GF Piping Systems

Signet Specials Catalog

GF+

and ordering guide

Specials Catalog and ordering guide

The Specials Catalog provides details of modified standard GF Signet products that meet special needs of specific applications.

In this catalog, we have selected the most popular modified products used throughout the GF Global sales channel. If after your search through this catalog you do not find a product that suits your application needs, please send an email request to the Special Order Product Manager at signet-specialproduct@georgfischer.com

How to Order Special Products

GF Sales companies must order Special Order products directly from GF Signet. All quotes issued will have important reference information which must be submitted to the GF Signet Customer Service department when issuing an order. (See example below).

SAP Material: 150 301 002 Quote Number: Q15020 001 Part Number: 3-2774-HT Description: pH electrode, high temperature with ¾" NPT process connector List price USD (in US dollars) NET iLab Charge: \$90.00

Quote is good until the end of 2017 or unless specified.

List price ranges are provided for budgetary purpose; however, the factory should be contacted for final net quotations which will be valid for all orders placed prior to year end 2017. A separate NET iLab charge may be added to the Special Order product. See price sheet or contact the factory for specific information.

When contacting GF Signet for a quote on a Special Order product, it's important to provide the full Special Order part number to avoid any confusion. ALL Special Order products can <u>NOT</u> be returned for credit. After receiving the initial request, we will provide a quote within two working days via email.

The quote will include list price, lead-time and a quote expiration date. If the product is not ordered prior to the expiration date, product must be re-quoted. If you need a modified version of a product listed in this catalog, or have a request for a new product, please contact the Special Order Product Manager. We advise to include all relevant application information.

You can use the Application Assistance Form located:
1) On the last page of this catalog
2) On our website using the link below:
http://www.gfps.com/content/gfps/country_US/en_US/service_and_support/application.html

All GF Sales companies are required to contact the GF Signet Office.

Simply send an email request to order special products directly to the Signet Customer Service representative or the Signet Special Order Product Manager at <u>signet-specialproduct@georgfischer.com</u>

Special Order products can <u>NOT</u> be ordered through the GF SAP system. These products are not standard products, SAP part numbers will not be assigned to them. All orders must be manually prepared by your Purchasing/Logistic Manager.

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Terms and Conditions

Please read the following very carefully:

- Special Order products must be ordered directly from GF Signet only.
- Price is issued as a list price, your standard GF Signet discount will be applied.
- Lead-time for Special Order products is 4 to 6 weeks. (The 3-2774 family sensors could have extended lead-times of up to 9 weeks).
- All Special Order product orders must be accompanied with a:
 - Non-cancellable Purchase Order
 - Reference the SAP Material
 - Quote Number
- Sales Companies are responsible for all freight charges to the final destination.
- All Special order products can <u>NOT</u> be returned for credit.
- Special Order products are not guaranteed to meet all standard part specifications. Verification testing of "special modifications" to determine conformance can be performed, and will be quoted upon request by the customer. To perform such a conformance test, specific requirements of fluid type and conditions of the media and piping system must be specified. Without this information, a determination of the time required and associated non-recurring testing cannot be determined. If testing is not performed, buyer agrees to accept the product as-is. The buyer will be responsible for any consequential damages due to suitability of use and installation of the provided products.

Special OEM Support:

GF Signet can package your OEM's system products in to a single package. This allows the customer to use one part number to receive an OEM system in one box avoiding ordering separate part numbers.

The contents in this publication are based on information available at the time of publication. In view of the possibility of human error, we accept no responsibility for any errors or omissions in this publication. The technical data is not binding and may be subject to modification. It neither provides a guarantee of product performance and durability nor constitutes coverage under warranty. In case of doubt or uncertainty, we strongly recommend consultation with the factory.

Flow >>



The Model 515 and 2536 sensors are offered in a variety of materials for a wide range of pipe sizes and insertion configurations. The many material choices including PP and PVDF make this model highly versatile and chemically compatible to many liquid process solutions. Sensors can be installed in DN15 to DN900 (1/2 to 36 in.) pipes.

Also available for Wet-Tap sensors - contact the factory.

Refer to the Signet Measurement and Control Product Catalog for additional information.

PVDF Sensor body assembly built with a combination of PVC and PVDF material. Material in contact with liquid is PVDF.

**PVDF only available in X0 and X1 lengths.

4

Choose: P51530-XXXX-XXX-X OR 3-2536-XXXX-XXX-X

	Se	nso	r Bo	ody N	/lat	erial			
	1	Bla	ack	Poly	pro	pylene			
	2	P٧	DF						
		Ro	tor	Mate	eria	ıl			Signet Accessory Reference
		1	Bla	ack P	٧D	F			198 820 052
		2	Na	tural	. P\	/DF			159 000 272
		3	ΕT	FE					159 000 273
		4	Sle	eved	d B	lack PV	DF		198 820 056
		5	Sle	eved	d N	atural P	VDI	=	198 820 057
		6	Sle	eved	d E	TFE			198 820 058
\mathcal{I}			Pir	n Mat	teri	ial			
			1	Tita	niu	ım			198 801 182
			2	Has	tel	loy-C			198 801 183
			3	Stai	inle	ess Stee	el		198 820 015
53.3 mm (2.1 in.)			4	Tan	tal	um			198 820 014
-0, -1			5	Cer	am	ic			198 820 016
$26.7 \text{ mm} \longrightarrow 1.05 \text{ in.} \qquad \leftarrow \qquad \circ 1.05 \text{ in.}$			6	Nat	ura	l PVDF*	r		159 500 049
				0-r i	ing	Materia	al		
╘╻╘				1	FP	М			198 801 000
Ц				2	ΕP	R (EPDN	۹)		198 820 006
-0 = 104 mm (4.1 in.) -1 = 137 mm (5.4 in.)				3	FF	KM			198 820 007
-1 = 137 mm (5.4 in.) -2 = 213 mm (8.4 in.)					-	Cable	Len	gth	
						025	7.6	6 m	(25 ft)
						050	15	.2 m	n (50 ft)
						075	22	.8 m	n (75 ft)
						100	30	.5 m	n (100 ft)
							-	Se	nsor Length
Example Part Numbe								0	DN15 to DN100 (0.5 to 4 in.)
P51530-22	3	1	- () 2	5	- 1		1	DN125 to DN200 (5 to 8 in.)
Paddlewheel sensor, PVDF body, Natural F FPM O-ring, 7.6 m (25 ft) cable for a DN12								2	DN250 to DN900 (10 to 36 in.)

*Only available with Natural PVDF Rotors **PVDF only available in X0 and X1 lengths

General				
Operatio	ng Range			
P5153	0	0.3 to 6 m/s	1 to 20 ft/s	
2536		0.1 to 6 m/s	0.3 to 20 ft/s	
Pipe Siz	e Range	DN15 to DN900	½ to 36 in.	
Linearit	У	±1% of max. range @ 2	25 °C (77 °F)	
Repeata	ability	±0.5% of max. range @	% of max. range @ 25 °C (77 °F)	
Cable L	ength	7.6 m (25 ft) can be ext 60 m (200 ft) maximun	m (25 ft) can be extended up to m (200 ft) maximum	
Max. Te	mperature/Pre	essure Ratings		
	PP	12.5 bar @ 20 °C	181 psi @ 68 °F	
		1.7 bar @ 90 °C	25 psi @ 194 °F	
	PVDF	14 bar @ 20 °C	203 psi @ 68 °F	
		1.4 bar @ 100 °C	20 psi @ 212 °F	

Operati	ng Temperatur	e		
	PP - 515	-18 °C to 90	°C	0 °F to 194 °F
	2536	-18 °C to 85	°C	0 °F to 185 °F
	PVDF - 515	-18 °C to 10	0 °C	0 °F to 212 °F
	2536	-18 °C to 85	°C	0 °F to 185 °F
Shippin	g Weight			
	P51530-X0 /	3-2536-X0	0.454 kg	1.00 lb
	P51530-X1 /	3-2536-X1	0.476 kg	1.05 lb
	P51530-X2 /	3-2536-X2	0.680 kg	1.50 lb
Standa	rds and Approv	als		
	CE, FCC (2536	s)		
	RoHS complia	ant, China Ro	HS	
		al Manageme	nt and OHS	ality and ISO 14001 for SAS 18001 for

Flow >>



The Model 8510 and 8512 sensors are offered in a variety of materials for a wide range of pipe sizes and insertion configurations. The many material choices including PP and PVDF make this model highly versatile and chemically compatible to many liquid process solutions.

Both the Integral Adapter Kit (3-8051) and a Field Mount Transmitter (3-8150-1 or 3-9900-1) are required (sold separately), or can be ordered fully assembled (See page 25).

Refer to the Signet Measurement and Control Product Catalog for additional information.

PVDF Sensor body assembly built with a combination of PVC and PVDF material. Material in contact with liquid is PVDF. PVDF only available in X0 and X1 lengths.

8510 Sensor

Genera	l			
Operati	ng Range, 8510	0.3 to 6 m/s	1 to 20 ft/s	
Pipe Siz	ze Range	DN15 to DN900	½ to 36 in.	
Lineari	ty	±.01% of max. range	@ 25 °C (77 °F)	
Repeat	ability	±0.5% of max. range		
Cable L	ength	7.6 m (25 ft) can be e 60 m (200 ft) maximi		
Max. Te	mperature/Pres	sure Rating - Standar	d and Integral Sensor	
	PP	12.5 bar @ 20 °C	181 psi @ 68 °F	
		1.7 bar @ 90 °C	25 psi @ 194 °F	
	PVDF	14.0 bar @ 20 °C	203 psi @ 68 °F	
		1.4 bar @ 100 °C	20 psi @ 212 °F	
Operati	ng Temperature	^		
	PP	-18 °C to 90 °C	0 °F to 194 °F	
	PVDF	-18 °C to 100 °C	0 °F to 212 °F	
Shippin	ig Weight			
	3-8510-X0	0.23 kg	0.50 lb	
	3-8510-X1	0.23 kg	0.50 lb	
Standa	rds and Approva	ls		
	RoHS complian	it, China RoHS		
	Environmental	under ISO 9001 for Qu Management and OH ealth and Safety	ality and ISO 14001 for SAS 18001 for	

Choose:	3	- (85	51	0	-XXX	X-X OR
	3	- 8	8 !	5 1	2	- XXX	X-X
	Se	nso	r Bo	ody I	Mate	erial	
	1	Bla	ack	Poly	pro	pylene	
	2	ΡV	DF				
		Ro	tor	Mate	eria	l	Signet Accessory Reference
		1	Bla	ack F	PVD	F	198 801 181
		2	Na	tura	l PV	/DF	159 500 304
		3	ET	FE			198 820 018
		4	Sle	eeve	d Bl	ack PVDF	198 820 059
Shown with the		5	Sle	eeve	d Na	atural PVDF	198 820 060
9900-1 and 8051		6	Sle	eeve	d E	FFE	198 820 017
99.06 mm			Pir	n Ma	teri	al	
←(3.90 in.)→			1	Tita	aniu	Im	198 801 182
			2	Has	stel	loy-C	198 801 183
106 mi			3	Sta	inle	ess Steel	198 820 015
	1.)		4	Tar	ntalı	um	198 820 014
			5	Cer	ram	ic	198 820 016
▲ 26.7 mm			6	Nat	tura	l PVDF*	159 500 049
0, -1 → ← 26.7 mm (1.05 in.)				0-r	ing	Material	
				1	FP	M	198 801 000
-0 = 152 mm (6.0 in.)				2	EP	R (EPDM)	198 820 006
-0 = 152 mm (8.0 m.) -1 = 185 mm (7.3 in.)				3	FF	KM	198 820 007
					-	Sensor Len	gth**
						0	DN15 to DN100 (0.5 to 4 in.)
Evenente Deut Mu						1	DN125 to DN200 (5 to 8 in.)
Example Part Nu 3 - 8 5 1 0 -				- '	1		ailable with Natural PVDF Rotors r length 1 not available in PVDF

Example F 3-8510-1352-1

Integral paddlewheel sensor, PP body, ETFE Rotor, Ceramic pin, EPR (EPDM) O-ring, for a DN125 to DN200 (5 in. to 8 in.) pipe.

8512 Sensor

0012 36	1501			
General				
Operating	Range, 8512	0.1 to 6 m/s	0.3 to 20 ft/s	
Pipe Size I	Range	DN15 to DN900	½ to 36 in.	
Linearity		±1.0% of max. range	@ 25 °C (77 °F)	
Repeatabi	lity	±0.5% of max. range	@ 25 °C (77 °F)	
Cable Leng	gth	7.6 m (25 ft) can be e 60 m (200 ft) maximu		
Max. Temp	perature/Press	ure Ratings		
	PP	12.5 bar @ 20 °C	180 psi @ 68 °F	
		1.7 bar @ 85 °C	25 psi @ 185 °F	
	PVDF	14 bar @ 20 °C	200 psi @ 68 °F	
		1.7 bar @ 85 °C	25 psi @ 185 °F	
Operating	Temperature			
	PP	-18 °C to 85 °C	0 °F to 185 °F	
	PVDF	-18 °C to 85 °C	0 °F to 185 °F	
Shipping V	Veight			
	3-8512-X0	0.454 kg	1.00 lb	
	3-8512-X1	0.476 kg	1.05 lb	
Standards	and Approvals	5		
	CE, FCC			
	RoHS complia	ant, China RoHS		
	Environmenta	l under ISO 9001 for Q al Management and Of Health and Safety	luality and ISO 14001 for HSAS 18001 for	

Flow >>

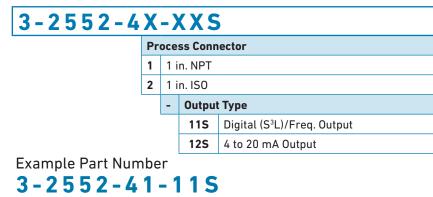


The Signet 2552 Submersible Metal Magmeter features a sensor manufactured in stainless steel with a PVDF nosepiece, waterproof cable assembly and CPVC waterproof back seal. The 2552 installs quickly into standard 1 in. ISO or NPT outlet and is adjustable to fit pipes up to 32 inches.

The waterproof design allows the sensor to be installed in underwater piping systems at levels up to 4.6 m (15.09 ft).

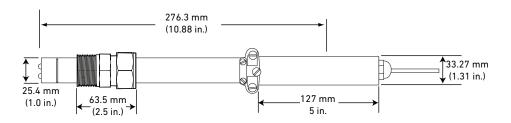
Select the blind 4 to 20 mA current output to interface directly with data loggers, PLCs or telemetry systems. Key features include empty pipe detection and bidirectional span capability (4 to 20 mA models).

Refer to the Signet Measurement and Control Product Catalog for additional information.



Submersible Magmeter, 1 in. NPT process connection, Submersible sensor with frequency output and 25 feet of cable.

Extended cables available. Please see page 2 for ordering information.



The Signet 0252 Configuration Tool is available to customize every performance feature in the 2552 so it can be adapted to the user's application requirements. WARNING:

BE CAREFUL INSTALLING THE SENSOR. ONCE THE PROCESS CONNECTOR IS PROPERLY TIGHTENED THE SENSOR <u>CAN NOT</u> BE DISASSEMBLED AND REINSTALLED.

Wetted Materials:	
Body and Electrodes	316L Stainless Steel
Insulator	PVDF
Cable	4-cond, rubber cable assembly with NEMA 6P connector, 25 ft standard, custom length available
Power Requirements	
4 to 20 mA	21.6 to 26.4 VDC, 22.1 mA maximum
Frequency	4.5 to 26.4 VDC, 15 mA maximum
Digital (S ³ L)	4.5 to 6.5 VDC, 15 mA maximum
Reverse polarity and sho	rt circuit protected
Performance	
Pipe Size Range	DN40 to DN1200 (1.5 in. to 48 in.)
Flow Range	
Minimum	0.05 m/s (0.15 ft/s)
Maximum	10 m/s (33 ft/s) Sensor ships 5 m/s
Linearity	±(1% reading + 0.01 m/s)
	±(1% reading + 0.033 ft/s)
Repeatability	±0.5% of reading @ 25°C
Min. Conductivity	20 μS/cm
Electrical	
Frequency output/S ³ L co	mpatible with Signet 8900, 9900 and 9950
Max. Pull-up Voltage	30 VDC

Short Circuit Protected	≤ 30 V @ 0 Ω pull-u	p for one hour
Reverse Polarity Protected	to -40 V for 1 hour	
Overvoltage Protected	to +40 V for 1 hour	
Max. Current Sink	50 mA, current lim	ited
Maximum cable	300 m (1000 ft)	
Max. Temperature/Pressure	Rating	
Storage Temp. (non-icing conditions)	-15 °C to 70 °C	5 °F to 158 °F
Operating Temperature		
Ambient Temp. (non-icing conditions)	-15 °C to 70 °C	5 °F to 158 °F
Media	-15 °C to 85 °C	5 °F to 185 °F
Max. Operating Pressure	20.7 bar @ 25 °C	300 psi @ 77 °F
Shipping Weight	·	
	2.50 kg	5.51 lb
Standards and Approvals		
CE, FCC		
RoHS Compliant, China	RoHS	
NEMA 6P (IP68) (subme maximum 3 m (10 ft) so continuous submersion	ubmersion depth for	
Manufactured under IS Environmental Manage Health and Safety.		

Flow >>

High Temperature, High Pressure - Boiler package

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Signet P525 Metalex Sensor is a high pressure, high temperature paddlewheel sensor. The 316 L stainless steel version is ideal for monitoring boiler feed water and condensate return water.

The corrosion resistant Hastelloy-C version is ideal for desalination processes.

Refer to the Signet Measurement and Control Product Catalog for additional information.

525-XX	-	XXX			
Sens	sor l	Body / Rot	or / Pin Material / Fitting		
1	1⁄2	- 1 in. Stai	nless Steel/Stainless Steel/Tungsten/Mini-tap		
2		1¼ - 12 in. Stainless Steel/Stainless Steel/Tungsten/ Weld-on Mini-tap			
15		½ - 1 in. Stainless Steel/Stainless Steel/Stainless Steel/ Mini-tap			
25		² - 12 in. S eld-on Min	tainless Steel/Stainless Steel/Stainless Steel/ i-tap		
2H			astelloy-C/Stainless Steel/Stainless ner supplied saddle or fitting only		
	-	Cable Le	ngth		
		050	15.2 m (50 ft)		
		075	22.8 m (75 ft)		
		100	30.5 m (100 ft)		

Example Part Number P525-1S-050

High Temperature, High Pressure flow sensor, ½ - 1 in. Stainless Steel body, Stainless Steel rotor, Stainless Steel pin, with mini-tap fitting, 15.2 m (50 ft) of cable.

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P525-1, P525-1S

SIGNET

P525-2, P525-2S, P525-2H

3



Custor manifold available in

	(1.06 i
m stainless steel	

38.4 mm (1.5 in.) ł 27 mm in.)

Ľ

SIGNET 63.5 mm (2.5 in.) 27 mm (1.06 in.)

General		
Operating Range	0.5 to 6 m/s	1.6 to 20 ft/s
Pipe Size Range	DN15 to DN300	½ to 12 in.
Wetted Materials		
Sensor Body	316 SS (ACI type 0 DIN 17440	CF-8M per ASTM A351),
Rotor Material	CB7Cu-1 Alloy	
Rotor Pin	Tungsten Carbide 316 stainless stee	
Retainers (2)	316 stainless stee	el (1.4401)
Rotor Bearings (2)	Carbon fiber reinf	forced PTFE
Gasket	KLINGER [®] sil C-44 (supplied with fitt	•

Socket Weld or Weld-On Mini-Tap Fittings		103 bar (1500 psi @ safety factor 1.5) @ 149 °C (300 °F)			
Strap-	on Saddle Fitting	21 bar (305 psi) @	66 °C (151 °F)		
Operat	ting Temperature	-18 °C to 149 °C	0 °F to 300 °F		
Shippi	ng Weight				
	P525-1/-1S	0.723 kg	1.60 lb		
	P525-2/-2S	0.774 kg	1.70 lb		
Standa	ards and Approvals				
	RoHS compliant,	China RoHS			
		nder ISO 9001 for Qu Ivironmental Manag			

OHSAS 18001 for Occupational Health and Safety

Special order products may not meet all of the specifications of the standard sensor assemblies.

www.gfsignet.com

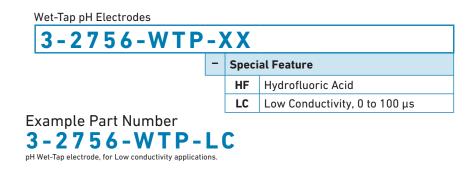
pH/ORP >>



The Wet-Tap sensors allow installation and removal of pH or ORP electrodes, even under process pressure, without the need for process shutdown during routine electrode maintenance and calibration. Automatic process isolation is achieved during electrode retraction with a double O-ring seal on a unique and compact retraction assembly.

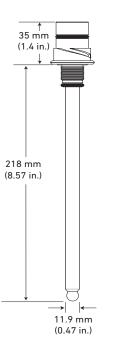
A separate valve is not required.

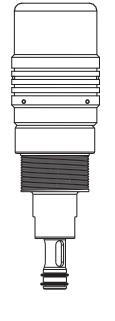
Refer to the Signet Measurement and Control Product Catalog for additional information.



Wet-Tap ORP Electrodes

3-2757-WTP-XX				
	-	Special Fe	ature	
		G	Gold Electrode	
		LC	Low Conductivity, 0 to 100 μs	
		HDPE-PR	HDPE reference junction for aquariums/salt water	





3719 Wet-Tap Assembly

A patented cam-activated automatic locking mechanism, SafeLoc[®], and the short stroke design help to assure operator safety. The Wet-Tap assembly can be mounted at any angle and can be used with the Signet DryLoc[®] Wet-Tap electrodes.

3719 Wet-Tap assembly sold separately

General			
Operating Range	pН	0 to 14 pH	
	ORP	Application dependent	
Connector	CPVC	DryLoc	
Temperature Sensor (pH)	3K Balco for pH		
Reference Junctions	Porous PTFE		
	Electrolyte	Saturated KCl	
	Elements	Ag/AgCl	
Impedance (pH)	< 150 MΩ @ 25 °C		
Wetted Materials			
Body	glass (bulb) PAS	S (Polyaryl sulphone)	
Reference Junctions	Porous PTFE		
Sensing Surface	pН	Glass Membrane	
	ORP	Platinum	

0-rings	FPM	FPM		
Connector	CPVC			
Max. Temperatur	e Rating			
Operating Temperature	0 °C to 85 °C	32 °F to 185 °F		
Recommended S	torage Temperature			
	0 °C to 50 °C	32 °F to 122 °F		
The electrode gla below 0 °C (32 °F		oped or stored at temperature		
	life of the electrode ove 50 °C (122 °F)	will shorten if stored at		
temperatar ee as				
Shipping Weight				
•	0.20 kg	0.44 lb		
•		0.44 lb		

pH/ORP >>



Wet-Tap pH/ORP assemblies are ideal for hard to reach applications. Its 3⁄4 in. diameter allows insertion into narrow tank openings, flow lines, and gives greater stability in highly agitated vessels.

Maintenance time is reduced, since there is only one active element to be serviced, and it is readily accessible, requiring no tools for removal.

Application Notes

Wetted materials of construction are 316 stainless steel and CPVC, with double O-ring seals of EPR (EPDM). The outer O-ring absorbs any chemical attack, allowing the inner to provide reliable sealing in a protected environment. A 124 mm (5 in.) long cartridge containing a combination pH or ORP sensor, snaps into the end of the stainless steel body. TC elements are potted in the body itself.

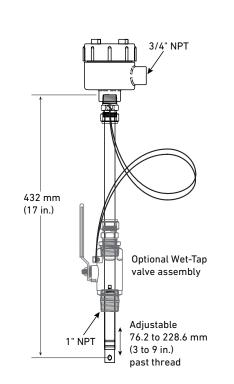
Special only, <u>not</u> in the Signet Measurement and Control Product Catalog. Contact GF Signet for more information.

<u>K7</u>	XX	
	MK7 W	et-Tap Assembly Complete with Electrode
	21	316 L Stainless Steel Wet-Tap pH Sensor Assembly with 1 in. SS ball valve
	23	316 L Stainless Steel Wet-Tap ORP Sensor Assembly with 1 in. SS ball valve
Replace	ment El	ectrodes
P71	733-1	pH Replacement Electrodes for MK 721
P72733-1 ORP Replacement Electrodes for MK 723		

Example Part Number

pH Wet-Tap assembly, Stainless Steel with

sensor and 1 in. Stainless Steel ball valve.



The wet tap electrode can be wired to the 2750 pH/ORP electronics using the 2722 BNC to DryLoc[°] adapter. See page 18.



Max. Temp	erature/Pressu	re Rating
Standard S	ensor	100 PSIG @ 100 °C
Sensor Onl	У	with Ball Valve Removed
Valve Asse	mbly	50 PSIG @ All Temperatures
Wetted Ma	terials	
Body		316 Stainless Steel
Sensor	pН	CPVC, PVDF Junction
	ORP	CPVC, PVDF Junction, Platinum pin
0-rings		EPR (EPDM)
Connection	15	
	Sensor	pH Process ¾ in. NPT
	Valve	1 in. NPT

Electrical		Requires the 3-2722 to connect to pH/ORP electronics.		
Temperature C	ompensation			
pH W	/et-Tap	3K Balco		
ORP	Wet-Tap	10 KΩ ID Resistor		
Shipping Weigl	nt			
Wet-	Tap assembly	2.27 kg	5.0 lb	
pH e	lectrode	0.22 kg	0.49 lb	
ORP	electrode	0.22 kg	0.49 lb	
Standards and	Approvals			
		CE		

pH/ORP >>



The Signet 2774-2777 pH and ORP Electrodes feature a unique foul-proof DryLoc[®] connector with gold-plated contacts designed specifically for use with the Signet 2750 and 2760 preamplifiers, sensor electronics, and connectors.

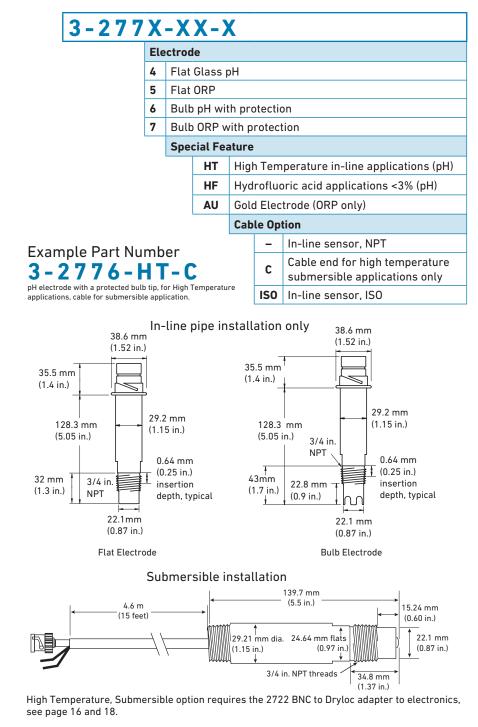
The high temperature sensors are available for in-line applications and allows the standard preamps and electronics to be used. For hot submersible applications, a cable version of the sensor is available to locate the preamps and electronics safely outside the elevated application temperature.

Refer to the Signet Measurement and Control Product Catalog for additional information.

3-2722 BNC DryLoc Adapter

The 2722 DryLoc adapter is used to connect the Signet high temperature pH and ORP electrodes used in submersible applications to the 2750/2760 electronics.





General		Recommended Storage Temperature			
774/2776	0 to 14 pH ±2000 mV (0RP)		L	0 °C to 50 °C	32 °F to 122 °F
775/2777			The electrode glass will break if shipped or stored at temp		or stored at temperature
			below 0 °C (32 °F)		
ody	PPS PTFE		The performance life of the electrode will shorten if stored at temperatures above 50 °C (122 °F) Shipping Weight		
eference					
unction					
ensing Surface	pН	Glass		0.25 kg	0.55 lb
		membrane	Standards and Appro	vals	
	ORP	Platinum or gold		Manufactured und	der ISO 9001 for Quality
-rings	FPM				
ure Rating					
10 °C	230 °F				
) bar	150 psi				
	rings ure Rating 0 °C	75/2777 ±2000 r rdy PPS reference PTFE rnsing Surface PH ORP rings FPM ure Rating 0 °C 230 °F	75/2777 ±2000 mV (ORP) ody PPS ofference PTFE notion PH Glass membrane ORP Platinum or gold rings FPM ure Rating 230 °F	74/2776 0 to 14 pH 75/2777 ±2000 mV (ORP) rdy PPS ody PPS afference PTFE nction PH Glass membrane ORP Platinum or gold rings FPM ure Rating 230 °F 0 °C 230 °F	74/2776 0 to 14 pH 75/2777 ±2000 mV (ORP) ody PPS ody PPS ofference PTFE nction PH orgonal Glass membrane 0.25 kg Standards and Approvals Manufactured und ure Rating 230 °F

Higher temperature and pressure sensors are available upon request.

Special order products may not meet all of the specifications of the standard sensor assemblies.

pH/ORP >>



PVC Wet-Tap pH or ORP sensors assemblies are ideal for hard to reach applications, such as tanks, and high maintenance applications that require more frequent cleaning. Built in temperature element for pH or a 10K ID resistor to allow use with the 3-2750-X smart electronics or the 3-2760-X preamplifiers.

Maintenance time is reduced by easily removing the sensor without process interruption or shut down. The sensor is easily replaced with no tools required.

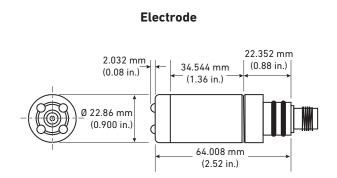
Wetted material, PVC.

Special only, <u>not</u> in the Signet Measurement and Control Product Catalog. Contact GF Signet for more information.

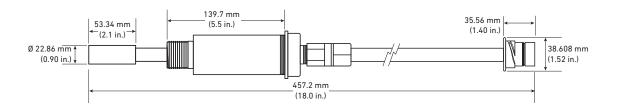
6 - X 7 X X - X X X 6-2760-WTA ORP Wet-Tap sensor assembly, PVC (sensor ordered separately) 6-3760-WTA pH Wet-Tap sensor assembly, PVC (sensor ordered separately) 6-2705-WT ORP Wet-Tap electrode, general purpose 6-2704-WT pH Wet-Tap electrode, general purpose

Example Part Number 6 - 2760 - WTA

ORP Wet-Tap assembly. ORP Wet-Tap Sensor sold separately.



Wet-Tap Assembly



Shipping Weight		
Wet Tap Assembly (without electrode)	0.68 kg	1.50 lb
pH Electrode	0.22 kg	0.49 lb
ORP Electrode	0.22 kg	0.49 lb

Special order products may not meet all of the specifications of the standard sensor assemblies.

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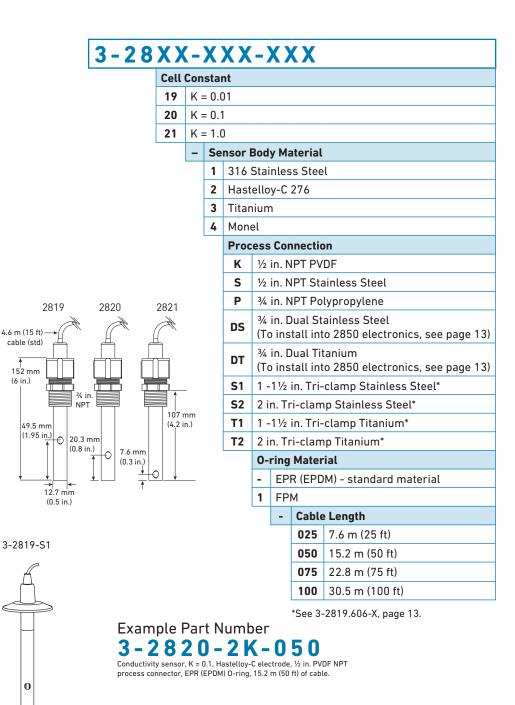
Conductivity >>



Signet 2819-2821 Conductivity/ Resistivity Electrodes are designed to provide versatile installation and accurate sensing across a very broad dynamic range. These electrodes are built with a controlled surface finish to ensure accuracy and repeatability. The electrodes are with a choice of 4 different materials for maximum chemical compatibility.

A platinum RTD (PT1000) located within the electrode allows optimal temperature sensing.

Refer to the Signet Measurement and Control Product Catalog for additional information.



*Tri-clamp sensors are available in Stainless Steel and Titanium only.

General					
Operating Range	3-2819	0.055 μS to 100 μS	18.2 MΩ to 10 KΩ	0.02 to 50 ppm	
	3-2820	1 μS to 1000 μS	1 MΩ to 1 KΩ	0.5 to 500 ppm	
	3-2821	10 μS to 10,000 μS	5 to 5,000 pp	om	
Cell Constant Accuracy		$\pm 2\%$ of reading (certified cells $\pm 1\%$)			
Temperature Compensation Device		PT1000			
Wetted Materials					
0-rings		EPR (EPDM))			
Insulator Material		Carbon fiber reinforced PTFE			
Electrodes		316L stainless steel (1.4408, DIN 17440) Hastelloy-C, Titanium or Monel			

Max. Temperature/Pressure Rating				
Standard Polypro Fitting	6.9 bar @ 100 °C	100 psi @ 212 °F		
Optional ½ in. NPT 316 SS fitting (3-2820.392)	13.8 bar @ 120 °C	200 psi @ 248 °F		
Shipping Weight				
	0.40 kg	0.88 lb		
Standards and Approvals				
RoHS compliant, China RoHS				

Special order products may not meet all of the specifications of the standard sensor assemblies.

(6 in.)

0

Conductivity >>



3-2850 electronics can be ordered using the 2819, 2820 and 2821 series conductivity sensors for applications where a longer sensor length is needed.

Wetted Material:

Choose Titanium process connector and sensor body or 316L Stainless Steel.

See Signet Measurement and Control Product Catalog for additional specifications for:

3-2819	3-2850-51
3-2820	3-2850-52
3-2821	

3-2850-XX-XX-X - Output Digital (S³L) 51 52 4 to 20 mA - Cell Constant 19 K= 0.01 20 K= 0.1 21 K= 1.0 Sensor Body and Process **Connection Material** S 316 L Stainless Steel Т Titanium

Example Part Number 3-2850-51-21-T

Conductivity sensor, digital (S³L) output, K = 1.0 cell constant,

Titanium body and process connection.

Wetted Materials					
0-rings	EPR (EPDM)				
Insulator Material	Carbon fiber ı	Carbon fiber reinforced PTFE			
Electrodes	316L stainles	316L stainless steel (1.4408, DIN 17440) or Titanium			
Shipping Weight					
		0.79 kg	1.75 lb		
Standards and Approv	als				
		CE, FCC			
RoHS compliant, China RoHS					



The 3-2819.606-X dual NPT adapter can be used to adapt the 3-2819-1, 3-2820-1 or the 3-2821-1 Conductivity sensor to the 3-2850-5X electronics.

See page 12.

3-2819.606	-)	K	
	-	Pro	cess Connection Material
		S	316L Stainless Steel
		Т	Titanium
Example Part Number			
3-2819.606-	٠S		
3/4 inch dual NPT Adapter, Stainless Steel con	nectio	n	
,3/4 in. NPT Process mount ,3/4 in. NPT Instrument/Jbox	moi	unt	
PTFE Backup r			
]= =	
316 SS Stop washer / // 2-111 Seating O-ri	ng/		
2-112 EDPM 0-rings, 2 ⁷ Retainer Plug, Stainless or Bra	iss/		3-28119-606-X
Seat snugly witth one wrench, while hand holding the fitting.			

Sea Do not over tighten by using two wrenches!

Shipping Weight			
	0.20 kg	0.44 lb	
Standards and Ap	provals		
	CE		

Special order products may not meet all of the specifications of the standard sensor assemblies.

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Conductivity >>

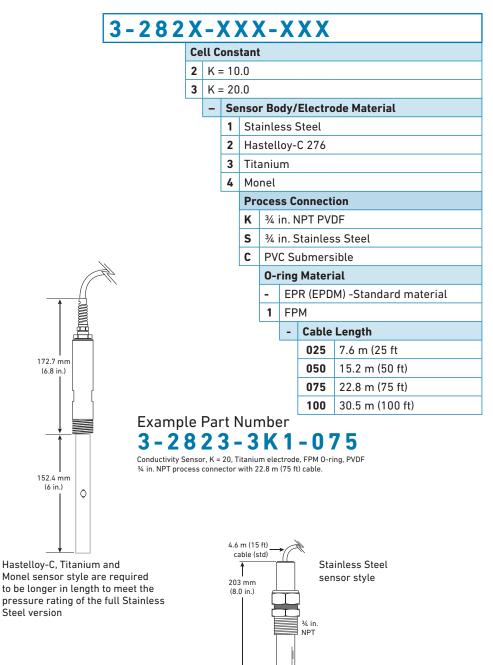


Signet 2822-2823 Conductivity Sensors are designed to provide versatile installation and accurate sensing across a broad dynamic range. These sensors are built with a controlled surface finish to ensure accuracy and repeatability.

The standard material of construction is 316L SS, but there are other metals available for maximum chemical compatibility.

A platinum RTD (PT1000) located within the electrode provides accurate temperature sensing.

Refer to the Signet Measurement and Control Product Catalog for additional information.





General				
Operating Range	3-2822	100 to 200,000 µS	50 to 100,000 ppm	
	3-2823	200 to 400,000 µS	100 to 200,000 ppm	
Temperature Compensation Device		PT1000		
Wetted Materials				
0-rings		EPR (EPDM)		
Insulator Material		PEEK°		
Process Connection	n	Electrodes See Matrix		
		Standard 316 SS fitting	See Matrix	

Max. Temperature/Pressure Rating							
Model 3-2823,	SS Style	6.9 bar @ 150 °C	100 psi @ 302 °F				
Any Model, Hasteloy-C, Monel, Titanium style		5.86 bar @ 100 °C	85 psi @ 212 °F				
Shipping Weigh	nt						
	3-2822	0.40 kg	0.88 lb				
3-2823		0.30 kg	0.66 lb				
Standards and Approvals							
		RoHS compliant, Ch	ina RoHS				

Conductivity >>



The Signet 2839-2842 Conductivity/ Resistivity Electrodes are available in four cell constants from 0.01 to 10.0 cm⁻¹, and are suitable for a wide variety of applications from high purity water quality monitoring to weak acids and bases. 316 SS electrode surface finishes are controlled in a precision bead blasting operation to ensure measurement accuracy and repeatability (sensor body is PVDF).

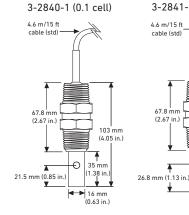
A Certificate of Calibration is included with all 2839-2842 Conductivity Electrodes. The electrodes are calibrated to meet 2% accuracy. Electrodes can be shipped back to the GF Signet Factory for recertification.

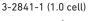
Refer to the Signet Measurement and Control Product Catalog for additional information.

3-28XX-XX-XXX **Cell Constant** 39 K = 0.01 40 K = 0.1 41 K = 1.0 K = 10 42 _ Sensor Body/Electrode Material 1 316 Stainless Steel ONLY **Process Connection** v NPT VD IS0 -**Cable Length** 025 7.6 m (25 ft) 050 15.2 m (50 ft) 075 22.8 m (75 ft) 100 30.5 m (100 ft)

Example Part Number **3 - 2 8 4 0 - 1 V D - 0 7 5**

Conductivity Sensor, K = 0.1, Stainless steel electrode, ISO Process Connection with 22.8 m (75 ft) cable.





109 mm

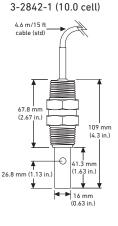
(4.3 in.)

41 3

16

(1.63 in

(0.63 in.)



Dual threads	3/4	NPT	or ISO	7/1-R	3/4	front	and	back
Baat thi baab								

Genera	General						
Operati	ng Range						
	2839	0.055 μS to 100 μS	0.02 ppm to 50 ppm	18.2 MΩ to 10 KΩ			
	2840	1 μS to 1,000 μS	0.5 ppm to 500 ppm	1 ΜΩ to 1 ΚΩ			
2841		10 μS to 10,000 μS	5 ppm to 5,000 ppm				
	2842	100 μS to 50 ppm to 200,000 μS 100,000 ppm					
Wetted	Materials						
	l O-ring Ind 2842)	FPM					
Insulate	or Material	PVDF					
Electrode Material		316L SS					
Thread Connec	ed Process tion	PVDF					

		131 °C @ 2.76 bar	268 °F @ 40 psi	
Storage Temperature		-20 °C to 131 °C	-4 °F to 268 °F	
Shippi	ng Weight			
	2839	0.34 kg	0.75 lb	
	2840, 2841, 2842	0.30 kg	0.66 lb	
Standa	ards and Appro	vals		
		RoHS compliant, Ch	ina RoHS	
	Manufactured under ISO 9001 for Quality and ISO 14001 for Environmental Management and OHSAS 18001 for Occupational Health and Safety			

Special order products may not meet all of the specifications of the standard sensor assemblies.

3-2839-1 (0.01 cell)

0

73

16 mm (0.63 in.)

(2.88 in.

140.7 mm (5.54 in.)

4.6 m/15ft

cable (std)

67.8 (2.67

59.3 mm

(2.33 in.)

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Conductivity >>



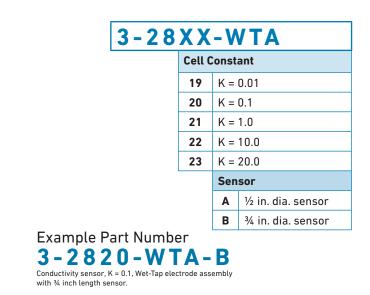
Valve-Insertion Sensor assembly. These insertion sensors are best suited for difficult applications in which the process line can not be interrupted, depressurized or is difficult to reach. These insertion sensors are also excellent for condensate return monitoring and not for boiler blowdown. The O-rings are chosen for best general chemical resistance, not for steam service*.

Wetted materials are 316L stainless steel and PTFE or PEEK, with double O-ring seals of EPR (EPDM). Junction box is aluminium.

Sensor can be used with the 2850 electronics or the Conductivity Module and 9900 Transmitter.

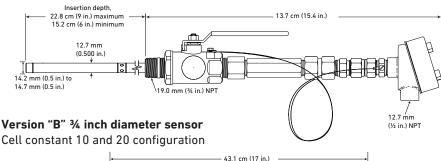
*NOTE:

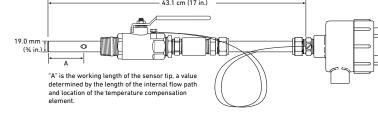
The Version "B" $\frac{3}{4}$ " diameter sensor transmits 44% of the line pressure as force trying to push the sensor out of the line. At 50 psi, the operator will have to hold back the equivalent of a 22 pound weight with one arm when retracting the sensor (difficult for the average person). At 100 psi, the force to handle with one arm is 44 pounds (difficult to the point of dangerous, if there is hot fluid in the line). The Version "A" $\frac{1}{2}$ " diameter sensor transmits only 19.6% of the line pressure outward, less than half the force from the $\frac{1}{2}$ " diameter sensor. It can therefore be safely operated at pressures up to 100 psi.



Version "A" ½ inch diameter sensor

Cell constants 0.01, 0.1, 1.0 and 10.0 configuration





Special only, <u>not</u> in the Signet Measurement and Control Product Catalog. Contact GF Signet for more information.

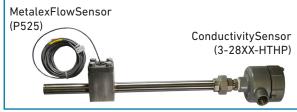
General						
Cell Constant	Cell Constant					
1	0.01					
	0.1					
	1					
	10					
	20					
Wetted Materials						
	316 Stainless Steel					
	PVDF					
	EPR (EPDM) O-rings					
Temperature Elemen	t					
	PT1000					

Temperature and Pre	essure Rating						
Stand Alone Sensor	6.8 bar / 100 psi a	t 120 °C (no ball valve)					
With Ball Valve	3.5 bar / 50 psi at (no exceptions)	3.5 bar / 50 psi at all temperatures (no exceptions)					
½ inch sensor	6.8 bar/100 psi						
¾ inch sensor	3.5 bar/50 psi at all temperatures						
Connections							
	Sensor assembly	¾ in. NPT					
	Ball valve 1 in. NPT						
Shipping Weight							
2819, 2820, 2821	1.60 kg 3.5 lb						
2822, 2823	2.50 kg 5.5 lb						

Conductivity >>

High Temperature, High Pressure





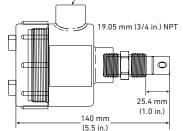
Custom stainless steel manifold available in 3/4 inch to 12 inch.

The 28XX-HTHP Conductivity Sensor is designed for the high temperature and pressures normally found in boiler applications.

Ideal applications include blow-down control, condensate return monitoring, leak detection on heat exchanges and steam purity measurement.

Wetted materials include, 316L Stainless steel, PEEK, EPR (EPDM) O-rings. Available in three cell constants.

Special only, <u>not</u> in the Signet Measurement and Control Product Catalog. Contact GF Signet for more information.





3-28XX-HTHP Cell Constant

K = 0.01

K = 0.1

K = 1.0

19

20

21

Example Part Number

3-2820-HTHP

Conductivity sensor, K = 0.1, High Temperature, High Pressure.

Note: Use the P525 Metalex Sensor to monitor boiler feed water and condensate return.

Contact GF Signet

Special products for prices on a boiler control package, Conductivity Senors, Metalex Flow Sensor and/ or 9900 Transmitters.

	High Temperature Sensor	250 psig at 205 °C			
	500 psig at 100 °C				
Wette	ed Materials				
	Electrodes	316L Stainless Steel			
	PEEK, EPR (EPDM)				
Ship	ping Weight				
	1.02 kg	2.25 lb			

3-28XX-HP

Cell Constant



The 28XX-HP Conductivity Sensor is designed for high pressure applications.

Wetted materials include 316L stainless steel, PEEK, EPR (EPDM) O-rings. Available in two cell constants.

Special only, <u>not</u> in the Signet Measurement and Control Product Catalog. Contact GF Signet for more information.

22 K = 10.023 K = 20.0 Example Part Number 3-2822-HP Conductivity sensor, K = 10.0, High Pressure 190.5 mm 96.52 mm (7.5 in.) (3.8 in.) 73.66 mm (2.9 in.) 19.05 mm \bigcirc (0.75 in.) Max Pressure/Temperature ratings High Pressure Sensor 500 psig at 25 °C

 Max Pressure/Temperature ratings

 High Pressure Sensor
 500 psig at 25 °C

 Wetted Materials

 Electrodes
 316L Stainless Steel

 Shipping Weight

 1.02 kg
 2.25 lb

Temperature/ **Pressure** >>



The Signet 2350 Temperature Sensor has a one piece injection molded PVDF body that is ideal for use in high purity applications. It also outlasts metal sensors in aggressive liquids and eliminates the need for costly custom thermowells. These sensors will have both a proprietary digital (S³L) output and field-scaleable 4 to 20 mA output.

Dual threaded ends (¾ in. NPT) allow submersion in process vessels, or in-line installation with conduit connection. An integral adapter kit (sold separately) may be used to create a compact assembly with field mount versions of the Signet 9900 Transmitter, or see page 28 to purchase a complete integral temperature/9900 sensor assembly.



The 2450 Pressure Ser one-piece injection mo body and ceramic diap superior compatibility in liquids. Three pressure allow for optimal resolution to your sensing needs. circuitry eliminates drift (potentiometers). These se have both a proprietary d output, or field-scaleable 4 to 20 mA output.

An integral mount kit (3-8052, sold separately) may be used to create a compact assembly with field mount versions of the Signet 9900, or see page 28 to purchase a complete pressure/9900 integral sensor assembly.

3-2350-X-XXX _ Sensor 3 S³L or 4 to 20 mA output - Process Connector 3⁄4 in. NPT process connector U 1/2 in. Union process connector -Cable 025 7.6 m (25 ft) 050 15.2 m (50 ft) 075 22.8 m (75 ft) 100 30.5 m (100 ft) Example Part Number 3-2350-3-075 Special only, not in the Signet Measurement and Control Temperature sensor, S³L or 4 to 20 mA output, ¾ in. NPT process connector, with 22.8 m (75 ft) cable

Product Catalog. Contact GF

Signet for more information.

Shipping Weight 0.22 kg 0.49 lb Standards and Approvals CE, FCC RoHS compliant, China RoHS Manufactured under ISO 9001 for Quality and ISO 14001 for Environmental Management and OHSAS 18001 for Occupational Health and Safety

			3-24	50-	· 7	Χ-	- X	-)	ххх	
	GE Sia	GF Signet can custom span the 4 to 20 mA				½ ir	n. Ur	nion	Adapter	
	output to customers requirements. Can be ranged to vacuum Vacuum Range				Pre	essu	re ra	ang	e	
r				U 0 to 0				o 0.'	7 bar (0 to	10 psi)
						L	0 to	0 to 3.4 bar (0 to 50 psi)		
2	U	-0.1 to 0.7 bar	-1.5 to 10 psi			н	0 to	o 17	' bar (0 to	250 psi)
	L	-0.41 to 3.4 bar	-6.0 to 50 psi			0-ri	ing I	Mat	erial	
	Н	-0.96 to 17.2 bar	-14.6 to 250 psi				-	FP	М	
nsor has a	9						1	EP	R (EPDM)	
olded PVDF	-							-	Cable Le	ngth
phragm for n corrosive									025	7.6 m (25 ft)
re versions	-								050	15.2 m (50 ft)
ion matched Solid state		Example Part Number						075	22.8 m (75 ft)	
(no internal		3	-2450-	• 7 U	- 1		0		100	30.5 m (100 ft)
sensors will digital (S³L)	-	-	essure sensor, 0-10 psi wit							
9			Shipp	oing Weig	ht					
				0.150) kg		0.3	33 lb)	

	0.150 kg 0.33 lb				
Standar	ds and Approvals	5			
	CE, FCC				
	RoHS compliant, China RoHS				
Manufactured under ISO 9001 for Quality and ISO 14001 for Environmental Management and OHSAS 18001 for Occupational Health and Safety					

pH/ORP >>



The Signet 2750 pH/ORP Sensor Electronics and 2760 Preamplifier/ connector feature the DryLoc® connector, providing robust connection to Signet DryLoc electrodes.

The 2750 has a preamplified signal and features two different outputs: a two-wire 4 to 20 mA loop output and a digital (S³L) output and is compatible with the Signet 8900 or 9900 instruments, or any 4 to 20 mA data logger or PLC.

The 2760 Preamplifier allows any DryLoc pH/ORP electrode to work with Signet ProcessPro® and ProPoint® instruments and instruments that do not require preamplified signals.

The 2722 must be used to connect any third party pH or ORP electrode that has a BNC connector to Signet 9900 or 8900 instruments. An external 3K or 10K resistor (not supplied) will be required.

Refer to the Signet Measurement and Control Product Catalog for additional information.

3-2750-X-XXX						
	-	Тур	Type of electronics			
_		3	Sub	mersil	ole Gray Body, ¾ in. NPT threads	
		4	Sub	mersil	ole Gray Body, ¾ in. ISO threads	
		7	7 In-line yellow Body, ¾ in. NPT threads			
		8	In-li	ine yel	low Body, ¾ in. ISO threads	
			-	Cable	Length	
				025	7.6 m (25 ft)	
			050	15.2 m (50 ft)		
				075	22.8 m (75 ft)	
ple Part Number				100	30.5 m (100 ft)	

Exam

3-27

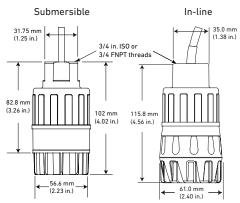
3-2750-3-050 pH/ORP Sensor Electronics, Submersible Gray Body with $^{3\!\!4}$ in. NPT threads and 50 ft of cable.

60-X-XXX						
	-	Туре	of el	ectron	lics	
		1	Sub	mersil	ole Gray Body, ¾ in. NPT threads	
		2	Sub	mersil	ole Gray Body, ¾ in. ISO threads	
		11	In-l	ine Yel	low Body, ¾ in. NPT threads	
		21	In-l	ine Yel	low Body, ¾ in. ISO threads	
			-	Cable	e Length	
				025	7.6 m (25 ft)	
	050 15.2 m (50 ft)					
075 22.8 m (75 ft)						
	100 30.5 m (100 ft)					

3-2722 BNC DryLoc Adapter

The 2722 DryLoc adapter is used to connect the Signet high temperature pH and ORP electrodes used in submersible applications to the 2750/2760 electronics.





General			
Operating Range	рН	0 to 14 pH	
	ORP	±2000 mV	
Electrical			
Power - 2750	12 to 24 VDC	±10%, regulated for 4 to 20 mA output	
	5 to 6.5 VDC	±5% regulated recommended, 3 mA max., for digital (S ³ L) output	
Accuracy -2750	±32 μΑ		
Resolution -2750	±5 μΑ		
Update Rate	0.6 seconds		
Max. Temperature/Pressure Rating			
Submersible	0 °C to 85 °C	32 °F to 185 °F	
In-line	0 °C to 110 °C	32 °F to 230 °F	

-				
0 to 95%, non-condensing				
(without electrode	e connected)			
-20 °C to 85 °C	-4 °F to 185 °F			
Shipping Weight				
0.75 kg 1.65 lb				
0.64 kg 1.41 lb				
Standards and Approvals				
CE, FCC				
RoHS compliant,	China RoHS			
Manufactured under ISO 9001 for Quality and ISO 14001 for Environmental Management and OHSAS 18001 for Occupational Health and Safety				
	(without electrode -20 °C to 85 °C 0.75 kg 0.64 kg rals CE, FCC RoHS compliant, Manufactured und ISO 14001 for Env OHSAS 18001 for			

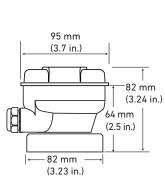
Systems >>



The 2505-XX has the Signet 2537 paddlewheel sensor electronics, mounted in the universal junction box. Use to easily upgrade paddlewheel sensors in the field. The electronics module mounts directly onto the pipe or wall, and is compatible with all GF and third party open collector output sensors with signal levels of 5 to 24 volts and output frequency up to 1000 Hz.

Refer to the Signet Measurement and Control Product Catalog for additional information regarding the 2537 technical specifications.

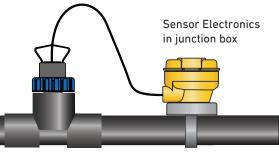
3 - 2 5 0 5 -	ХХ	
	Outpu	It Module Option
	1C	Pulse divider/flow switch/totalizer - Dry-contact relay
	2C	Pulse divider/flow switch/totalizer - Solid state relay
	5C	Digital (S³L) Output
Example Part Number	6C	Output Module Option 1C Pulse divider/flow switch/totalizer - Dry-contact relay 2C Pulse divider/flow switch/totalizer - Solid state relay 5C Digital (S ³ L) Output
3-2505-5C		



Sensor Electronics in Universal Junction Box,

Digital (S³L) Output.

Any Compatible Signet Flow Sensor (2536 shown)



Compatible Signet Flow Sensors 2000 2100 2507 2536 2540 2551 2552

Electr	ical				
Multi	With Dry-Contact Relay	24 VDC nominal, ±10%, regulated, 30 mA max current			
	With Solid-State Relay	6 V to 24 VDC, ±10%, regulated, 30 mA max current			
	Digital (S ³ L)	5.0 VDC min to 6.5 VDC max., 30 mA max current (1.5 mA nominal)			
	4 to 20 mA	400 mV max ripple voltage, 30 mA max current			
	Maximum Pulse Rate	300 Hz			
	Maximum Pulse Width	50 ms			
	Minimum Pulse Rate	0.5 Hz			
	Compatible with PLC, PC or similar equipment				
	Compatible with customer supplied metering pump				
Digita	l (S ³ L) Version	5 VDC nominal, regulated, 3 mA max current			
	Туре	Serial ASCII, TTL level 9600 bps			
	Max. Cable Length	Refer to Signet 8900 wiring specifications			
Compatible with M		l Signet 8900 Multi-Parameter Controller			
4 to 20 mA version Loop Accuracy Loop Resolution		12 to 32 VDC nominal, ±10%, regulated, 21 mA max current			
		±32 μA @ 25 °C @ 24 VDC			
		5 μΑ			
		±1μA per °C max.			

	Power Supply Rejection	±1µA per V		
	Max. Cable	305 m	1000 ft	
	Maximum Loop Resistance	600 Ω @ 24 VDC	1 KΩ @ 32 VDC	
	Load Impedance	375 Ω		
	se Polarity and Short Protected	Up to 40 V, 1 hour		
Over-v	oltage Protection	> 40 VDC over 1 ho	ur	
Relay	Specifications			
	Mechanical SPDT	5 A @ 30 VDC, 5 A (@ 250 VAC	
	Solid-State Relay	100 mA @ 40 VDC,	70 mA @ 33 VAC	
	Relay Modes	Low, High		
	Time Delay	0.0 to 6400.0 secor	nds	
	Hysteresis	Adjustable for exiting alarm condition		
Shippi	ng Weight			
		0.64 kg	1.41 lb	
Standa	ards and Approvals			
	CE, UL, NSF and FCC			
	China RoHS			
	Manufactured under ISO 9001 for Quality and ISO 14001 for Environmental Management and OHSAS 18001 for Occupational Health and Safety			

Level >>



The Signet i-Go 8058-3 Signal Converter converts a 4 to 20 mA signal to a Digital (S^3L) signal. This allows any third party device with a 4 to 20 mA output, to connect to the 9900 Transmitter (only accepts a Digital (S^3L) input).

The 9900 Transmitter's 4 to 20 mA option when used with the 8058-3, allows information from the 4 to 20 mA output of a device, to be visually displayed on the 9900.

The user can also customize the units and the description on the 9900 display. For example, when using the converter with the 2270 Level Sensor, the 9900 Transmitter can be configured to display signal and units of the level sensor output.

The Signet i-Go 8058-3 Signal Converter is designed to fit in the Relay Module slot of the 9900-1P Panel Mount Transmitters. The 8058-3 can be purchased individually or as a complete package, Signet 3-9900-1P-IGO, that includes the 9900-1P Transmitter.

If using the 8058-3 Signal Converter together with a Relay Module, the 8058-3 can be attached to the 9900 Transmitter using a hook and loop strip (supplied). The Relay Module adds two dry contact relays, SPDT. The relays and/or open collector in the 9900 can be used to indicate alarm conditions, including low alarm, high alarm, and proportional pulse.

3-8058-X

Signal Converter only

3 Single input converter; 4 to 20 mA output converted to a digital (S³L) output, for use with the 9900-1P only

3-9900-1P-IG0

9900 Panel Mount with 3-8058-3 i-GO® connector

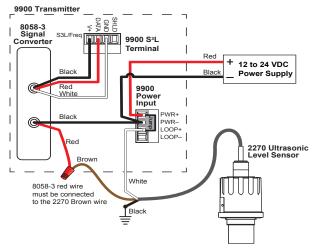
3-9900.399-X

Re	ar Enclosure	Signet Accessory Reference		
1	with hinged cover	159 001 834		
2 with flat cover		159 001 835		



3-8058-3 shown installed in 9900 transmitter





Refer to instruction sheet for wiring to other third party devices.



General	
Input	4 to 20 mA current loop, passive (external power required)
Input Range	3.6 to 22.1 mA
Output	Digital (S ³ L) output
Accuracy	± 32 μA @ 25 °C
Electrical	
Max. Voltage	35 VDC
Max. Current	40 mA
Isolation	Up to 48 VAC/DC
Voltage Drop	5 VDC max.
	Reverse polarity protected

Max. Recommended Cable Extensions				
	Loop in	300 m (1000 ft)		
Environmental				
Operating Ambi	ent Temperature	-10 °C to 55 °C	14 °F to 131 °F	
Storage Temper	rature	-20 °C to 85 °C	-4 °F to 185 °F	
Relative Humidi	ty	3-8058-3: 0 to 100%, condensing		
Shipping Weigh	t			
	3-8058-3	0.09 kg	0.20 lb	
Standards and Approvals				
		CE, FCC		
		RoHS compliant, China RoHS		

Integral Systems >>

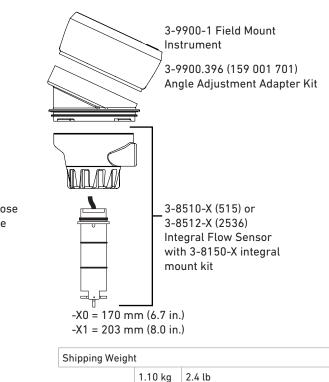
Paddlewheel Flow with 9900 Transmitter

3-	9900-1-851	ХХ	-X	
		Sensor/ Sensor Body Material/ Sensor Rotor/ Pin Material		
		0P	3-8510-PX/ Polypropylene/ Black PVDF/ Titanium	
	latarral	ОН	3-8510-HX/ Polypropylene/ Black PVDF/ Hastelloy-C	
	Integral Version of — 515 Je (3-9900.395)	0S	3-8510-SX/ Polypropylene/ Black PVDF/ Natural PVDF	
Can also be used with the Signet H-COMM Module (3-9900.3		٥V	3-8510-VX/ Natural PVDF/ Natural PVDF/ Hastelloy-C	
Can at MM Mo Signet H-COMM Mo		ОТ	3-8510-TX/ Natural PVDF/ Natural PVDF/ Natural PVDF	
Signet has combined the			3-8512-PX/ Polypropylene/ Black PVDF/ Titanium	
9900 SmartPro® Transmitter with the integral versions of the 515 (8510) and 2536 (8512) Paddlewheel Flow		2H	3-8512-HX/ Polypropylene/ Black PVDF/ Hastelloy-C	
sensors, to create integral systems that are easy to order and simple to	Integral Version of — 2536	25	3-8512-SX/ Polypropylene/ Black PVDF/ Natural PVDF	
install. Also available in conductivity, level, temperature, and pressure	2000	2V	3-8512-VX/ Natural PVDF/ Natural PVDF/ Hastelloy-C	
configurations, each integral system features a 9900 Transmitter which provides a local and easy to read		2Т	3-8512-TX/ Natural PVDF/ Natural PVDF/ Natural PVDF	
LCD display. The push button keypad makes it easy to navigate through the		-	- Pipe Size	
transmitter's menu.			0 ½ to 4 in	
The DC-powered 9900 features a scalable 4 to 20 mA output and open			1 5 to 8 in P1 versions only	

Example Part Number 3-9900-1-0P-0

9900 Transmitter with 8510-P0 paddlewheel sensor, polypropylene body, PVDF rotor and Titanium pin, for pipe size ½ to 4 in

See pages 4 and 5 to choose modified materials for the flow sensor.



Standards and Approvals

See individual product datasheet for approvals

purchased separately. See individual transmitter and sensor catalog pages for more information. Refer to Models 8510, 8512 and 9900 technical

Special order products may not meet all of the specifications of the standard sensor assemblies.

collector for process control.

The integral 9900 system is combined

with Signet's field-proven Models

8510 and 8512. These sensors

reliably perform in flow ranges from 0.3 to 6 m/s (1 to 20 ft/s) and 0.1 to

6 m/s (0.3 to 20 ft/s) respectively for

pipe sizes from 1/2 to 8 inches. They are available in a variety of materials

including polypropylene and PVDF

and are easily mounted in the pipe using Signet's comprehensive line of

Special only, not in the Signet Measurement and Control Product Catalog. Contact GF Signet for

Integral Mounts are available with all parts

specifications for more details.

conveniently assembled (transmitter, sensor, and

mounting kit). Alternatively, all three parts can be

standard fittings.

more information.

Ordering Notes

Integral Systems >>

Magmeter Flow with 9900 Transmitter



Signet has combined the 9900 SmartPro® Transmitter with the 2551 Magmeter Flow sensor to create integral systems that are easy to order and simple to install. Each integral system features a NEMA rated 4X/ IP65 9900 Transmitter, which provides a local and easy to read LCD display. The push button keypad makes it easy to navigate through the transmitter's menu. The 9900 comes complete with a six pin, waterproof connector (cable not included) to apply 12/24 VDC power and access the passive, scalable 4 to 20 mA output and an open collector relay for process control and data logging.

The integral 9900 system is combined with Signet's field-proven 2551 Magmeter. These sensors reliably perform in flow ranges from 0.05 to 10 m/s (0.15 to 33 ft/s) for pipe sizes from DN15 to DN900 ($\frac{1}{2}$ " to 36"). They are available in a variety of wetted materials including Polypropylene and PVDF with optional SS, Titanium or Hastelloy-C electrode material for maximum chemical compatibility. Electrodes are easily mounted in the pipe using Signet's comprehensive line of standard fittings.

Special only, <u>not</u> in the Signet Measurement and Control Product Catalog. Contact GF Signet for more information.

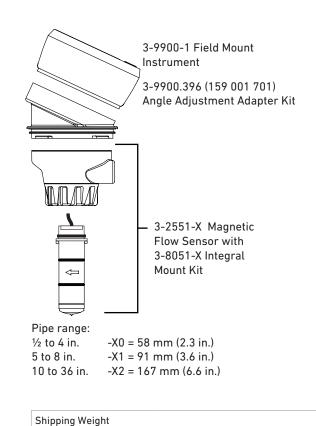
3-9900-2551-XX

Instrum	nent + Sensor / Pipe Size / Sensor Body
P0	3-9900-1 w/3-2551-P0 / DN15 to DN100 (1/2 to 4 in.) / Polypropylene and 316L SS
то	3-9900-1 w/3-2551-T0 / DN15 to DN100 (½ to 4 in.) / PVDF and Titanium
VO	3-9900-1 w/3-2551-V0 / DN15 to DN100 (½ to 4 in.) / PVDF and Hastelloy-C
P1	3-9900-1 w/3-2551-P1 / DN125 to DN200 (5 to 8 in.) / Polypropylene and 316L SS
T1	3-9900-1 w/3-2551-T1 / DN125 to DN200 (5 to 8 in.) / PVDF and Titanium
V1	3-9900-1 w/3-2551-V1 / DN125 to DN200 (5 to 8 in.) / PVDF and Hastelloy-C
P2	3-9900-1 w/3-2551-P2 / DN250 to DN900 (10 to 36 in.) / Polypropylene and 316L SS
Т2	3-9900-1 w/3-2551-T2 / DN250 to DN900 (10 to 36 in.) / PVDF and Titanium
V2	3-9900-1 w/3-2551-V2 / DN250 to DN900 (10 to 36 in.) / PVDF and Hastelloy-C

Example Part Number

3-9900-2551-VO

3-9900-1 Transmitter with 3-2551-V0 Magmeter Flow Sensor, PVDF and Hastelloy-C body, for pipe size DN15 to DN100 ($\rlap{W}{2}$ to 4 in.)



Shipping Weight			
	1.10 kg	2.4 lb	

Standards and Approvals

See individual product datasheet for approvals

Integral Systems >>

Conductivity with 9900 Transmitter



Signet has combined the 9900 SmartPro®Transmitter with conductivity and resistivity sensors to create integral systems that are easy to order and simple to install. Also available in flow, level, temperature and pressure configurations, each integral system features a 9900 Transmitter which provides a local and easy to read LCD display. The push button keypad makes it easy to navigate through the transmitter's menu. The DC-powered 9900 features a scalable 4 to 20 mA output and open collector for process control.

The integral system is offered with all GF Signet conductivity sensors with cell constants ranging from 0.01 to 20. These sensors are field proven and reliably perform in ranges from $18.2 \text{ M}\Omega (0.055 \,\mu\text{S})$ to $400,000 \,\mu\text{S}$. They are ideal for installation into standard pipes via the 34 inch sensor threaded (NPT or ISO) process connection. The sensors are available with 316 stainless steel and PVDF wetted materials.

Special only, <u>not</u> in the Signet Measurement and Control Product Catalog. Contact GF Signet for more information.

Ordering Notes

Integral Mounts are available with all parts conveniently assembled (transmitter, sensor, and mounting kits). Alternatively, all three parts can be purchased separately. See individual instrument and sensor catalog pages for more information. Refer to Models 2839, 2840, 2841, 2842, and 9900 technical specifications for more details.

Shipping Weight				
	1.10 kg	2.4 lb		
Standards and Approvals				
See individual product datasheet for approvals				

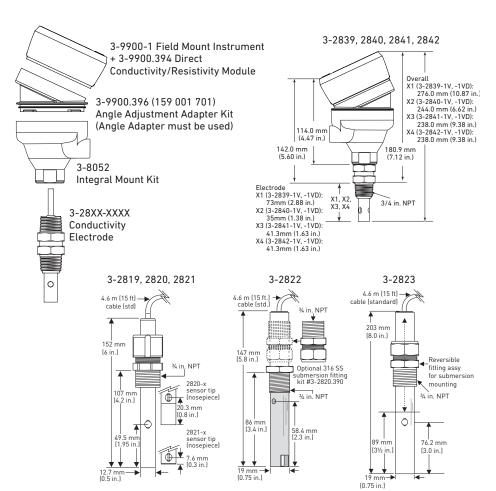
3-9900-1-XXXX - Sensor/Cell Constant/Threads 19DS 3-2819 Stainless Steel/

19DS	3-2819 Stainless Steel/ 0.01 cm ⁻¹ / ¾ in. NPT
19DT	3-2819 Titanium/ 0.01 cm ⁻¹ / ¾ in. NPT
20DS	3-2820 Stainless Steel/ 0.1 cm ⁻¹ / ¾ in. NPT
20DT	3-2820 Titanium/ 0.1 cm ⁻¹ / ¾ in. NPT
21DS	3-2821 Stainless Steel/ 1.0 cm ⁻¹ / ¾ in. NPT
21DT	3-2821 Titanium/ 1.0 cm ⁻¹ / ¾ in. NPT
22-1S	3-2822 Stainless Steel/ 10.0 cm ⁻¹ / ¾ in. NPT
23-1S	3-2823 Stainless Steel/ 20.0 cm ⁻¹ / ¾ in. NPT
39V	3-2839-1/ 0.01 cm ⁻¹ / ¾ in. NPT
40V	3-2840-1/ 0.1 cm ⁻¹ / ³ /4 in. NPT
41V	3-2841-1/ 1.0 cm ⁻¹ / ¾ in. NPT
42V	3-2842-1/ 10.0 cm ⁻¹ / ¾ in. NPT
39VD	3-2839-1D/ 0.01 cm ⁻¹ / ISO 7/1-R ³ / ₄
40VD	3-2840-1D/ 0.1 cm ⁻¹ / ISO 7/1-R ¾
41VD	3-2841-1D/ 1.0 cm ⁻¹ / ISO 7/1-R ¾
42VD	3-2842-1D/ 10.0 cm ⁻¹ / ISO 7/1-R ¾

Example Part Number

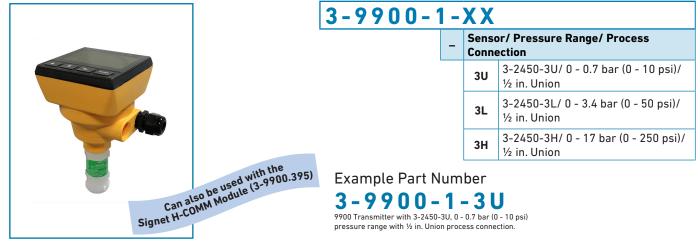
3-9900-1-40VD

9900 Transmitter with 3-2840-1D sensor with a Cell constant of 0.1 cm-1, ISO 7/1-R % threads.



Integral Systems >>

Pressure with 9900 Transmitter



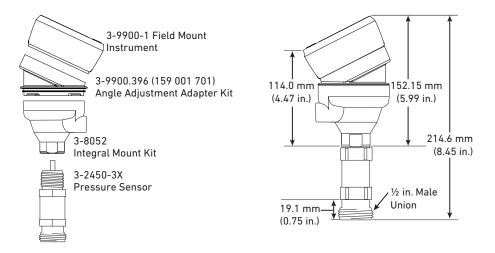
Signet has combined the 9900 SmartPro® Transmitter with the 2450 Pressure sensors to create integral systems for level applications that are easy to order and simple to install. Also available in conductivity, temperature, and flow configurations, each integral system features a 9900 Transmitter which provides a local and easy to read LCD display. The push button keypad makes it easy to navigate through the transmitter's menu. The DC-powered 9900 features a scalable 4 to 20 mA output and open collector for process control.

The integral system offers a local display, a scalable 4 to 20 mA output and open collector for process control. A 2450 Pressure sensor with wetted materials of ceramic and PVDF installs into a ½" union fitting. The 2450 Pressure sensor is offered in three pressure ranges which could also be used as a hydrostatic level for tank level management.

Special only, <u>not</u> in the Signet Measurement and Control Product Catalog. Contact GF Signet for more information.

Ordering Notes

Integral Mounts are available with all parts conveniently assembled (transmitter, sensor, and mounting kit). Alternatively, all three parts can be purchased separately. See individual transmitter and sensor pages for more information.



Sensor can be mounted through the side of a tank for hydrostatic level measurement. **Tip:** Add a ball valve to isolate the sensor from the tank to allow the removal of the sensor for service.

It is not recommended to use the 2450 Pressure sensor mounted inside a tank. For all tank installations where the sensor is mounted inside a tank, use 2250 Hydrostatic Level Sensor only.

Pressure/Level Ranges:			
3-2450-3U 0 to 10 psi = 0 to 7.03 meters = 0 to 23.06 ft			
3-2450-3L	0 to 50 psi = 0 to 35.15 meters = 0 to 115.32 ft		

Shipping Weight						
	1.10 kg 2.4 lb					
Standards and Approvals						
See individual product datasheet for approvals						

Integral Systems >>

Temperature with 9900 Transmitter



Signet has combined the 9900 SmartPro[®] Transmitter with the 2350 Temperature sensors to create integral systems that are easy to order and simple to install. Also available in conductivity, flow, level, and pressure configurations, each integral system features a 9900 Transmitter which provides a local and easy to read LCD display. The push button keypad makes it easy to navigate through the transmitter's menu.

The DC-powered 9900 features a scalable 4 to 20 mA output and open collector for process control.

The integral system is offered with a Signet 2350 Temperature sensor and is available in a range of -10 °C to 100 °C (14 °F to 212 °F). Sensor installation is achieved into standard pipes via the 3/4 inch threaded NPT process connection. The sensor is available with PVDF as a wetted material.

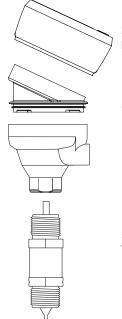
Ordering Notes

The Integral Mount is available with all parts conveniently assembled (instrument, sensor, and mounting kit). Alternatively, all three parts can be purchased separately. See individual transmitter and sensor pages for more information.

3-9900-1-X _ Sensor / Description 3-2350-1 / 4 to 20 mA and one open collector + digital (S³L) temperature sensor, 1 3/4 in. NPT threads 3-2350-1 / 4 to 20 mA and one open 2 collector + digital (S³L) temperature sensor, 1/2 in. union process connector **Example Part Number**

3-9900-1-1

9900 Transmitter with 3-2350-1 temperature sensor with 4 to 20 mA and digital (S³L) output plus one open collector output

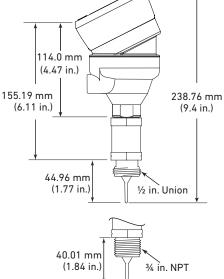


3-9900-1 Field Mount Instrument

3-9900.396 (159 001 701) Angle Adjustment Adapter Kit

3-8052 Integral Mount Kit

3-2350-1 **Temperature Sensor**



Shipping Weight					
1.10 kg 2.4 lb					
Standards and Approvals					
See individual product datasheet for approvals					

Dissolved Oxygen >>



Rail mount adapter, extension pipes and float assembly for Dissolved Oxygen, pH, ORP, and Conductivity sensors.

The rail mount adapter has a dual pivot point which allows any GF Signet sensor pipe assembly (sold separately) to move, both vertically and horizontally, over an open channel, tank, or process weir. Once the sensor is brought out of the solution vertically, a safety pin locks the sensor into position, and the horizontal axis is used to swing the sensor assembly safely outside the process area for maintenance and cleaning. Manufactured out of SS for corrosion resistance.

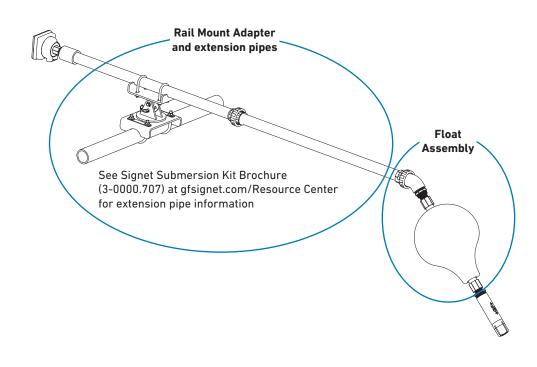
The GF Signet float assembly allows any Signet electrode to be placed into a process at a specific depth. The float comes complete with a 1 inch male NPT nipple assembly, which threads into a customer supplied piping system.

Call the factory for ISO piping requirements.

Special only, <u>not</u> in the Signet Measurement and Control Product Catalog. Contact GF Signet for more information.

3-2610.XXX			
3-2610.312		Rail Mount Adapter and extension pipes for Dissolved Oxygen, pH, ORP, and conductivity sensors	
	3-2610.FLT	Float assembly for Dissolved Oxygen, pH, ORP, and conductivity sensors	

Example Part Number **3 - 2 6 1 0 . 3 1 2** Rail Mount adapter and extension pipes

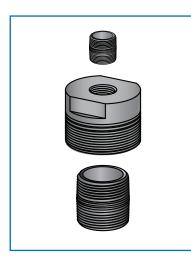


Shipping Weight Contact factory

Special order products may not meet all of the specifications of the standard sensor assemblies.

www.gfsignet.com

Dissolved Oxygen >>



2610 Dissolved Oxygen/ 9900 Adapter Kit (3-2610.390)

The adapter kit allows a 9900 to be installed right on the 3-2610-41 sensor assembly to measure dissolved oxygen in a pressurized piping system. The kit includes a (¾" NPT closed nipple, 1¼" NPT closed nipple and D0 threaded pipe adapter). The Signet 2610 Process Optical Dissolved Oxygen sensor is sold separately. Check the specification of the 2610 D0 sensor for pressure limitations.

DO Sensor Air-Blast

Acetal, SS set screw

DO Anti Fouling Guard (3-2610-81300)

Reduces

Attach an air blast adapter to

the DO sensor and a 20 psi air

source using a ¼" OD tube, this

allows the sensor to be cleaned. A 60 second blast every four hours extends the length of time between overall maintenance and cleaning. Wetted material:

biological

while improving measurement accuracy and extends the length

of time between cleaning of the sensor. Simply attach the copper guard onto the front of the sensor. It is recommended the guard be replaced every 6 months. Wetted material: Delrin, high purity copper

fouling

(3-2610-81950)





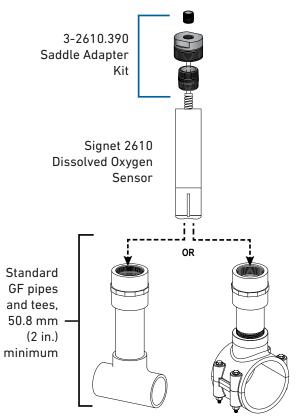
Example Part Number **3 - 26 10.390** D0 sensor pipe adapter kit

Example Part Number **3 - 2 6 1 0 . 8 1 9 5 0** D0 sensorAir-Blast

Example Part Number **3 - 2610.81300** D0 sensor Anti Fouling Guard

Example Part Number **3 - 26 10.101 - 01** ^{3 in saddle assembly}

Special only, <u>not</u> in the Signet Measurement and Control Product Catalog. Contact GF Signet for more information.



Adapters, Saddles and Tees

Adapters, Tees and Saddles GF Signet has a line of tees and saddle assemblies in PVC and CPVC for pipes ranging 2 inch to 8 inches, to allow inline measuring of dissolved oxygen.

Mfr. Part No.	Description	
3-2610.100	2 inch Tee Assembly, PVC	
3-2610.101-01	3 in. Saddle Assembly	
3-2610.101-02	4 in. Saddle assembly	
3-2610.101-03	6 in. Saddle Assembly	
3-2610.101-04	8 in. Saddle Assembly	

Shipping Weight		
	Contact the factory	
Standards and Approvals		
	CE	

Instruments and Misc. >>



Use the 3-2450-A PVC adapter to install a 3-2450-X ½ in. union pressure sensor into a ¾ inch NPT female pipe nipple.

Special only, <u>not</u> in the Signet Measurement and Control Product Catalog. Contact GF Signet for more information.

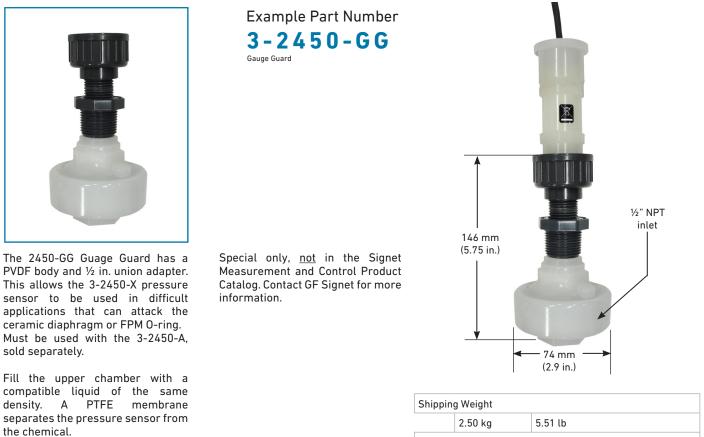


Adapter for the 2450 pressure sensor



3-2450-A ½ in. union to ¾ in. NPT adapter - PVC material

Shipping Weight			
0.46 kg 1.01 lb			
Standards and Approvals			
CE			



Standards and Approvals

CE

Special order products may not meet all of the specifications of the standard sensor assemblies.

www.gfsignet.com

ASTM/Metric Pipe Saddles >>

Schedule 52 and Metric Ductile Iron K9 Type



The Signet IR5S and IR5MD Strap-on Iron Saddles are especially recommended where large taps are required.

The Signet Strap-on Iron Saddles have a ductile iron body per ASTM A536. The saddles have an outlet for the service connection that allows the NPT thread of the 2552 Magmeter or 3719 pH/ORP Wet-Tap assembly to be tapped into it. Sensors and Wet-Tap sold separately.

The gasket is made of Nitrile (Buna) and NSF 61 listed and has a temperature range of -29 °C to 82 °C (-20 °F to +180 °F).

IR5D-XXX-X

Ductile Iron Service Saddle for ductile iron pipes, with insert for flow sensor (USA) $% \left(\left(\mathsf{USA}\right) \right) \right)$

Pipe Siz	Pipe Size - saddle and size/OD/Wall thickness				
035	3 $\frac{1}{2}$ in. saddle, 3.74 to 4.13 in./ OD = 3.96 in./0.25 in.				
040	4 in. saddle, 4.74 to 5.14 in./ OD = 4.80 in./0.29 in.				
060	6 in. saddle, 6.84 to 7.6 in./ OD = 6.9 in./0.31 in.				
080	3 in. saddle, 8.54 to 10.10 in./ OD = 9.05 in./0.33 in.				
100	10 in. saddle, 10.64 to 12.12 in./ OD = 11.10 in./ 0.35 in				
120	12 in. saddle, 12.62 to 14.32 in./ OD = 13.20 in./0.37 in				
140	14 in. saddle, 14.73 to 15.65 in./ OD = 15.30 in./0.39 in				
160	16 in. saddle, 17.25 to 17.80 in./ OD = 17.40 in./0.40 in				
180	18 in. saddle, 19.38 to 19.68 in./ OD = 19.50 in./0.41 in				
200	20 in. saddle, 21.55 to 21.65 in./ OD = 21.60 in./0.42 in				
240	24 in. saddle, 25.75 to 25.85 in./ OD = 25.80 in./0.44 in				
300	30 in. saddle, 31.75 to 32.50 in./ OD = 32.00 in./0.47 in.				
	- Service port access				

		·	£	£1	
-	with	Insert	tor	TIOW	sensor

A 1 ¹ / ₄ in. NPT - use with 3-2552-2X or 351

B 1¹/₂ in. NPT - use with 3-2552-3X or 3519

IR5MD-XXX-X

	Iron Service Saddle (K9 type) for ductile iron pipes with insert for flow sensor (EU)								
Pipe Size - saddle and size/ OD/ Wall thickness									
	040	K-9 saddle, DN 40/ OD = 56 mm (2.205 in.)/ 6 mm (0.236 in.)							
	050 K-9 saddle, DN 50/ OD = 66 mm (2.598 in.)/ 6 mm (0.236 in.)								
	060	060 K-9 saddle, DN 60/ OD = 77 mm (3.03 in.)/ 6 mm (0.236 in.)							
	065	K-9	9 sad	dle, DN 65/ OD = 82 mm (3.23 in.)/ 6 mm (0.236 in.)					
	080	K-9 saddle, DN 80/ OD = 98 mm (3.86 in.)/ 6 mm (0.236 in.)							
	100	K-9 saddle, DN 100/ OD = 118 mm (4.65 in.)/ 6 mm (0.236 in.)							
	125	K-9 saddle, DN 125/ OD = 144 mm (5.67 in.)/ 6 mm (0.236 in.)							
	150	K-9 saddle, DN 150/ OD = 170 mm (6.69 in.)/ 6 mm (0.236 in.)							
	200	K-9	9 sad	dle, DN 200/ OD = 222 mm (8.74 in.)/ 6.3 mm (0.248 in.)					
	250	K-9	9 sad	dle, DN 250/ OD = 274 mm (10.8 in.)/ 6.8 mm (0.268 in.)					
	300	K-9	9 sad	dle, DN 300/ OD = 326 mm (12.84 in.)/ 7.2 mm (0.283 in.)					
350 K-9 saddle, DN 350/ OD = 378 mm (14.88 in.)/ 7.7 mm (0									
	400 K-9 saddle, DN 400/ OD = 429 mm (16.89 in.)/ 8.1 mm (0.319								
		-	Ser	vice port access					
			-	with insert for flow sensor					
			Α	1¼ in. NPT - use with 3-2552-2X or 3519					

B 1¹/₂ in. NPT - use with 3-2552-3X or 3519



Ductile Iron Strap-on saddle, metric K-9 saddle, for DN 60 pipe, with insert for flow sensor

ASTM/Metric Pipe Saddles >>

Schedule 40 and 80



The Signet IR4S and IR8S Strap-on Iron Saddles are especially recommended where large taps are required.

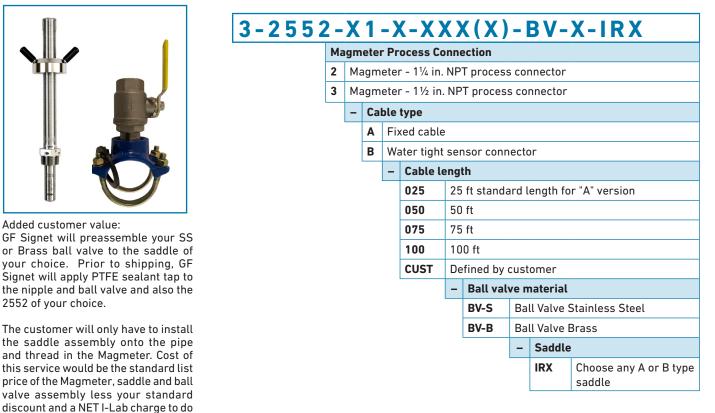
The Signet Strap-on Iron Saddles have a ductile iron body per ASTM A536. The saddles have an outlet for the service connection that allows the NPT thread of the 2552 Magmeter or 3719 pH/ORP Wet-Tap assembly to be tapped into it.

The gasket is made of Nitrile (Buna) and NSF 61 listed and has a temperature range of -29 °C to 82 °C (-20 °F to 180 °F).

IR								
	Iron Service Saddle							
	Pipe	Schedule	e – In	on Service Saddle				
	4S	Schedul	e 40	pipe				
	8S	Schedul	e 80					
Pipe Siz			e - C	D/Wall thickness				
		140	14 in. Pipe (OD = 12.62 in. to 14.32 in./320 to 363 mm)					
		160	16 in. Pipe (OD = 15.95 in. to 17.25 in./405 to 438 mm)					
		180	18 in. Pipe (OD = 17.40 in. to 18.00 in./442 to 478.5 mm)					
		200	20 in. Pipe (OD = 19.25 in. to 20.00 in./489 to 508 mm)					
		240	24	in. Pipe (OD = 23.75 in. to 24.50 in./603 to 622 mm)				
			Inle	et Size				
			-	with insert for flow sensor				
			Α	1¼ in. NPT - use with 3-2552-2X or 3519				
			В	1½ in. NPT - use with 3-2552-3X or 3519				

Example Part Number IR4S180A

Iron Strap-on saddle, schedule 40 pipe, for 18 inch pipe 1¼ inch NPT inlet.



Example Part Number

3-2552-21-A-050-BV-S-IRX Magmeter, 1 ¼ in. NPT process connection, with digital (S³L) output, 50 feet of cable, a Stainless Steel ball valve and saddle

The customer will only have to install the saddle assembly onto the pipe and thread in the Magmeter. Cost of this service would be the standard list price of the Magmeter, saddle and ball valve assembly less your standard

Added customer value:

2552 of your choice.

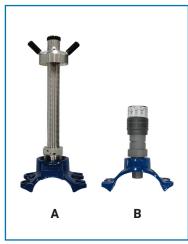
Refer to the Signet Measurement and Control Product Catalog for additional 2552 information.

Special order products may not meet all of the specifications of the standard sensor assemblies.

the assembly work.

ASTM/Metric Pipe Saddles >>

Schedule 40 and 80



The Signet IR4S and IR8S Strap-on Iron Saddles are especially recommended where large taps are required.

The Signet Strap-on Iron Saddles have a ductile iron body per ASTM A536. The saddles have an outlet for the service connection that allows the NPT thread of the 2552 Magmeter or 3719 pH/ORP Wet-Tap assembly to be tapped into it.

The gasket is made of Nitrile (Buna) and NSF 61 listed and has a temperature range of -29 °C to 82 °C (-20 °F to 180 °F).

IRXXXXX										
	Iron	Service Saddle								
	Pipe	n Service Saddle								
	4S	Schedule	Schedule 40 pipe							
	85	Schedule	e 80							
		Pipe Size	e - 0	D/Wall thickness						
		020	12	in. Pipe (OD = 2.35 in. to 2.56 in./59.69 to 65.0 mm)						
		025	2.5	2.5 in. Pipe (OD = 2.44 in. to 2.91 in./62 to 74 mm)						
030			3 in. Pipe (OD = 2.97 in. to 3.54 in./75.4 to 90.0 mm)							
		040	4 in. Pipe (OD = 4.40 in. to 4.80 in./111.76 to 121.9 mm)							
		050	5 in. Pipe (OD = 5.00 in. to 5.63 in./127 to 143 mm)							
		060	6 in. Pipe (OD = 5.94 in. to 6.70 in./151 to 170 mm)							
		080	8 in. Pipe (OD = 7.96 in. to 8.72 in./202.2 to 221 mm)							
		100	10 in. Pipe (OD = 10.64 in. to 12.12 in./270.2 to 308 mm)							
120			12 in. Pipe (OD = 12.62 in. to 14.32 in./320.5 to 363.7 mm)							
			Inlet Size							
			Α	1¼ in. NPT - use with 3-2552-2X or 3519						
			в	1½ in. NPT - use with 3-2552-3X or 3519						
				·J						

Example Part Number

Iron Strap-on saddle, schedule 80 pipe, for 8 inch/202mm pipe 1 % inch NPT inlet.

ASTM/Metric Pipe Saddles >>

Schedule 40



The A and B versions of the Weld-on Weldolet allow easy installation of the 3-2552 and 3-3719 pH/ORP Wet-Tap assembly into metal piping systems. The C version allows standard insertion sensors to be used. These products are available in Brass, Stainless Steel and Carbon Steel.

Smaller Weld-on Weldolet sizes are available.

WARNING:

Verify the pipe ID, OD, wall thickness and the sensor to be used in the application. Contact GF Special products for assistance in verifying proper system selection.

Weld-on Weldolet **Threadolet Material** CS4 Carbon Steel, Schedule 40 BR4 Brass, Schedule 40 CR4 Stainless Steel, Schedule 40 **Special Feature** 140 14 in. Pipe - Call for metric size pipes 160 16 in. Pipe - Call for metric size pipes 180 18 in. Pipe - Call for metric size pipes 200 20 in. Pipe - Call for metric size pipes 240 24 in. Pipe - Call for metric size pipes **Inlet Size** - Insert for flow sensor **A** 1¼ in. NPT (2552-2 or 3519) 1½ in. NPT (2552-3 or 3519) В

Example Part Number

Threaded weldolet, carbon steel, schedule 40, 14 in. pipe, 1¼ in. NPT inlet.



Shippin	g Weight	
	0.50 kg (approx.)	1.10 lb (approx.)

ASTM/Metric Pipe Saddles >>



The Weld-on Weldolet allow easyinstallation of the 3-2552 and 3-3719-11 pH/ORP Wet-Tap assembly into metal piping systems. These products are available in Stainless Steel, Carbon Steel and Brass.

Smaller Weld-on Weldolet sizes are available.

WARNING:

Verify the pipe ID, OD, wall thickness and the sensor to be used in the application. Contact GF Special products for assistance in verifying proper system selection.

Choose: 2129-9XXX (Carbon Steel), 2149-9XXX (Stainless Steel) or 2189-9XXX (Brass)

	-								
Stain	Stainless Steel								
U	se with 2552-21								
202	2 in. Threadolet, 1 ¼ in. NPT connection								
204	4 to 5 in. Threadolet, 1 $\frac{1}{4}$ in. NPT connection								
291	6 in. (153 mm) weldolet, 1 ¼ in. NPT connection								
292	8 to 10 in. (203 to 254 mm) weldolet, 1 ¼ in. NPT connection								
294	12 to 18 in. (305 to 457 mm) weldolet, 1 ¼ in. NPT connection								
295	20 to 36 in. (508 to 915 mm) weldolet, 1 ¼ in. NPT connection								
296	38 in. (965 mm) weldolet, 1 ¼ in. NPT connection								
U	se with 2552-33 or 3-3719-11								
091	6 in. (153 mm) weldolet, 1 ½ in. NPT connection								
092	8 to 10 in. (203 to 254 mm) weldolet, 1 ½ in. NPT connection								
094	12 to 18 in. (305 to 457 mm) weldolet, 1 $\frac{1}{2}$ in. NPT connection								
095	20 to 36 in. (508 to 915 mm) weldolet, 1 ½ in. NPT connection								
096	38 in. (965 mm) weldolet, 1 ½ in. NPT connection								

Example Part Number 2189-9091 Brass

Threaded weldolet, brass, for a 6 in. pipe, 11/2 in. NPT connection.



Shipping Weight

0.50 kg (approx.)

1.10 lb (approx.)

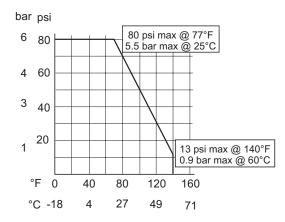
ASTM/Metric Pipe Saddles >>

PVC Saddle, ASTM/Metric pipe sizes, glue-on, PSI rated 5.5 bar (80 PSI)



A full line of PVC glue on saddle for large pipes. Proper installation requires the customer to provide and install straps after gluing to meet the 80 psi pressure rating.

Saddles are available to allow all GF Signet flow sensors or 3719 pH Wet-Tap assembly to be installed into PVC piping systems.



PV8SXX-X										
		Pip	pe Size - ASTM PVC Saddles							
	10 Schedule 80, 10 in. (OD = 10.75 in. X 0.596 in. wall									
		12	Schedule 80, 12 in (0D = 12.75 in. x 0.687 in. wall)							
		14	So	Schedule 80, 14 in. (OD = 14.00 in. x 0.750 in. wall)						
		16	So	chedu	le 80, 16 in. (OD = 16.00 in. x 0.843 in. wall)					
		18	So	chedu	le 80, 18 in. (OD = 18.00 in. x 0.938 in. wall)					
		20	So	chedu	le 80, 20 in. (OD = 20.00 in. x 1.031 in. wall)					
		24	So	chedu	le 80, 24 in. (OD = 24.00 in. x 1.219 in. wall)					
	- Service port size				vice port size					
				- with insert for flow sensor						
				A 1¼ in. NPT for 2552-2 X						
				В	B 1½ in. NPT for 2552-2X or 3519					
				С	2.0 in NPT for 3519					
IPS	IPSXXX-X									
	Pipe	e Siz	ze Metric PVC Saddles							
	11	0	PVC IPS 110 mm pipe							
	35	0	PVC IPS 350 mm pipe							
	40	0	P٧	C IPS	400 mm pipe					
	45	0	PVC IPS 450 mm pipe							

Example Part Number IPS450-C

500

550

600

-

-

Α

В

С

PVC IPS 500 mm pipe

PVC IPS 550 mm pipe

PVC IPS 600 mm pipe

Service port size

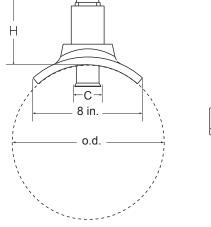
with insert for flow sensor

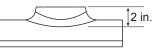
11/2 in. NPT for 2552-2X or 3519

1¼ in. NPT for 2552-2 X

2.0 in NPT for 3519

PVC glue-on saddle, IPS 450 mm pipe, with insert for flow sensor.







Straps used during installation

Special order products may not meet all of the specifications of the standard sensor assemblies.

www.gfsignet.com

ASTM/Metric Pipe Saddles >>

Vinyl ester resin fiberglass saddles



Metric fiberglass saddles are manufactured from corrosion resistant epoxy vinyl ester, polyester, isophthalic, epoxy and furan resins. ASTM E-84 Class 1 flame spread and low smoke resins are also available where applications require their use.

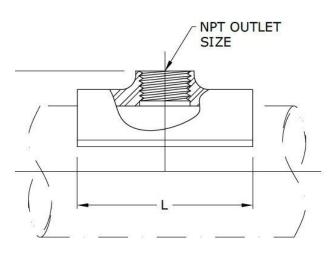
Our standard resin systems allow operating temperatures to 200 $^\circ\text{F},$ with higher temperatures of 250 $^\circ\text{F}$ and 300 $^\circ\text{F}$ available.

Ultraviolet inhibitor and waxcoat in the external layers are standard on all fiberglass saddles.

FPSXX(X)-X								
	Pipe S	ize - MUST supply OD, ID and Wall Thickness when ordering						
	20	2 in. Fiberglass Pipe						
	30	3 in. Fibe	rglass Pipe					
	40	4 in. Fibe	rglass Pipe					
	60	6 in. Fiberglass Pipe						
	80	8 in. Fiberglass Pipe						
	100	10 in. Fiberglass Pipe						
	120	12 in. Fib	erglass Pipe					
	140	14 in. Fib	erglass Pipe					
		Service p	ort access					
		- with i	insert for flow sensor					
		A 1¼ in. SS NPT insert for 2552-2 X (NOT available for 14 in. pipe)						
			n. SS NPT insert for 2552-3X or 3519 available for 14 in. pipe)					

Example Part Number **F P S 1 0 0 - A**

Vina\yl ester resin fiberglass saddle, for a 10 in. fiberglass pipe, 1% in. NPT insert for 2552-2X.





Straps used during installation

Instruments and Misc. >>

OEM Version, Chlorine and Chlorine Dioxide Systems



The OEM version of the 4630 chlorine panel family is to incorporate the GF Signet Chlorine panel design into your own control panel or skid. Complete with the standard flow cell rated up to 120 psi (8 bar), with intergrated pressure regulator, VAFM and isolation valves, inlet, effluent and sample port.

Free chlorine or Chlorine dioxide electronics (2650-7) and optional pH electronics (2750-7) are supplied with 15 ft. (4.6 m) cable to allow flexible design and separation between the 8630 transmitter and flow cell. 8630 transmitter can be powered directly with 12 to 24 volts DC or use a 7300 series power supply for AC powered applications. Comes with a Chlorine Sensor and optional pH electrode.

3-463X-X-X								
	Chlorine/Chlorine Dioxide Systems - OEM							
	0	Fr	ee C	Chlo	rine	9		
	2	Ch	lori	ne [Diox	ide		
- Range								
			1	0.0	02 to	o 2 PPM		
			2	0.0	05 to	o 5 PPM		
			3	0.1	1 to	20 PPM		
				-	Op	tions		
					0	No pH electrode		
1 With pH electrode								
Example Part Number								

3-4632-2-1

OEM Chlorine Dioxide system, 0.05 to 5 PPM, with pH electrode.



General			Operating Te	mperature	0 °C to 45 °C	32 °F to 113 °F		
Materials			Electrical					
Flow Cell	Acrylic		DC Input -	DC Input - 12 to 24 VDC ±10% regulated,				
Wiring Enclosure	Polycarbonate		Standard Co	Standard Configuration		250 mA max.		
Max. Temperature/Press	sure Rating		AC Input - Optional Configuration		100 to 240 VAC nominal 50 to 60 Hz, 0.17A at 100 VAC			
System Inlet Pressure Rating	1 to 8 bar	15 to 120 psi	Shipping Wei	5				
Pressure Regulator	< 0.69 bar (10 psi) v	ariation over all			10 kg	22 lb		
· · · · · · · · · · · · · · · · · · ·	ranges of flow and p		Standards and Approvals					
Flow Tolerance	Flow Tolerance ± 15% or rated specification above			CE, UL, CUL				
Flow Rate Limits	30.24 to 45.36 LPH 8 to 12 US gal/h			China RoHS				
Storage Temperature	0 °C to 65 °C	32 °F to 149 °F			ed under ISO 9001 or Environmental N	,		

Special order products may not meet all of the specifications of the standard sensor assemblies.

Instruments and Misc. >>



The 4150-DL is a simple to use data logger that can be easily installed onto the back of the 4150 power supply. The data logger is mounted in a splashproof enclosure which comes complete with software that allows the capability to download data to any laptop in a comma separated value (CSV) format.

Special only, <u>not</u> in the Signet Measurement and Control Product Catalog. Contact GF Signet for more information.



3-4150.24017S Power Supply



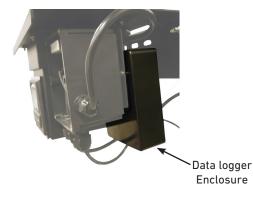
3-4150-20111 Power Supply Kit

Example Part Number **3 - 4 1 5 0 - D L**

Data Logger for the 4150 Turbidimeter

Datalogger for the 4150 Turbidimeter





Other Turbidity Special Order Products

Mfr. Part No. Code		Description				
3-4150-24017S	-	Power Supply 120/220 VAC				
3-4150-20111	-	Power Supply kit - installed by customer				
3-4150.381	159 001 613	Replacement desiccant cap with gasket				
3-4150-TU0805B20	159 301 006	Tubing 8mm X 5 mm (5/16 X 3/16) water supply and drain, 10m (32ft), influent/effluent 10 m (32 ft)				

Shipping Weight						
	0.68 kg 1.50 lb					
Stan	Standards and Approvals					
	CE					

Instruments and Misc. >>



3-4150.53XXX NTU Standard



3-4150.2833X Solid Validation Standard (low or mid NTU available)



3-4150.FICell Flow Cell

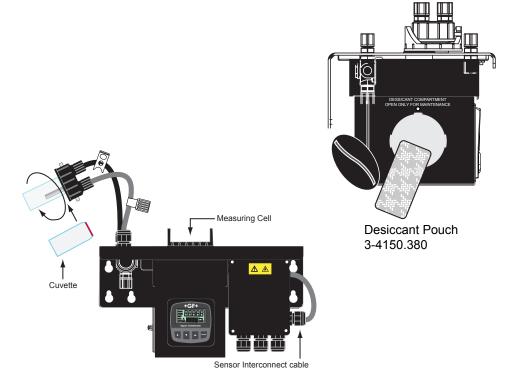


3-4150.21228 Red O-ring for flow cell

3-4150.XXXXX					
	53090	0.02 NTU Standard, 125 ml			
	53240	0.02 NTU Standard, 500 ml			
	53030	0.02 NTU Standard, 1 liter			
	39825	10.0 NTU Standard, 125 ml			
	53260	10.0 NTU Standard, 500 ml			
	53000	10.0 NTU Standard, 1 liter			
	28335	ProCheck-S Solid Validation Standard, low NTU value			
	28336	ProCheck-S Solid Validation Standard, mid NTU value			
	21228	Red O-ring, Cuvette to flow cell (5 total)			
	-FlCell	Flow Cell only. No Cuvette or Tubing kit			

Example Part Number

3 - 4 1 5 0 . 2 1 2 2 8 Red O-rings, Cuvette to flow cell, 5 total.



Shipp	ping Weight
	Contact factory
Stand	dards and Approvals
	See Signet Measurement and Control Product Catalog

Instruments and Misc. >>



Free Chlorine or Chlorine dioxide calibration kits

DPD kit:

Required to properly support the Signet Free Chlorine and Chlorine Dioxide Amperometric Sensor panel assemblies

- EPA approved method to test Free Chlorine.
- Used for initial startup and calibration of the 3-463X chlorine panels
- Use after maintenance/service of the 3-263X series Free Chlorine sensors
- Assist in system troubleshooting
- 100 reagent test dispenser and thermometer sold separately

Special only, <u>not</u> in the Signet Measurement and Control Product Catalog. Contact GF Signet for more information.

General			
Range	0 - 10 mg/l		
Method	EPA Approved - DPD		
Resolution			
	0.01 ppm for 0 - 6 ppm		
	0.1 ppm for 6 - 10 ppm		
Measurement	1 cm path length		
Accuracy			
	2% 0 -6 ppm		
	10% 6 -10 ppm		
Response Time	3 seconds		
Power Supply	4 - AAA alkaline batteries (up to 1000 tests)		
Display	7 segment bright vision LCD		

Certification	CE				
Light Source	Longlife LED - 515 mm				
Sample Size	3 ml				
Enclosure	IP67, waterproof at 1 m for 30 minutes				
Shipping Weight					
Photometer	1.00 kg	2.2 lb			
Reagent Dispenser	0.23 kg	0.50 lb			
Thermometer	0.12 kg	0.26 lb			
Standards and Approvals					
	CE				

3-263X.XXX

-2038.888			
	0.683	Free Chlorine photometer 0 -10 ppm	
	0.684	FCL Reagent Dispenser - 100 test	
	0.385	Thermometer	
	2.686	Chlorine Dioxide Photometer 0 -10 ppm	
		·	

Example Part Number

3-2632.686

Calibration Kit with Chlorine Dioxide Photometer 0 -10 ppm

FCL Reagent Dispenser

Thermometer



SSC-737 G

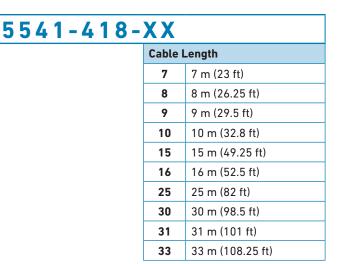
Instruments /Misc. >>



Extended length cable for the 2552-"B" series Magmeter.

These molded waterproof cable assemblies can be ordered in different lengths to support long distance connections to the transmitter or data logging device. The removable connector allows the Magmeters to be easily removed from its location for servicing without having to remove the total length of cable from a conduit.

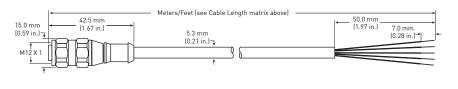
Special only, <u>not</u> in the Signet Measurement and Control Product Catalog. Contact GF Signet for more information.



Example Part Number

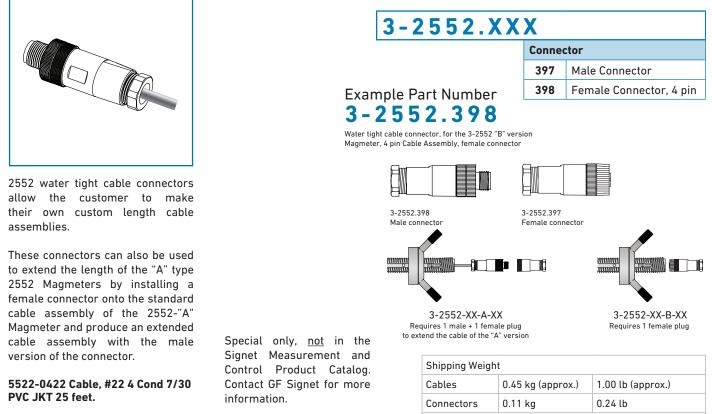


2552-"B" Magmeter 4 pin Cable Assembly, 7 m (23 ft).



Shipping Weight

Contact factory



Standards and Approvals

CE

Application Assistance Form

Please provide as much detail as possible for prompt assistance.

Date:			
Company:		_	
Contact:			
Address:			
City:	State/Country:		Zip/Postal Code:
Country:			
Phone:	Ext:	Fax:	Email:
Name of project:			
GF Distributor:	Contact:		Tel:
Description of application (use separa	te sheet if necessary):		

Piping system: (if flow sensor, on separate sheet sketch piping system - see Installation section for upstream and downstream requirements)

Piping material:		Size:	Schedule:	Angle: Vertical	or Horizontal 🗌
Fluid temp. range,	min:		max:	nominal:	Control range:
Line press. range,	min:		max:	nominal:	Control range:
Process pH range,	min:		max:	nominal:	Control range:
Cond/Resist range	, min:		max:	nominal:	Control range:
Turbidity range,	min:		max:	nominal:	Control range:
Chlorine range,	min:		max:		
рН	min:		max:		
Temperature	min:		max:		
Pressure	min:		max:		
Sensor mounted: I	ndoor	or Outdoor	· 🗌	Indicator mounted:	Indoor 🗌 or Outdoor 🗌
Sensor mounted: I	n-line	or Submer	sible		
If submersible, tank size and shape:					

Fluid to be measured:		Chemistry:	
Fluid viscosity:		Specific gravity:	
Percent solids:	Description:		Size of solids:
Flow rate, min:	max:		nominal:
Back pressure after sensor:	psig/bar		
Required accuracy:	Unit of measurement		
Cable run from sensor to indicator:	ft/m		
Available power:	Amperage:		
Required outputs & Qty:			

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They are subject to modification. Our General Terms of Sale apply.

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