







#### **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



### **PSC Safety Case Gauge**

Winters PSC Safety Case gauge is constructed of a solid front and blowout back for the ultimate in gauge safety. PSC has full rotary movement and micrometer pointer for ease of calibration.

Dial Size	4", 4.5" or 6"
Case	304 SS case with blowout back
Accuracy	4", 6": +/-1% ASME Grade 1A, 4.5": +/-0.5% ASME Grade 2A
Range	Vac to 20,000 psi
Connection	1/4" or 1/2" NPT bottom, SS
Warranty	5 vears



### **PTR Tamper Resistant Process Gauge**

PTR provides the durability expected from a Winters process gauge with the addition of a one-piece welded diaphragm seal body. Use PTR in applications where a tamper-resistant gauge/seal is required.

Dial Size	4.5"
Case	Black phenolic with pressure relief back, solid front, integral back flange
Accuracy	+/-1% ANSI/ASME Grade A
Range	15 to 5,000 psi
Connection	1/2" NPT bottom, 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" or 6", panel mount
	Case	AISI 304 SS
V.	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 and 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.

Dial Size	2.5", 4" or 6"
Case	AISI 304 SS
Accuracy	2.5" ±1.5% of full scale, 4" and 6" ±1% ANSI/ASME Grade 1A
Range	Vac to 20,000 psi
Connection	2.5": 1/4" NPT, 4" and 6": 1/4" or 1/2" NPT, SS
Warranty	5 years



### PN2 NACE Liquid Filled Gauge - MR0175-2002

PN2 NACE gauge with stainless steel case and laminated safety glass lens. PN2 is designed for sour gas applications requiring NACE standards MR0175-2002.

Dial Size	4" or 6"
Case	304 SS
Accuracy	+/-1% ANSI/ASME Grade 1A
Range	Vac to 20,000 psi
Connection	1/4" or 1/2" NPT back or bottom, SS
Warranty	5 years



## PN2-ZR NACE StabiliZR™ Gauge - MR0175-2002

PN2-ZR has the same features as the PN2 with the added benefit of StabiliZR<sup>™</sup> dampened movement. Designed for NACE sour gas applications where pulsation is present and liquid filling is not possible.

Dial Size	4"
Case	304 SS
Accuracy	+/-1% ANSI/ASME Grade 1A
Range	Vac to 20,000 psi
Connection	1/2" NPT bottom, 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" or 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" or 1/2" NPT or 7/16"-20 SAE (may contain brass*)
Warranty	5 years



### LIS Intrinsically Safe Transmitter

The LIS is a rugged stainless steel transmitter with a ceramic sensor and an accuracy of ±0.5% FSO. It is available in a wide range of mechanical and electrical connections and is approved for outdoor use.

Output	2-wire 4-20 mA, others available
Housing	316L SS
Accuracy	±0.5% FSO IEC 60770
Range	Vac to 8,700 psi
Sensor	Ceramic
Warranty	5 years



#### **D40 Medium Duty 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" NPTF x NPTF or NPTM x NPTF
Warranty	5 years

#### D44 #80 Flanged Diaphragm Seal

D44 series two-piece flanged diaphragm seal is available in a variety of sizes and housing materials. A backing plate prevents the diaphragm from rupturing if the pressure sensing instrument fails.



Housing	316 SS, Monel®, Hastelloy® B&C, titanium, tantalum, PVC, carbon steel, PTFE
Diaphragm	PTFE
Min. Pressure	0 psi
Max. Pressure	1,000 psi
Connection	Gauge: 1/4" or 1/2" NPTF, Process: 1", 1.5" or 2", 150# or 300# pressure rating
Warranty	5 years

#### D70 Heavy Duty 2-Piece Industrial 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®, Hastelloy® 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	5 years

# **D71 NACE 2-Piece Seal**

The D71 is a NACE compliant two-piece threaded diaphragm seal for sour gas applications. The diaphragm is 316 SS or Hastelloy® C welded with backing plate for continuous use applications.



Housing	316 SS or Hastelloy <sup>®</sup> C, compliant to MR0175-2003
Diaphragm	316L SS or Hastelloy® C, welded, compliant to MR0175-2003
Min. Pressure	30 psi
Max. Pressure	2,500 psi
Connection	1/4", 1/2", 3/4" or 1" NPTF bottom, 1/4" or 1/2" NPTF top
Warranty	5 years

### **D81 Isolation Ring**

D81 is an in-line 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 Hypalon®
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	5 years

<sup>\*</sup>Tee fitting also available





#### **NVA Needle Valve**

NVA Needle Valves come in straight, angle body, 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	5 vears

# **NVA Needle Valve (Multiport)**

The multiport design allows for up to 3 instrument connections, reducing the number of connections to permanent piping installations, decreasing possible leak paths. *Bleed screw and plugs not included.* 



Body	Carbon steel, stainless steel or stainless steel NACE
Connections	1/2" or 3/4" NPTM x NPTF
Pressure	6,000 psi (41,368 kPa) (soft seat) or 10,000 psi (68,947 kPa) (hard seat)
Needle/Needle Tip	Stainless steel or stainless steel NACE
Stem O-ring	FKM
Approvals	CRN registered, burst pressure safety tested at 4 times valve rating

### **BBV Block & Bleed Valve Single Handle**

The block & bleed design allows media to be bled off without disturbing the permanent piping installation, allowing safe and easy removal or replacement of instruments.



Body	Carbon steel or stainless steel
Connections	1/4" or 1/2" NPTM x NPTF or NPTF x NPTF
Pressure	6,000 psi (41,368 kPa) (soft seat) or 10,000 psi (68,947 kPa) (hard seat)
Needle/Needle Tip	Stainless steel
Stem O-ring	FKM
Approvals	CRN registered, burst pressure safety tested at 4 times valve rating

#### **BBV Block & Bleed Valve Two Handles**

The two handle block & bleed valve allows controlled media bleed off without disturbing the permanent piping installation, allowing safe and easy removal or replacement of instruments.



	Body	Carbon steel, stainless steel or stainless steel NACE
۵.	Connections	1/4" or 1/2" NPTM x NPTF or NPTF x NPTF
	Pressure	6,000 psi (41,368 kPa) (soft seat) or 10,000 psi (68,947 kPa) (hard seat)
	Needle/Needle Tip	Stainless steel or stainless steel NACE
	Stem O-rings	FKM
	Approvals	CRN registered, burst pressure safety tested at 4 times valve rating

## **BBV Double Block & Bleed Valve**

The Double Block & Bleed Valve offers redundant closure for critical applications and controlled media bleed off, enabling instruments to be removed without disturbing the permanent piping installation.



Body	Stainless steel or stainless steel NACE
Connections	1/4" or 1/2" NPTM x NPTF or NPTF x NPTF
Pressure	10,000 psi (68,947 kPa)
Needle/Needle Tip	Stainless steel or stainless steel NACE
Stem O-rings	FKM
Approvals	CRN registered, burst pressure safety tested at 4 times valve rating





#### **SAS Adjustable Snubber**

Winters SAS Adjustable Snubber prolongs the life of pressure instruments by reducing the damaging effects of pulsation. An adjustable restrictor screw can be used to restrict flow to the instrument.

Body	316 SS or brass*
Operating Temp.	-40°F to 248°F (-40°C to 120°C)
Max Pressure	SS: 10,000 psi, brass: 6,000 psi
<b>Burst Pressure</b>	SS: 30,000 psi, brass: 18,000
Connection	1/4" or 1/2" NPTM x NPTF
Warranty	5 years



#### **SSN Snubber**

Winters SSN 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" NPTM x NPTF
Warranty	5 years



#### **SCT Cooling Tower**

The SCT has a perforated case and spiral tubing that protects pressure gauges, switches and transmitters. It's used where process media temperature exceeds the rating of the instrument.

Socket/Tube	316L SS/316 SS
Max. Pressure	1,500 psi
Max. Temp.	570°F (300°C) or 932°F (500°C)
Connection	1/4" or 1/2" NPTM x NPTF
Warranty	5 years



### **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, bellows or piston, NACE or non-NACE
ĺ	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" NPTF x NPTM
	Warranty	5 years

#### **SSP Syphon**

SSP Series Syphon constructed of brass, steel, 304 SS or 316 SS. Connection will be 1/4" or 1/2" NPTM x NPTM. Used where instrument damage due to high temperature steam may occur.



Material	Brass*, steel, 304 SS, 316 SS
Туре	180° coil standard. Other available
Pipe Schedule	40, 80 other
Connection	1/4" or 1/2" NPTM x NPTM
Warranty	5 years





#### **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**

TRRs 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" or 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
H	Bore	.260" standard
	Length	2.5", 4", 6", 9",12" or 15"
	Process Connect.	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	5 years



#### **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" NPTF
Warranty	5 years

Hastelloy® is a registered trademark of Haynes International, Inc. Hypalon® is a registered trademark of DuPont Performance Elastomers Monel® is a registered trademark of Inco Alloys International

\* 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



Winters Instruments is a global manufacturer of premium quality pressure and temperature instrumentation, with distribution partners in over 90 countries. Please contact us for your nearest Regional Manager.

### Corporate - Canada

Winters Instruments 121 Railside Road Toronto, Ontario M3A 1B2 Tel: 416-444-2345 1-800-WINTERS

# Fax: 416-444-8979

sales@winters.com

# Asia - Shanghai

Winters Instruments Shanghai WitHub Hi-Tech **Business Center Suite 308** No. 333 Honggiao Road Shanghai 200030 China Tel: 86-21-6104-2610 Fax: 86-21-6104-2615 asiasales@winters.com

#### Canada - Calgary

Winters Instruments 3125-16 Street NE Calgary, Alberta T2E 7K8 Tel: 403-723-6645

# 1-800-WINTERS

Fax: 403-723-6647 calgary@winters.com

#### **USA** - Houston

Winters Instruments 5400 W. Sam Houston Pkwy N. Houston, Texas

77041

Tel: 281-880-8607 1-800-WINTERS Fax: 281-880-8614

usasales@winters.com

### **USA - Buffalo**

Winters Instruments Airport Commerce Park 455 Cayuga Rd., Suite 650 Buffalo, New York

14225

Tel: 716-874-8700 1-800-WINTERS Fax: 716-874-8800 usasales@winters.com

#### **Latin America**

Winters Instruments Lamadrid 121 Los Troncos del Talar, B1608CEC Buenos Aires, Argentina Tel: 54-11-4715-3036 latinsales@winters.com www.winters.com.ar

#### Europe - Middle East - Africa

Winters Instruments Dubai Airport Free Zone 6WB G50 Dubai. United Arab Emirates Tel: 971-4295-9177

Fax: 971-4295-9177 emeasales@winters.com



www.wintersasia.com

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