**GF** Piping Systems



# Seamless Connectivity

# Enhance plant efficiency with digital field connectivity

In order to succeed in the competitive market, manufacturing plants must find ways to increase efficiency. However, with the predominant utilization of 4–20 mA analog loops in today's field-level technologies, optimization is limited. These limitations include excessive costs associated with installation and commissioning, the provision of only one value per device, and a lack of support for predicting device failures.

To enhance plant efficiency, the automation industry embraces specific trends, including Industry 4.0, implementing connected systems, adopting predictive maintenance practices, and integrating the Industrial Internet of Things (IIoT).

To effectively support these trends, process plants require seamless access to device data in the field, along with state-ofthe-art network technology. Industrial Ethernet enables state-of-the-art technology for wired digital communication, which has been extensively utilized in various industries for many years. Different Industrial Ethernet protocols are available, depending on the capabilities of the PLCs and specific use cases.



### **Network schematics**

# Digital network topologies

### <sup>+</sup> Benefits

- Cost-efficient and flexible network design
- One cable from the cabinet to the field level
- Multiple process variables per device
- Fast commissioning
- Plug&Play device exchange
- Insights for predictive maintenance



### Supporting future-proof Industrial Ethernet protocols

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EtherNet/IP



# Security certified (SL1) according to IEC 62443-4-1 and -2

Digital connectivity solutions by GF Piping Systems are cyber security certified according to IEC 62443. The components and requirements comply with both part 4-1, secure product development lifecycle requirements, and 4-2, the technical security requirements for IACS components.

## Examples of data streams with an electric actuator

- Adjusting end positions
- System set-up
- Troubleshooting
- Valve positioning

- Actual valve position
- NE107 status + error details
- Motor current
- Temperature
- Running cycles
- Cycle time

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### **Our Industrial Ethernet offering**

# Ready for tomorrow's challenges



### Electric Actuator (EA25 – 250)

Combining well-proven products with state-of-the-art technologies and durable components is vital in future critical decisions for long-lasting and safe plant operation. With a new housing design, added Industrial Ethernet communication standards, and improved IP68 rating, the latest generation of Electric Actuators by GF Piping Systems perfectly matches customer needs and application requirements.



### Electro-pneumatic Positioner for linear stroke actuators – SPC D / SPC PID

Our compact top-mount electro-pneumatic positioner SPC D / SPC PID has been tested and optimized for GF Piping Systems diaphragm valve type DIASTAR. Designed to optimize the flow profile of the liquid inside the pipe, these valves are made entirely of thermoplastics for excellent durability and reliability. The modular design allows them to be easily adapted to process conditions.



## Electro-pneumatic Positioner for rotary actuators – RPC D / RPC PID

With the electro-pneumatic Positioner RPC D / RPC PID, we deliver optimal control packed in a robust, compact housing. External operation is effortless due to the optional backlit largescreen display, which features a self-explanatory four-key interface. Enhanced functionalities such as automated control and defined set-point positioning increase the performance, efficiency, and operational possibilities of the control valve.

### **Remote Access**

# Embedded web server

Our updated range of state-of-the-art Electric Actuators can easily be equipped with optional Industrial Ethernet accessory cards, enabling web server access to monitor, control, and program individual actuated assemblies

The web server displays valuable data, documentation, and controls such as:

- Live values and process variables
- Status + Diagnostics
- Event logbook
- Monitoring features (current + cycle time)
- Firmware updates
- Downloadable manuals
- · End position adjustments
- Manual control



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### **Next steps**

Find your local contact on the back cover of this brochure or visit our GF Piping Systems website, where you will find specialized contact persons in your area. You will also find additional information on our products, including technical datasheets, operating instructions, and relevant certificates and approvals.

More information at gfps.com/connectivity



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## Local support around the world

Visit our webpage to get in touch with your local specialist: **www.gfps.com/our-locations** 



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