

# Quick Start PPS Series







**PPS - V Series** 









# Safety Information

Gauges are not to be subject to water hammer or pressure spikes!



#### **WARNING!**

Before installation be certain the appropriate gauge has been selected considering operating pressure / full scale pressure / proof pressure, wetted material requirements, media compatibility, operating temperature, vibration, pulsation, desired accuracy and any other gauge component related to the service application (including the potential need for protective attachments and/or special installation requirements). Failure to do so could result in equipment damage, gauge failure and/or personal

## Installation

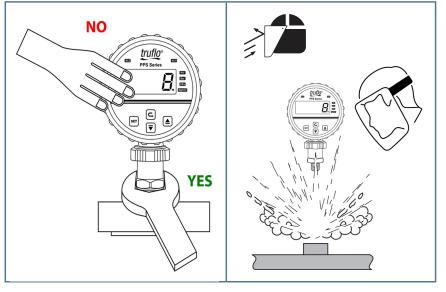


#### IMPORTANT!

When installing the gauge connection into the application, use the wrench area to thread in and tighten the gauge. Do not use the gauge case to install the gauge.

This could result in loss of accuracy, excessive friction, or mechanical damage to the pressure element or gauge case. The gauge connection must be compatible with the mating connection and must be assembled appropriately. If the mating parts do not seal completely, a sealing material may be considered.

#### **IMPORTANT!**



#### Pressurize 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.

#### **Personal Protective Equipment (PPE)**

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



Read the User's Manual Carefully.

Manufacturer Reserves the Right to Implement Changes Without Prior Notice.



## Corrosion-Free Instrumentation Equipment

#### **PPS SERIES**

## **Pressure Transmitter | Switch**





## Specifications

Sensor Diaphragm	Ceramic   AL <sub>2</sub> O <sub>3</sub> 96%	
Measured Fluids	H <sub>2</sub> O   Liquid Chemicals   Gases	
Process Temperature	-40 - + 257° F **   -40 - +125°C**	
Accuracy	±1.0% of F.S. @ 25°C max.	
Repeatability	< ±0.5% FS max.	
Operating Voltage	10-30VDC	
Current Consumption	60mA max.	
Pressure Unit	Psi   Bar   KPa   Kg/cm <sup>2</sup>	
Display	0-9999   Green   Red	
Alarm Display	0-9999   Red	
Communication	RS-485 RTU*	
Transmitter Output	4-20mA   0-10V*	
Relay Outputs	2 x 5 Amp   250 VAC   2 x NPN*   2x PNP*	
Current Output	150mA max.	
Over Pressure	200% of FS min.	
Burst pressure	300% of FS min.	
Zero Drift	@ 20°C ± 0.03% FSO	
Sensitivity Drift	@ 20°C ± 0.03% FSO	
Output Resistance	50Ω max.	
Thermal Drift	± 0.03 % FS /°C	
Materials	PP   PVDF   316 SS	
Material of Construction	PC   GFPP   316 SS   PP   PVDF	
Protection Class	IP66   General Purpose	
Approval	cULus   CE   RoHS	
*Ontional ** Material Dependent		

<sup>\*</sup>Optional \*\* Material Dependent

#### **PPS SERIES**

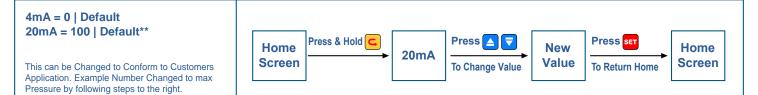
#### **Pressure Transmitter | Switch**



#### Display Navigation

Home Screen	Press SET
Relay Set Points	Press SET 3 sec to Set Alarm Value
Communication Setting   RS-485	Press SET V 3 sec
Zero Point Reset	Press
Transmitter Range	Press C Program

#### Programming Range 4mA | 20mA



#### **Programming**

STATUS	DISPLAY	RANGE	DESCRIPTION
Press & SET + A A 3 secs			Current Pressure Value
Lock Setting  Press  To Change Value	LY.ID	0 - 99	**NOTE: If Lock # is Changed from the # 10 the Meter will be in Lockout Mode. If Lock Setting is set to 11, you can Only Change Zero Point.
Pressure Unit Selection  Press  To Change Value	UE. []	0 - 3	ut.0 = Bar ut.1 = Kg/cm2 ut.2 = PSI   Default ut.3 = KPa
Alarm Selection  Press To Change	ALE.O	0 - 4	Refer to Alarm Mode Description Below
Alarm Delay Selection  Press   To Change	dn. 🛭	0 - 2	dn = 0 = Power on Delay dn = 1 = Alarm Delay dn = 2 = Power on + Alarm Delay
Alarm Time Delay	dE. [][]	0 - 99	Delay Time   Secs

#### **PPS SERIES**

## **Pressure Transmitter | Switch**



## Setting Relays

STATUS	DISPLAY	RANGE	DESCRIPTION
Press & Hold SET ( 3 secs			Current Pressure Value
Alarm AL1 Setting  Press  To Change Value		0 - 9999	Set Point for Relay 1
Alarm AL2 Setting  Press To Change	2.0	0 - 9999	Set Point for Relay 2  **NOTE: AL2 must be set higher than AL1 If AL2 < AL1 PV will display Error while press SET key
Alarm Hysteresis  Press To Change Value	H DD	0 - 9999	Program Hysteresis of Relay Output

#### Alarm Output

Mode	Description	
ALt.0	No Alarm	
ALt.1	R1 ON (AL1-H) AL1	R2 ON  AL1 (AL1-H)
	$CV > (AL1) \longrightarrow R1/AL1 \text{ ON}$ ; $CV < (AL1 - H) \longrightarrow R1/AL1 \text{ OFF}$	$CV > (AL2) \longrightarrow R2/AL2 \text{ ON }; CV > (AL2+H) \longrightarrow R2/AL2 \text{ OFF}$
ALt.2	(AL1-H) AL1	R2 ON  AL2 (AL2+H)
	$CV < (AL1 - H) \longrightarrow R1/AL1 \text{ ON }; CV > AL1 \longrightarrow R1/AL1 \text{ OFF}$	$CV > (AL2 + H) \longrightarrow R2/AL2 \ ON \ ; CV < AL2 \longrightarrow R2/AL2 \ OFF$
ALt.3	R1 ON (AL1-H) AL1	R2 ON (AL2-H) AL2
	CV > AL1 → R1/AL1 OFF; CV < (AL1 - H) → R1/AL1 ON	$CV > AL2 \longrightarrow R2/AL2 \text{ OFF}$ ; $CV < (AL2 - H) \longrightarrow R2/AL2 \text{ ON}$
ALt.4	(AL1-H) AL1	(AL2-H) AL2
	$CV > (AL1) \longrightarrow R1/AL1 \text{ ON}$ ; $CV < (AL1 - H) \longrightarrow R1/AL1 \text{ OFF}$	$CV > AL2 \longrightarrow R2/AL2 \ ON \ ; CV < (AL2 - H) \longrightarrow R2/AL2 \ OFF$

## Legend

**R1** - Relay 1 **R2** - Relay 2

AL1 - Alarm 1 AL2 - Alarm 2

H - Hysteresis CV - Current Value

## Display

Alarm Status	Alarm OFF	Alarm 1   Alarm 2 ON
Home Screen	Green	Red

#### **Pressure Transmitter | Switch**







#### DC Power Only

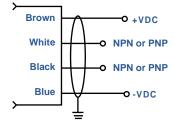
PNP   NPN Output	Relay Output	PNP   NPN Output RS-485	NPN   PNP Output 4~20mA or 0~10V	Relay Output 4~20mA or 0~10V
Brown: +V White: PNP or NPN Blue: OV Black: PNP or NPN	Brown: +V Black: R1 Blue: OV White: R2 Gray: Com	Brown: +V White: NPN or PNP Blue: OV Black: NPN or PNP Gray: RS Orange: RS+	Brown: +V White: NPN or PNP Blue: OV Black: NPN or PNP Gray: RS Orange: mA	Brown: +V Black: R1 Blue: OV Black: R2 Gray: Com Orange: mA

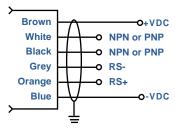


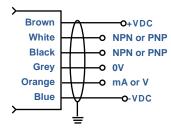
• (PNP or NPN Output)

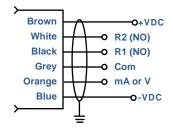
PNP or NPN Output with RS-485

NPN or PNP Output with 4~20mA or 0~10V Relay Output with 4~20mA or 0~10V















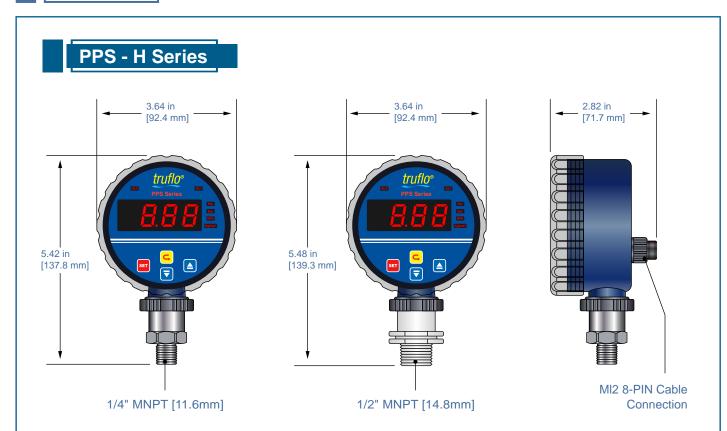


PIN ASSIGNMENT		
PIN#	WIRING	
PIN 1	+10-30VDC	
PIN 2	Relay 2	
PIN 3	-VDC	
PIN 4	Relay 1	
PIN 5	СОМ	
PIN 6	mA+ or V	

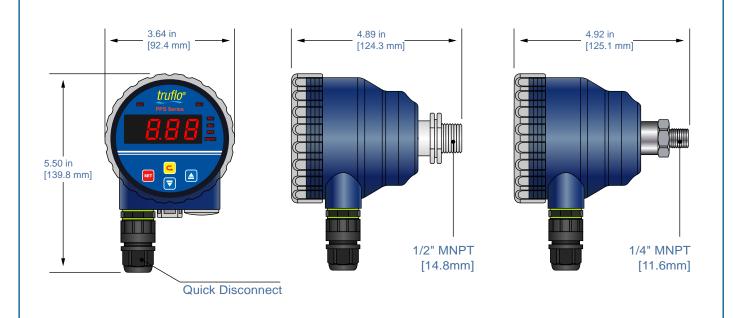
## **Pressure Transmitter | Switch**

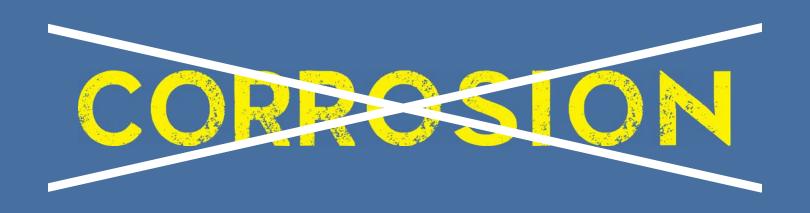


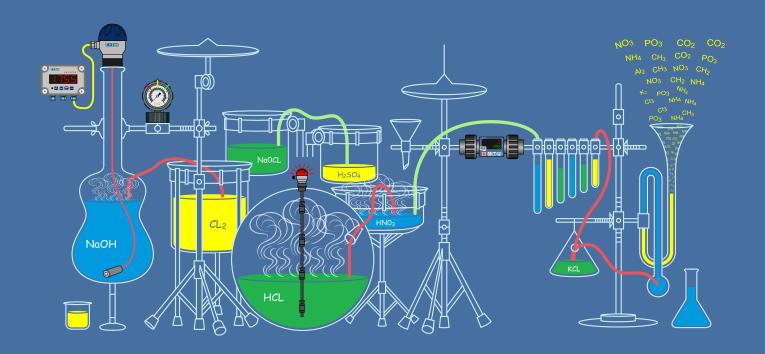
# Dimensions



#### PPS - V Series







# We Measure & Control All Kinds of Corrosive Liquid \$#\*%

Industry's Most Extensive Line of Corrosion-Free Instrumentation Equipment



# Corrosion-Free Instrumentation Equipment