



# WINTERS INSTRUMENTS MANUFACTURER OF INDUSTRIAL INSTRUMENTATION





#### **PPC Process Gauge**

The PPC Series gauge is a durable gauge with a phenolic solid front and pressure relief back safety case. Use the PPC in situations where user safety is a must such as in the presence of contaminated media.

Dial Size	4.5"
Case	Black phenolic with pressure relief back, solid front, integral back flange
Accuracy	±0.5% ANSI/ASME Grade 2A
Range	Vac to 20,000 psi
Connection	1/4" or 1/2" NPT, bottom or back, brass* or SS
Warranty	5 years



#### PPC-ZR StabiliZR™ Process Gauge

The PPC-ZR StabiliZR™ gauge dampens movement and minimizes the effects of pulsation and vibration without liquid filling. Ideal for processes where chemical compatibility and vibration are a concern.

Dial Size	4.5"
Case	Black phenolic with pressure relief back, solid front, integral back flange
Accuracy	±0.5% ANSI/ASME Grade 2A
Range	Vac to 20,000 psi
Connection	1/4" or 1/2" NPT, bottom or back, brass* or SS
Warranty	5 years

#### PFP Premium Stainless Steel Liquid Filled Gauge

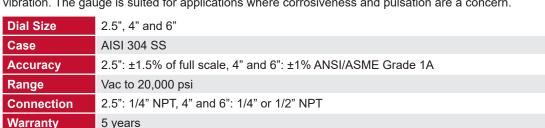
This gauge features a pulsation resistant, liquid filled stainless steel case with either brass or stainless steel internals. Ideal for use outdoors or in severe ambient and process conditions.



Dial Size	2.5", 4", 4.5" and 6", panel mount
Case	AISI 304 SS
Accuracy	2.5": ±1.5%, 4" to 6": ±1% ANSI/ASME Grade 1A
Range	Vac to 40,000 psi
Connection	1/4" or 1/2" NPT - bottom, centre or lower back, high pressure and 9/16", brass* or SS
Warranty	5 years

### PFP-ZR Premium Stainless Steel StabiliZR™ Gauge

PFP-ZR utilizes a precision designed dampening mechanism to minimize the effects of pulsation and vibration. The gauge is suited for applications where corrosiveness and pulsation are a concern.





### **PFQ Stainless Steel Liquid Filled Gauge**

The PFQ Series gauge is a durable stainless steel gauge that can withstand pulsation and vibration, making it an ideal choice for pumps, compressors and motors operating in harsh environments.

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00 \$ 8	Dial Size	1.5", 2", 2.5" and 4"
00 00 00 00 00 00 00 00 00 00 00 00 00	Case	AISI 304 SS
kPa kPa	Accuracy	1.5" and 2": ±2.5% of full scale, 2.5" and 4": ±1.5% of full scale
com	Range	Vac to 15,000 psi
	Connection	1/8", 1/4" and 1/2" NPT bottom or back or 7/16"-20 SAE bottom, brass* or SS
	Warranty	5 years





#### P3S Series Gauge

The P3S gauge is a heavy duty, highly accurate aluminum case gauge with brass or stainless steel internals. Use the P3S gauge in applications using air, steam, fresh water or in boiler and control rooms.

Dial Size	4.5", 6", 8.5" and 10"
Case	Aluminum painted black
Accuracy	±0.5% ANSI/ASME Grade 2A
Range	Vac to 20,000 psi
Connection	1/4" or 1/2" NPT bottom or back, brass* or SS
Warranty	5 years



#### **PDT Differential Gauge**

This gauge uses brass or stainless steel wetted parts and is available with conventional or balanced scales. The PDT is typically used to measure pressure drops across filters, pumps or other equipment.

Dial Size	4.5" or 6"
Case	Aluminum, painted black
Accuracy	±1% ANSI/ASME Grade 1A
Range	0 to 600 psi
Connection	1/4" NPT bottom or back, brass* or SS
Warranty	5 years



#### High Static Pressure Differential Gauges (PPD, PRD, PSD, PVD)

Winters' high static differential pressure gauges utilize four types of sensing elements for a large variety of ranges and are available with switches for actuation. Perfect for filtration systems and leak detection.

Dial Size	2.5", 3.5", 4", 4.5" and 6" (depending on series)
Case	Aluminum or engineered plastic (depending on series)
Accuracy	±2% of full scale or ±5% of full scale (depending on series)
Range	5 "H <sub>2</sub> O to 110 psid
Connection	1/4", 1/2" NPT or 7/16"-20 SAE
Warranty	5 years



### **PDX Duplex Gauge**

The PDX is a heavy duty, highly accurate gauge that uses two separate bourdon tubes and pointers to compare two separate process pressures at the same time.

Dial Size	4.5" or 6"
Case	Aluminum, painted black
Accuracy	±1% ANSI/ASME Grade 1A
Range	0 to 600 psi
Connection	1/4" NPT bottom or back, brass* or SS
Warranty	5 years



### **DPG Digital Pressure Gauge**

DPG is a simple to use digital pressure gauge with stainless steel wetted parts including a 316L welded diaphragm. It's ideal for test measurement and general purpose commercial and industrial applications.

Dial Size	2.5"
Case	ABS (IP60) with a protective silicone rubber boot.
Accuracy	±1% (±0.5% optional for gauges up to 5,000 psi)
Range	Vac to 15,000 psi
Connection	1/4" NPT bottom
Warranty	1 year





#### **LE3 General Purpose Transmitter**

LE3 is a compact general industry stainless steel transmitter suitable for outdoor use. Its wide variety of mechanical and electrical connections makes it ideal for pump and compressor monitoring.

Output	2-wire 4-20 mA
Housing	304 SS
Accuracy	±0.5% FSO
Range	Vac to 5,000 psi
Sensor	Ceramic
Warranty	1 year



#### **LM1 Anti-Clogging Submersible Transmitter**

LM1 is a submersible transmitter with a built-in anti-clogging device to resist damage from floating solids. It is internally protected against lightning and includes a dual seal for increased environmental durability.

Output	2-wire 4-20 mA
Housing	316L SS
Accuracy	±0.5% FSO (±0.25% FSO optional)
Range	5 to 25 psi (higher ranges also available)
Sensor	316L
Warranty	1 year



#### **LM6 All Stainless Steel Submersible Transmitter**

LM6 is designed for continuous level measurement in water or other liquids with low viscosity. Typical installations include ground or tank level monitoring of water and sewage treatment measurement.

Output	2-wire 4-20 mA
Housing	316L SS
Accuracy	±0.35% FSO
Range	50"H <sub>2</sub> O to 300 psi
Sensor	Stainless steel
Warranty	1 year



#### **2WPS General Purpose Pressure Switch**

The 2WPS has a NEMA 4, IP65 enclosure rating with the option of a NEMA 4X rating. It's typically utilized for pump and compressor monitoring and general industrial applications.

Housing	Anodized aluminum
Wetted Parts	Aluminum and Buna-N (PTFE O-ring or FKM diaphragm optional)
Range	Vac to 500 psi
No. of Contacts	One, SPDT
Accuracy	±2% of the adjustable range
Warranty	1 year

### **4WPS Low Pressure Diaphragm Pressure Switch**

4WPS has simple single or dual set point adjustment. With ±0.5% accuracy it's ideal for more sensitive industrial applications.



Housing	Anodized aluminum
Wetted Parts	304 SS process connection and 17-PH SS diaphragm
Range	"H <sub>a</sub> O to 150 psi

No. of Contacts One or two SPDT (hermetically sealed option for 1 x SPDT only)

Accuracy ±0.5% of the adjustable range

Warranty 1 year



#### **D40 Diaphragm Seal**

This compact lightweight diaphragm seal is ideally suited for applications where space limitations exist. This diaphragm seal is primarily utilized to protect gauges and transmitters from corrosive media.



Housing	AISI 316 SS
Diaphragm	AISI 316L SS, welded
Min. Pressure	15 psi
Max. Pressure	1,000 psi
Connection	1/4" or 1/2" NPT female or male
Warranty	1 year

#### **D70 Diaphragm Seal**



The D70 is found in applications where process fluids are corrosive or viscous and could damage instrumentation. An optional flushing connection is available to prevent clogging of the seal.

Housing	316L SS, Monel®, Hastelloy® C
Diaphragm	316L SS, Monel <sup>®</sup> , Hastelloy <sup>®</sup> C, FKM
Min. Pressure	30 psi
Max. Pressure	2,500 psi
Connection	1/4", 1/2", 3/4" or 1" NPT bottom, 1/4" or 1/2" top
Warranty	1 year



#### **D81 Isolation Ring**

D81 is an inline diaphragm seal that is available in a variety of configurations to fit specific applications. The wafer style isolation ring makes the D81 ideal for measuring the pressure of viscous or solid media.

Housing	Carbon Steel, 316 SS, Acetal, others available
Diaphragm	Neoprene, Nitrile, EPDM, FKM or Natural Rubber
Min. Pressure	Vacuum
Max. Pressure	1,000 psi
Connection	1/4" or 1/2" NPTF gauge ports, 1"-42" pipe sizes, (consult factory for larger sizes)
Warranty	1 year
	*Tee fitting also available





NVA Needle Valves come in straight, angle body,multiport or block & bleed, hard or soft seat, carbon or stainless steel with a NACE option. They provide excellent flow regulation and are leak tight.

Body	Carbon steel or stainless steel with or without NACE
Seat	Hard or soft seat
Max. Pressure	6,000 or 10,000 psi
Connection	1/4", 3/8", 1/2", 3/4" or 1" NPTF and NPTM connection options
Warranty	1 year

#### **SOP Overpressure Protector**



SOP utilizes an external adjusting screw to automatically shut off pressure to an instrument once the adjustable pressure is exceeded. This overpressure protector is available in Bellows and Piston types.

١	Body	316 SS
j	Burst	10,000 psi/kPa
	Temperature	-40°F to 248°F (-40°C to 120°C)
	Connection	1/4" x 1/4" NPT or 1/2" x 1/2" NPT
	Warranty	1 year



#### **SSN Snubber**

Winters' snubber uses a sintered, porous 316 SS snubbing element to ensure its effectiveness. Available in three classifications: heavy oil, water and air.



Body	316 SS, brass* or lead free brass*
Operating Temp.	SS: -320°F to 1,500°F (-195°C to 815°C), brass: -65°F to 650°F (-53°C to 815°C)
Max Pressure	SS: 20,000 psi, brass: 10,000 psi
<b>Burst Pressure</b>	SS: 60,000 psi, brass: 30,000
Connection	1/4" or 1/2" NPT
Warranty	1 year



#### **TBM Bi-Metal Thermometer**

This industrial grade thermometer uses a bi-metallic sensing element for reliable temperature readings. All models are hermetically sealed and fully moisture and water proof.

Dial Size	1" to 6"
Case	AISI 304 SS
Accuracy	±1% of full scale
Range	-100°F to 1,000°F (-70°C to 550°C)
Connection	1/4" or 1/2" NPT bottom, back and adjustable angle
Warranty	5 year



### TRR Remote Reading Thermometer

TRR's are heavy duty gas or vapour filled thermometers for remote reading installations. This product is available for immediate delivery off-the-shelf and non-standard configurations are made-to-order.

Dial Size	2.5", 3.5", 4", 4.5", 6" and 8.5"
Case	2.5": 316 SS, 3.5" and 4": steel painted black, others are aluminum painted black
Accuracy	Gas: ±0.5% of full scale value, Vapour: ±2% of full scale value
Range	-40°F to 1,000°F (-40°C to 537°C)
Connection	1/2" bulb diameter, brass* or SS
Warranty	5 year

### **TBR Bi-Metal Threaded Thermowell**

The TBR is standard in a "stepped construction" and available in a variety of custom configurations. Use to protect TBM thermometers from media or to allow for maintenance without shutting down a system.



Material	Brass*, AISI 304 SS, AISI 316 SS, other materials available upon request
Bore	.260" standard
Length	2.5", 4", 6", 9",12" or 15"
<b>Process Connect.</b>	3/4", 1/2" or 1" standard, other thread sizes available upon request
Therm. Connect.	1/2" NPT female, other thread sizes available upon request
Warranty	1 year

#### **TWF Bi-Metal Thermowell**

The TWF thermowell is designed for use on a closed system. It is used to protect thermometers from process media and to allow for thermometer replacement without requiring shut-down of the system.



Material	304 SS or 316 SS
Bore	.260"
Length	4", 6", 9", 12" or 15"
<b>Process Connect.</b>	1", 1.5" or 2" flange
Therm. Connect.	1/2" NPT female
Warranty	1 year



# **Winters Isolation Ring**

Winters' Isolation Ring provides a clog-free method of measuring the pressure of media containing solids. The flanged pipe connection provides accurate measurement while minimizing the amount of weight added to the system. A unique WinCONNECT fitting provides quick replacement of instrumentation, minimizing system down-time.







# **Description and Features:**

- ✓ Pressure measurement with no clogging
- WinCONNECT fitting allows pressure instruments to be shipped separately preventing damage in transit
- ✓ Quick field replacement without tools eliminates system down-time and leakage
- √ Tee fittings can be used so multiple instruments can be installed on the same ring.
- ✓ Isolation ring works with 150# and 300# flanges

Hastelloy® is a registered trademark of Haynes International, Inc. Monel® is a registered trademark of Inco Alloys International

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**WARNING:** This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

# **WINTERS INSTRUMENTS**

# MANUFACTURER OF INDUSTRIAL INSTRUMENTATION



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