

WINTERS INSTRUMENTS



SANITARY PROCESS



PRESSURE & TEMPERATURE SOLUTIONS



CORPORATE PROFILE

WINTERS Instruments was established over forty-seven years ago in Toronto, Canada by Erwin Winter, an immigrant from Czechoslovakia. WINTERS was established for the manufacture of pressure gauges and industrial thermometers for the Canadian market.

As WINTERS developed, it rapidly acquired a reputation for high quality instrumentation; securing as its long time customers numerous major Canadian distributors, Original Equipment Manufacturers and Government sectors including the Canadian and United States Departments of National Defence, where stringent quality standards are maintained.

During the 1980's, WINTERS began to broaden its market base by exporting its products and services to the United States, Europe, the Caribbean and South America. In 1991, WINTERS opened the United States operation and in 1996, an International Division was added. In 2000, Versa Gauge, an U.S. based manufacturer of industrial instrumentation was acquired. Today, WINTERS is proud to be distributing its products in over sixty countries throughout the world.

WINTERS emphasis on quality and service together with the drive for a specialized product line has resulted in Winters strength in "niche" markets such as the Food and Beverage and Pharmaceutical industries. Today, the WINTERS corporation includes four divisions, Winters Canada, Winters USA, Winters International and Versa Gauge, that service sanitary industries which require specific pressure and temperature measurement. These industries include: Biopharmaceutical, Biotechnology, Food and Beverage Processing, Dairy/Sanitary, Cosmetic Processing, Refrigeration and many others.

As we progress into the next century our vision is quite clear; competitively priced quality products and a commitment to providing our customers with the best service is what will continue to separate WINTERS from the competition.

MISSION STATEMENT

TO PROVIDE OUR CUSTOMERS WITH INDUSTRIAL INSTRUMENTATION FOR THE MEASUREMENT PRIMARILY OF PRESSURE AND TEMPERATURE. WINTERS WILL SATISFY OUR CUSTOMER'S REQUIREMENTS WITH TIMELY DELIVERIES OF COMPETITIVELY PRICED, QUALITY PRODUCTS AND FRIENDLY, EFFICIENT CUSTOMER SERVICE.

APPROVALS / STANDARDS

ISO 9002
CRN
UL
ULC
CSA
FM

ASME B40.1
NATO
NACE
NEMA
FCI
CE

CAN. DEPT. OF DEFENSE
U.S. DEPT. OF DEFENSE
U.S. NAVY
U.S. COAST GUARD





What separates Winters Instruments from all of the other manufacturers in the Sanitary Industry?

E-COMMERCE

WINTERS is now offering a full E-commerce solution. Features include; real-time ordering, real-time stock-check, product database search and many more features.

SERVICE

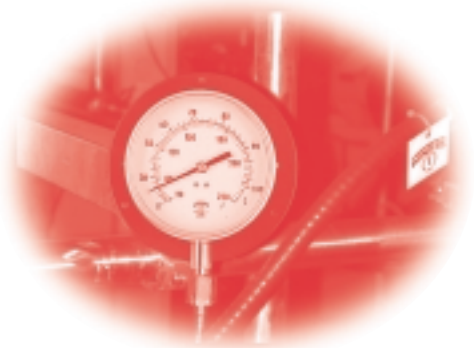
WINTERS leads the industry, known for our quick and efficient service.

QUALITY

THE BEST WARRANTY IN THE INDUSTRY, PERIOD. The 5-3-1 warranty. And of course, WINTERS high quality standards are maintained by its ISO 9002 certification.

SPECIALS

WINTERS can produce a wide range of custom products (eg. Special ranges, dials, connections, etc.) in record time, usually in one week or less.



DELIVERY

Full stocking warehouses enable same day shipping of most products.

TRACK RECORD

WINTERS has been manufacturing instruments for over forty-seven years. Our impressive customers, with stringent quality requirements, include large original equipment manufacturers, an international network of distributors in over sixty countries and world renowned corporations.

COMMITMENT

Competitively priced, quality products and the utmost in service, your satisfaction guaranteed.

www.WINTERS.ca

WINTERS



1953

WINTERS 3A Sanitary Gauge



Winters 3A designated Sanitary Gauges are designed to meet the special requirements of the dairy, food processing and pharmaceutical industries. The rugged one piece stainless steel construction ensures an extended service life. The gauges are available with glycerin fill to reduce internal wear due to pulsation and vibration and to provide an easier reading by minimizing excess pointer movement. Winters 3A Sanitary Gauges are available in a 2.5" (63mm) or 4" (100mm) dial size available with a 1.5" (40mm) or 2" (50mm) bottom or back Sanitary Tri-Clamp® connection.

± 0.75% ACCURACY
RECALIBRATOR SCREW
TEST CERTIFICATE
AVAILABLE UPON
REQUEST

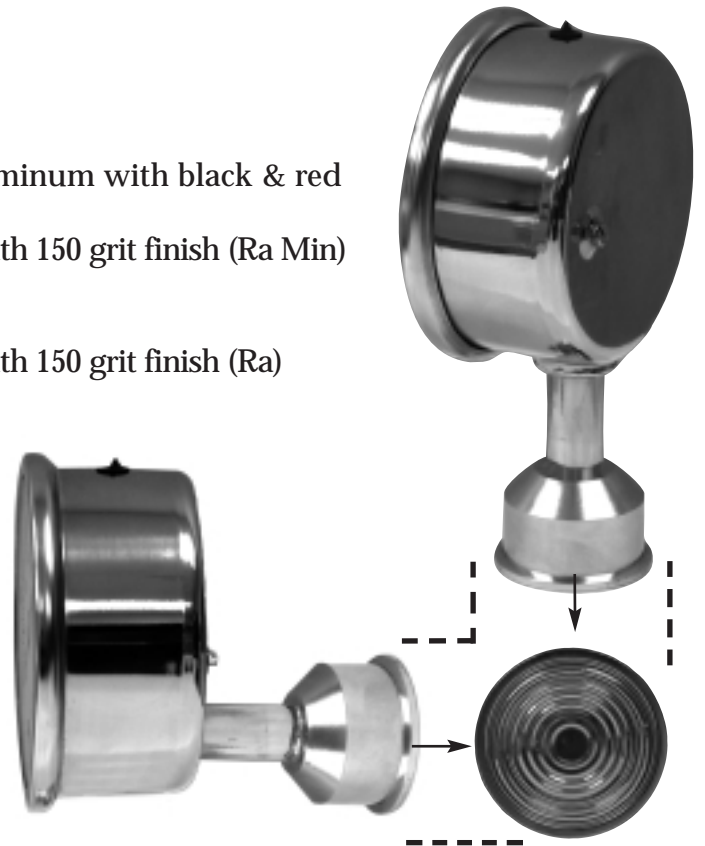
- Dial:2.5" (63mm) and 4" (100mm), white aluminum with black & red markings
- Case:AISI 304 stainless steel, electro polished with 150 grit finish (Ra Min) (with external recalibrator screw)
- Lens:Plexiglass
- Ring:AISI 304 stainless steel, electro polished with 150 grit finish (Ra)
- Pointer:.....Aluminum, anodized black
- Process
- Connection:....1 1/2" (40mm), 2" (50mm) Tri-Clamp **
 AISI 316 stainless steel, electro polished
- Diaphragm:....AISI 316 stainless steel, electro polished
- Gasket:2.5" (63mm) silicon; 4" (100mm) EPDM
- Vent and
- Fill Plug:EPDM
- Seal Fill:Approved food service oil
- Case Fill:Glycerin, 98%
- Working
- Pressure:Maximum 75% of full scale value
- Ambient
- Temperature: +59F / +149°F (+15°C / +65°C)
- Process
- Temperature: +149F (+65°C).

- Can be cleaned and steamed in place up to +250F (+121°C)
- Accuracy:.....2.5" (63mm) ±3% - 2% - 3% accuracy (ANSI / ASME Grade B)
 4" (100mm) ±0.75% accuracy (ANSI / ASME Grade 1)
- Range:Standard ranges through 30"-0-30 psi/bar to 0-600 psi/bar

* Autoclavable - 4" dry model only.

** Other connections available.

Tri-Clamp is a registered trade mark of Tri-Clover.





WINTERS 3A Objectives/Background

The purpose of the 3-A Sanitary Standards Committees is to formulate sanitary design criteria applicable to equipment types (Standards) or practices relating to processing systems (Accepted Practices). The 3A designation is internationally accepted throughout the world.

3-A accepted practices pertain to the sanitation aspects of equipment utilized to produce a wide variety of food, dairy and pharmaceutical products. Included are Culinary Steam, Boiler Feed Water, Heat Exchangers, Transfer Station, Silo Tank, Atmospheric Pasteurizers, Pipeline Milking Systems and Feed Production.

Sanitary systems are dependent upon accurate temperature measurement. Pasteurization systems include high temperature short time (HTST) at 221°F (105 °C) and higher heat shorter time (HHST) at 300F (149°C).

Boiler Feed Water Systems include temperature measurement to reduce water hardness and to prevent corrosion and scale in boilers. Sanitization Systems include temperature, time and the concentration of specific detergent solutions and bactericides. Cleaning and sanitizing procedures routinely include requirements of 250°F (121°C).

The temperature control system typically uses an indicating thermometer to measure the process temperature. A second thermometer is used to limit the maximum temperature to a defined preset value.

Temperature sensors (usually high accuracy resistance temperature detectors (RTD's) are installed in a fitting at the outlet of the heating and/or cooling system to accurately measure temperature.



Tri-Clamp Fitting

Tri-clamp fittings are the most popular for easy assembly and break-down of process lines and equipment. Winters offers Tri-clamp fittings in T304 and T316L materials in 1/2" through 12" sizes.



SPECIFICATIONS

Size: 1/2" OD through 12" OD
Materials: T304 or T316L



WINTERS PRESSURE GAUGES



Premium Liquid Filled

Process Gauge

Low Pressure

Utilized in all aspects of the sanitary process (e.g. Pumps, food equipment & aseptic process systems.)

Process areas where severe service applications or operator safety is a factor. (Pharmaceutical or cosmetic production line)

For the measurement of low pressures of liquids and gases in processing.

- 1 1/2" (40mm), 2 1/2" (63mm), 4" (100mm), 6" (150mm) & 10" (250mm) dial sizes
- Stainless Steel case

- 4 1/2" (115mm)
- Black impact resistant phenolic case

- 2 1/2" (63mm), 4" (100mm), 4 1/2" (115mm), 6" (150mm)
- Steel, Stainless Steel or Aluminum case

- 316 Stainless Steel
- Brass

- 316 Stainless Steel
- Brass

- Stainless Steel
- Brass

- 1/4", 1/2" or 3/8" NPT, Bottom or Back

- 1/4" or 1/42" NPT Bottom or Back

- 1/4" NPT

- 1 1/2" (40mm) ±2.5% filled ANSI/ASME Grade B
- 2 1/2" (63mm) - ±1.6% filled ANSI/ASME Grade A 1% Dry ANSI/ASME Grade 1A
- 4" (100mm), 6" (150mm) & 10" (250mm) ±1% filled, ANSI/ASME Grade 1A, ±0.5% dry, ANSI/ASME Grade 2A

- ± 0.5% accuracy dry, ANSI/ASME Grade 2A
- ± 1% accuracy filled ANSI/ASME Grade 1A

- ± 1% accuracy, ANSI/ASME Grade 1A

Standard Ranges from 30" Hg Vacuum /kPa to 0-20000 psi/kPa

Standard Ranges from 30" Hg Vacuum/kPa to 0-20,000 psi/kPa

Standard Ranges from 0-15" water vac. to 0-10 psi/kPa

- Restrictor screw
- Bayonet ring
- White aluminum dials with black and red marking

- Silver braised or welded joints
- Safety blowout backplate
- Solid front
- Reinforced polypropylene ring

- Restrictor screw
- Recalibrator standard on stainless steel internal gauges

APPLICATIONS

DIAL SIZE / CASE

TUBE / SOCKET

CONNECTION

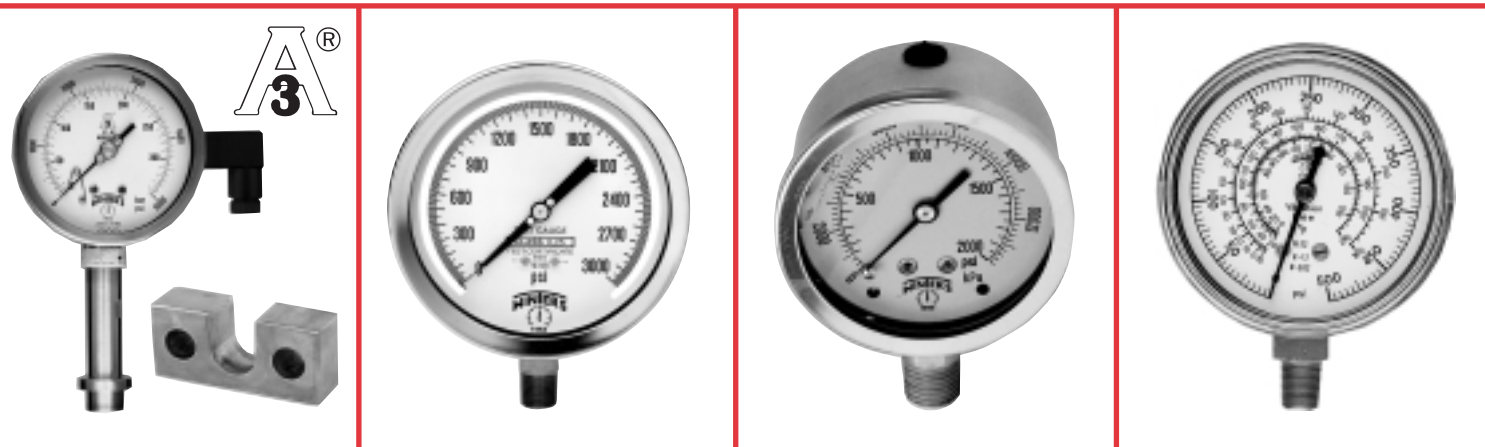
ACCURACY

PRESSURE RANGES

OTHER SPECS



WINTERS PRESSURE GAUGES



Homogenizer	Test Gauge	Quality Liquid Filled	Freon
<p>The 3A designated Homogenizer is designed specifically for sanitary applications in the food industry</p> <ul style="list-style-type: none"> - 4" (100mm) & 6" (150mm) - White aluminum dial - AISI 304 stainless steel case 	<p>All sanitary applications (i.e. laboratories) where accuracy and repeatability are of prime importance.</p> <ul style="list-style-type: none"> - 4" (100mm) & 6" (150mm) - AISI 304 stainless steel 	<p>Designed for service applications where vibration or pulsation is present.</p> <ul style="list-style-type: none"> - 1.5" (40mm), 2.5" (63mm) & 4" (100mm) - AISI 304 stainless steel case 	<p>These gauges are designed for use on all freon applications. CFC refrigerant scale is standard, HFC refrigerant scale is available</p> <ul style="list-style-type: none"> - 2.5" (63mm) Plastic, colour coded case - 4" (100mm) & 6" (150mm) Steel painted black case
<ul style="list-style-type: none"> - AISI 316 stainless steel 	<ul style="list-style-type: none"> - AISI 316 Stainless steel 	<ul style="list-style-type: none"> - OT 58 Brass or - AISI 316 stainless steel 	<ul style="list-style-type: none"> - Phosphor Bronze - Brass (6" only)
<ul style="list-style-type: none"> - Standard fitting 	<ul style="list-style-type: none"> - 1/4" NPT - 1/2" NPT - Bottom & Back connections 	<ul style="list-style-type: none"> - 1/8" NPT - 1/4" NPT - 1/2" NPT - Bottom & Back connections 	<ul style="list-style-type: none"> - 1/4" NPT, bronze - 1/2" NPT, bronze - Bottom & Back connections
<ul style="list-style-type: none"> - ±1% accuracy ANSI / ASME Grade 1A 	<ul style="list-style-type: none"> - 4" (100mm) ±0.5% full scale, ANSI/ASME Grade 2A - 6" (150mm) ±0.25% full scale, ANSI/ASME Grade 3A 	<ul style="list-style-type: none"> - 1.5" (40mm) ±2.5% ANSI/ASME Grade B - 2.5" (63mm) & 4" (100mm) ±1.6% liquid filled ANSI/ASME Grade 1A ±1% dry ANSI/ASME Grade 2A 	<ul style="list-style-type: none"> - 2.5" (63mm) ±2% ANSI/ASME Grade B - 4" (100mm) & 6" (150mm) ±1% liquid filled ANSI/ASME Grade 1A
<ul style="list-style-type: none"> - 0-5000 psi/bar - 0-10000 psi/bar - 0-5000 psi/bar & transmitter - 0-10000 psi/bar & transmitter 	<ul style="list-style-type: none"> - 1/4" NPT, standard ranges from 0/15 psi to 0/600 psi - 1/2" NPT, standard ranges from 0/1000 psi to 0/10000 psi 	<ul style="list-style-type: none"> - Standard ranges from Vacuum to 15000 psi 	<ul style="list-style-type: none"> - 30"-0-120 psi (retard 250) - 30"-0-300 psi - 0-500 psi
<ul style="list-style-type: none"> - Liquid filled - Seal fill is oil, approved for food service 	<ul style="list-style-type: none"> - Supplied with an NIST traceable test certificate certifying the accuracy of the gauge. - The pointer is an aluminum, anodized black, micrometer adjustable, knife edge. 	<ul style="list-style-type: none"> - Liquid fill is glycerin, (silicone and florolube are optional) - Plexiglass lens 	<ul style="list-style-type: none"> - Recalibrator bar is standard - Restrictor screw is standard - Lens is plexiglass or glass

APPLICATIONS

DIAL SIZE / CASE

TUBE / SOCKET

CONNECTION

ACCURACY

PRESSURE RANGES

OTHER SPECS



WINTERS PRESSURE GAUGES

**OXYGEN
CLEANING
AVAILABLE**



Economy

Panel Mounted

Ammonia

Measurement of pressure media in food processing equipment, beverage dispensers & pharmaceutical applications

Measurement of pressure media in food processing equipment, beverage dispensers & pharmaceutical applications.

Ammonia Gauges are widely used in the refrigeration industry where they provide reliable service.

- 1 1/2" (40mm), 2" (50mm), 2 1/2" (63mm) or 4" (100mm)
- Steel or plastic case

- 1 1/2" (40mm), 2" (50mm) & 2 1/2" (63mm)
- Black steel case with u-clamp

- 2 1/2" (63mm), 4" (100mm), 6" (150mm), 8" (200mm) & 10" (250mm)
- AISI 304 stainless steel and aluminum or steel

- Brass

- Brass

- Premium - 316 stainless steel
- Quality - stainless steel
- Economy - stainless steel tube & nickel plated socket

- 1/8" or 1/4" NPT Bottom, Back or Centre Back
-

- 1/4" or 1/8" NPT Back
-

- Premium - 1/4" NPT or 1/2" NPT
- Quality - 1/4" NPT
- Economy - 1/4" NPT

- ±3% - 2% - 3% ANSI/ASME Grade B

- ±3% - 2% - 3% ANSI/ASME Grade B

- Premium - ±0.5% to ±1.0% ANSI/ASME Grade A & 1A
- Quality - ±1% ANSI/ASME Grade 1A
- Economy - ±1% to ±2% ANSI/ASME Grade 1A or B

Standard Ranges from 30" Hg Vacuum /kPa to 0-5000 psi/kPa

Standard Ranges from 30" Hg Vacuum /kPa to 0-300 psi/kPa

- 30-0-150 psi/ F
- 30-0-300 psi/ F

- Stainless steel case available
- Lead free construction is available
- Glass lens is optional

- Stainless steel ring around acrylic lens

- 2" & 4" available in bottom or back connections
- Front flange is available
- Plexiglass lens
- Ambient temperature is -13F to 149 F (-25C to 65C)

APPLICATIONS

DIAL SIZE / CASE

TUBE / SOCKET

CONNECTION

ACCURACY

PRESSURE RANGES

OTHER SPECS

WINTERS ACCESSORIES



Diaphragm Seals

FEATURES:

- ◇ Stainless steel diaphragms (insulators) available in 1 or 2 piece construction
- ◇ Various connections ($\frac{1}{4}$ ", $\frac{1}{2}$ ", $\frac{3}{4}$ ", 1", etc.)
- ◇ Flanged and In-line, also, available
- ◇ Assorted types of materials available (e.g. Monel, Hastelloy B & C, Titanium, etc.)
- ◇ Plastic diaphragm seals
- ◇ Viton diaphragm seals available for very low pressure applications

PRESSURE RANGES:

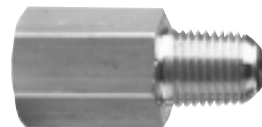
30" vacuum up to 6000 psi/kpa (Other ranges available upon request)

APPLICATIONS:

Any application where the process fluid is corrosive or is viscous and would solidify within the pressure gauge, or pressure transmitter.

#20 SANITARY SEAL

Meets the requirements of dairy, food, beverage, chemical and pharmaceutical industries. When the #20 Sanitary Seal is attached to an all stainless steel construction pressure gauge, the unit becomes completely sanitary, making it impossible for bacteria to form and contaminate the process product. This unit is 3A designated for all sanitary applications.



SNUBBER



NEEDLE VALVE



MINI BALL VALVE



SYPHON

Accessories

SNUBBER - Utilized to dampen fluctuating or shock pressures. (available in stainless steel or brass) and used commonly in process applications ($\frac{1}{4}$ " or $\frac{1}{2}$ " NPT, F x M). (s/steel snubber - up to 20,000 psi/kpa)

NEEDLE VALVE - Commonly used to control flow. Stainless steel or brass, $\frac{1}{4}$ " NPT F x F.

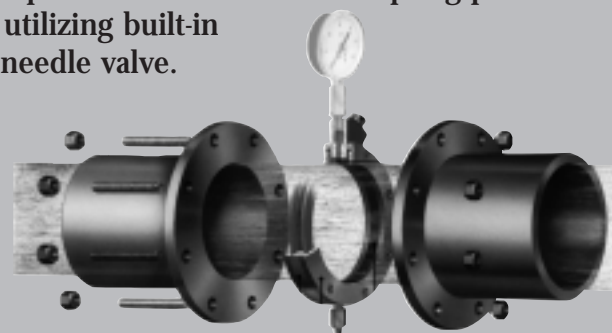
MINI BALL VALVE - Economical and practical solution utilized as an isolation valve. Stainless steel or brass material $\frac{1}{4}$ " NPT, F x M.

SYPHON - Stainless steel or steel coil, $\frac{1}{4}$ " or $\frac{1}{2}$ " NPT. Most common application is to reduce media temperature.

Other pressure gauge options available including: safety case, maximum adjustable pointer, micrometer adjustable pointer, over and under stops, stainless steel tags, red secondary pointer, etc. .

INSTRUMENTATION INSULATION RING

In many biotechnology applications, the instrumentation ring isolates the gauge/switch from solids in process flow to assure accurate pressure reading, while maintaining absolute cleanliness and sterility. Easy removal of gauge or switch for calibration, repair or replacement without interrupting process flow. Virtually clog free, utilizing built-in threaded needle valve.





WINTERS ELECTRONIC SERIES



STC Series



HT Series



3A RTD



STP Series

APPLICATIONS
ELECTRICAL OUTPUT
ELECTRICAL CONNECTOR
HOUSING
WETTED PARTS / CONNECTION
ACCURACY
PROOF
BURST
RANGE
OTHER SPECS

<p>Food & beverage, Liquid level Processing, Pharmaceutical, Dairy & Sanitary pipelines</p>	<p>Homogenizers, Slurries and Viscous Environments</p>	<p>Utilized in food, dairy, beverage, pharmaceutical & chemical processing.</p>	<p>– Food & Beverage Processing. – Dairy, Pharmaceutical, Cosmetics & Testing Applications</p>
<p>– 4-20mA (Other outputs available)</p>	<p>– 4-20mA (Other outputs available)</p>	<p>– 4-20 mA (Other outputs available)</p>	<p>– 4-20 mA, 2 wire (Other outputs available)</p>
<p>– 1/2" NPT conduit fitting and strain relief with 15' (4.5m) shielded cable</p>	<p>– 20 foot (6m) Belden 9536, 6 conductor</p>	<p>– 3 wire construction pt 100 DIW $\pm 0.12^{\circ}\text{C}$ at 0°C $\alpha = 0.00385$, platinum</p>	<p>– 20 foot (6m) Belden 9536, 6 conductor</p>
<p>– 316 stainless steel</p>	<p>– 316 stainless steel</p>	<p>Polypropylene and stainless steel heads</p>	<p>– 316 welded stainless steel</p>
<p>– 1 1/2" (40mm) Tri-Clamp® – 2" (50mm) Tri-Clamp®</p>	<p>– 316 stainless steel – 15-5 PH 316 stainless steel (wetted)</p>	<p>– 1 1/2", 2", 2 1/2", 3" Tri-Clamp®, 316 stainless steel – 2 1/2", 4", 6" stainless steel probe (1/4" diameter)</p>	<p>– 316 stainless steel, 1 1/2" (40mm) & 2" (50mm) Tri-Clamp®</p>
<p>– $\pm 0.20\%$ full scale</p>	<p>– $\pm 0.5\%$ full scale</p>	<p>– High accuracy, 3 wire construction</p>	<p>– $\pm 0.5\%$ full scale</p>
<p>– Varies with range</p>	<p>– 3X full scale (22,500 psi)</p>	<p>– N/A</p>	<p>– 2X full scale</p>
<p>– Varies with range</p>	<p>– 5X full scale (23,000)psi</p>	<p>– N/A</p>	<p>– 3X full scale</p>
<p>– Standard ranges from 0-1 psi to 0-1000 psi/kPa – Meets 3A standards – Designed for Clean-in-Place and Steam-in-Place – Insensitive to thermal shock</p>	<p>– Standard ranges from 0-100 psi to 0-1000 psi – Utilized in demanding industrial environments – Compatible with all systems – NEMA 4X rated</p>	<p>– -58°F- 390°F (-50°C- 200°C) – Installed and Calibrated 4-20mA – Transmitter available</p>	<p>– Standard ranges from 75" H2O to 2000" H2O & 0- 3psi to 0- 1000 psi – NEMA4X(IP65) – RFI Protection</p>



WINTERS ELECTRONIC SERIES



Sanitary Silo	Non-Contact	Digital Pressure	Solar Digital
Utilized in Sanitary process & Storage tanks Provides dairy customers with an economical solution to their Silo storage measurements needs	Food, Sanitary, Stack temperatures	Sanitary applications requiring digital readout & pressure switch option	Provides an excellent alternative to conventional analog alternative to conventional analog liquid and gas filled remote reading thermometers
- 4-20 mA, 2 wire (Other outputs available)	- N/A	- 4" (100mm) dial - 4-20mA (2 wire)	- N/A
- 20ft(6m) wire pigtail with NEMA 4X and strain relief - Soft wire	- Battery operated	- MINI - DIN	- N/A
- 316 stainless steel	- Plastic Housing	- ABS	- Case: AISI 304 Stainless Steel, Polished
- 316 stainless steel	- Non-Contact, Infrared Technology	- Stainless Steel	- 4' (1.21m) PVC cable, - AISI 304 Stainless Steel Probe
- 0.20% FSO (Static)	- ±2% accuracy of reading 3F/2C (which ever is greater)	- ±0.20% of full scale	- 1%
- 2x full scale	- N/A	- N/A	- N/A
- 5x full scale	- N/A	- N/A	- N/A
- Standard ranges from 0-3 psi to 0-100 psi	- 0 F - 600F (-18C - 315C)	- 0 - 10,000 psi	- 2" (50mm) -58/158 °F or -40/70 °C - 2.5" (63mm) -58/302 °F or -50 / 150 °C
- Safe for Wash-Downs	- Utilized in measuring temperature with non-contact infrared technology. - Selectable in F or C - One second response	- High tech, easy to read display	- Easy to read crystal display - Lithium battery backup - Polycarbonate lens

APPLICATIONS
ELECTRICAL OUTPUT
ELECTRICAL CONNECTOR
HOUSING
WETTED PARTS / CONNECTION
ACCURACY
PROOF
BURST
RANGE
OTHER SPECS

WINTERS



1953

WINTERS THERMOMETERS



Bi-Metal

Retort 9IT

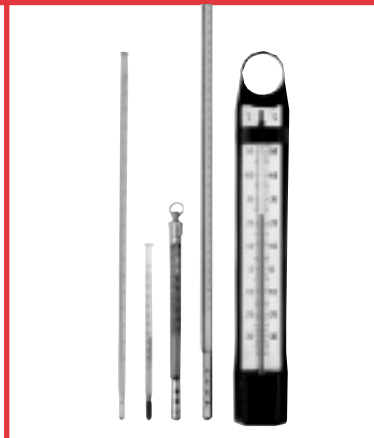
Sanitary Wells

Thermowells

APPLICATIONS	<ul style="list-style-type: none"> - All types of industrial applications - Food applications 	<ul style="list-style-type: none"> - Retort thermometers utilized in food / canning applications 	<ul style="list-style-type: none"> - Designed specifically for the sanitary requirements of the food and dairy industry. 	Winters offers a full line of industrial thermowells to meet all of your requirements from Bi-metals to 9IT thermometers
DIAL SIZE / CASE	<ul style="list-style-type: none"> - 1" (25mm) & 2" (50mm) back connection - 3" (75mm), 4" (100mm) & 5" (125mm) back, bottom & adjustable angle connection 	<ul style="list-style-type: none"> - 9" (228mm) Aluminum Case - Glass lens 	<ul style="list-style-type: none"> - 316 Stainless steel 	<ul style="list-style-type: none"> - Materials include: Carbon Steel, Brass, 304 & 306 stainless steel, Titanium, & Alloy 20 - Other materials are available
STEM LENGTH	<ul style="list-style-type: none"> - 2.5" (63mm), 4" (100mm), 5" (125mm), 6" (150mm), 9" (225mm) & 12" (300mm) - other stem lengths available 	<ul style="list-style-type: none"> - 3 1/2" (75mm) - 6" (150mm) 	<ul style="list-style-type: none"> - 2.5" (63mm), 4" (100mm), 6" (150mm) & 9" (225mm) - Over 9" Available 	<ul style="list-style-type: none"> - All standard/custom lengths are available.
CONNECTION	<ul style="list-style-type: none"> - 1/4" NPT on 2" (50mm) dial, 1/2" NPT on 3" (90mm), 4" (100mm) & 5" (125mm) dials 	<ul style="list-style-type: none"> - 3/4" NPT brass separable socket 	<ul style="list-style-type: none"> - All wells have a 1/2" NPT thermometer connection & a - 1.5" (40mm) Tri-clamp® or - 2" (50mm) Tri-clamp® 	<ul style="list-style-type: none"> - 3/4" NPT - 1/2" NPT - Other thread sizes are available
ACCURACY	<ul style="list-style-type: none"> - ±1.0% - 1.5% FS 	<ul style="list-style-type: none"> - ±1% accuracy 	<ul style="list-style-type: none"> - N/A 	<ul style="list-style-type: none"> - N/A
TEMPERATURE RANGES	<ul style="list-style-type: none"> - Standard ranges from -100 / 150 °F (-70 / 70 °C) to 200 / 1000 °F (100/540 °C) 	<ul style="list-style-type: none"> - 170 / 270 F&P Retort - Standard ranges from -40 / 110 °F (-40 / 40 °C) to 30 / 300 °F (0 / 150 °C) - 80 / 135 C/kg 	<ul style="list-style-type: none"> - N/A 	<ul style="list-style-type: none"> - N/A
OTHER SPECS	<ul style="list-style-type: none"> - Stainless steel case and stem - An acrylic or Lexan lens is available for food applications - Hermetically sealed construction 	<ul style="list-style-type: none"> - Dual scale (°F / °C) standard - Fully adjustable - Organic liquid filled tube - Other sockets available 	<ul style="list-style-type: none"> - Lengths to fit all standard bimetal thermometers. 	<ul style="list-style-type: none"> - Allows for the creation of a sealed system. - Thermometer can be removed from a system with out a shutdown.



WINTERS THERMOMETERS



Remote Reading	Long Stem	Laboratory	Hydrometers
Industrial applications where an inexpensive remote temperature indication is required. (e.g. freezer)	Designed specifically for sanitary requirements of the food and dairy industry.	Laboratories, quality control departments and miscellaneous tests. Petroleum Industry wide copper dip case & refill).	Designed to measure the percentage of alcohol content for spirits or beer. Manufactured in accordance with guidelines set by Revenue Canada and are certifiable
<ul style="list-style-type: none"> - 2" (50mm) AISI 304 stainless steel - 2 1/2" (63mm), 3 1/2" (90mm), 4" (100mm), 4 1/2" (115mm), 6" (150mm) & 8" (200mm) 	<ul style="list-style-type: none"> - 4 1/2" (115mm) - Aluminum case painted black 	<ul style="list-style-type: none"> - Ring or button top cases available - Armour cases available in Aluminum or chrome plated stainless steel. 	<ul style="list-style-type: none"> - Soda Glass
<ul style="list-style-type: none"> - 5ft. (1.5m) Standard length - Max. length is 100ft. 	<ul style="list-style-type: none"> - Stem length: 12" (30.48cm) to 48" (122cm) - all stems are AISI stainless steel 	<ul style="list-style-type: none"> - 5" (125mm) up to 20" (500mm) 	<ul style="list-style-type: none"> - Various
<ul style="list-style-type: none"> - None, bulb only - 1/2" or 3/4" available in brass union, st/st union, brass thermowell, st/st thermowell 	<ul style="list-style-type: none"> - Brass union bulb 	<ul style="list-style-type: none"> - N/A 	<ul style="list-style-type: none"> - N/A
<ul style="list-style-type: none"> - ±0.5% accuracy Gas actuated - ±3% accuracy Vapour actuated 	<ul style="list-style-type: none"> - ± 1% full scale 	<ul style="list-style-type: none"> - ±0.1% to ±1.5% 	<ul style="list-style-type: none"> - Alcohol hydrometer's accuracy is ±0.2 of full scale
<ul style="list-style-type: none"> - Standard ranges available in °F, °C, F/C scales 	<ul style="list-style-type: none"> - 40/220 °F - 0/300 °F - 80/300 °F - 200/400 °F 	<ul style="list-style-type: none"> - Various temperature ranges are available 	<ul style="list-style-type: none"> - +68 °F (+20 °C) Ambient - +176 °F (+80 °C) Max - +32 (0 °C) Min
<ul style="list-style-type: none"> - 1/2" (12.7mm) x 6" (150mm) bulb is standard - Numerous options including armour, duct flanges, compensated capillary, etc. 	<ul style="list-style-type: none"> - Gas actuated heavy-duty movement system. - Wood handle - Shatter-resistant plexiglass lens 	<p>Lab thermometers are available in every configuration from the most basic general use thermometer to the most specialized A.S.T.M or fractional degree thermometer.</p>	<ul style="list-style-type: none"> - Bulb shot poised, sealed with specially formulated wax.

APPLICATIONS

DIAL SIZE / CASE

STEM LENGTH

CONNECTION

ACCURACY

TEMPERATURE RANGES

OTHER SPECS

THE BEST WARRANTY IN THE INDUSTRY, PERIOD.



5 YEAR WARRANTY

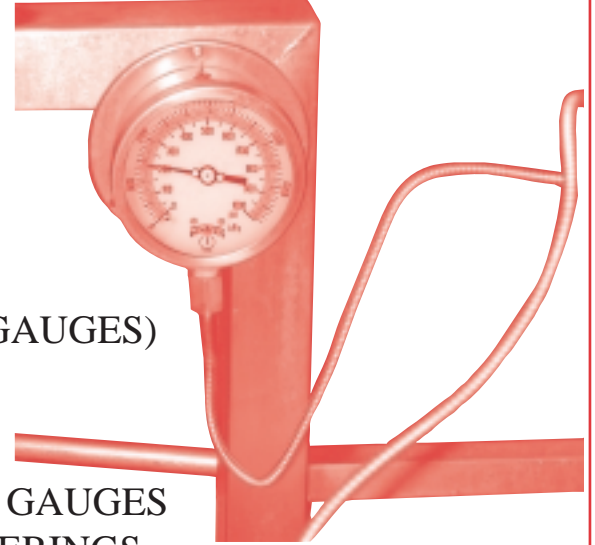
(WINTERS PREMIUM SERIES
PRESSURE GAUGES)

3 YEAR WARRANTY

(WINTERS QUALITY SERIES PRESSURE GAUGES)

1 YEAR WARRANTY

(WINTERS ECONOMY SERIES PRESSURE GAUGES
AND ALL OF OUR OTHER PRODUCT OFFERINGS
INCLUDING; THERMOMETERS, ELECTRONIC
PRODUCTS AND RELATED ACCESSORIES)



Winters Instruments' products are warranted for a stated period of time (see above) after date of purchase against manufacturing and materials defects. Any product which is found by Winters to be defective will be replaced at Winters discretion. Winters product warranty does not cover product defects resulting from improper product selection, misuse or misapplication EXCEPT AS SPECIFICALLY SET FORTH IN THIS WARRANTY. WINTERS INSTRUMENTS MAKES NO REPRESENTATION OR WARRANTY OF ANY KIND, WHETHER EXPRESSED OR IMPLIED, TO PURCHASER OR ANY OTHER PERSON WITH RESPECT TO ANY OF THE PRODUCTS. WITHOUT LIMITING THE GENERALITY OF THE PRECEDING SENTENCE, WINTERS INSTRUMENTS DISCLAIMS THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Any liability from Winters to Purchaser or any other person or entity pursuant to this Warranty, whether for a claim in tort, for breach of contract or otherwise, shall not exceed the purchase price of the Product giving rise to such liability. Winters shall in no event have any liability to Purchaser or any other person or entity for any consequential, indirect, punitive or special damages (including, without limitation, lost profits) pursuant to this Warranty or pursuant to its sale of the Products, even if the possibility of such damages could have been foreseen by Winters Instruments.

Winters Remote
Reading
Thermometer
Built in 1969
Serviced in 2001
Still in service today.


Quality Control Manager



Why E-commerce in the Sanitary Industry?

- CONVENIENCE:** You can place an order 24 hours a day, seven days a week, 365 days a year from any location with a computer and a connection to the internet, including work, home, an internet café or library.
- FAST:** Web orders arrive at Winters seconds after they are confirmed. The orders are automatically entered into the inventory system and are then double checked for accuracy by a Winters representative decreasing the overall processing time.
- SEARCHABLE:** The database search allows you to quickly find a product, including many custom products that can only be found via the search, and then place the order in seconds.
- CURRENT:** The website is always up to date with new products, and current pricing. In-house systems can become out of date, and/or cumbersome to maintain current pricing and products.
- CHECK STOCK:** Check availability of products in real time, and receive an estimated shipping date.
- ORDER BY PRODUCT CODE:** The ability to order by product code from the main page or from within the shopping cart creates a fast and convenient way to place an order. You can also order by selecting a code from any "Product Code Chart". (3A Sanitary Pressure Gauge)
- OPTIONS/ACCESSORIES:** Easily add options/accessories from the accessories page or by code. There is a special instructions area on the checkout page where a customer can match options to products. Pharmaceutical news including current headlines is available.
- ORDER HISTORY:** The online Order History is sorted by date, and is useful for:
- 】 Tracking orders by account
 - 】 Quick and easy re-ordering, allowing for amount changes and the addition or removal of products from the shopping cart.
 - 】 It is accessible from any computer that has Internet access
- CONFIRMATION:** After placing an order through www.winters.ca, a confirmation with the following information is sent to the customer:
- 】 Winters internal order number, so any questions you have about the order can quickly be addressed.
 - 】 The shipping address.
 - 】 The customers P.O. number.
 - 】 Product codes, Quantity, List Price, Net Price and Totals.
 - 】 An estimated Shipping Cost and Weight.
 - 】 Any Special Instructions for the order.
- The confirmation is an appropriate reference to use as a hard copy Purchase Order.

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This complex block features a collage of various Winters Instruments products, including pressure gauges, sensors, and valves, set against a red grid background. A large, semi-transparent '@' symbol is overlaid on the center. In the upper right, a circular inset shows a screenshot of the company's website, www.winters.ca, with a mouse cursor pointing to a 'Check Stock' button. At the bottom, two buttons labeled 'Proceed to Checkout' and 'Check Stock' are visible. The company name 'winters.ca' is written vertically on the left side, and the website URL 'www.winters.ca' is displayed at the bottom in a large white font.