

Quick Start Manual



Read the user's manual carefully before starting to use the unit. Producer reserves the right to implement changes without prior notice.

Truflo® — PRD Series

Digital LED Pressure Transmitter | Switch



Safety Information

- De-pressurize and vent system prior to installation or removal
- Confirm chemical compatibility before use
- DO NOT exceed maximum temperature or pressure specifications
- ALWAYS wear safety goggles or face-shield during installation and service
- 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.



Note | Technical Notes

Highlights additional information or detailed procedure.



Installation Instructions

Do not tighten by grasping the case of the transmitter as this may cause damage. Always pressure test connections for leaks with water prior to use on chemical service. The user shall ensure that the correct transmitter pressure range and the correct materials of construction are selected.





Personal Protective Equipment (PPE)

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



Please ensure that the Instruments are not to be subject to water hammer or pressure spikes! Always Pressure Test System with H2O Prior to Initial Start-Up

Before Before installation be certain the appropriate instrument has been selected considering operating pressure, full scale pressure, wetted material requirements, media compatibility, operating temperature, vibration, pulsation, desired accuracy and any other instrument 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, failure and/or personal injury. Ensure only qualified personnel personnel are permitted to install and maintain this instrument.



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.



Please Ensure Full Pipe

PRD Series can be installed in a horizontal or vertical direction.

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Technical Specifications

General			
Mounting	Direct Mount Bottom Connection		
Process Connection	½" MNPT / FNPT (PP / PVDF) ½" MNPT (316SS)		
Pressure Sensor	14 20 34 54 *Consult Factory for Levels > 54 ft		
Measured Fluids	H ₂ O Chemical Liquids Gases		
Applied Pressure	-40°F to 275°F -40°C to 125°C		
Overload Pressure	200% of Maximum Pressure Range		
Burst Pressure	300% of Maximum Pressure Range		
Material	PP PVDF 316 SS		
Overpressure Psi	210 290 290 380		
Pressure Units	Psi Bar KPa Kg/cm²		
Display	0~999 Green Red		
Thermal Drift	SS316L : ± 0.05% F.S./°C Ceramic : ± 0.1% F.S./°C		
Protection Class	IP64		
Electrical			
Power Supply	10-30 VDC		
Current Consumption	50mA max.		
Output			
Power Supply	10-30 VDC		
Output	4-20mA + Two (2) 3 amp Relays NPN PNP		
Performance			
Accuracy	Normal Type : ± 1.0% F.S. Precision Type : ± 0.25% F.S.		
Repeatability	SS316L : ≤± 0.3% F.S. Max. Ceramic : ≤± 1.0% F.S. Max.		
Standard & Approvals			
CE FCC RoHS Compliant			

Wiring

M12 Connection (no Internal wiring required)

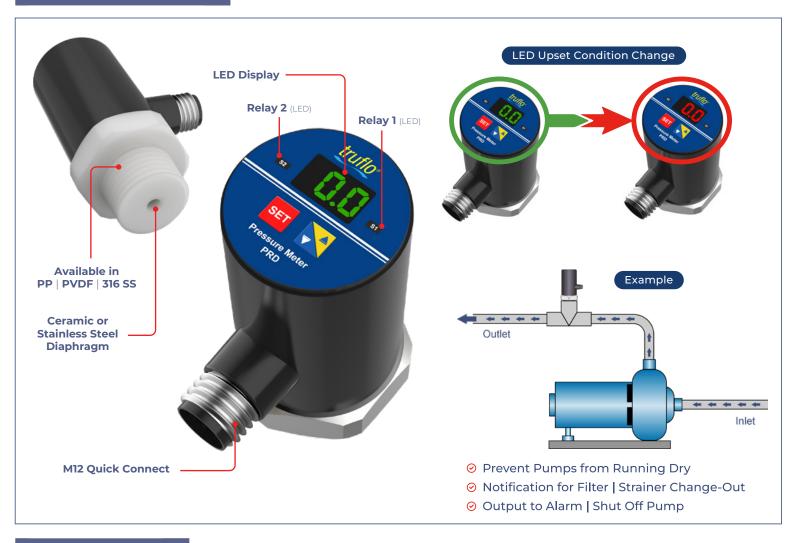
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Terminal	Description	Color
1	+ 10~30 VDC	Brown
2	Relay 2	White
3	0V	Blue
4	Relay 1	Black
5	Com	Grey
6	+mA or +V	Yellow



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Product Introduction



Display Features

Alarm Status	No Alarm	Alarm 1 Alarm 2 ON			
Display	Green	Red			
Relay Set Points	Press SET				
Function Setting	Press 🔑 🕒 5 seconds				
Press SET X 2 to Load the Setting Value and to proceed to next setting					
Press and Hold the setting value, while tapping the key to DECREASE the Setting Value, Press key to INCREASE the Setting Value.					

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Programming

SET Select / Save / Continue



Steps	Display	Range	Description
Press and Hold SET Press HOLD			Current Pressure Value
#2 Lock Setting Press SET X 2		0 - F	LK.9 = Settable Press to change values
#3 Pressure Unit Selection Press SET X 2	BE.B	0 - 3	ut.0 = Bar ut.1 = Kg/cm2 ut.2 = Psi (Default) ut.3 = KPa
#4 Decimal Point Press SET X 2	88.8	0 - 2	dP.0 = No Decimal Point dP.1 = 1 Decimal Point dP.2 = 2 Decimal Point
#5 Response Time Press SET X 2		0 - 9	Press to change values
#6 Alarm Mode Selection Press SET X 2	AFB	0 - 4	At.1 = S1 At.2 = S2 At.3 = S1 & S2 Refer to Alarm Mode
#7 Alarm Delay Mode Press SET X 2		0 - 2	dn.0 = Power ON Delay dn.1 = Alarm ON Delay dn.2 = Power ON + Alarm ON delay
#8 Alarm Delay Time Press SET X 2	8.88	0 - 99	Delay Time (Sec.)

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Alarm Settings





Steps	Display	Range	Description
#1 Home Screen Press SET Hold	888		Current Pressure Value
#2 Alarm AL1 Setting Press SET X 2		0 - 999	Set Point for Relay 1
#3 Alarm AL2 Setting Press SET X 2		0 - 999	Set Point for Relay 2 **NOTE: AL2 must be set higher than AL1; If AL2 ≤ AL1, PV will display Error while press SET key
#4 Alarm Hysteresis Setting Press SET X 2		0 - 99	Program Hysteresis of Relay Output **Hysteresis is a buffer around the Programmed Set Point

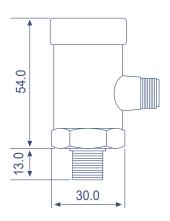
Alarm Mode Settings

Mode	Description		
At.0	No Alarm		
At.1	R1 ON (AL1-H) AL1 $CV \ge (AL1) \longrightarrow R1/AL1 \text{ ON } CV < (AL1 - H) \longrightarrow R1/AL1 \text{ OFF}$	R2 ON AL2 (AL2+H) $CV \le (AL2) \longrightarrow R2/AL2 \ ON \ ; \ CV > (AL2+H) \longrightarrow R2/AL2 \ OFF$	
At.2	R1 ON (AL1-H) \rightarrow R1/AL1 ON; CV \geq AL1 \rightarrow R1/AL1 OFF	R2 ON AL2 (AL2+H) $R = \frac{1}{2} \frac{1}{$	
At.3	R1 ON $\frac{1}{(AL1-H)} = \frac{1}{AL1}$ $CV \ge AL1 \longrightarrow R1/AL1 \text{ OFF }; CV < (AL1-H) \longrightarrow R1/AL1 \text{ ON}$	R2 ON	
At.4	R1 ON (AL1-H) AL1 $CV \ge (AL1) \longrightarrow R1/AL1$ ON; $CV < (AL1 - H) \longrightarrow R1/AL1$ OFF	R2 ON (AL2-H) AL2 $CV \ge AL2 \longrightarrow R2/AL2$ ON; $CV < (AL2 - H) \longrightarrow R2/AL2$ OFF	

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Dimensions (mm)





Model Selection

PRD — 3 Digit Pressure Meter			
Size	Part Number	Material	
½" MNPT	PRD-X-PP-M-X	PP	
½" MNPT	PRD-X-PF-M-X	PVDF	
1/4" MNPT	PRD-X-SS-M-X	316SS	
½" FNPT	PRD-X-PP-F-X	PP	
½" FNPT	PRD-X-PF-F-X	PVDF	

X = Pressure Range

N01 ► -14.5 - 0.0 Psi 001 ► 0.0 - 14.5 Psi C01 ➤ -14.5 - 14.5 Psi P06 ➤ 0.0 - 8.7 Psi C01 ➤ -14.5 Psi C01 ➤ -14.5 Psi C01 ➤ -14.5 Psi C01 ➤ 0.0 - 145.0 Psi C03 ➤ 0.0 - 435.0 Psi (SS Only)

2x 3A Relays (std) — Add suffix "-P" for PNP, "-N" for NPN

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Warranty, Returns and Limitations

Warranty

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Limitations

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For additional product documentation and technical support visit:

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