

WINTERS



We're There.



PULP & PAPER PRODUCTS



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



PSG Schaeffer Gauge

PSG is a combination of pressure gauge and diaphragm seal forming one instrument. It is used for low pressure corrosive medias where diaphragm seal protection is needed.

Dial Size	4", 6"
Case	304 SS
Accuracy	±1.5% of full scale
Range	0 to 300 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
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" or 6": 1/4" or 1/2" NPT
Warranty	5 years



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.

Dial Size	1.5", 2", 2.5" or 4"
Case	AISI 304 SS
Accuracy	1.5" and 2": $\pm 2.5\%$ of full scale, 2.5" and 4": $\pm 1.5\%$ of full scale
Range	Vac to 15,000 psi
Connection	1/8", 1/4" or 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" or 10"
Case	Aluminum painted black
Accuracy	$\pm 0.5\%$ 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": $\pm 1\%$ ASME Grade 1A, 4.5": $\pm 0.5\%$ ASME Grade 2A
Range	Vac to 20,000 psi
Connection	1/4" or 1/2" NPT bottom, SS
Warranty	5 years



PTG Test Gauge

The PTG is a highly accurate gauge that comes standard with a calibration certificate traceable to NIST Standards. It is used in laboratories and testing facilities.

Dial Size	4" or 6"
Case	304 SS case with blowout back
Accuracy	$\pm 0.5\%$ ANSI/ASME Grade 2A
Range	Vac to 10,000 psi
Connection	1/4" or 1/2" NPT bottom, brass*
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	$\pm 1\%$ ANSI/ASME Grade 1A
Range	0 to 600 psi
Connection	1/4" NPT bottom or back, brass* or SS
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

PPD High Static Pressure Differential Piston Gauge

Winters' high static differential pressure gauge uses a piston as a sensor to separate high & low pressure in response to pressure differentiation. Perfect for filtration systems and leak detection.



Dial Size	2.5", 3.5" or 4.5"
Case	Aluminum or engineered plastic
Accuracy	±2% of full scale
Range	0 to 110 psid
Connection	1/4", 1/2" NPT or 7/16"-20 SAE
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 is 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, SS
Warranty	5 years

PEC Premium Stainless Steel Gauge with Electrical Contacts

PEC is a premium gauge with independently adjustable electrical contacts rated up to 1 amp at 220-338 Vac. The gauge is installed in applications where electrical switching is required with local indication.



Dial Size	4"
Case	304 SS
Accuracy	±1%
Range	Vac to 10,000 psi
Connection	1/4" NPT bottom, SS
Warranty	5 years

PLP Low Pressure Gauge

PLP provides a highly accurate reading of low pressure corrosive and non-corrosive gaseous media. It is used to measure natural gas pressure as well as air flow indication and leak detection.



Dial Size	2.5", 4", 4.5" or 6"
Case	AISI 304 SS, aluminum (black), steel (black) or cast aluminum (black)
Accuracy	SS: ±1.6% of full scale, brass*: ±3-2-3% ANSI/ASME Grade B
Range	0 to 10 psi
Connection	1/4" NPT bottom or back, brass* or SS
Warranty	5 years



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	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



LTF Flush Mount 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
Range	Vac to 5,800 psi
Sensor	316 SS
Warranty	5 years



LXP Explosion Proof Transmitter

LXP features a NEMA 4X, 7 or 9 explosion proof enclosure and cULus approval. It is suitable for a variety of hazardous applications where the added security of an explosion proof enclosure is required.

Output	2-wire 4-20 mA, 3-wire 1-11 V
Housing	304 SS
Accuracy	±0.25% BFSL / ±0.5% for vacuum only
Range	Vac to 10,000 psi
Sensor	Silicone
Warranty	5 years



2WPS General Purpose Pressure Switch

The 2WPS has a NEMA 4, IP65 enclosure rating with the option of a NEMA 4X rating. It is 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	30 to 1,600 psi
No. of Contacts	One, SPDT (hermetically sealed option available)
Accuracy	±2% of the adjustable range
Warranty	5 years

3WPS Industrial Pressure Switch

3WPS is a piston-type pressure switch with simple set point adjustment and SPDT snap action. It is suitable for pump and compressor monitoring, HVAC systems 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	5 years

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 ₂ 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	5 years

9WPS Explosion Proof Compact Pressure Switch

9WPS has an internal adjustment wheel with built in locking set-screws and is safe to adjust during operation. It is suitable for use in safety panels with pumps, compressors, turbines and other applications.



Housing	316 SS
Wetted Parts	SS process connection and 316 SS diaphragm
Range	Vac to 15,000 psi
No. of Contacts	1 x SPDT (2 x SPDT optional) (hermetically sealed option for 1 x SPDT only)
Accuracy	±2% of full scale
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 or NPTM
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.



Upper Housing	Nickel plated carbon steel, 316 SS
Lower Housing	316 SS, Hastelloy® B & C, Monel®, PTFE, other
Diaphragm	PTFE for increased compatibility, sensitivity and versatility
Min/Max Pres.	0-2,500 psi
Connection	1/4" or 1/2" NPTF, process flange: 1", 1.5" or 2" and #150 or #300 pressure rating
Warranty	5 years



D46 Flanged Flush Mount Diaphragm Seal

D46 is one-piece design seal with no internal gaskets or o-rings. It is typically found in oil refineries, pulp and paper mills and chemical plants where media buildup is a concern.

Body	316 SS
Diaphragm	316L SS bonded housing
Min/Max Pres.	30-1,300 psi
Connection	0-2,500 psi
Connection	1/4" or 1/2" NPT, process flange: 1.5", 2" or 3" pipe size process connection
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" 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	EPDM, Neoprene, Nitrile or Hypalon®
Min. Pressure	Vacuum
Max. Pressure	1,000 psi
Connection	1/4" or 1/2" NPTF gauge ports, 1"-48" pipe sizes, (consult factory for larger sizes)
Warranty	5 years

*Tee fitting also available



NVA Needle Valve

NVA Needle Valves come in straight, angle body or multiport, 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" and 1" NPTF and NPTM connection options
Warranty	5 years



BBV Block & Bleed Valve

Block & Bleed Valves are available as single handle, two handle or double block and bleed, hard or soft seat, carbon or stainless steel with a NACE option. They are ideal for industrial applications.

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" and 1/2" NPTF and NPTM connection options
Warranty	5 years

Pulp & Paper Product Selection



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
Burst Pressure	SS: 30,000 psi, brass: 18,000
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 is 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 or 932°F
Connection	1/4" NPTM x 1/4" NPTF or 1/2" NPTM x 1/2" 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.

Body	316 SS, bellows or piston, NACE or non-NACE
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



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
Burst Pressure	SS: 60,000 psi, brass: 30,000
Connection	1/4" or 1/2" NPTM x NPTF
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
Type	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 or 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: ±1% 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 years



TER and TET RTDs and Thermocouples

RTDs and Thermocouples are electronic temperature sensors capable of measuring high temperatures. Their high accuracy and durability enables them to be used in a variety of industrial applications.

Head	Aluminum (standard) or stainless steel
Element	TER: Platinum 100 Ohm Class A as per IEC751, TET: Type J & K standard
Accuracy	TER: ±0.5°C at 0°C, TET: ±0.4% Class 1
Range	-328°F to 2,192°F (-200°C to 1,200°C)
Connection	Process: 1/2" NPT (3/4" NPT with well) male, Conduit: 1/2" NPT female
Warranty	5 years

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*, 304 SS, 316 SS, other materials available upon request
Bore	0.260" standard
Length	2.5", 4", 6", 9", 12" or 15" and others
Process Connect.	3/4", 1/2" or 1" standard, other thread sizes available upon request
Therm. Connect.	1/2" NPTF, 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	0.260"
Length	4", 6", 9", 12" or 15" and others
Process Connect.	1", 1.5" or 2" flange and others
Therm. Connect.	1/2" NPT female
Warranty	5 years

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

Monel® is a registered trademark of Inco Alloys International

Hypalon® is a registered trademark of DuPont Performance Elastomers

* **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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