



300 Series



Altitude



Ammonia



Brass Case



Colour Coded Series



Differential



High Static Pressure
Differential Gauges



Duplex



Homogenizer



LF Series
(Liquid Filled)



Low Pressure



Low Pressure Test



Nace Gauge
MR0175-2002



Nace Gauge
MR0103-2003



Process



Receiver



Safety Case



3A Sanitary



Schaeffer Gauge



Stabilizer



Test Gauge



Turbine Gauge



Custom Products



Custom Dials



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300 Series

CRN



Back Connection



Optional Hinged Case
Back Connection

Description

The Winters 300 Series pressure gauge was originally designed and manufactured to conform to NATO's stringent specifications. The same high level quality has been maintained through the years as this gauge has become a durable all purpose premium gauge.

Available with brass or stainless steel internals, Winters 300 Series gauges are manufactured to ensure sturdy and reliable performance. These rugged gauges continue to be supplied to both the Canadian (CRN registered) and United States Naval Defense departments.

Winters 300 Series gauge is best suited for steam air, oil, fresh and salt water, freon and other pressure media. (A syphon is recommended for steam applications.)

The new optional Hinged Case (available on the 4.5" & 6" back connection) makes calibration much more efficient.



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300 Series

Specifications - Brass Internals

Dial:	4 ¹ / ₂ " (115mm), 6" (150mm) 8 ¹ / ₂ " (200mm) and 10" (250mm) white aluminum
Case:	Aluminum painted black
Lens:	4 ¹ / ₂ " (115mm) and 6" (150mm) - glass 8 ¹ / ₂ " (200mm) and 10" (250mm) - polycarbonate
Ring:	4 ¹ / ₂ " (115mm) and 6" (150mm) - stainless steel, polished 8 ¹ / ₂ " (200mm) and 10" (250 mm) - anodized aluminum
Front Flange:	4 ¹ / ₂ " (115mm) and 6" (150mm) - stainless steel, polished 8 ¹ / ₂ " (200mm) and 10" (250mm) - aluminum painted black
Back Flange:	Steel, painted black (8.5" & 10" flange integral part of case)
Pointer:	Aluminum, anodized black, micrometer adjustable
Socket:	Brass
Connection:	1/4" NPT or 1/2" NPT standard
Bourdon Tube:	Phosphor bronze for ranges up to 600 psi (4, 137 kPa) 316L stainless steel for ranges over 600 psi (4, 137 kPa)
Movement:	Brass
Welding:	Tin/copper alloy for ranges up to 600 psi (4,137 kPa) Silver alloy for ranges over 600 psi (4,137 kPa)
Over-pressure Limit:	30% for pressures up to 600 psi (4,137 kPa) 25% for pressures over 600 - 1,400 psi (4,137 - 9,653 kPa) 15% for pressures over 1,400 psi (9,653 kPa)
Working Pressure:	Maximum 75% of full scale value
Ambient/Process Temp:	-40°F to 150°F (-40°C to 65°C)
Accuracy:	+/-0.5% accuracy (ANSI/ASME Grade 2A)
Protection:	IP54

Specifications - Stainless Steel Internals

Dial:	4 ¹ / ₂ " (115mm), 6" (150mm) 8 ¹ / ₂ " (200mm) and 10" (250mm) white aluminum
Case:	Aluminum painted black
Lens:	4 ¹ / ₂ " (115mm) and 6" (150mm) - glass 8 ¹ / ₂ " (200mm) and 10" (250mm) - polycarbonate
Ring:	4 ¹ / ₂ " (115mm) and 6" (150mm) - stainless steel, polished 8 ¹ / ₂ " (200mm) and 10" (250 mm) - anodized aluminum
Front Flange:	4 ¹ / ₂ " (115mm) and 6" (150mm) - stainless steel, polished 8 ¹ / ₂ " (200mm) and 10" (250mm) - aluminum painted black
Back Flange:	Steel, painted black (8.5" & 10" flange integral part of case)
Pointer:	Aluminum, anodized black, micrometer adjustable
Socket:	316L Stainless steel
Connection:	1/4" NPT or 1/2" NPT standard
Bourdon Tube:	316L stainless steel
Movement:	304 stainless steel
Welding:	316L stainless steel TIG Argonarc
Over-pressure Limit:	30% for pressures up to 600 psi (4,137 kPa) 25% for pressures over 600 - 1,400 psi (4,137 - 9,653 kPa) 15% for pressures over 1,400 psi (9,653 kPa)
Working Pressure:	Maximum 75% of full scale value
Ambient/Process Temp:	-40°F to 150°F (-40°C to 65°C)
Accuracy:	+/-0.5% accuracy (ANSI/ASME Grade 2A)
Protection:	IP54



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300 Series

PRODUCT CODES

How to order: Specify product code

Dial Size Connection Tube, Socket, Movement	4 1/2" (115mm)		4 1/2" (115mm)		6" (150mm)		6" (150mm)	
	Bottom	Back (LB)	Bottom	Back (LB)	Bottom	Back (LB)	Bottom	Back (LB)
	Brass	Brass	Stainless Steel	Stainless Steel	Brass	Brass	Stainless Steel	Stainless Steel
30" Hg. vacuum/kPa	P6000	P6000B	P6025	P6025B	P6075	P6075B	P6260	P6260B
30"/0/15 psi/kPa	P6001	P6001B	P6026	P6026B	P6076	P6076B	P6261	P6261B
30"/0/30 psi/kPa	P6002	P6002B	P6027	P6027B	P6077	P6077B	P6162	P6162B
30"/0/60 psi/kPa	P6003	P6003B	P6028	P6028B	P6078	P6078B	P6163	P6163B
30"/0/100 psi/kPa	P6004	P6004B	P6029	P6029B	P6079	P6079B	P6164	P6164B
30"/0/160 psi/kPa	P6005	P6005B	P6030	P6030B	P6080	P6080B	P6265	P6265B
30"/0/200 psi/kPa	P6006	P6006B	P6031	P6031B	P6081	P6081B	P6266	P6266B
30"/0/300 psi/kPa	P6007	P6007B	P6032	P6032B	P6082	P6082B	P6267	P6267B
0 - 15 psi/kPa	P6008	P6008B	P6033	P6033B	P6083	P6083B	P6098	P6098B
0 - 30 psi/kPa	P6009	P6009B	P6034	P6034B	P6084	P6084B	P6099	P6099B
0 - 60 psi/kPa	P6010	P6010B	P6035	P6035B	P6085	P6085B	P6100	P6100B
0 - 100 psi/kPa	P6011	P6011B	P6036	P6036B	P6086	P6086B	P6101	P6101B
0 - 160 psi/kPa	P6012	P6012B	P6037	P6037B	P6087	P6087B	P6102	P6102B
0 - 200 psi/kPa	P6013	P6013B	P6038	P6038B	P6088	P6088B	P6103	P6103B
0 - 300 psi/kPa	P6014	P6014B	P6039	P6039B	P6089	P6089B	P6104	P6104B
0 - 400 psi/kPa	P6015	P6015B	P6040	P6040B	P6090	P6090B	P6105	P6105B
0 - 600 psi/kPa	P6016	P6016B	P6041	P6041B	P6091	P6091B	P6106	P6106B
0 - 1000 psi/kPa	P6017	P6017B	P6042	P6042B	P6092	P6092B	P6107	P6107B
0 - 1500 psi/kPa	P6018	P6018B	P6043	P6043B	P6093	P6093B	P6108	P6108B
0 - 2000 psi/kPa	P6019	P6019B	P6044	P6044B	P6094	P6094B	P6109	P6109B
0 - 3000 psi/kPa	P6020	P6020B	P6045	P6045B	P6095	P6095B	P6110	P6110B
0 - 5000 psi/kPa	P6021	P6021B	P6046	P6046B	P6096	P6096B	P6111	P6111B
0 - 10000 psi/kPa	P6022	P6022B	P6047	P6047B	P6170	P6170B	P6180	P6180B
0 - 15000 psi/kPa	P6023	P6023B	P6160	P6160B	P6171	P6171B	P6181	P6181B
0 - 20000 psi/kPa	P6024	P6024B	P6161	P6161B	P6172	P6172B	P6182	P6182B

Dial Size Connection Tube, Socket, Movement	8 1/2" (200mm)		8 1/2" (200mm)		10" (250mm)		10" (250mm)	
	Bottom	Back (LB)	Bottom	Back (LB)	Bottom	Back (LB)	Bottom	Back (LB)
	Brass	Brass	Stainless Steel	Stainless Steel	Brass	Brass	Stainless Steel	Stainless Steel
30" Hg. vacuum/kPa	P6200	P6200B	P6300	P6300B	P6400	P6400B	P6500	P6500B
30"/0/15 psi/kPa	P6201	P6201B	P6301	P6301B	P6401	P6401B	P6501	P6501B
30"/0/30 psi/kPa	P6202	P6202B	P6302	P6302B	P6402	P6402B	P6502	P6502B
30"/0/60 psi/kPa	P6203	P6203B	P6303	P6303B	P6403	P6403B	P6503	P6503B
30"/0/100 psi/kPa	P6204	P6204B	P6304	P6304B	P6404	P6404B	P6504	P6504B
30"/0/160 psi/kPa	P6205	P6205B	P6305	P6305B	P6405	P6405B	P6505	P6505B
30"/0/200 psi/kPa	P6206	P6206B	P6306	P6306B	P6406	P6406B	P6506	P6506B
30"/0/300 psi/kPa	P6207	P6207B	P6307	P6307B	P6407	P6407B	P6507	P6507B
0 - 15 psi/kPa	P6208	P6208B	P6308	P6308B	P6408	P6408B	P6508	P6508B
0 - 30 psi/kPa	P6209	P6209B	P6309	P6309B	P6409	P6409B	P6509	P6509B
0 - 60 psi/kPa	P6210	P6210B	P6310	P6310B	P6410	P6410B	P6510	P6510B
0 - 100 psi/kPa	P6211	P6211B	P6311	P6311B	P6411	P6411B	P6511	P6511B
0 - 160 psi/kPa	P6212	P6212B	P6312	P6312B	P6412	P6412B	P6512	P6512B
0 - 200 psi/kPa	P6213	P6213B	P6313	P6313B	P6413	P6413B	P6513	P6513B
0 - 300 psi/kPa	P6214	P6214B	P6314	P6314B	P6414	P6414B	P6514	P6514B
0 - 400 psi/kPa	P6215	P6215B	P6315	P6315B	P6415	P6415B	P6515	P6515B
0 - 600 psi/kPa	P6216	P6216B	P6316	P6316B	P6416	P6416B	P6516	P6516B
0 - 1000 psi/kPa	P6217	P6217B	P6317	P6317B	P6417	P6417B	P6517	P6517B
0 - 1500 psi/kPa	P6218	P6218B	P6318	P6318B	P6418	P6418B	P6518	P6518B
0 - 2000 psi/kPa	P6219	P6219B	P6319	P6319B	P6419	P6419B	P6519	P6519B
0 - 3000 psi/kPa	P6220	P6220B	P6320	P6320B	P6420	P6420B	P6520	P6520B
0 - 5000 psi/kPa	P6221	P6221B	P6321	P6321B	P6421	P6421B	P6521	P6521B
0 - 10000 psi/kPa	P6222	P6222B	P6322	P6322B	P6422	P6422B	P6522	P6522B
0 - 15000 psi/kPa	P6223	P6223B	P6323	P6323B	P6423	P6423B	P6523	P6523B
0 - 20000 psi/kPa	P6224	P6224B	P6324	P6324B	P6424	P6424B	P6524	P6524B

NOTE: Front flange is standard on all back connected models. Front flange is standard on 10" back connected models.

• (8 1/2" Model standard with U-clamp) (LB) - Lower back connection

Other Options:

- If back flange required add "300BF" to product code.
- SG = Safety glass lens.
- Other ranges available upon request.
- MS = Monel socket and tube.
- SFC = Solid front safety case.
- Over and understops available.
- (* Syphon recommended for steam applications)
- Over and understops available.
- 45HC = 4.5" Hinged Case
- 6HC = 6" Hinged Case
- MAXI = Maximum adjustable pointer.



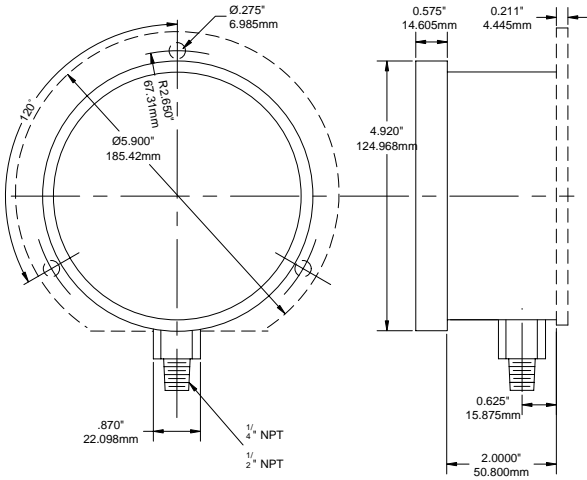
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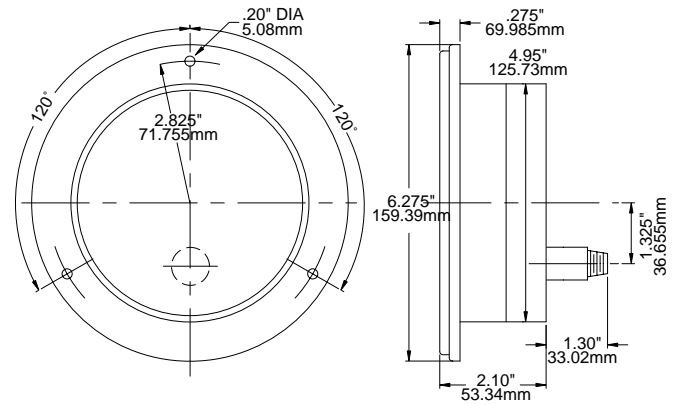
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300 Series

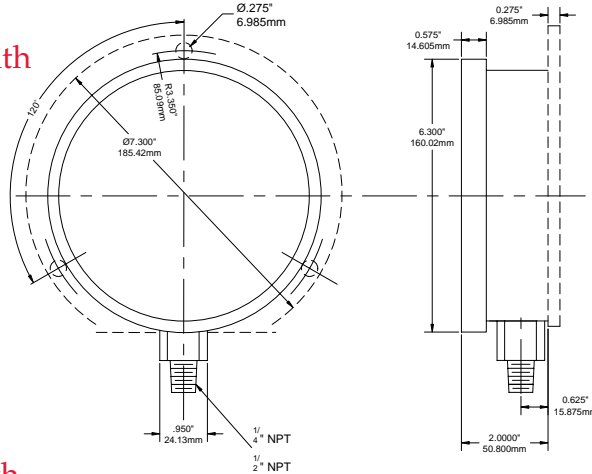
4.5" Bottom Connection with Back Flange Option



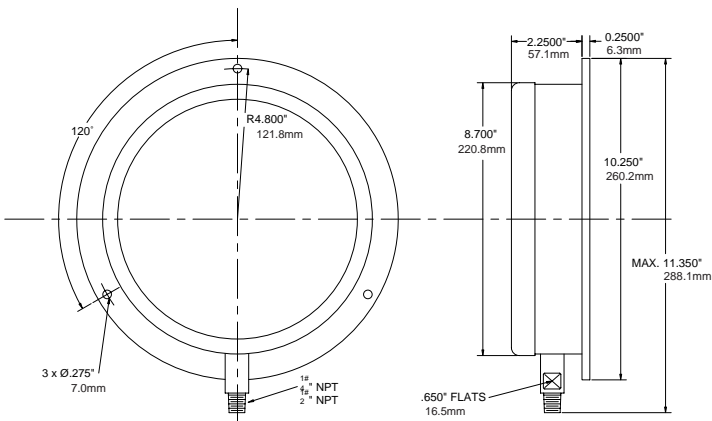
4.5" Back Connection with Front Flange Option



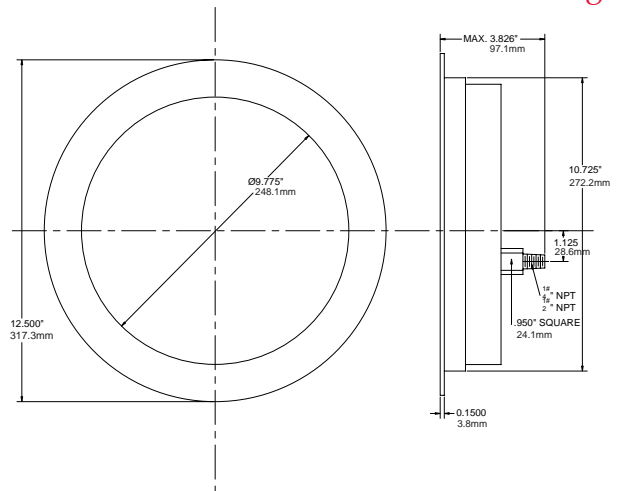
6" Bottom Connection with Back Flange Option



8.5" Bottom Connection with Standard Back Flange



10" Back Connection with Standard Back Flange



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Altitude

CRN



Description

Winters Altitude Gauge is used to indicate the level of liquid in a tank, pipe, etc. The Altitude Gauge is available with dial scales in feet of water, meters of water, or any other liquid with a known specific gravity. When determining the appropriate dial type, the medium being measured must be considered. The Altitude Gauge is available with a 4½" (115mm) dial with black aluminum casing. The instrument features brass or stainless steel internals and has an accuracy level of $\pm 0.5\%$ ANSI/ASME Grade 2A. Calibration and adjustments can be completed easily with the micrometer pointer. The instrument is CRN registered.



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Altitude

Specifications Brass Internals	
Dial:	4 1/2" (115mm)
Case:	Aluminum painted black
Lens:	Glass
Ring:	Stainless steel, polished
Front Flange:	Stainless steel, polished
Back Flange:	Steel, painted black
Pointer:	Aluminum, anodized black, micrometer adjustable brass
Socket:	Brass
Connection:	1/4" NPT or 1/2" NPT standard
Bourdon Tube:	Phosphor bronze
Movement:	Brass
Welding:	Tin/copper alloy
Over-pressure Limit:	30% of full scale value
Working Pressure:	Maximum 75% of full scale value
Ambient Temperature:	-40°F to 150°F (-40°C to 65°C)
Process Temperature:	-40°F to 150°F (-40°C to 65°C)
Accuracy:	±0.5% accuracy (ANSI/ASME Grade 2A)
Protection:	IP52

Specifications Stainless Steel Internals	
Dial:	4 1/2" (115mm)
Case:	Aluminum painted black
Lens:	Glass
Ring:	Stainless steel, polished
Front Flange:	Stainless steel, polished
Back Flange:	Steel, painted black
Pointer:	Aluminum, anodized black, micrometer adjustable brass
Socket:	316L stainless steel
Connection:	1/4" NPT or 1/2" NPT standard
Bourdon Tube:	316L stainless steel
Movement:	Stainless steel
Welding:	316L stainless steel TIG Argonarc
Over-pressure Limit:	30% of full scale value
Working Pressure:	Maximum 75% of full scale value
Ambient Temperature:	-40°F to 150°F (-40°C to 65°C)
Process Temperature:	-40°F to 150°F (-40°C to 65°C)
Accuracy:	±0.5% accuracy (ANSI/ASME Grade 2A)
Protection:	IP52



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Altitude

How to order: Specify product code

PRODUCT CODES

Dial Size	4 1/2" (115mm)	
Tube, Socket, Movement	Brass	Stainless Steel
0-35 ft/water	P6008ALT	P6033ALT
0-70 ft/water	P6009ALT	P6034ALT
0-140 ft/water	P6010ALT	P6035ALT
0-230 ft/water	P6011ALT	P6036ALT
0-370 ft/water	P6012ALT	P6037ALT
0-460 ft/water	P6013ALT	P6038ALT
0-690 ft/water	P6014ALT	P6039ALT

OPTIONS:

- SG= Safety glass lens
- MS= Monel socket and tube
- SFC= Solid front safety case
- MAXI= Maximum adjustable pointer available
- 300BF= Back flange
- Over and understops available
- Other ranges available upon request
- Other dial sizes, gauge types, options, and connections are available upon request.

NOTE: For back connection, add the suffix "B" to the corresponding bottom connection product codes. Front flange is standard on all back connection models.



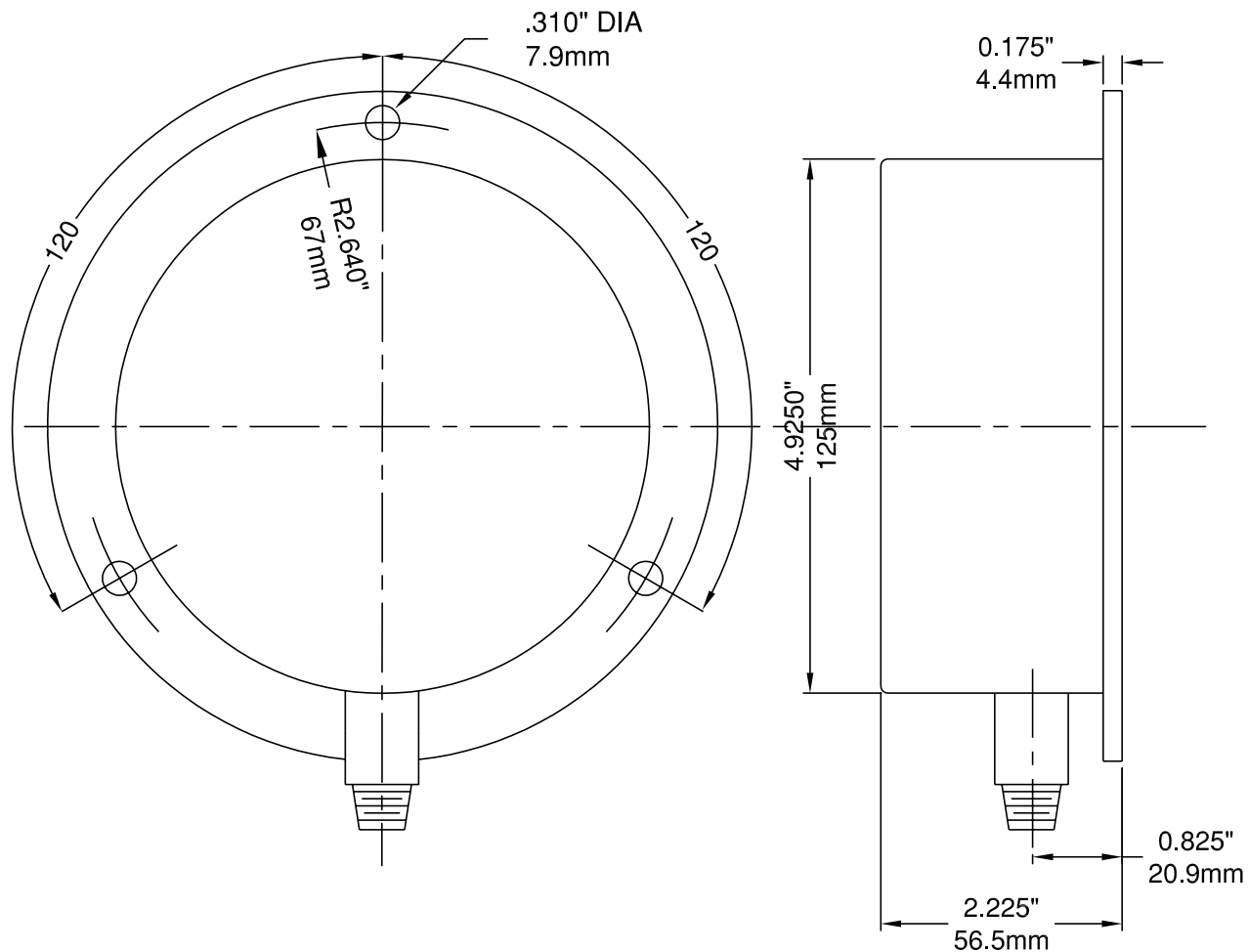
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Altitude

4.5" Bottom Connection with Standard Back Flange



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12/02

Ammonia

CRN



Premium 4" Dial

Description

Winters Ammonia Gauges are widely used in the refrigeration industry where they provide reliable service at a reasonable price.

Winters Ammonia Gauges are available in Premium Series (2½" [63mm], 4" [100mm], 6" [150mm], 8½" [200mm], & 10" [250mm] dial size) with welded #316 stainless steel internals, Quality Series 4" [100mm] dial size) with welded steel internals or Economy Series (2½" [63mm] and 4" [100mm]) with stainless steel tube and nickel plated socket.

The Winters Ammonia Gauges are CRN registered.

How to order: Specify product code

PRODUCT CODES

PREMIUM

Dial Size	30-0-150 PSI/F	30-0-300 PSI/F
2.5" (63mm) Bottom	P1750	P1751
2.5" (63mm) Back (CB)	P1752	P1753
4" (100mm) Bottom	P1705	P1706
4" (100mm) Back (LB)	P1708	P1709
6" (150mm) Bottom	P1710	P1711
8.5" (200mm) Bottom	P1712	P1713
10" (250mm) Bottom	P1714	P1715

QUALITY

Dial Size	30-0-150 PSI/F	30-0-300 PSI/F
4" (100mm) Bottom	Q1701	Q1702
4" (100mm) Back (LB)	Q1703	Q1704

ECONOMY

Dial Size	30-0-150 PSI/F	30-0-300 PSI/F
2.5" (63mm) Bottom	E1699	E1700
2.5" (63mm) Back	*	*
4" (100mm) Bottom	E1695	E1696
4" (100mm) Back (CB)	E1697	E1698

Options:

- Back flange available.
 - Other ranges available upon request.
 - Glycerine fill available (except on 8.5" & 10" dials)
 - Other connection sizes available upon request.
 - Front flange available.
 - U-clamp available.
- CB - Centre back connection, LB - Lower back connection



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Ammonia

Premium Series Specifications

Dial:	2 1/2" (63mm), 4" (100mm), 6" (150mm), 8 1/2" (200mm), 10" (250mm) white with black and red markings
Case/Ring:	AISI 304 stainless steel for 2 1/2" (63mm), 4" (100mm) & 6" (150mm) - Aluminum case for 8 1/2" & 10"
Lens:	Polycarbonate
Pointer:	Aluminum, anodized black, micrometer adjustable 4" (100mm) and 6" (150mm)
Socket:	316L stainless steel
Connection:	1/4" NPT or 1/2" NPT standard, bottom
Bourdon Tube:	316L stainless steel, seamless drawn
Movement:	304 stainless steel
Gasket Materials:	2 1/2" (63mm): Buna N for case and black seal, Monoprene for lens seal 4" (100mm), 6" (150mm), 8 1/2" (200mm) and 10" (250mm) EPDM
Welding:	TIG
Over-pressure Limit:	30% of full scale value
Working Pressure:	Maximum 75% of full scale value
Ambient Temperature:	-40°F to 150°F (-40°C to 65°C) - dry, 14°F to 150°F (-10°C to 65°C) - liquid filled (8 1/2" & 10" dry)
Process Temperature:	-40°F to 150°F (-40°C to 65°C) - dry, 14°F to 150°F (-10°C to 65°C) - liquid filled (8 1/2" & 10" dry)
Accuracy:	2 1/2" (63mm): +/-1.5% , 4" (100mm) and 6" (150mm) +/-1.0% of full scale , 8 1/2" (200mm) & 10" (250mm) +/- 0.5% (ANSI/ASME Grade 2A)
Protection:	IP65

Quality Series Specifications

Dial:	4" (100mm) aluminum, painted white
Case/Ring:	AISI 304 stainless steel
Lens:	Polycarbonate
Pointer:	Aluminum, anodized black
Socket / Bourdon Tube:	316 Stainless steel
Connection:	1/4" NPT standard
Movement:	304 stainless steel
Over-pressure Limit:	30% of full scale value
Working Pressure Limit:	Maximum 75% of full scale value
Ambient/Process Temp.:	-40°F to 150°F dry (-25°C to 65°C), 14°F-150°F (-10°C-65°C) liquid filled
Accuracy:	+/- 1.5% (ANSI/ASME Grade 1A)
Protection:	IP65

Economy Series Specifications

Dial:	2 1/2" (63mm) and 4" (100mm) aluminum, painted white
Case:	2 1/2" (63mm) steel painted black, 4" (100mm) steel painted black
Lens:	Polycarbonate
Ring:	2 1/2" (63mm) steel, painted black, 4" (100mm) AISI 304 stainless steel
Pointer:	Aluminum, anodized black
Socket:	2 1/2" (63mm) steel, and 4" (100mm) nickel plated steel
Connection:	1/4" NPT standard
Bourdon Tube:	2 1/2" (63mm) and 4" (100mm) stainless steel
Movement:	Stainless steel
Over-pressure Limit:	30% of full scale value
Working Pressure:	Maximum 75% of full scale value
Ambient/Process Temp.:	-40°F to 150°F (-40°C to 65°C)
Accuracy:	+/- 3-2-3% (ANSI/ASME Grade B)
Protection:	IP52



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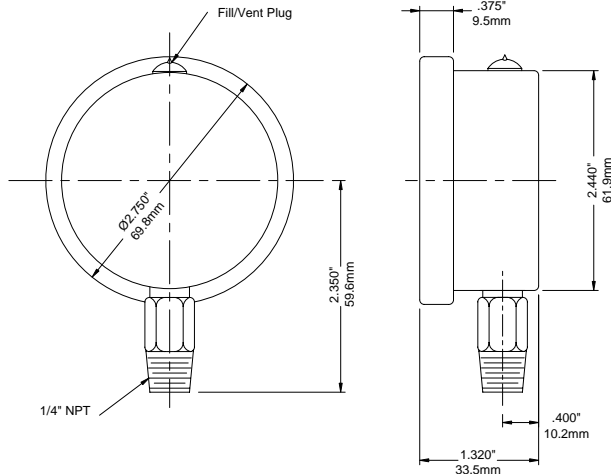
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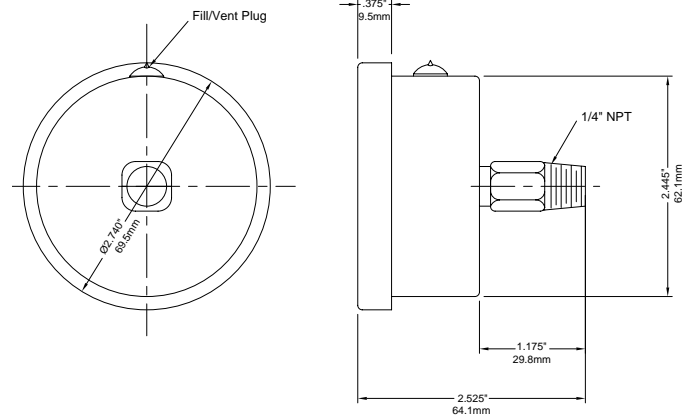
Ammonia

PREMIUM AMMONIA GAUGE

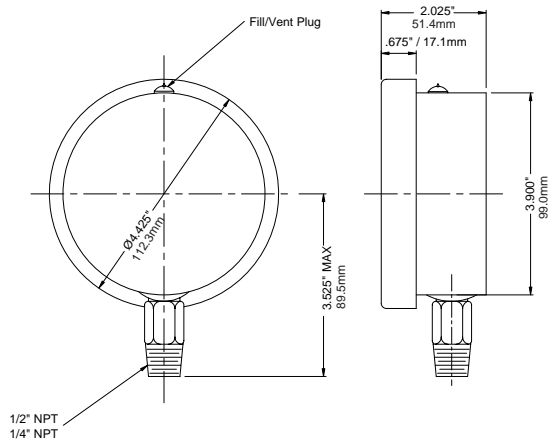
2 1/2" Bottom Connection



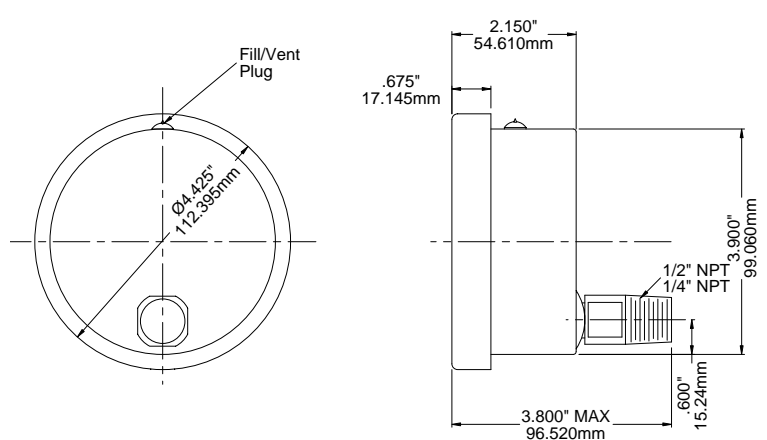
2 1/2" Back Connection



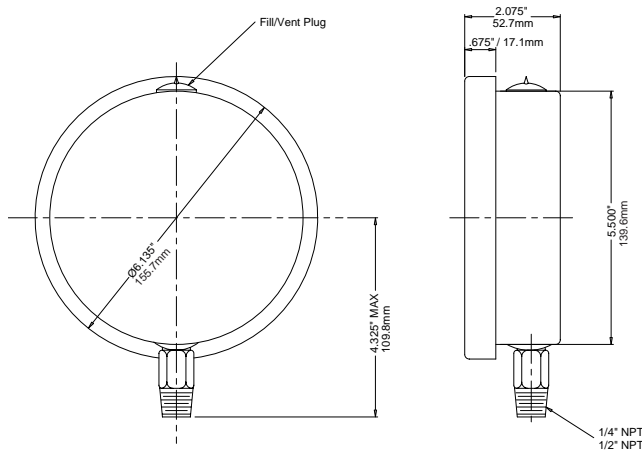
4" Bottom Connection



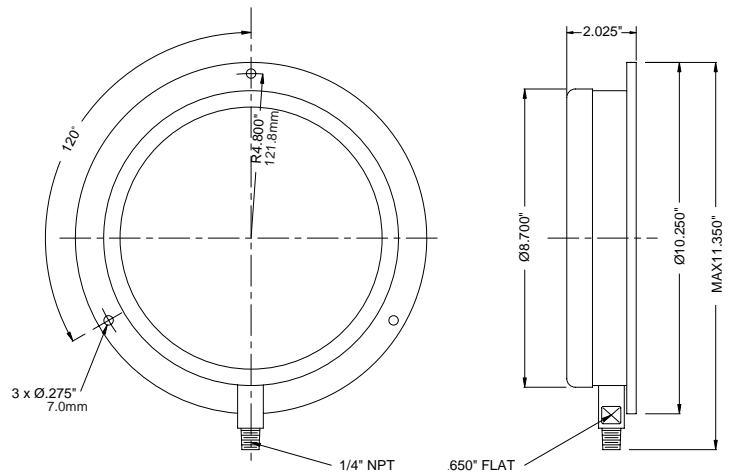
4" Back Connection



6" Bottom Connection



8 1/2" Bottom Connection



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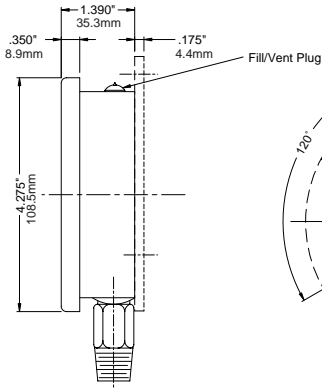
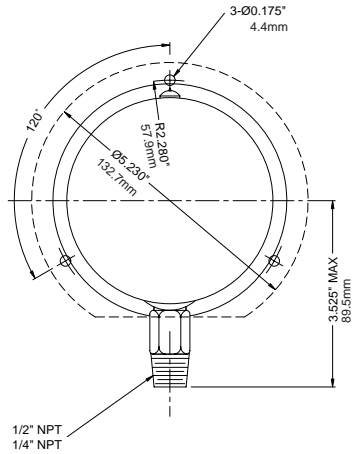
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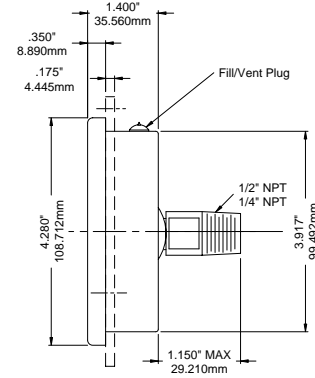
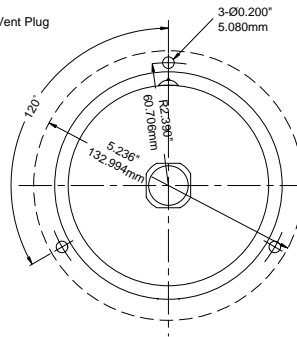
Ammonia

QUALITY AMMONIA GAUGE

4" Bottom Connection

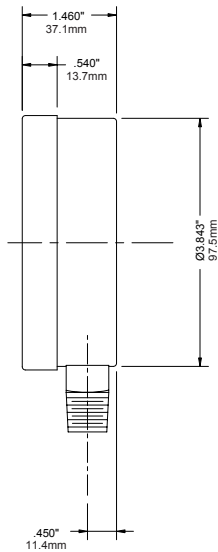
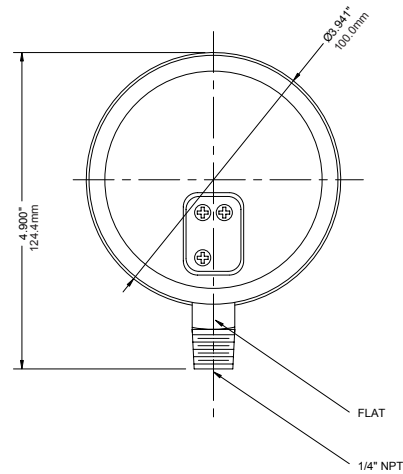


4" Back Connection

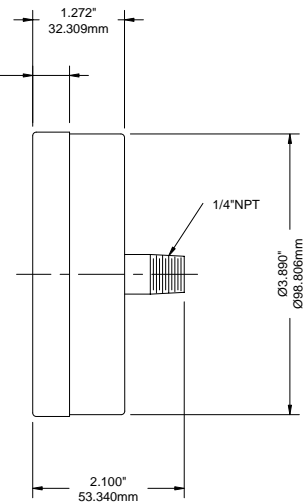
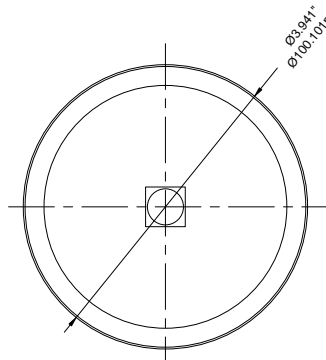


ECONOMY AMMONIA GAUGE

4" Bottom Connection



4" Back Connection

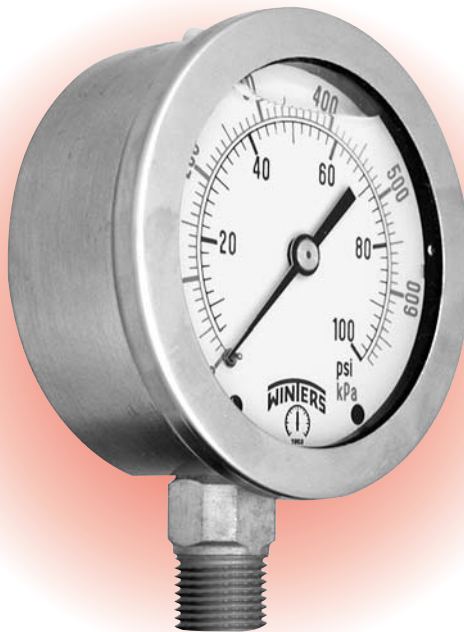


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Brass Case



- * Forged Brass Case
- * 316 Stainless Steel Ring
- * Removable Restrictor Screw

Description

The Winters' Premium Series Brass Case Gauge is a heavy duty, durable and rugged instrument utilized in a variety of industrial applications. This pressure gauge is available in a 2.5" (63mm) dial size with a bottom or back connection (optional u-clamp available). The instrument is standard liquid filled, where all moving parts are lubricated and dampened from the harmful effects of vibration and pulsation.

The Winters Brass Case is highlighted by a forged case that entails an attractive 316 stainless steel ring. For your specific requirements, a removable restrictor screw is a standard feature.

Winters' Brass Case Gauge should be used in applications that are not corrosive to brass. Typical applications include; hydraulics, automotive, waste water, fluid power and other high vibration applications.

Specifications

Dial:	2.5" (63mm), aluminum with red and black markings
Case:	Forged Brass
Lens:	Polycarbonate
Ring:	316 stainless steel
Pointer:	Aluminum, anodized black
Block:	Brass
Socket:	Brass
Connection:	1/4" NPT, back or bottom
Bourdon Tube:	Bronze
Movement:	Brass
Gasket Materials:	Neoprene
Fill Liquid:	Glycerin (99.7%)
Protection:	IP65
Restrictor Screw:	Removable
Over-pressure Limit:	30% of full scale value
Working Pressure:	Maximum 75% of full scale value
Ambient/Process Temperature:	32°F-149°F (0°C-60°C) (for temperatures below this range, silicone filling is recommended)
Accuracy:	1.5% of full scale



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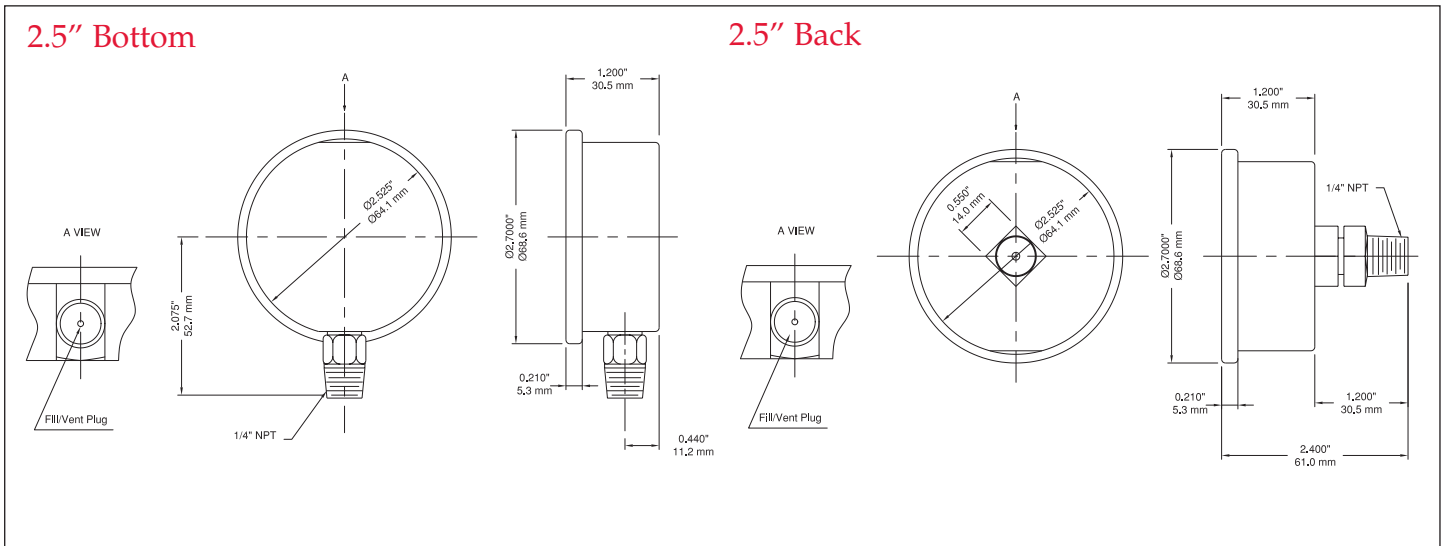
Brass Case

How to order: Specify product code
PRODUCT CODES

Dial Size	2 1/2" (63mm)		Dial Size	2 1/2" (63mm)	
Connection	Bottom	Back (CB)	Connection	Bottom	Back (CB)
Tube, Socket & Movement	Brass	Brass	Tube, Socket & Movement	Brass	Brass
NPT Connection	1/4"	1/4"	NPT Connection	1/4"	1/4"
30" Hg Vacuum/kPa	PBC801	PBC900	0-160 psi/kPa	PBC805	PBC905
30"-0-15 psi/kPa	PBC790	PBC890	0-200 psi/kPa	PBC806	PBC906
30"-0-30 psi/kPa	PBC798	PBC898	0-300 psi/kPa	PBC807	PBC907
30"-0-60 psi/kPa	PBC799	PBC899	0-400 psi/kPa	PBC817	PBC917
30"-0-100 psi/kPa	PBC791	PBC891	0-600 psi/kPa	PBC808	PBC908
30"-0-150 psi/kPa	PBC792	PBC892	0-1000 psi/kPa	PBC809	PBC909
30"-0-200 psi/kPa	PBC794	PBC894	0-1500 psi/kPa	PBC816	PBC914
30"-0-300 psi/kPa	PBC795	PBC895	0-2000 psi/kPa	PBC810	PBC910
0-15 psi/kPa	PBC800	PBC901	0-3000 psi/kPa	PBC811	PBC911
0-30 psi/kPa	PBC802	PBC902	0-5000 psi/kPa	PBC812	PBC912
0-60 psi/kPa	PBC803	PBC903	0-6000psi/kPa	PBC814	PBC915
0-100 psi/kPa	PBC804	PBC904	0-10000 psi/kPa	PBC813	PBC913

Options:

- Dry = Supply above gauge without liquid fill
- 1/2" or 1/4" NPT, BSP or BSPT Connection
- 25UC = 2.5" (63mm) u-clamp
- Silicone filling available



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Colour Coded Series



CRN

Description

Winters' Colour Coded Series Pressure Gauges feature a coloured, polyethylene terephthalate case (P.B.T) and bezel. The gauge is available in 4" (100mm) or 6" (150mm) dials. This unique pressure gauge allows for fast, easy and safe visual identification of any gauge system including: process contents, specific pressure range or a particular type of pressure gauge. Available in 16 different colours, this colour coded pressure gauge features an UV resistant case, which will not fade in colour or breakdown in any corrosive environment. The Colour Coded Series is available with stainless steel or brass sockets and tubes that can be liquid-filled for high pulsation and vibration environments. As an option, the gauges can be equipped with a safety case featuring a blowout back plate with solid front. The Colour Coded Series can be most commonly found on pumps, compressors, hydraulic presses & machinery, motors, etc.



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Colour Coded Series

Stainless Steel Specifications

Dial:	4" (100mm), 6" (150mm) white aluminum with black and red markings
Case:	P.B.T. Polyutylene terephthalate - colour coded
Lens:	Polycarbonate
Ring:	P.B.T. Polyutylene terephthalate - colour coded
Pointer:	Aluminum, anodized black
Socket:	316L stainless steel
Connection:	1/4" NPT or 1/2" NPT standard
Bourdon Tube:	316L stainless steel, seamless drawn
Movement:	304 stainless steel
Gasket Materials:	4" (100mm), 6" (150mm) - EPDM
Fill Liquid:	Glycerin, silicone and fluorolube optional
Protection:	IP65 per UEC 529, UNI 8896
Welding:	TIG, Silver alloy
Over-pressure Limit:	30% for pressures up to 600 psi (4,147 kPa), 15% for pressures over 600 psi (4,147 kPa)
Working Pressure:	Maximum 75% of full scale value
Ambient Temperature:	-40°F to 150°F (-40°C to 65°C) dry, 14°F-150F (-10°C-65°C) glycerin filled
Process Temperature:	-40°F to 150°F (-40°C to 65°C) dry, 14°F-150F (-10°C-65°C) glycerin filled
Accuracy:	+/-1% (ANSI/ASME Grade 1A)

Brass Specifications

Dial:	4" (100mm) white aluminum with black and red markings
Case:	P.B.T. Polyutylene terephthalate - colour coded
Lens:	Plexiglass
Ring:	P.B.T. Polyutylene terephthalate - colour coded
Pointer:	Aluminum, anodized black
Socket:	OT 58 brass
Connection:	1/4" NPT or 1/2" NPT standard
Bourdon Tube:	Phosphor bronze
Movement:	Gears are OT 59 brass, plates are AISI 304 st/st
Gasket Materials:	Silicone rubber for socket, EPDM for lens, filling plug and blow-out vent
Fill Liquid:	Glycerin, silicone and fluorolube optional
Protection:	IP65 per UEC 529, UNI 8896
Welding:	Tin/copper alloy for pressures below 600 psi (4,147 kPa) Silver alloy for pressure 600 psi (4.147 kPa) and above
Over-pressure Limit:	25% for pressures up to 1,400 psi (9,653 kPa), 15% for pressures over 1,400 psi (9,653 kPa)
Working Pressure:	Maximum 75% of full scale value
Ambient Temperature:	-40°F to 150°F (-40°C to 65°C) dry, 14°F-150F (-10°C-65°C) glycerin filled
Process Temperature:	-40°F to 150°F (-40°C to 65°C) dry, 14°F-150F (-10°C-65°C) glycerin filled
Accuracy:	+/-1% ANSI/ASME Grade 1A



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Colour Coded Series

How to order: Specify product code and colour code

PRODUCT CODE*

Dial Size	4" (100mm)		4" (100mm)		6" (150mm)	
NPT Connection						
Bottom	1/4"	1/2"	1/4"	1/2"	1/4"	1/2"
Movement						
Socket,Tube	Brass	Brass	St/St	St/St	St/St	St/St
30" Hg. Vac./kPa	P600C	*	P640C	P655C	P1078C	*
30"-0-15 psi/kPa	P1020C	*	P1036C	P1044C	P1079C	*
30"-0-30 psi/kPa	P1021C	*	P1037C	P1045C	P1052C	*
30"-0-60 psi/kPa	P1022C	*	P1038C	P1046C	P1053C	*
30"-0-100 psi/kPa	P1023C	*	P1039C	P1047C	P1054C	*
30"-0-150 psi/kPa	P1024C	*	P1040C	P1048C	P1055C	*
30"-0-200 psi/kPa	P1026C	*	P1042C	P1050C	P1057C	*
30"-0-300 psi/kPa	P1027C	*	P1043C	P1051C	P1058C	*
0-15 psi/kPa	P601C	*	P641C	P656C	P1059C	*
0-30 psi/kPa	P602C	*	P642C	P657C	P1060C	*
0-60 psi/kPa	P603C	*	P643C	P658C	P1061C	*
0-100 psi/kPa	P604C	*	P644C	P659C	P1062C	*
0-160 psi/kPa	P605C	*	P645C	P660C	P1063C	*
0-200 psi/kPa	P606C	*	P646C	P661C	P1064C	*
0-300 psi/kPa	P607C	*	P647C	P662C	P1065C	*
0-400 psi/kPa	P610C	*	P650C	P666C	P1077C	*
0-600 psi/kPa	P608C	*	P648C	P663C	P1066C	*
0-1000 psi/kPa	P609C	P624C	P649C	P664C	P1067C	P1080C
0-1500 psi/kPa	*	P625C	*	P665C	P1068C	P1081C
0-2000 psi/kPa	*	P626C	*	P667C	P1069C	P1082C
0-3000 psi/kPa	*	P627C	*	P668C	P1070C	P1083C
0-5000 psi/kPa	*	P628C	*	P669C	P1072C	P1085C
0-10000 psi/kPa	*	P629C	*	P670C	P1073C	P1086C
0-15000 psi/kPa	*	P630C	*	P671C	P1074C	P1087C
0-20000 psi/kPa	*	P639C	*	P672C	P1075C	P1088C

*Colour Codes:

4" (100 mm) Case	6" (150 mm) Case
1Y - Red	1Z - Red
2Y - Yellow	2Z - Yellow
3Y - Black	3Z - Black
4Y - Green	4Z - Green
5Y - Blue	5Z - Blue
6Y - Orange	6Z - Orange
7Y - Gold	7Z - Gold
8Y - Brown	8Z - Brown
9Y - White	9Z - White
10Y - Pink	10Z - Pink
11Y - Purple	11Z - Purple
12Y - Cyan	12Z - Cyan
13Y - Charcoal	13Z - Charcoal
14Y - Dark Brown	14Z - Dark Brown
15Y - Olive Green	15Z - Olive Green
16Y - Violet	16Z - Violet
17Y - Grey	

*Add appropriate colour code as suffix. (e.g. P663C5Y = Product Code + Colour Code)

Options:

Add suffix "G" for glycerin fill
Available with Safety Case



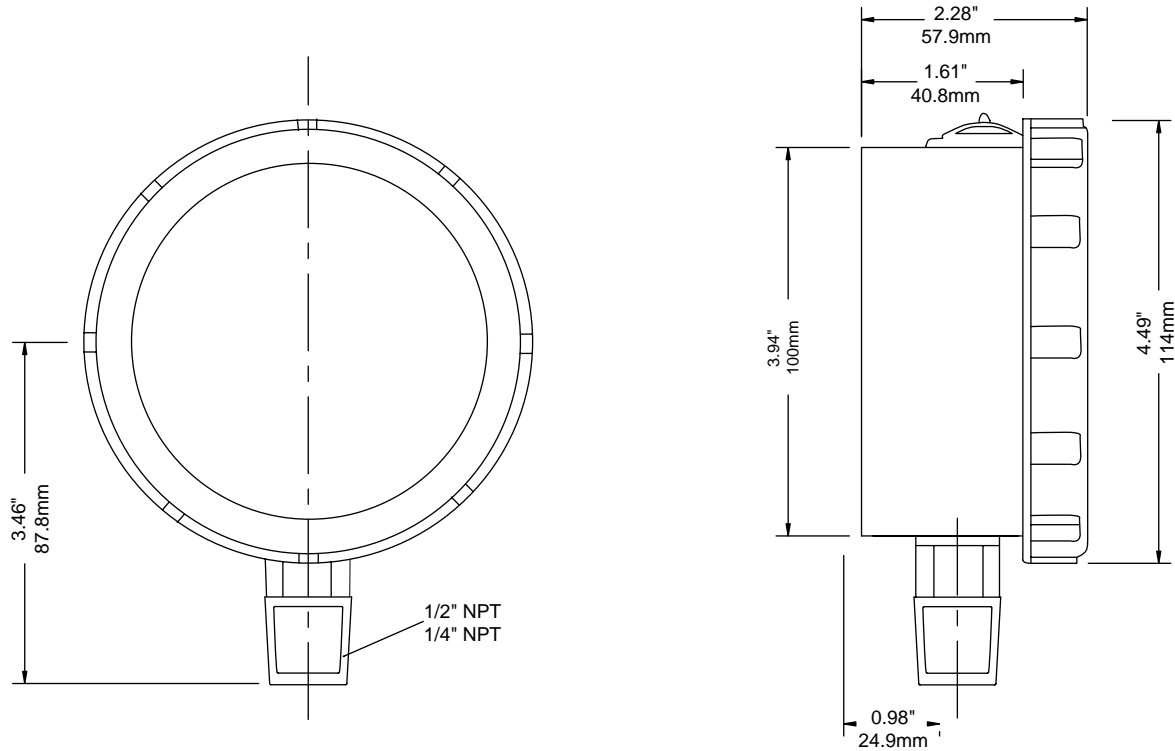
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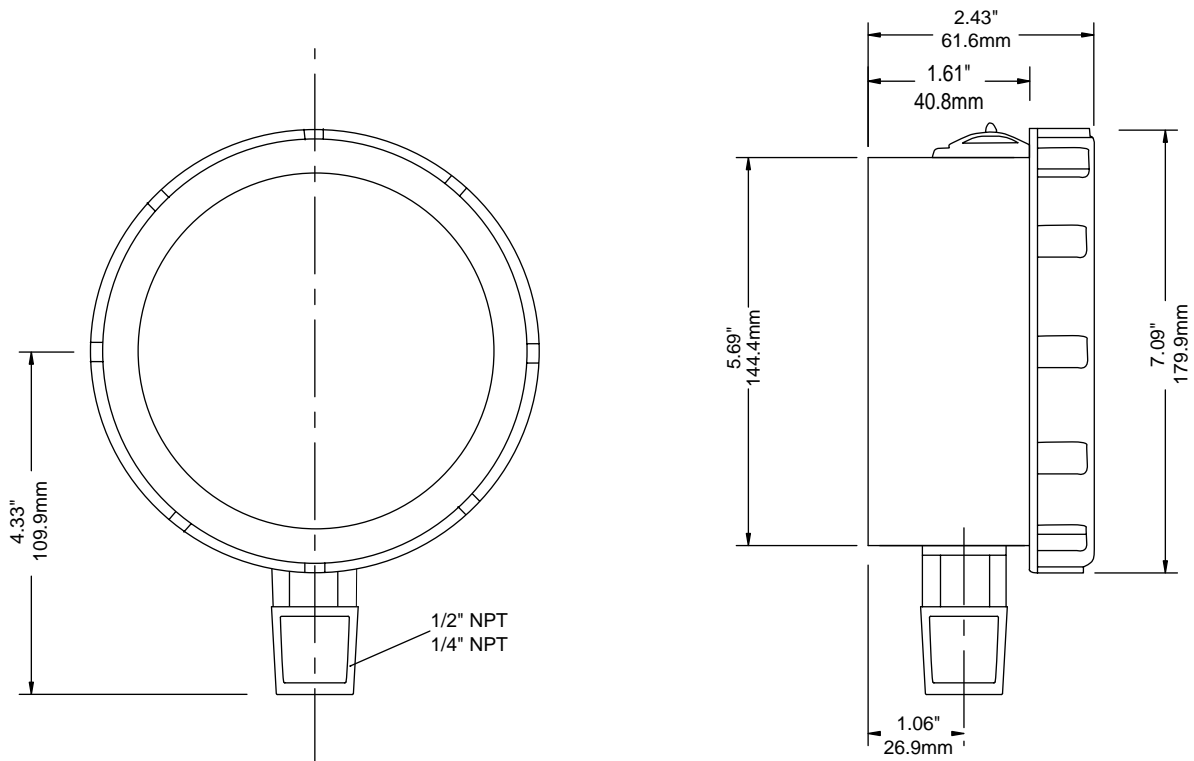
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Colour Coded Series

4" Bottom Connection



6" Bottom Connection



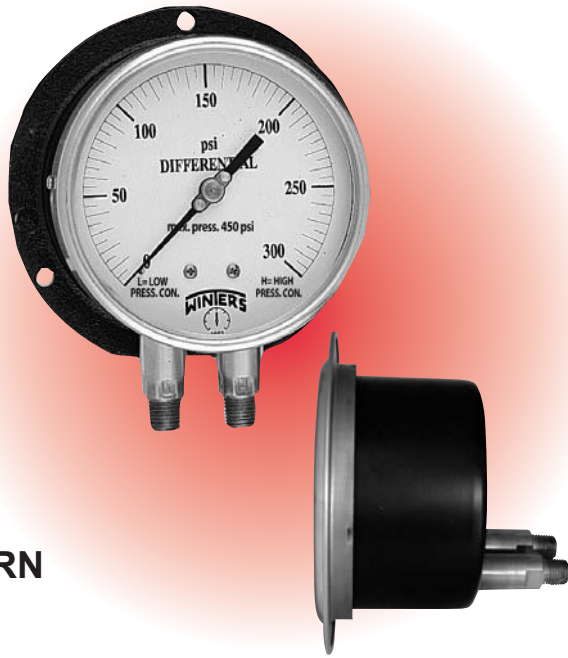
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12/02

Differential



CRN

Description

Winters' (CRN registered) Differential Gauges are single pointer gauges that show the difference between two separate but related pressures on the same dial. Winters Differential Gauges are available with the zero point at the top centre of the scale or the more conventional style with the zero at the left side of the scale.

This gauge can be used to show the difference between the input and output pressures on a line entering and exiting a filter. For example, the line entering the filter would have a known pressure of 45 psi and, if the filter remains clear or clean, the pressure on the line exiting the filter would also be 45 psi. This would mean that the gauge would read zero (0) which is the difference in value between the input and output pressures. If the same filter was dirty or partially clogged, the output pressure would be reduced while the input pressure would remain at 45 psi. If the output pressure drops to 25 psi, the Differential Pressure gauge would show a reading of 20 psi which is the difference in value between the input and output pressures. This difference between the input and output pressures would indicate that the filter is either working well (clean) or needs to be replaced (dirty).

(*The dial pressure range must be 2/3 of maximum operating pressure - (e.g. 0-300 psi will have maximum operating range of 450 psi).

Specifications

Dial:	4 ¹ / ₂ " (115mm) and 6" (150mm) white aluminum with black markings
Case:	Aluminum, painted black
Lens:	Glass
Ring:	4 ¹ / ₂ " stainless steel, 6" Aluminum
Front Flange:	4 ¹ / ₂ " stainless steel, 6" Aluminum
Back Flange:	Aluminum
Pointer:	Aluminum
Socket:	Brass or 316 stainless steel as specified
Connection:	1/4" NPT standard
Bourdon Tubes:	Phosphor bronze or AISI 316 stainless steel, independent, matched
Movement:	Brass, heavy duty
Welding:	Tin/copper alloy for brass internals, TIG Argonarc for stainless steel internals
Over-pressure Limit:	30% of full scale value
Working Pressure:	Maximum 75% of full scale value
Ambient Temperature:	-40°F to 150°F (-40°C to 65°C)
Process Temperature:	-40°F to 150°F (-40°C to 65°C)
Accuracy:	+/- 1% accuracy (ANSI/ASME Grade 1A)
Movements	
Plates:	Brass
Columns:	Brass
Outer frame bearings:	Stainless steel
Inner frame bearings:	Bronze
Segment:	Bronze
Slide:	Brass
Long Lever:	Bronze
Short Lever:	Brass
Slide shoulder screws:	Stainless steel
Pinion:	Nickel silver
Shaft (arbor):	Nickel silver
Hairspring:	Bronze
Movement screws:	Brass

**High Pressure/Low Pressure configurations are also available.



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Differential

How to order: Specify product code

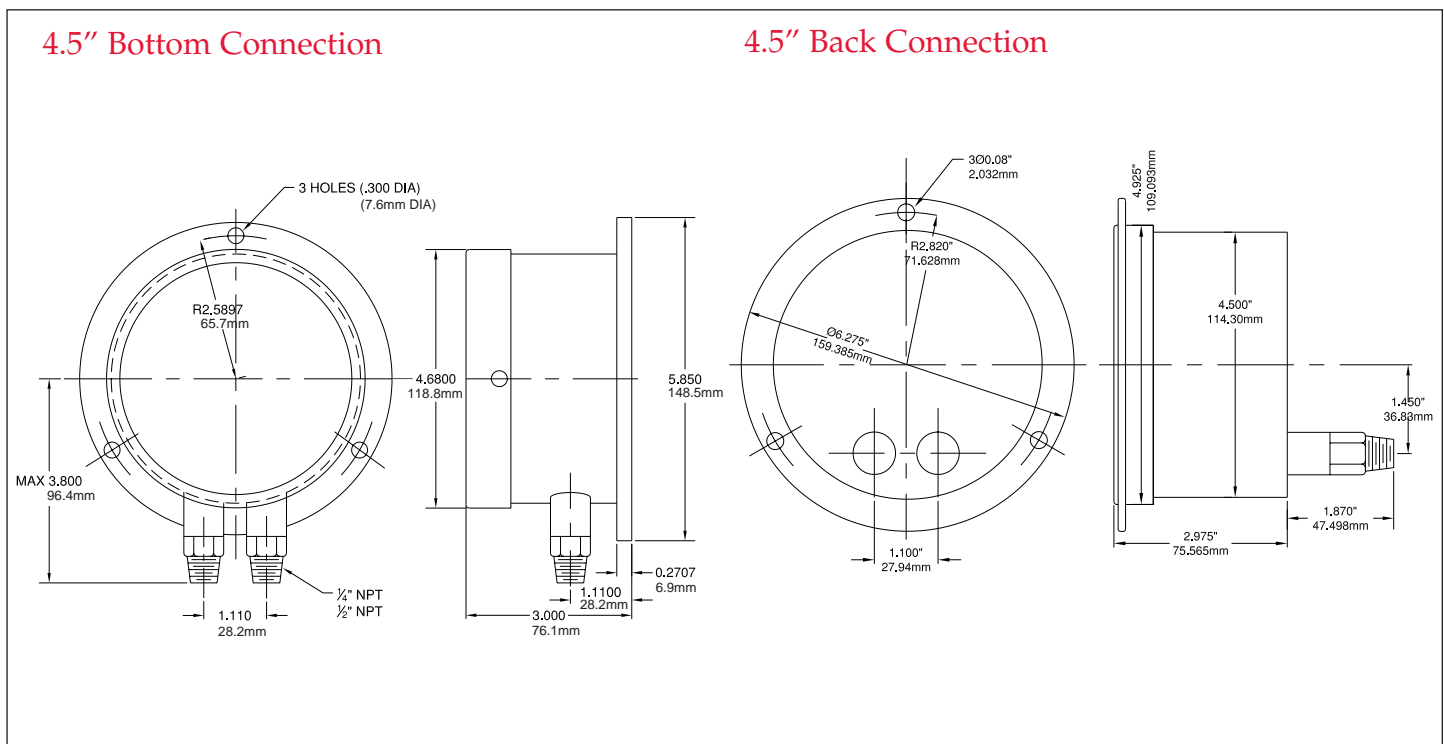
PRODUCT CODES

Dial Size	4 1/2" (115mm)				6" (150mm)			
Tube & Socket	Brass	Brass	St/St	St/St	Brass	Brass	St/St	St/St
Connection	1/4" NPT Bottom	1/4" NPT Back (LB)	1/4" NPT Bottom	1/4" NPT Back (LB)	1/4" NPT Bottom	1/4" NPT Back (LB)	1/4" NPT Bottom	1/4" NPT Back (LB)
0/15 psi	P8051	P8051B	P8061	P8061B	P8071	P8071B	P8081	P8081B
0/30 psi	P8052	P8052B	P8062	P8062B	P8072	P8072B	P8082	P8082B
0/60 psi	P8053	P8053B	P8063	P8063B	P8073	P8073B	P8083	P8083B
0/100 psi	P8054	P8054B	P8064	P8064B	P8074	P8074B	P8084	P8084B
0/160 psi	P8055	P8055B	P8065	P8065B	P8075	P8075B	P8085	P8085B
0/200 psi	P8056	P8056B	P8066	P8066B	P8076	P8076B	P8086	P8086B
0/300 psi	P8057	P8057B	P8067	P8067B	P8077	P8077B	P8087	P8087B
0/600 psi	P8058	P8058B	P8068	P8068B	P8078	P8078B	P8088	P8088B
Special Range	P8050	P8050B	P8060	P8060B	P8070	P8070B	P8080	P8080B

LB = Lower Back Connection

(Dial pressure range must be 2/3 of maximum operating pressure)

(High Pressure / Low Pressure configurations are also available)



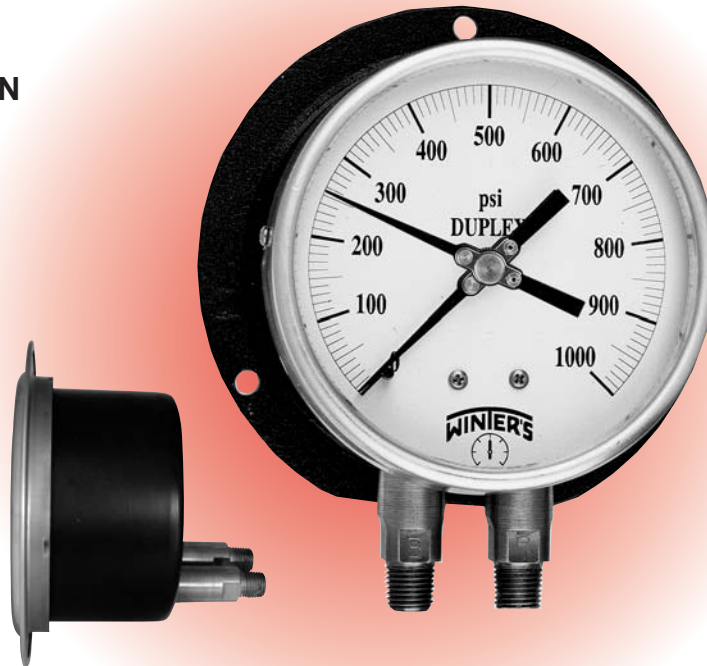
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Duplex

CRN



Description

Winters Duplex Gauge is designed to measure two separate but related pressures simultaneously on the same dial. Two separate pointers, one red and the other black, indicate the two different pressure readings on the dial. The NPT connections are also marked "R" for red and "B" for black to indicate which pressure is hooked up to each line.

Winters Duplex Gauges are suitable for service on all types of pressure media. The Duplex pressure gauge is utilized more commonly on pumps and filters.

The Winters Duplex Gauge is CRN registered in Canada.

Specifications

Dial:	4 1/2" (115mm) and 6" (150mm) white aluminum with black markings
Case:	Aluminum, painted black
Lens:	Glass
Ring:	4 1/2" St/St, 6" Aluminum
Front Flange:	4 1/2" St/St, 6" Aluminum
Back Flange:	4 1/2" Black steel or 6" Aluminum
Pointer:	Aluminum
Socket:	Brass or 316 stainless steel as specified
Connection:	1/4" NPT standard
Bourdon Tubes:	Phosphor bronze or AISI 316 stainless steel, independent, matched
Movement:	Brass, heavy duty
Welding:	Tin/copper alloy for brass internals, TIG Argonarc for stainless steel internals
Over-pressure Limit:	30% of full scale value
Working Pressure:	Maximum 75% of full scale value
Ambient Temperature:	-40°F to 150°F (-40°C to 65°C)
Process Temperature:	-40°F to 150°F (-40°C to 65°C)
Accuracy:	± 1% accuracy (ANSI/ASME Grade 1A)



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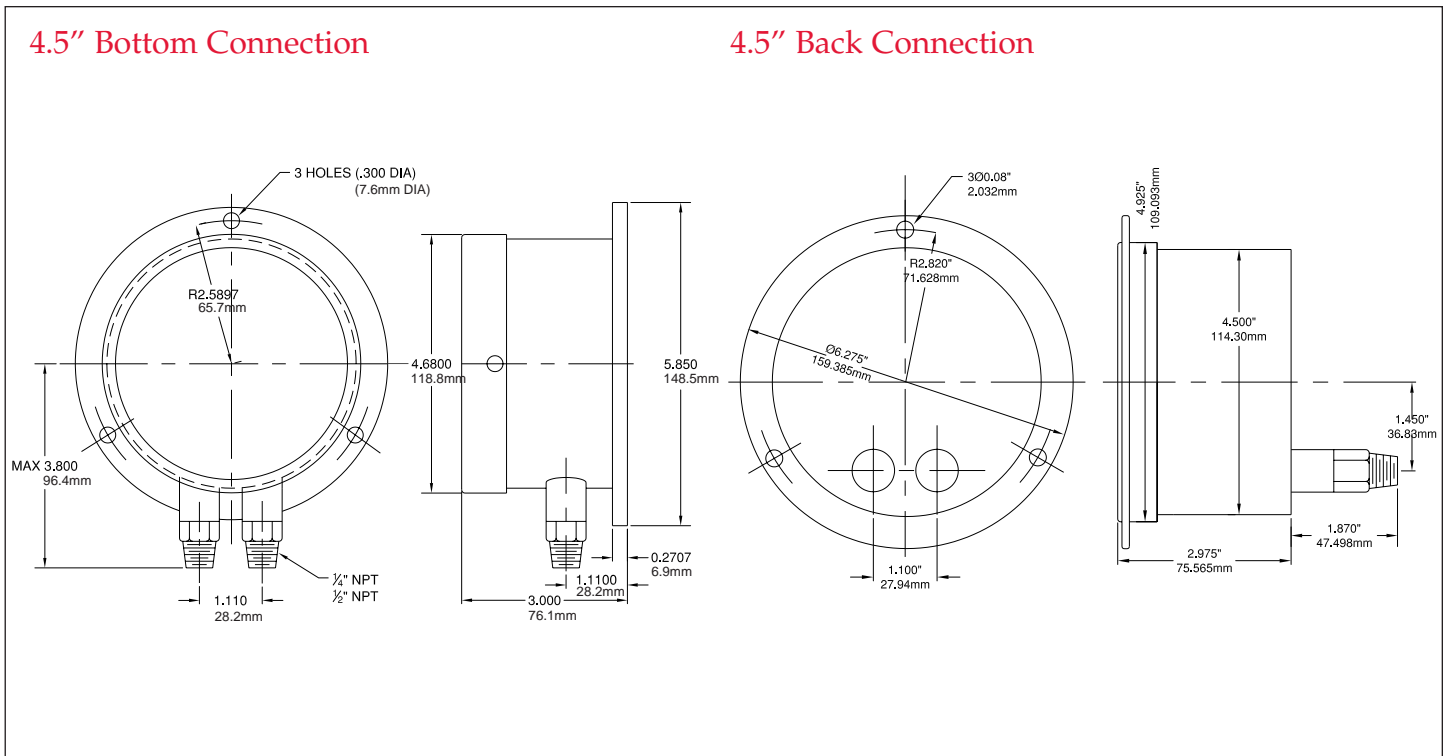
Duplex

How to order: Specify product code

PRODUCT CODES

Dial Size	4 1/2" (115mm)				6" (150mm)			
Tube & Socket	Brass	Brass	St/St	St/St	Brass	Brass	St/St	St/St
Connection	1/4" NPT Bottom	1/4" NPT Back (LB)	1/4" NPT Bottom	1/4" NPT Back (LB)	1/4" NPT Bottom	1/4" NPT Back (LB)	1/4" NPT Bottom	1/4" NPT Back (LB)
0/15 psi	P8011	P8011B	P8021	P8021B	P8091	P8091B	P8101	P8101B
0/30 psi	P8012	P8012B	P8022	P8022B	P8092	P8092B	P8102	P8102B
0/60 psi	P8013	P8013B	P8023	P8023B	P8093	P8093B	P8103	P8103B
0/100 psi	P8014	P8014B	P8024	P8024B	P8094	P8094B	P8104	P8104B
0/160 psi	P8015	P8015B	P8025	P8025B	P8095	P8095B	P8105	P8105B
0/200 psi	P8016	P8016B	P8026	P8026B	P8096	P8096B	P8106	P8106B
0/300 psi	P8017	P8017B	P8027	P8027B	P8097	P8097B	P8107	P8107B
0/600 psi	P8018	P8018B	P8028	P8028B	P8098	P8098B	P8109	P8109B
Special Range	P8010	P8010B	P8020	P8020B	P8090	P8090B	P8100	P8100B

LB = Lower Back Connection



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High Static Pressure Differential Gauges



Winters offers High Static Pressure Differential Gauges in various configurations - 2" (50 mm), 2½" (63 mm), 3½" (90 mm), 4" (100 mm), 4½" (115 mm), 6" (150 mm) dials and aluminum, brass or 316 stainless steel wetted parts.

These Winters Differential Pressure Gauges offer a high degree of accuracy +/-2%.

Winters Instruments offers 4 types of High Static Pressure Differential Pressure Gauges - Piston Type, Rolling Diaphragm Gauge, Small Convoluted Diaphragm Gauge and Convoluted Diaphragm Gauge.

Piston Type

Most suitable for general use/all purpose applications. Uses a piston with Teflon cap as a sensor to separate high & low pressure in response to pressure differentiation.

- Maximum Pressure - 3000 psi/bar
- Standard Range - 5-100 psid/bar

Rolling Diaphragm Gauge

Operates on rolling diaphragm as sensor, which separates high and low pressure ports. Recommended for air and gas applications or where zero migration of fluid between high and low ports is important. Used in high line pressure and differential pressure ranges up to 100 psid.

- Maximum Pressure - 3000 psi/bar
- Standard Range - 5-100 psid

Small Convoluted Diaphragm Gauge

Operates on a convoluted diaphragm as a sensor which separates high and low pressure ports. Recommended for air and gas applications. Used for high line pressure and differential pressure ranges up to 60 psid.

- Maximum Pressure - 1500 psi/bar
- Standard Range - 1-60 psid/bar

Convoluted Diaphragm Gauge

Operates on convoluted diaphragm sensor with differential pressure ranges 2-200 inches of water. Used where comparatively low line pressures and sensitivity to small changes in differential pressure is important.

- Maximum Pressure - 500 psi/bar
- Standard Range - 2-200 inches of H₂O/mmH₂O

Please contact Winters Instruments for the Differential Pressure Gauge that will optimize your application.



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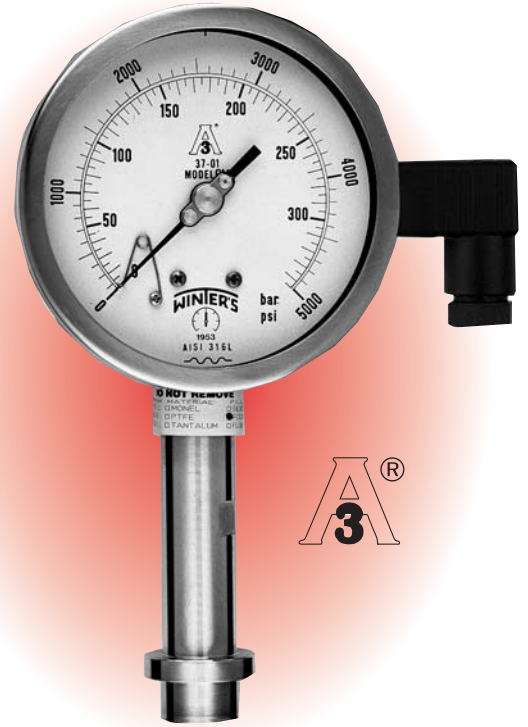
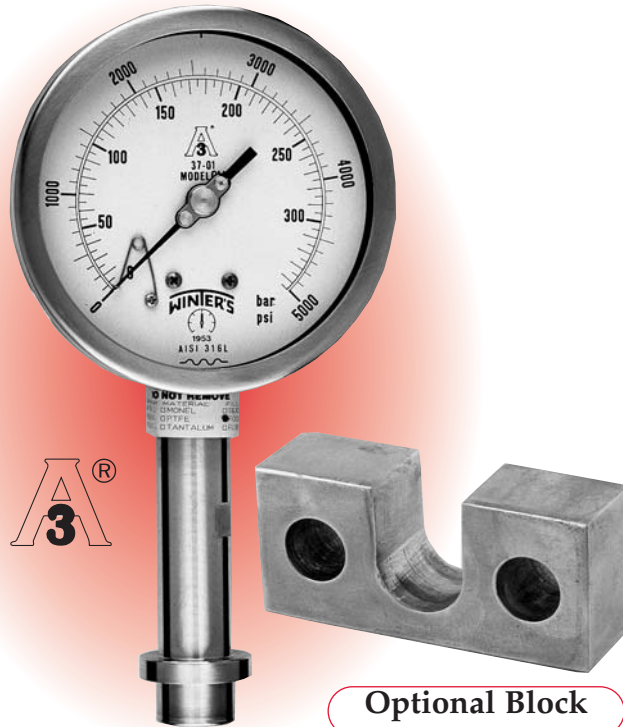
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Homogenizer

Fixed spec box - 12/02

CRN



Description

Winters 3A designated Homogenizer Gauge is designed specifically for sanitary applications in the food industry. The rugged one piece welded, all stainless steel construction and liquid filling provide exceptional durability and corrosion resistance.

The Winters 3A Homogenizer is CRN registered.

Winters Homogenizer Gauge is available with an optional transmitter and an optional block.

Specifications

Dial:	4" (100mm) white aluminum dial with black and red markings
Case:	AISI 304 stainless steel
Lens:	Plexiglass
Ring:	AISI 304 stainless steel
Pointer:	Aluminum, anodized black
Seal Body:	AISI 316 stainless steel
Diaphragm:	AISI 316 stainless steel, TIG welded
Block:	AISI 316 stainless steel (optional)
Bourdon Tube:	AISI 316 stainless steel
Movement:	AISI 304 stainless steel
Gasket:	EPDM
Seal Fill:	Oil, approved for food service
Case Fill:	Glycerin, 98%
Protection:	IP65
Over-pressure Limit:	15% of full scale value
Working Pressure:	Maximum 75% of full scale value
Ambient Temperature:	14°F to 150°F (-10°C to 65°C)
Process Temperature:	59°F to 248°F (15°C to 120°C)
Transmitter:	4-20mA output with PG9 cable Gland (optional)
Accuracy:	+/-1.6% accuracy (ANSI/ASME Grade 1A)



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Homogenizer

How to order: Specify product code
PRODUCT CODES

RANGES	
0-5000 psi/bar	P8001
0-10000 psi/bar	P8002
0-5000 psi/bar with transmitter	P8001PT
0-10000 psi/bar with transmitter	P8002PT

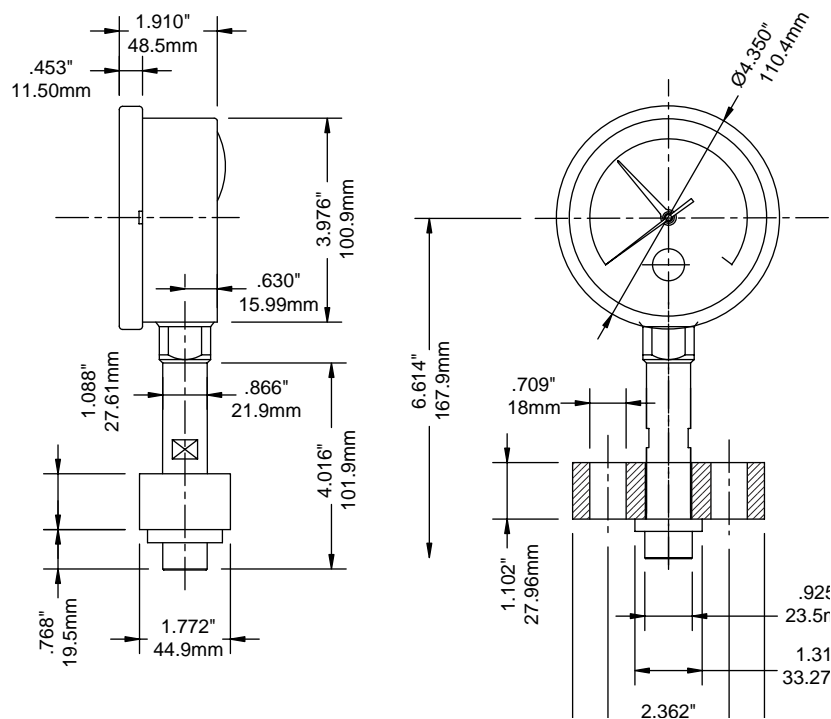
Note: If a block is required, add the suffix "BL" to the above codes.

eg. P8001BL - with block

Glycerin filling is standard.

Options: 6"(150mm) dial size available upon request.

4" Homogenizer



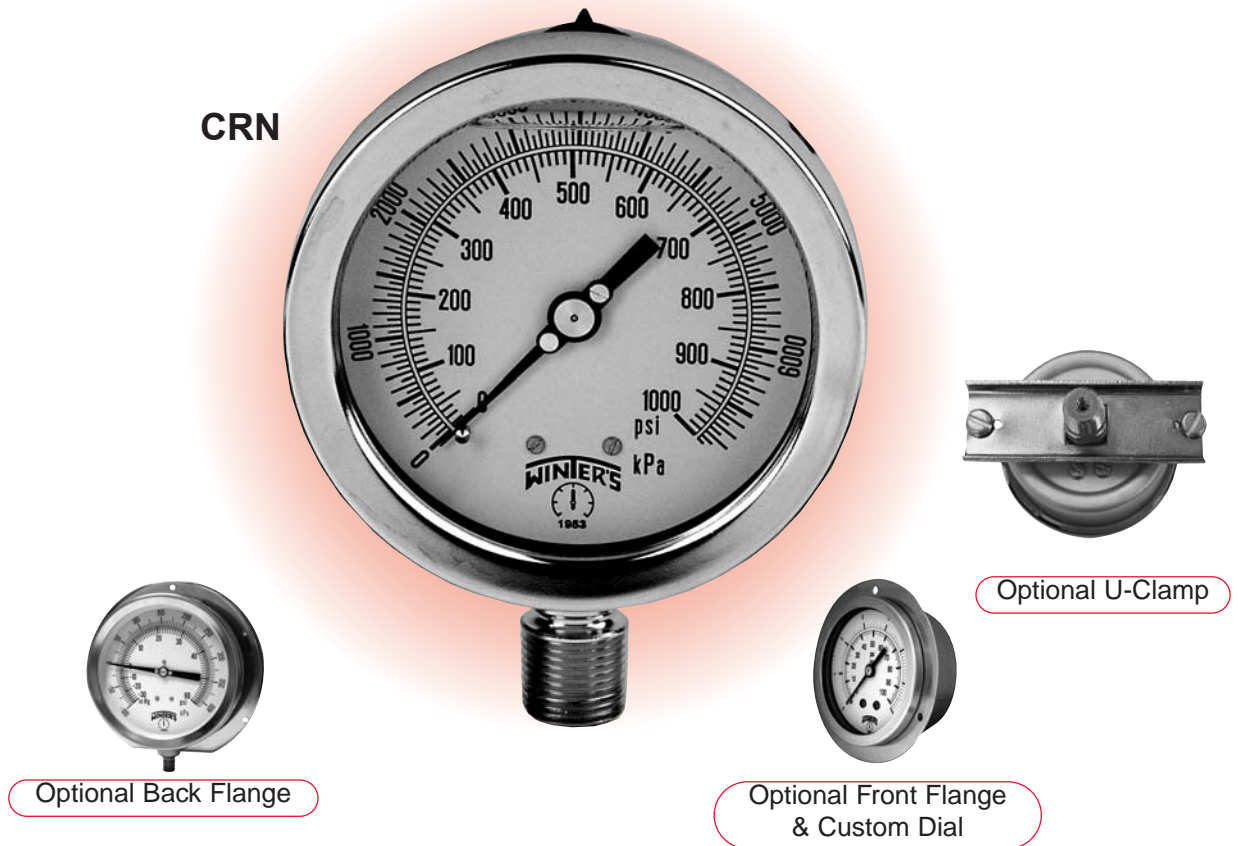
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12/02

Liquid Filled (LF) Series Premium



Description

Winters' Liquid Filled (LF) Series Premium Pressure Gauges are made of stainless steel and are specifically designed for severe service applications. When immersed in glycerin, all moving parts in the instrument are lubricated and dampened from the harmful effects of vibration and pulsation. The LF Series Premium gauges are available with either stainless steel or brass internals and are CRN registered.

Winters' glycerin filled gauges are especially well suited for agricultural equipment, hydraulic equipment, pressure washers, oil field equipment, pumps, compressors and process systems. The gauges are available in direct, wall or panel mounting formats with ranges from vacuum to 20,000 psi (137,895 kPa).



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Liquid Filled (LF) Series Premium

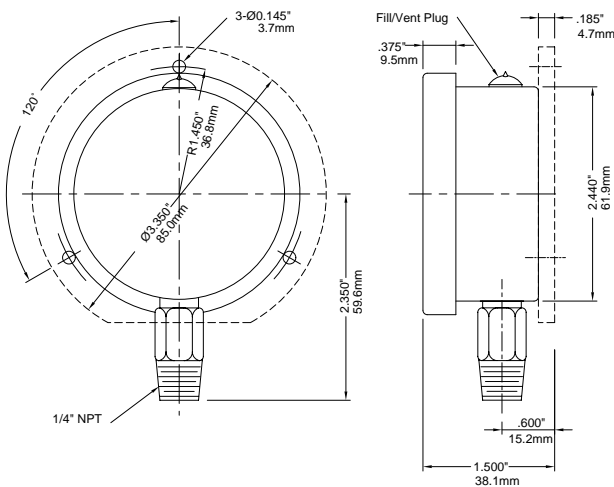
LF/SS Premium Specifications

Dial:	2 1/2" (63mm), 4" (100mm) 6" (150mm) and 10" (250mm) white aluminum with black and red markings
Case:	AISI 304 stainless steel
Lens:	Polycarbonate
Ring:	AISI 304 stainless steel
Pointer:	Aluminum, anodized black
Socket:	316L stainless steel
Connection:	1/4" NPT or 1/2" NPT standard 2 1/2" 1/4" NPT standard
Bourdon Tube:	316L stainless steel, seamless drawn
Movement:	304 stainless steel
Gasket Materials:	2 1/2" (63mm) - Buna N for case and block seal, Monoprene for lens seal 4" (100mm) , 6" (150mm) - EPDM
Fill Liquid:	Glycerin is standard, silicone and fluorolube are optional
Protection:	IP65 per UEC 529, UNI 8896
Welding:	TIG
Over-pressure Limit:	30% for pressures up to 600 psi (4,147 kPa), 15% for pressures over 600 psi (4,147 kPa)
Working Pressure:	Maximum 75% of full scale value
Ambient/Process Temperature:	-40°F to 150°F (-40C-65C) Dry, 14F to 150F (-10C-65C) liquid filled
Accuracy:	2 1/2" (63mm) -1.5%, 4" (100mm), 6" (150mm) and 10" (250mm) - 1% ANSI/ASME Grade 1A

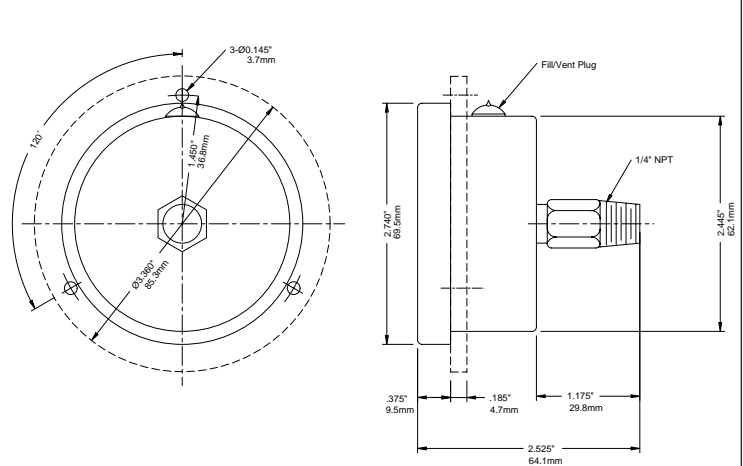
LF/BR Premium Specifications

Dial:	4" (100mm) white aluminum with black and red markings
Case:	AISI 304 stainless steel
Lens:	Polycarbonate
Ring:	AISI 304 stainless steel
Pointer:	Aluminum, anodized black
Socket:	OT 58 brass
Connection:	1/4" NPT or 1/2" NPT Standard
Bourdon Tube:	Phosphor Bronze
Movement:	Gears are OT 59 brass
Gasket Materials:	Silicone rubber for socket, EPDM for lens, filling plug and blow-out vent
Fill Liquid:	Glycerin is standard, silicone and fluorolube are optional
Protection:	IP65 per UEC 529, UNI 8896
Welding:	Silver alloy
Over-pressure Limit:	25% for pressures up to 1,400 psi (9,653 kPa), 15% for pressures over 1,400 psi (9,653 kPa)
Working Pressure:	Maximum 75% of full scale value
Ambient/Process Temperature:	-40°F to 150°F (-40C-65C) Dry, 14F to 150F (-10C-65C) liquid filled
Accuracy:	4" (100mm), 1% ANSI/ASME Grade 1A

2 1/2" Bottom Connection with optional Back Flange - St/St



2 1/2" Back Connection with optional Front Flange - St/St



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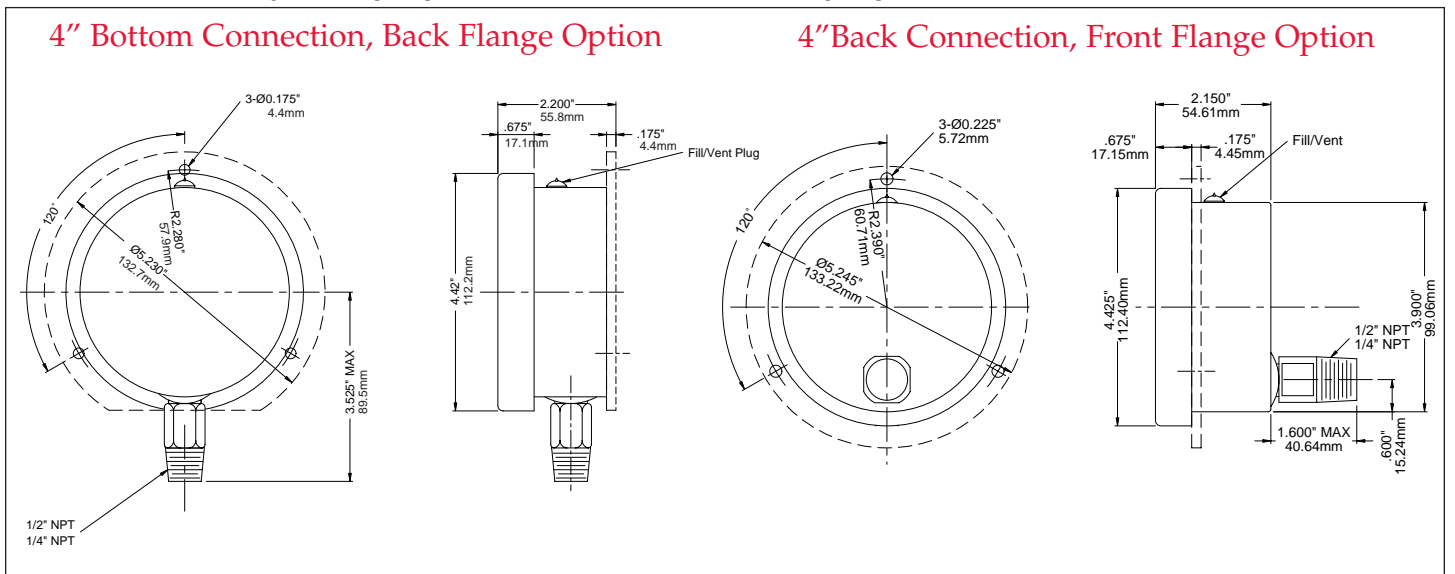
Liquid Filled (LF) Series Premium

How to order: Specify product code
PRODUCT CODES

2 1/2" & 4" Dials

Dial Size	2 1/2" (63mm)		4" (100mm)				4" (100mm)			
Connection	Bottom	Back (CB)	Bottom	Bottom	Back(LB)	Back (LB)	Bottom	Bottom	Back (LB)	Back(LB)
NPT Connection	1/4"	1/4"	1/4"	1/2"	1/4"	1/2"	1/4"	1/2"	1/4"	1/2"
Movement socket, tube	St/St	St/St	Brass	Brass	Brass	Brass	St/St	St/St	St/St	St/St
Glycerin Filled	Filled	Filled	Filled	Filled	Filled	Filled	Filled	Filled	Filled	Filled
30" Hg Vacuum/kPa	P820	P840	P600	*	P1000	*	P640	P655	P1090	*
30"-0-15 psi/kPa	P860	P870	P1020	*	P1028	*	P1036	P1044	P1244	*
30"-0-30 psi/kPa	P861	P871	P1021	*	P1029	*	P1037	P1045	P1245	*
30"-0-60 psi/kPa	P862	P872	P1022	*	P1030	*	P1038	P1046	P1246	*
30"-0-100 psi/kPa	P863	P873	P1023	*	P1031	*	P1039	P1047	P1247	*
30"-0-150 psi/kPa	P864	P874	P1024	*	P1032	*	P1040	P1048	P1248	*
30"-0-200 psi/kPa	P866	P876	P1026	*	P1034	*	P1042	P1050	P1249	*
30"-0-300 psi/kPa	P867	P877	P1027	*	P1035	*	P1043	P1051	P1250	*
0-15 psi/kPa	P821	P921	P601	*	P1001	*	P641	P656	P1091	*
0-30 psi/kPa	P822	P922	P602	*	P1002	*	P642	P657	P1092	*
0-60 psi/kPa	P823	P923	P603	*	P1003	*	P643	P658	P1093	*
0-100 psi/kPa	P824	P924	P604	*	P1004	*	P644	P659	P1094	*
0-160 psi/kPa	P825	P925	P605	*	P1005	*	P645	P660	P1095	*
0-200 psi/kPa	P826	P926	P606	*	P1006	*	P646	P661	P1096	*
0-300 psi/kPa	P827	P927	P607	*	P1007	*	P647	P662	P1097	*
0-400 psi/kPa	P880	P881	P610	*	P1016	*	P650	P666	P1251	*
0-600 psi/kPa	P828	P928	P608	*	P1008	*	P648	P663	P1098	*
0-1000 psi/kPa	P829	P929	P609	P624	*	P1009	P649	P664	P1099	*
0-1500 psi/kPa	P834	P934	*	P625	*	P1010	*	P665	P1252	P1190
0-2000 psi/kPa	P830	P930	*	P626	*	P1011	*	P667	P1253	P1191
0-3000 psi/kPa	P831	P931	*	P627	*	P1012	*	P668	P1254	P1192
0-5000 psi/kPa	P832	P852	*	P628	*	P1013	*	P669	P1255	P1193
0-6000psi/kPa	P836	P851	*	P631	*	P1015	*	P675	P1259	P1197
0-10000 psi/kPa	P833	P853	*	P629	*	P1014	*	P670	P1256	P1194
0-15000 psi/kPa	P835	P855	*	P630	*	P1018	*	P671	P1257	P1195
0-20000 psi/kPa	*	*	*	P639	*	P1019	*	P672	P1258	P1196

Other Options: 25UC = 2.5" (63mm) U-Clamp 4UC = 4" (100mm) U-Clamp SF = Silicone Filled
 25FF = 2.5" (63mm) Front Flange 4FF = 4" (100mm) Front Flange SG = Safety Glass Lens
 25BF = 2.5" (63mm) Back Flange 4BF = 4" (100mm) Back Flange 316 Stainless Steel Case and Mountable Bezel available
 Dry = Supply above gauge less liquid fill 4" (100mm) Available with Electric Contacts (dry or liquid filled) CB = centre back connection
 Other ranges available upon request. Other connection sizes available upon request LB = lower back connection



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Liquid Filled (LF) Series Premium

6" & 10" Dials

How to order: Specify product code

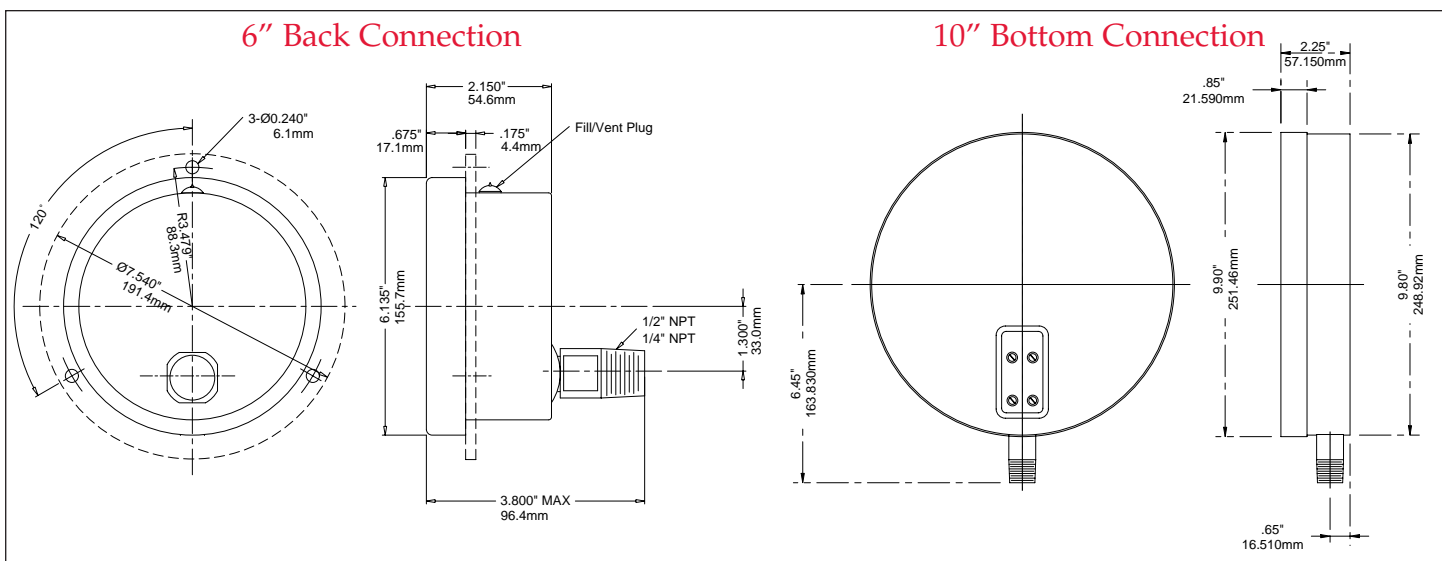
PRODUCT CODES

Dial Size	6" (150mm)				10" (250mm)	
Connection	Bottom	Back (LB)	Bottom	Back (LB)	Bottom	Bottom
NPT Connection	1/4"	1/4"	1/2"	1/2"	1/4"	1/2"
Movement						
socket, tube	St/St	St/St	St/St	St/St	St/St	St/St
Glycerin Filled	Filled	Filled	Filled	Filled	Filled	Filled
30" Hg Vacuum/kPa	P1078	P1168	*	*	P2020	*
30"-0-15 psi/kPa	P1079	*	*	*	P2021	*
30"-0-30 psi/kPa	P1052	*	*	*	P2022	*
30"-0-60 psi/kPa	P1053	*	*	*	P2023	*
30"-0-100 psi/kPa	P1054	*	*	*	P2024	*
30"-0-150 psi/kPa	P1055	*	*	*	P2025	*
30"-0-200 psi/kPa	P1057	*	*	*	P2026	*
30"-0-300 psi/kPa	P1058	*	*	*	P2027	*
0-15 psi/kPa	P1059	P1159	*	*	P2028	*
0-30 psi/kPa	P1060	P1160	*	*	P2029	*
0-60 psi/kPa	P1061	P1161	*	*	P2030	*
0-100 psi/kPa	P1062	P1162	*	*	P2031	*
0-160 psi/kPa	P1063	P1163	*	*	P2032	*
0-200 psi/kPa	P1064	P1164	*	*	P2033	*
0-300 psi/kPa	P1065	P1165	*	*	P2034	*
0-400 psi/kPa	P1077	*	*	*	P2035	*
0-600 psi/kPa	P1066	P1166	*	*	P2036	*
0-1000 psi/kPa	P1067	P1167	P1080	*	P2037	P2045
0-1500 psi/kPa	P1068	*	P1081	P1169	P2038	P2046
0-2000 psi/kPa	P1069	*	P1082	P1170	P2039	P2047
0-3000 psi/kPa	P1070	*	P1083	P1171	P2040	P2048
0-5000 psi/kPa	P1072	*	P1085	P1172	P2041	P2049
0-6000psi/kPa	*	*	P1089	P1176	*	*
0-10000 psi/kPa	P1073	*	P1086	P1173	P2042	P2050
0-15000 psi/kPa	P1074	*	P1087	P1174	P2043	P2051
0-20000 psi/kPa	P1075	*	P1088	P1175	P2044	P2052

Other Options:

6UC = 6" (150mm) U-Clamp
 6FF = 6" (150mm) Front Flange
 6BF = 6" (150mm) Back Flange
 SG = Safety Glass Lens
 Other ranges available upon request.

SF = Silicone Filled
 SC = Safety Case (6" bottom connection only)
 Dry = Supply above gauge less liquid fill
 LB = Lower back connection
 Other connection sizes available upon request.

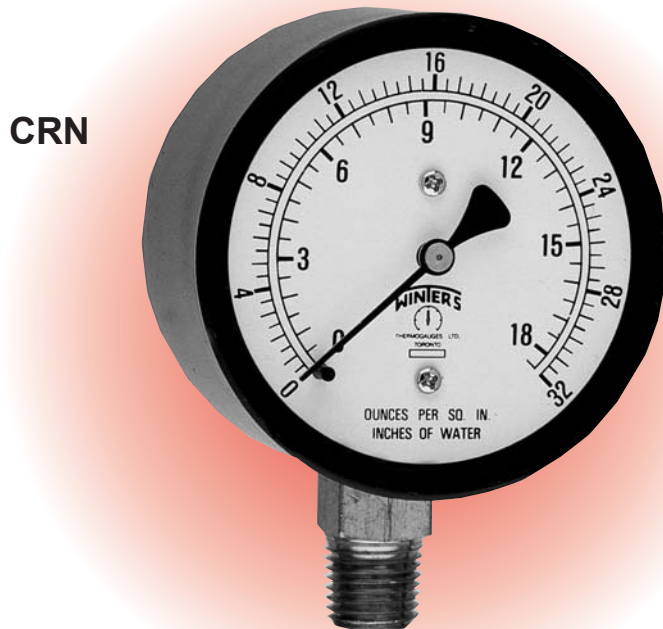


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Low Pressure



Description

Winters' Low Pressure Series gauges are ideally suited for low pressure measurement where the conventional bourdon tube cannot perform reliably. Typical applications include air flow indicators, liquid level indicators, leak testers, draft gauges, natural gas gauges, and any other application that requires quick and precise measurement of pressures below 15 psi [103 kPa].

Winters' Low Pressure gauges are available in various dial sizes (2½", 4", 4½" and 6") with either brass or stainless steel internals. As an added feature, the 4½" dial with stainless steel internals is available with an optional phenolic case.

Winters' Low Pressure gauge is CRN registered.



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Low Pressure

Specifications Brass Internals

Dial:	2½" (63mm), 4" (100mm), 4½" (115mm) and 6" (150mm), white aluminum dial with black and red markings
Case:	Steel, painted black 2.5" & 4" or cast aluminum, painted black 4.5" & 6"
Lens:	2½" (63mm) - polycarbonate 4" (100mm), 4½" (115mm) and 6" (150mm) - glass
Ring:	2½" (63mm) 4" (100mm), - steel 4½" (115mm) and 6" (150mm) - aluminum
Back Flange:	Steel, painted black
Pointer:	Aluminum, anodized black
Socket:	Brass
Connection:	¼" NPT standard
Diaphragm Element:	Phosphor Bronze
Movement:	Engineering plastic upper and lower plate with brass pinion and sector (2½" [63mm]), brass (4" [100mm], 4.5" [115mm] & 6" [150mm])
Working Pressure:	60% of full scale value (fluctuating); 75% of full scale value (static)
Ambient Temperature:	-40°F to 150°F (-40°C to 65°C)
Process Temperature:	-40°F to 150°F (-40°C to 65°C)
Accuracy:	±.1% accuracy (ANSI/ASME Grade 1A)
Protection:	IP52

Specifications Stainless Steel Internals

Dial:	2½" (63mm), 4" (100mm), 4½" (115mm) and 6" (150mm), white aluminum dial with black and red markings
Case:	2½" (63mm) and 4" (100mm) - AISI 304 stainless steel 4½" (115mm) and 6" (150mm) - aluminum, painted black
Lens:	2½" (63mm) - polycarbonate 4" (100mm), 4½" (115mm) and 6" (150mm) - glass
Ring:	2½" (63mm) and 4" (100mm) - steel 4½" (115mm) and 6" (150mm) - aluminum
Back Flange:	Steel, painted black
Pointer:	Aluminum, anodized black
Socket:	AISI 316 stainless steel
Welding:	TIG
Connection:	¼" NPT standard
Diaphragm Element:	AISI 316 stainless steel
Movement:	AISI 316 stainless steel
Working Pressure:	75% of full scale value
Over-pressure Limit:	30% of full scale value
Ambient Temperature:	-40-150F (-40C-65C)
Process Temperature:	-40-150F (-40C-65C)
Accuracy:	±.1% accuracy (ANSI/ASME Grade 1A)
Protection:	IP52



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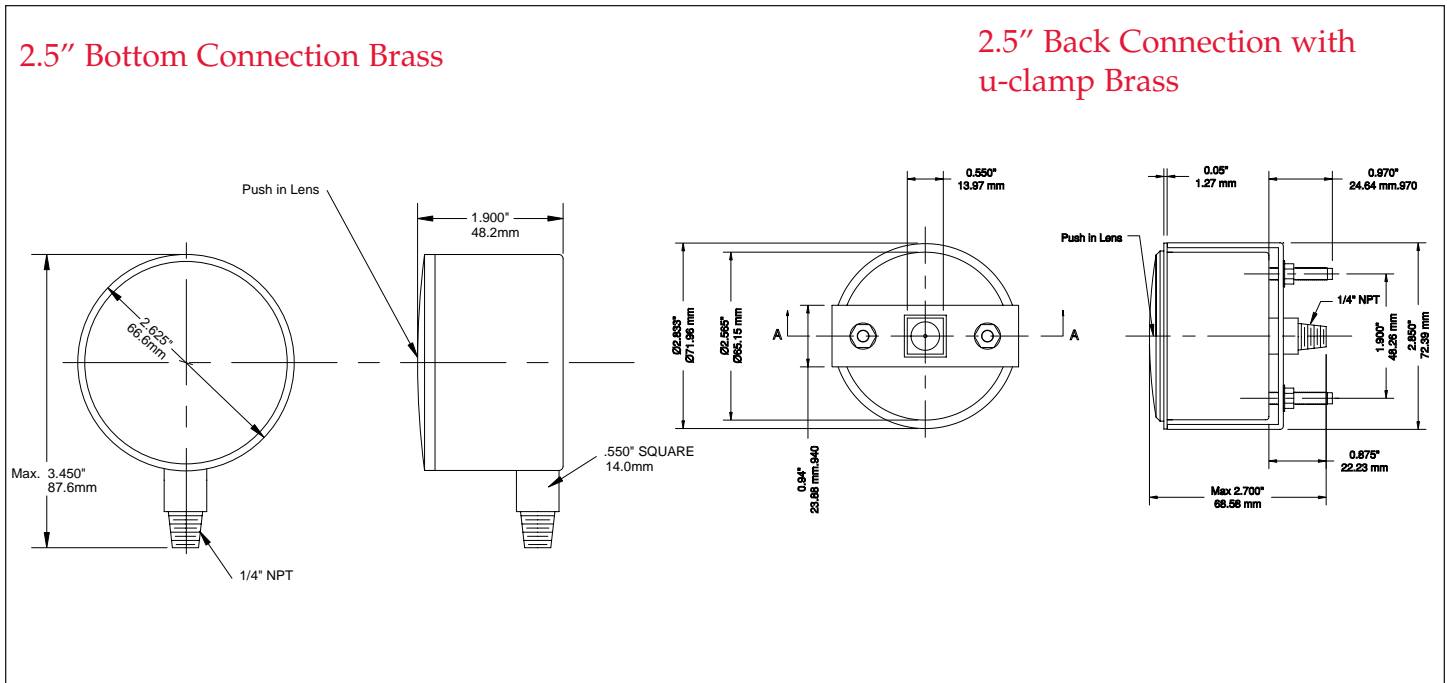
Low Pressure

How to order: Specify product code
PRODUCT CODES

Dial Size	2 1/2" (63mm)			4" (100mm)				4 1/2" (115mm)				6" (150mm)			
Case Material	Steel		St/St	Steel	St/St	Steel	St/St	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
Connection	Bottom	Centre Back	Bottom	Bottom		Centre Back		Bottom		Centre Back		Bottom		Centre Back	
NPT Connection	1/4"	1/4"	1/4"	1/4"		1/4"		1/4"		1/4"		1/4"		1/4"	1/4"
Movement socket, bellows	Brass	Brass	St/St	Brass	St/St	Brass	St/St	Brass	St/St	Brass	St/St	Brass	St/St	Brass	St/St
0-15" water vac	P300V	P340V	P350V	P310V	P4200V	P4230V	P4240V	P4250V	P4260V	P4290V	P4300V	P4310V	P4320V	*	*
0-32" water vac.	P301V	P341V	P351V	P311V	P4201V	P4231V	P4241V	P4251V	P4261V	P4291V	P4301V	P4311V	P4321V	*	*
0-55" water vac.	P302V	P342V	P352V	P312V	P4202V	P4232V	P4242V	P4252V	P4262V	P4292V	P4302V	P4312V	P4322V	*	*
0-100" water vac.	P304V	P343V	P353V	P313V	P4203V	P4233V	P4243V	P4253V	P4263V	P4293V	P4303V	P4313V	P4323V	*	*
0-15" water/oz	P300	P340	P350	P310	P4200	P4230	P4240	P4250	P4260	P4290	P4300	P4310	P4320	*	P4360
0-32" water/oz	P301	P341	P351	P311	P4201	P4231	P4241	P4251	P4261	P4291	P4301	P4311	P4321	P4351	P4361
0-55" water/oz	P302	P342	P352	P312	P4202	P4232	P4242	P4252	P4262	P4292	P4302	P4312	P4322	*	*
0-100" water/oz	P304	P343	P353	P313	P4203	P4233	P4243	P4253	P4263	P4293	P4303	P4313	P4323	P4353	P4363
0-200" water/oz	P303	P346	P356	P316	P4206	P4236	P4246	P4256	P4266	P4296	P4306	P4316	P4326	*	*
0-5 psi/kPa	P305	P344	P354	P314	P4204	P4234	P4244	P4254	P4264	P4294	P4304	P4314	P4324	P4354	P4364
0-10 psi/kPa	P306	P345	P355	P315	P4205	P4235	P4245	P4255	P4265	P4295	P4305	P4315	P4325	P4355	P4365

Notes: Other ranges available upon request.
 Other connection sizes available upon request.

- Options:**
- UC = U-clamp (2 1/2" (63mm) only)
 - LPPF6 = 6" (150mm) Front flange.
 - LPPF = Front flange 4 1/2" (115mm) only
 - LPBF = Back flange (all sizes except 2.5")
 - Phenolic case available on 4 1/2" st/st (115mm) dial



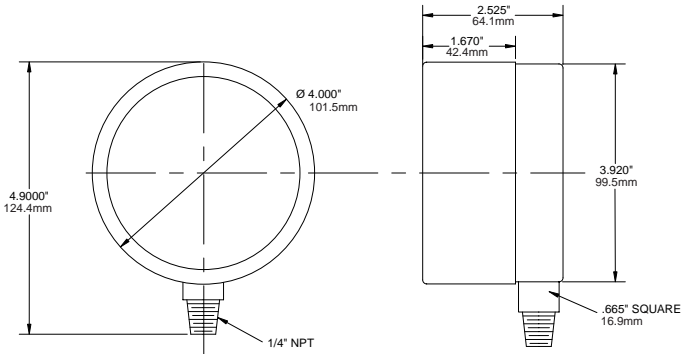
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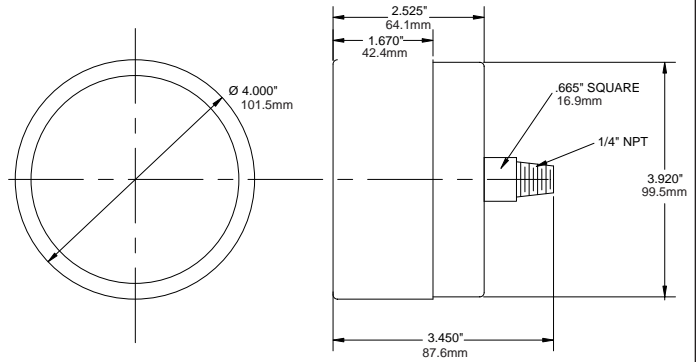
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Low Pressure

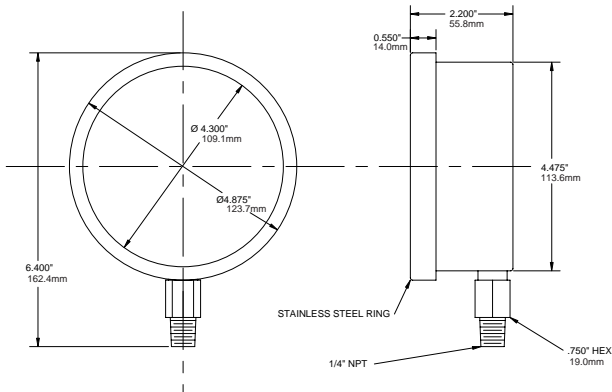
4" Bottom Connection Brass



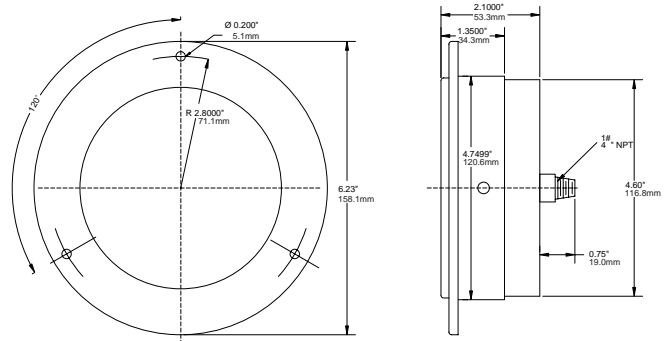
4" Back Connection Brass



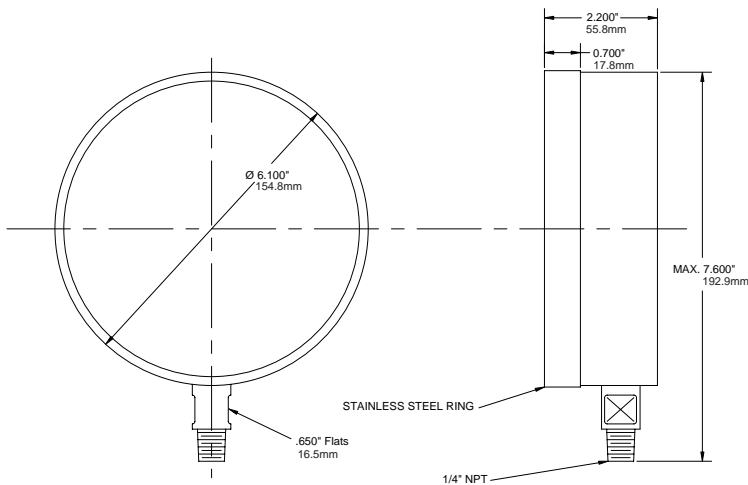
4.5" Bottom Connection Stainless Steel



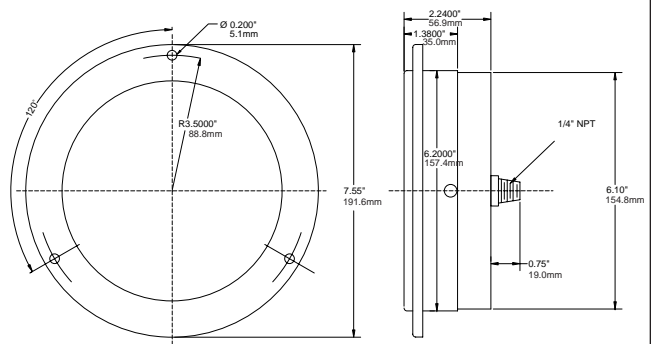
4.5" Back Connection Stainless Steel



6" Bottom Connection Stainless Steel



6" Back Connection Stainless Steel

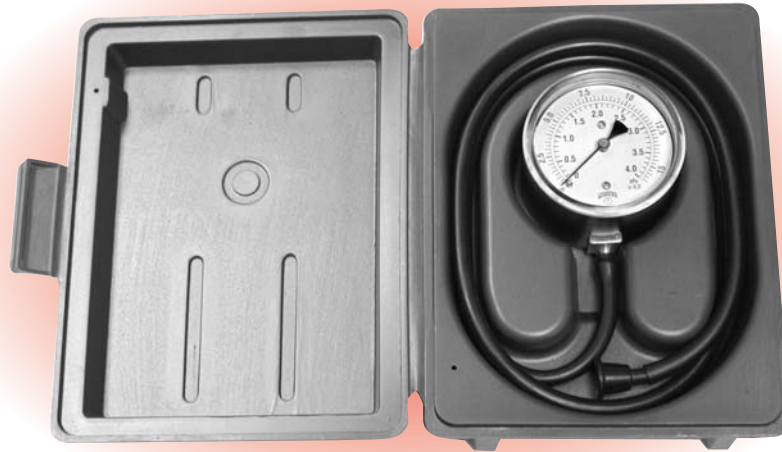


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Low Pressure Test Kit



- Easier To Use Than a Manometer
- Grey Plastic Blow Molded Case for Added Durability
- Sleek Design Featuring Secure Latch Facilitating Safe Handling
- Sensitive Diaphragm Gauge Available in 3 Pressure Ranges

Description

Winters Low Pressure Test Kit is equipped with a sensitive 2 ½" (63mm) low pressure gauge that is available in 3 different ranges (i.e. 15", 35" or 100" water column). The gauge is securely mounted within the rugged plastic blow molded case. The Kit, also consists of 3 feet (91cm) of rubber tubing and a rubber tube nipple for easy connection to manifolds.

The Winters Low Pressure Test Kit is utilized in various applications to set or measure gas pressure and is easier to use than a manometer. Common applications include: Measuring natural gas, low pressure gas, etc. across manifolds for stoves, gas dryers, furnaces and other gas producing products. Also, utilized by service technicians to measure pressure on burners for gas, water heaters, ranges, boilers, unit heaters, etc.



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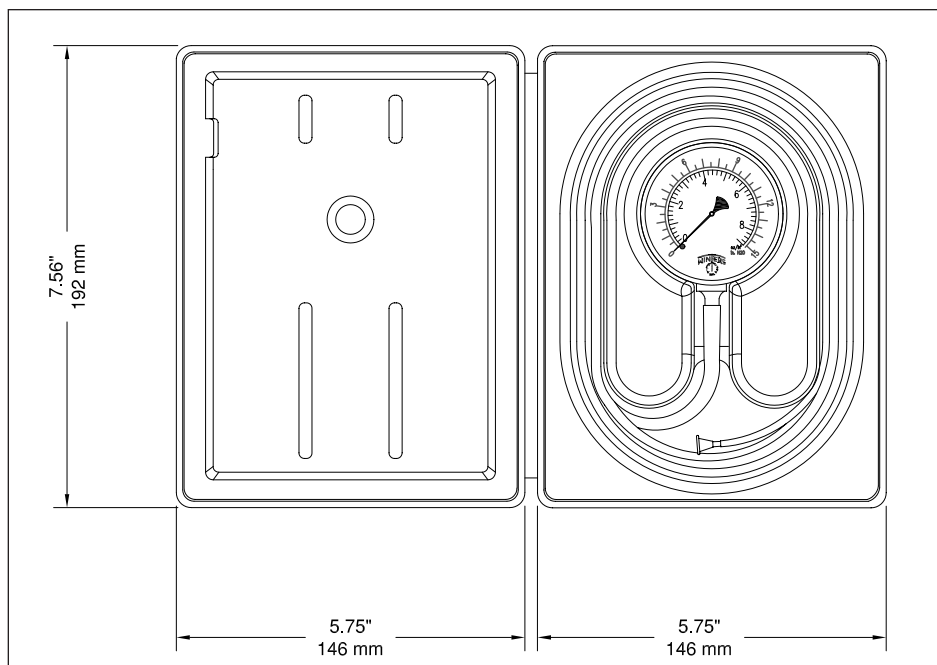
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Low Pressure Test Kit

Gauge Specifications	
Dial Size:	2.5" (63mm), white aluminum dial with red and black markings
Connection:	Brass hose barb (1/4")
Case/Ring:	Steel, painted black
Lens:	Polycarbonate
Diaphragm element:	Phosphor Bronze
Movement:	Engineering plastic upper and lower plate with brass pinion and sector
Ambient Temperature:	-40°F-150°F (-40°C-65°C)
Process Enclosure:	IP52
Accuracy:	+/- 1% accuracy ANSI/ASME Grade A
Case Specifications	
Case Material:	Grey plastic blow molded, 5.75" x 7.56" (146mm x 192mm)
Hose Tube:	Rubber, 3' (91cm) in length; 0.197" (5mm) I.D. x 0.315" (8mm) O.D.
Tube Nipple:	Rubber, 0.256" (6.5mm) I.D. x 0.472" (12mm) O.D. x 1.339" (34mm) L

How to order: Specify Product Code

Part No.	Pressure Range
PLT15	0-15" water/kpa
PLT35	0-35" water/0-20 oz/in2
PLT100	0-100" water/0-58 oz/in2



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06/03

NACE MR0175-2002



Applications

The Winters NACE pressure gauge is designed for oil and gas applications requiring NACE Standards MR0175-2002.

Options

- 4DRY = supply above gauge less liquid fill
- 4UC-P = 4" (100mm) u-clamp
- 4FF = 4" (100mm) front flange
- 4BF = 4" (100mm) back flange
- Custom dials

Specifications	
Dial:	4" (100mm) aluminum with black and red markings
Case:	304 stainless steel
Lens:	Laminated safety glass (safety glass mark)
Ring:	304 stainless steel, bayonet
Pointer:	Aluminum, micro-adjustment
Socket:	316 stainless steel
Connection:	1/4" or 1/2" NPT, bottom or back
Bourdon Tube:	316 stainless steel
Movement:	Stainless steel
Fill Liquid:	Glycerin/H ₂ O
Ambient/Process Temperature:	-40°F to 150°F (-40°C to 65°C) dry 14°F to 150°F (-10°C to 65°C) filled
Protection:	IP65
Accuracy:	1% ANSI/ASME Grade 1A



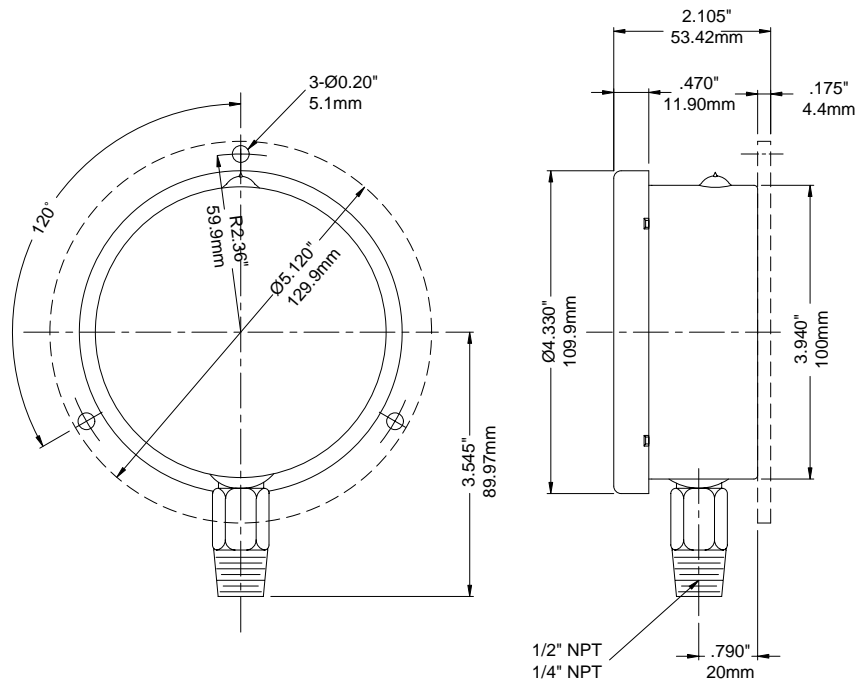
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NACE MR0175-2002

Product Codes				
Dial Size	4" (100mm)			
Connection	Bottom	Back	Bottom	Back
NPT Connection	1/4"	1/4"	1/2"	1/2"
Movement, socket, tube	St/St	St/St	St/St	St/St
Glycerin/H ₂ O Filled	Filled	Filled	Filled	Filled
30" Hg Vacuum/kPa	P640N	P1090N	P655N	*
30"-0-15 psi/kPa	P1036N	*	P1044N	*
30"-0-30 psi/kPa	P1037N	*	P1045N	*
30"-0-60 psi/kPa	P1038N	*	P1046N	*
30"-0-100 psi/kPa	P1039N	*	P1047N	*
30"-0-150 psi/kPa	P1040N	*	P1048N	*
30"-0-200 psi/kPa	P1042N	*	P1050N	*
30"-0-300 psi/kPa	P1043N	*	P1051N	*
0-15 psi/kPa	P641N	P1091N	P656N	*
0-30 psi/kPa	P642N	P1092N	P657N	*
0-60 psi/kPa	P643N	P1093N	P658N	*
0-100 psi/kPa	P644N	P1094N	P659N	*
0-160 psi/kPa	P645N	P1095N	P660N	*
0-200 psi/kPa	P646N	P1096N	P661N	*
0-300 psi/kPa	P647N	P1097N	P662N	*
0-400 psi/kPa	P650N	*	P666N	*
0-600 psi/kPa	P648N	P1098N	P663N	*
0-1000 psi/kPa	P649N	P1099N	P664N	*
0-1500 psi/kPa	*	*	P665N	P1190N
0-2000 psi/kPa	*	*	P667N	P1191N
0-3000 psi/kPa	*	*	P668N	P1192N
0-5000 psi/kPa	*	*	P669N	P1193N
0-10000 psi/kPa	*	*	P670N	P1194N
0-15000 psi/kPa	*	*	P671N	P1195N
0-20000 psi/kPa	*	*	P672N	P1196N



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NACE MR0103-2003



Applications

Winters NACE MR0103-2003 pressure gauge is designed specifically for refinery applications, requiring NACE International Standards.

Options

- 4DRY = supply above gauge less liquid fill
- 4UC-P = 4" (100mm) u-clamp
- 4FF = 4" (100mm) front flange
- 4BF = 4" (100mm) back flange
- Custom dials

Specifications	
Dial:	4" (100mm) aluminum with black and red markings
Case:	304 stainless steel
Lens:	Laminated safety glass (safety glass mark)
Ring:	304 stainless steel, bayonet
Pointer:	Aluminum, micro-adjustment
Socket:	316 stainless steel
Connection:	1/4" or 1/2" NPT, bottom or back
Bourdon Tube:	316 stainless steel
Movement:	Stainless steel
Fill Liquid:	Glycerin/H ₂ O
Ambient/Process Temperature:	-40°F to 150°F (-40°C to 65°C) dry 14°F to 150°F (-10°C to 65°C) filled
Protection:	IP65
Accuracy:	1% ANSI/ASME Grade 1A



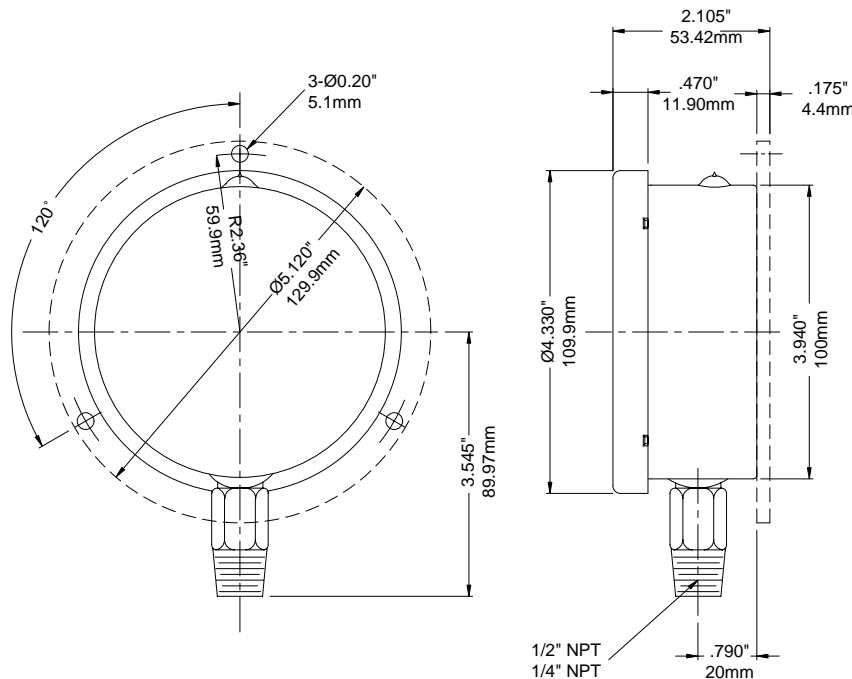
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NACE MR0103-2003

Product Codes				
Dial Size	4" (100mm)			
Connection	Bottom	Back	Bottom	Back
NPT Connection	1/4"	1/4"	1/2"	1/2"
Movement, socket, tube	St/St	St/St	St/St	St/St
Glycerin/H ₂ O Filled	Filled	Filled	Filled	Filled
30" Hg Vacuum/kPa	P640N03	P1090N03	P655N03	*
30"-0-15 psi/kPa	P1036N03	*	P1044N03	*
30"-0-30 psi/kPa	P1037N03	*	P1045N03	*
30"-0-60 psi/kPa	P1038N03	*	P1046N03	*
30"-0-100 psi/kPa	P1039N03	*	P1047N03	*
30"-0-150 psi/kPa	P1040N03	*	P1048N03	*
30"-0-200 psi/kPa	P1042N03	*	P1050N03	*
30"-0-300 psi/kPa	P1043N03	*	P1051N03	*
0-15 psi/kPa	P641N03	P1091N03	P656N03	*
0-30 psi/kPa	P642N03	P1092N03	P657N03	*
0-60 psi/kPa	P643N03	P1093N03	P658N03	*
0-100 psi/kPa	P644N03	P1094N03	P659N03	*
0-160 psi/kPa	P645N03	P1095N03	P660N03	*
0-200 psi/kPa	P646N03	P1096N03	P661N03	*
0-300 psi/kPa	P647N03	P1097N03	P662N03	*
0-400 psi/kPa	P650N03	*	P666N03	*
0-600 psi/kPa	P648N03	P1098N03	P663N03	*
0-1000 psi/kPa	P649N03	P1099N03	P664N03	*
0-1500 psi/kPa	*	*	P665N03	P1190N03
0-2000 psi/kPa	*	*	P667N03	P1191N03
0-3000 psi/kPa	*	*	P668N03	P1192N03
0-5000 psi/kPa	*	*	P669N03	P1193N03
0-10000 psi/kPa	*	*	P670N03	P1194N03
0-15000 psi/kPa	*	*	P671N03	P1195N03
0-20000 psi/kPa	*	*	P672N03	P1196N03



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Process



Applications

Winters Process gauge is designed for process, chemical and petroleum industries, etc. and severe service applications where operator safety is a factor.

Options

- 45HCS = 4 1/2" (115mm) solid front hinged case
- SG-45 = 4 1/2" (115mm) safety glass
- 45SF = Silicone fill
- MS = Monel tube and socket
- F = Fluorolube fill
- G = Glycerin Fill
- FMR = Flush mounted ring
- 1/2" NPT brass available on ranges below 1,000 psi/kPa
- LB = Lower back connection
- Other ranges available upon request

Specifications	
Dial:	4 1/2" (115mm) aluminum with black and red markings
Case:	Engineered reinforced thermoplastic with safety blowout back, solid front, integral back flange
Lens:	Acrylic
Ring:	Reinforced thermoplastic
Pointer:	Anodized aluminum, micrometer adjustable
Socket:	316 stainless steel or brass
Connection:	1/4" or 1/2" NPT, bottom or back
Bourdon Tube:	316 stainless steel or brass
Movement:	304 stainless steel or brass
Seal:	EPDM
Welding:	TIG
O-ring:	Nitrile
Ambient/Process Temperature:	14-150°F (-10-65°C)
Over-pressure Limit:	25% for pressures up to 1500 psi/kPa 15% for pressures 1501 to 8700 psi/kPa 10% for pressures above 8701 psi/kPa
Working Pressure:	Maximum 75% of full scale
Protection:	IP65
Accuracy:	+/-0.5% of full scale ANSI/ASME Grade2A



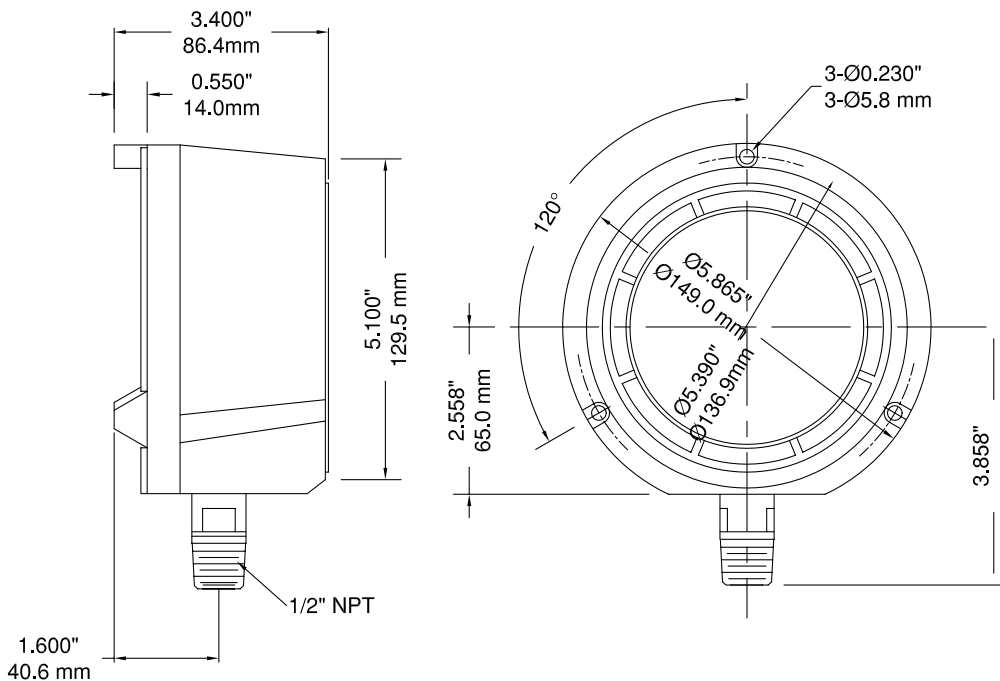
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Process

Product Codes						
Connection	Bottom	Back (LB)	Bottom	Back (LB)	Bottom	Back (LB)
NPT Connection Size	1/4"	1/4"	1/4"	1/4"	1/2"	1/2"
Socket, Tube	Brass	Brass	St/St	St/St	St/St	St/St
Movement	St/St	St/St	St/St	St/St	St/St	St/St
30" Hg Vacuum/kPa	P5080	P5280	P5040	P5340	P5060	P5460
30"-0-15 psi/kPa	P5120	P5220	P5130	P5330	P5140	P5440
30"-0-30 psi/kPa	P5121	P5221	P5131	P5331	P5141	P5441
30"-0-60 psi/kPa	P5122	P5222	P5132	P5332	P5142	P5442
30"-0-100 psi/kPa	P5123	P5223	P5133	P5333	P5143	P5443
30"-0-160 psi/kPa	P5124	P5224	P5134	P5334	P5144	P5444
30"-0-200 psi/kPa	P5125	P5225	P5135	P5335	P5145	P5445
30"-0-300 psi/kPa	P5126	P5226	P5136	P5336	P5146	P5446
0-15 psi/kPa	P5081	P5281	P5041	P5341	P5061	P5461
0-30 psi/kPa	P5082	P5282	P5042	P5342	P5062	P5462
0-60 psi/kPa	P5083	P5283	P5043	P5343	P5063	P5463
0-100 psi/kPa	P5084	P5284	P5044	P5344	P5064	P5464
0-160 psi/kPa	P5085	P5285	P5045	P5345	P5065	P5465
0-200 psi/kPa	P5086	P5286	P5046	P5346	P5066	P5466
0-300 psi/kPa	P5087	P5287	P5047	P5347	P5067	P5467
0-400 psi/kPa	P5088	P5288	P5048	P5348	P5068	P5468
0-600 psi/kPa	P5089	P5289	P5049	P5349	P5069	P5469
0-1000 psi/kPa	P5098	P5298	*****	*****	*****	****
NPT Connection Size	1/2"	1/2"	1/4"	1/4"	1/2"	1/2"
0-1000 psi/kPa	P5090	P5290	P5050	P5350	P5070	P5470
0-1500 psi/kPa	P5091	P5291	P5051	P5351	P5071	P5471
0-2000 psi/kPa	P5092	P5292	P5052	P5352	P5072	P5472
0-3000 psi/kPa	P5093	P5293	P5053	P5353	P5073	P5473
0-5000 psi/kPa	P5094	P5294	P5054	P5354	P5074	P5474
0-10,000 psi/kPa	P5095	P5295	P5055	P5355	P5075	P5475
0-15,000 psi/kPa	P5096	P5296	P5056	P5356	P5076	P5476
0-20,000 psi/kPa	P5097	P5297	P5057	P5357	P5077	P5477



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Receiver

CRN



Description

Winters Receiver Gauge works in association with an electronic instrument and is used in an industrial application where a signal is to be indicated. The gauge indicates pressure, temperature or flow that can be transmitted by proportional variations in pressure. The gauge can also be used to determine leaks in tanks and pipes. The receiver gauge contains a brass or stainless steel tube and socket. The gauge has an accuracy rating of $\pm 0.5\%$ ANSI/ASME Grade 2A and maintains a CRN registration. The 4 $\frac{1}{2}$ " (115 mm) dial size with adjustable micrometer and adjustable pointer is encased in a phenolic material with a $\frac{1}{4}$ " NPT connection.

Specifications

Dial:	4 $\frac{1}{2}$ " (115mm) white aluminum with black and red markings
Case:	Black impact resistance phenolic
Solid Wall:	304 stainless steel
Lens:	Acrylic
Ring:	Phenolic
Pointer:	Aluminum, micrometer,
Socket:	Brass or 316 stainless steel
Connection:	$\frac{1}{4}$ " NPT standard bottom
Bourdon Tube:	Phosphor bronze or 316 stainless steel
Movement:	Brass or 304 stainless steel
Gasket Materials:	EPDM
Welding:	TIG/Silver alloy
Over-pressure Limit:	25% of full scale value
Working Pressure:	Maximum 75% of full scale value
Ambient Temperature:	-40°F to 150°F (-40°C to 65°C) dry 14°F to 150°F (-10°C to 65°C) filled
Process Temperature:	-40°F to 150°F (-40°C to 65°C) 14°F to 150°F (-10°C to 65°C) filled
Accuracy:	$\pm 0.5\%$ (ANSI/ASME GRADE 2A)
Protection:	IP65



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Receiver

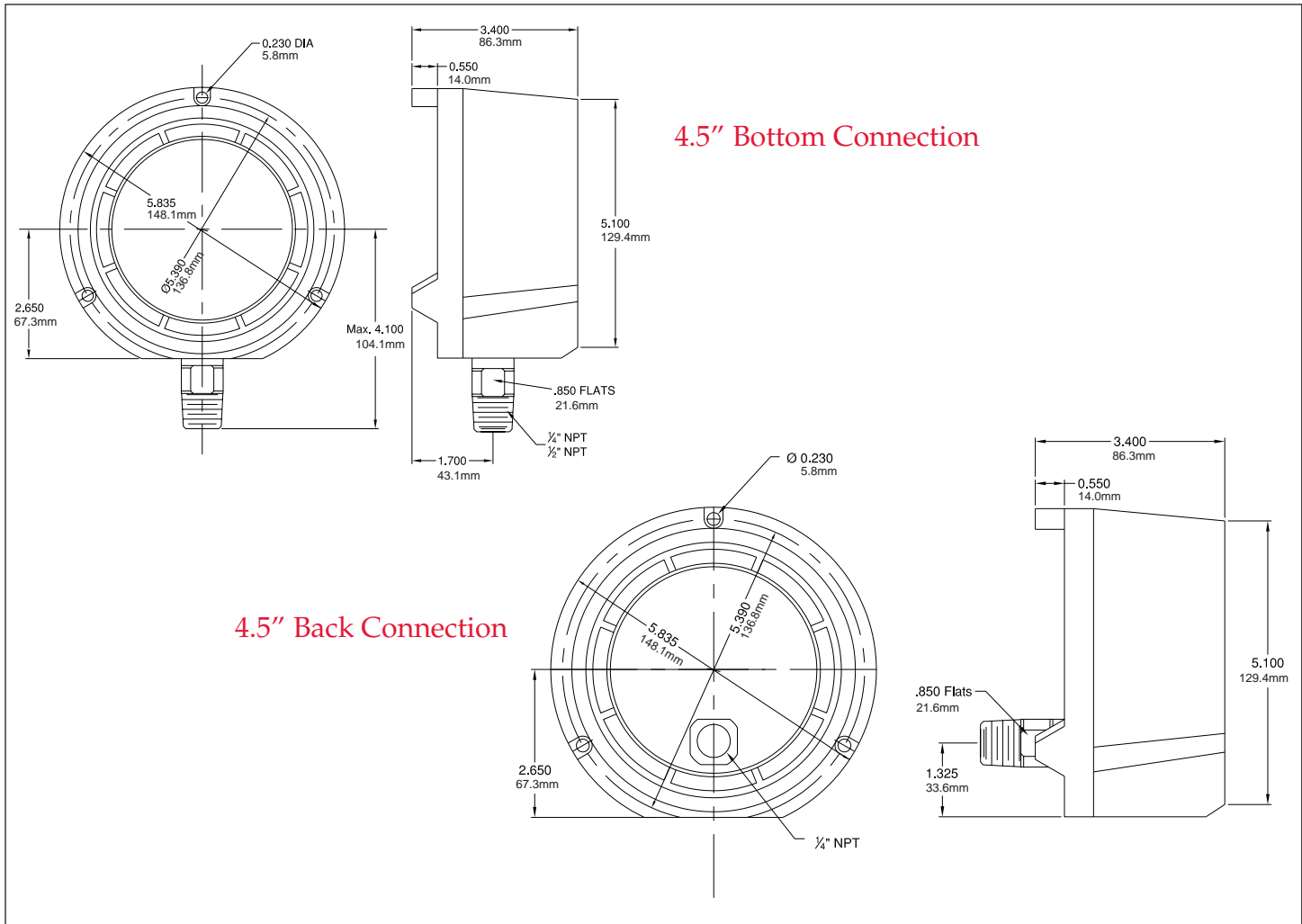
How to order: Specify product code

PRODUCT CODES

Range*	Product Codes	
	Socket, Tube (Brass) 1/4" NPT Bottom Connection	Socket, Tube (St./St.) 1/4" NPT Bottom Connection
3-15 psi	P5081REC	P5041REC
3-27 psi	P5082REC	P5042REC

* Please indicate corresponding dials (e.g. square root, % etc.)

Other options available upon request



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Safety Case



CRN



Description

Winters Safety Case is designed for heavy industrial applications where operator safety is a factor. These applications include chemical and petrochemical processing, food, beverage, pharmaceutical, conventional and nuclear power plants.

Winters Safety Case meets safety specifications of ANSI B40.1, and is built to resist the most severe operating conditions. The Safety Case is offered in 304 stainless steel with a blow out back or colour coded P.B.T. (polybutylene terephthalate) with a blow out back plate.

Specifications

Dial:	4" (100mm) white dial with black markings
Case:	304 stainless steel case with blow out back or colour coded (P.B.T.) case and blowout back plate
Lens:	Laminated safety glass
Ring:	Bayonet (stainless steel or PBT)
Pointer:	Aluminum, anodized black, micrometer
Socket:	304 stainless steel
Connection:	1/4" or 1/2" NPT bottom
Bourdon Tube:	316 Stainless steel
Movement:	304 Stainless steel
Protection:	IP65 per UEC 529, UNI 8896
Welding:	316 stainless steel TIG Argonarc
Over-pressure Limit:	30% for pressures up to 600 psi (4,147 kPa) 15% for pressures over 600 psi (4,147 kPa)
Working Pressure:	Maximum 75% of full scale value
Ambient / Process Temperature:	-40F-150F (-40C-65C) dry 14F-150F (-10C-65C) glycerin filled
Accuracy:	1% ANSI/ASME Grade 1A



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Safety Case

How to order: Specify product code
PRODUCT CODES

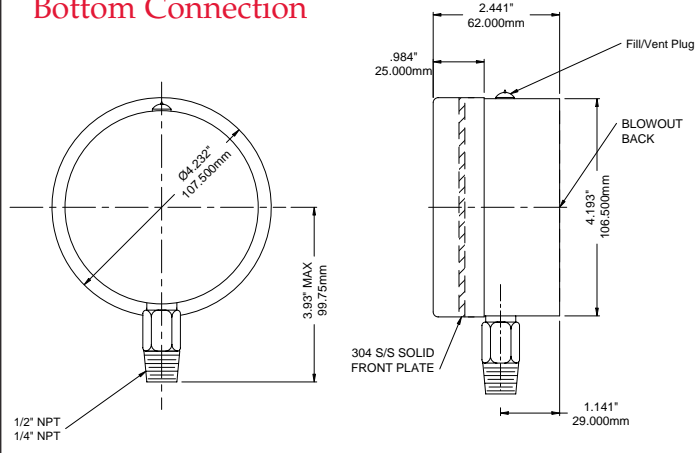
Dial Size	4" (100mm)			
Connection	Bottom	Bottom	Bottom	Bottom
NPT Connection	1/4"	1/2"	1/4"	1/2"
Movement socket, tube	St/St	St/St	St/St	St/St
Case	Stainless	Stainless	Colour (PBT)	Colour (PBT)
30" Hg Vacuum/kPa	P640SFC	P655SFC	P640CSFC	P655CSFC
30"-0-15 psi/kPa	P1044SFC	*	P1044CSFC	*
30"-0-30 psi/kPa	P1037SFC	P1045SFC	P1037CSFC	P1045CSFC
30"-0-60 psi/kPa	P1038SFC	P1046SFC	P1038CSFC	P1046CSFC
30"-0-100 psi/kPa	P1039SFC	P1047SFC	P1039CSFC	P1047CSFC
30"-0-150 psi/kPa	P1048SFC	*	P1048CSFC	*
30"-0-200 psi/kPa	P1042SFC	P1050SFC	P1042CSFC	P1050CSFC
30"-0-300 psi/kPa	P1043SFC	P1051SFC	P1043CSFC	P1051CSFC
0-15 psi/kPa	P641SFC	P656SFC	P641CSFC	P656CSFC
0-30 psi/kPa	P642SFC	P657SFC	P642CSFC	P657CSFC
0-60 psi/kPa	P643SFC	P658SFC	P643CSFC	P658CSFC
0-100 psi/kPa	P644SFC	P659SFC	P644CSFC	P659CSFC
0-160 psi/kPa	P645SFC	P660SFC	P645CSFC	P660CSFC
0-200 psi/kPa	P646SFC	P661SFC	P646CSFC	P661CSFC
0-300 psi/kPa	P647SFC	P662SFC	P647CSFC	P662CSFC
0-400 psi/kPa	P650SFC	P666SFC	P650CSFC	P666CSFC
0-600 psi/kPa	P648SFC	P663SFC	P648CSFC	P663CSFC
0-1000 psi/kPa	P649SFC	P664SFC	P649CSFC	P664CSFC
0-1500 psi/kPa	P651SFC	P665SFC	P651CSFC	P665CSFC
0-2000 psi/kPa	P652SFC	P667SFC	P652CSFC	P667CSFC
0-3000 psi/kPa	P653SFC	P668SFC	P653CSFC	P668CSFC
0-5000 psi/kPa	P654SFC	P669SFC	P654CSFC	P669CSFC
0-10000 psi/kPa	P673SFC	P670SFC	P673CSFC	P670CSFC
0-15000 psi/kPa	P674SFC	P671SFC	P674CSFC	P671CSFC
0-20000 psi/kPa	P675SFC	P672SFC	P675CSFC	P672CSFC

Colour Coded Case Only	
Add Colour Code to Product Code	
4" (100mm) Case Colour Codes	
1SCY - Red	9SCY - White
2SCY - Yellow	10SCY - Pink
3SCY - Black	11SCY - purple
4SCY - Green	12SCY - Cyan
5SCY - Blue	13SCY - Charcoal
6SCY - Orange	14SCY - Dark Brown
7SCY - Gold	15SCY - Olive Green
8SCY - Brown	16SCY - Violet

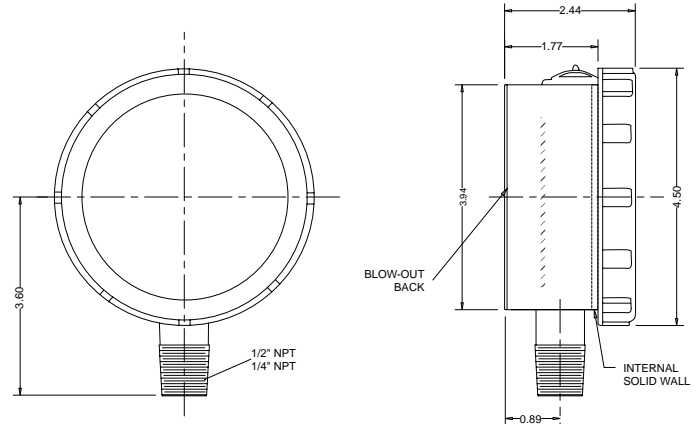
* Add appropriate colour code as suffix. (e.g. P655CSFC5SCY = Product Code + Colour Code)

Options: Specify liquid filled for liquid filled option - Available with Monel internals

4" Stainless Steel Safety Case, Bottom Connection



4" Colour Coded Safety Case, Bottom Connection



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Sanitary 3A

Standard

Premium

New!

CRN

Autoclavable



- * External Recalibrator Screw
- * +/- 0.75% Accuracy
- * 4" (100mm) bottom connection

Description

Winters 3A designated Sanitary Gauges are designed to meet the special requirements of the dairy, food processing and pharmaceutical industries in compliance with STD 37.01 of 3A organization. The rugged one piece stainless steel construction ensures an extended service life. The gauges are glycerin filled to reduce internal wear due to pulsation and vibration and to provide an easier reading by minimizing excess pointer movement. Winters Standard 3A Sanitary Gauges are available in a 2 1/2" (63mm) or 4" (100mm) dial size with either a 1 1/2" (40mm) or 2" (50mm) bottom or back entry sanitary Tri-Clamp® connection. The process connection is a diaphragm seal integrally built with the pressure gauge.

Winters newest addition to the 3A Sanitary Series is a Premium 4" (100mm) bottom connection pressure gauge. This instrument features +/- 0.75% full scale accuracy and an external recalibrator screw for convenient calibration. The Premium Series 3A Sanitary pressure gauge is available with a 1 1/2" or 2" Tri-Clamp® connection and is highlighted by a very high .20umRa electropolished finish.

* Autoclavable - 4" dry model only

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



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Sanitary 3A

Specifications		
	Standard 3A	Premium 3A
Dial:	2 1/2" (63mm) and 4" (100mm), white aluminum with black & red markings	4" (100mm), white aluminum with black & red markings
Case:	AISI 304 stainless steel, electro polished with 150 grit finish (Ra Min)	AISI 304 stainless steel, electro polished .20umRa finish
Lens:	Plexiglass	Polycarbonate
Ring:	AISI 304 stainless steel, electro polished with 150 grit finish (Ra)	AISI 304 stainless steel, electro polished .20umRa finish
Pointer:	Aluminum, anodized black	Aluminum, anodized black
Process Connection:	AISI 316 stainless steel, electro polished with 1 1/2" or 2" Tri-Clamp	AISI 316 stainless steel, electro polished with 1 1/2" or 2" Tri-Clamp
Diaphragm:	AISI 316L stainless steel, electro polished	AISI 316L stainless steel, electro polished .05umRa
Gasket:	2 1/2" (63mm) silicon; 4" (100mm) EPDM	Monprene
Vent & Fill Plug:	EPDM	Monprene
Recalibrator:	N/A	External
Seal Fill:	Approved food service oil	Shell Ordina
Case Fill:	Glycerin, 98%	Glycerin, 98%
Working Pressure:	Maximum 75% of full scale value	Maximum 75% of full scale value
Ambient / Process Temperature:	-13°F to 150°F (-25°C to 65°C) dry, 5°F to 150°F (-15°C to 65°C) filled	-13°F to 150°F (-25°C to 65°C) dry, 5°F to 150°F (-15°C to 65°C) filled
Cleaned in Place:	Contact Winters	Contact Winters
Accuracy:	2 1/2" (100mm) 3%-2%-3% ANSI/ASME Grade B), 4" (100mm) ± 1% accuracy (ANSI/ASME Grade 1A)	+/- 0.75% of full scale (ANSI/ASME Grade 1A)
Autoclavable Specifications*		
Window:	Polysulfone	Polycarbonate
Gasket:	Silicone rubber	Monprene
Vent & Fill Plug:	Viton	Monprene
Other Specifications:	Same as standard product	Same as standard product

(*Autoclavable Temperature Limit: up to 302°F (150°C))

How to order: Specify product code PRODUCT CODES

Dial Size	Standard						Premium			
	2 1/2" (63mm)		2 1/2" (63mm)		4" (100mm)		4" (100mm)		4" (100mm)	4" (100mm)
Tri Clamp	1 1/2" (40mm)		2" (50mm)		1 1/2" (40mm)		2" (50mm)		1 1/2" (40mm)	2" (50mm)
Connection	Bottom	Back	Bottom	Back	Bottom	Back	Bottom	Back	Bottom	Bottom
30"-0-30 psi/bar	P15798	P15798B	P20798	P20798B	P151021	P151021B	P201021	P201021B	PR151021	PR201021
30"-0-60 psi/bar	P15799	P15799B	P20799	P20799B	P151022	P151022B	P201022	P201022B	PR151022	PR201022
30"-0-100 psi/bar	P15791	P15791B	P20791	P20791B	P151023	P151023B	P201023	P201023B	PR151023	PR201023
30"-0-150 psi/bar	P15793	P15793B	P20793	P20793B	P151025	P151025B	P201025	P201025B	PR151025	PR201025
30"-0-200 psi/bar	P15794	P15794B	P20794	P20794B	P151026	P151026B	P201026	P201026B	PR151026	PR201026
30"-0-300 psi/bar	P15795	P15795B	P20795	P20795B	P151027	P151027B	P201027	P201027B	PR151027	PR201027
0-30 psi/bar	P15802	P15802B	P20802	P20802B	P15602	P15602B	P20602	P20602B	PR15602	PR20602
0-60 psi/bar	P15803	P15803B	P20803	P20803B	P15603	P15603B	P20603	P20603B	PR15603	PR20603
0-100 psi/bar	P15804	P15804B	P20804	P20804B	P15604	P15604B	P20604	P20604B	PR15604	PR20604
0-160 psi/bar	P15805	P15805B	P20805	P20805B	P15605	P15605B	P20605	P20605B	PR15605	PR20605
0-200 psi/bar	P15806	P15806B	P20806	P20806B	P15606	P15606B	P20606	P20606B	PR15606	PR20606
0-300 psi/bar	P15807	P15807B	P20807	P20807B	P15607	P15607B	P20607	P20607B	PR15607	PR20607
0-600 psi/bar	P15808	P15808B	P20808	P20808B	P15608	P15608B	P20608	P20608B	PR15608	PR20608

- Other ranges available upon request.
- Autoclavable option available on 4" (100mm) dry only.



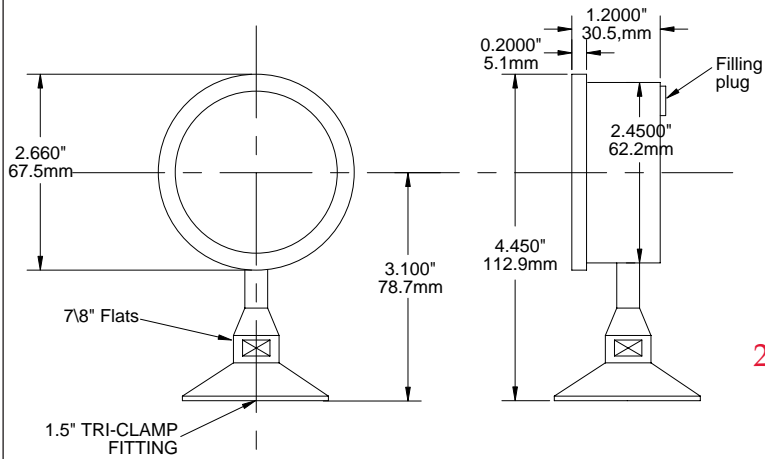
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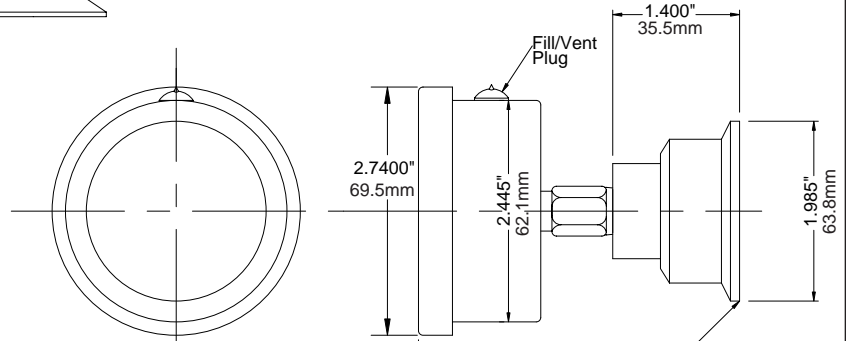
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Sanitary 3A

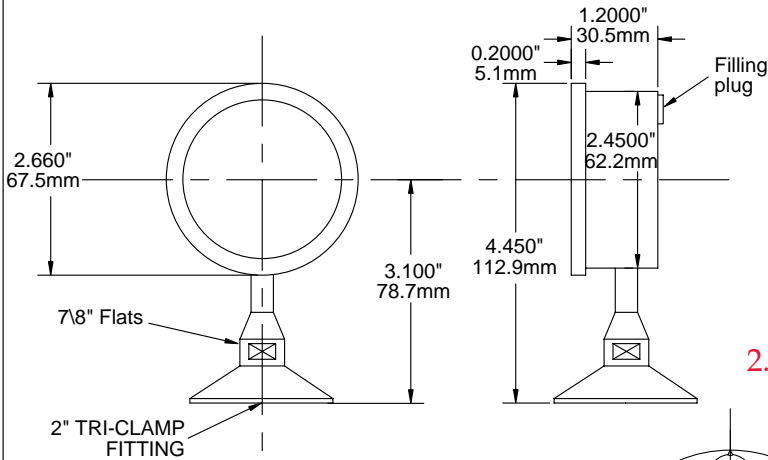
2.5" 3A, 1.5" Tri-Clamp, Bottom Connection



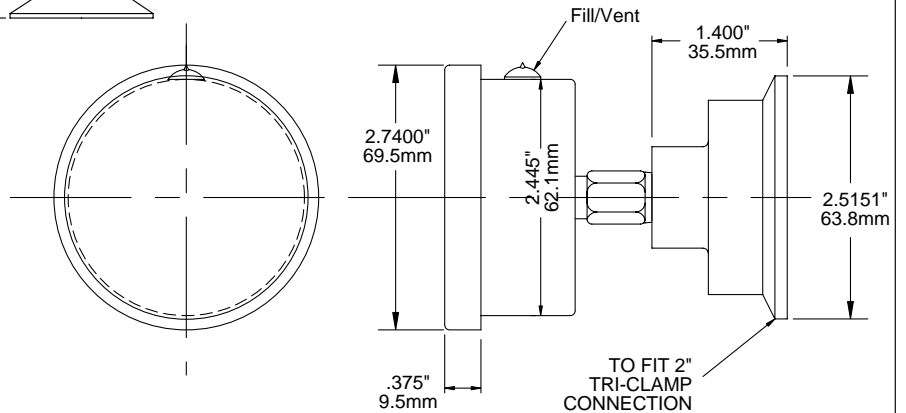
2.5" 3A, 1.5" Tri-clamp, Back Connection



2.5" 3A, 2" Tri-Clamp, Bottom Connection



2.5" 3A, 2" Tri-Clamp, Back Connection



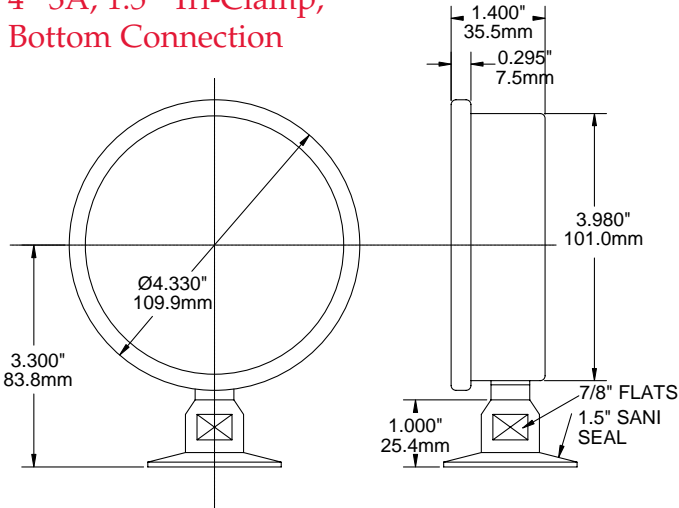
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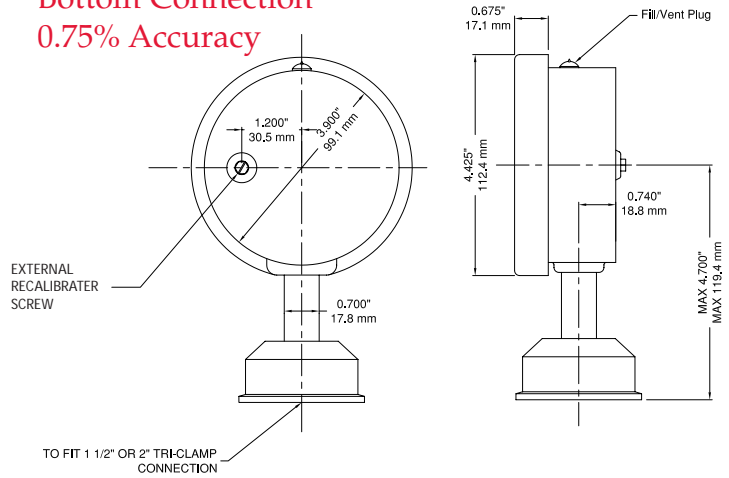
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Sanitary 3A

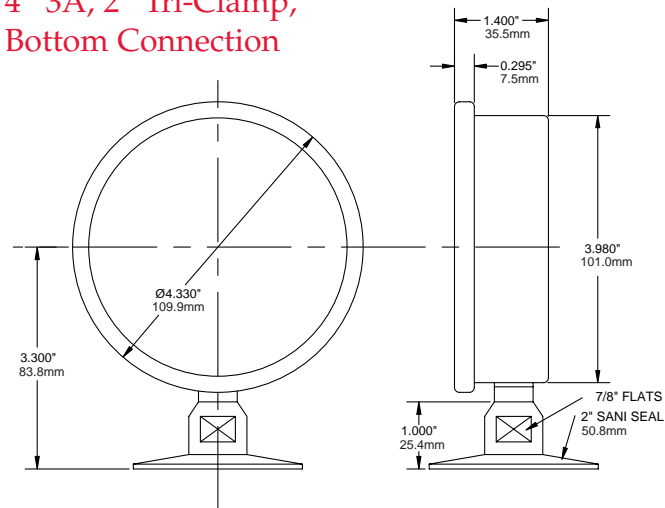
Standard
4" 3A, 1.5" Tri-Clamp,
Bottom Connection



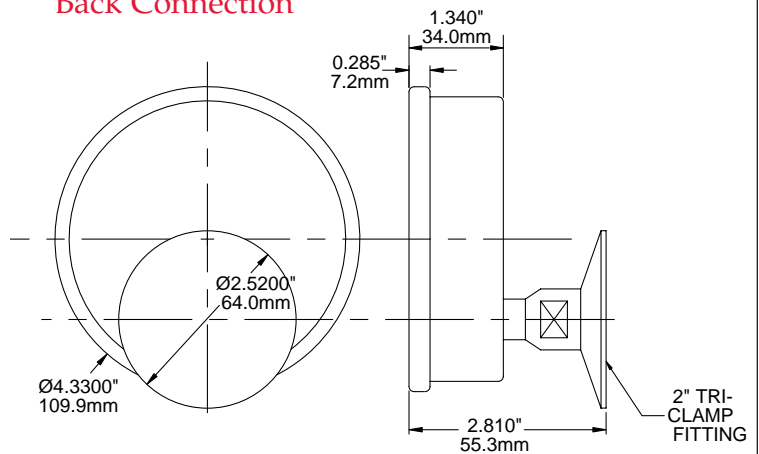
Premium
4" 3A, 2" Tri-Clamp,
Bottom Connection
0.75% Accuracy



Standard
4" 3A, 2" Tri-Clamp,
Bottom Connection



Standard
4" 3A, 2" Tri-Clamp,
Back Connection



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Schaeffer Gauge

STAINLESS STEEL FLANGED DIAPHRAGM



Custom Dials Available

Description

The Schaeffer Gauge is a diaphragm pressure gauge utilized for measuring low positive pressures in an aggressive and highly corrosive media. This pressure gauge is equipped with a concentrically thin corrugated diaphragm clamped between two flanges and the loading of the process fluid causes the diaphragm to deflect upwards or downward.

The Schaeffer Gauge is best suited for applications requiring low pressures* where highly corrosive media is present, such as oil refineries, pulp & paper, chemical plants, and many other industrial applications.

* Vacuum ranges also available.

Specifications

Dial:	4" (100mm) and 6" (150mm) white aluminum with black markings
Case / Ring:	304L stainless steel
Lens:	Acrylic (safety glass optional)
Diaphragm:	316 stainless steel, 316 stainless steel PTFE lined, or Tantalum
Movement:	All stainless steel - Push rod / connecting link and segment
Pointer:	Adjustable pointer - aluminum
Connection:	1/4" or 1/2" NPT standard
Upper Flange:	Stainless steel (neck and base movements)
Lower Flange and Connection:	316L stainless steel bottom connection
Wetted Parts:	316 stainless steel
Ambient Temperature:	-13°F to 140°F (-25°C to 60°C)
Process Temperature:	212°F (100°C)*
Accuracy:	+/-1.5% full scale
Protection:	IP54

* Minimum temperature should not be less than or equal to the freezing point of the process fluid.



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Schaeffer Gauge

STAINLESS STEEL FLANGED DIAPHRAGM

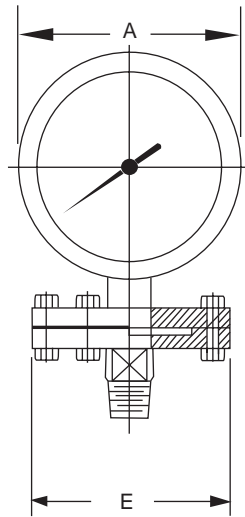
How to order: Specify product code

Dial Size	4" (100mm)		4" (100mm)		6" (150mm)	
Connection (NPT)	1/4" Bottom	1/2" Bottom	1/4" Bottom	1/2" Bottom	1/4" Bottom	1/2" Bottom
0-10" water/oz	PSG4010	PSG40105			PSG6010	PSG60105
0-30" water/oz	PSG4030	PSG40305			PSG6030	PSG60305
0-60" water/oz	PSG4060	PSG40605			PSG6060	PSG60605
0-100" water/oz	PSG40100	PSG401005			PSG60100	PSG601005
0-160" water/oz	PSG40160	PSG401605			PSG60160	PSG601605
0-200" water/oz	PSG40200	PSG402005			PSG60200	PSG602005
0-300" water/oz	PSG40300	PSG403005			PSG60300	PSG603005
0-10 psi/kPa	PSG410	PSG4105			PSG610	PSG6105
0-15 psi/kPa	PSG415	PSG4155			PSG615	PSG6155
0-30 psi/kPa	PSG430	PSG4305			PSG630	PSG6305
0-60 psi/kPa	PSG460	PSG4605			PSG660	PSG6605
0-100 psi/kPa	PSG4100	PSG41005	PSG4100T	PSG41005T	PSG6100	PSG61005
0-160 psi/kPa	PSG4160	PSG41605			PSG6160	PSG61605
0-200 psi/kPa	PSG4200	PSG42005	PSG4200T	PSG42005T	PSG6200	PSG62005
0-300 psi/kPa	PSG4300	PSG43005	PSG4300T	PSG43005T	PSG6300	PSG63005

T: Denotes Tantalum Diaphragm

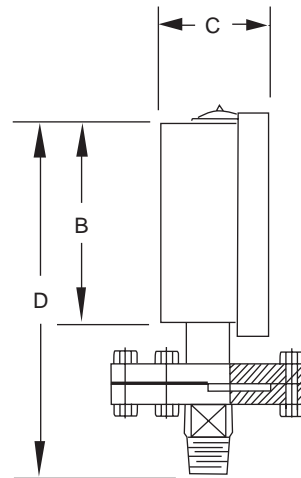
Options: 316 stainless steel PTFE lined diaphragm available - please specify PTFE4 - 4" dial or PTFE6 - 6" dial. Other materials, ranges, connections are available upon request.

Safety Glass: SG - 4" dial, SG6 - 6" dial



For pressure ranges greater than 0-10 psi/kPa

Case Dia.	Flange Dia.	A	B	C	D	E
4" 100 mm	4" 100 mm	4.43" 112	3.90" 99	2.16" 55	6.99" 177	3.86" 98
6" 150 mm	4" 100 mm	6.10" 155	5.51" 140	2.20" 56	6.99" 177	3.86" 98



For pressure ranges less than and equal to 10 psi/kPa

Case Dia.	Flange Dia.	A	B	C	D	E
4" 100 mm	6" 150 mm	4.43" 112	3.90" 99	2.16" 55	6.99" 177	6.10" 155
6" 150 mm	6" 150 mm	6.10" 155	5.51" 140	2.20" 56	6.99" 177	6.10" 155



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Stabilizer Series



Applications

The New Winters' Stabilizer Pressure Gauge is to be utilized in high vibration/high pulsation environments. The specially designed movement enables an easier pressure reading under conditions of vibration or process pressure fluctuation. This gauge requires no liquid filling.

Options

- 45HCS = 4¹/₂" (115mm) solid front hinged case
- SG-45 = 4¹/₂" (115mm) safety glass
- 1/2" NPT brass available on ranges below 1,000 psi/kPa
- FMR = Flush mounted ring
- MS = Monel tube and socket
- Other ranges available upon request

Specifications	
Dial:	4 ¹ / ₂ " (115mm) aluminum with black and red markings
Case:	Engineered reinforced thermoplastic with safety blowout back, solid front, integral back flange
Lens:	Acrylic
Ring:	Reinforced thermoplastic
Pointer:	Anodized aluminum
Socket:	316 stainless steel or brass
Connection:	1/4" or 1/2" NPT
Bourdon Tube:	316 stainless steel or brass
Movement:	304 stainless steel or brass
Seal:	EPDM
Welding:	TIG
O-ring:	Nitrile
Ambient/Process Temperature:	14-150°F (-10-65°C)
Over-pressure Limit:	25% for pressures up to 1500 psi/kPa 15% for pressures 1501 to 8700 psi/kPa 10% for pressures above 8701 psi/kPa
Working Pressure:	Maximum 75% of full scale
Protection:	IP65
Accuracy:	+/-0.5% of full scale

Product Codes			
Connection	Bottom	Bottom	Bottom
NPT Connection Size	1/4"	1/4"	1/2"
Socket, Tube	Brass	St/St	St/St
Movement	St/St	St/St	St/St
30" Hg Vacuum/kPa	P5080Z	P5040Z	P5060Z
30"-0-15 psi/kPa	P5120Z	P5130Z	P5140Z
30"-0-30 psi/kPa	P5121Z	P5131Z	P5141Z
30"-0-60 psi/kPa	P5122Z	P5132Z	P5142Z
30"-0-100 psi/kPa	P5123Z	P5133Z	P5143Z
30"-0-160 psi/kPa	P5124Z	P5134Z	P5144Z
30"-0-200 psi/kPa	P5125Z	P5135Z	P5145Z
30"-0-300 psi/kPa	P5126Z	P5136Z	P5146Z
0-15 psi/kPa	P5081Z	P5041Z	P5061Z
0-30 psi/kPa	P5082Z	P5042Z	P5062Z
0-60 psi/kPa	P5083Z	P5043Z	P5063Z
0-100 psi/kPa	P5084Z	P5044Z	P5064Z
0-160 psi/kPa	P5085Z	P5045Z	P5065Z
0-200 psi/kPa	P5086Z	P5046Z	P5066Z
0-300 psi/kPa	P5087Z	P5047Z	P5067Z
0-400 psi/kPa	P5088Z	P5048Z	P5068Z
0-600 psi/kPa	P5089Z	P5049Z	P5069Z
0-1000 psi/kPa	P5098Z	****	****
NPT Connection Size	1/2"	1/4"	1/2"
0-1000 psi/kPa	P5090Z	P5050Z	P5070Z
0-1500 psi/kPa	P5091Z	P5051Z	P5071Z
0-2000 psi/kPa	P5092Z	P5052Z	P5072Z
0-3000 psi/kPa	P5093Z	P5053Z	P5073Z
0-5000 psi/kPa	P5094Z	P5054Z	P5074Z
0-10,000 psi/kPa	P5095Z	P5055Z	P5075Z
0-15,000 psi/kPa	P5096Z	P5056Z	P5076Z
0-20,000 psi/kPa	P5097Z	P5057Z	P5077Z

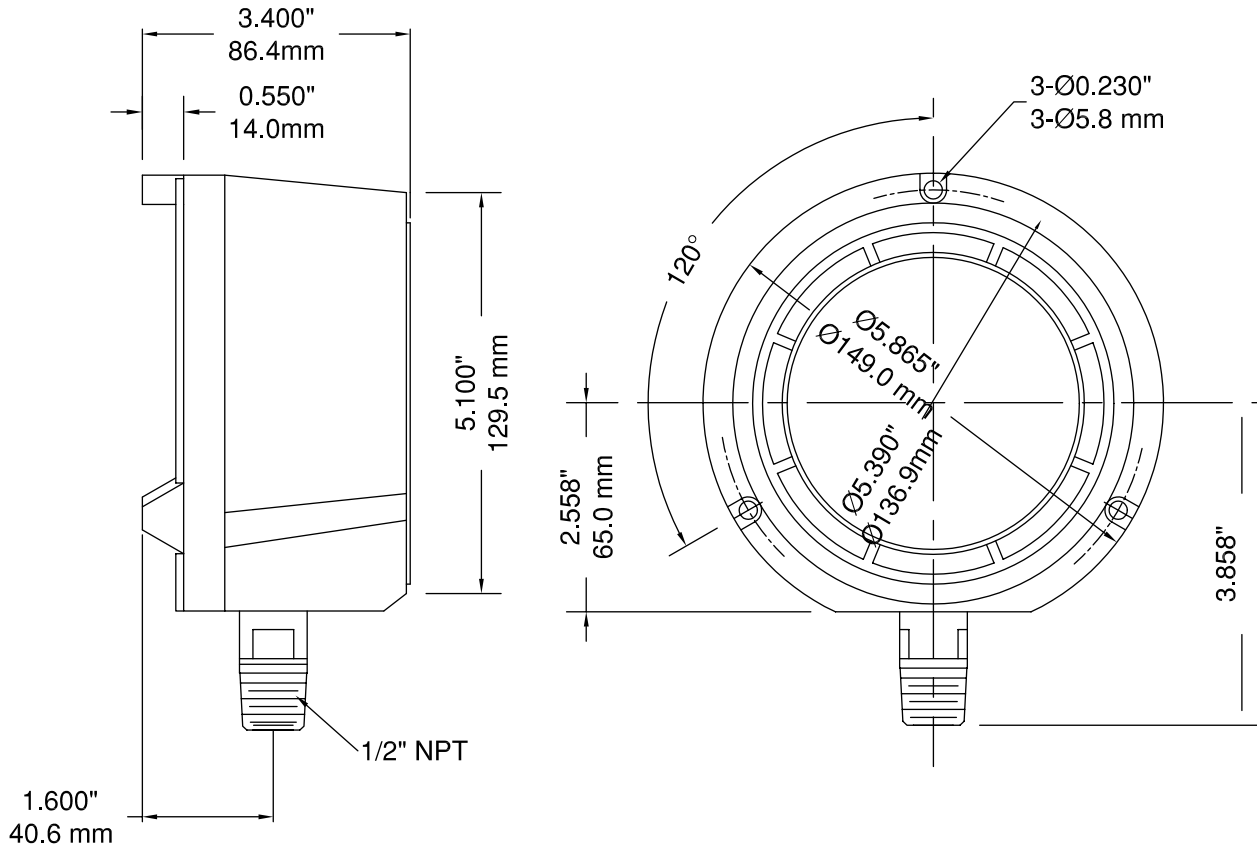


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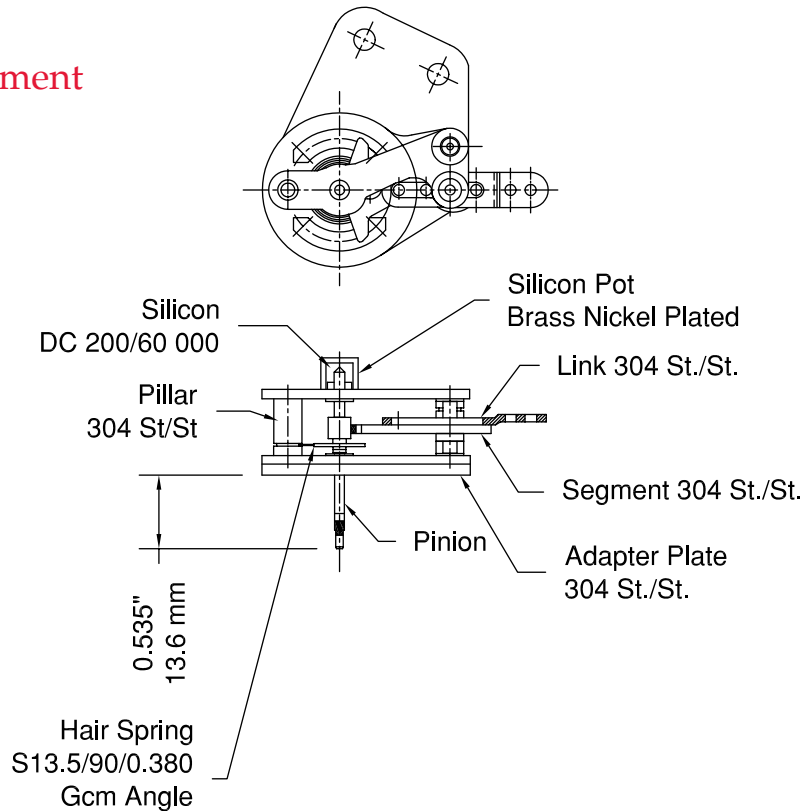
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Stabilizer Series



Stabilizer Movement



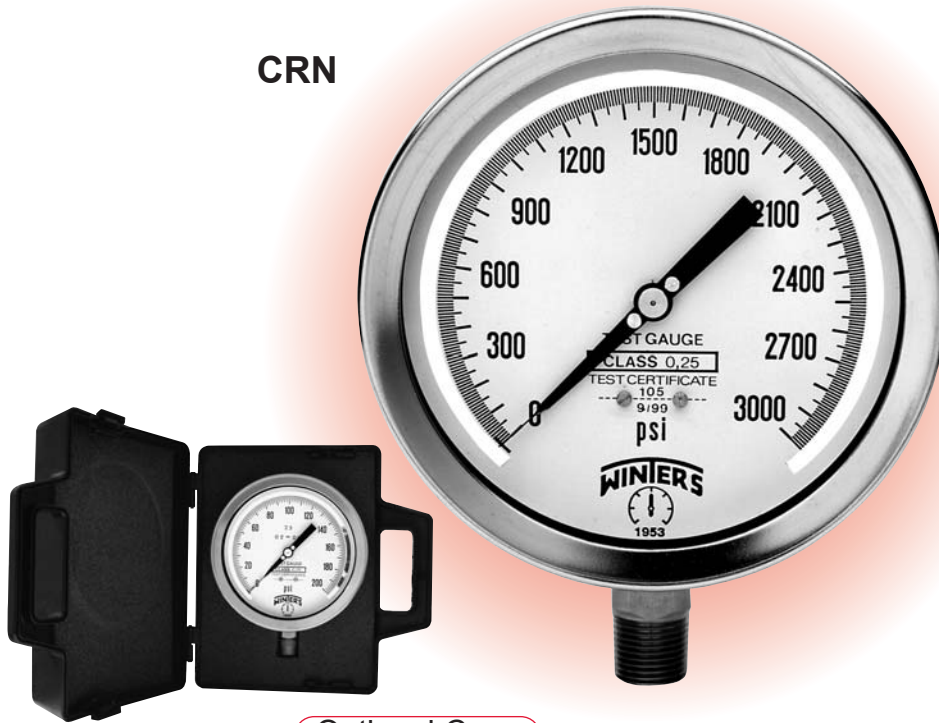
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Test Gauge

CRN



Optional Case

Description

Winters' Test Gauges are designed specifically for use where accuracy and repeatability are of prime importance such as in laboratories or instrument testing facilities. Constructed of 304 stainless steel casing and brass movements, these gauges offer excellent reliability and have a long service life. The 6" (150mm) Test Gauge features a synthetic jewel bearing for added accuracy - (0.25% full scale). The 4" (100mm) Test Gauge features an accuracy of 0.5%.

Winters' Test Gauges are supplied standard with an NIST traceable test certificate certifying the accuracy of the instrument. The Winters Test Gauge is CRN registered.

An optional carrying case is available for additional protection and transportation purposes.

Specifications

Dial:	4" (100mm) white aluminum dial with black markings, 6" (150mm) white aluminum dial with black markings, both dials have mirror band for precise instrument readings
Case:	AISI 304 stainless steel
Lens:	Polycarbonate
Ring:	AISI 304 stainless steel
Pointer:	Aluminum, anodized black, micrometer adjustable, knife-edge
Socket:	Brass
Connection:	1/4" NPT or 1/2" NPT standard, bottom
Bourdon Tube:	Beryllium Copper
Movement:	4" brass, 6" brass with synthetic jewel bearings
Protection:	IP65
Welding:	Silver alloy
Over-pressure Limit:	30% of full scale value
Working Pressure:	Maximum 75% of full scale value
Calibration Conditions:	68°F (± 5.4°F) 20°C (± 3°C) for ambient and process temperatures at atmospheric pressure
Accuracy:	4" (100mm) ± 0.5% full scale accuracy (ANSI/ASME Grade 2A) 6" (150mm) ± 0.25% full scale accuracy (ANSI/ASME Grade 3A)



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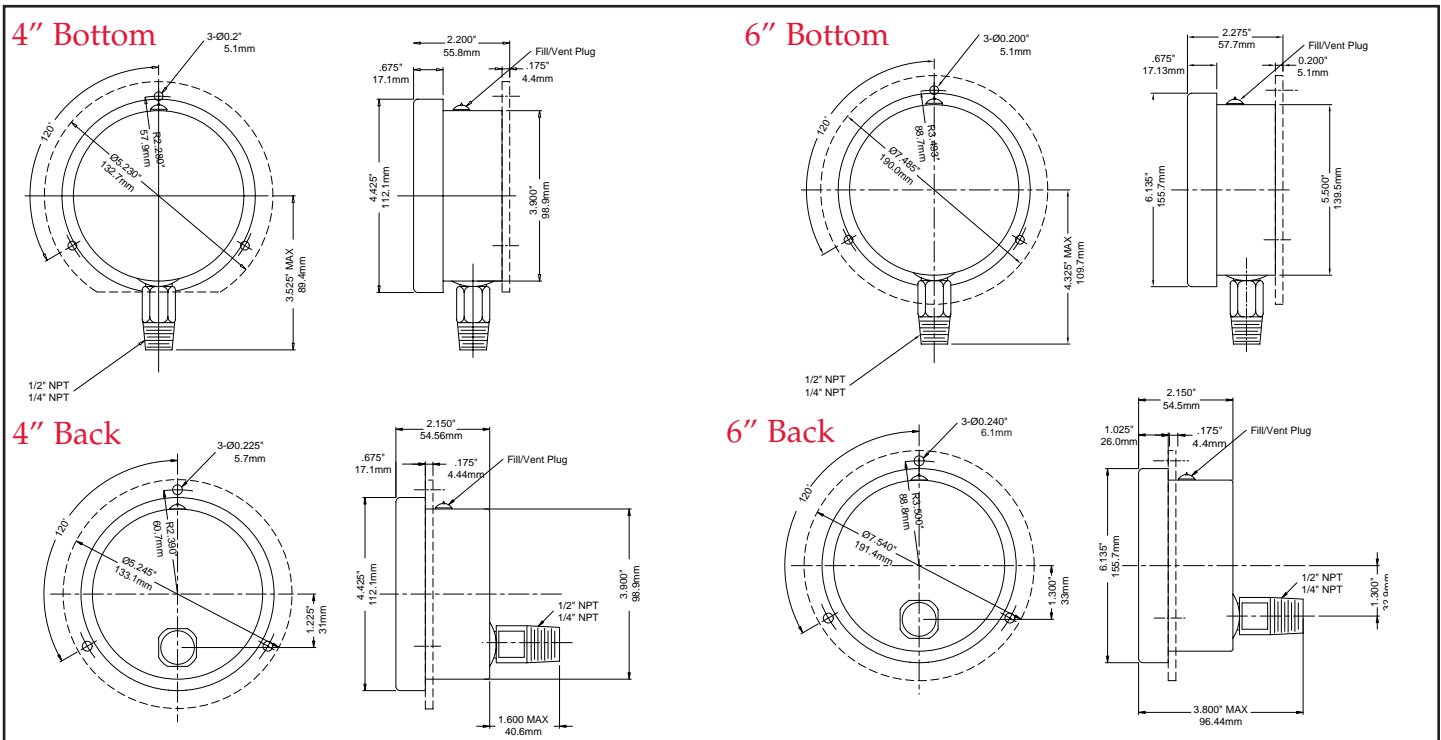
Test Gauge

How to order: Specify product code
PRODUCT CODES

Dial Size	4" (100mm)	6" (150mm)	4" (100mm)	6" (150mm)
Tube	Beryllium copper	Beryllium copper	Beryllium copper	Beryllium copper
Socket	Brass	Brass	Brass	Brass
Movement	Brass	Brass, with synthetic jewel bearings	Brass	Brass, with synthetic jewel bearings
Connection	Bottom	Bottom	Bottom	Bottom
NPT Connection	1/4"	1/4"	1/2"	1/2"
30"Hg Vacuum	P3999	P1999	*	*
0/15 psi	P4000	P2000	*	*
0/30 psi	P4001	P2001	*	*
0/60 psi	P4002	P2002	*	*
0/100 psi	P4003	P2003	*	*
0/160 psi	P4004	P2004	*	*
0/200 psi	P4005	P2005	*	*
0/300 psi	P4006	P2006	*	*
0/400 psi	P4007	P2007	*	*
0/600 psi	P4008	P2008	*	*
0/1000 psi	*	*	P4009	P2009
0/1600 psi	*	*	P4010	P2010
0/2000 psi	*	*	P4011	P2011
0/3000 psi	*	*	P4012	P2012
0/6000 psi	*	*	P4013	P2013
0/10000 psi	*	*	P4014	P2014

Options:

- 0.10% accuracy available on request.
 - Back connection available upon request.
 - Add the suffix "B" for back connection.
 - Back flange, front flange and u-clamp options available upon request.
 - Other ranges and connection sizes available upon request.
- (Test Gauge Case - 4" - TG4, Test Gauge Case - 6" - TG6)



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Turbine Gauge



Description

Winters' Turbine Pressure Gauge, manufactured to *GE specifications, features a cast brass machined case with a machined cast aluminum bezel that is oil tight. The pressure gauge consists of stainless steel internals and a carbon steel connection specific for turbine applications.

Removable bezel and lens with an adjustable micrometer pointer for in place calibration.

Application

For use on turbines.

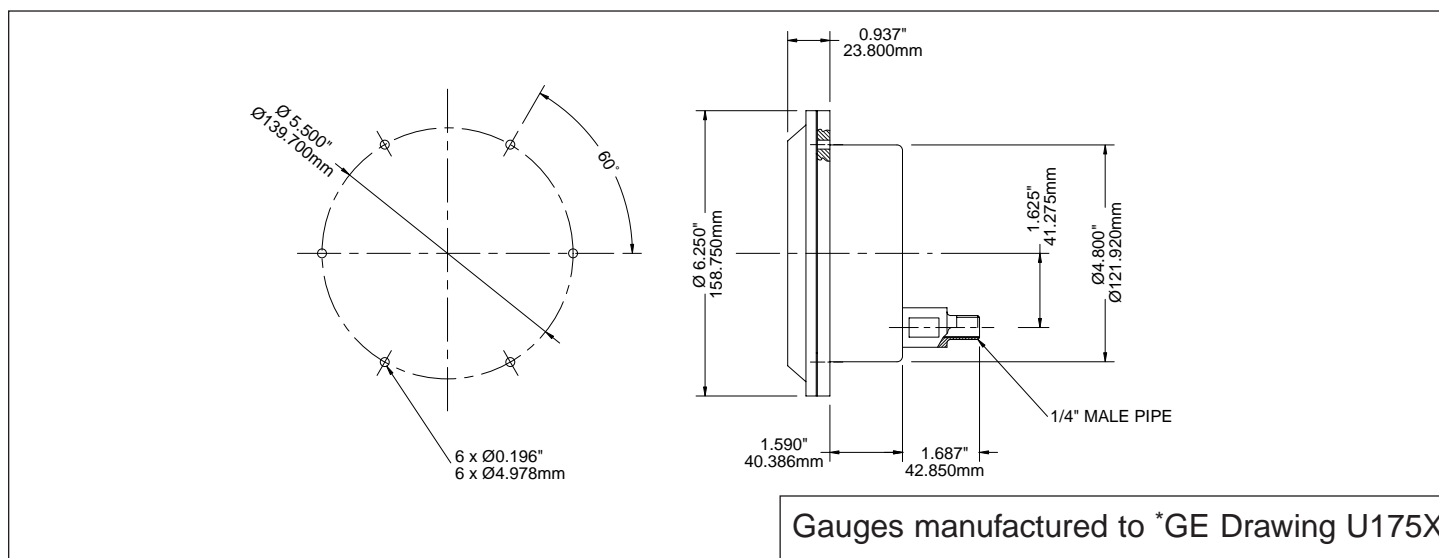
How to order: Specify product code
PRODUCT CODES

RANGE	CODE
0 - 60 psi	P4101GE
0 - 400 psi	P4106GE

Specifications

Dial:	4 1/2" (115mm)
Case:	Machined cast brass, painted black
Lens:	Glass
Bezel:	Machined cast aluminum bezel, painted black
Pointer:	Aluminum - adjustable micrometer
Socket:	Carbon steel
Connection:	1/4" NPT standard
Bourdon Tube:	Stainless steel
Movement:	Stainless steel
Over-pressure Limit:	30% of full scale value
Working Pressure:	Maximum 75% of full scale value
Accuracy:	0.5% accuracy

Note: The dial may require a service mark (i.e. "Pump Suction").



*GE is a registered Trademark of General Electric.



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Features:

- Winters produces a wide range of industrial instrumentation configurations in record times. Custom dials, ranges, different connections ASK US !!!!!

Applications:

Numerous applications for customers' special requirements.

CONNECTION TYPES

- 1/8" BSP
- 1/8" NPT
- 1/4" BSP
- 1/4" BSPT
- 1/4" SAE
- 3/8" BSP
- 3/8" NPT
- 1/2" BSP
- 1/2" NPT
- etc....

DIAL TYPES

- PSI OR KPA
- FT. OF WATER
- BAR
- MPA
- TONS ON RAM
- EMPTY/FULL
- " OF HG
- KG/CM²
- mmHG
- mmH²O
- mBAR
- etc...

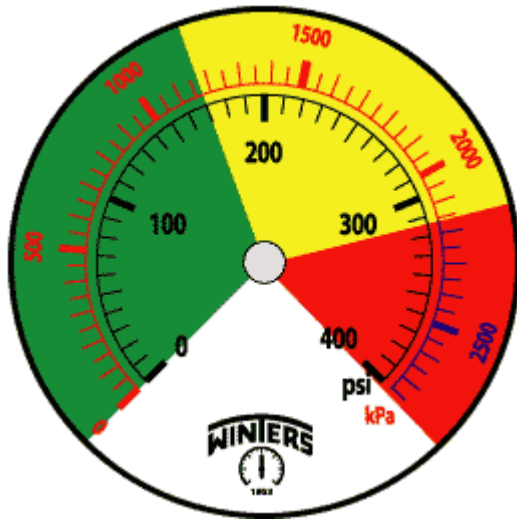
Available upon request on most pressure gauges, pressure transmitters and thermometers. {maxi}



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Features:

- Available for all makes and models of pressure and temperature instrumentation.
- All 256 standard colours are available.
- All dials are custom manufactured to meet your specifications.
- Available on new or repaired instruments.
- Available for dry or liquid filled instruments.
- Emergency **same day** custom dial manufacturing is available.

Applications:

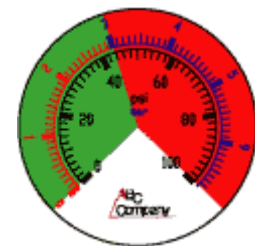
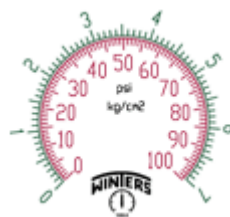
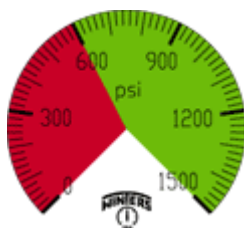
- Where easy to read, highly visible warning zones are required.
- Non-standard custom measurement scales.
- Replacement of damaged or outdated dials.
- For time sensitive dial requirements.

Available Options:

- Colour safety zones.
- Warning identification.
- Tons on Ram scales.
- Feet of Water scales.
- Bar scales.
- Kg/cm scales.
- Receiver gauge scales.
- MM of H O scales.
- Custom logos.
- Plus much more call with your requirements.

Custom Dial Product Codes *

R1- psi	R7- mm of Hg
R2- kPa	R8- inches of H ₂ O
R3- kg/cm ²	R9- ounces per square inch
R4- cm of H ₂ O	R10- atmospheres
R5- feet of water	R11- bar
R6- inches of Hg	R12- mBar
	R13- MPa



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