with customers. A dedicated website www.yokogawa.pepperl-fuchs.com allows you to learn the advantages of exclusive proven product solutions on how to save time and money in your plants.

Solutions from the Explosion Protection Experts

With immense hazardous area expertise gathered over 5 decades, Pepperl+Fuchs is the true market leader that provides products and solutions comprising of various explosion protection techniques. From innovative mobile devices and rugged HMI workstations to trusted interface solutions, Pepperl+Fuchs products are the preferred choice for process automation applications worldwide.

Our focus is always on your individual requirements: With a passion for automation and groundbreaking technology, we are committed to working in partnership with you now and in the future. We understand the demands of your markets and channel our expertise into developing tailored solutions for your project demands.

For more information, visit:

www.yokogawa.pepperl-fuchs.com

Mobile Devices for Hazardous Areas

- Digitalizing hazardous areas with Smart Phones, Tablets, Camera, Watch, Bluetooth® Beacon, Scanner and Remote Speaker mic.

- Enabling connectivity with customized applications to suit customer's specifications worldwide.

- Enhancing mobility via Mobile Worker Concept.

HMI Solutions for Zone 1/21 and Zone 2/22

- Modular, quick and easy assembly.

- World's lightest Remote Monitor / PC.

- GMP compliance.

- ATEX / IECEx and regional certifications.

- RM Shell GUI and capacitive multi-touch display and tested with various operator gloves.

Industrial Box Thin Client

- Industrial grade box Thin Client for 24/7 operation.

- Supports 4K and HD monitors.

- Operating temp range -20 … 60 °C.
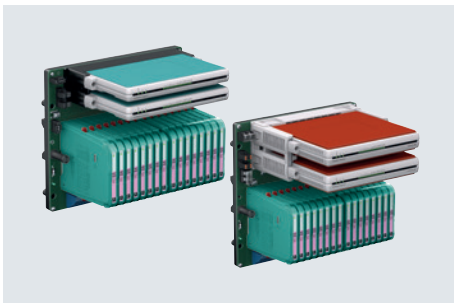
ISBP Termination Board for Yokogawa CENTUM VP® and ProSafe® RS

- Exclusive OEM product for Yokogawa.

- CENTUM VP® and ProSafe® RS model options with Left and Right Side field connection options.

- I.S. modules used are the standard Pepperl+Fuchs H-Series barriers.

- ISBP footprint allows maximum I/O cabinet density.
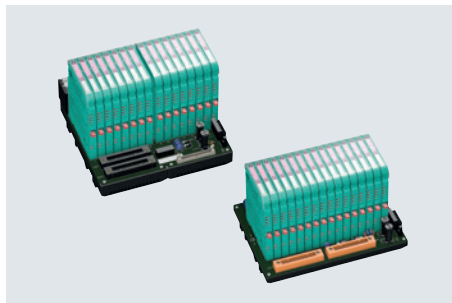
H-System Termination Board Solutions

- H System termination boards in 8/16/32 channel versions.

- Single or Dual channel product options.

- Individual channel isolation.

- CENTUM VP® and ProSafe® RS options available.

- Plug and Play connection via AKB Plug.
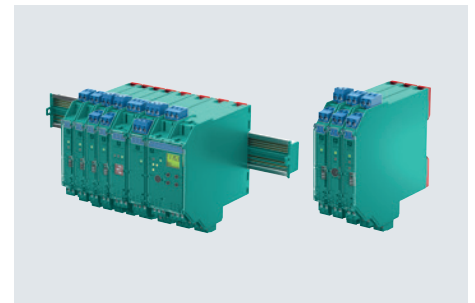
Intrinsic Safety Barriers

- Proven technology with extensive portfolio offers the right solution for virtually any process industry requirement.

- Signals can be connected up to Zone 0 ATEX/IECEx certified for SIL 2 and SIL 3 applications.

- Quick and convenient installations using DIN mounting rail with modules clipping on or off for replacement or expansion, eliminates labor-intensive wiring and hot-work permits.
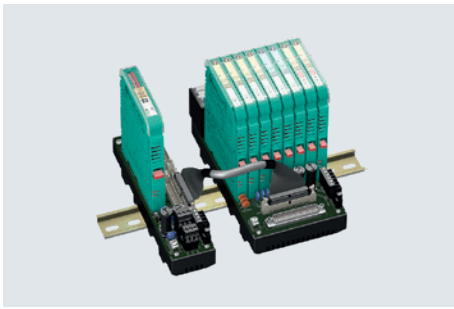
## HART Multiplexer Solutions

- 32-channel H-Series multiplexer, multidropping allowing up to 992 field instruments per communication port on a PC Workstation.

- K-Series multiplexer uses a master/ slave system which can accommodate up to 7,936 field devices.

- Easy connection to the Asset Management System for device diagnostics and troubleshooting, configuration or reconfiguration.

HART Interface Modems (Viator)

- HART interface modems for interface to HART field devices.

- Bluetooth® Class I, USB, RS232 connection options to Host PC.

- Full range of connection cables available.
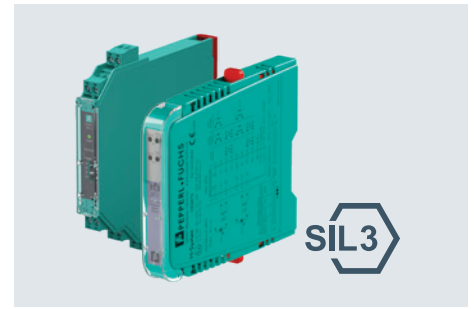
Safety Relay

- K-Series intelligent safety relay based on 1oo3 architecture with triple redundant protection.

- H-Series fail-safe relay contact output HiC5861 for de-energized to safe (DTS) and HiC5863 for energized to safe (ETS).

- Immunity against test pulses from all common control panels.

- Certified for ATEX/IECEx Zone 2 and up to SIL 3 applications for maximium safety.
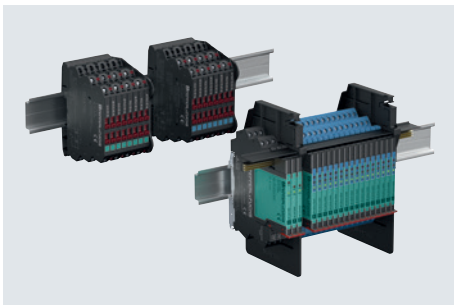
Surge Protection - M-LB-5000 and M-LB-2000

- World's first smart surge protection in a compact 6.2 mm housing signalling replacement before failure.

- Indication and alarm outputs to integrate into the control system.

- Plug-in modules allow for Loop Disconnect Testing and Hot Swap on individual circuits.

- Knife Disconnect Connection allows for removal of marshalling terminals.

Electrical Explosion Protection Equipment

- Wide variety of explosion proof enclosure systems in stainless steel, cast aluminium, glass reinforced polyester (GRP).

- Ex d, Ex de, Ex i, Ex e, Ex p customized solutions available.

- Certified Solution Engineering Centers capable of producing fully documented EPC solutions.

Bebco EPS® Purge & Pressurization Solutions

- State-of-the-art solutions based on more than 20 years of experience – a family of automatic purge and pressurization systems that make hazardous location protection easy.

- Fully certified purge and pressurization systems for Zone 1 & 2, Div. 1 & 2, available via the Pepperl+Fuchs Solution Engineering Centers.

Remote I/O Systems

- Comprehensive Remote I/O Systems for Zone 1 & 2.

- Compatible with various network protocols such as PROFIBUS DP, PROFINET, Modbus RTU and Modbus TCP/IP.

- Fully certified and documented Remote I/O Solutions assembled by Pepperl+Fuchs Solution Engineering Centers.

- Marine and Offshore Certification.

FieldBarriers® Junction Boxes and Segment Protectors

- Customized FieldConnex® Junction Boxes for Field Barrier®, Segment Protector, Temperature Multi-Input device and Multi-Input/Output device for binary signals.

- Full range of diagnostics surge protection devices available for field spur circuits.

- Junction Box solutions fully certified and documented, produced at Pepperl+Fuchs Solution Engineering Centers.

- Segment Checker software allows system design with BOM Creation.
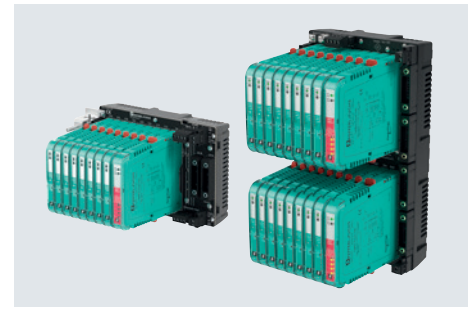
Fieldbus Power Supplies

- Fieldbus power supplies using motherboard footprint.

- 4 and 8 segment redundant solutions with both left and right connection options.

- Easy connection to Yokogawa ALF via AKB 338 system cable.

- Pluggable diagnostic surge protectors for trunk line.

- Marine and Offshore Certification.

Fieldbus Advanced Diagnostics

- Advanced diagnostic solutions for FOUNDATION Fieldbus and PROFIBUS PA.

- Advanced diagnostic gateways connected via the Fieldbus H1 node or Ethernet deliver full fieldbus parameters into the PRM Asset Management System.

- Field diagnostic handheld devices allow fast and flexible field testing.

- Detailed reporting delivers actionable information for fast fault finding.

Fieldbus Multi Input/Output and Temperature Multi-Input

- FieldConnex® Multi-Input/Output allows up to 12 binary signals via one fieldbus address.

- Multiple I/Os range from valve control, frequency inputs, discrete inputs and level monitoring.

- FieldConnex® Temperature Multi-Input allows up to 8 temperature signals via one fieldbus address.

- Multiple temperature signals range for thermocouples, RTD and mV signals.
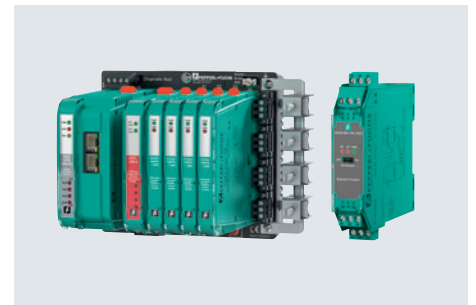
PROFIBUS Segment Couplers

- PROFIBUS DP and PROFINET PLC interface connections.

- Transparent gateway.

- Onboard diagnostics.

- Redundant and non-redundant models.

- Pluggable diagnostic surge protectors for trunk line.

PEPPERL+FUCHS

Pepperl+Fuchs and Yokogawa Solutions

Global partners for global solutions

Safe Area

Plant Resource Manager (PRM)

HIS Operator Station

PROFI BUS®

HART® FIELD COMMUNICATION PROTOCOL

CENTUM VP

Field Control Station (FCS)

ISBP for CENTUM VP N-IO

HiC Termination Board Solutions for CENTUM VP

Fieldbus Power Hub

M-LB 5000 Surge Protection

M-LB 2000 Surge Protection

Zone 2

*Tab-Ex® Pro Communication and Inspection

Segment Protector

Fieldbus Ex ic

LB Remote IO

Zone 1

HART Ex ia

HART Ex ia

Viator® HART Interface Modems

Tab-Ex® Field Calibrator

FieldBarrier

Fieldbus Ex ia

HART Ex ia

* Check your local Pepperl+Fuchs Office for more information on the Tab-Ex® Pro products

6

YOKOGAWA ◆

Engineering
Station

Server

HART®
FIELD COMMUNICATION PROTOCOL

ProSafe-RS®

Safety Control Station (SCS)

HART Multipliexer

ISBP for
ProSafe-RS N-IO

HiC TerminationBoard
Solution for ProSafe-RS

Box Thin Client

4K Monitors

M-LB 2000
Surge Protection

M-LB 5000
Surge Protection

Zone 2

*Tab-Ex® Pro
Communication
and Inspection

VisuNet GXP
Remote Monitor / PC

Zone 1

Ident-Ex®
Bluetooth
Scanner

FB Remote IO

HART
Ex ia

HART
Ex ia

HART
Ex ia

Ex-Handy
Communication
and Inspection

Smart-Ex®
Communication
and Inspection

Centum VP Control System Solutions

Centum VP H Series Interface

Yokogawa		Pepperl+Fuchs				
Centum VP		H-Series Module Type		Termination Board		
Type	Channel	Type	Channel	Type	Module	Channel
Digital Inputs						
ADV151	32	HiC2821	1	HiCTB32-YC3-RRB-AK-CC-DX32	32	32
ADV151	32	HiC2822	2	HiCTB16-YC3-RRB-AK-CC-DX32	16	32
ADV151	32	HiC2824	4	HiDTB08-YC3-RRB-AK-CC-DX32	8	32
Digital Outputs						
ADV551	32	HiC2871A	1	HiCTB32-YC3-RRB-AK-CC-DX32-Y1	32	32
ADV551	32	HiD2872 / HiD2876	2	HiDTB16-YC3-RRB-AK-CC-DX32	16	32
Analog Inputs						
AAI143	16	HiC2025	1	HiCTB16-YRS-RRB-KS-CC-AI16	16	16
AAI143	16	HiD2022 / HiD2082(TI)	2	HiDTB08-YRS-RRB-KS-CC-AI16	8	16
AAI143	16	HiD2081(TI)	1	HiCTB16-YRS-RRB-KS-CC-AI16-Y1	16	16
AAI141	16	HiC2025	2	HiDTB08-YRS-RRB-KS-CC-AI16-Y1	8	16
AAI141	16	HiC2025	1	HiCTB16-YC3-RRB-KS-CC-AI16-Y2	16	16
AAI141	16	HiD2022	2	HiDTB08-YC3-RRB-KS-CC-AI16-Y1	8	16
Analog Inputs / Outputs						
AAI841	16	HiC2025 / HiC2031	1	HiCTB16-YC3-RRB-KS-CC-AM16	16	16
AAI841	16	HiD2022 / HiD2032	2	HiDTB08-YC3-RRB-KS-CC-AM16-Y1	8	16
AAI135/AAI835	8	HiC2025 / HiC2031	1	HiCTB08-YC3-RRB-KS-CC-AM08	8	8
AAB841	16	HiC2025 / HiC2031	1	HiCTB16-YC3-RRB-KS-CC-AM16-Y1	16	16
AAB841	16	HiC2022 / HiC2038Y	2	HiDTB08-YC3-RRB-KS-CC-AM16	8	16
Analog Outputs						
AAI543	16	HiC2031	1	HiCTB16-YC3-RRB-KS-CC-AO16	16	16
AAI543	16	HiD2038Y	2	HiDTB08-YC3-RRB-KS-CC-AO16	8	16

ALF 111 FOUNDATION Fieldbus Communication Module

Type	Channel	Segment	Redundant	Terminals
MBHC-FB-4.YO	4	4		Screw type
MBHC-FB-4.YO.1	4	4		Spring clamp
MBHC-FB-4R.YO	4	4	Yes	Screw type
MBHC-FB.4R.YO.R	4	4	Yes	Screw type
MBHC-FB-4R.YO.1	4	4	Yes	Spring clamp
MBHC-FB-8R.YO	8	8	Yes	Screw type
MBHC-FB-8R.YO.1	8	8	Yes	Spring clamp
MBHC-FB-8R.YO.R	8	8	Yes	Screw type

ALP 121 PROFIBUS DP / PROFINET Communication Module

Type	Channel	Segment	Redundant	Terminals
MBHC-FB-4.GT		4	Simplex	Screw type
HD2-GTR-4PA		4	Gateway	Screw type
HD2-GTR-4PA.PN		4	Gateway	Screw type
MB-FB-GTR1		4	Yes	Screw type
MBHC-FB-4R.HSC		4	Yes	Screw type
Diagnostics				
HD2-DM-B (Basic)		4		
HD2-DM-A (Advanced)		4		
FDH-1 (Handheld)		1		

ProSafe RS Safety System Solutions

ProSafe RS H Series Interface

Yokogawa		Pepperl+Fuchs				
ProSafe		H-Series Module Type		Termination Board		
Type	Channel	Type	Channel	Type	Module	Channel
Digital Inputs						
SDV144	16	HiC2831R1 / HiC2853R1	1	HiCTB16-YRS-RRB-AK-CC-DI16	16	16
SDV144	16	HiC2832R1	2	HiCTB08-YRS-RRB-AK-CC-DI16	8	16
Digital Outputs						
SDV531	8	HiC2871A	1	HiCTB08-YRS-RRB-AK-CC-DO08	8	8
SDV541	16	HiC2871A / HiC2883 / HiC2877	1	HiCTB16-YRS-RRB-AK-CC-DO16	16	16
SDV541	16	HID2872 / HiD2876	2	HiDTB08-YRS-RRB-AK-CC-DO16	8	16
Analog Inputs						
SAI143	16	HiC2025	1	HiCTB16-YRS-RRB-KS-CC-AI16	16	16
SAI143	16	HiD2022	2	HiDTB08-YRS-RRB-KS-CC-AI16	8	16
SAV144	16	HiC2025	1	HiCTB16-YRS-RRB-KS-CC-AI16-Y1	16	16
SAV144	16	HiD2022	2	HiDTB08-YRS-RRB-KS-CC-AI16-Y1	8	16
Analog Inputs						
SAI533	8	HiC2031	1	HiCTB08-YRS-RRB-KS-CC-AO08	8	8

Experts Around the World for Customized Solutions

For decades, the name Pepperl+Fuchs has been synonymous with high-quality explosion protection products. Our six Solution Engineering Centers (SECs) provide engineering solutions and tailor-made system solutions for any customer application all over the world.

One-Stop Shop for the Right Solution—Every Time

Pepperl+Fuchs SECs offer expert support for companies of all sizes and from all industries. Qualified experts always have the right solution for even the most demanding of applications. From small single-unit production to customized system solutions with Ex certification and documentation—the SEC specialists offer everything from a single source, ready for installation on-site.

Locations Around the World

With six SECs worldwide, Pepperl+Fuchs ensures that a team of experts is always close at hand. Three of the centers cover North America and Europe. Optimal support is also available in the Asia-Pacific region—with three SECs located in China, India, and Australia, the company is able to offer expertise and the highest level of service here.

In-depth knowledge of explosion protection and many years of experience in project planning form the basis for developing tailor-made and fully certified solutions at these locations. Thanks to the extensive portfolio—with an enormous range of modules and systems—users receive exactly the right solution for almost any requirement.

Mannheim

Burago Bühl

Houston Twinsburg

Shanghai

Chennai

Singapore

Melbourne
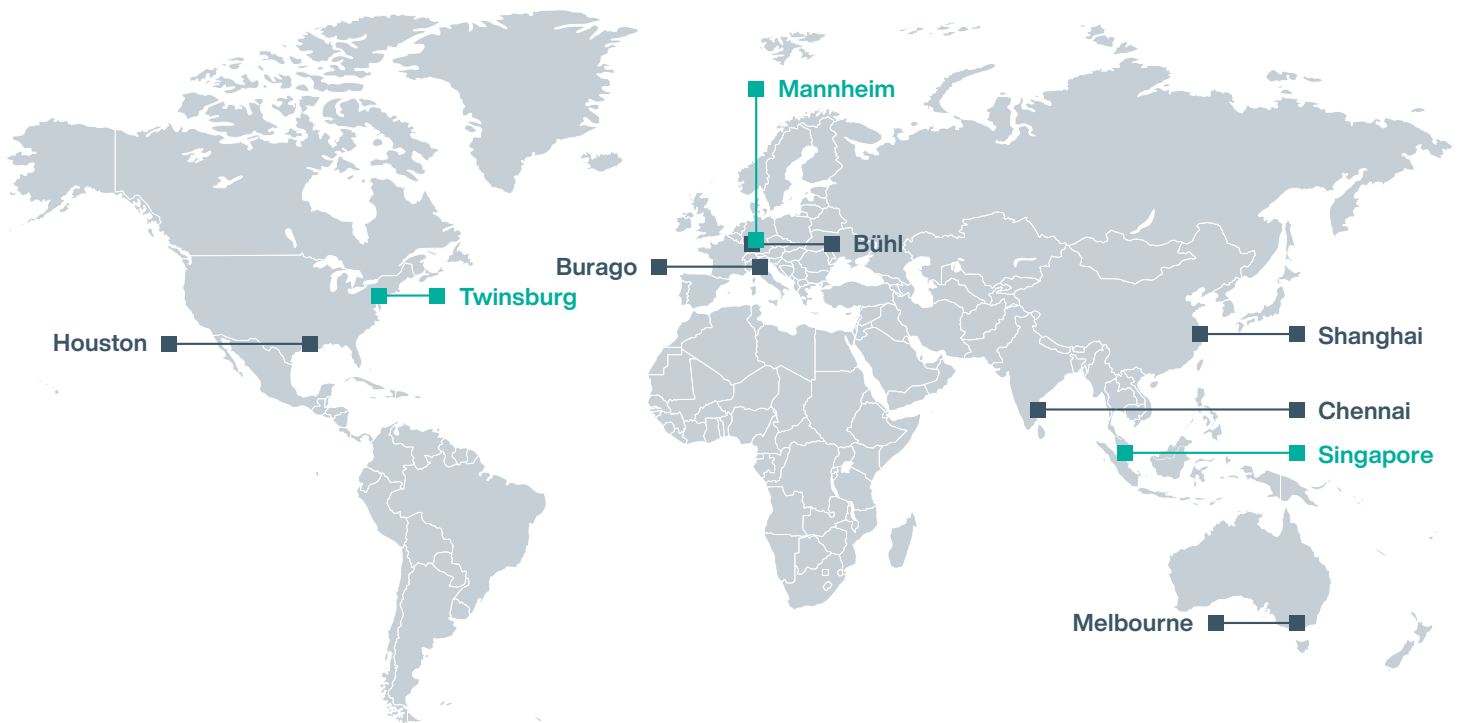
■ Pepperl+Fuchs Headquarters
■ Pepperl+Fuchs SECs

Your automation, our passion.

Explosion Protection

- Intrinsic Safety Barriers
- Signal Conditioners
- FieldConnex® Fieldbus Infrastructure
- Remote I/O Systems
- Electrical Explosion Protection Equipment
- Purge and Pressurization Systems
- HMI Systems
- Mobile Computing and Communications
- HART Interface Solutions
- Surge Protection
- Wireless Solutions
- Level Measurement

Industrial Sensors

- Proximity Sensors
- Photoelectric Sensors
- Industrial Vision
- Ultrasonic Sensors
- Rotary Encoders
- Positioning Systems
- Inclination and Acceleration Sensors
- Industrial Ethernet
- AS-Interface
- IO-Link
- Identification Systems
- Displays and Signal Processing
- Connectivity

Pepperl+Fuchs Quality
Download our latest policy here:

www.pepperl-fuchs.com/quality

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