Merit Instruments

MECHANICAL TRADE PRODUCTS

www.meritinstruments.com

To achieve optimal performance, maintain energy efficiency, and ensure occupant comfort, engineers and technicians rely on a variety of sophisticated instrumentation. Among these essential tools are pressure gauges, liquid-in-glass thermometers, and bimetal thermometers. Let's explore how these instruments play a crucial role in the design, installation, and operation of HVAC systems in large buildings.

Pressure Gauges: Monitoring System Integrity and Performance

Pressure gauges are fundamental instruments used in HVAC systems to measure the pressure of air, water, or refrigerants at various points within the system. In large buildings with complex ductwork, piping networks, and air handling units, pressure gauges provide critical insights into system integrity, airflow balance, and equipment performance.

1. Differential Pressure Gauges: These gauges measure the pressure difference between two points in the HVAC system, such as across air filters, coils, or dampers. By monitoring pressure differentials, technicians can assess airflow distribution, detect airflow restrictions, and optimize system efficiency.
2. Static Pressure Gauges: Static pressure gauges measure the static pressure within ductwork or piping systems. They help ensure proper duct sizing, identify duct leakage, and determine fan performance to maintain optimal airflow and minimize energy consumption.
3. Refrigerant Pressure Gauges: In HVAC systems with refrigeration cycles, refrigerant pressure gauges monitor the pressure levels of refrigerants within compressors, condensers, and evaporators. These gauges aid in troubleshooting refrigerant leaks, compressor malfunctions, and system inefficiencies.

Liquid-in-Glass Thermometers: Precise Temperature Measurement

Liquid-in-glass thermometers, a traditional yet reliable instrument, are utilized in HVAC systems to measure fluid temperatures accurately. In large buildings, where temperature control is critical for occupant comfort and energy efficiency, these thermometers provide invaluable data for system monitoring and control.

1. Water Temperature Thermometers: Water temperature thermometers measure the temperature of water circulating through hydronic heating and cooling systems. By monitoring water temperatures at various points, technicians can ensure optimal performance, balance heating and cooling loads, and prevent equipment overheating or freezing.
2. Air Temperature Thermometers: Air temperature thermometers are used to measure the temperature of air entering and exiting HVAC equipment such as air handling

units, fan coil units, and ductwork. These gauges help maintain desired temperature set points, verify HVAC system performance, and diagnose airflow issues.

Bimetal Thermometers: Robust and Versatile Temperature Sensing

Bimetal thermometers consist of two different metals bonded together to form a temperature-sensitive coil. Widely used in HVAC applications, these rugged instruments offer reliable temperature measurement in diverse operating conditions.

1. Duct Bimetal Thermometers: Duct bimetal thermometers are inserted into ductwork to measure air temperatures accurately. With their durable construction and wide temperature range, these thermometers provide dependable performance in harsh HVAC environments.
2. Pipe Bimetal Thermometers: Pipe bimetal thermometers are installed directly onto piping systems to monitor fluid temperatures. Whether for hot water heating systems or chilled water distribution networks, these thermometers offer robust temperature sensing capabilities for precise system control.

Merit Instruments offers a broad range of the most popular instrumentation that is widely used in HVAC/Mechanical applications. In addition to our world-class thermometers and pressure gauges, Merit also has the ability to custom manufacture instrumentation to suit your *specific requirements*. Visit https://www.meritinstruments.com today to learn more and remember, we ALWAYS welcome inquiries!

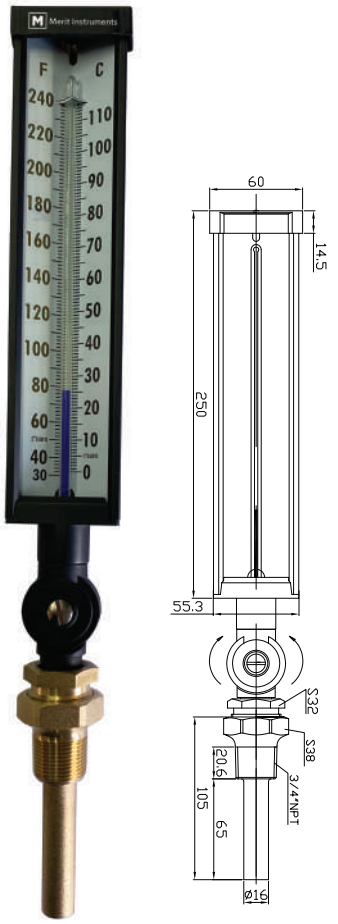
TRD9 INDUSTRIAL 9” THERMOMETER

Overview:

- Used extensively by Mechanical Trades for HVAC and plumbing applications.
- Available in either aluminum or Valox® cases.
- Blue organic liquid fill is standard, red organic fill is available as an option.
- Available in single F only or dual scale F&C temperature scales.
- Brass thermowell is standard. Available options are lead-free brass, 304SS or 316SS.
- Adjustable angle connection standard.
- 3.5" or 6" stem lengths are standard.
- +-1% accuracy.
- 7 year warranty against manufacturing defects*

® registered trademark of the General Electric Company.

**See Merit Instruments warranty page for full coverage information.*



Product codes for this product are as follows:

Valox®Case: 9" Scale Liquid in Glass Adjustable Angle Thermometer 3.5" Stem c/w brass separable thermowell 3/4" NPT	F Only			
	Ranges	Code	F&C Ranges	Code
	40/110 F	TRD9SAB100	40/110 F&C	TRD9DAB200
	0/120 F	TRD9SAB101	0/120 F&C	TRD9DAB201
	0/160 F	TRD9SAB102	0/160 F&C	TRD9DAB202
	30/180 F	TRD9SAB103	30/180 F&C	TRD9DAB203
	30/240 F	TRD9SAB104	30/240 F&C	TRD9DAB204
	30/300 F	TRDSAB105	30/300 F&C	TRD9DAB205

Aluminium Case: 9" Scale Liquid in Glass Adjustable Angle Thermometer 3.5" Stem c/w brass separable thermowell 3/4” NPT	F Only			
	Ranges	Code	F&C Ranges	Code
	40/110 F	TRD9SALB100	40/110 F&C	TRD9DALB200
	0/120 F	TRD9SALB101	0/120 F&C	TRD9DALB201
	0/160 F	TRD9SALB102	0/160 F&C	TRD9DALB202
	30/180 F	TRD9SALB103	30/180 F&C	TRD9DALB203
	30/240 F	TRD9SALB104	30/240 F&C	TRD9DALB204
	30/300 F	TRDSALB105	30/300 F&C	TRD9DALB205

Valox®Case: 9" Scale Liquid in Glass Adjustable Angle Thermometer 3.5" Stem c/w Lead Free brass separable thermowell 3/4" NPT	F Only			
	Ranges	Code	F&C Ranges	Code
	40/110 F	TRD9SALF100	40/110 F&C	TRD9DLF200
	0/120 F	TRD9SALF101	0/120 F&C	TRD9DLF201
	0/160 F	TRD9SALF102	0/160 F&C	TRD9DLF202
	30/180 F	TRD9SALF103	30/180 F&C	TRD9DLF203
	30/240 F	TRD9SALF104	30/240 F&C	TRD9DLF204
	30/300 F	TRD9SALF105	30/300 F&C	TRD9DLF205

Aluminium Case: 9" Scale Liquid in Glass Adjustable Angle Thermometer 3.5" Stem c/w Lead Free brass separable thermowell 3/4” NPT	F Only			
	Ranges	Code	F&C Ranges	Code
	40/110 F	TRD9SALLF100	40/110 F&C	TRD9D6LF200
	0/120 F	TRD9SALLF101	0/120 F&C	TRD9DLLF201
	0/160 F	TRD9SALLF102	0/160 F&C	TRD9DLLF202
	30/180 F	TRD9SALLF103	30/180 F&C	TRD9DLLF203
	30/240 F	TRD9SALLF104	30/240 F&C	TRD9DLLF204
	30/300 F	TRD9SALLF105	30/300 F&C	TRD9DLLF205

WARNING

This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm.

For more information, go to www.P65Warnings.ca.gov

Accessories are as follows:

ACCESSORIES	CODES
3.5" Brass Thermowell, 1/2" NPT	TRDWBR50
3.5" Brass Thermowell only, 3/4" NPT	TRDWBR75
3.5" Lead Free Brass Thermowell, 1/2" NPT	TRDWLFB50
3.5" Lead Free Brass Thermowell only, 3/4" NPT	TRDWLF75
3.5" 304 SS Thermowell, 1/2" NPT	TRDW30450
3.5" 304 SS Thermowell, 3/4" NPT	TRDW30475
3.5" 316 SS Thermowell, 1/2" NPT	TRDW31650
3.5" 316 SS Thermowell, 3/4" NPT	TRDW31675

TRD SERIES BIMETAL DIAL THERMOMETER

Description & Features:

- 304 stainless steel dial thermometers (no mercury), used widely in HVAC and general industrial applications that require a high-quality, easy-to-read temperature indication.
- Hermetically sealed dial with glass lens (PC available) and an aluminum dished dial with clear black markings for accurate temperature readings.
- External recalibrator screw standard.
- +- 1% accuracy.
- Case, stem, ring and thread are made from durable 304 stainless steel. Optional 316 stainless steel stem, case and thread is available.
- Reliable bimetallic sensor offers both accuracy and durability
- 7 Year warranty against manufacturing defects*

**See Merit Instruments warranty page for full coverage information.*

Specifications:

- Dial: 2”, 3”, 4”, 5” and 6” dial sizes standard. All sizes have a dished-shaped dial to prevent parallax error in aluminum with easy-to-read black markings.
- Case: 304 stainless steel is standard. 316 stainless steel is optional.
- Stem: 304 stainless steel is standard. 316 stainless steel is optional.
- Ring: 304 stainless steel.
- Lens: Glass is standard with optional PC available.
- Recalibrator: Standard
- Connection Size: ¼” NPT standard on 2” dial with optional ½” NPT available. All other dial sizes come standard with ½” NPT connection. BSP threads are available.
- Enclosure Rating: IP68
- Maximum Operating Pressure: 125 psi (861 kPa)*
- Operating Temperature: Maximum 75% of full-scale value for continuous use.
- Ambient Temperature: -58F to 248 F or -50 C to 120 C.

**NOTE: Merit Instruments recommends using a thermowell for any installation that has an operating pressure of 100 psi or higher. A thermowell is also recommended for operating conditions that experience high flow rates or process media that is corrosive to 304 stainless steel. Contact your Merit Instruments representative for more details.*

Order Codes:

Bimetal Dial Thermometer 304 SS Hermetically Sealed, Dished Aluminum Dial, Recalibrator, Glass Lens

Dial Size	NPT Location	Stem Length	Range	Code
2"	1/4" NPT Center Back	2.5"	0/140 F	TRDB225099
			0/200 F	TRDB225100
			0/250 F	TRDB225101
			50/300 F	TRDB225102
			50/500 F	TRDB225103
			0/140 F&C	TRDB225104
			0/200 F&C	TRDB225105
			0/250 F&C	TRDB225106
			50/300 F&C	TRDB225107
			50/500 F&C	TRDB225108
2"	1/4" NPT Center Back	4"	0/140 F	TRDB240099
			0/200 F	TRDB240100
			0/250 F	TRDB240101
			50/300 F	TRDB240102
			50/500 F	TRDB240103
			0/140 F&C	TRDB240104
			0/200 F&C	TRDB240105
			0/250 F&C	TRDB240106
			50/300 F&C	TRDB240107
			50/500 F&C	TRDB240108
2"	1/4" NPT Center Back	6"	0/140 F	TRDB260099
			0/200 F	TRDB260100
			0/250 F	TRDB260101
			50/300 F	TRDB260102
			50/500 F	TRDB260103
			0/140 F&C	TRDB260104
			0/200 F&C	TRDB260105
			0/250 F&C	TRDB260106
			50/300 F&C	TRDB260107
			50/500 F&C	TRDB260108
3"	½" NPT Center Back	2.5"	0/140 F	TRDB325099
			0/200 F	TRDB325100
			0/250 F	TRDB325101
			50/300 F	TBRB325102
			50/500 F	TRDB325103
			0/140 F&C	TRDB325104
			0/200 F&C	TRDB325105
			0/250 F&C	TRDB325106
			50/300 F&C	TRDB325107
			50/500 F&C	TRDB325108
3"	½" NPT Center Back	4"	0/140 F	TRDB34099
			0/200 F	TRDB340100
			0/250 F	TRDB340101
			50/300 F	TRDB340102
			50/500 F	TRDB340103
			0/140 F&C	TRDB340104
			0/200 F&C	TRDB340105
			0/250 F&C	TRDB340106
			50/300 F&C	TRDB340107
			50/500 F&C	TRDB340108
3"	½" NPT Center Back	6"	0/140 F	TRDB360099
			0/200 F	TRDB360100
			0/250 F	TRDB360101
			50/300 F	TRDB360102
			50/500 F	TRDB360103
			0/140 F&C	TRDB360104
			0/200 F&C	TRDB360105
			0/250 F&C	TRDB360106
			50/300 F&C	TRDB360107
			50/500 F&C	TRDB360108
3"	½" NPT Adjustable Angle	2.5"	0/140 F	TRDA325099
			0/200 F	TRDA325100
			0/250 F	TRDA325101
			50/300 F	TRDA325102
			50/500 F	TRDA325103
			0/140 F&C	TRDA325104
			0/200 F&C	TRDA325105
			0/250 F&C	TRDA325106
			50/300 F&C	TRDA325107
			50/500 F&C	TRDA325108
3"	½" NPT Adjustable Angle	4"	0/140 F	TRDA340099
			0/200 F	TRDA340100
			0/250 F	TRDA340101
			50/300 F	TRDA340102
			50/500 F	TRDA340103
			0/140 F&C	TRDA340104
			0/200 F&C	TRDA340105
			0/250 F&C	TRDA340106
			50/300 F&C	TRDA340107
			50/500 F&C	TRDA340108

Order Codes:

Bimetal Dial Thermometer 304 SS Hermetically Sealed, Dished Aluminum Dial, Recalibrator, Glass Lens

Dial Size	NPT Location	Stem Length	Range	Code
3"	½" NPT Adjustable Angle	6"	0/140 F	TRDA360099
			0/200 F	TRDA360100
			0/250 F	TRDA360101
			50/300 F	TRDA360102
			50/500 F	TRDA360103
			0/140 F&C	TRDA360104
			0/200 F&C	TRDA360105
			0/250 F&C	TRDA360106
			50/300 F&C	TRDA360107
			50/500 F&C	TRDA360108
4"	½" NPT Center Back	2.5"	0/140 F	TRDB425099
			0/200 F	TRDB425100
			0/250 F	TRDB425101
			50/300 F	TRDB425102
			50/500 F	TRDB425103
			0/140 F&C	TRDB425104
			0/200 F&C	TRDB425105
			0/250 F&C	TRDB425106
			50/300 F&C	TRDB425107
			50/500 F&C	TRDB425108
4"	½" NPT Center Back	4"	0/140 F	TRDB440099
			0/200 F	TRDB440100
			0/250 F	TRDB440101
			50/300 F	TRDB440102
			50/500 F	TRDB440103
			0/140 F&C	TRDB440104
			0/200 F&C	TRDB440105
			0/250 F&C	TRDB440106
			50/300 F&C	TRDB440107
			50/500 F&C	TRDB440108
4"	½" NPT Center Back	6"	0/140 F	TRDB460099
			0/200 F	TRDB460100
			0/250 F	TRDB460101
			50/300 F	TRDB460102
			50/500 F	TRDB460103
			0/140 F&C	TRDB460104
			0/200 F&C	TRDB460105
			0/250 F&C	TRDB460106
			50/300 F&C	TRDB460107
			50/500 F&C	TRDB460108
4"	½" NPT Adjustable Angle	2.5"	0/140 F	TRDA425099
			0/200 F	TRDA425100
			0/250 F	TRDA425101
			50/300 F	TRDA425102
			50/500 F	TRDA425103
			0/140 F&C	TRDA425104
			0/200 F&C	TRDA425105
			0/250 F&C	TRDA425106
			50/300 F&C	TRDA425107
			50/500 F&C	TRDA425108
4"	½" NPT Adjustable Angle	4"	0/140 F	TRDA440099
			0/200 F	TRDA440100
			0/250 F	TRDA440101
			50/300 F	TRDA440102
			50/500 F	TRDA440103
			0/140 F&C	TRDA440104
			0/200 F&C	TRDA440105
			0/250 F&C	TRDA440106
			50/300 F&C	TRDA440107
			50/500 F&C	TRDA440108
4"	½" NPT Adjustable Angle	6"	0/140 F	TRDA460099
			0/200 F	TRDA460100
			0/250 F	TRDA460101
			50/300 F	TRDA460102
			50/500 F	TRDA460103
			0/140 F&C	TRDA460104
			0/200 F&C	TRDA460105
			0/250 F&C	TRDA460106
			50/300 F&C	TRDA460107
			50/500 F&C	TRDA460108
5"	½" NPTCenter Back	2.5"	0/140 F	TRDB525099
			0/200 F	TRDB525100
			0/250 F	TRDB525101
			50/300 F	TRDB525102
			50/500 F	TRDB525103
			0/140 F&C	TRDB525104
			0/200 F&C	TRDB525105
			0/250 F&C	TRDB525106
			50/300 F&C	TRDB525107
			50/500 F&C	TRDB525108

Order Codes:

Bimetal Dial Thermometer
304 SS Hermetically Sealed,
Dished Aluminum Dial,
Recalibrator, Glass Lens

Dial Size	NPT Location	Stem Length	Range	Code
5"	½" NPT Center Back	4"	0/140 F	TRDB540099
			0/200 F	TRDB540100
			0/250 F	TRDB540101
			50/300 F	TRDB540102
			50/500 F	TRDB540103
			0/140 F&C	TRDB540104
			0/200 F&C	TRDB540105
			0/250 F&C	TRDB540106
			50/300 F&C	TRDB540107
			50/500 F&C	TRDB540108
5"	½" NPT Center Back	6"	0/140 F	TRDB560099
			0/200 F	TRDB560100
			0/250 F	TRDB560101
			50/300 F	TRDB560102
			50/500 F	TRDB560103
			0/140 F&C	TRDB560104
			0/200 F&C	TRDB560105
			0/250 F&C	TRDB560106
			50/300 F&C	TRDB560107
			50/500 F&C	TRDB560108
5"	½" NPT Adjustable Angle	2.5"	0/140 F	TRDA525099
			0/200 F	TRDA525100
			0/250 F	TRDA525101
			50/300 F	TRDA525102
			50/500 F	TRDA525103
			0/140 F&C	TRDA525104
			0/200 F&C	TRDA525105
			0/250 F&C	TRDA525106
			50/300 F&C	TRDA525107
			50/500 F&C	TRDA525108
5"	½" NPT Adjustable Angle	4"	0/140 F	TRDA540099
			0/200 F	TRDA540100
			0/250 F	TRDA540101
			50/300 F	TRDA540102
			50/500 F	TRDA540103
			0/140 F&C	TRDA540104
			0/200 F&C	TRDA540105
			0/250 F&C	TRDA540106
			50/300 F&C	TRDA540107
			50/500 F&C	TRDA540108
5"	½" NPT Adjustable Angle	6"	0/140 F	TRDA560099
			0/200 F	TRDA560100
			0/250 F	TRDA560101
			50/300 F	TRDA560102
			50/500 F	TRDA560103
			0/140 F&C	TRDA560104
			0/200 F&C	TRDA560105
			0/250 F&C	TRDA560106
			50/300 F&C	TRDA560107
			50/500 F&C	TRDA560108
6"	½" NPT Center Back	2.5"	0/140 F	TRD6525099
			0/200 F	TRD6525100
			0/250 F	TRD6525101
			50/300 F	TRD6525102
			50/500 F	TRD6525103
			0/140 F&C	TRD6525104
			0/200 F&C	TRD6525105
			0/250 F&C	TRD6525106
			50/300 F&C	TRD6525107
			50/500 F&C	TRD6525108
6"	½" NPT Center Back	4"	0/140 F	TRDB640099
			0/200 F	TRDB640100
			0/250 F	TRDB640101
			50/300 F	TRDB640102
			50/500 F	TRDB640103
			0/140 F&C	TRDB640104
			0/200 F&C	TRDB640105
			0/250 F&C	TRDB640106
			50/300 F&C	TRDB640107
			50/500 F&C	TRDB640108
6"	½" NPT Center Back	6"	0/140 F	TRDB660099
			0/200 F	TRDB660100
			0/250 F	TRDB660101
			50/300 F	TRDB660102
			50/500 F	TRDB660103
			0/140 F&C	TRDB660104
			0/200 F&C	TRDB660105
			0/250 F&C	TRDB660106
			50/300 F&C	TRDB660107
			50/500 F&C	TRDB660108

Order Codes:

	Dial Size	NPT Location	Stem Length	Range	Code
Bimetal Dial Thermometer 304 SS Hermetically Sealed, Dished Aluminum Dial, Recalibrator, Glass Lens	6"	½" NPT Adjustable Angle	2.5"	0/140 F	TRDA625099
				0/200 F	TRDA625100
				0/250 F	TRDA625101
				50/300 F	TRDA625102
				50/500 F	TRDA625103
				0/140 F&C	TRDA625104
				0/200 F&C	TRDA625105
				0/250 F&C	TRDA625106
				50/300 F&C	TRDA625107
				50/500 F&C	TRDA625108
	6"	½" NPT Adjustable Angle	4"	0/140 F	TRDA640099
				0/200 F	TRDA640100
				0/250 F	TRDA640101
				50/300 F	TRDA640102
				50/500 F	TRDA640103
				0/140 F&C	TRDA640104
				0/200 F&C	TRDA640105
				0/250 F&C	TRDA640106
				50/300 F&C	TRDA640107
				50/500 F&C	TRDA640108
	6"	½" NPT Adjustable Angle	6"	0/140 F	TRDA660099
				0/200 F	TRDA660100
				0/250 F	TRDA660101
				50/300 F	TRDA660102
				50/500 F	TRDA660103
				0/140 F&C	TRDA660104
				0/200 F&C	TRDA660105
				0/250 F&C	TRDA660106
				50/300 F&C	TRDA660107
				50/500 F&C	TRDA660108

TW SERIES THERMOWELLS FOR BIMETAL THERMOMETERS/RTDS

Description & Features:

- Available in brass, lead-free brass, 304 stainless steel and 316 stainless steel. Other materials available upon request.
- Standard connections are ½" NPT Female x ½" NPT Male or ½" NPT Female x ¾" NPT Male. *Other thread sizes are available upon request.*
- All thermowells are made from one-piece solid barstock.
- Etched MIL traceable heat number standard.
- Available in stepped, tapered and straight construction.
- Standard bore size is 0.260" with 0.385" bore available.
- Available with flange and sanitary connections upon request.
- Cap & Chain available upon request.
- MTR available

Specifications:

- MIL traceable heat number etched on each thermowell.
- Brass, Lead-Free Brass, 304 Stainless Steel and 316 Stainless Steel are standard materials with other materials available upon request.
- Stepped, Straight and Tapered designs are available.
- Standard bore sizes are 0.260" and 0.385".
- Available in lengths up to 48".

Applications:

- Typical applications would include the use of a thermowell in tanks, pipelines or any application that the user wishes to create a "closed system" that allows for the removal of the temperature instrument without the need to shut down or drain the system, significantly reducing "down-time".
- Suitable for applications that will damage the instrument probe due to corrosion, high flow rates or potential build-up of materials such as calcium, etc.
- Recommended for all applications that have an operating pressure of >100 psi for bimetal thermometers/RTDs that would otherwise damage the instrument.
- Thermowells protect and extend the life of the temperature instrument, lowering replacement costs.

Order Codes:

Thermowells for Bimetal Thermometers & RTDs, Stepped	Stem Length	U-Dimension	Lagging Extenion	Code
Brass 1/2" NPT x 3/4" NPT	2.5"	1.02"		TW75110
Brass 1/2" NPT x 3/4" NPT	4"	2.51"		TW75111
Brass 1/2" NPT x 3/4" NPT	6"	4.48"		TW75112
Brass 1/2" NPT x 3/4" NPT	9"	7.51"		TW75113
Brass 1/2" NPT x 3/4" NPT	12"	10.51"		TW75114
Brass 1/2" NPT x 3/4" NPT	6"	2.51"	2" Lag Extension	TW75115
Brass 1/2" NPT x 3/4" NPT	9"	4.48"	3" Lag Extension	TW75116
Brass 1/2" NPT x 3/4" NPT 0-15	12"	7.51”	3" Lag Extension	TW75117
Brass 1/2" NPT X 1/2" NPT	2.5"	1.02"		TW50118
Brass 1/2" NPT X 1/2" NPT	4"	2.51"		TW50119
Brass 1/2" NPT X 1/2" NPT	6"	4.48"		TW50120
Brass 1/2" NPT X 1/2" NPT	9"	7.51"		TW50121
Brass 1/2" NPT X 1/2" NPT	12"	10.51"		TW50122
Brass 1/2" NPT X 1/2" NPT	6"	2.51"	2" Lag Extension	TW50123
Brass 1/2" NPT X 1/2" NPT	9"	4.48"	3" Lag Extension	TW50124
Brass 1/2" NPT X 1/2" NPT	12"	7.51"	3" Lag Extension	TW50125
Lead Free Brass 1/2" NPT x 3/4" NPT	2.5"	1.02"		TWL75126
Lead Free Brass 1/2" NPT x 3/4" NPT	4"	2.51"		TWL75127
Lead Free Brass 1/2" NPT x 3/4" NPT	6"	4.48"		TWL75128
Lead Free Brass 1/2" NPT x 3/4" NPT	9"	7.51"		TWL75129
Lead Free Brass 1/2" NPT x 3/4" NPT	12"	10.51"		TWL75130
Lead Free Brass 1/2" NPT x 3/4" NPT	6"	2.51"	2" Lag Extension	TWL75131
Lead Free Brass 1/2" NPT x 3/4" NPT	9"	4.48"	3" Lag Extension	TWL75132
Lead Free Brass 1/2" NPT x 3/4" NPT	12"	7.51"	3" Lag Extension	TWL75133
Lead Free Brass 1/2" NPT X 1/2" NPT	2.5"	1.02"		TWL50134
Lead Free Brass 1/2" NPT X 1/2" NPT	4"	2.51"		TWL50135
Lead Free Brass 1/2" NPT X 1/2" NPT	6"	4.48"		TWL50136
Lead Free Brass 1/2" NPT X 1/2" NPT	9"	7.51"		TWL50137
Lead Free Brass 1/2" NPT X 1/2" NPT	12"	10.51"		TWL50138
Lead Free Brass 1/2" NPT X 1/2" NPT	6"	2.51"	2" Lag Extension	TWL50139
Lead Free Brass 1/2" NPT X 1/2" NPT	9"	4.48"	3" Lag Extension	TWL50140
Lead Free Brass 1/2" NPT X 1/2" NPT	12"	7.51"	3" Lag Extension	TWL50141
304SS 1/2" NPT x 3/4" NPT	2.5"	1.02"		TW75001
304SS 1/2" NPT x 3/4" NPT	4"	2.51"		TW75002
304SS 1/2" NPT x 3/4" NPT	6"	4.48"		TW75003
304SS 1/2" NPT x 3/4" NPT	9"	7.51"		TW75004
304SS 1/2" NPT x 3/4" NPT	12"	10.51"		TW75005
304SS 1/2" NPT x 3/4" NPT	6"	2.51"	2" Lag Extension	TWL75001
304SS 1/2" NPT x 3/4" NPT	9"	4.48"	3" Lag Extension	TWL75002
304SS 1/2" NPT x 3/4" NPT	12"	7.51"	3" Lag Extension	TWL75003

Order Codes:

Thermowells for Bimetal Thermometers & RTDs, Stepped	Stem Length	U-Dimension	Lagging Extenion	Code
316SS 1/2" NPT x 3/4" NPT	2.5"	1.02"		TW375100
316SS 1/2" NPT x 3/4" NPT	4"	2.51"		TW375101
316SS 1/2" NPT x 3/4" NPT	6"	4.48"		TW375102
316SS 1/2" NPT x 3/4" NPT	9"	7.51"		TW375103
316SS 1/2" NPT x 3/4" NPT	12"	10.51"		TW375104
316SS 1/2" NPT x 3/4" NPT	6"	2.51"	2" Lag Extension	TWL375101
316SS 1/2" NPT x 3/4" NPT	9"	4.48"	3" Lag Extension	TWL375102
316SS 1/2" NPT x 3/4" NPT	12"	7.51"	3" Lag Extension	TWL375103
304SS 1/2" NPT X 1/2" NPT	2.5"	1.02"		TW50001
304SS 1/2" NPT X 1/2" NPT	4"	2.51"		TW50002
304SS 1/2" NPT X 1/2" NPT	6"	4.48"		TW50003
304SS 1/2" NPT X 1/2" NPT	9"	7.51"		TW50004
304SS 1/2" NPT X 1/2" NPT	12"	10.51"		TW50005
304SS 1/2" NPT X 1/2" NPT	6"	2.51"	2" Lag Extension	TWL50100
304SS 1/2" NPT X 1/2" NPT	9"	4.48"	3" Lag Extension	TWL50101
304SS 1/2" NPT X 1/2" NPT	12"	7.51"	3" Lag Extension	TWL50102
316SS 1/2" NPT X 1/2" NPT	2.5"	1.02"		TW350100
316SS 1/2" NPT X 1/2" NPT	4"	2.51"		TW350101
316SS 1/2" NPT X 1/2" NPT	6"	4.48"		TW350102
316SS 1/2" NPT X 1/2" NPT	9"	7.51"		TW350103
316SS 1/2" NPT X 1/2" NPT	12"	10.51"		TW350104
316SS 1/2" NPT X 1/2" NPT	6"	2.51"	2" Lag Extension	TWL350100
316SS 1/2" NPT X 1/2" NPT	9"	4.48"	3" Lag Extension	TWL350101
316SS 1/2" NPT X 1/2" NPT	12"	7.51"	3" Lag Extension	TWL350102

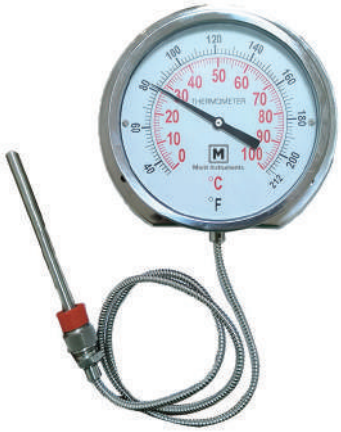
TRT SERIES REMOTE READING GAS ACTUATED THERMOMETERS

Description & Features:

- Custom manufactured stainless steel thermometers for measuring temperatures remotely.
- Available in 2.5”, 4” and 6” dial sizes in back or bottom connection.
- Temperature ranges available in single scale (F only, C only) or dual scale (F&C).
- Made from durable 304 stainless steel standard.
- 7-Year warranty*

  **Refer to Merit Instruments warranty page for full warranty details.*

Specifications:



- Dial Size: 2.5” (63mm), 4” (100mm) and 6” (150mm) dial sizes are standard. Other sizes available upon request.
- Connection Location: Bottom or Back connection available.
- Dial: Aluminum.
- Case: 304 stainless steel case and.
- Case Mounting: 304 SS Back Flange standard on bottom connection, 304 SS Front Flange or 304 SS U-Clamp available on back connection thermometers.
- Lens: Polycarbonate (PC) standard, laminated safety glass available.
- Ring: 304 stainless steel.
- Capillary: 304 stainless steel, seamless. Standard lengths start at 5’ and are available up to 15’. Longer capillary lengths available upon request.
- Armour: 304 stainless steel.
- Sensing Bulb: ½” OD x 6” long 304 stainless steel standard, 316 stainless steel optional. Other sensing bulb sizes available upon request.
- Connection: Plain bulb (no connection) standard. ½” NPT or ¾” NPT 316 stainless steel union connection or thermowell available.
- Fill Media: Gas – allows for a linear temperature scale unlike vapor filling which is non-linear.
- Accuracy: +/- 1% of full-scale value.
- Note: Merit recommends an ambient temperature of 74 F (23 C) when using this thermometer. Significantly higher or lower ambient temperatures may negatively impact the accuracy of the thermometer reading.

Applications:

- For any application requiring a remote temperature reading where the dial (temperature reading) is mounted away from the process media such as in tanks, difficult to reach process areas, different rooms, etc.
- Can be customized to meet OEM requirements.

TRT SERIES ORDER CODES

ITEM	DESCRIPTION	CODE
Dial Size	2.0"	A
	2.5"	B
	4.0"	C
	6.0"	D
Capillary Location	Bottom	A
	Back	B
Mounting Option (back flange standard on bottom connection thermometers).	Back Flange	1F
	Front Flange	2F
	U-Clamp	3F
Capillary Length	5 Feet	5
	10 Feet	10
	15 Feet	15
Bulb Type	304 SS	S
	316 SS	C
Connection Type	Plain	PC
	1/2" NPT 316 SS Union	1U
	3/4" NPT 316 SS Union	2U
	1/2" NPT 316 SS Thermowell	1T
	3/4" NPT 316 SS Thermowell	2T

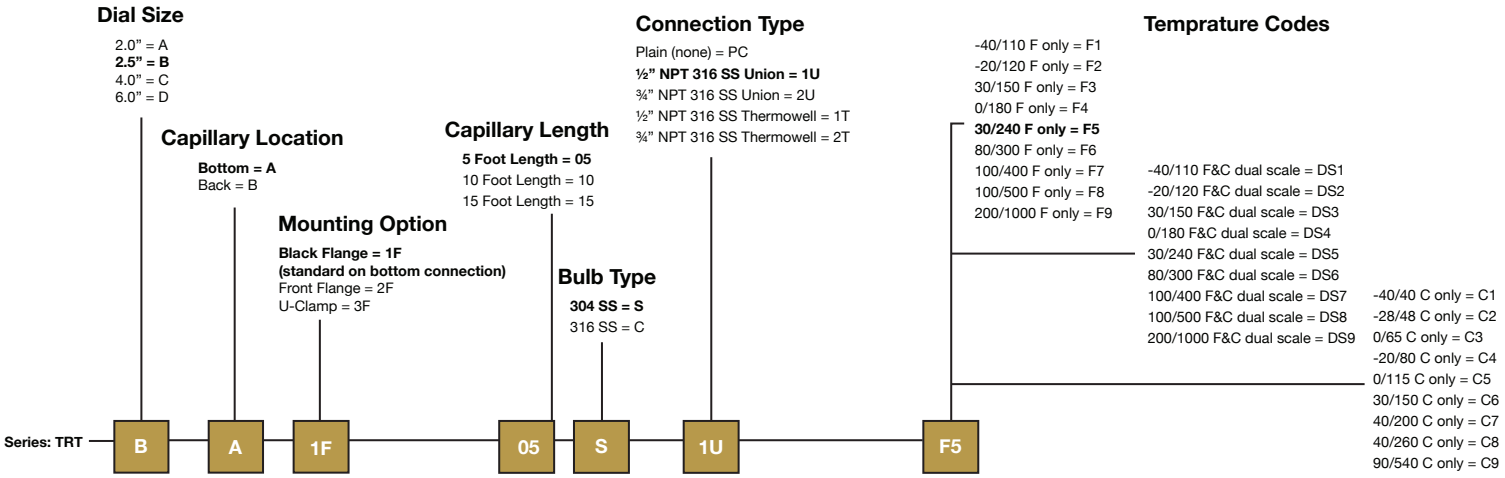
TEMPERATURE CODES

F Only Single Scale	Code	F&C Dual Scale	Code	C Only Single Scale	Code
-40/110 F	F1	-40/110 F&C	DS1	-40/40 C	C1
-20/120 F	F2	-20/120 F&C	DS2	-28/48 C	C2
30/150 F	F3	30/150 F&C	DS3	0/65 C	C3
0/180 F	F4	0/180 F&C	DS4	-20/80 C	C4
30/240 F	F5	30/240 F&C	DS5	0/115 C	C5
80/300 F	F6	80/300 F&C	DS6	30/150 C	C6
100/400 F	F7	100/400 F&C	DS7	40/200 C	C7
100/500 F	F8	100/500 F&C	DS8	40/260 C	C8
200/1000 F	F9	200/1000 F&C	DS9	90/540 C	C9

How to order:

Select 1 item from each of the options on the previous page such as for the following example:

For a 2.5” dial bottom connection thermometer with back flange, 5 ‘ of capillary, 304 SS bulb with ½” NPT 316 SS union, range 30/240 F only, single scale: **TRTBA1F05S1UF5**


Dial Size
2.0" = A
2.5" = B
4.0" = C
6.0" = D
Capillary Location
Bottom = A
Back = B
Mounting Option
Black Flange = 1F
(standard on bottom connection)
Front Flange = 2F
U-Clamp = 3F
Capillary Length
5 Foot Length = 05
10 Foot Length = 10
15 Foot Length = 15
Bulb Type
304 SS = S
316 SS = C
Connection Type
Plain (none) = PC
½" NPT 316 SS Union = 1U
¾" NPT 316 SS Union = 2U
½" NPT 316 SS Thermowell = 1T
¾" NPT 316 SS Thermowell = 2T
Temprature Codes
-40/110 F only = F1
-20/120 F only = F2
30/150 F only = F3
0/180 F only = F4
30/240 F only = F5
80/300 F only = F6
100/400 F only = F7
100/500 F only = F8
200/1000 F only = F9
-40/110 F&C dual scale = DS1
-20/120 F&C dual scale = DS2
30/150 F&C dual scale = DS3
0/180 F&C dual scale = DS4
30/240 F&C dual scale = DS5
80/300 F&C dual scale = DS6
100/400 F&C dual scale = DS7
100/500 F&C dual scale = DS8
200/1000 F&C dual scale = DS9
-40/40 C only = C1
-28/48 C only = C2
0/65 C only = C3
-20/80 C only = C4
0/115 C only = C5
30/150 C only = C6
40/200 C only = C7
40/260 C only = C8
90/540 C only = C9
Series: TRT
B
A
1F
05
S
1U
F5

PSSB SERIES 4.5” 304 SS CASE CONTRACTOR GAUGE

Description & Features:

- Merit’s 4.5” dial 304 SS Case Contractor Gauge is designed for HVAC applications that require brass internals, a recalibrator screw and +/-1% full scale accuracy.
- 7-Year Warranty*

  **Refer to Merit Instruments warranty page for full warranty details.*

Specifications:

- Dial: 4.5” (115mm).
- Case: 304 stainless steel.
- Lens: Polycarbonate (PC), convex.
- Ring: 304 stainless steel.
- Socket: Brass.
- Bourdon Tube: Phosphor bronze.
- Movement: Brass,
- Connection: ¼” NPT bottom connection. Other connections available upon request.
- Dial: Aluminum, painted white with black and red markings for dual scale ranges, and black markings for single scale ranges.
- Pointer: Aluminum, painted black.
- Recalibrator: standard.
- Working Pressure: Maximum 75% of full scale value.
- Accuracy: +/-1% of full scale.
- IP Rating: IP52

Applications:

- Suitable for applications that are not corrosive to brass and that require +/-1% accuracy, the ability to recalibrate the pointer and offer excellent dial visibility at an economical price such as HVAC pipeline/airline applications.

Order Codes:

4.5" Dial Pressure Gauge
Stainless Steel Case, brass internals, 1/4" NPT bottom connection

P = Pressure Gauge
SS = Stainless Steel Case
B = Brass Internals

100 Codes - psi only
200 Codes - psi/Bar
300 Codes - psi/kPa

PSI Range	Code	PSI/Bar Range	Code	PSI/kPa Range	Code
Vacuum	PSSB100	Vacuum	PSSB200	Vacuum/kPa	PSSB300
0-15	PSSB101	0-15 psi/Bar	PSSB201	0-15 psi/kPa	PSSB301
0-30	PSSB102	0-30 psi/Bar	PSSB202	0-30 psi/kPa	PSSB302
0-60	PSSB103	0-60 psi/Bar	PSSB203	0-60 psi/kPa	PSSB303
0-100	PSSB104	0-100 psi/Bar	PSSB204	0-100 psi/kPa	PSSB304
0-160	PSSB105	0-160 psi/Bar	PSSB205	0-160 psi/kPa	PSSB305
0-200	PSSB106	0-200 psi/Bar	PSSB206	0-200 psi/kPa	PSSB306
0-300	PSSB107	0-300 psi/Bar	PSSB207	0-300 psi/kPa	PSSB307
0-600	PSSB108	0-600 psi/Bar	PSSB208	0-600 psi/kPa	PSSB308
0-1000	PSSB109	0-1000 psi/Bar	PSSB209	0-1000 psi/kPa	PSSB309
0-1500	PSSB110	0-1500 psi/Bar	PSSB210	0-1500 psi/kPa	PSSB310
0-2000	PSSB111	0-2000 psi/Bar	PSSB211	0-2000 psi/kPa	PSSB311
0-3000	PSSB112	0-3000 psi/Bar	PSSB212	0-3000 psi/kPa	PSSB312
0-5000	PSSB113	0-5000 psi/Bar	PSSB213	0-5000 psi/kPa	PSSB313

PTRB SERIES

Description & Features:

- Merit's PTRB Series gauge is designed for applications that require a precision, high-quality visually attractive gauge at a reasonable price.
- 7-Year Warranty*

  **Refer to Merit Instruments warranty page for full warranty details.*

Specifications:

- Dial: 4" (100mm).
- Case: Steel, painted black.
- Lens: Glass.
- Ring: Plated brass, polished.
- Socket: Brass.
- Bourdon Tube: Phosphor bronze.
- Movement: Brass.
- Connection: ¼" NPT bottom connection. Other connections available upon request.
- Dial: Aluminum, painted white with black and red markings for dual scale ranges, and black markings for single scale ranges.
- Pointer: Aluminum, painted black.
- Working Pressure: Maximum 75% of full scale value.
- Accuracy: +/-1% of full scale.
- IP Rating: IP52

Applications:

- Suitable for applications and environments that are not corrosive to brass and steel, that require +/-1% accuracy, and offer a visually appealing appearance such as in commercial HVAC installations.

Order Codes:

Aluminum Case, Polished Brass Ring, Glass Lens, 1/4" NPT bottom, Brass Internals P = Pressure Gauge TR = Mechanical Trades B = 4" Dial 2 = 1/4" NPT P = Pressure Gauge	PSI Range	Code	PSI/Bar Range	Code	PSI/kPa Range	Code
	0/30" Hg Vaccum	PTRB2100	0/30" Vac/Bar	PTRB2200	Vacuum/kPa	PTRB2300
	0/15 psi	PTRB2101	0/15 psi/Bar	PTRB2201	0-15 psi/kPa	PTRB2301
	0/30 psi	PTRB2102	0/30 psi/Bar	PTRB2202	0-30 psi/kPa	PTRB2302
	0-60 psi	PTRB2103	0-60 psi/Bar	PTRB2203	0-60 psi/kPa	PTRB2303
	0-100 psi	PTRB2104	0-100 psi/Bar	PTRB2204	0-100 psi/kPa	PTRB2304
	0-160 psi	PTRB2105	0-160 psi/Bar	PTRB2205	0-160 psi/kPa	PTRB2305
	0-200 psi	PTRB2106	0-200 psi/Bar	PTRB2206	0-200 psi/kPa	PTRB2306
	0-300 psi	PTRB2107	0-300 psi/Bar	PTRB2207	0-300 psi/kPa	PTRB2307
	0-600 psi	PTRB2108	0-600 psi/Bar	PTRB2208	0-600 psi/kPa	PTRB2308

PLS SERIES LOW PRESSURE GAUGE

Description & Features:

- Black steel case, brass internals, PC lens, 3%-2%-3% accuracy, ¼" NPT bottom connection, single or dual scale from 15" H2O up to and including 10 psi.
- Suitable for multiple applications for measuring low pressures of process media that is not corrosive to brass (e.g. natural gas lines, air flow measurement, leak detection, etc).
- Available with over-range protection upon request.
- 7-year warranty*

Specifications:

- Dial Sizes: 2.5" and 4" dial sizes standard, other sizes available upon request.
- Dial Material: Aluminum painted white with black markings (single scale) or black and red markings (dual scale).
- Case: Steel, painted black.
- Tube and Socket: Brass capsule with one-piece brass socket standard.
- Lens: Polycarbonate (PC).
- Connection Size: ¼" NPT standard. BSP, BSPT threads available.
- Enclosure Rating: IP52.
- Recommended Maximum Operating Pressure: 60% of full-scale range.
- Operating/Ambient Temperature: -4/150F, -20/65 C.
- Ranges: Available in single scale or dual scales as required. Other ranges available upon request.
- Customization: Available upon request.

**Refer to Merit Instruments warranty page for full warranty details.*

Order Codes:

2.5" Dial Low Pressure Gauge Black Steel Case, Brass Internals, 1/4" NPT bottom connection, PC lens PLS = Low Pressure Gauge A = 2.5" Dial 2 = 1/4" NPT 100 Codes = Inches of H2O Only 200 Codes = Inches of H2O/mBar 300 Codes = Inches/Oz H2O	Inches H2O/PSIOnly	Code	Inches H2O/mBar	Code	Inches/Ounces of Water	Code
	0-15" H2O	PLSA2100	0-15" H2O	PLSA2200	0-15"/Oz H2O	PLSA2300
	0-32" H2O	PLSA2101	0-32" H2O	PLSA2201	0-32"/Oz H2O	PLSA2301
	0-55" H2O	PLSA2102	0-55" H2O	PLSA2202	0-55"/Oz H2O	PLSA2302
	0-100" H2O	PLSA2103	0-100" H2O	PLSA2203	0-100"/Oz H2O	PLSA2303
	0-200" H2O	PLSA2104	0-200" H2O	PLSA2204	0-200"/Oz H2O	PLSA2304
	0-5 PSI only	PLSA2105	0-5 PSI/Bar	PLSA2205	0-5 PSI/kPa	PLSA2305
	0-10 PSI only	PLSA2106	0-10 PSI/Bar	PLSA2206	0-10 PSI/kPa	PLSA2306

4" Dial Low Pressure Gauge Black Steel Case, Brass Internals, 1/4" NPT bottom connection, PC lens PLS = Low Pressure Gauge B = 4" Dial 2 = 1/4" NPT 100 Codes = Inches of H2O Only 200 Codes = Inches of H2O/mBar 300 Codes = Inches/Oz H2O	Inches H2O/PSI Only	Code	Inches H2O/mBar	Code	Inches/Ounces of Water	Code
	0-15" H2O	PLSB2100	0-15" H2O	PLSB2200	0-15"/Oz H2O	PLSB2300
	0-32" H2O	PLSB2101	0-32" H2O	PLSB2201	0-32"/Oz H2O	PLSB2301
	0-55" H2O	PLSB2102	0-55" H2O	PLSB2202	0-55"/Oz H2O	PLSB2302
	0-100" H2O	PLSB2103	0-100" H2O	PLSB2203	0-100"/Oz H2O	PLSB2303
	0-200" H2O	PLSB2104	0-200" H2O	PLSB2204	0-200"/Oz H2O	PLSB2304
	0-5 PSI only	PLSB2105	0-5 PSI/Bar	PLSB2205	0-5 PSI/kPa	PLSB2305
	0-10 PSI only	PLSB2106	0-10 PSI/Bar	PLSB2206	0-10 PSI/kPa	PLSB2306

PCR LEAD-FREE BRASS LIQUID FILLED SERIES

Description & Features:

- Merit's Lead-Free brass PCR Series gauges are manufactured & tested to contain lead content of less than 0.1% in compliance with the Safe Drinking Water Act (https://www.epa.gov/sdwa). Look for the 💧 that indicates that your Merit lead-free gauge is SDWA compliant!
- Glycerin filled for applications subject to vibration, to prevent pointer flutter & damage to movement gears.
- 7-Year Warranty*
  **Refer to Merit Instruments warranty page for full warranty details.*

Specifications:

- Dial: 2.5" (63mm).
- Case: 304 stainless steel.
- Lens: Polycarbonate (PC).
- Ring: 304 stainless steel.
- Socket: Lead-free brass (<0.1% lead content).
- Bourdon Tube: Phosphor bronze.
- Movement: Stainless steel.
- Connection: ¼" NPT bottom or center back connection. Other connections available upon request.
- Dial: Aluminum, painted white with black and red markings for dual scale ranges, and black markings for single scale ranges.
- Pointer: Aluminum, painted black.
- Working Pressure: Maximum 75% of full scale value.
- Accuracy: +/-1.5% of full scale.
- IP Rating: IP65

Applications:

- Suitable for applications that require lead-free brass and that require glycerin filling to dampen the negative effects of vibration such as: water pumps, compressors, water lines, hydraulic presses and pneumatic equipment.

Order Codes:

2.5" Dial Pressure Gauge
Lead-free brass internals
glycerine filled
1/4" NPT bottom connection

P = Pressure Gauge
CR = Crimped Ring
GL = Glycerine Filled Lead- Free Brass internals
A = 2.5" Dial
2 = 1/4" NPT

100 Codes = psi only
200 Codes = psi/Bar
300 Codes = psi/kPa

PSI Range	Code	PSI/Bar Range	Code	PSI/kPa Range	Code
Vacuum	PCRGLA2100	Vacuum/Bar	PCRGLA2200	Vacuum/kPa	PCRGLA2300
15 psi	PCRGLA2101	15 psi/Bar	PCRGLA2201	0-15 psi/kPa	PCRGLA2301
30 psi	PCRGLA2102	30 psi/Bar	PCRGLA2202	0-30 psi/kPa	PCRGLA2302
60 psi	PCRGLA2103	60 psi/Bar	PCRGLA2203	0-60 psi/kPa	PCRGLA2303
100 psi	PCRGLA2104	100 psi/Bar	PCRGLA2204	0-100 psi/kPa	PCRGLA2304
160 psi	PCRGLA2105	160 psi/Bar	PCRGLA2205	0-160 psi/kPa	PCRGLA2305
200 psi	PCRGLA2106	200 psi/Bar	PCRGLA2206	0-200 psi/kPa	PCRGLA2306
300 psi	PCRGLA2107	300 psi/Bar	PCRGLA2207	0-300 psi/kPa	PCRGLA2307
600 psi	PCRGLA2108	600 psi/Bar	PCRGLA2208	0-600 psi/kPa	PCRGLA2308
1000 psi	PCRGLA2109	1000 psi/Bar	PCRGLA2209	0-1000 psi/kPa	PCRGLA2309
1500 psi	PCRGLA2110	1500 psi/Bar	PCRGLA2210	0-1500 psi/kPa	PCRGLA2310
2000 psi	PCRGLA2111	2000 psi/Bar	PCRGLA2211	0-2000 psi/kPa	PCRGLA2311
3000 psi	PCRGLA2112	3000 psi/Bar	PCRGLA2212	0-3000 psi/Kpa	PCRGLA2312
0-5000 psi	PCRGLA2113	5000 psi/Bar	PCRGLA2213	0-5000 psi/kPa	PCRGLA2313

2.5" Dial Pressure Gauge
Lead-free brass internals
glycerine filled
1/4" NPT center back connection

P = Pressure Gauge
CR = Crimped Ring
GL = Glycerine Filled Lead- Free Brass internals
A = 2.5" Dial
2 = 1/4" NPT

500 Codes = psi only back connection
600 Codes = psi/Bar back connection
700 Codes = psi/kPa back connection

PSI Range	Code	PSI/Bar Range	Code	PSI/kPa Range	Code
Vacuum	PCRGLA2500	Vacuum/Bar	PCRGLA2600	Vacuum/kPa	PCRGLA2700
15 psi	PCRGLA2501	15 psi/Bar	PCRGLA2601	0-15 psi/kPa	PCRGLA2701
30 psi	PCRGLA2502	30 psi/Bar	PCRGLA2602	0-30 psi/kPa	PCRGLA2702
60 psi	PCRGLA2503	60 psi/Bar	PCRGLA2603	0-60 psi/kPa	PCRGLA2703
100 psi	PCRGLA2504	100 psi/Bar	PCRGLA2604	0-100 psi/kPa	PCRGLA2704
160 psi	PCRGLA2505	160 psi/Bar	PCRGLA2605	0-160 psi/kPa	PCRGLA2705
200 psi	PCRGLA2506	200 psi/Bar	PCRGLA2606	0-200 psi/kPa	PCRGLA2706
300 psi	PCRGLA2507	300 psi/Bar	PCRGLA2607	0-300 psi/kPa	PCRGLA2707
600 psi	PCRGLA2508	600 psi/Bar	PCRGLA2608	0-600 psi/kPa	PCRGLA2708
1000 psi	PCRGLA2509	1000 psi/Bar	PCRGLA2609	0-1000 psi/kPa	PCRGLA2709
1500 psi	PCRGLA2510	1500 psi/Bar	PCRGLA2610	0-1500 psi/kPa	PCRGLA2710
2000 psi	PCRGLA2511	2000 psi/Bar	PCRGLA2611	0-2000 psi/kPa	PCRGLA2711
3000 psi	PCRGLA2512	3000 psi/Bar	PCRGLA2612	0-3000 psi/Kpa	PCRGLA2712
5000 psi	PCRGLA2513	5000 psi/Bar	PCRGLA2613	0-5000 psi/kPa	PCRGLA2713

PG SERIES GENERAL PURPOSE GAUGES

Description & Features:

- Economical pressure gauges designed for general applications that are not corrosive to brass and that are not subject to harsh environmental conditions that would damage steel.
- Available in dial sizes of 1.5”, 2”, 2.5” and 4”.
- Durable steel case painted black with push-in PC lens for easy replacement on 1.5”, 2” and 2.5” dial sizes. 4” dial gauge comes with a steel case painted black with a glass lens and nickel-plated ring.

**Refer to Merit Instruments warranty page for full warranty details.*

Specifications:

- Dial: 1.5” (40mm), 2” (50mm), 2.5” (63mm) and 4” (100mm) available.
- Case: Steel painted black standard. Plastic case available on 1.5”, 2” and 2.5” dial sizes.
- Lens: PC standard for 1.5”, 2” and 2.5” dial sizes and glass is standard on the 4” dial size. Other lens materials available upon request.
- Ring: 1.5”, 2” and 2.5” dial sizes have a push-in lens without a retaining ring. 4” dial has a nickel-plated retaining ring.
- Socket: Brass.
- Bourdon Tube: Phosphor bronze.
- Connection: 1/8” NPT, ¼” NPT and ½” NPT available.
- Dial: Aluminum, painted white with black and red markings for dual scale ranges, and black markings for single scale ranges.
- Pointer: Aluminum, non-adjustable, painted black.
- Working Pressure: Maximum 75% of full scale value.
- Accuracy: +/- 3%-2%-3%, ANSI/ASMBE Grade B
- IP Rating: IP52

Applications:

- Suitable for applications with process media that is not corrosive to brass and environmental conditions suitable for steel or plastic.
- Typical applications include: air compressors, pumps, hydraulic lines, air lines, water tanks, etc.
- Suitable for OEM products that require custom logo dials (POA).

Order Codes:

Economy/Utility 3%-2%-3% gauge, black steel case, push-in PC lens, brass internals 1/8 " NPT Bottom P = Pressure Gauge G= General Purpose C = 1.5" Dial 4 - 1/8" NPT 100 Codes = psi only 200 Codes = psi/Bar 300 Codes = psi/kPa	PSI Only	Code	PSI/Bar	Code	PSI/kPA	Code
	30" Vacuum	PGC4100	30" Vac/Bar	PGC4200	Vacuum/kPa	PGC4300
	0/15 psi	PGC4101	0/15 psi/Bar	PGC4201	0-15 psi/kPa	PGC4301
	0/30 psi	PGC4102	0/30 psi/Bar	PGC4202	0-30 psi/kPa	PGC4302
	0/60 psi	PGC4103	0/60 psi/Bar	PGC4203	0-60 psi/kPa	PGC4303
	0/100 psi	PGC4104	0/100 psi/Bar	PGC4204	0-100 psi/kPa	PGC4304
	0/160 psi	PGC4105	0/160 psi/Bar	PGC4205	0-160 psi/kPa	PGC4305
	0/200 psi	PGC4106	0/200 psi/Bar	PGC4206	0-200 psi/kPa	PGC4306
	0/300 psi	PGC4107	0/300 psi/Bar	PGC4207	0-300 psi/kPa	PGC4307
	0/600 psi	PGC4108	0/600 psi/Bar	PGC4208	0-600 psi/kPa	PGC4308
Ditto 1.5"x 1/8" NPT Back P = Pressure Gauge G= General Purpose C = 1.5" Dial 4 - 1/8" NPT 500 Codes = psi only back connection 600 Codes = psi/Bar back connection 700 Codes = psi/kPa back connection	PSI Only	Code	PSI/Bar	Code	PSI/kPA	Code
	30" Vacuum	PGC4500	30" Vac/Bar	PGC4600	Vacuum/kPa	PGC4700
	0/15 psi	PGC4501	0/15 psi/Bar	PGC4601	0-15 psi/kPa	PGC4701
	0/30 psi	PGC4502	0/30 psi/Bar	PGC4602	0-30 psi/kPa	PGC4702
	0/60 psi	PGC4503	0/60 psi/Bar	PGC4603	0-60 psi/kPa	PGC4703
	0/100 psi	PGC4504	0/100 psi/Bar	PGC4604	0-100 psi/kPa	PGC4704
	0/160 psi	PGC4505	0/160 psi/Bar	PGC4605	0-160 psi/kPa	PGC4705
	0/200 psi	PGC4506	0/200 psi/Bar	PGC4606	0-200 psi/kPa	PGC4706
	0/300 psi	PGC4507	0/300 psi/Bar	PGC4607	0-300 psi/kPa	PGC4707
	0/600 psi	PGC4508	0/600 psi/Bar	PGC4608	0-600 psi/kPa	PGC4708
Ditto 2"x 1/4" NPT Bottom P = Pressure Gauge G= General Purpose D = 2" Dial 2 - 1/4" NPT 100 Codes = psi only 200 Codes = psi/Bar 300 Codes = psi/kPa	PSI Only	Code	PSI/Bar	Code	PSI/kPA	Code
	30" Vacuum	PGD2100	30" Vac/Bar	PGD2200	Vacuum/kPa	PGD2300
	0/15 psi	PGD2101	0/15 psi/Bar	PGD2201	0-15 psi/kPa	PGD2301
	0/30 psi	PGD2102	0/30 psi/Bar	PGD2202	0-30 psi/kPa	PGD2302
	0/60 psi	PGD2103	0/60 psi/Bar	PGD2203	0-60 psi/kPa	PGD2303
	0/100 psi	PGD2104	0/100 psi/Bar	PGD2204	0-100 psi/kPa	PGD2304
	0/160 psi	PGD2105	0/160 psi/Bar	PGD2205	0-160 psi/kPa	PGD2305
	0/200 psi	PGD2106	0/200 psi/Bar	PGD2206	0-200 psi/kPa	PGD2306
	0/300 psi	PGD2107	0/300 psi/Bar	PGD2207	0-300 psi/kPa	PGD2307
	0/600 psi	PGD2108	0/600 psi/Bar	PGD2208	0-600 psi/kPa	PGD2308
	0/1000 psi	PGD2109	0/1000 psi/Bar	PGD2209	0-1000 psi/kPa	PGD2309
Ditto 2" x 1/4" NPT Back P = Pressure Gauge G= General Purpose D = 2" Dial 2 - 1/4" NPT 500 Codes = psi only back connection 600 Codes = psi/Bar back connection 700 Codes = psi/kPa back connection	PSI Ranges	Code	PSI/Bar Ranges	Code	PSI/kPA Ranges	Code
	30" Vacuum	PGD2500	30" Vac/Bar	PGD2600	Vacuum/kPa	PGD2700
	0/15 psi	PGD2501	0/15 psi/Bar	PGD2601	0-15 psi/kPa	PGD2701
	0/30 psi	PGD2502	0/30 psi/Bar	PGD2602	0-30 psi/kPa	PGD2702
	0/60 psi	PGD2503	0/60 psi/Bar	PGD2603	0-60 psi/kPa	PGD2703
	0/100 psi	PGD2504	0/100 psi/Bar	PGD2604	0-100 psi/kPa	PGD2704
	0/160 psi	PGD2505	0/160 psi/Bar	PGD2605	0-160 psi/kPa	PGD2705
	0/200 psi	PGD2506	0/200 psi/Bar	PGD2606	0-200 psi/kPa	PGD2706
	0/300 psi	PGD2507	0/300 psi/Bar	PGD2607	0-300 psi/kPa	PGD2707
	0/600 psi	PGD2508	0/600 psi/Bar	PGD2608	0-600 psi/kPa	PGD2708
	0/1000 psi	PGD2509	0/1000 psi/Bar	PGD2609	0-1000 psi/kPa	PGD2709

Order Codes:

Economy/Utility 3%-2%-3% gauge, black steel case, push-in PC lens, brass internals, 2.5" x 1/4" NPT Bottom

P = Pressure Gauge
G= General Purpose
A = 2.5" Dial
2 = 1/4" NPT

100 Codes = psi only
200 Codes = psi/Bar
300 Codes = psi/kPa

PSI Only		PSI/Bar	Code	PSI/kPA	Code
30" Vacuum	PGA2100	30" Vac/Bar	PGA2200	Vacuum/kPa	PGA2300
0/15 psi	PGA2101	0/15 psi/Bar	PGA2201	0-15 psi/kPa	PGA2301
0/30 psi	PGA2102	0/30 psi/Bar	PGA2202	0-30 psi/kPa	PGA2302
0/60 psi	PGA2103	0/60 psi/Bar	PGA2203	0-60 psi/kPa	PGA2303
0/100 psi	PGA2104	0/100 psi/Bar	PGA2204	0-100 psi/kPa	PGA2304
0/160 psi	PGA2105	0/160 psi/Bar	PGA2205	0-160 psi/kPa	PGA2305
0/200 psi	PGA2106	0/200 psi/Bar	PGA2206	0-200 psi/kPa	PGA2306
0/300 psi	PGA2107	0/300 psi/Bar	PGA2207	0-300 psi/kPa	PGA2307
0/600 psi	PGA2108	0/600 psi/Bar	PGA2208	0-600 psi/kPa	PGA2308
0/1000 psi	PGA2109	0/1000 psi/Bar	PGA2209	0-1000 psi/kPa	PGA2309

Ditto 2.5" x 1/4" NPT Back
P = Pressure Gauge
G= General Purpose
A = 2.5" Dial
2 = 1/4" NPT

500 Codes = psi only back connection
600 Codes = psi/Bar back connection
700 Codes = psi/kPa back connection

PSI Only		PSI/Bar	Code	PSI/kPA	Code
30" Vacuum	PGA2500	30" Vac/Bar	PGA2600	Vacuum/kPa	PGA2700
0/15 psi	PGA2501	0/15 psi/Bar	PGA2601	0-15 psi/kPa	PGA2701
0/30 psi	PGA2502	0/30 psi/Bar	PGA2602	0-30 psi/kPa	PGA2702
0/60 psi	PGA2503	0/60 psi/Bar	PGA2603	0-60 psi/kPa	PGA2703
0/100 psi	PGA2504	0/100 psi/Bar	PGA2604	0-100 psi/kPa	PGA2704
0/160 psi	PGA2505	0/160 psi/Bar	PGA2605	0-160 psi/kPa	PGA2705
0/200 psi	PGA2506	0/200 psi/Bar	PGA2606	0-200 psi/kPa	PGA2706
0/300 psi	PGA2507	0/300 psi/Bar	PGA2607	0-300 psi/kPa	PGA2707
0/600 psi	PGA2508	0/600 psi/Bar	PGA2608	0-600 psi/kPa	PGA2708
0/1000 psi	PGA2509	0/1000 psi/Bar	PGA2609	0-1000 psi/kPa	PGA2709

4" Dial 1/4" NPT Bottom SS ring
P = Pressure Gauge
G= General Purpose
B = 4" Dial
2 = 1/4" NPT

100 Codes = psi only
200 Codes = psi/Bar
300 Codes = psi/kPa

PSI Only	Code	PSI/Bar	Code	PSI/kPA	Code
30" Vacuum	PGA2100	30" Vac/Bar	PGA2200	Vacuum/kPa	PGA2300
0/15 psi	PGA2101	0/15 psi/Bar	PGA2201	0-15 psi/kPa	PGA2301
0/30 psi	PGA2102	0/30 psi/Bar	PGA2202	0-30 psi/kPa	PGA2302
0/60 psi	PGA2103	0/60 psi/Bar	PGA2203	0-60 psi/kPa	PGA2303
0/100 psi	PGA2104	0/100 psi/Bar	PGA2204	0-100 psi/kPa	PGA2304
0/160 psi	PGA2105	0/160 psi/Bar	PGA2205	0-160 psi/kPa	PGA2305
0/200 psi	PGA2106	0/200 psi/Bar	PGA2206	0-200 psi/kPa	PGA2306
0/300 psi	PGA2107	0/300 psi/Bar	PGA2207	0-300 psi/kPa	PGA2307
0/600 psi	PGA2108	0/600 psi/Bar	PGA2208	0-600 psi/kPa	PGA2308
0/1000 psi	PGA2109	0/1000 psi/Bar	PGA2209	0-1000 psi/kPa	PGA2309

4" Dial 1/4" NPT Back
P = Pressure Gauge
G= General Purpose
B = 4" Dial
2 = 1/4" NPT

500 Codes = psi only back connection
600 Codes = psi/Bar back connection
700 Codes = psi/kPa back connection

PSI Ranges		PSI/Bar Ranges	Code	PSI/kPA Ranges	Code
30" Vacuum	PGB2500	30" Vac/Bar	PGB2600	Vacuum/kPa	PGB2700
0/15 psi	PGB2501	0/15 psi/Bar	PGB2601	0-15 psi/kPa	PGB2701
0/30 psi	PGB2502	0/30 psi/Bar	PGB2602	0-30 psi/kPa	PGB2702
0/60 psi	PGB2503	0/60 psi/Bar	PGB2603	0-60 psi/kPa	PGB2703
0/100 psi	PGB2504	0/100 psi/Bar	PGB2604	0-100 psi/kPa	PGB2704
0/160 psi	PGB2505	0/160 psi/Bar	PGB2605	0-160 psi/kPa	PGB2705
0/200 psi	PGB2506	0/200 psi/Bar	PGB2606	0-200 psi/kPa	PGB2706
0/300 psi	PGB2507	0/300 psi/Bar	PGB2607	0-300 psi/kPa	PGB2707
0/600 psi	PGB2508	0/600 psi/Bar	PGB2608	0-600 psi/kPa	PGB2708

NEEDLE VALVE

Description & Features:

- Available in all brass construction as well as brass with a red plastic handle.
- Suitable for applications that are not corrosive to brass and pressures that do not exceed 400 psi.
- ¼" NPT F x ¼" NPT F connections.
- Designed to allow for hand adjusted flow control of process media.
- 7-year warranty*

Specifications:

- Body Material: Brass.
- Handle: Brass or Plastic (see ordering information below).
- Connection: ¼" NPT Female x ¼" NPT Female standard. Other connections and sizes available upon request.
- Maximum Operating Pressure: 400 psi (2,758 kPa).

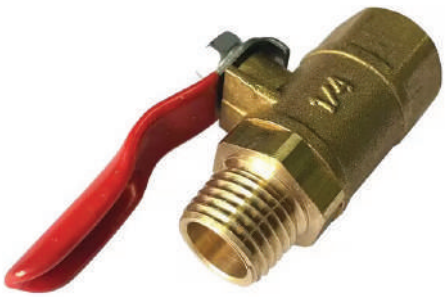
**Refer to Merit Instruments warranty page for full warranty details.*

Order Codes:

Description	Order Code
Brass body & handle ¼" NPT F x ¼" NPT F	ACNV10
Brass body & plastic handle ¼" NPT F x ¼" NPT F	ACNV20

BRASS BALL VALVE

Description & Features:



- Brass body with stainless steel ball and plated steel handle.
- Suitable for applications that are not corrosive to brass and pressures that do not exceed 400 psi.
- Standard ¼" NPT F x ¼" NPT F or ¼" NPT F x ¼" NPT M connections.
- Designed to allow for hand adjusted flow control of process media.
- 7-year warranty*

Specifications:

- Body Material: Brass.
- Handle: Plated steel.
- Connection: ¼" NPT Female x ¼" NPT Female and ¼" NPT Female x ¼" NPT Male standard.
- Gasket: PTFE.
- Maximum Operating Pressure: 400 psi (2,758 kPa).

**Refer to Merit Instruments warranty page for full warranty details.*

Order Codes:

Description	Order Code
¼" NPT F x ¼" NPT F	ACBV10
¼" NPT F x ¼" NPT M	ACBV20

SYPHON

Description & Features:

- Available in Brass, Carbon Steel, 304 and 316 Stainless Steel.
- Seamless coil design.
- ¼” NPT M x ¼” NPT M or ½” NPT M x ½” NPT Male standard. Other connection types & sizes available.
- Designed to lower process media temperature prior to entering pressure instrument.
- 7-year warranty*

Specifications:

- Material: Brass, Carbon Steel, 304 Stainless Steel and 316 Stainless Steel.
- Design: 180 degree coil.
- Connection: ¼” NPT Male x ¼” NPT Male or ½” NPT Male x ½” NPT Male standard. Other connections available upon request.
- Maximum Operating Pressure: Schedule 40 up to 500 psi at 680 F (360 C), Schedule 80 up to 1,650 psi at 630 F (332 C).
- Options: Female connections and other design styles available upon request.

**Refer to Merit Instruments warranty page for full warranty details.*

Order Codes:

Material Type & NPT Size	Order Code
Schedule 40 Brass ¼" NPT	ACBR4025
Schedule 40 Brass 1/2" NPT	ACBR4050
Schedule 40 Carbon Steel ¼” NPT	ACC4025
Schedule 40 Carbon Steel ½” NPT	ACC4050
Schedule 80 Carbon Steel ¼” NPT	ACC8025
Schedule 80 Carbon Steel ½” NPT	ACC8050
Schedule 40 304 SS ¼” NPT	ACSS3044025
Schedule 40 304 SS ½” NPT	ACSS3044050
Schedule 40 316 SS ¼” NPT	ACSS3164025
Schedule 40 316 SS ½” NPT	ACSS3164050
Schedule 80 316 SS ¼” NPT	ACSS3168025
Schedule 80 316 SS ½” NPT	ACSS3168050

BRASS TEST PLUG

Description & Features:

- All brass construction with self-sealing Buna N core.
- Suitable for applications that are not corrosive to brass and pressures that do not exceed 1,000 psi.
- Available in ¼” NPT and ½” NPT male process connections.
- Designed to allow for economical and easy test-point installations where permanent
- installation of a pressure or temperature instrument is not required or desired.
- 7-year warranty*

Specifications:

- Body Material: Brass.
- Core: Buna N, self-sealing
- Connection: ¼” NPT Male or ½” NPT Male standard.
- Maximum Operating Pressure: 1,000 psi (6,895 kPa).

Order Codes:

Description	Order Code
1/4” NPT Male	ACTP10
½” NPT Male	ACTP20

AC SERIES PRESSURE SNUBBERS

Description & Features:

- Available in brass or 316 SS body.
- 316 SS sintered (porous) snubbing element.
- Available in ¼" NPT and ½" NPT male process connections.
- Designed to reduce the pulsation effects caused by process media hammer to reduce potential damage to the pressure instrument which may otherwise occur.
- 3 viscosity ratings available tailored for specific process media.
- 7-year warranty*

Specifications:

- Body Material: Brass or 316 stainless steel.
- Element: 316 stainless steel sintered (porous) core.
- Viscosity: Available for Air/Gases, Water/Light Oils and Heavy Oil applications.
- Connection: ¼" NPT Male or ½" NPT Male standard.
- Maximum Operating Pressure: Brass 10,000 psi (66,950 kPa), 316 SS 20,000 psi (137,900 kPa).

**Refer to Merit Instruments warranty page for full warranty details.*

Order Codes:

Description	Viscosity	Order Code
1/4" NPT Brass Snubber	Air/Gas	ACB25100
1/4" NPT Brass Snubber	Water/Light Oil	ACB25101
1/4" NPT Brass Snubber	Heavy Oil	ACB25102
1/4" NPT 316 SS Snubber	Air/Gas	ACSS25100
1/4" NPT 316 SS Snubber	Water/Light Oil	ACSS25101
1/4" NPT 316 SS Snubber	Heavy Oil	ACSS25102
1/2" NPT Brass Snubber	Air/Gas	ACB50100
1/2" NPT Brass Snubber	Water/Light Oil	ACB50101
1/2" NPT Brass Snubber	Heavy Oil	ACB50102
1/2" NPT 316 SS Snubber	Air/Gas	ACSS50100
1/2" NPT 316 SS Snubber	Water/Light Oil	ACSS50101
1/2" NPT 316 SS Snubber	Heavy Oil	ACSS50102

Merit Instruments

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