

# Automation made easy for you

Accurate measurement  
Precise control  
Reliable actuation



# The best choice

Corrosion and chemical resistant products, systems and complete solutions from GF Piping Systems

## + Georg Fischer

Georg Fischer focuses on three core businesses: GF Piping Systems, GF Automotive and GF Machining Solutions. The industrial corporation founded in 1802 headquarters in Switzerland and operates approximately 130 companies with more than 14 000 employees in 30 countries. GF Piping Systems is a leading supplier of plastic and metal piping systems with global market presence. For the treatment and distribution of water and chemicals, as well as the safe transport of li-uids and gases in industry, we have the corresponding jointing technologies, fittings, valves, automation products and pipes in our portfolio.



GF Piping Systems headquarters in Schaffhausen, Switzerland.

## + Our market segments

Being a strong implementation partner GF Piping Systems supports its customers in every phase of the project. No matter which processes and applications are planned in the following market segments:

- Building Technology
- Chemical Process Industry
- Energy
- Food & Beverage / Cooling
- Microelectronics
- Marine
- Water & Gas Utilities
- Water Treatment

## + Global presence

Our global presence ensures customer proximity worldwide. Sales companies in over 25 countries and representatives in another 80 countries provide customer service around the clock. With 50 production sites in Europe, Asia and the USA we are close to our customers and comply with local standards. A modern logistics concept with local distribution centers ensures highest product availability and short delivery times. GF Piping Systems specialists are always close by.

## + Complete solutions provider

Our extensive product range represents a unique form of product and competence bundling. With over 60 000 products, allied with a broad range of services, we offer individual and comprehensive system solutions for a variety of industrial applications. Our automation offering perfectly fits into our complete system approach and is thus an integral part of our portfolio. Having the profitability of the projects in focus, we optimize processes and applications that are integrated into the whole system. Continually setting standards in the market, we directly provide our customers with technological advantages. Due to our worldwide network customers benefit directly from our 50 years+ experience in plastics.

From start to finish, we support our customers as a competent, reliable and experienced partner, actively contributing the know-how of an industrial company that has been successful in the market for over 200 years.

# Automation made easy

Our automation loop consists of three elements: measurement, control and actuation. Measurement encompasses a wide range of measurement technologies and parameters. Most of these products are available in plastic and are offered with dedicated fittings, which integrate our sensors perfectly into your piping system. Control comprises various control functionalities (from simple relays to PID controllers) and all major communication technologies. Actuation includes pneumatic, electric and magnetic actuators, which can be seamlessly combined with all kinds of valves and accessories.

## The all-in-one solution for your automation needs

**Easy-to-combine**

Flexible combination and upgrade

**Easy-to-install**

Seamless integration

**Easy-to-connect**

State-of-the-art communication technology

**Easy-to-set-up**

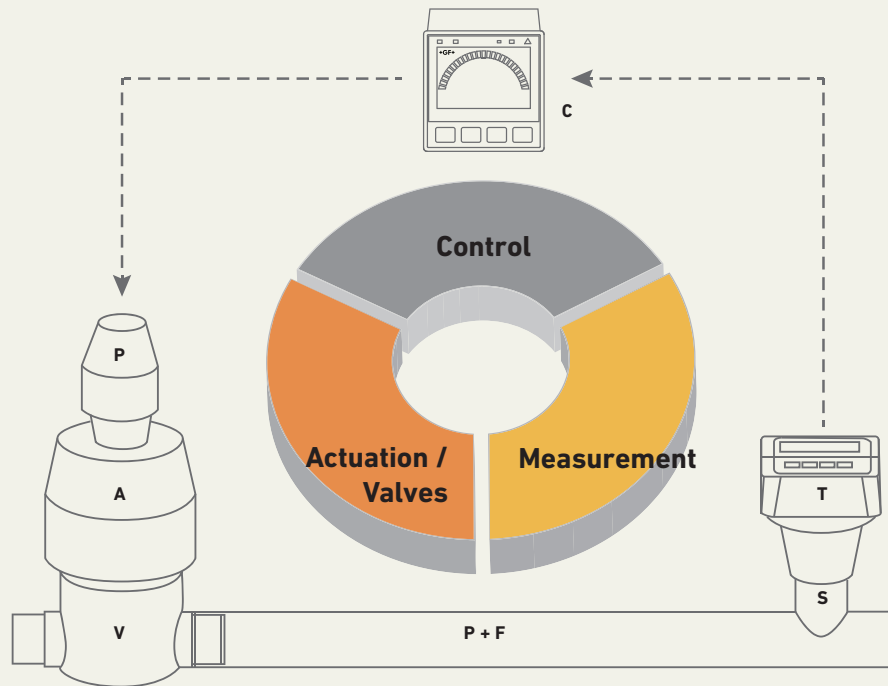
Plug-and-play design

**Easy-to-operate**

Intuitive menu structure

**Easy-to-maintain**

Wide range of accessories



S: Sensor

P: Positioner

V: Valve

T: Transmitter

A: Actuator

P+F: Pipe & Fittings

C: Controller

**Measurement**

Accurate measurement



**Control**

Precise control



**Actuation**

Reliable actuation



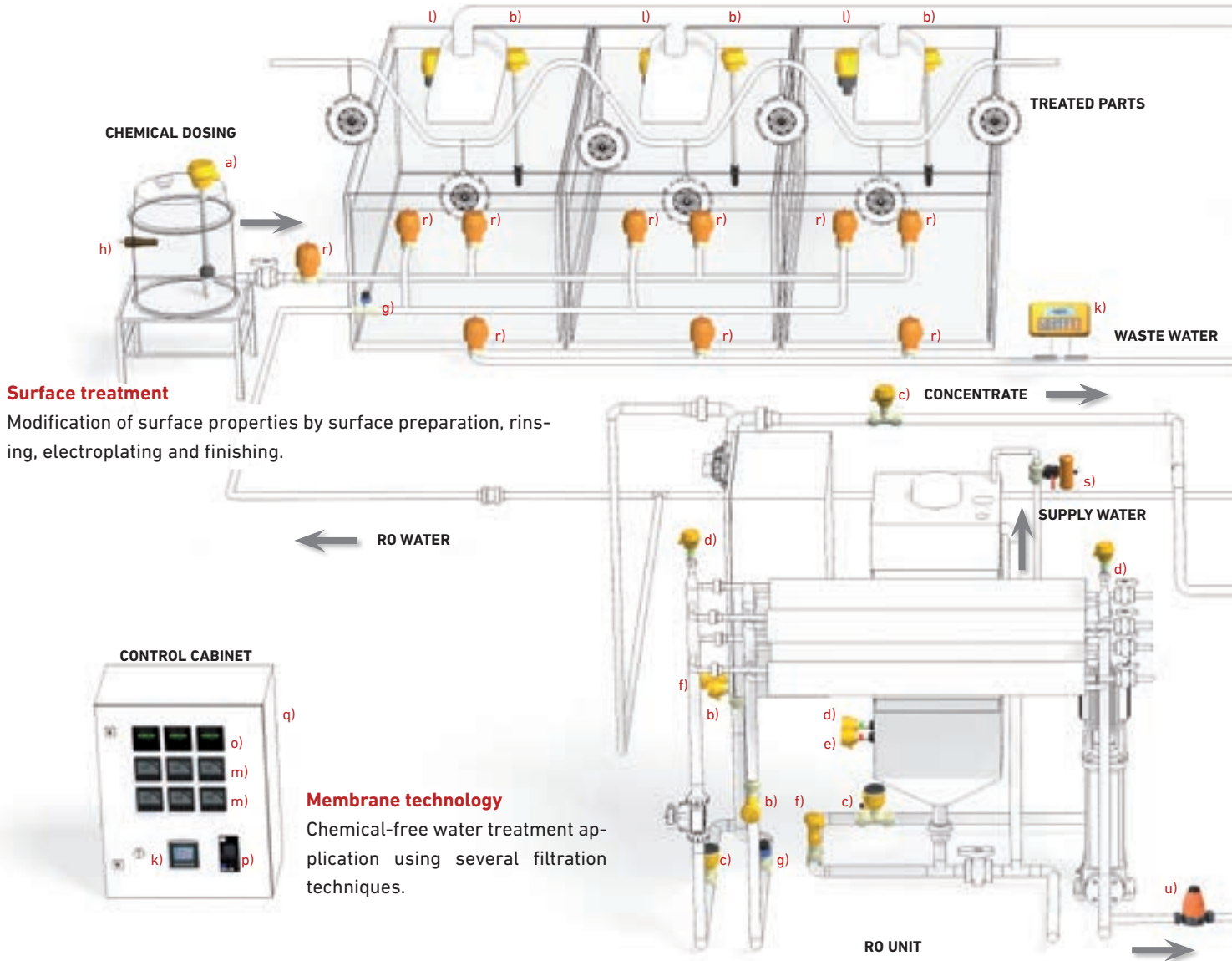
**Valves**

Modular valves



# Industrial automation made easy

We have a comprehensive automation offering for your industrial applications



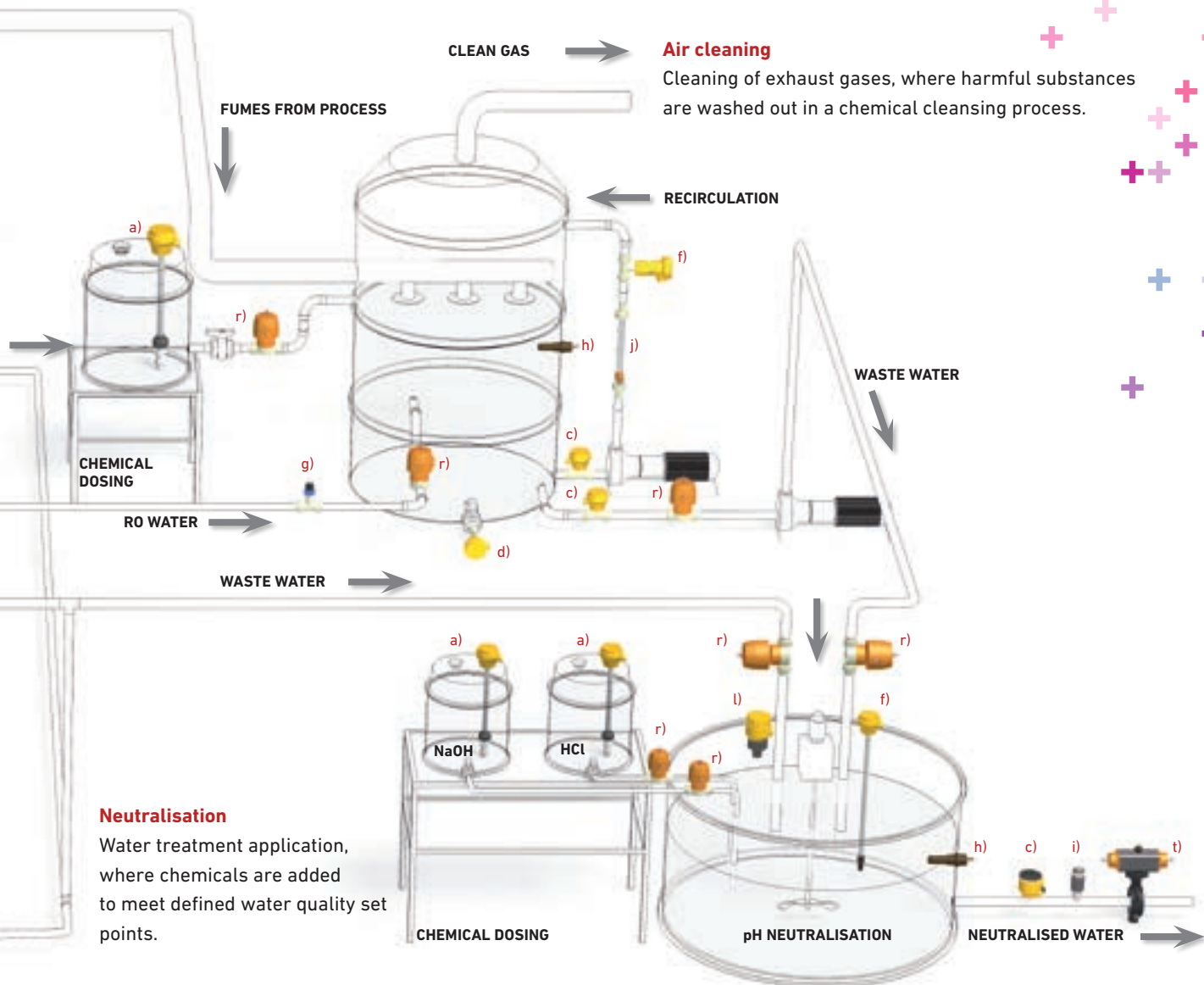
## Measurement

- a) Level Sensor type 2250
- b) Conductivity Sensor using 2850 Sensor Electronics
- c) Electromagnetic flow sensor type 2551
- d) Pressure Sensor type 2450
- e) Temperature Sensor type 2350
- f) pH-Sensor type 2724
- g) Paddlewheel Flow sensor type 2536
- h) Limit Switch
- i) pH / ORP Wet-Tap unit type 3719
- j) Variable area flow meter type 335
- k) Portaflow Ultrasonic flowmeter type 330 / 220
- l) Ultrasonic Level sensor



## + Main benefits

- Safety** = Completely controlled and regulated processes
- Simplicity** = Easy to install, handle and operate
- Efficiency** = Economical and durable system solutions from a single source
- Economy** = Optimized cost of ownership due to low-maintenance systems



### Control

- m) Multi-Parameter Transmitter type 9900
- n) Customer PLC
- o) Multi-Parameter/ Multi-Channel Controller type 8900
- p) PID Controller
- q) Profibus concentrator

### Actuation / Valves

- r) Diaphragm Valve, pneumatic, type DIASTAR Ten
- s) Ball Valve, pneumatic type 230
- t) Butterfly Valve, pneumatic type 240
- u) Pressure retaining valve type 586

The rendering above shows an exemplary selection of industrial applications, where our automation offering can be used.

# Measurement

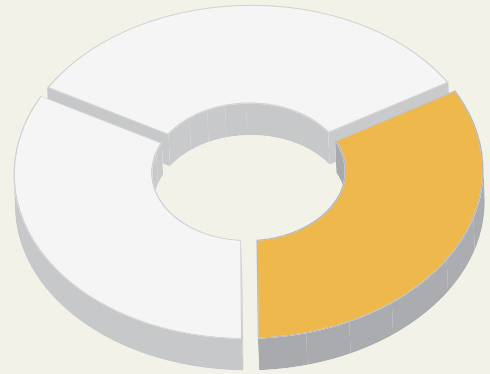
Accurate measurement is the basis for reliable process control



Our measurement offering will cover your needs: flow, pH, conductivity, level, temperature and various water quality parameters. Corresponding to our piping systems, most sensors are available in plastic and are therefore highly resistant to chemicals. Our plug-and-play measurement products are self-explanatory, easy to maintain and are offered with suitable installation fittings.

# Measurement products

An overview of the key products



## Flow Sensors and Instruments



**Rotor-X Paddlewheel Flow Sensor type 515**

- Non-powered
- 0.3 - 6 m/s (1 to 20 ft/s)
- DN15 - DN900 (½ to 36 in.)
- 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)



**Rotor-X Paddlewheel Flow Sensor type 2536**

- Powered
- 0.1 - 6 m/s (0.3 to 20 ft/s)
- DN15 - DN900 (½ to 36 in.)
- PP 12.5 bar @ 20 °C (180 psi @ 68 °F)
- PVDF 14 bar @ 20 °C (203 psi @ 68 °F)
- 49 Hz per m/s nominal (15 Hz per ft/s nominal)



**Paddlewheel Flow Sensor type 2537**

- 0.1 - 6 m/s (0.3 to 20 ft/s)
- DN15 - DN200 (½ to 8 in.)
- PP 12.5 bar @ 20 °C (181 psi @ 68 °F)
- PVDF 14 bar @ 20 °C (203 psi @ 68 °F)
- 4-20 mA, digital (S<sup>3</sup>L), flow switch or pulse outputs (based on part number)



**Stainless Steel Paddlewheel Flow Sensor - type 2540**

- 0.1 - 6 m/s (0.3 to 20 ft/s)
- DN40 - DN900 (1½ to 36 in.)
- 316 Stainless Steel
- 17 bar @ 100 °C (250 psi @ 212 °F)
- 49 Hz per m/s nominal (15 Hz per ft/s nominal)
- Open Collector output



**Magmeter (blind or display) type 2551**

- 0.05 - 10 m/s (0.15 to 33 ft/s)
- DN15 - DN900 (½ to 36 in.)
- 10.3 bar @ 25 °C (150 psi @ 77 °F)
- 4-20 mA, or frequency/ digital (S<sup>3</sup>L) outputs
- Optional relay outputs



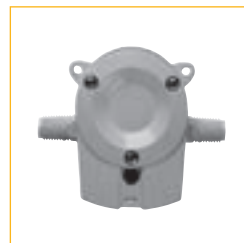
**Metal Magmeter type 2552**

- 0.05 - 10 m/s (0.15 to 33 ft/s)
- DN50 - DN2550 (2 to 102 in.)
- 316 Stainless Steel & PVDF
- 20.7 bar @ 25 °C (300 psi @ 77 °F)
- 4-20 mA, frequency/ digital (S<sup>3</sup>L)
- Hot-tap using ball or gate valves



**Turbine Flow Sensor type 2100**

- 0.38 to 38 lpm (0.10 to 10 gpm)
- DN15 (½ in.)
- PVDF
- 16 bar @ 20 °C (232 psi @ 68 °F)
- Open Collector output
- Use with End Fitting: 3-2100-31 to 3-2100-38



**Micro-Flow Rotor Sensor type 2000**

- 0.11 - 12.11 lpm (0.03-3.2 gpm)
- ¾ in. 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)



**Mini-Flow Rotor Sensor type 2507**

- 400 - 12 000 mL/m (0.1 to 3.2 U.S. gpm)
- G ¾ in. ports, ¼ in. NPT pipe adapters
- PVDF
- 5.5 bar @ 24 °C (80 psi @ 75 °F)
- Open Collector output
- Standard cable 7.6 m (25 ft)



**Metalex Paddlewheel Flow Sensor type 525**

- 0.5 - 6 m/s (1.6-20 ft/s)
- DN15 - DN300 (½-12 in.)
- 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)

# Easy to install

## Flow sensors and instruments



**SmartPro Transmitter  
type 9900**

- Multi-Parameter input selection
- Large auto-sensing backlit display
- "Dial-type" digital bar graph
- Optional field upgradable relays
- Selectable error mode for current outputs, 3.6 mA or 22 mA
- Optional Relay, Direct Conductivity / Resistivity, 4 to 20 mA Output, and HART modules are available



**Flow Integral Mount  
type 9900**

- Local display for sensor mounted instruments
- Provides 4-20 mA output
- "At a glance" visibility
- "Dial-type" digital bar graph
- NEMA 4X/IP65



**ProPoint Sensor-Powered  
Flow Monitor - type 5090**

- Displays GPM
- No power required
- Single input
- Panel mount
- Analogue dial for indication
- Use with 515 flow sensor



**Battery Powered Flow Totaliser  
type 8150**

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



**Variable Area Flow Meters  
type 335 / 350, SK50-73**

- Taper tubes in PVC transparent, PA, PSU, PVDF
- Union connection with PVC (std)
- DN10 - DN65 (3/8" - 3 1/2")
- PN10
- Optional switch feedback
- Special scales on request



**Flow Wet-Tap Valve  
type 3519**

- DN15 - DN900 (1/2 to 36 in.)
- PVC
- 7 bar @ 20 °C (100 psi max @ 68 °F)
- Use with Wet-Tap Paddlewheel Flow Sensors Type 515 and 2536



**Portaflow Portable Ultrasonic  
Flowmeter - type 330 / 220**

- 0.1 m/s - 20 m/s
- d13-d2000
- Battery powered, AC 110-240 V
- Output: 0/4 to 20 mA, RS 232, USB, pulse
- Data logger (Type 330)
- Transit time measurement



**Ultraflow wall Mount Ultrasonic  
Flowmeter - type 3000 / 4000**

- 0.1 m/s - 20 m/s
- d13-d2000
- DC 24 V or AC 86-240 V
- Output 0/4 to 20mA, RS 232, USB, pulse
- Data logger (Type 4000)
- Transit time measurement



**Ultrasonic Flowmeter  
type U1000**

- 0.1 m/s-10 m/s
- d25-d115
- DC 12 - 24 V
- Output: 4-20 mA, pulse or frequency
- Transit time measurement





## pH/ORP sensors and instruments



**SmartPro Transmitter  
type 9900**

- Multi-Parameter input selection
- Large auto-sensing backlit display
- "Dial-type" digital bar graph
- Optional field upgradable relays
- Selectable error mode for current outputs, 3.6 mA or 22 mA
- Optional Relay, Direct Conductivity / Resistivity, HART modules 4 to 20 mA Output Module are available



**DryLoc pH and ORP Electrodes  
type 2724-2726**

- 0-14 pH,  $\pm 2,000$  mV ORP
- Ryton body, PE junction
- Use fittings for in-line applications or  $\frac{3}{4}$ " NPT or ISO
- Suitable for submersible applications
- DryLoc preamplifier connection with gold plated pins



**Threaded DryLoc pH/ORP  
Electrode - type 2774-2777**

- 0 - 14 pH,  $\pm 2,000$  mV ORP
- Ryton body, PTFE junction
- Use sensor  $\frac{3}{4}$ " threads for mounting
- DryLoc preamplifier connection with gold plated pins
- Suitable for submersible applications
- For use with 2750/2760 preamplifiers



**pH/ORP Wet-Tap Assembly - type 3719 /  
2756, Wet-Tap Electrodes type 2757**

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



**Differential DryLoc pH / ORP Electrodes  
type 2764-2767**

- 0 - 14 pH,  $\pm 2,000$  mV ORP
- Ryton body, PTFE junction
- Use sensor 1 inch threads for mounting
- DryLoc preamplifier connection with gold plated pins
- For use with 2750 / 2760 preamplifiers



**DryLoc pH/ORP SensorElectronics  
type 2750**

- 0 - 14 pH,  $\pm 2,000$  mV ORP
- PBT, CPVC (PVC-C)
- DryLoc connection with gold plated pins
- 4 - 20 mA or digital (S<sup>2</sup>L)
- Use with 8900, 9900 or PLC
- In-line and submersible versions available



**DryLoc pH and ORP Electrodes for Harsh  
Applications - type 2734-2736**

- 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 Signet standard fittings from DN15 to DN100 ( $\frac{1}{2}$  to 4 in.)

## Conductivity/resistivity sensors and instruments



**Dual-Channel Conductivity Controller - type 8860**

- Displays  $\mu\text{S}$ ,  $\text{mS}$ ,  $\text{K}\Omega$ ,  $\text{M}\Omega$ ,  $\text{PPM}$
- AC or DC supply
- Up to 2 sensor inputs
- Up to 2 Open Collector outputs and 4 relay outputs
- Up to 3 active current outputs
- % reject, % recovery, and ratio functions



**SmartPro Transmitter type 9900**

- Multi-Parameter input selection
- Large auto-sensing backlit display
- "Dial-type" digital bar graph
- Optional field upgradable relays
- Selectable error mode for current outputs, 3.6 mA or 22 mA
- Optional Relay, Direct Conductivity / Resistivity, 4 to 20 mA Output, and HART modules are available



**Conductivity Integral System with 9900 Transmitter**

- Local display for sensor mounted instruments
- Provides 4-20 mA output
- "At a glance" visibility
- "Dial-type" digital bar graph
- NEMA 4X/IP65



**Conductivity Sensor Electronics with PVDF type 2850**

- 0.055 - 400 000  $\mu\text{S}$  (0.02 - 200 000 ppm) (18.2  $\text{M}\Omega$  - 1  $\text{K}\Omega$ )
- PBT (integral mount) /PBT/CPVC (universal J-box)
- Integral systems connect to the 2839 series electrodes or 2819 series electrode via 3-286X Universal J-box assembly
- 4-20 mA or digital (S<sup>3</sup>L)
- Factory NIST Certified



**Conductivity/Resistivity Electrodes type 2818 - 2823**

- 0.055 - 400 000  $\mu\text{S}$  (0.02-200 000 ppm) (18.2  $\text{M}\Omega$  - 1  $\text{K}\Omega$ )
- 316 SS or Titanium (Hastelloy-C also available upon request)
- Reversible threads or sanitary flange connections
- Connect to 2850 sensor electronics



**PVDF Conductivity Electrodes type 2839 - 1V(D) - 2842 - 1V(D)**

- 0.055-200 000  $\mu\text{S}$  (0.02-100 000 ppm) (18.2  $\text{M}\Omega$  - 1  $\text{K}\Omega$ )
- 316 SS and PVDF
- Dual threaded NPT or ISO
- Connection to 9900 - 1, 8900 instruments or 2850 sensor electronics
- NIST Certificate

Dual-Channel ProcessPro's -3 are still available

## Temperature sensors and instruments



**SmartPro Transmitter type 9900**

- Multi-Parameter input selection
- Large auto-sensing backlit display
- "Dial-type" digital bar graph
- Optional field upgradable relays
- Selectable error mode for current outputs, 3.6 mA or 22 mA
- Optional Relay, Direct Conductivity/ Resistivity and HART modules are available



**Temperature Integral System with 9900 Transmitter**

- Local display for sensor mounted instruments
- Provides 4-20 mA output
- "At a glance" visibility
- "Dial-type" digital bar graph
- NEMA 4X/IP65



**Temperature Sensor type 2350**

- In-line mounting: 10 °C to 100 °C (14 °-212 °F)
- Submersible mounting: 10 °C to 85 °C (14 °-185 °F)
- PVDF
- 3/4 inch dual threaded for in-line or submersible installation
- 4-20 mA or digital (S<sup>3</sup>L)

## Temperature, pressure and level sensors and instruments



**Pressure Integral System with 9900 Transmitter**

- Utilizes the 2450 sensor for pressure or hydrostatic level measurement
- Local display for sensor mounted instruments
- Provides 4 - 20 mA output
- "At a glance" visibility
- "Dial-type" digital bar graph
- NEMA 4X / IP65



**Pressure Sensor type 2450**

- 0 - 0.7 bar (0 - 10 psig) - U
- 0 - 3.4 bar (0 - 50 psig) - L
- 0 - 17 bar (0 - 250 psig) - H
- Vacuum range available
- Wetted material: PVDF, ceramic and FPM
- ½" union, dual threaded
- 4 - 20 mA or digital (S<sup>3</sup>L)



**Ultrasonic Integral Level Transmitter type 2260**

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



**Ultrasonic Level Sensor type 2270**

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



**Point level Switches**

- Body materials for water, water based liquids and concentrated chemicals
- Versions for industrial- and municipal water treatment
- Digital transistor- and relay outputs
- ATEX versions
- WHG versions
- Versions without moving parts



**Hydrostatic Level Sensor type 2250**

- 0 - 10 psi = 0 - 7.03 m = 0 - 23.06 ft
- 0 - 50 psi = 0 - 35.15 m = 0 - 115.32 ft
- Wetted Material: PVDF, PVC, ceramic and FPM
- Submersible sensor
- 4 - 20 mA or digital (S<sup>3</sup>L)
- Uses hydrostatic pressure for level and depth control

## Water analysis



**Chlorine Analyzer System type 4630**

- Continuous free chlorine measurement without chemical reagents
- Optional pH sensor for increased accuracy
- Pre-wired panel for easy installation
- Built in pressure regulator and variable area flow meter



**Turbidimeter type 4150**

- Compliant with U.S. EPA 180.1 or ISO7027
- Two adjustable alarm relays
- Built-in pressure regulator
- Easy access for wiring and maintenance
- Optional auto cleaning for reduced maintenance



**Process Optical Dissolved Oxygen Sensor - type 2610**

- Optical DO measurement with no flow requirements
- No membranes or filling solutions
- Flexible communications 4 to 20 mA or Modbus 3-2610-31 (S<sup>3</sup>L), 4 to 20 mA or Modbus 3-2610-41
- Measurement Range: 0 - 20 mg/L, 0 - 200% Saturation



**Chlorine Dioxide System type 4632**

- Complete turnkey system – no additional parts required to install
- Now available with a flow switch interrupt (Chlorine and Chlorine dioxide)
- Complies with EPA standard 334.0
- Chemical free measuring system – 0 - 2 ppm
- Optional pH measurement

# Easy to monitor

# Easy to operate

## Accessories



**Switching Power Supplies  
type 7310**

- Universal AC input/Full Range
- Protections: Short circuit/Overload/Over-voltage
- Cooling by free air convection
- Install on DIN rail TS-35/7.5 or 15
- Built in DC OK active signal
- LED indicator for power on



**i-GO Signal Converter  
type 8058**

- Connects third party 4 - 20 mA signals to the 8900 and 9900
- Available for single or dual 4 - 20 mA sensor inputs
- Requires special programming for use with the 8350, 8450
- Compatible with 8900, 9900



**8059 External Relay  
Module**

- 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
- Only compatible with 8900



**HART -  
USB Modem**

- HART to USB converter
- Portable or DIN rail version
- ATEX



**pH/ORP System Tester  
type 2759**

- Battery powered
- Simulates pH and ORP
- Compatible with 2750 and 2760 preamp
- Connects to any pH/ORP instrument



**Configuration/Diagnostic Tool  
type 0250 USB to Digital (S<sup>3</sup>L)**

- User friendly interface
- Configure all modifiable parameters in the sensor
- Monitor/graph sensor data or log sensor data to a file
- Monitor mV readings in pH/ORP sensors to monitor drift



**Conductivity/Resistivity Tools  
type 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



**PC COMM Configuration Tool  
type 0251**

- User friendly interface
- Configure settings such as instrument type, units and modify labels
- Back up and restore 9900 Transmitter configurations to a computer
- Use a single file to clone multiple 9900 Transmitters





**Buffer Solutions  
type pH/ORP**

- NIST Traceable
- Easily identifiable colour coded buffer solutions
- Liquid or powder versions
- Temperature compensated values
- Kits for easy use



**Formazin Stock Kit for Turbidimeter  
type 4150**

- Turbidity standard for most any value
- Three different graduated pipettes included
- Four glass cuvettes with light shield caps
- Easy to follow instructions



**Calibration Kits for Turbidimeter  
type 4150**

- Stable pre-mixed standards that are certified accurate
- Sealed calibration cuvettes
- Shelf-life 12 months
- Easy to follow instructions
- Kits for easy use



**Wall Mount  
Accessory Kit**

- Compact enclosure that works with 9900 Transmitter and other ¼ DIN size instruments
- Equipped with a ¼ DIN cutout and two ½" holes at the base
- Mounting hardware and liquid tight connectors are included



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

- 12 - 24 V DC
- IP 65
- 4 - 20 mA (3 wire)



**Limit contacts GK 10 /GK11 for type  
335 / 350 and short version**

- Reed contact
- IP65
- 230 V

# Easy to connect

## Installation fitting tees



### Plastic - Metric Tees

- ABS\* DN20 - DN50
- PVC DN15 - DN50
- PP DN15 - DN50
- PVDF DN15 - DN50
- PE DN15 - DN50



### Plastic - Fiberglass Tees

- Fiberglass 1.5 - 2.0" / SCH 80



### Plastic - PVC Tees

- PVC 0.50 - 4.0" / SCH 80
- PVC-C 0.50 - 2.0" / SCH 80
- PVC BSP\* 0.50 - 2.0"
- Fiberglass 1.50 - 2.0" / SCH 80



### Metal - Tees

- 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



### Metal - Tees

- 316 SS NPT 0.50 - 2.00" / SCH 40
- Brass NPT 1.00 - 2.00" / SCH 40

\* BSP and ABS fittings are available through your local Georg Fischer sales company.

## Weldolets / brazolets



### Weldolet

- PVC-U DN65 - DN600
- PP DN65 - DN600
- PE DN65 - DN600
- PVDF DN65 - DN600
- SS DN50 - DN630



### 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

- SS Socket 0.50 - 1.00"
- SS Weld-on 1.25 - 12"



### Metalex Weld-on Mini-Tap

- 1.25 - 12"



## Wafer fittings



### Wafer

- PP DN65 - DN300 (2.5 - 4.0")
- PVDF DN65 - DN200 (3.0")

## Saddles



### Saddle

- Iron Multi 1.25 - 1.50" / SCH 80



### Strap-On

- Iron 2.0 - 12.0" / SCH 80



### Electrofusion Transition

- PE 2.0 - 12.0"



### Electrofusion

- PE DN65 - DN400



### Clamp-On

- PVC 2.0 - 8.0" / SCH 80
- PVC-U metric DN65 - DN200
- BSP 3" - 6"



### PVC-U Glue-On

- PVC 10" - 12" / SCH 80



### Glue-On

- PP Glue-On 10.0" and 12.0" / SCH 80



### Glue-on

- PVC-U DN65 - DN300
- ABS DN65 - DN200

# Control

Precise control  
throughout your automation loop

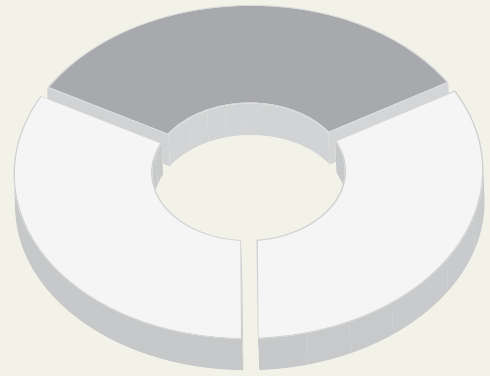
Clever design makes life easy. All our measurement parameters can be connected with one and the same transmitter, a true multi-parameter controller. Additional functionalities like batch control or communication technologies can be added anytime because of the modular design. Our control products are simple to operate, have intuitive menu structures and can be upgraded modularly.





# Control products

An overview of the key products



## Multi-parameter instruments



**SmartPro Transmitter**  
type 9900

- Multi-Parameter input selection
- Large auto-sensing backlit display
- „Dial-type“ digital bar graph
- Optional field upgradable relays
- Selectable error mode for current outputs, 3.6 mA or 22 mA
- Optional Relay, Direct Conductivity / Resistivity, 4 to 20 mA Output, and HART modules are available



**Multi-Parameter/ Multi-Channel Controller - type 8900**

- AC or DC power option
- Up to 6 sensor inputs (2 frequency inputs max)
- Up to 4 4 - 20mA outputs
- Up to 8 relays
- Use with all digital (S<sup>2</sup>L) sensors

## Flow instruments



**SmartPro Batch Controller**  
type 9900-1BC

- “Dial-type“ digital bar graph
- Remote control wiring with start, stop and resume terminals for remote batch control
- 3 programmable relays
- 10 batch memory
- Compatible with flow sensors
- Two-stage control to prevent overfilling
- Simple and advanced programming modes

## Accessories



**i-GO Signal Converter**  
type 8058

- Connects third party 4 - 20 mA signals to the 8900 and 9900
- Available for single or dual 4 - 20 mA sensor inputs
- Compatible with 8900, 9900
- Requires programming at the factory with the 8350, 8450

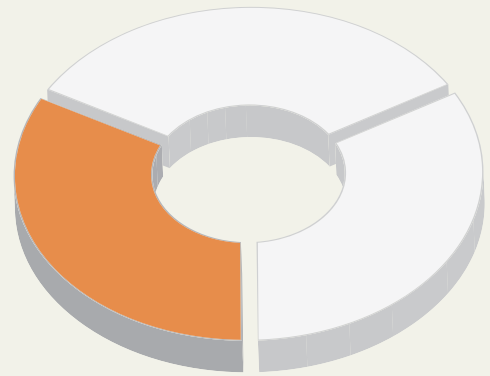
# Actuation

Reliable actuation with configuration flexibility

With our modular set-up, valves and actuators can be combined flexibly and additional functionalities, like positioners or monitoring devices, can be added optionally. Naturally, we offer the whole range in all-plastic designs, which are capable of withstanding harsh environments. A wide range of pressure regulating valves and accessories complete our actuation portfolio.

# Actuation products

An overview of the key products



## Actuators electric and pneumatic



**Electric actuators  
type EA11**

- 100 - 230 V AC, 24 V AC/DC
- 20 Nm peak (F05)
- 150 000 cycles, 40% ED
- Position Feedback optional
- Fail-safe modul optional
- Heating Element optional



**Electric actuators  
type EA21, EA31, EA42**

- 100-230 V AC, 24 V AC/DC
- EA21: 20 Nm peak (F05) 100% ED
- EA31: 120 Nm peak (F07) 50% ED
- EA42: 250 Nm peak (F07) 35% ED
- Accessory like EA11 plus additional
- with monitoring and positioner options



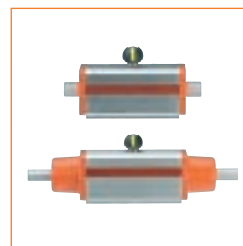
**Electric actuators  
type EA25, EA45, EA120, EA250**

- Replaces EA21 - 42 (Q4 2015)
- 100 - 230 V AC, 24 V AC/DC
- Torques from 25 Nm - 250 Nm
- LED enforced position feedback
- Standard: Position Feedback, Heater
- Optional:
  - Fail-safe return unit integrated
  - Positioner
  - Monitoring
  - Profibus



**Pneumatic actuator  
type PA11, PA21**

- FC, FO, DA
- Rack and pinion principle
- Accessory interface acc. ISO5211
- Visual position indication
- Full plastic solution
- PA11: 10 Nm / PA21: 20 Nm



**Pneumatic actuator  
type PA30 - PA90**

- FC, FO, DA
- Scotch Yoke principle
- Accessory interface acc. ISO5211
- Visual position indication
- Adjustable end stops
- Various coatings on request

## Actuated Butterfly Valves



**Butterfly Valve electric  
type 140 / 143 / 144**

- Electric actuated Butterfly Valve
- Actuator type: EA31/42\* (24 V, 110 - 230 V)
- Plastic Butterfly Valve Wafer/ Lugstyle
- Butterfly Valve type 567/578
- PVC-U, PVC-C, ABS, PP-H, PVDF
- 567: DN50 - DN600; 578: DN50 - DN300



**Butterfly Valve electric  
type 038-E / 039-E**

- Electric actuated Butterfly Valve
- Actuator type: EA31/42\* (24 V, 110-230 V)
- Metal Butterfly Valve Wafer/ Lugstyle
- Butterfly Valve type 038 / 039
- 038/039: Ductile Iron with Powder/ Epoxy Coating/ Rilsan Coating
- 038: DN50 - DN600;
- 039: DN50 - DN1200

\* will be replaced by Q4 2015 with new actuators type EA120 / 250

..... Launch in Q4 2015

# Easy to modify

## Actuated Butterfly Valves



**Butterfly Valve pneumatic  
type 240 / 243 / 244**

- Pneumatic actuated Butterfly Valve
- Actuator Type: PA30-PA90
- Plastic Butterfly Valve Wafer/ Lugstyle
- Butterfly Valve Typ 567/578
- PVC-U, PVC-C, ABS, PP-H, PVDF
- 567: DN50-DN600; 578: DN50-DN300



**Butterfly Valve pneumatic  
type 038-P / 039-P**

- Pneumatic actuated Butterfly Valve
- Actuator Type: PA30-PA90
- Metal Butterfly Valve Wafer/ Lugstyle
- Butterfly Valve Type 038/039
- 038/039: Ductile Iron with Powder/Epoxy Coating/ Rilsan Coating
- 038: DN50-DN600; 039: DN50-DN1200

## Actuated Ball Valves



**Electric Ball Valve  
type 104**

- Electric actuated 2-way Ball Valve
- Actuator Type: EA04 (24V, 85-230V)
- Actuating angle 0-90°
- Ball Valve 546
- PVC-C, PVC-U, PP-H
- DN10 – DN50 3/8 - 2"
- Limited accessory range
- Low cycle applications



**Electric Ball Valve  
type 107**

- Electric actuated 2-way Ball Valve
- Actuator Type: EA11 (24 V, 110-230 V)
- Actuating angle 90°
- Ball Valve 546
- ABS, PVC-C, PVC-U, PP-H, PVDF
- DN10-DN50



**Electric Ball Valve  
type 130-135**

- Electric actuated 2-way Ball Valve
- Actuator Type: EA21/31 (24 V, 110-230 V)
- Actuating angle 90°
- Ball Valve 546
- ABS, PVC-C, PVC-U, PP-H, PVDF
- EA21 DN10-DN50; EA 31 DN65-DN100\*



**Electric Ball Valve  
type 185-188**

- Electric actuated 3-way Ball Valve
- Actuator Type: EA21\* (24 V, 110-230 V)
- Actuating angle 90°; max. 180°
- Ball Valve 543
- ABS, PVC-C, PVC-U, PP, PVDF
- DN10-DN50



**Pneumatic Ball Valve  
type 285-288**

- Pneumatic actuated 3-way Ball Valve
- Actuator Type: PA11/PA21
- Actuating angle 90°
- Ball Valve 543
- ABS, PVC-C, PVC-U, PP, PVDF
- DN10-DN50



**Pneumatic Ball Valve  
type 230-235**

- Pneumatic actuated 2-way Ball Valve
- Actuator Type: PA11/PA21 (<DN65)
- Actuator Type: PA30-PA90 (>DN50)
- Ball Valve 546
- ABS, PVC-C, PVC-U, PP-H, PVDF
- DN10-DN100

\* will be replaced by Q4 2015 with new actuators type EA 25 / 45 / 120



# Actuation

## Actuated Diaphragm Valves



**Diaphragm Valve**  
type 604 / 605

- PVC-U, PVC-C, PP-H, PVDF
- EPDM, FPM, PTFE / EPDM, PTFE / FPM
- DN15
- PN6
- pneumatic actuated FC, FO, DA



**Diaphragm Valve DIASTAR**  
TenPLUS

- ABS, PVC-U, PVC-C, PP-H, PVDF, PVDF-HP
- EPDM, FPM, PTFE / EPDM, PTFE / FPM
- DN15-DN50
- PN10 (both sides)
- pneumatic actuated FC, FO, DA
- Accessories available



**Diaphragm Valve DIASTAR**  
Six

- ABS, PVC-U, PVC-C, PP-H
- EPDM, FPM
- DN15 - DN50
- PN6
- pneumatic actuated FC



**Diaphragm Valve DIASTAR**  
Sixteen

- PVDF, PVDF-HP
- EPDM, FPM, PTFE / EPDM, PTFE / FPM
- DN15-DN50
- PN16
- pneumatic actuated FC, FO, DA
- Accessories available



**Diaphragm Valve DIASTAR**  
Ten

- ABS, PVC-U, PVC-C, PP-H, PP-N, PVDF, PVDF-HP
- EPDM, FPM, PTFE / EPDM, PTFE / FPM
- DN15 - DN50
- PN10
- pneumatic actuated FC, FO, DA
- Accessories available



**Diaphragm Valve DIASTAR**  
025

- ABS, PVC-U, PVC-C, PP-H, PVDF, PVDF-HP
- EPDM, FPM, PTFE/EPDM, PTFE / FPM
- DN65 - DN150
- up to PN10
- pneumatic actuated FC, FO, DA
- Accessories available

## Actuated process control valves



**Solenoid Valve**  
type 157

- direct acting pivoted armature valve
- 2/2-Ways
- PVC-U
- EPDM, FPM
- 230 V AC, 24 V AC, 24 V DC
- DN4-DN8
- 0-4 bar depending on dimension



**Solenoid Valve**  
type 160 / 161

- direct acting pivoted armature valve
- 2/2- or 3/2-Ways
- PVC-U
- EPDM, FPM
- 230 V AC, 24 V AC, 24 V DC
- DN10-DN20
- 0-3 bar depending on dimension



**Solenoid Valve**  
type 165

- pilot assisted solenoid valve
- 2/2-Ways
- PVC-U, PVDF
- EPDM, FPM
- 230 V AC, 110 V AC, 24 V AC, 24 V DC
- DN15 - DN50
- 0.5 - 6 bar



**Solenoid Valve**  
type 166

- direct acting pivoted armature valve
- 2/2- or 3/2-Ways
- PVC-U, PVDF
- EPDM, FPM
- 230 V AC, 110 V AC, 24 V AC, 24 V DC
- DN3 - DN5
- 0-10 bar depending on dimension

..... Available from Q3 2015 on

# Easy to regulate

## Pressure regulating valves



**Pressure Reducing Valve  
type 582**

- PVC-U, CPVC, PP-H, PVDF
- Spigot or union connection
- O-ring Material: EPDM, FPM
- DN10–DN50
- 0.5 - 9 bar or 0.3 - 3 bar
- Manometer with or without gauge guard optional



**Pressure Retaining Valve  
type 586**

- PVC-U, CPVC, PP-H, PVDF
- Spigot or union connection
- O-ring Material: EPDM, FPM
- DN10–DN50
- 0.5 - 9 bar or 0.3 - 3 bar
- Manometer with or without gauge guard optional



**Pressure Retaining Valve  
type V86**

- PVC-U, PP, PVDF
- EPDM, EPDM-PTFE-coated
- V86: DN65 - 80: 1 - 6 bar  
DN100: 1 - 4 bar



**Pressure Reducing Valve  
type V82**

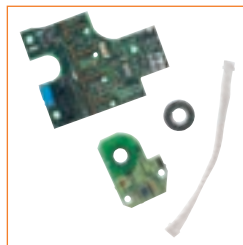
- PVC-U, PP, PVDF
- EPDM, EPDM-PTFE-coated
- V82: DN65 - 80: 0.5 - 6 bar  
DN100 0.5 - 4 bar

## Electric accessories



**Limit switches (position feedback) for  
EA11 - 42**

- Mechanical switches (AgNi or Au)
- NPN/PNP
- Middle position (3way Ball Valve)
- Additional 2 limit switches
- For EA11: AgNi switches only



**Monitoring and Positioner Options for  
EA21 - 42**

- Monitoring board with:
- Cycle counter
  - Cycle Time extension and/ or monitoring
  - Current Monitoring

- Positioner with:
- Input: 0 - 10V or 4 - 20mA
  - Feedback: 4 - 20mA



**Heating element and Fail-safe return  
unit for EA11 - 42**

- Heating element reduces condensation
- Caused by temperature variation
- Fail safe return unit for safe
- Adjustment in case of power failure
- 230 V AC; 24 V AC/DC



**Accessories for (new) EA25 - EA250**

- Fail-safe return unit to be installed in housing
- Positioner
- Monitoring Board
- Profibus

..... Launch in Q4 2015



## Pneumatic accessories



**Solenoid pilot valve 3/2-ways type PV94**

- 230 V, 50-60 Hz
- 115 V, 50-60 Hz
- 24 V, 50-60 Hz
- 24 V DC
- G $\frac{1}{8}$ , G $\frac{1}{4}$ , G6mm
- DN1.2



**Solenoid pilot valve 3/2-ways type PV95**

- 230 V, 50-60 Hz
- 115 V, 50-60 Hz
- 24 V, 50-60 Hz
- 24 V DC
- G $\frac{1}{8}$ , G $\frac{1}{4}$ ;
- DN1.5 - DN2



**Solenoid Pilot valve type 2000**

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



**Solenoid pilot valve type MNL 532**

- Version for 3/2-way and 5/2-way
- Namur connection
- Material of body: Aluminium
- 24 V AC, 24 V DC, 48 V AC, 110 V AC, 230 V AC



**Electric position feedback type ER 52-1/ER53-1**

- For pneumatic stroke actuators
- For Diastar Ten, TenPLUS, Sixteen, 025
- Mechanical switches (AgNi or Au)
- NPN/PNP, Namur
- With visual position indication



**Electric position feedback limit switch box**

- For pneumatic rotary actuators
- For PA11 - 90:
- Mechanical switches (AgNi or Au)
- NPN/PNP, Namur
- With visual position indication



**Stroke limiter/ manual override**

- For Diastar all type Ten, TenPLUS, Sixteen, 025



**Digital electro-pneumatic positioner type DSR 500**

- Mounted on pneumatic control valves
- Linear and rotary actuators
- Nominal stroke 3 - 28 mm
- Self-learning
- Control signal 4 - 20 mA
- 24 V DC

# Communication Products

Different communication protocols for different needs

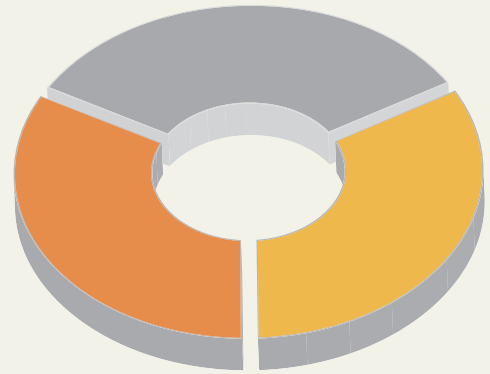


Our automation loop can be managed with various communication technologies and can therefore be seamlessly integrated into existing plant management systems. We offer analogue and digital communication technologies which support on / off or continuous control loops. Benefits are less wiring, faster installations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



# Communication products

An overview of the key products



## Communication



### Profibus Concentrator type 3-0486

- Connect GF Actuated Valves and Sensors to Profibus automation networks
- Supports six S<sup>3</sup>L sensors or relay modules plus a proportional controlled actuated valve
- Four of the (S<sup>3</sup>L) inputs support flow frequency devices for cost effective flow monitoring
- Two of the (S<sup>3</sup>L) inputs support 4 to 20 mA current loop inputs for connections to third party sensors
- 4 to 20 mA current loop input and output for connection to GF proportional controlled actuated valves



### Profibus

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



### AS-interface for pneumatic rotary actuators

- Pilot valve 5/2-Ways
- Electric feedback integrated
- Full plastic housing
- Optical status indicator
- AS Interface Version 3.0



### AS-interface for electric actuators

- Integrated control an electric
- Feedback
- For 24 V DC actuators
- For EA11-EA42
- Manual override standard



### AS-interface for manual valves with feedback

- With integrated feedback
- Ideal for Ball Valves
- Ideal for Butterfly Valves
- Ideal for Diaphragm Valves



### AS-interface for pneumatic stroke actuators

- Pilot valve 3/2-Ways
- Compact design
- Full plastic housing
- Optical status indicator
- AS Interface Version 3.0



### AS-interface for sensor with switch output

- With switching output
- For level switch
- For flow switch
- For pressure switch
- For temperature switch



### HART

- HART Protocol superimposes digital signals on top of the 4 - 20 mA analog signal
- Communication occurs between two HART-enabled devices
- HART protocol operates according to the master-slave method

..... Launch in Q4 2015

# Valves

The right valve  
for your application

We offer one of the most comprehensive valve product ranges, which enables you to find the right match for your application.

Our valves are available in a wide selection of dimensions, materials, chemical resistances, standards, actuation, operation principles, and pipe connections and are designed for long service life. The combination of the right valve selection and our high product quality leads to a favorable total cost of ownership.

# Valves

## Manual Ball Valves



**Ball Valve  
type 546**

- ABS, PVC-C, PVC-U, PP-H, PVDF
- EPDM, FPM, Ball Seat: PTFE, PVDF
- DN10 - DN100
- up to PN16 = PVC-U, PVC-C, PVDF; up to PN10 = PP-H, ABS
- Lockable Lever, Multifunctional Module
- Lever
- Linear version



**Linear Ball Valve  
type 546**

- PVC-U, PVC-C, ABS, PP-H, PVDF
- DN15 - DN50
- Lockable lever
- Multifunctional module



**3-Way Ball Valve  
type 543**

- ABS, PVC-C, PVC-U, PP-H, PVDF
- EPDM, FPM, Ball Seat: PTFE, PVDF
- DN10-DN50
- up to PN10
- Lockable Lever, Multifunctional Module
- Lever



**Ball Valve  
type 375**

- PVC-U, PVC-C
- EPDM, FPM, Ball Seat: PTFE
- DN10-DN50
- up to PN16 to DN50, up to PN10 to DN100
- Lever
- not actuated



**Metering Ball Valve  
type 523**

- PVC-U, PP-H, PVDF
- EPDM, FPM, Ball Seat: PTFE
- DN10-DN15
- up to PN16
- Lever



**Coloro  
type 353 - 355**

- PVC-U
- EPDM, Ball Seat: HD-PE
- DN10-DN50
- up to PN16
- Lever
- not actuated

## Manual Diaphragm Valves



**Diaphragm Valve  
type 514**

- PVC-U, PVC-C, ABS, PP-H, PVDF, PVDF-HP
- EPDM, PTFE/EPDM, FPM, PTFE/FPM
- DN15 - DN50
- up to PN16
- Lockable Handwheel
- Electrical Feedback Module



**Diaphragm Valve  
type 515**

- PVC-U, PVC-C, ABS, PP-H, PP-N, PVDF, PVDF-HP
- EPDM, PTFE/EPDM, FPM, PTFE/FPM
- DN15 - DN50
- up to PN16
- Lockable Handwheel
- Electrical Feedback Module



**Diaphragm Valve  
type 517 (317)**

- PVC-U, PVC-C, PP-H, PVDF, PVDF-HP
- EPDM, PTFE/EPDM, FPM, PTFE/FPM
- DN15-DN50 (type 317: DN65-DN150)
- up to PN16
- Lockable Handwheel
- Electrical Feedback Module



**Diaphragm Valve  
type 519**

- PP-H, PP-N, PVDF-HP
- EPDM, PTFE/EPDM, PTFE/FPM
- DN20 - DN20 : d110 - d63
- up to PN16
- Lockable Handwheel
- Electrical Feedback Module

# Valves



## Manual Butterfly Valves



**Butterfly Valve manual type 567**

- ABS, PVC-C, PVC-U, PP-H, PVDF
- Sealings: EPDM, FPM, PTFE / FPM
- DN50-DN200
- PN10
- Lever, Gear, 230 V o. 24 V, FC / FO/DA
- Electrical Feedback Module



**Metal Butterfly Valve type 038 / 039**

- 038: GGG,LUG; 039: GGG Wafer
- Sealings: EPDM, FPM
- 038: DN50-DN300;
- 039: DN50-DN1200
- PN10 / PN16
- Lever, Gear, 230 V o. 24 V, FC/FO/DA



**Butterfly Valve manual type 578**

- ABS, PVC-C, PVC-U, PP-H, PVDF
- Sealings: EPDM, FPM, PTFE / FPM
- DN50-DN300
- PN10
- Lever, Gear, 230 V o. 24 V, FC / FO/DA
- Electrical Feedback Module

## Accessories



**Multifunctional modules**

- Multi functional module
- Accessory for Ball Valves 546 / 543
- Limit switch Ag Ni, Au, Namur, NPN, PNP
- Interface for el./pneum. Actuators



**Electrical feedback module**

- Electrical feedback module
- Accessory for (manual) Diaphragm Valves 514 - 519
- Limit switch Ag Ni or Au
- Self adjusting mechanism



**Integrated position indicator**

- Integrated position indicator
- Accessory for Butterfly Valves 567 / 578
- Limit switch Ag Ni, AU, Namur, NPN, PNP



**Labelling Ball Valve**

- Labelling system for Ball Valve 546 / 543

## Process Control Valves



**Check Valve type 561 / 562**

- ABS, PVC-C, PVC-U, PP-H, PVDF
- EPDM, FPM
- DN10-DN100
- up to PN16
- Type 562 with spring



**Ventilating Valve/ Ventilating and Bleed Valve type 591 / 595**

- ABS, PVC-C, PVC-U, PP-H, PVDF
- EPDM, FPM
- DN10-DN100
- up to PN16
- Type 595 with spring
- Float PP-H / PVDF





## Process Control Valves



**Angle Seat Check Valve**  
type 303 / 304

- PVC-U, ABS
- EPDM, FPM
- DN10-DN80
- PN10



**Wafer Check Valve**  
type 369

- PVC-U, PP-H, PVDF
- EPDM, FPM
- DN32-DN300, 1¼ - 12"
- PN10



**Line Strainer**  
type 305 / 306

- PVC-U, PVC-C, ABS, PP-H, PVC-U transparent
- EPDM, FPM
- DN15 - DN50, PVC-U up to DN80
- PN10
- screen: stainless-steel and PVC-U



**Angle Seat Valve**  
type 300 / 301

- PVC-U
- PE, PTFE,
- DN10-DN80
- PN10



**Water Jet Suction Pump (eductor)**  
type P20

- PVC-U, PP-H, PVDF
- EPDM, FPM
- DN10 - DN80
- PN10



**Throttle Valve**  
type V251

- PVC-U, PP-H, PVDF
- EPDM, FPM
- DN10-DN50
- PN10



**Gauge Guard**  
type Z500/501

- True plastic design (no metal screws!)
- PVC-U, PP-H, PVDF
- EPDM, EPDM-PTFE-coated
- DN20 or DN 25
- PN10
- With or without pressure gauge



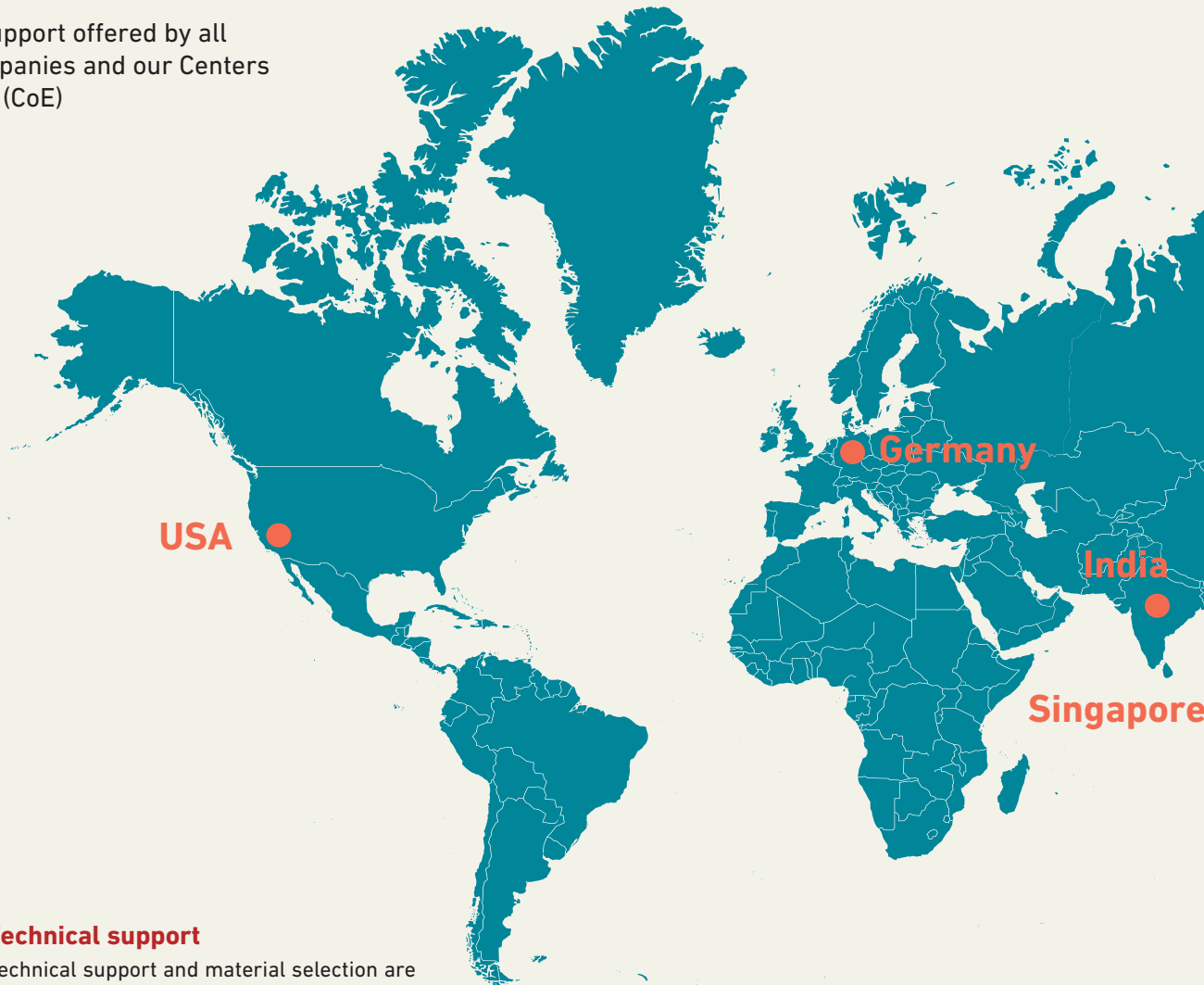
**Float Valve**  
type V140

- PVC, PP
- EPDM, FPM
- DN10-DN80
- PN6
- Vertical mounting position

# Centers of excellence

## Competent support for you

Competent support offered by all GF sales companies and our Centers of Excellence (CoE)



### Technical support

Technical support and material selection are key factors for a successful installation. A team of specialists individually support our customers around the world.



### Chemical resistance

Our specialist teams have decades of experience in the area of chemical resistance. They can offer individual support and consult in selecting the right material.



### Training courses

GF Piping Systems offers a wide range of training courses that allow participants to gain confidence in working with our products and proven jointing technologies.



### On-site training

Our experts are available to support our customers locally and conduct training in diverse fusion and jointing techniques on location.



### CAD library

The database comprises over 30 000 drawings and technical data regarding pipes, fittings, measurement and control technology as well as manual and actuated valves.



China Japan



#### **Online and mobile calculation tools**

Our numerous, multilingual online tools and mobile applications are very useful for on-site configuring and calculating.



#### **Technical manual**

We have documented the extensive know-how of GF Piping Systems in planning and installing piping systems in our technical manual for customers.



#### **Customising**

The focus of these teams is to manufacture custom parts for special systems. In addition, a variety of special solutions can be produced in small series.

## Support

### + Easy access support

**Quick, reliable and competent service is as important as a comprehensive product offering**

We ensure that our staff in all countries has state-of-the-art knowledge of products, applications and technology. As a result, our local GF automation specialists can support you professionally in choosing the right products and defining a system which truly satisfies your needs, in addition to commissioning and after-sales service. Furthermore, GF is setting up a global network of centers of excellence (CoE) for automation where dedicated teams for sales, service and automation training are available to you.

### + Value added services

**From planning support to implementation – our specialists are always close by**

As a leading provider of piping systems in plastic and metal, we offer our customers not only reliable products, but also a large package of services. Our support ranges from a comprehensive technical manual or the extensive CAD library to an international team of experts, who work closely together with local sales companies. And when it comes to implementing a project, our customers additionally benefit from a wide range of training courses, either on site or in our modern Training Centers worldwide.

For more information on our automation system please contact our local sales companies and our sales representatives.

[www.gfps.com](http://www.gfps.com)

# Worldwide at home

Our sales companies and representatives ensure local customer support in over 100 countries.

[www.gfps.com](http://www.gfps.com)

## Argentina / Southern South America

Georg Fischer Central Plastics  
Sudamérica S.R.L.  
Buenos Aires, Argentina  
Phone +54 11 4512 02 90  
[gfcentral.ps.ar@georgfischer.com](mailto:gfcentral.ps.ar@georgfischer.com)  
[www.gfps.com/ar](http://www.gfps.com/ar)

## Australia

George Fischer Pty Ltd  
Riverwood NSW 2210 Australia  
Phone +61 (0) 2 9502 8000  
[australia.ps@georgfischer.com](mailto:australia.ps@georgfischer.com)  
[www.gfps.com/au](http://www.gfps.com/au)

## Austria

Georg Fischer  
Rohrleitungssysteme GmbH  
3130 Herzogenburg  
Phone +43 (0) 2782 856 43-0  
[austria.ps@georgfischer.com](mailto:austria.ps@georgfischer.com)  
[www.gfps.com/at](http://www.gfps.com/at)

## Belgium / Luxembourg

Georg Fischer NV/SA  
1070 Bruxelles/Brüssel  
Phone +32 (0) 2 556 40 20  
[be.ps@georgfischer.com](mailto:be.ps@georgfischer.com)  
[www.gfps.com/be](http://www.gfps.com/be)

## Brazil

Georg Fischer Sist. de Tub. Ltda.  
04795-100 São Paulo  
Phone +55 (0) 11 5525 1311  
[br.ps@georgfischer.com](mailto:br.ps@georgfischer.com)  
[www.gfps.com/br](http://www.gfps.com/br)

## Canada

Georg Fischer Piping Systems Ltd  
Mississauga, ON L5T 2B2  
Phone +1 (905) 670 8005  
Fax +1 (905) 670 8513  
[ca.ps@georgfischer.com](mailto:ca.ps@georgfischer.com)  
[www.gfps.com/ca](http://www.gfps.com/ca)

## China

Georg Fischer Piping Systems Ltd  
Shanghai 201319  
Phone +86 21 3899 3899  
[china.ps@georgfischer.com](mailto:china.ps@georgfischer.com)  
[www.gfps.com/cn](http://www.gfps.com/cn)

## Denmark / Iceland

Georg Fischer A/S  
2630 Taastrup  
Phone +45 (0) 70 22 19 75  
[info.dk.ps@georgfischer.com](mailto:info.dk.ps@georgfischer.com)  
[www.gfps.com/dk](http://www.gfps.com/dk)

## Finland

Georg Fischer AB  
01510 VANTAA  
Phone +358 (0) 9 586 58 25  
Fax +358 (0) 9 586 58 29  
[info.fi.ps@georgfischer.com](mailto:info.fi.ps@georgfischer.com)  
[www.gfps.com/fi](http://www.gfps.com/fi)

## France

Georg Fischer SAS  
95932 Roissy Charles de Gaulle Cedex  
Phone +33 (0) 1 41 84 68 84  
[fr.ps@georgfischer.com](mailto:fr.ps@georgfischer.com)  
[www.gfps.com/fr](http://www.gfps.com/fr)

## Germany

Georg Fischer GmbH  
73095 Albershausen  
Phone +49 (0) 7161 302-0  
[info.de.ps@georgfischer.com](mailto:info.de.ps@georgfischer.com)  
[www.gfps.com/de](http://www.gfps.com/de)

## India

Georg Fischer Piping Systems Ltd  
400 076 Mumbai  
Phone +91 224007 2001  
[branchoffice@georgfischer.com](mailto:branchoffice@georgfischer.com)  
[www.gfps.com/in](http://www.gfps.com/in)

## Indonesia

George Fischer Pte Ltd –  
Representative Office  
Phone +62 21 2900 8564  
Fax +62 21 2900 8566  
[sgp.ps@georgfischer.com](mailto:sgp.ps@georgfischer.com)  
[www.gfps.com/sg](http://www.gfps.com/sg)

## Italy

Georg Fischer S.p.A.  
20063 Cernusco S/N (MI)  
Phone +39 02 921 861  
[it.ps@georgfischer.com](mailto:it.ps@georgfischer.com)  
[www.gfps.com/it](http://www.gfps.com/it)

## Japan

Georg Fischer Ltd  
556-0011 Osaka,  
Phone +81 (0) 6 6635 2691  
[jp.ps@georgfischer.com](mailto:jp.ps@georgfischer.com)  
[www.gfps.com/jp](http://www.gfps.com/jp)

## Korea

Georg Fischer Piping Systems  
271-3 Seohyeon-dong Bundang-gu  
Seongnam-si, Gyeonggi-do  
Seoul 463-824  
Phone +82 31 8017 1450  
Fax +82 31 8017 1454  
[kor.ps@georgfischer.com](mailto:kor.ps@georgfischer.com)  
[www.gfps.com/kr](http://www.gfps.com/kr)

## Malaysia

George Fischer (M) Sdn. Bhd.  
40460 Shah Alam, Selangor Darul Ehsan  
Phone +60 (0) 3 5122 5585  
Fax +603 5122 5575  
[my.ps@georgfischer.com](mailto:my.ps@georgfischer.com)  
[www.gfps.com/my](http://www.gfps.com/my)

## Mexico / Northern Latin America

Georg Fischer S.A. de C.V.  
Apodaca, Nuevo Leon  
CP66636 Mexico  
Phone +52 (81) 1340 8586  
Fax +52 (81) 1522 8906  
[mx.ps@georgfischer.com](mailto:mx.ps@georgfischer.com)  
[www.gfps.com/mx](http://www.gfps.com/mx)

## Middle East

Georg Fischer  
Piping Systems (Switzerland) Ltd  
Dubai, United Arab Emirates  
Phone +971 4 289 49 60  
[gcc.ps@georgfischer.com](mailto:gcc.ps@georgfischer.com)  
[www.gfps.com/int](http://www.gfps.com/int)

## Netherlands

Georg Fischer N.V.  
8161 PA Epe  
Phone +31 (0) 578 678 222  
[nl.ps@georgfischer.com](mailto:nl.ps@georgfischer.com)  
[www.gfps.com/nl](http://www.gfps.com/nl)

## New Zealand

Georg Fischer Ltd  
13 Jupiter Grove, Upper Hutt 5018  
PO Box 40399, Upper Hutt 5140  
Phone +64 (0) 4 527 9813  
[nz.ps@georgfischer.com](mailto:nz.ps@georgfischer.com)  
[www.gfps.com/nz](http://www.gfps.com/nz)

## Norway

Georg Fischer AS  
1351 Rud  
Phone +47 67 18 29 00  
[no.ps@georgfischer.com](mailto:no.ps@georgfischer.com)  
[www.gfps.com/no](http://www.gfps.com/no)

## Philippines

George Fischer Pte Ltd  
Representative Office  
Phone +632 571 2365  
Fax +632 571 2368  
[sgp.ps@georgfischer.com](mailto:sgp.ps@georgfischer.com)  
[www.gfps.com/sg](http://www.gfps.com/sg)

## Poland

Georg Fischer Sp. z o.o.  
05-090 Sekocin Nowy  
Phone +48 (0) 22 31 31 0 50  
[poland.ps@georgfischer.com](mailto:poland.ps@georgfischer.com)  
[www.gfps.com/pl](http://www.gfps.com/pl)

## Romania

Georg Fischer  
Piping Systems (Switzerland) Ltd  
020257 Bucharest - Sector 2  
Phone +40 (0) 21 230 53 80  
[ro.ps@georgfischer.com](mailto:ro.ps@georgfischer.com)  
[www.gfps.com/int](http://www.gfps.com/int)

## Russia

Georg Fischer  
Piping Systems (Switzerland) Ltd  
Moscow 125047  
Phone +7 495 258 60 80  
[ru.ps@georgfischer.com](mailto:ru.ps@georgfischer.com)  
[www.gfps.com/ru](http://www.gfps.com/ru)

## Singapore

George Fischer Pte Ltd  
11 Tampines Street 92, #04-01/07  
528 872 Singapore  
Phone +65 6747 0611  
Fax +65 6747 0577  
[sgp.ps@georgfischer.com](mailto:sgp.ps@georgfischer.com)  
[www.gfps.com/sg](http://www.gfps.com/sg)

## Spain / Portugal

Georg Fischer S.A.  
28046 Madrid  
Phone +34 (0) 91 781 98 90  
[es.ps@georgfischer.com](mailto:es.ps@georgfischer.com)  
[www.gfps.com/es](http://www.gfps.com/es)

## Sweden

Georg Fischer AB  
117 43 Stockholm  
Phone +46 (0) 8 506 775 00  
[info.se.ps@georgfischer.com](mailto:info.se.ps@georgfischer.com)  
[www.gfps.com/se](http://www.gfps.com/se)

## Switzerland

Georg Fischer  
Rohrleitungssysteme (Schweiz) AG  
8201 Schaffhausen  
Phone +41 (0) 52 631 30 26  
[ch.ps@georgfischer.com](mailto:ch.ps@georgfischer.com)  
[www.gfps.com/ch](http://www.gfps.com/ch)

## Taiwan

Georg Fischer Co., Ltd  
San Chung Dist., New Taipei City  
Phone +886 2 8512 2822  
Fax +886 2 8512 2823  
[www.gfps.com/tw](http://www.gfps.com/tw)

## United Kingdom / Ireland

Georg Fischer Sales Limited  
Coventry, CV2 2ST  
Phone +44 (0) 2476 535 535  
[uk.ps@georgfischer.com](mailto:uk.ps@georgfischer.com)  
[www.gfps.com/uk](http://www.gfps.com/uk)

## USA / Caribbean

Georg Fischer LLC  
Tustin, CA 92780-7258  
Phone +1 (714) 731 88 00  
Toll Free 800 854 40 90  
[us.ps@georgfischer.com](mailto:us.ps@georgfischer.com)  
[www.gfpiping.com](http://www.gfpiping.com)

## Vietnam

George Fischer Pte Ltd  
Representative Office  
136E Tran Vu, Ba Dinh District, Hanoi  
Phone +84 4 3715 3290  
Fax +84 4 3715 3285  
[sgp.ps@georgfischer.com](mailto:sgp.ps@georgfischer.com)  
[www.gfps.com/sg](http://www.gfps.com/sg)

## International

Georg Fischer  
Piping Systems (Switzerland) Ltd  
8201 Schaffhausen/Switzerland  
Phone +41 (0) 52 631 30 03  
Fax +41 (0) 52 631 28 93  
[info.export@georgfischer.com](mailto:info.export@georgfischer.com)  
[www.gfps.com/int](http://www.gfps.com/int)

The technical data are not binding. They neither constitute expressly warranted characteristics nor guaranteed properties nor a guaranteed durability. They are subject to modification. Our General Terms of Sale apply.