

THE SMARTER CHOICE.

+GF+ SIGNET

FLOW MEASUREMENT AND INSTRUMENTATION

George Fischer Signet delivers sophisticated, advanced flow and analytical technology, which offer accuracy, dependability, ease of use, and minimal maintenance. Every sensor, transmitter, controller and monitor manufactured meets the highest of standards. Engineered for performance, Signet products are ideally suited for Chemical Process, Food and Beverage, Life Sciences, Shipbuilding, Semiconductor, Water and Waste Water Treatment, including the Pool Industry, and Agriculture.



This product list is designed to be read in conjunction with the +GF+ Signet Catalogue, available on request. For details on the +GF+ Signet range of Analytical Instrumentation, please refer to the separate product list.

2551 INSERTION MAGMETER

Signet Insertion Magmeters feature no moving parts to wear or foul and high accuracy sensing without the excessive costs associated with full bore magnetic flow units. The units accurately measure flow in fluids containing a high content of particles, solids and fibres, making them an excellent choice for applications with dirty fluids. A minimum conductivity of 20µS is required.

Magmeters have three signal output options: frequency, digital, or 4-20mA, for long distance signal transmission application requirements. Basic diagnostic capabilities allow the user to optimize the meter for each application. The 4 to 20mA output is factory spanned and can be modified in the field using the PC compatible accessory set-up tool, model 3-0250.

Suits flow velocities 0.05 to 10 m/s, and pipe sizes up to DN300

| | | Code |
|---|-------------------------|----------------|
| Blind Meter  | Frequency Output | SG3-2551-P0-11 |
| | | SG3-2551-P1-11 |
| | | SG3-2551-P2-11 |
| | 4-20mA Output | SG3-2551-P0-12 |
| | | SG3-2551-P1-12 |
| | | SG3-2551-P2-12 |
| With Display  | Frequency Output | SG3-2551-P0-41 |
| | | SG3-2551-P1-41 |
| | | SG3-2551-P2-41 |
| | 4-20mA Output | SG3-2551-P0-42 |
| | | SG3-2551-P1-42 |
| | | SG3-2551-P2-42 |

2580 FLOWTRAMAG FULL-BORE MAGMETER

The Signet 2580 FlowtraMag is a full-bore plastic PVC in line style magnetic flowmeter. The PVC body with titanium electrodes has no moving parts, and is two to three times lighter in weight compared to traditional metal magmeters on the market. It is designed for high accuracy flow measurement in short pipe runs, making it an ideal solution for industrial applications where performance and ease of use are important.

The FlowtraMag is available in pipe sizes of 1", 2" and 4", optimized for performance in short pipe runs often associated with final effluent lines, well heads and water treatment skids.

| | | Code |
|--|--|------------------|
| Full-Bore Magmeter, 25mm PVC Union Ends FKM Seals  | | SG3-2580-P-T-010 |
| Full-Bore Magmeter, 50mm PVC Union Ends FKM Seals  | | SG3-2580-P-T-020 |
| Full-Bore Magmeter, 100mm PVC ANSI 150 Flanged Ends FKM Seals  | | SG3-2580-P-T-040 |


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FLOW SENSORS


Paddlewheel sensors offer traditional, dependable, and accurate flow measurement. They can be used in conjunction with separately mounted digital displays, or as blind sensors.

515 ROTOR-X PADDLEWHEEL

| | | Code |
|---|------------------------------|-------------|
|  | Standard Sensor | SGP51530-P0 |
| | | SGP51530-P1 |
| | | SGP51530-P2 |
| | Integral Mount Sensor | SG3-8510-P0 |
| | | SG3-8510-P1 |


Suit flow velocities of 0.3 to 6m/s. They have a sinusoidal output capable of driving a self powered flowmeter, such as the 3-5090.

2536 ROTOR-X PADDLEWHEEL

| | | Code |
|--|------------------------------|-------------|
|  | Standard Sensor | SG3-2536-P0 |
| | | SG3-2536-P1 |
| | | SG3-2536-P2 |
| | Integral Mount Sensor | SG3-8512-P0 |
| | | SG3-8512-P1 |

Low flow model, with process ready open-collector output, and good noise immunity. Suit flow velocities 0.1 to 6m/s, accepts a 3-24V power supply.

525 METALEX FLOW SENSOR

| | | Code |
|---|------------------------|----------|
|  | Standard Sensor | SGP525-1 |
| | | SGP525-2 |

Suitable for extreme pressures and temperatures, for flow velocities 0.5 to 6m/s. Requires socketweld or weldon installation fittings sold separately. Compatible with 9900 Transmitter

2537 BLIND PADDLEWHEEL FLOW SENSOR


| | | Code |
|--|---|----------------|
|  | Pulse Divider & Flow Switch Output | SG3-2537-2C-P0 |
| | | SG3-2537-2C-P1 |
| | 4-20mA Output | SG3-2537-6C-P0 |
| | | SG3-2537-6C-P1 |

The 2537 blind Paddlewheel flow sensor combines a traditional paddlewheel flow sensor with a blind output option. It is a standalone unit, with no external display. Measures flow velocities down to 0.1 m/s, Outputs can be connected directly to Chart Recorders, PLC's, or pump VSD's by using either the pulse divider with configurable range and width, or the programmable 4-20mA Output.

The 2537 can also be used as a flow switch, with programmable low and high set points, and adjustable hysteresis.

Stand-alone unit.

2540 STAINLESS STEEL FLOW SENSOR

| | | Code |
|---|------------------------|------------|
|  | Standard Sensor | SG3-2540-2 |
| | | |
| | Hot-Tap Sensor | SG3-2540-4 |

Strength and corrosion resistance of 316 Stainless Steel, and the convenience of an insertion sensor design. Suitable for flow velocities 0.1 to 6m/s.

2540-2 is suitable for pipes up to DN600. The 2540-4 suits up to DN900, and includes a bleed valve for hot tap installations. Both models mount using a 1-1/2in Thread.

Compatible with 9900 Transmitter

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9900 FLOW TRANSMITTER

"At a glance visibility" due to extra large characters and a digital bar graph from an auto-sensing backlit LCD display. Single sensor input compatible with signals from all GF Signet Flow, pH/ORP, Conductivity, Salinity, Pressure or Temperature sensors as well as any non-GF Signet sensors that outputs a 4-20mA signal (requires GF Signet 8058 signal convertor).

One permanent and one resettable totaliser, LED relay or warning indicators. Analogue (4 – 20MA) and open collector with user selectable pulse units output.

Relay module and batch controller modules are optional extras and can be retrofitted (Panel version only).

Panel or field mount versions available.

Requires 12 to 32VDC power supply.

Field Mount



Code
SG3-9900-1

Panel Mount



Code
SG3-9900-1P
SG3-9900-1BC

MOUNTING KIT

Code

Universal mount kit

Code
SG3 - 8050



to mount field transmitter on to a wall or other flat surface

Integral mount kit

Code
SG3 - 8051



to mount field transmitter on to the top of an integral sensor

OPTIONAL EXTRAS

Code

Relay Module

Code
SG3-9900.393



Batch Module

Code
SG3-9900.397



8900 MULTI-PARAMETER INSTRUMENT

This instrument is built to order from user specified modules. With up to 6 inputs that can include flow, pH/ORP, conductivity, pressure, temperature and/or turbidity and up to 4 outputs,(analogue and relays). AC and DC power options are available.

Advanced relay logic allows up to 3 measurement sources to trigger relay.

Derived measurements include: difference, sum, ratio, percent recovery, percent rejection, percent passage and BTU (or Kw)

Price varies depending on configuration; please enquire.

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INSTALLATION FITTINGS

All the previously mentioned Flow Sensors measure flow velocity at a set point, and from this calculate the total flow rate through the pipe system. For accurate and repeatable measurements fully developed turbulent flow is required. For full details and installation requirements refer to GF Signet Literature.

For optimum accuracy Signet recommend that the pin on a paddlewheel flow sensor, or the tip of an Insertion Magmeter, is positioned at a point 10% of the Pipe ID from the inside of the pipe wall.

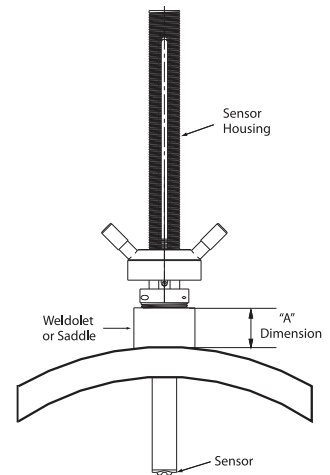
Installation fittings broadly fit into 2 categories, depending on the flow sensor to be used.

FITTINGS FOR 2540 AND 2552 METAL FLOW METERS

The 1-1/4in or 1-1/2in mounting thread allows the use of a conventional branch saddle, or Weld-o-let.

Sensors can easily be fitted to PE pipes (as shown here) using Electrofusion Saddles and threaded adaptors.

Hot-tap installations can also be easily incorporated.



FITTINGS FOR 515, 2536, 2537, PADDLEWHEELS, AND 2551 INSERTION MAGMETERS

For smaller diameter Schedule 80 PVC pipelines Signet offer off the shelf installation fittings which meet this requirement. For other materials, configurations, and pipe diameters a variety of installation options are available.

Flow meters are available with differing insertion depths to suit the pipe diameter.

For plastic, and other pipes with thicker walls, it is sometimes necessary to use a longer sensor.

| Code | Insertion Depth | Nominal Pipe Size |
|------|-----------------|-------------------|
| PO | 51mm | up to DN100 |
| P1 | 84mm | DN100 to DN200 |
| P2 | 160mm | DN250 and above |

SCHEDULE 80 PVC TEES

| Code | Size |
|------------|------|
| SGPV8T005F | 15mm |
| SGPV8T010F | 25mm |
| SGPV8T012F | 32mm |
| SGPV8T015F | 40mm |
| SGPV8T020 | 50mm |



Suit Schedule 80 PVC Pipework. 80 and 100mm sizes compatible with NZS PVC Pipe

PVC CLAMP-ON SADDLES

| Code | Size |
|-----------|-------|
| SGPV8S030 | 80mm |
| SGPV8S040 | 100mm |
| SGPV8S060 | 150mm |



Suit Schedule 80 PVC Pipework. 80 and 100mm sizes compatible with NZS PVC Pipe

PP ADAPTOR INSERTS

For larger pipe diameters it is necessary to use either a conventional saddle, or weld-o-let, in conjunction with a threaded adaptor. For plastic pipes the Alprene saddles from AsmuSS are ideal. Some machining may be required.



| Code | |
|---|--------------|
| Suit P0 Length Sensor, and 32mm Female BSP Saddle | SGI515P0/032 |
| Suit P1 Length Sensor, and 50mm Female BSP Saddle | SGI515P1/050 |
| Suit P2 Length Sensor, and 50mm Female BSP Saddle | SGI515P2/050 |

Note: Inserts only. Saddles are sold separately.