

## +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
<b>Blind Meter</b> 	<b>Frequency Output</b>	SG3-2551-P0-11
		SG3-2551-P1-11
		SG3-2551-P2-11
	<b>4-20mA Output</b>	SG3-2551-P0-12
		SG3-2551-P1-12
		SG3-2551-P2-12
<b>With Display</b> 	<b>Frequency Output</b>	SG3-2551-P0-41
		SG3-2551-P1-41
		SG3-2551-P2-41
	<b>4-20mA Output</b>	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
<b>Full-Bore Magmeter, 25mm PVC Union Ends FKM Seals</b> 		SG3-2580-P-T-010
<b>Full-Bore Magmeter, 50mm PVC Union Ends FKM Seals</b> 		SG3-2580-P-T-020
<b>Full-Bore Magmeter, 100mm PVC ANSI 150 Flanged Ends FKM Seals</b> 		SG3-2580-P-T-040


# +GF+ SIGNET

## FLOW MEASUREMENT AND INSTRUMENTATION

### 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
	<b>Standard Sensor</b>	SGP51530-P0
		SGP51530-P1
		SGP51530-P2
	<b>Integral Mount Sensor</b>	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
	<b>Standard Sensor</b>	SG3-2536-P0
		SG3-2536-P1
		SG3-2536-P2
	<b>Integral Mount Sensor</b>	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
<b>Standard Sensor</b>		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
	<b>Pulse Divider &amp; Flow Switch Output</b>	SG3-2537-2C-P0
		SG3-2537-2C-P1
	<b>4-20mA Output</b>	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
	<b>Standard Sensor</b>	SG3-2540-2
		<b>Hot-Tap Sensor</b>

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

# THE SMARTER CHOICE.

## +GF+ SIGNET

### FLOW MEASUREMENT AND INSTRUMENTATION

#### 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
<p><b>Universal mount kit</b></p>  <p>to mount field transmitter on to a wall or other flat surface</p>	SG3 - 8050
<p><b>Integral mount kit</b></p>  <p>to mount field transmitter on to the top of an integral sensor</p>	SG3 - 8051

#### OPTIONAL EXTRAS

	Code
<p><b>Relay Module</b></p> 	SG3-9900.393
<p><b>Batch Module</b></p> 	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.

# +GF+ SIGNET

## FLOW MEASUREMENT AND INSTRUMENTATION

### 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.

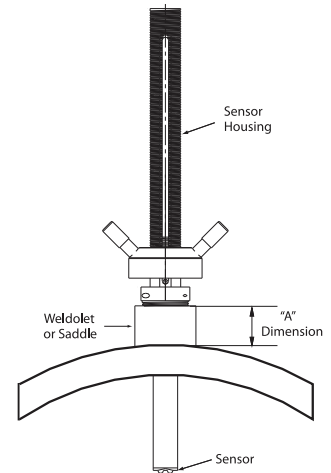
Installation fittings broadly fit into 2 categories, depending on the flow sensor to be used.

#### 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.