

Valves and Measurement Portfolio

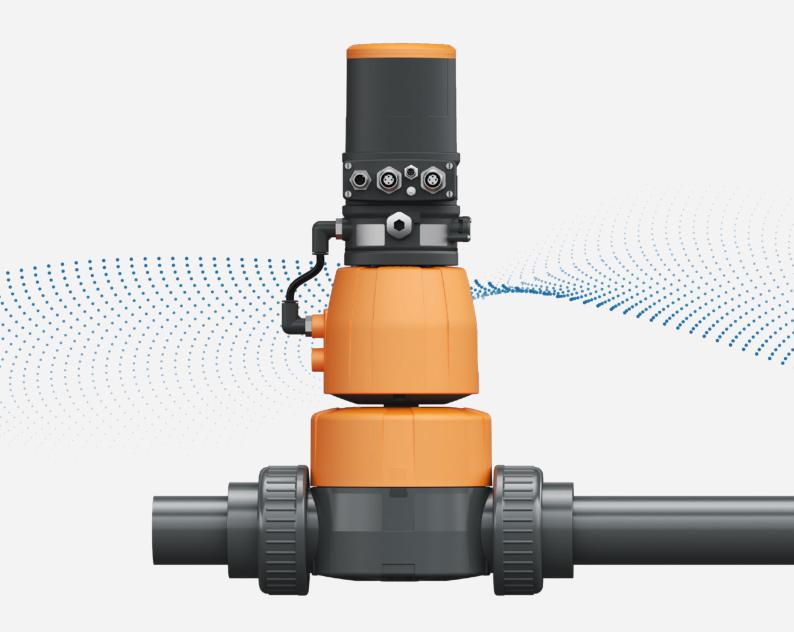
Product catalogue



Comprehensive valves
Reliable actuation
Accurate measurement

We make Automation easy

We offer a comprehensive portfolio of full-scale valves and measurement solutions specifically designed for water treatment and chemical processing applications. Combined with our deep expertise in, we simplify complex operations, making fluid handling processes efficient and reliable.



Technologies for clean and corrosive environments

At GF, we provide comprehensive solutions tailored to meet your process requirements. Available in a wide range of material options, our sensors and valves are designed to support corrosive to ultrapure applications.

GF valve solutions are recognized as industry-leading. Our extensive valve portfolio includes key types such as ball, butterfly, diaphragm, and process valves. Depending on your process needs, these valves can be manually operated or automated to integrate seamlessly with other system components, such as process sensors.

In addition, our measurement solutions cover a wide range of parameters, including flow, pH/ORP, conductivity, temperature, pressure, and level, as well as dissolved oxygen (D0). We also offer transmitters and controllers to ensure the safe and efficient management of liquid processes.

Delivery value through expertise

GF is globally recognized for its high-quality and innovative solutions, delivering exceptional reliability and performance across diverse industries. We bring expertise in designing and manufacturing solutions for handling water and chemicals tailored to customer needs worldwide. Our global network of experts provides comprehensive support regardless of your or your customers' location.



Easy to combine

Flexible combination and upgrade.



Easy to connect

State-of-the-art communications technology.



Easy to install

Seamless integration.



Easy to set-up

Plug-and-play design.



Easy to maintain

Wide range of accessories.



Easy to operate

Intuitive menu structure.



Watch our customers success stories



3 Valves and Measurement Portfolio +GF+

Valve Automation Center

GF' Valve Automation Centers deliver customized automation solutions for the water treatment and chemical process industries. Our experts provide extensive support – from sizing valves and actuators to helping design integrated control systems – ensuring reliable, efficient, and safe operation tailored to your specific applications.





Customized Solutions

We offer comprehensive piping systems, including pipes, valves, and actuation. Our expertise extends to automating your systems by seamlessly integrating third-party actuation solutions designed to meet your exact specifications, ensuring optimal operation and reliability. As your automation partner, we provide this service at various locations worldwide, delivering reliable, efficient, and safe valve automation solutions you can depend on.

Unmatched Expertise

GF's Valve Automation Centers combine engineering expertise with precision manufacturing to deliver unmatched valve actuation solutions. Our skilled engineers design custom systems tailored to your needs while expert technicians assemble and rigorously test every solution for flawless performance. We ensure the perfect solution based on your specific application. We help you select and dimension the best actuation configuration, including integrating a wide range of accessories.



Valve Automation around the globe



Your Dedicated Automation Partner



Streamlined Communication

A single point of contact ensures smoother coordination, saving you time and effort for your complete Piping Systems



Fast Turnaround

Accelerated quoting, specification, assembly, testing and delivery of automated solutions.



Advanced Capabilities

Cutting-edge tools, technology and equipment for superior results.



Simplified Supply Chain

Partnering with GF minimizes supplier complexity, streamlining procurement for efficiency and cost reduction.

We make Process Automation easy

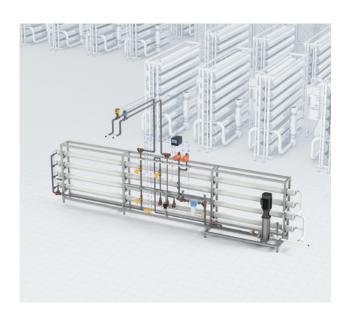
We offer a holistic portfolio with full scale valves and actuation, measurement solutions within water treatment and chemical processing applications.



Application possibilities

Technologies for clean and corrosive environments

At GF, next to our expertise in pipes, fittings and jointing technologies, we provide comprehensive solutions for your processes, focusing strongly on manual and actuated valves, measurement solutions such as flow, pH/ORP, conductivity, temperature, pressure, level, dissolved oxygen (DO), free chlorine as well as monitors and transmitters for the safe management of your liquid processes. Furthermore, we specialize in designing, manufacturing, and supporting to meet customer needs globally.



Reverse osmosis

Reverse Osmosis technology is a filtering method in which contaminated water passes through a semi-permeable membrane under high pressure and removes nearly all water pollution, such as minerals, bacteria, and particles. Because it needs no chemicals, energy consumption is low, and handling is easy.



Ion exchange

Demineralization units such as deionization, reverse osmosis, and distillation techniques secure the production of pure, high-quality process water in the industrial environment. Water purification, separation, and decontaminating aqueous and other ion-containing fluids characterize applications in that water treatment area. In this context, ion exchangers can absorb unwanted ions in the water, thanks to selective synthetic resin beads, and release them during a regeneration process. The compact construction of ion exchange plants requires flexible piping solutions and components.



Dosing / Dilution

Dosing and/or diluting chemicals requires highly specialized and reliable workflows, especially with aggressive chemicals. Concentrated chemicals in small amounts are dosed in-line or through a static mixer that ensures correct dilution in the process. A plastic system can be easily constructed to meet customer specifications by selectively combining pressure control valves, flow meters, and control instrumentation.



Surface treatment

In surface treatment or electroplating the process is subjected to stringent control to avoid cont. To convey chemical media, high-quality system solutions and components made of plastics are, therefore, the perfect choice. GF has numerous measurement and control technology devices on offer, from simple pressure sensors to fully automated and networked control systems, enabling our customers to optimize their processes. Using dedicated jointing technology, system life can be improved.



Neutralization

In nearly every water treatment process, the water is to be pH adjusted to meet the treatment requirements, whether it is wastewater for public wastewater treatment plants, drinking water produced by reverse osmosis, or alkaline or acidic wastewater. All those operations are to be properly monitored and controlled by a measurement and control setup. We offer high process reliability and cost optimization in this cost-intensive area.



Media filtration

In the multi-level filtration processes, anthracite or stones, as well as sand, are used to remove particles up to 10-15 μ m from fluids. Due to the need for several operation modes, the process requires cleaned, numerous valves and bypass actuators, and adapted measurement and control technology.



Filling of tanks

Tanks are required to store liquid media in manufacturing and processing plants. GF offers fast, reliable, and safe tools for filling and emptying tanks. Our range comprises a wide spectrum of, including measurement and control technology, automatic and manual valves, and an extensive array of valves for demanding applications.

Valves

Precision, Security and Reliability in every operation













We offer one of the most comprehensive valve product ranges, ensuring you find the right match for your application. Available in various dimensions, materials, chemical resistances, standards, actuation types, and pipe connections, our valves are designed for long service life and cost-effectiveness.

Our thermoplastic valves withstand harsh environments, and their modular design also allows for flexible actuation possibilities with non GF-products and added accessories. This helps ensure reliable performance, flexibility, and a favorable total cost of ownership for diverse applications.

Main benefits

- Superior material characteristics
- Lightweight & Easy Installation
- Water & Chemical Applications fit
- Precise Flow Control
- Low Maintenance & Long Service Life

Product overview

- Ball Valves
- Butterfly Valves
- Diaphragm Valves
- · Process Control valves
- · Solenoid valves
- · Valve Accessories

Valves

Ball Valves

Our high-performance and state-of-the-art thermoplastic ball valve solutions are developed for various water and chemical applications. Their interoperable and modular design allows for plugand-play automation and upgrades to meet every requirement. From simple shut-off applications to fully automated control valves, our Ball Valves are ready for any challenge.

Go-to Solution for:

- · Water treatment
- · Chemical process industry
- · Life science
- · Microelectronics industry
- Food and beverage



Ball Valve 546 Pro

The Original

- ABS, PVC-C, PVC-U, PP-H, PVDF
- EPDM, FKM, ball seat: PTFE, PVDF
- DN10 DN100 (3/8" 4")
- Up to PN16 (232 psi) = PVC-U, PVC-C, PVDF; up to PN10 (145 psi) = PP-H, ABS
- Vented version for gaseous applications available



Ball Valve 546 Linear Pro

Linear flow control

- PVC-U, PVC-C, ABS, PP-H, PVDF
- DN15-DN50 (0.5" 2")



Ball Valve 523 Pro

Precise metering

- PVC-U. PP-H. PVDF
- EPDM, FKM, Ball Seat: PTFE
- DN10-DN15 (3/8" 0.5")
- Up to PN16 (232 psi)



Ball Valve 543 Pro

Mix and distribute

- ABS, PVC-C, PVC-U, PP-H, PVDF
- EPDM, FKM, ball seat: PTFE, PVDF
- DN10-DN50 (3/8" 2")
- Up to PN10 (145 psi)



Ball Valve 542

The simplified Original

- PVC-U / PVC-C PP-H Water applications: PE (blue lever) Chemical applications: PTFE (red lever)
- EPDM, FKM, ball seat: PTFE, PVDF
- DN 10 50 (3/8" 2")
- PN 10 (145 psi) for PP-H PN 16 (232 psi) for PVC-U and PVC-C



Ball Valve 375

The baseline

- PVC-U, PVC-C
- EPDM, FKM, ball seat: PTFE
- DN10-DN100 (3/8" 4")
- PN16 (232 psi)
- Not actuated



Ball Valve 522

Laboratory applications

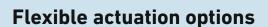
- PVC-U, PVDF
- EPDM, FPM, Ball Seat: PTFE
- DN6 (1/8")
- PN10 (145 psi)

Actuated Ball Valves

GF automated ball valves offer precision, efficiency, and reliability. They reduce labor costs, enhance safety, and integrate seamlessly with control systems. Pneumatic options ensure fast operation in harsh environments, while electric variants provide precise positioning and remote monitoring—perfect for critical processes requiring automated, consistent, and low-maintenance performance.

Go-to Solution for:

- · Water treatment
- · Chemical process industry
- · Life science
- · Microelectronics industry
- · Food and beverage



In addition to our standard actuator configurations, our valves are also compatible with third-party actuators, providing flexibility to meet diverse system requirements. In our Valve Automation Centers, we combine engineering expertise with precision manufacturing to deliver unmatched valve actuation solutions.

Learn more about Custom Valve Automation. www.gfps.com/vac





Pneumatic Ball Valve 546 Pro P

- Actuator Type:
- PPA04, PPA08, PPA15, PPA40, PPA80
- Actuator function: FC/F0/DA
 ABS, PVC-C, PVC-U, PP-H, PVDF
- DN10-DN100 (3/8" 4")



Pneumatic Ball Valve 543 Pro P

- Actuator Type: PPA08, PPA15, PPA40, PPA80
- Actuator function: FC/FO/DA
- Actuating angle 90 $^{\circ}$
- · ABS, PVC-C, PVC-U, PP, PVDF
- DN10-DN50 (3/8" 2")



Electric Ball Valve 546 Pro E - 179-184

- Actuator: dEA25/45/120 and EA25/45/120(24 V, 110 - 230 V)
- Actuating angle 90°
- ABS, PVC-C, PVC-U, PP-H, PVDF
- EA25 DN10-DN50 (3/8" 2"); EA45/120 DN65-DN100 (2 1/2" - 4")



Electric Ball Valve 546 Pro E - 127

- Actuator: EA15 (24 V, 110-230 V)
- Actuating angle 90°
- ABS, PVC-C, PVC-U, PP-H, PVDF
- DN10-DN50 (3/8" 2")



Electric Ball Valve 543 Pro E

- Actuator: dEA25 and EA25 (24 V. 110-230 V)
- Actuating angle 90°; max. 180°
- ABS, PVC-C, PVC-U, PP, PVDF
- DN10-DN50 (3/8" 2")



Electric Ball Valve 546 Pro E - 104

Low cycle applications

- Electric actuated 2-way ball valve
- Actuator: EA04 (24V, 85-230V)
- Actuating angle 0 90 °
- PVC-C, PVC-U, PP-H
- DN10 DN50 (3/8" 2")

Valves

Butterfly Valves

GF Butterfly Valves are designed to deliver exceptional performance in fluid transport, ensuring safety, efficiency, and durability. Made from highquality, corrosion-resistant materials, these valves are lightweight yet robust, making them easy to handle, install, and operate.

Whether used in industrial, water treatment, or chemical processing environments, they offer a future-proof solution that adapts to evolving system requirements.



- · Drinking water process
- · Industrial process water
- · Industrial waste water
- Municipal waste water
- Desalination plant
- · Aquatic life support
- Swimming pools
- Cruise ships
- Offshore
- · Vessels and merchant fleet



Butterfly Valve 565

Resilient Seated – for water applications

- Housing: PA-GF
- Disc: PA-GF + PVDF
- Sealings: EPDM, FKM
- DN50-DN300 (2" 12")
- DN50-150 (2" 6"): PN16 / DN200-250 (8" 10"): PN10 / DN300 (12"): PN6
- Lever, Gear, 230 V o. 24 V, FC /FO/DA
- Optional: Integrated position indicator in valve body



Built for the bigger picture

- Housing: PP-GF
- Disc: PE-UHMW, Stainless Steel
- Sealings: EPDM, (FKM*)
- Dimensions: DN350 DN400 (14-16") (DN450-DN600 (18 - 24")*
- PN10 (145 psi)
- Short installation length (EN558 row 20, ISO 5752 row 20, API 609 table 2)
- Manual reduction gear, Pneumatic actuation, Electric Actuation 100-230V, 400V
- Optional: Integrated position indicator in valve body



Butterfly Valve 567

Double eccentric - for chemicals handling applications

- ABS, PVC-C, PVC-U, PP-H, PVDF
- Sealings: EPDM, FKM, PTFE/FKM
- DN50-DN600 (2" 24")
- PN10 (145 psi)
- Lever, Gear, 230 V o. 24 V. FC/FO/DA
- Optional: Integrated position indicator in valve body



Butterfly Valve 578

Double eccentric - for chemicals handling

- ABS, PVC-C, PVC-U, PP-H, PVDF
- Sealings: EPDM, FKM, PTFE/FKM
- DN50 DN300 (2" 12")
- PN10 (145 psi)
- Lever, gear, 230 V o. 24 V, FC/FO/DA
- Optional: Integrated position indicator in valve body



Metal Butterfly 038/039

- Sealings: EPDM, FKM
- 038: DN50 DN300 (2" 12")
- 039: DN50 DN1200 (2" 48")
- PN10/PN16 (145 psi/232 psi)
- Lever, gear, 230 V o. 24 V, FC/FO/DA

*available soon

Actuated Butterfly Valves

Their modular design allows for seamless integration with a wide range of actuators and accessories, providing maximum flexibility to suit diverse applications. GF Butterfly Valves can be equipped with the appropriate pneumatic or electric actuators and can be used as process and control valves. Double sensors enable end position detection (open/closed disc).



Electric Butterfly Valve 565

Wafer and Lug Style

- · Actuator: EA25-250 and dEA (24 V, 100 - 230 V)
- · Housing: PA-GF
- Disc: PA-GF + PVDF
- DN50 DN300 (2" 12")



Electric Butterfly Valve 145/146/147

Wafer and Lug Style

- Actuator Type: dEA45/120/250 and EA45/120/250 (24 V, 110 - 230 V)
- Butterfly valve Type 567/578
- PVC-U, PVC-C, ABS, PP-H, PVDF
- 567: DN50 DN600 (2" 24") 578: DN50 - DN300 (2" - 12")



Electric Butterfly Valve 038-E / 039-E

Wafer and Lug Style

- Actuator: dEA45/120/250 and EA45/120/250 (24 V, 110 - 230 V)
- Butterfly valve Type 038/039
- 038/039: Ductile iron with powder/epoxy/rilsan coating
- 038: DN50 DN600 (2" 24") 039: DN50 - DN1200 (2" - 48")



Pneumatic Butterfly Valve 565**

Wafer and Lug-Style

- Actuator: PA30-PA70; PPA40-80
- · Housing: PA-GF
- Disc: PA-GF + PVDF
- DN50 DN300 (2" 12")



Pneumatic Butterfly Valve 240/243/244**

Wafer and Lug-Style

- Actuator: PA30-PA90; PPA40-80
- Butterfly valve Type 567 (Wafer) / 578 (Lug)
- PVC-U, PVC-C, ABS, PP-H, PVDF
- 567: DN50 DN600 (2" 24") 578: DN50 - DN300 (2" - 12")



Pneumatic Butterfly Valve 038-P / 039 -P

Wafer and Lug-Style

- Actuator: PA30 PA70
- Butterfly valve Type 038/039
- 038/039: ductile iron with powder/epoxy coating/rilsan coating
- 038: DN50 DN600 (2" 24") 039: DN50 - DN1200 (2" - 48")



*** Pneumatic Actuator Type PPA available until DN125 (5")

Flexible actuation options

In addition to our standard actuator configurations, our valves are also compatible with third-party actuators, providing flexibility to meet diverse system requirements. In our Valve Automation Centers, we combine engineering expertise with precision manufacturing to deliver unmatched valve actuation solutions.

Learn more about Custom Valve Automation. www.gfps.com/vac





Valves

Process Control Valves

Our innovative range of plastic process control valves are designed to operate efficiently without the need for additional energy sources, making them both eco-friendly and cost-effective. These valves are ideal for a variety of industrial applications, offering reliable performance and durability.

Go-to Solution for:

- · Water treatment
- · Chemical process industry
- · Semiconductor industry

Check Valves, Ventilating & Bleeding Valves



Check Valve 561/562

- ABS, PVC-C, PVC-U, PP-H, PVDF
- EPDM, FKM
- DN10-DN100 (3/8" 4")
- Up to PN16 (232 psi)
- Type 562 with spring



Angle seat Check Valve 303/304

- PVC-U, ABS
- EPDM, FKM
- DN10 DN80 (3/8" 3")
- PN10 (145 psi)



Wafer Check Valve 369

- PVC-U, PP-H, PVDF
- EPDM, FKM
- DN32-DN300 (1.25"-12")
- PN10 (145 psi)



Ventilating Valve 595 / Ventilating and bleed Valve 591

- ABS, PVC-C, PVC-U, PP-H, PVDF
- EPDM, FKM
- DN10-DN100 (3/8" 4")
- Up to PN16 (232 psi)
- Type 595 with spring
- Float PP-H / PVDF



Line Strainer 305/306

- PVC-U, PVC-C, ABS, PP-H, PVC-U transparent
- EPDM, FKM
- DN15-DN50 (0.5" 2"), PVC-U up to DN80 (145 psi)
- PN10 (145 psi)
- Screen: stainless-steel and PVC-U



Water Jet Suction Pump (eductor) P20

- PVC-U, PP-H, PVDF
- EPDM, FKM
- DN10-DN80 (3/8" 3")
- PN10 (145 psi)



Throttle Valve V251

- PVC-U, PP-H, PVDF
- EPDM, FKM
- DN10-DN50 (3/8" 2")
- PN10 (145 psi)

Solenoid Valves



Solenoid Valve 157

- · direct acting pivoted armature valve
- 2/2-ways
- PVC-U
- EPDM, FKM
- 230 V AC, 24 V AC, 24 V DC
- DN4-DN8 (1/8" 0.25")
- 0 4 bar (0 58.02 psi), depending on dimension



Solenoid Valve 165

- Pilot assisted solenoid valve
- 2/2-ways
- PVC-U, PVDF
- EPDM, FKM
- 230 V AC, 110 V AC, 24 V AC, 24 V DC
- DN15-DN50 (0.5 2")
- 0.5 6 bar (7.25 87.02 psi), depending on dimension



Solenoid Valve 160/161

- · direct acting pivoted armature valve
- 2/2- or 3/2-ways
- PVC-U
- EPDM, FKM
- 230 V AC, 24 V AC, 24 V DC
- DN10-DN20 (3/8" 0.75")
- 0-3 bar (0-43.51 psi), depending on dimension



Solenoid Valve 166

- direct acting pivoted armature valve
- 2/2- or 3/2-ways PVDF
- EPDM, FKM
- 230 V AC, 110 V AC, 24 V AC, 24 V DC
- DN3-DN5 (1/8" 2")
- 0-10 bar (0-145 psi), depending on dimension

Pressure Regulating Valves

Made from hardwearing fully molded plastic parts, the range of pressure regulating valves keeps the pressure in a pipe system at a pre-defined value and eliminates the risk of overload. Containing the latest in pressure-regulating technology, these valves are compact and easy to install and can be configured to either reduce or retain the pressure. The innovative cartridge design minimizes maintenance.



Pressure Reducing Valve 582

- PVC-U, PVC-C, PP-H, PVDF, PVDF-HP
- Spigot or union connection
- O-ring Material: EPDM, FKM
- DN10-DN50 (3/8" 2")
- 0.5-9 bar or 0.3-3 bar
- · Manometer with or without gauge guard optional
- Pressure switch optional



Pressure Retaining Valve 586

- PVC-U, PVC-C, PP-H, PVDF
- Spigot or union connection
- O-ring Material: EPDM, FKM
- DN10-DN50 (3/8" 2")
- 0.5-9 bar or 0.3-3 bar
- Manometer with or without gauge guard optional
- · Pressure switch optional



Pressure Reducing Valve V82

- PVC-U PP PVDF
- EPDM, EPDM-PTFE-coated
- Adjustment range: DN65-80 (2 1/2" - 3"): 0.5-5 bar DN100 (4"): 1-3 bar



Pressure Retaining Valve V86

- PVC-U PP PVDF
- EPDM, EPDM-PTFE-coated
- Adjustment range: DN65-80 (2 1/2" - 3"): 1-6 bar DN100 (4"): 1 - 4 bar

Valves

Diaphragm Valves

Our diaphragm valves deliver performance for everyday to demanding industrial applications. Made entirely of high-quality plastics, they resist corrosion, ensuring durability in harsh chemical environments. Their optimized design improves flow control, doubling the flow rate over competitors. A modular structure allows easy adaptation to various standards, chemicals, and actuation methods. The plastic housing nut eliminates metal bolts, preventing corrosion and enhancing safety. With minimal moving parts and a self-tightening design, they require little maintenance and offer long service life.



- · Chemical process industry
- · Microelectronics industry
- · Water treatment
- Cooling



Diaphragm Valve 514

For every day applications

- PVC-U, PVC-C, ABS, PP-H, PVDF, PVDF-HP
- EPDM, PTFE/EPDM, FKM, PTFE/FKM
- DN15-DN50 (0.25" 2")
- Up to PN16
- Lockable handwheel
- Electrical feedback module



Diaphragm Valve 515

For demanding applications

- PVC-U, PVC-C, ABS, PP-H, PP-N, PVDF, PVDF-HP
- EPDM, PTFE/EPDM, FKM, PTFE/FKM
- DN15-DN50 (0.5" 2")
- Up to PN16 (232 psi)
- Lockable handwheel
- · Electrical feedback module



Diaphragm Valve 517 (317)

Versatile and reliable

- PVC-U, PVC-C, PP-H, PVDF, PVDF-HP
- EPDM, PTFE/EPDM, FKM, PTFE/FKM
- DN15-DN50 (0.5" 2") type 317: DN65-DN150 (2.5" - 6")
- Up to PN16 (232 psi)
- Lockable handwheel
- · Electrical feedback module



Diaphragm Valve 519

For demanding applications

- PP-H, PP-N, PVDF-HP
- EPDM, PTFE/EPDM, PTFE/FKM
- DN15 DN50 (0.5" 2")
- Up to PN16 (232 psi)
- Lockable handwheel
- Electrical feedback module

Actuated Diaphragm Valves

GF has streamlined the body design of all of its diaphragm valves to improve the internal flow profile and boost overall system performance. Whether it's electric or pneumatic acuation, GF diaphragm valves are guaranteed to improve the operational efficiency of any installation.

The pneumatic diaphragm valves of the type DIASTAR are tailored for precise pressure management across various pressure ranges. The "DIASTAR Six" model handles up to 6 bar, the "Ten" up to 10 bar, the "TenPlus" is suitable for pressures between 4–10 bar, and the "Sixteen" designed for 6–16 bar.



Diaphragm Valve 604/605

- PVC-U, PVC-C, PP-H, PVDF
- EPDM, FKM, PTFE/EPDM, PTFE/FKM
- DN15 (0.5")
- PN6 (87 psi)
- pneumatic actuated FC, FO, DA



Diaphragm Valve DIASTAR Six

- ABS, PVC-U, PVC-C, PP-H
- EPDM, FKM
- DN15-DN50 (0.5" 2")
- PN6 (87 psi
- · pneumatic actuated FC



Diaphragm Valve DIASTAR Ten

- ABS, PVC-U, PVC-C, PP-H, PP-N, PVDF, PVDF-HP
- EPDM, FKM, PTFE/EPDM, PTFE/FKM
- DN15-DN50 (0.5" 2")
- PN10 (145 psi)
- pneumatic actuated FC, FO, DA
- · Accessories available



Diaphragm Valve DIASTAR TenPLUS

- ABS, PVC-U, PVC-C, PP-H, PVDF, PVDF-HP
- EPDM, FKM, PTFE/EPDM, PTFE/FKM
- DN15-DN50 (0.5" 2")
- PN10 (145 psi) both sides
- pneumatic actuated FC, F0, DA
- Accessories available



Diaphragm Valve DIASTAR Sixteen

- PVDF, PVDF-HP
- EPDM, FKM, PTFE/EPDM, PTFE/FKM
- DN15-DN50 (0.5" 2")
- PN16 (232 psi)
- pneumatic actuated FC, FO, DA
- Accessories available



Diaphragm Valve DIASTAR 025

- ABS, PVC-U, PVC-C, PP-H, PVDF, PVDF-HP
- EPDM, FKM, PTFE/EPDM, PTFE/FKM
- DN65-DN150 (2.5 6")
- up to PN10 (145 psi)
- pneumatic actuated FC, FO, DA
- Accessories available



eDiastar – 514 (threaded sockets) and 515 (spigots)

- PVC-U, PVC-C, ABS, PP-H, PVDF Retrofittable: PVDF-HP
- EPDM, PTFE/EPDM, NBR, FKM, PTFE/FKM
- d32/DN25 (1") and d63/DN50 (2")
- DN25 (1"): PN10 (145 psi) DN50 (2"): PN6 (87 psi)
- electric actuated FC

Valve Accessories

Our high-quality and modular accessories for valves enhance functionality, reliability, and efficiency, enabling precise customization for optimized system performance and longevity.



Interface Module for GF Actuators

- Compatible with Ball Valve Pro Series
- Integration with double sensor for position feedback possible
- Labelling clip included



Manual Spring Return Unit Retrofit Kit

- For safe sampling, dosing, cleaning or draining
- Compatible with Ball Valve Pro Series
- Labelling clip included
- Possible integration of double sensor for position feedback



Interface Module for Actuators

- Compatible with Ball Valve Pro Series
- Accessory for Pro ball valves
- According to EN ISO 5211
- Labelling clip included



Electrical Feedback Module

- Compatible with manual Diaphragm Valve 514 - 519
- Limit switch AgNi or Au
- Self adjusting mechanism



Double Sensor for Electrical Position Feedback

- Compatible with Ball Valve Pro Series, Butterfly Valve 565
- Included LED visual feedback
- IP67 rating



Ball Valve Labeling

• Compatible with Ball Valve 546 Pro/543 Pro/523/547



Stroke Limiter/ Manual

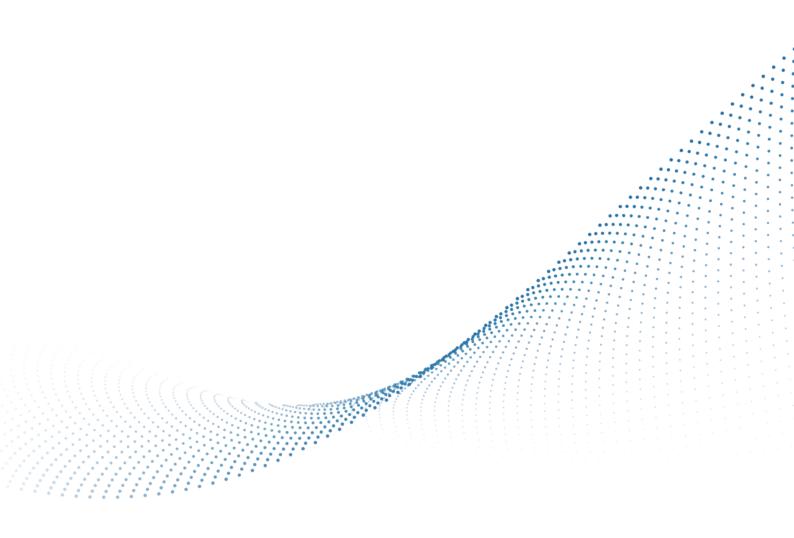
Override

• For DIASTAR all Type Ten, TenPlus, Sixteen, 025



Integrated Position Indicator

- Compatible with Butterfly Valve 567/578
- Limit switch AgNi, AU, Namur, NPN, PNP



Speak to our experts

Explore innovative products and our integrated solutions to simplify automation and boost performance.

www.gfps.com/processautomation



Actuation

Reliability, Configuration flexibility and longer Lifetime for safe and efficient flow management.



GF actuators stand out with their lightweight, durable design and longer lifetime than the competition. Our modular setup enables flexible combinations of valves and actuators, with optional positioners and monitoring devices for enhanced functionality. Made entirely of high-performance plastics, they withstand harsh environments while ensuring maintenance-free operation.

Electric and Pneumatic Actuators provide advanced automation, offering seamless connectivity, self-diagnosing electronics, and corrosion-free performance. With superior reliability and efficiency, our solutions optimize installation and long-term operation for safe and effective flow management.

Main benefits

- Superior material
- · Lightweight & Easy Installation
- · Water & Chemical Applications fit
- · Precise Flow Control
- · Low Maintenance & Long Service Life

Product overview

- Electric Actuators
- · Accessories for Electric Actuators
- Pneumatic Actuators
- · Accessories for Pneumatic Actuators
- · Seamless Connectivity

Actuators

Electric Actuators

Our Electric actuators are highly reliable and very easy to set up and operate. In addition, the latest generation of actuators offers many intelligent features. Modular accessories such as electric interfaces, integrated battery-powered fail-safe units and visual system feedback are also available.

Main applications

- · Chemical process industry
- · Water treatment
- · Refrigeration



Smart Actuator dEA25/45/120/250

- 100-230 V AC, 24 V AC/DC
- Torques from 10 Nm 250 Nm (7.3 lb ft - 184 lb ft)
- LED stripe for visual open/close 360 ° feedback
- Heating element, position feedback (Open/Close/ Middle)
- · Connectivity via NFC and Wi-Fi Direct for seamless and reliable control



Electric Actuator EA15

- 100-230 V AC. 24 V AC/DC
- Torques from 20 Nm (14.7 lb ft)
- LED enforced position feedback
- Position feedback, heater as a standard
- Optional: fail-safe return unit integrated



Electric Actuator EA25, 45, 120, 250

- 100-230 V AC, 24 V AC/DC
- Torques from 25 Nm 250 Nm (18 lb ft - 184 lb ft)
- LED enforced position feedback
- Position feedback, heater as a standard
- Optional: fail-safe return unit integrated, positioner, monitoring, profibus DP VO
- · Accessories card for digital connectivity standards: Modbus, PROFINET, EtherNet/IP



Accessories for Electric Actuators



EtherNet/IP





Digital Communication with Industrial Ethernet and Fieldbusses (EA25-250)

- Simple integration to any digital network
- Industrial Ethernet: PROFINET, EtherNet/IP, Modbus TCP
- Fieldbusses via RS-485: PROFIBUS DP, Modbus RTU
- Multiple process values and diagnostics available in PLC
- Valve control via Open/Close or via positioner mode
- Monitoring of motor current, cycle times, temperature, and total cycles
- Embedded web server for easy configuration and troubleshooting (Ethernet devices only)
- 2 ports enabling daisy-chain / line / ring topologies



Fail-Safe Return Unit (E15 - 250)

• Sets actuator back to pre-defined position (open/close)



M12 Adapter Board

 Optional Board for Ethernet variants with 2x M12 connectors instead of cable glands with internal connection to RJ45



Positioner Card (EA25-250)

- Input 4-20mA or 0-10 V (can be inverted)
- Output/Feedback 4-20 mA (can be inverted)
- Monitoring of motor current



Monitoring Board (EA15-250)

- Easy monitoring for on/off actuation
- Monitoring of motor current, cycle times, and total cycles

Actuators

Pneumatic Actuators

GF pneumatic actuators are suitable for a wide range of environments and guarantee high levels of safety and reliability thanks to their fail-safe operation, robust design and high functionality, such as fast cycle times and adjustable travel. They are economical, functional and reliable solution, especially for installations with a high number of actuated valves.

Main applications

- · Chemical process industry
- · Water treatment
- Refrigeration











Plastic Pneumatic Actuator PPA

- Torques from 3 Nm 40 Nm (2.2 lbs ft - 29.5 lbs ft)
- FC, FO, DA
- Rack and pinion principle
- Integrated NAMUR interfaces
- Glass-fiber reinforced polypropylene

Pneumatic Actuator PA30 - PA90

- Torques from 15 Nm 240 Nm (11.1 lbs ft - 177.1 lbs ft)
- FC, FO, DA
- Scotch Yoke principle
- Accessory interface acc. ISO5211
- · Visual position indication
- Adjustable end stops
- Various coatings on request

24 Valves and Measurement Portfolio +GF+

Accessories for Pneumatic Actuators



Pilot Valve PV96

- Direct-acting 3/2 Pilot valve
- Single acting pneumatic actuators
 Material of Body: PPS
- Supply Voltage: 24 VDC, 24 VAC, 50 60 Hz; 110 VAC, 50 - 60 Hz; 120 VAC AC, 60 Hz; 230 VAC, 50 - 60 Hz
- DN2
- QNn value air: 120 l/min



Electro-pneumatic Positioner for **Rotary Actuators**

- For pneumatic actuators in double-acting and single acting function
- Power supply voltage 24V DC, Activation 0-10 V, 0-5 V, 4-20 mA
- 0-20 mA adjustable
- Multi-pin plug electrical connection
- Operation/configuration via display or internal DIP switch
- · Protection rating IP65/IP67
- · Binary input (fail-safe position, changeover)
- Operating mode (Automatic/Manual)
- Analog position indicator (0/4 to 20 mA, 0 to 5/10 V) for setpoints and actual values
- Approved and listed according to cULus and cCSAus
- Supporting future-proof Industrial Ethernet protocols (PROFINET / EtherNet/IP /



Electro-Pneumatic Positioner for **Linear Stroke Actuators**

- · For pneumatic actuators in single-acting function
- Power supply voltage 24V DC, Activation 0-10 V, 0-5 V, 4-20 mA
- 0-20 mA adjustable
- · Multi-pin plug electrical connection
- · Operation/configuration via display or internal DIP switch
- Protection rating IP65/IP67
- · Binary input (fail-safe position, changeover)
- Operating mode (Automatic/Manual)
- · Analog position indicator (0/4 to 20 mA, 0 to 5/10 V) for setpoints and actual values
- Approved and listed according to cULus and cCSAus
- supporting future-proof Industrial Ethernet protocols (PROFINET / EtherNet/IP / Modbus)



DTM M12 Double Sensor

- Conneciton M12
- · Detection of two switching states open/closed
- · Switching status indication via integrated LEDs
- · Simple installation
- · Puck available for inductive sensor and mechanical, optical position indicator



DTM CG Double Sensor

- Connection: Cable Gland
- · Detection of two switching states open/closed
- Switching status indication via integrated LEDs
- · Simple installation
- PNP
- Puck available for inductive sensor and mechanical, optical position indicator



Pilot Valve PV95

- Direct-acting 3/2 Pilot valve
- Single acting pneumatic actuators
- Material of Body: PPS
 Supply Voltage: 24 VDC; 24 VAC, 50 60 Hz; 110 VAC, 50 60 Hz; 230 VAC, 50 60 Hz
- DN2
- QNn value air: 75 l/min



Solenoid Pilot Valve MNL 532

- Version for 3/2-way and 5/2-way
- Namur connection
- Material of body: Aluminum
- 24 V AC, 24 V DC, 48 V AC, 110 V AC,
- DN5
- 950 l/min



Solenoid Pilot Valve 4/2-ways 5470

- · for double acting pneumatic actuators (DA)
- NAMUR connection
- Material of body: Polyamid
- 24 V AC/DC, 110 V AC/DC, 230 V AC/DC
- DN4
- 300 l/min



Electric Position Feedback ER52-1/ER53-1

- For pneumatic stroke actuators
- For DIASTAR Ten, TenPus, Sixteen, 025
- Mechanical switches (AgNi or Au)
- NPN/PNP. NAMUR connection
- With visual position indication



Solenoid Pilot Valve 2000

- Modular version for 3/2-way and 5/2-way valves
- 24 V DC
- Connection module AS-Interface
- Connection module profibus interface



Electric Position feedback Limit Switch Box

- For pneumatic rotary actuators
- For PPA08 80 and PA11 90
- Mechanical switches (AgNi or Au) • NPN/PNP, Namur connection
- With visual position indication

Seamless connectivity

Our automation loop can be managed with various communication technologies and can therefore be seamlessly integrated into existing plant management systems. We offer analogue and digital communication technologies which support on/off or continuous control loops. The benefits of any digital communication technology include less wiring, faster installations and more efficient diagnostic and parameterization capabilities.

Industrial Ethernet-enabled actuators

To reduce Total Cost of Ownership and enhance plant efficiency, the automation industry is embracing specific trends. These trends include simple network set-ups, 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 easy to handle technologies, seamless access to device data in the field, and state-of-the-art network technol-

ogy. Industrial Ethernet has been extensively utilized in various industries for many years. Protocols such as PROFINET, EtherNet/IP, and Modbus TCP offer seamless integration to control systems, enabling robust and reliable real-time data exchange for enhanced automation, scalability, and interoperability.









Electric Actuator (EA25-250)

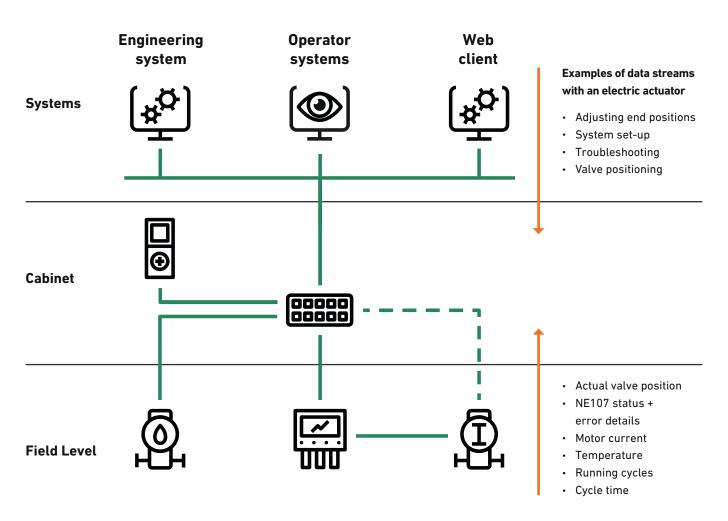


Electro-Pneumatic Positioner for Linear Stroke Actuators – RPC D / RPC PID



Electro-Pneumatic Positioner for Rotary Actuators – SPC D / SPC PID

Full process control



Digital Communication Technologies

GF provides various digital connectivity technologies, extending beyond Industrial Ethernet. One such offering is Modbus RTU, a widely recognized protocol utilizing RS-485 physics. This protocol facilitates data transmission to Programmable Logic Controllers (PLCs). By adopting Modbus RTU, users gain access to additional device data, allowing for a reduction in the number of I/O cards in the cabinet. Compatible devices include the 9900 single channel transmitter and the 9950 multi-channel transmitter, ultrasonic flow meters, and the electric actuator range.

In addition to Modbus RTU, GF supports other digital connectivity technologies, such as HART and AS-I, for selected devices.









Electric Actuator EA25-250

- Flexible choice between On/Off and Positioner Mode
- Monitoring features (motor current, cycle times, service intervals, etc.)
- Device health status and diagnostic events
- Cyber security certified embedded web server



Electro-pneumatic positioner for rotary actuators RPC D / RPC PID

- · Device health status
- Enhanced device configurations



Electro- pneumatic positioner for linear stroke actuators SPC D / SPC PID

- · Device health status
- · Enhanced device configurations





Electric Actuator EA25-250

- Flexible choice between On/Off and Positioner Mode
- Monitoring features (motor current, cycle times, service intervals, etc.)
- Device health status and diagnostic events



0486 PROFIBUS Concentrator

- Multi-channel device for connection of sensors and actuated valves to a PROFIBUS DP Network
- Supported devices: S3L, 4-20mA, frequency, open collector
- Channels: 6xS3L, 2x4-20mA Input, 4x Frequency Input, 1x4-20mA Output

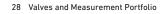


We enhance plant efficiency with digital field connectivity. Digital communication technologies such as Industrial Ethernet with EtherNet/IP, PROFINET, and Modbus TCP protocols enable state-of-the-art automation.

Learn more:

www.gfps.com/connectivity









- Full plastic housing
- · Optical status indicator
- AS-Interface 3.0



Electric Actuator EA25-250

- Flexible choice between On/Off and Positioner Mode
- Monitoring features (motor current, cycle times, service intervals, etc.)
- Device health status and diagnostic events



AS-Interface for Pneumatic Rotary Actuators



9900/9950 Transmitter

- 2 Process Variables per channel
- Device health status per channel



AS-Interface for **Pneumatic Stroke Actuators**



U1000, UD2100 Ultrasonic Flow

- Additional process variables (flow rate, velocity, energy, temperature)
- Diagnostic insights



AS-Interface for Manual Valves with Feedback







9900 Transmitter

- 2 process variables of connected device
- Device health status of connected device



AS-Interface for Sensor with Switch Output





AS-Interface for **Electric Actuators**



UD2100 Ultrasonic Flow

- Full configuration possibilities via field communicator
- Full list of process variables accessible

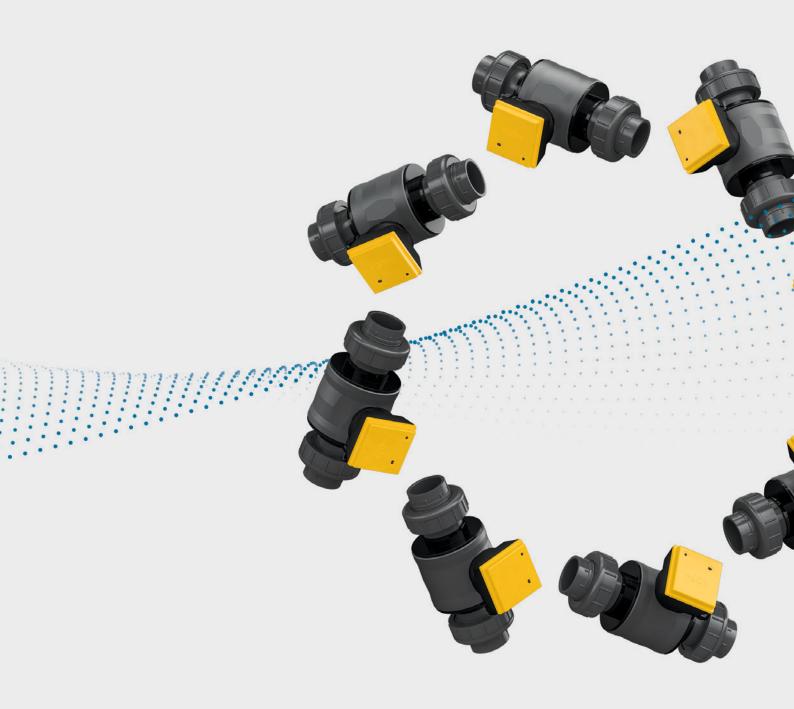


2260, 2270, 2298 Ultrasonic and Radar Level

- Full configuration possibilities via PC software Eview
- Adaptation of device to process specifics

Measurement

Precision for High-Quality Results in Your Processes





GF offers a wide range of flow and analytical technologies, providing simple operation and reliable results for all process requirements. Committed to excellence, our sensors are used in applications ranging from water and wastewater treatment applications to chemical processing.

Our measurement products are designed with the customer in mind, featuring a universal transmitter for all measurement parameters with an intuitive menu structure.

The modular design allows for easy field expansions with functionalities including relays and communications such as 4-20, HART and Modbus, ensuring flexibility for diverse applications.

Main benefits

- · Excellent corrosion resistance
- · Robustness and durability
- · Reliability and accuracy
- · Simple commissioning and operation
- · User-friendly maintenance
- · Modularity tailored to the application

Product overview

- Transmitters, Monitors & Controllers
- Flow
- Level
- · Liquid Analysis
- Pressure and Temperature
- · Installation Fittings
- Accessories

31 Valves and Measurement Portfolio

Measurement

Transmitters, Monitors & Controllers

Our 9900 transmitter/monitor and 9950 controllers provide a flexible sensor interface for a wide range of applications. 9900 transmiThese instruments support GF sensors (Flow, pH/ORP, Conductivity, etc.) via digital S³L, and with the i-Go® module, also accept 4-20mA sensors.



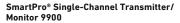
Applications requiring the measurement of:

- Flow
- Level
- pH/ORP
- · Conductivity / Resistivity
- · Dissolved Oxygen
- · Free Chlorine / Chlorine Dioxide
- · Temperature
- Pressure
- · Any sensors with 4-20 mA output









- Multi-parameter sensor input
- Panel-mount or field-mount
- · Large auto-sensing backlit display
- 1 passive 4-20 mA loop output
- 1 open collector relay output
- Power: 24 VDC
- Optional modules: Relays, 4-20 mA output, direct conductivity/resistivity, HART, Modbus RTU

SmartPro® Dual-Channel Transmitter 9950

- Multi-parameter sensor input
- · Option for binary inputs
- Panel-mount
- · Large auto-sensing backlit display
- 2 passive 4-20 mA loop outputs
- Power: 24 VDC or 120/240 VAC
- Derived functions: Ratio, difference, sum, % rejection, % recovery
- Optional modules: Relays, 4-20 mA output, direct conductivity/resistivity, Modbus RTU

SmartPro® Six-Channel Transmitter 9950

- Multi-parameter sensor input
- · Option for binary inputs
- Panel-mount
- Large auto-sensing backlit display
- Up to 6 passive 4-20 mA loop outputs
- Power: 24 VDC or 120/240 VAC
- Derived functions: Ratio, difference, sum, % rejection, % recovery
- Optional modules: Relays (up to 8 mechanical relays), 4-20 mA output, direct conductivity/resistivity, Modbus RTU



i-Go® Analog to S³L Module 8058-1

- Converts 1 analog 4-20 mA signal to digital S³L per input channel
- Connects to all 9900 and 9950 SmartPros®
- Wire mount





Battery-Powered Flow Totaliser

- Displays GPS, GPM, GPH, GPD, LPS, LPM, LPH, LPD
- Battery-powered
- Single input
- Panel- or field-mount
- 3 totalizers, auto calibration
- Use with 515 or 525 flow sensors



i-Go® Analog to S³L Module 8058-2

- Converts 2 analog 4-20 mA signal to digital S³L
- Connects to 9950-10/-11 SmartPro®
- DIN-rail mount



8059 External DIN-Rail Relays

- AC and DC powered versions
- External relays controlled by host instrument
- Digital pass-through (DC versions) to simplify wiring
- Relay can be tested locally, and also via the host instrument
- Compatibility: 9950-10/-11 SmartPro®



i-Go® Analog to S³L Module Type 8058-3

- Converts 1 analog 4-20 mA signals to digital S^3L
- Connects to 9900 panel-mount only
- Module mount

Modules

Type 9900



H COMM Module

- Allows communication between the 9900 Transmitter and a HART®-enabled device
- · Allows access to primary and secondary measurements remotely
- · Allows user to remotely adjust the 4 and 20 mA settings
- · Not compatible with Batch module

Type 9950



Single-Channel Direct Conductivity/ Resistivity Module

- · Allows direct connection to single conductivity/resistivity sensor up to 30m (100 ft) in cable
- For applications separated by more than 30m (100 ft) use 3-2850-51-XX Sensor Electronics



4-20 mA Module

- Adds a second 4-20 mA output
- Output can be used for primary or secondary measurement



Dual-Channel Direct Conductivity/ Resistivity Module

- Allows direct connection to two conductivity/resistivity sensors up to 30m (100 ft) in cable
- · For applications separated by more than 30m (100 ft) use 3-2850-51-XX Sensor Electronics



Direct Conductivity/Resistivity Module

- · Allows direct connection to the conductivity/resistivity sensor up to 30m (100 ft) in cable
- For applications separated by more than 30m (100 ft) use 3-2850-51-XX Sensor Electronics



Dual Channel 4-20 mA Module **Current Loop Output Module**

- Each module contains two 4-20 mA outputs
- Can connect up to two 4-20 mA modules for a total of six 4-20 mA outputs
- Passive loops, requires external 12 to 24 VDC power



Batch Module

Adds batch control capability to the 9900 Transmitter

- $\bullet\,$ Compatible with all GF S^3L and frequency output flow sensors
- Up to 10 batch sizes can be stored in one 9900 with customized names and K-factors available for each batch



Modbus RTU Module

Connects the 9950 to existing Modbus RTU, serial RS485 and automation networks

- · Allows digital access to live measurement readings
- Simplifies the interfacing of the 9950 to automation networks



Modbus RTU Module

Ability to transfer live readings, units of measure, and measurement status

- Connects to PLCs and SCADA system
- Supports the serial Modbus RS485 standard



Relay Module

3 options: 4 dry-contact relays, 2 dry-contact and 2 solid state relays, 2 dry-contact and 4 binary inputs



Relay Module

Adds two programmable dry-contact

- Hysteresis and time delay available for each relay
- · Depending on the sensor type, there are a total of 23 relay modes available

Measurement

Flow

With over 50 years of experience, GF remains at the forefront of developing flow measurement technologies. We provide a range of sensors to measure flow in media ranging from ultra-pure to highly corrosive applications, ensuring the right fit with your process requirements.

Paddlewheel flow sensors

Easy to install with a proven track record of reliability, paddlewheel flow sensors come in various materials, including PVC, PP, PVDF, and stainless steel, ensuring versatility and chemical compatibility across a wide range of pipe sizes and insertion configurations.

Main applications

- · Water Treatment Systems
- · Final Effluent Monitoring
- · Agriculture
- Pools and Water Parks: Filtration
- Zoos and Aquariums: Filtration
- Liquid Delivery Systems
- Make-up Water
- · Condensate Lines
- Batching





Type 3519

Rotor-X Paddlewheel Flow Sensor

- 0.3 6 m/s (1 to 20 ft/s)
- DN15-DN900 (1/2 to 36")
- PP 12.5 bar @ 20 °C (180 psi @ 68 °F)
- PVDF 14 bar @ 20 °C (203 psi @ 68 °F)
- 19.7 Hz per m/s nominal (6 Hz per ft/s nominal)

Wet-tap valve available

- DN15-DN900 (1/2 to 36")
- PVC
- 7 bar @ 20 °C (100 psi max @ 68 °F)





Flow wet-tap valve Type 3519

Rotor-X Paddlewheel Flow 2536

- 0.1 6 m/S (0.3 to 20 ft/S)
- DN15-DN900 (1/2 to 36")
- DN15-DN100 (1/2 to 4") for PVC
- \bullet PP 12.5 bar @ 20 °C (180 psi @ 38 °F)
- PVDF 14 bar @ 20 °C (203 psi @ 68 °F)
- PVC 14 bar @ 20 °C (203 psi @ 68 °F)
- 49 Hz per m/S nominal (15 Hz per ft/S nominal)
- Open collector output

Wet-tap valve available

- DN15-DN900 (1/2 to 36")
- 7 bar @ 20 °C (100 psi max @ 68 °F)



Paddlewheel Flow Sensor

- 0.1 6 m/s (0.3 to 20 ft/s)
- DN15-DN200 (1/2 to 8")
- PP 12.5 bar @ 20 °C (181 psi @ 68 °F)
- PVDF 14 bar @ 20 °C (203 psi @ 68 °F)
- 4-20 mA digital (S³L) flow switch or pulse outputs (based on part number)



Metalex Paddlewheel Flow Sensor 525

Self-powered

- 0.5 6 m/s (1.6-20 ft/s) DN15-DN300 (0.5-12")
- 316 stainless steel
- 103 bar (1500 psi @ safety factor 1.5) @149 °C (300 °F)
- 39 Hz per m/s nominal (12 Hz per ft/s nominal)



Stainless Steel Paddlewheel Flow Sensor 2540

- 0.1 6 m/s (0.3 to 20 ft/s)
- DN40-DN900 (1½ to 36")
- 316 stainless steel
- 17 bar @ 100 °C (250 psi @ 212 °F)
- 49 Hz per m/s nominal (15 Hz per ft/s nominal)
- · Field replaceable electronics
- · Open collector output



Flow Integral Mount

- · Integral display for "at a glance" visibility
- "Dial-type" digital bar graph
- · Optional output modules: Modbus, HART
- NEMA 4X/IP65

Inline flow sensors

Ideal for low-flow and small line sizes, flexible end connections support both tubing and piping installations from DN8-DN15 (1/4 to 1/2"). A variety of wetted materials ensures excellent durability and chemical resistance, making these sensors ideal for chemical injection and batching applications.

Main applications

- · Chemical Addition
- · Cooling Flow
- · Wet Benches



Turbine Flow Sensor

- 0.38 to 38 lpm (0.10 to 10 gpm)
- DN15 (1/2")
- PVDF
- 16 bar @ 20 °C (232 psi @ 68 °F)
- Open collector output
- Choice of end fittings: 3-2100-31 to 3-2100-38



Mini-Flow Rotor Sensor 2507

- 400-12 000 mL/m (0.1 to 3.2 U.S. gpm)
- G ¼" ports, ¼" NPT pipe adapters
- PVDF
- 5.5 bar @ 24 °C (80 psi @ 75 °F)
- · Open collector output
- Standard cable 7.6 m (25 ft)



Micro-Flow Rotor Sensor 2000

- 0.11 12.11 lpm (0.03 3.2 gpm)
- 1/4" NPT or ISO 7/1-R1/4 threads
- Polyphenylene sulphide and PEEK
- 5.5 bar @ 0 ° to 80 °C (80 psi @ 32 °F to 176 °F)
- Open collector output
- Standard cable 7.6 m (25 ft)

Variable area flow meters

Variable area flow meters (VAFM) are dismountable meters for flow measuring in industrial piping applications. The measurement ranges, which are attuned to our customers' needs, and the range of materials available for the tubes and connection ends, mean that the flow meters can be used for a wide range of applications and a great variety of media.



VariableArea Flow Meters 335 / 350, SK50-73

- Taper tubes in PVC transparent, PA, PSU
- Union connection with PVC (std)*
- DN10 DN65 (3/8 3.5")
- PN10 (145 psi)
- Optional switch feedback
- Special scales on request

*others on request

Main applications

- · Water treatment
- · Chemical process industry
- Microelectronics
- Food industry
- Marine

Measurement

Magmeters

Magmeters provide accurate flow measurement with no moving parts and minimal maintenance for long-term reliability. They are available in insertion-style and full-bore (FlowtraMag®) designs. Insertion magmeters are easier to install and remove, while full-bore offers higher accuracy with minimal pipe runs. Select models feature corrosion-resistant materials, making them suitable for various fluid applications.



FlowtraMag® Meter 2581

Full-bore

- 0.02 10 m/s (0.07 to 33 ft/s)
- DN25 to DN100 (1 to 4")
- 10 bar @ 23 °C (145 psi @ 73 °F)
- 4-20 mA, 4 to 20 mA per ANSI-ISA 50.00.01 Class H

Main applications

- · Suspended Solids
- · Water and Wastewater Monitoring
- · Water Treatment Systems
- Final Effluent Monitoring
- · Pools and Water Parks: Filtration
- · Zoos and Aquariums: Filtration
- Agriculture
- Batching
- · Cooling Tower



Flow wet-tap valve Type 3519



Magmeter 2551

Insertion

- 0.05 10 m/s (0.15 to 33 ft/s)
- DN15-DN900 (½ to 36")
- 10.3 bar @ 25 °C (150 psi @ 77 °F)
- 4-20 mA, or frequency/digital (S³L) outputs
- Optional display and relay outputs
 Wet-tap valve available
- DN15-DN900 (1/2 to 36")
- PVC
- 7 bar @ 20 °C (100 psi max @ 68 °F)

Metal Magmeter 2552

Insertion

- 0.05 10 m/s (0.15 to 33 ft/s)
- DN50-DN2550 (2 to 102")
- 316 stainless steel & PVDF
- 20.7 bar @ 25 °C (300 psi @ 77 °F)
- 4-20 mA, frequency/digital (S³L)
- Hot-tap using ball or gate valves



Flow Integral Mount

- Integral display for "at a glance" visibility
- "Dial-type" digital bar graph
- 4-20 mA output
- Optional output modules: Modbus, HART
- NEMA 4X/IP65

Ultrasonic flow meters

Non-contacting flow meters accurately measure flow rates of liquid media without coming into contact with the actual fluid. Ultrasonic technology is used when a non-invasive measurement is required and process shutdowns need to be avoided. The ultrasonic advantage comes into play especially in areas where avoiding contamination is critical, such as ultrapure water. Ultrasonic flow meters are available as portable or fixed installation.

Main applications

- · Ultrapure water measurement
- · Heating systems
- · Chilled water metering
- · Flow measurement for energy metering
- Monitoring of manufacturing processes



Ultrasonic Flowmeter U1000 V2

- 0.1 m/s 10 m/s
- d22-d180
- DC 12-24 V
- Output: 4 20 mA, pulse/frequency, Modbus
- Transit-time measurement
- Heatmeter option available
- Wallmount option available



Portable UltrasonicFflowmeter PF220 / PF330

- 0.1 m/s 20 m/s
- d13-d2000
- Battery powered, AC 110 240 V
- Output: 4 20 mA, USB
- Integrated datalogger (PF330)
- Transit-time measurement
- Heatmeter option available
- Customizable speed of sound value



Ultrasonic Wall Mount Flowmeter U3000 / U4000

- 0.1 m/s-20 m/s
- d13-d2000
- DC 24 V or AC 86 -240 V
- Output: 4-20 mA, pulse/frequency, RS232, USB
- Integrated datalogger (U4000)
- · Transit-time measurement
- Heatmeter option available
- Customizable speed of sound value



Ultrasonic Doppler Flowmeter UD2100

- · Especially designed for suspended solids/aerated liquids
- 0.03 m/s 12.2 m/s
- d16-d4000
- DC 24 V or AC 86 240 V
- Output: 4-20 mA, pulse/frequency, Modbus
- · Integrated datalogger
- Doppler measurement

Level

GF offers a wide range of technologies to measure levels in tanks either continuously or to detect point level thresholds. Due to the high diversity of process liquids and types of vessels, different methods are required to keep control of fluids – not only in but also in tank applications.

Point level detection

To maintain full control over the liquid level in tanks, point level switches can be used for a physical detection of critical filling levels. These instruments provide additional safety and control. They are often installed together with a continuous level sensor as a back-up system. They can also be used to directly control filling and emptying process.

Main applications

- · Overfill protection
- High and low level alarms
- · Pump control
- · Dry-run protection for pumps



Vibration Forks 2280

- For safe operation in critical applications
- Cable, DIN connector and connection terminals
- Easy wiring in various applications
- No moving parts
- · No maintenance costs
- PFA coating available for superior chemical resistance
- Customized length available (for perfect fit in every application)



Conductive Multipoint Switch 2281

- Individual cutting of electrodes
- Most economic solution to indicate multiple point levels
- Easy adaptation of switching points on site
- Up to 4 switching points in one sensor
- 4 times faster installation
- Cost effective solution



Float Switch 2285

- Double chambered enclosure
- Easiest way to monitor point levels in open tanks and basins
- High operational safety
- Mercury free switching contact
- Safe use in drinking- and waste water applications



Ultrasonic Gap Switch 2284

- PPS Full-plastic body
- Realiable point level detection even in very corrosive or viscous liquids
- · Optimized chemical compatibility
- Compact size
- Easy installation in pipes and small systems
- Robust ultrasonic principle even in highly viscous liquid



Guided Float Switch 2282

- PP or PVDF full-plastic body
- Compact and cost attractive solution for small vessels
- Optimized chemical compatibility
- Ultra compact housing
- Easy installation in compact systems

Continuous level control

For continuous tank level detection, we offer a variety of measurement technologies. Depending on application requirements and characteristics of the process liquid, either a non-contact or contact device can be utilized. Our level sensors provide accurate level information through analog or digital signals to ensure easy interfacing with programmable logic controllers (PLC).

Main applications

- · Inventory management
- · Batching and dosing processes
- Storage Tank Monitoring
- · Neutralization Tanks
- Plating Lines
- · Waste Sumps
- · Clarifiers
- Overflow Protection



Guided Radar Level Transmitter 2291

- Reliable guidance of measuring signal along sensors
- Advanced resilience in case of extreme fumes, thick foam layers or agitation
- Great performance also on media of low dielectric constants
- Special coatings for sensors available: PP, PFA and FEP



Ultrasonic Level Sensor

- · Non-contact principle
- Narrow 5 and 6° beam
- Range: 4, 6, 8 meters (13, 20, 26 ft), 4-20 mA. HART
- PP and PVDF bodies
- Easy to use EView programming software
- Allows for open channel measurement



Ultrasonic Integral Level Transmitter 2260

- · Non-contact principle
- Narrow 5 and 6° beam
- Range: 4, 6, 15 meters (13, 20, 50 ft)
- 4-20 mA, HART, relay ouput
- PP and PVDF bodies
- Quick-set and advanced menu
- · Large multi-parameter display
- · Allows for open channel measurement



Hydrostatic Level Sensor 2250

- Pressure/fill ranges*
 0-0.7 bar (0-10 psi) = 0-7.03m (0-23.06 ft) -XU
 0-3.4 bar (0-50 psi) = 0-35.15m (0-115.32 ft) -XL
- Wetted material: PVDF, PVC, ceramic and FKM
- Submersible sensor
- 4-20 mA or digital (S³L) output
- Uses hydrostatic pressure for level and depth control



Non-Contact Principle Radar Level Transmitter 2298

- Non-contact principle
- Robust against most interfering factors such as fumes, light foaming or fluctuations of pressure or temperature
- Display and comprehensive configuration menu
- PP, PTFE, PVDF or stainless steel antenna enclosures
- Allows open channel flow measurement



^{*}Ranges calculated using specific gravity of water. Maximum range depends on the specific gravity.

Conductivity/Resistivity

Suitable for a wide range of applications, our conductivity sensors offer precise measurement from water treatment and process chemistry to wastewater treatment. With a variety of chemically resistant wetted materials, our sensors ensure longevity and reliable performance.

Main applications

- Reverse Osmosis
- Deionization
- Rinse Water
- Salinity / Brine
- Ion Exchange
- Distillation
- Condensate
- Filtration



• 0.055-200 000 μS (0.02-100 000 ppm) (18.2 MΩ - 1 KΩ)

Conductivity/Resistivity Sensors

connections

- 316 SS • CPVC/Polypropylene/PVDF/PEEK process
- · Dual threaded NPT or ISO
- Connection to 9900 and 9950 SmartPro® transmitters/controllers or 2850 sensor electronic
- Option for NIST certificate



Conductivity/Resistivity Sensors

- 0.055 400 000 μS (0.02-200 000 ppm) $(18.2 M\Omega - 1 K\Omega)$
- 316 SS or titanium (Hastelloy C available upon request)
- Sanitary flange connections
- Connection to 9900 and 9950 SmartPro® transmitters/controllers or 2850 sensor electronics



Conductivity Sensor Electronics with PVDF

- 0.055 400 000 μS (0.02 200 000 ppm) (18.2 MΩ - 1 KΩ)
- PBT (integral mount) /PBT/CPVC (universal junction box)
- Integral systems connect to GF Type 288X conductivity sensors or via universal junction box 3-2850-5X-6X to other GF conductivity sensors
- 4-20 mA or digital (S³L)
- Five simulated factory NIST traceable recertification tools available for use with 2850



Conductivity Integral System with 9900 Transmitter

- · "At a glance" visibility
- "Dial-type" digital bar graph
- 4-20 mA output
- NEMA 4X/IP65
- Five simulated factory NIST traceable recertification tools available for use

pH/ORP

Our pH/ORP portfolio offers a variety of sensors ranging from general purpose to challenging applications. The sensors are equipped with a memory chip for convenient data storage and access to a wide range of unique features. Stored manufacturing, calibration, operational and sensor health data combine to facilitate trouble-shooting and remote calibration, minimizing system downtime and increasing safety.

Main applications

- pH Neutralization
- · Water and Wastewater Treatment
- · Scrubber Control
- Effluent Monitoring
- · Ozone Monitoring
- · Cooling Towers



DryLoc pH/ORP Sensors

General purpose

- 0-14 pH, ± 2,000 mV ORP
- Ryton body, PE junction
- Use fittings for in-line applications or 3/4" NPT or ISO
- Suitable for submersible applications
- DryLoc® preamplifier connection with gold plated pins



pH/ORP Wet-Tap Assembly 3719 Wet-Tap Electrodes - 2756/2757 General purpose

- Use a wet-tap style sensor for 0-14 pH, ± 2,000 mV ORP
- CPVC. PVC
- 1½" or larger
- 1½" or 2" NPT, ISO 7/1 R1.5 or R2
- Electrode removal without process
 shutdown



DryLoc® pH/ORP Electrodes for Harsh Applications – 2734 - 2736

Industrial purpose

- Enhanced reference and bridge gels to resist chemical poisoning
- Ryton (PPS) body and PTFE junction for broad range of chemical compatibility
- PTFE reference junction resists fouling and chemical attack
- Mounts in GF Signet standard fittings from DN15 to DN100 (½ to 4")



DryLoc® pH/ORP Electrode

Industrial purpose

- 0-14 pH, ± 2,000 mV ORP
- Ryton body, PTFE junction
- Use sensor ¾" threads for mounting
- DryLoc preamplifier connection with gold plated pins
- Suitable for submersible applications
- For use with 2751 sensor electronics



Differential DryLoc® pH/ORP Electrodes 2744 - 2747

• 0-14 pH, ± 1500 mV ORP

- Ryton body, PTFE double junction
- Use sensor 1 inch threads for mounting
- DryLoc® preamplifier connection with gold plated contacts
- For use with 2751 sensor electronics



DryLoc® pH/ORP Smart Sensor Electronics

Smart Sensor Electronics

- -1 15 pH, ± 2,000 mV ORP
- PBT, CPVC (PVC-C)
- Sensor health monitoring, glass impedance and broken glass detection
- Memory chip interface
- Use with SmartPro® transmitters/ controllers
- In-line and submersible versions available

Chlorine

GF Chlorine Analyzer System is an integrated, all-in-one system designed to measure free chlorine or chlorine dioxide. Quick to set up and easy to install, the analyzers are supplied with a 100-240 VAC power supply, two 4-20 mA outputs and two dry contact mechanical relays.

Main applications

- · Water Distribution
- · Ground Water
- Surface Water
- · HVAC Applications (cooling water)





Chlorine Analyzer System

- Continuous free chlorine measurement without chemical reagants
- Measurement ranges 0-2 ppm, 0-5 ppm, 0-20 ppm
- · pH sensor for increased accuracy
- Integrated flow switch interrupt
- · Pre-wired panel for easy installation
- Built in pressure regulator and variable area flow meter
- Complies with EPA standard 334.0

Chlorine Dioxide System 4632

- Continuous chlorine dioxide measurement without chemical reagants
- Measurement range 0-2 ppm
- Integrated flow switch interrupt
- Pre-wired panel for easy installation
- Built in pressure regulator and variable area flow meter

Dissolved Oxygen (DO)

Our sensor features the latest optical technology that comes with many benefits. The sensor cap that comes with the product is pre-calibrated at the factory and requires no field calibration at start-up. The cap, which has a 2-year lifetime after installation, also eliminates the need for a membrane and reference solution, thus reducing maintenance. The sensor is suitable for both stagnant and moving water as well as inline and submersible applications.



Process Optical Dissolved Oxygen Sensor 2610

- Optical DO measurement with no flow requirements
- No membranes or reference solutions
- Outputs: 4-20 mA, Modbus RS485, S³L
- Measurement ranges: 0-20 mg/L, 0-60 mg/L or field-adjustable within 0-60 mg/L
- Salinity range, 0-42 PSU

Main applications

- · Municipal and Industrial Wastewater Treatment
- Zoos and Aquariums
- Aquaculture
- · Agriculture
- Bioreactors
- Bioleaching
- · Anaerobic/aerobic processes

Temperature and Pressure

GF temperature and pressure sensors are designed with a PVDF body, making them ideal for corrosive and high-purity applications and eliminating the need for costly custom thermowells.

Main applications

- · Plating Bath Temperature Control
- · Heat Exchange Monitor
- Reverse Osmosis
- Deionization
- · Hot/Cold Mixing System Monitor
- · Data Centers: Cooling
- Chillers
- · Chemical Processing



Temperature Sensor

- In-line mounting: 10 °C 100 °C (14 °F - 212 °F)
- Submersible mounting: $10\,^\circ\text{C}$ $85\,^\circ\text{C}$ ($14\,^\circ\text{F}$ $185\,^\circ\text{F}$)
- PVDF
- ¾" dual threaded for in-line or submersible installation
- 4-20 mA or digital (S3L)



Pressure Sensor 2450

- 0-0.7 bar (0-10 psi)-U
- 0-3.4 bar (0-50 psi)-L
- 0-17 bar (0-250 psi)-H
- Vacuum range available
- Wetted materials: PVDF, ceramic and FKM
- ½" union, dual threaded
- 4-20 mA or digital (S3L)



Temperature Integral System with 9900 Transmitter

- Integral display for "at a glance" visibility
- "Dial-type" digital bar graph
- 4-20 mA output
- Optional output modules: Modbus, HART
- NEMA 4X/IP65



Pressure Integral System with 9900 Transmitter

- Integral display for "at a glance" visibility
- "Dial-type" digital bar graph
- 4-20 mA output
- Optional output modules: Modbus, HART
- NEMA 4X/IP65



Gauge Guard

- True plastic design (no metal screws)
- PVC-U, PP-H, PVDF
- EPDM, EPDM-PTFE-coated
- DN20 or DN25
- PN10
- With or without pressure gauge

Installation fittings



Plastic -

- Compatibility: pH/ORP and Flow (Paddlewheels and Magmeter 2551)
- ABS* DN20-DN50
- PVC DN15-DN50
- PP DN15 DN50
- PVDF DN15-DN50
- PE DN15 DN50



Metal -

- Compatibility: pH/ORP and Flow (Paddlewheels and Magmeter 2551)
- Brass NPT 1.00 2.00" / SCH 40



Plastic -**PVC Tees**

- Compatibility: pH/ORP and Flow (Paddlewheels and Magmeter 2551)
- PVC 0.50 2.0" / SCH 80
- PVC-C 0.50 2.0" / SCH 80
- PVC BSP* 0.50 2.0"



- 316 SS NPT 0.50 2.00" / SCH 40



Metal -

- Compatibility: pH/ORP and Flow (Paddlewheels and Magmeter 2551)
- Carbon steel NPT 0.50 2.0" / SCH 40
- Copper sweat-on 0.50 2.0" / SCH K
- Galvanized iron NPT 1.00 2.0" / SCH 40



Weldolets / Brazolets

- Carbon steel 2.5 12.0" / SCH 40
- Brass 2.5 12.0" / SCH 40
- 316 SS 2.5 12.0" / SCH 40

Metalex

Metalex Socket Weld Mini-Tap Fitting

- 0.5-1
- For stainless steel pipe only
- Compatibility: Paddlewheel Type 525



Wafer fitting

Wafer

- Compatibility: pH/ORP and Flow (Paddlewheels and Magmeter 2551)
- PP DN65-DN300 (2.5-4.0")
- PVDF DN65 DN200 (3.0")



Metalex Weld-On Mini-Tap

- 1.25-12"
- Stainless steel Weld-on
- Compatibility: Paddlewheel Type 525

Saddles



Electrofusion Transition

- PE 2-12"
- 1.25" or 1.5" F-NPT (Stainless steel)



Electrofusion

- PE metric DN65-DN400
- Compatibility: Flow (-X1, -X2, -X4, -X5)



Clamp-On

- PVC 2.0-8.0" / SCH 80
- PVC-U metric DN65 DN200
- BSP 3-6
- Compatibility: pH/ORP (up to 4") and Flow (-X0, -X1, -X2)



PVC-U Glue-on Saddle for Insertion Flow Sensors

- PVC 10-16"/SCH 80 up to 80 psi ambient
- Special order 18 and 20"
- Compatibility: Flow (-X2)



Strap-On

- Iron 2.0-24"/SCH80
- Special order SCH80 up to 48"/DN 1200
- HDPE SDR11 and SDR17
- SCH52 Ductile iron saddle 3.5-30"
- Compatibility: pH/ORP up to 4" and Flow (up to DN900 / 36")



PVC-U Glue-on Saddle for pH Wet-Tap Assembly

- PVC 10-18" / SCH80 up to 80 psi ambient
- Female 2" NPT option
- Compatibility: pH Wet-Tap Assembly (3719) and Flow (-X2)



Glue-on Saddle

- PVC-U metric DN65-DN300
- ABS metric DN65-DN200
- Compatibility: Flow (-X1, -X2)

Accessories



Switching Power Supplies 7310

- Compatible with GF transmitters, controllers and FlowtraMag®
- Output: 24 VDC @ 0.42, 1, 1.7, 2.5 & 4 Amps
- Universal AC input: 85 to 264 VAC
- Protections: Short circuit/overload/ over-voltage
- Install on DIN-rail TS-35/7.5 or 15
- LED indicator for power on



pH/ORPSystem Tester 2759/2759.391

- Battery powered
- Simulates pH and ORP signals to GF transmitter for troubleshooting
- Connects to pH/ORP Sensor Electronics Type 2751



Conductivity/Resistivity Tools 2850 - 101 - X

- Available in 5 different values
- Verifies electronic independent of electrode
- Compatible with all conductivity and resistivity instruments
- Temperature compensated to 25 °C (77 °F)



9900 pH/ORP Calibrator

- Battery powered and portable
- Runs on (8) AA Alkaline batteries (included)
- Supports safe rotation of electrodes in the field for sensor maintenance and calibration
- Connects to GF pH/ORP DryLoc® sensors



HART – USB Modem

- Compatibility: Ultrasonic and radar level
- HART to USB converter



Configuration Tool 0252

- User-friendly PC interface to configure settings such as instrument type, units, scale 4-20 mA current loops and modify labels
- Back up and restore SmartPro® and sensor files
- Use a single file to clone multiple SmartPro® units and sensors
- · Allows real-time data monitoring
- User interface: Windows®
- Compatibility:
- SmartPro® type 9900
- SmartPro® type 9950-10/-11
- Hydrostatic level sensor type 2250
- Temperature sensor type 2350
- Pressure sensor type 2450
- pH/ORP Sensor Electronics type 2751
- Magmeter Type 2551
- Metal Magmeter Type 2552
- Dissolved Oxygen Sensor type 2610
- FlowtraMag® type 2581







Buffer Solutions pH/ORP

- NIST traceable
- Easily identifiable color coded buffer solutions
- Liquid or powder versions
- Quinhydrone powder for ORP
- Temperature compensated values
- Kits for easy use



Wall Mount Accessory Kit

- Compact enclosure that works with SmartPro® Type 9900 and other 0.25 DIN size instruments
- Equipped with a 0.25 DIN cutout and two 0.5" holes at the base
- Mounting hardware and liquid tight connectors are included



KCL Storage Solution

 Enables reconditioning and long-term storage of pH and ORP sensors



Rear Enclosure Kits for 9900

- Pipe mount installations NEMA 4X/IP66 rated for indoor or outdoor installations
- Hinged cover design for easy to access wiring
- Hinged cover suitable for wall mount or pipe mount installations
- Compatibility: SmartPro Type 9900-1P and associated modules



Limit Contacts GK 10/GK11 VAFM 335/350 /123

- Compatible with: VAF
- Reed contact
- IP65
- 230 V



4-20 mA Sensor GK 15 for VAFM 335/350

- Compatible with: VAF
- 12-24 V DC
- IP 65
- 4-20 mA (3 wire)

Excellence in Flow

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



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