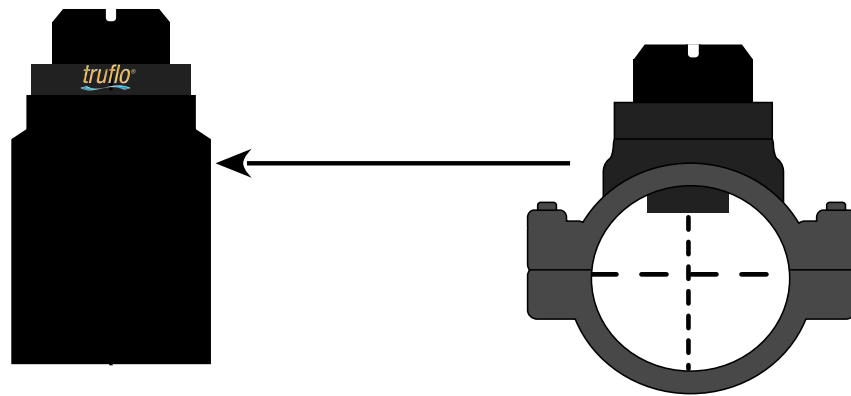


LS SERIES QUICK START INSTALLATION MANUAL

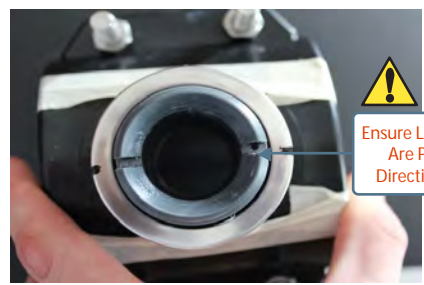


www.iconprocon.com
sales@iconprocon.com
Ph: 905.469.9283

⚠ Important | Installation

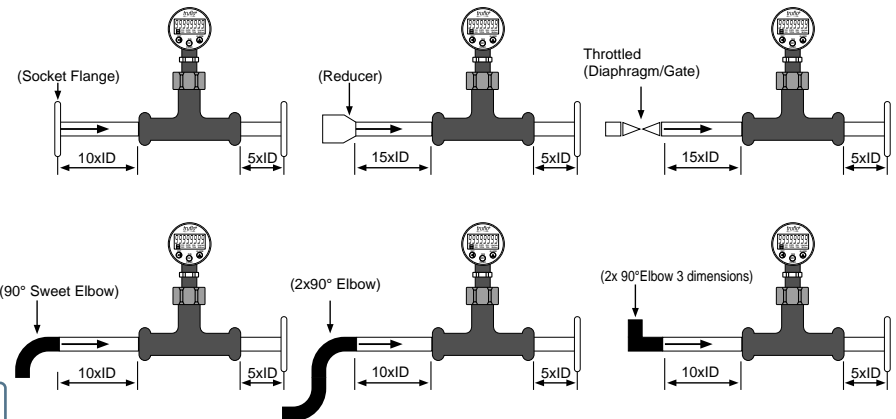


Ensure Silicon Grease is Applied Prior to Insertion



⚠ Ensure Location Tabs Are Parallel to Direction of Flow

Correct Sensor Positioning



In Order to Achieve the Highest Accuracy Always Maximize the Upstream Downstream Distances Between the the Flow Meter and a Pump | Valve or Fitting.

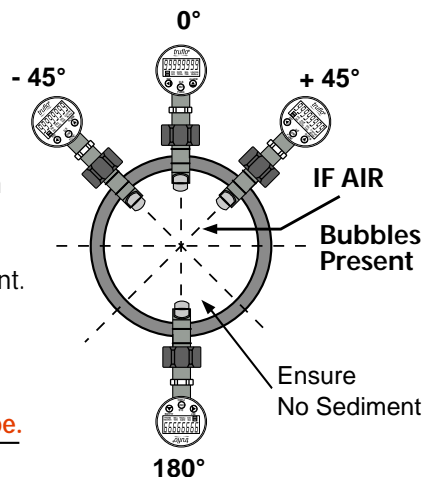
Sensor Mounting Position

Horizontal Pipe Runs

- ➔ Mount sensor in the upright (0°) position for best performance.
- ➔ Mount at a Maximum of 45° when Air Bubbles are present.
- ➔ **Do not** mount on the bottom of the pipe when Sediments is present.

Vertical Pipe Runs

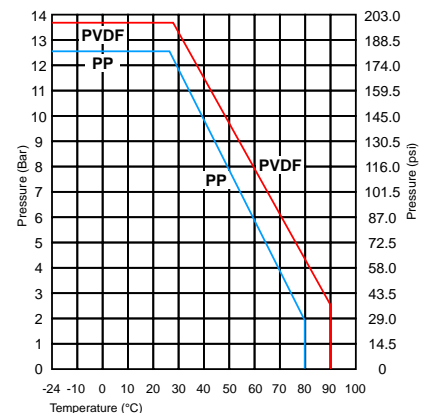
- ➔ Mount sensor in any orientation.
- ➔ Upward Vertical flow is Strongly Recommended to **Ensure Full Pipe.**



Maximum Operating Pressure/Temperature

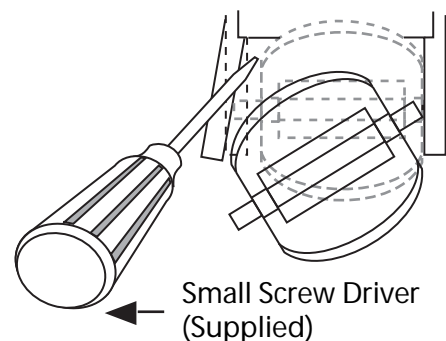
- PP Body : (180psi @ 68°F) (25psi @ 176°F)
- PVDF Body : 200psi @ (-20 to 27°C) (-4 to 81 F)

Temperature (°F) 36psi @ 80°C (188°F)



Rotor Replacement Procedure

- To remove the rotor, insert a small screwdriver between the rotor and the ear of the sensor.
- Carefully Twist the screwdriver blade to flex the ear outward enough to remove one end of the rotor and pin.
- **DO NOT** flex the ear any more than necessary! If it breaks, the sensor cannot be repaired and will not be considered as a valid warranty claim.
- Install the new rotor by inserting one tip of the pin into the hole, then Carefully flex the opposite ear back enough to slip rotor into place.



⚠ Important Proper Installation Method

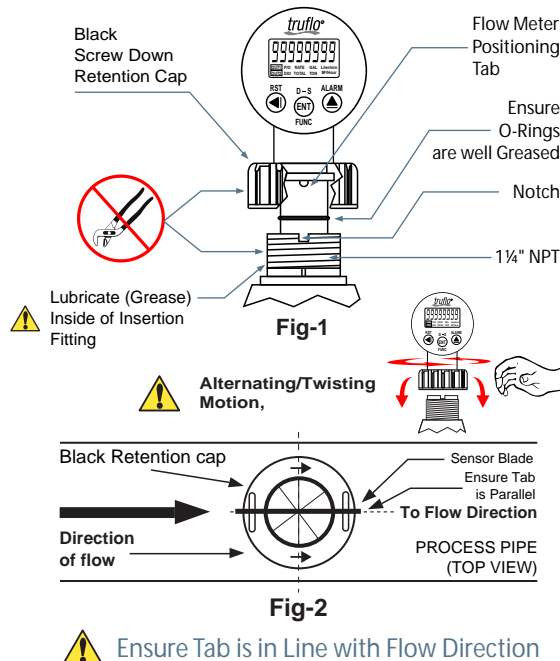
LSS & LS Sensor Installation

⚠ Lubricate O-rings with a Viscous Lubricant (grease) compatible with the system. Very Important (Grease Enclosed)

- ➔ Using an **Alternating/Twisting Motion**, Carefully lower the sensor into the fitting. Do Not Force
- ➔ Engage one thread of the sensor cap then turn the sensor until the alignment tab is seated in the fitting notch (Fig-1) Ensure Tab is Parallel to Flow Direction.

⚠ Ensure Tab / Notch are Parallel to Flow Direction Fig-2

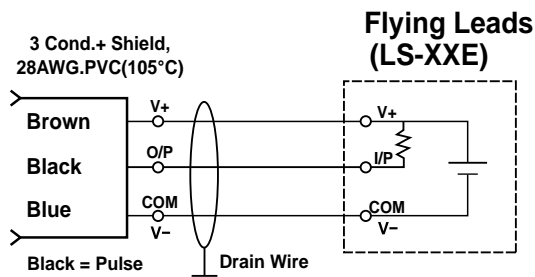
Hand Tighten the Sensor Cap. **DO NOT** use any tools on the sensor cap or the cap threads or fitting threads may be damaged, see Fig-1



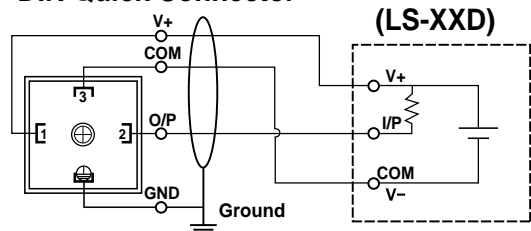
Sensor Wiring (DC Power Only)

- Use conductor shielded cable 24V DC (20-26 AWG).
- Cable shield must be maintained through cable splice.

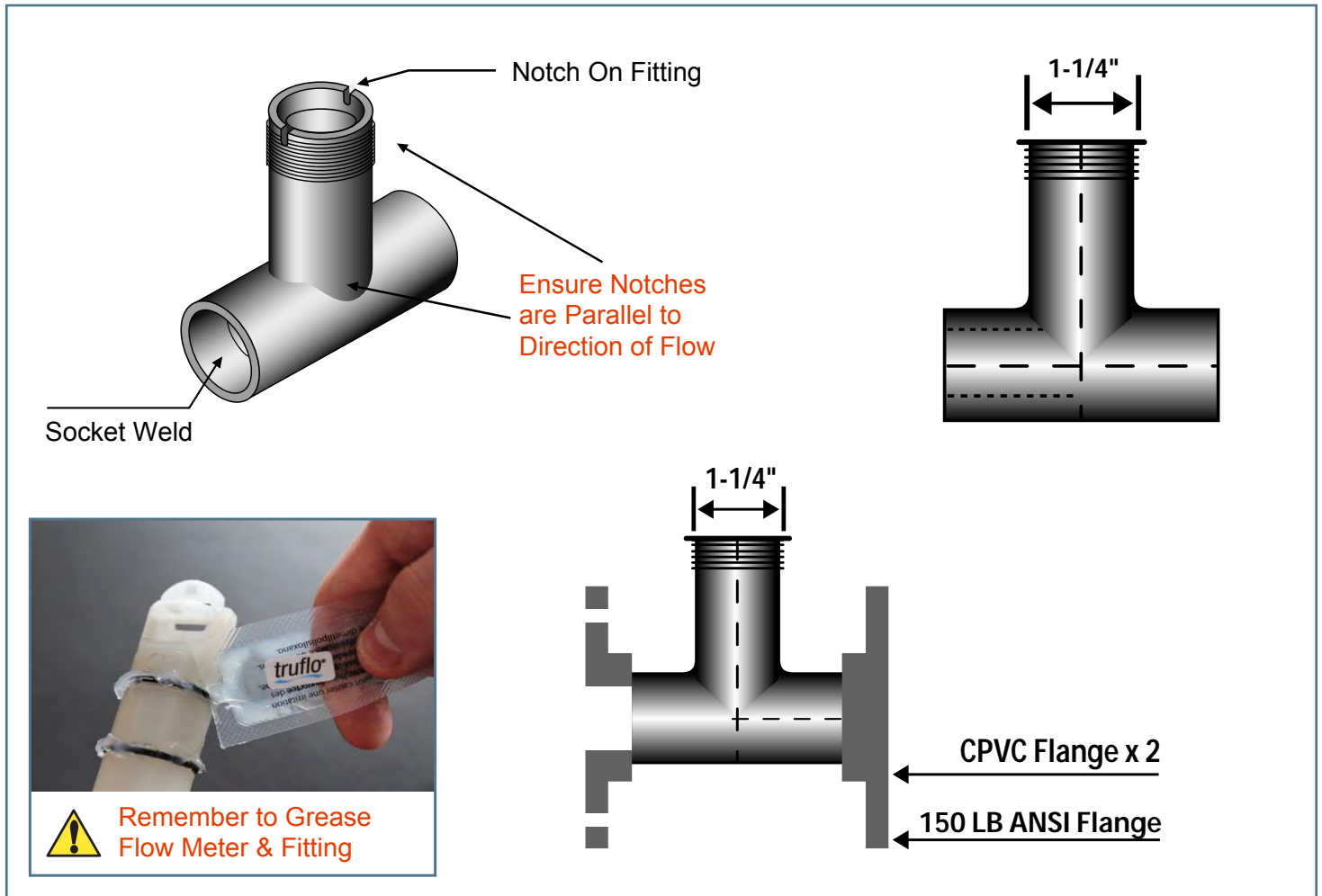
5-24VDC



DIN Quick Connector



CPVC TEE FITTING | SCH80



K-Factor | Pulse/Gal*

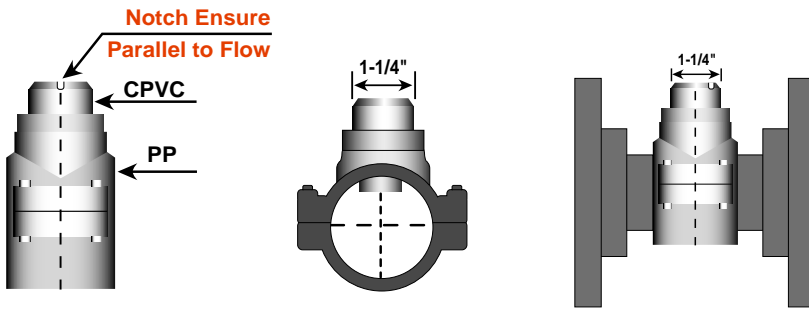
TEE FITTING			K-Factor CPVC SCH80	Sensor Length
Size	DN	Id		
1/2"	15	0.55	811	T
3/4"	20	0.74	430.3	T
1"	25	0.96	334.7	T
1-1/4"	32	1.30	188.6	T
1-1/2"	40	1.50	156.8	T

TEE FITTING			K-Factor CPVC SCH80	Sensor Length
Size	DN	Id		
2"	50	1.90	28.7	T
2-1/2"	65	2.30	19.6	T
3"	80	2.90	11.9	T
4"	100	3.83	6.3	T
6"	150	3.80	2.6	T1

*Divide K- Factor by 3.8 to change to LPM

K-FACTOR TABLES

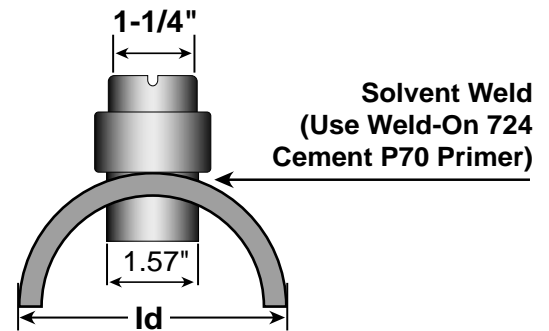
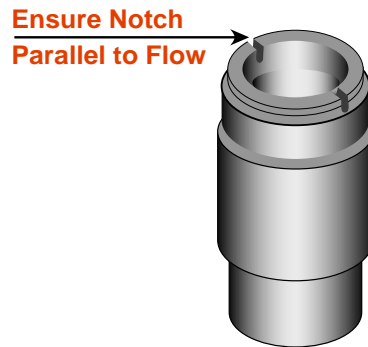
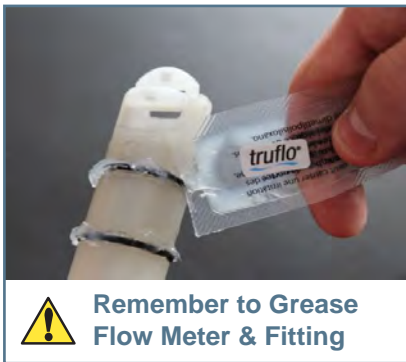
CLAMP SADDLES



Clamp Saddles			K-Factor Pulse/Gal*	Sensor Length
Size	DN	Id	CPVC (SCH80)	
2"	50	1.9	29.0	T
2-1/2"	65	2.3	19.8	T
3"	80	2.9	12.0	T
4"	100	3.8	6.3	T
6"	150	5.7	2.6	T1

*Divide K- Factor by 3.8 to change to LPM

CPVC SOCKET WELD-ON ADAPTERS



Glue-On Adapters			K-Factor Pulse/Gal*	Sensor Length
Size	DN	Id	CPVC (SCH80)	
2"	50	1.9	29.0	T
2-1/2"	65	2.3	14.8	T
3"	80	2.9	12.0	T
4"	100	3.8	6.3	T
6"	150	5.7	2.6	T1
8"	200	7.0	1.4	T1

Glue-On Adapters			K-Factor Pulse/Gal*	Sensor Length
Size	DN	Id	CPVC (SCH80)	
10"	250	9.5	0.90	T1
12"	300	11.3	0.64	T1
14"	350	12.4	0.53	T1
16"	400	15.1	0.40	T1
20"	500	19.0	0.77	T1
24"	600	21.0	0.18	T1

*Divide K- Factor by 3.8 to change to LPM

Warranty Information

All warranty and non-warranty repairs being returned must include a fully completed Service Form and goods must be returned to Icon Process Controls directly or to the authorized distributor. Product returned without a Service Form will not be warranty replaced or repaired.

Truflo Flow Meters are warranted out of box but not against any damage, due to Process or Misapplication failures e.g. High Temperature | Chemical Attack or Physical Mishandling of Product.

Safety Information

1. De-pressurize and Vent System Prior to Installation or Removal.
2. Confirm Chemical Compatibility Before Use.
3. DO NOT exceed Maximum Temperature or Pressure Specifications.
4. ALWAYS Wear Safety Goggles or Face-shield During Installation and/or Service.
5. DO NOT Alter Product Construction.



Warning / Caution / Danger

Indicates a potential hazard. Failure to follow all warnings may lead to equipment damage, injury, or death



Hand Tighten Only

Overtightening may permanently damage product threads and lead to failure of the retaining nut.



Note / Technical Notes

Highlights additional information or detailed procedure.



Do Not Use Tools

Use of tool(s) may damage product beyond repair and potentially void product warranty.

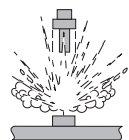


WARNING!



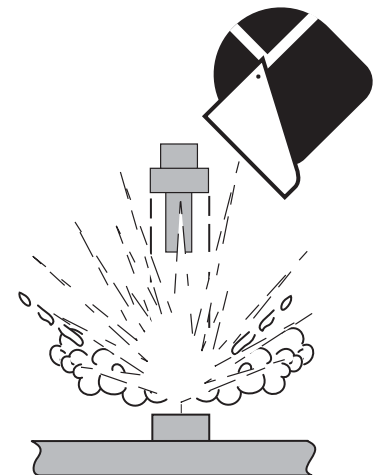
Personal Protective Equipment (PPE)

Always utilize the most appropriate PPE during installation and service of Signet products.



Pressurized System Warning

Sensor may be under pressure, take caution to vent system prior to installation or removal. Failure to do so may result in equipment damage and/or serious injury.



DC Power Only