



3-3519.090



B-8/01 English



SAFETY INSTRUCTIONS

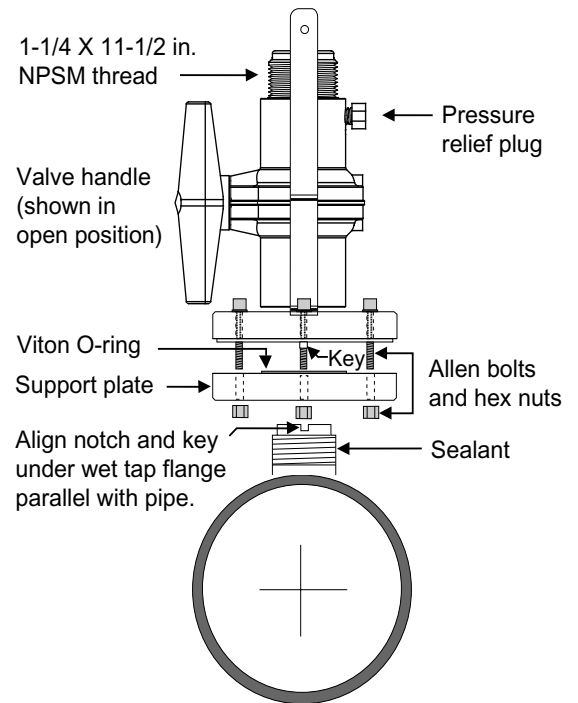
1. Do not exceed maximum temperature/pressure specifications.
2. Wear safety goggles or faceshield during installation/service.
3. Do not alter product construction.

1. Wet-Tap Valve Installation

The +GF+ SIGNET 3519 Wet-Tap Assembly attaches directly onto any +GF+ Signet fitting to enable sensor removal without system shutdown. It consists of a flange and support plate which thread onto the pipe fitting insert, and a PVC ball valve through which an extended length 515 sensor is inserted into the pipe.

Procedure

1. Remove six hex nuts and bolts from the Wet-Tap flange. Separate the support plate from the main assembly. Be sure that the Viton O-ring is properly seated in the support plate groove.
2. Apply sealant to the pipe fitting insert threads to prevent leaks.
3. Screw support plate onto pipe fitting insert. It must be threaded completely down until the notches at the top of the pipe fitting insert are exposed.
4. Mount the main Wet-Tap Assembly on the support plate. Make certain the alignment keys on the flange mate with the notches on the pipe fitting insert.
5. Replace the six hex nuts and bolts to secure the Wet-Tap Assembly in place. Adjust the support plate position as necessary to align screws.
6. Check the pressure relief plug on Wet-Tap Assembly. It must be closed finger tight to prevent leaks.
7. Close ball valve by turning the orange handle to the fully closed position (parallel with pipe).



2. Specifications

Materials

- Body: PVC
- Ball seat: PTFE
- O-rings: FPM

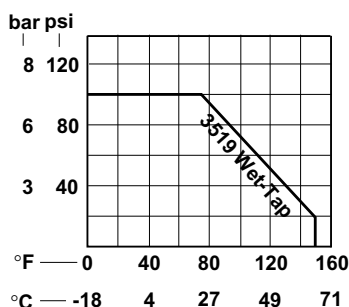
Standards

- Manufactured under ISO 9001 and 14001

Fluid Conditions

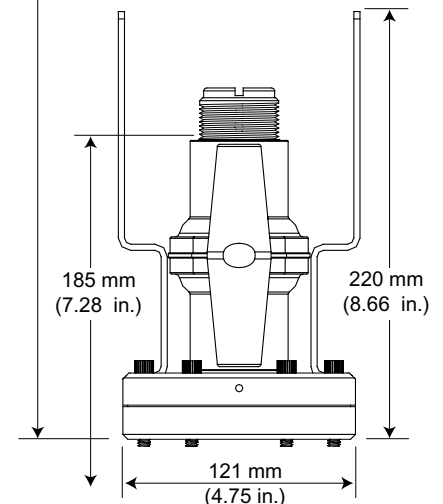
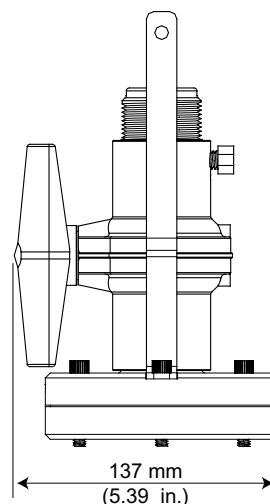
Pressure/Temperature Ratings:

- 7 bar max. @ -18 to 20°C (100 psi max. @ 0 to 68°F)
- 1.4 bar max. @ 66°C (20 psi max. @ 150°F)



Total minimum clearance for sensor insertion and removal:

- 1/2 to 4 inch pipe: 545 mm (21.5 inches)
- 5 to 8 inch pipe: 585 mm (23.0 inches)
- 10 inch and up: 655 mm (25.8 inches)



3. Flow Sensor Installation/Removal

To install the flow sensor:

1. Lubricate the sensor o-rings with a lubricant compatible with your process and the sensor materials of construction. Do not use petroleum based lubricants that will attack the o-rings.

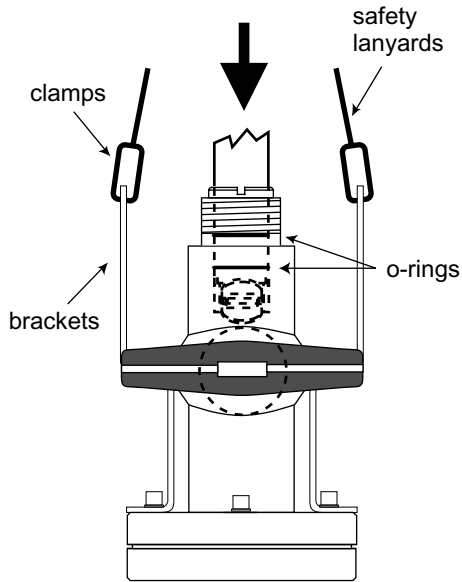


Figure 1

2. Carefully insert the sensor into the 3519 valve assembly until the first two o-rings seat inside the bore. (Figure 1)
 - Do not damage the rotor on closed ball valve.
3. Attach the sensor safety lanyards to the 3519 assembly brackets (hand tighten only).
4. Pull the flow sensor upward to remove slack in the safety cables. (Figure 2)



Warning: Safety lanyards are factory installed at precise length. DO NOT attempt to service or replace safety lanyards.

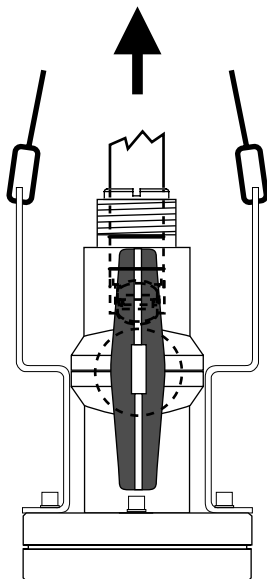


Figure 2

5. Reduce flow system pressure to 25 psi or less.
6. Open the ball valve by turning the handle to the vertical position. (Figure 2)
7. Push the flow sensor into the 3519 assembly with a twisting motion.
 - Turn the sensor so the arrows on the black sensor cap point in the direction of flow.
 - When properly aligned the sensor bale will be parallel with the pipe. (Figure 3)

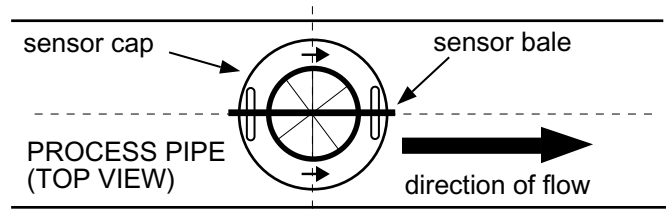


Figure 3

8. Align the tabs under the red sensor cap with the notches on the fitting insert and tighten the red sensor cap. (Figure 4)
 - HAND TIGHTEN ONLY. DO NOT use any tools that may damage plastic parts.

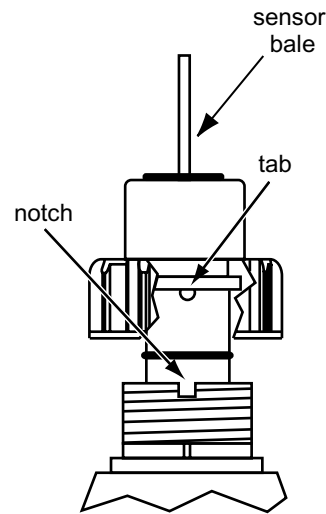


Figure 4











To remove the flow sensor:



Caution: Reduce flow system pressure to 25 psi or less. Vacate stroke area directly above the sensor and stay clear of safety lanyards.

1. Unscrew the red sensor cap. (DO NOT use any tools that may damage plastic parts.)
2. Carefully pull the flow sensor upward with a twisting motion until the safety lanyards are fully extended. (Figure 2)
3. Close the ball valve by turning handle to the horizontal position. (Figure 1)
4. Loosen the relief plug to depressurize the sensor area.
5. Disconnect the sensor safety lanyards from the 3519 assembly brackets.
6. The sensor can now be safely removed.

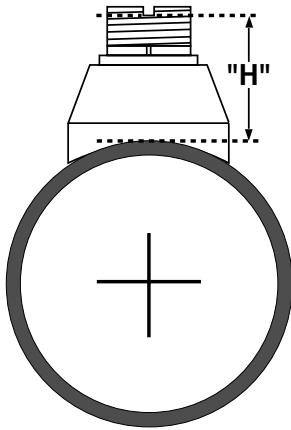
4. +GF+ SIGNET Fittings

Type	Description	Type	Description
Plastic tees 	<ul style="list-style-type: none"> 0.5 to 4 inch versions PVC or CPVC 	Carbon steel & stainless steel threaded tees 	<ul style="list-style-type: none"> 0.5 to 2 inch versions
PVC Glue-on Saddles 	<ul style="list-style-type: none"> Available in 10 and 12 inch sizes only Cut 2-1/2 inch hole in pipe Weld in place using solvent cement 	Carbon steel & stainless steel Weld-on Weldolets 	<ul style="list-style-type: none"> 2 to 4 inch, cut 1-7/16 inch hole in pipe Over 4 inch, cut 2-1/4 inch hole in pipe See section 5 below for details
PVC Saddles 	<ul style="list-style-type: none"> 2 to 4 inch, cut 1-7/16 inch hole in pipe 6 to 8 inch, cut 2-1/4 inch hole in pipe 	Metric PVC-U Saddle 	<ul style="list-style-type: none"> For pipes DN 65 to 200 mm Requires a 30 mm diam. hole in the pipe
PP Clamp-on Saddles 	<ul style="list-style-type: none"> Available in 10 and 12 inch sizes only Cut 2-1/4 inch hole in pipe 	Metric Wafer Fitting 	<ul style="list-style-type: none"> For pipes DN 65 to 200 mm PP or PVDF
Iron Strap-on saddles 	<ul style="list-style-type: none"> 2 to 4 inch, cut 1-7/16 inch hole in pipe Over 4 inch, cut 2-1/4 inch hole in pipe Special order over 12 inch 	Metric Union Fitting 	<ul style="list-style-type: none"> For pipes from DN 15 to 50 mm PP or PVDF

Consult the +GF+ SIGNET Measurement and instrumentation Catalog for a complete listing of installation fittings.

5. H-Dimensions

The plastic sensor insert in the Weldolet fitting MUST be removed before the welding process. When reinstalled, it is important that the insert be threaded to the proper height ("H" dimension).



Part Number	Carbon Steel		Stainless Steel		
	"H" dimensions		Part Number	"H" dimension	
	inches	mm		inches	mm
CS4W020	2.38	60.45	CR4W020	2.38	60.45
CS4W025	2.33	59.18	CR4W025	2.33	59.18
CS4W030	2.32	58.92	CR4W030	2.32	58.92
CS4W040	2.30	58.42	CR4W040	2.30	58.42
CS4W050	3.09	78.48	CR4W050	3.09	78.48
CS4W060	2.96	75.18	CR4W060	2.96	75.18
CS4W080	2.73	69.34	CR4W080	2.73	69.34
CS4W100	5.48	139.19	CR4W100	5.48	139.19
CS4W120	5.25	133.35	CR4W120	5.25	133.35
CS4W140	5.10	129.54			
CS4W160	4.85	123.19			
CS4W180	4.60	116.84			
CS4W200	4.38	111.25			
CS4W240	4.16	105.66			
CS4W360	4.10	104.14			

+GF+ SIGNET

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page 4 of 4



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