



## Pressure Gauges

General purpose utility gauges ASME grade B 3-2-3% - Quality & Economy

Typical Applications:

Air Conditioning, Heating & Hydraulic Systems, Sprinkler & Irrigation,  
Pressure Regulators, Water Pumps, Air Line Testing

All gauges to be installed in accordance with ASME B40.1. All gauges are precision instruments and must be handled with care. A failure resulting in injury damage may be caused by pressure beyond top of scale, excessive vibration or pulsation excessive temperature, corrosion of the pressure containing parts or other misuse. **DO NOT USE ON OXYGEN SERVICE**

### Air Test Gauge Assembly

- All parts precision made and assembled with sealant
- 3/4" FPT
- 2" Gauge
- 1427-A is an Ashcroft Gauge



PART NUMBER	PSI	INCREMENTS
1427	0-30#	1/2#
1427-A		
1420	0-60#	1#
1421	0-100#	2#

### Air Test Gauge Assembly

- 3/4" or 1" FPT
- All parts precision made and assembled with sealant
- 2" Gauge
- Bell reducer type
- \* Add -B for bottom mount



Photo shown is top mount

PART NUMBER	PSI	FPT SIZE
1410	1/10-15#	3/4"
1411*	0-30#	
1412*	0-60#	
1413	0-100#	
1414	0-30#	1"
1415	0-60#	

### 1/10 PSI Air Test Gauge Assembly

- 15 # gauge scaled in 1/10# increments
- Complies with Section 319.0 of Uniform Plumbing Code
- All parts precision made and assembled with sealant
- 3/4" FPT
- 2" Gauge



PART NUMBER	PSI	INCREMENTS
1726-10G	0-15#	1/10#

### Low Pressure Air Test Gauge Assembly

- 2-1/2" - 5# low pressure gauge
- Complete with body and air valve



**PART NUMBER**  
1736-T

## Lazy Hand Water Test Gauge

- 3/4" FHT brass swivel connection
- Filter washer

Regular pressure hand to peak operating or surge pressure point where it remains until you manually reset it. Excellent to determine if P/T valve is leaking from failure or if leaking is caused by surge or excessive pressures (gauge attached to boiler drain overnight) LAZY hand operates over entire gauge range.

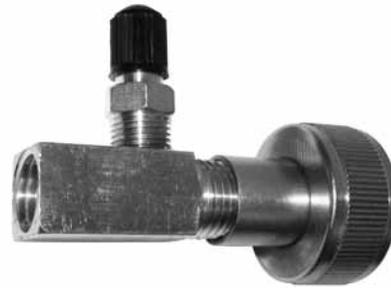


PART NUMBER	PSI
1423	0-160#
1428	0-300#

## Air Pressure Test Gauge Adapter

Add a pressure gauge to our all new brass adapter to test a variety of installations.

- Use to air test new construction gas or water piping.
- Adapts to any type of supply line material (PEX, copper, PVC, iron)
- Adapts to an existing hose bibe to air test existing water lines or to test re-pipe installations.
- Use air instead of water to test. Prevents the hassle of clean up that may occur with water test.
- Air test can be used on water supply lines when water supply is not readily available.



PART NUMBER	DESCRIPTION
1408	1/4" FPT x 3/4" FHT with Hose Swivel

## Water Test Gauge

- 3/4" FHT brass swivel connection
- Filter washer



PART NUMBER	PSI	GAUGE SIZE
1431	0-160#	2"
1432	0-300#	2"
1440	0-160#	2-1/2"
1430	0-300#	2-1/2"

### Connection Only (swivel)

PART NUMBER	DESCRIPTION
1402	Nut and Bushing 3/4" FHT x 1/4" FPT

## Separate Air Test Gauge Components



PART NUMBER	DESCRIPTION
1404	Air test gauge body ONLY
1405	Air test gauge body w/ air valve
1406	1/8" Air valve with cap ONLY
1417	3/4" Bell reducer with air valve





## Dial Type Thermometers

- Economical
- Back mount

Dual Scale:

- 40°-250°F, 0,-120°C, Accuracy to 1°
- 5° Increments
- 2-1/2" Face
- Brass wells
- Choice of adapters
- Thermometer can be removed from adapter for easy installation

Thermometers supplied complete with connection



**Compliant**

AB 1953

PART NUMBER	CONNECTION
1449	1/2" MPT
1449-C	Well ONLY



**Compliant**

AB 1953

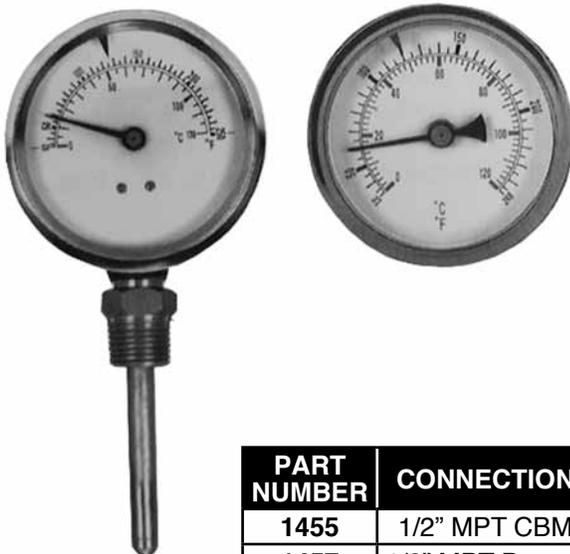
PART NUMBER	CONNECTION
1450	3/4" CWT Solder
1450-W	Well ONLY

## Dial Type Thermometers

- Superior quality
- Back or bottom mount

Dual scale:

- 32°-250°F, 0°-120°C
- 3-1/2" diameter
- 1/2" MPT brass connection
- 2-1/2" brass element (beyond MPT)
- Corrosion resistant steel case



PART NUMBER	CONNECTION
1455	1/2" MPT CBM
1457	1/2" MPT Bottom

## Spring Strap-On Surface Thermometer

**New!**

This new thermometer is specifically designed to provide an economical and accurate surface temperature measurement on any 1/2" to 4" pipe: iron, plastic, steel or copper. Easy on, easy off!

- Dual Scale  
40°C/240°F  
0°C/120°C
- 5° increments
- Acrylic lens
- Accuracy +/- 3°



PART NUMBER	CONNECTION
1446	4 Stainless Steel Springs



## Pigtail Siphons

- 1/4" IPS
- Complies with ASTM A-53B
- 600 PSI-750°F



PART NUMBER	MPT MATERIAL	STYLE
1459-B	Brass	Straight
1459	Steel	Straight
1460	Steel	Angle

## Pressure Gauge Snubber

- Pulsation damper
- Protects air pressure gauges from sudden pressure surges
- 1/4" MPT x 1/4" FPT
- Brass

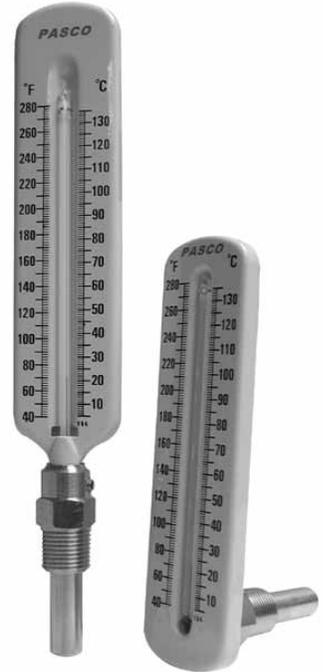


PART NUMBER
1469

## Hot Water Thermometers

Dual Scale:

- 40° - 280°F
- 10° - 130°C
- 1/2" MPT connection
- 1442-1444 7" overall length
- 1443-1445 10-1/2" overall length



PART NUMBER	MPT MATERIAL	STYLE
1442	Steel	Angle
1444	Brass	Angle
1443	Steel	Straight
1445	Brass	Straight

## Boiler Gauges Pressure/Temperature

Specially constructed for use on hot water heater boilers, these combination gauges give accurate indication of temperature and pressure. Gauges are designed to withstand the conditions normally encountered on domestic heating systems.

Dual scale:

- 60° - 260° F
- 20° - 120° C
- 3-1/2" diameter
- 1/2" MPT brass connection
- Steel case
- Glass face



PART NUMBER	PSI	CONNECTION AND ELEMENT LENGTH
1451	0-75 PSI	2-3/4" Bottom Mount
1452	0-75 PSI	2-3/4" Back Mount

Dual scale:

- 60° - 320° F
- 20° - 160° C
- 2-3/4" diameter
- 1/4" MPT brass connection
- Center backmount
- Polycarbonate face
- Back mount only



PART NUMBER	PSI	CONNECTION AND ELEMENT LENGTH
1435	0-75 PSI	2-1/2" Back Mount
1437	0-75 PSI	3-1/2" Back Mount



The following information has been gathered from various sources, including AMETEK's Pressure Gauge Handbook and ANSI B-40. The descriptions and topics mentioned cover the particular gauges that are found in **PASCO's** catalog.

## **Commercial Gauges:**

Gauges found on much of the equipment used in manufacturing plants, stores, garages, etc. are classified as commercial gauges or general purpose gauges. Typical equipment uses include refrigeration units, pumps, compressors and fire extinguishers. In such applications, although the gauges may be ruggedly built, service conditions are not expected to be severe. These gauges are of Grade B accuracy and could have metal or plastic cases and glass or plastic faces.

Commercial gauges are low in cost and designed without refinements to simplify maintenance or repair due to the fact that it is less expensive to replace them than to repair them. Not for use on oxygen systems.

## **Grade B Gauges**

GRADE B Gauges are used in the above mentioned general purpose applications. These gauges are often referred to as 3-2-3 gauges. The reason is that they have a an accuracy of 2% of span over the middle half of the scale and 3% of span over the first and last quarters of the scale. Grade B gauges are not high accuracy gauges, but suitable for commercial installations.

## **Gauge Take Up**

The average user believes that if the gauge pointer is not on zero, then the gauge must be faulty and will refuse to accept the gauge or try to reset the pointer, damaging the gauge. As shown above, a GRADE B gauge pointer could not be at zero and still be within spec because of the 3% accuracy at either end of the scale. A GRADE B gauge will begin more accurate measurement once the pointer goes past the first 3 graduations of the scale.

## **Frequency Of Graduations**

The frequency of the graduation on a gauge should bear a relationship to the grade of accuracy. For example, it is somewhat misleading to divide the gauge into 100 increments if the gauge is made to GRADE B accuracy.

## **Pulsation Damper**

Push checks or throttle plugs are the least expensive pulsation dampers. These checks are usually made from the same material as the pressure port of the gauge and they are easily installed by pushing into the gauge stem. The small hole in the check helps alleviate pressure surges or spikes which may cause gauge failure. In the event of gauge failure, due to fatigue or corrosion, the check may also limit the flow of pressure medium if the gauge develops a leak. The small diameter hole in the check may become clogged with debris preventing gauge operation. The gauge should be checked from time to time and this hole kept free of debris.

## **Gauge Valves or Cocks - IMPORTANT**

Gauge valves or cocks are installed in the pipeline leading to the gauge. The valve provides a means of shutoff so that the gauge can be removed from the line without loss of pressure. The valve also allows the gauge to be completely closed off from the pressure source except when it is necessary to take a reading. Clogging of the gauge stem is minimized and the gauge will also be isolated from pressure surges or spikes. This arrangement will nearly prevent early or unexpected gauge failure and greatly extend the life of the gauge.

## **Siphons**

The purpose of the siphon is to provide a heat exchanger where steam in the line can be condensed and the resulting condensate cooled prior to entering the pressure gauge. This prevents the melting of the soft soldered joints of the gauge which could cause gauge failure. A pigtail siphon is a coiled tube. This coil provides a large cooling surface and the trap created prevents the condensate from draining away. Incoming vapor must pass through this liquid seal and is cooled. This type of siphon is often referred to as a trap.

## **Installation**

In all installations, ANSI B40. must be strictly followed. Always use the wrench flat on the gauge stem to tighten the gauge into the fitting. Never APPLY TORQUE TO THE GAUGE CASE. It is suggestion that a joint compound instead of thread sealing tape be used. Tape sheds can get into the pressure gauge port of the gauge causing blockage.



### Manual Air & Condensate Vents

- 1/8" threads
- Nickle plated brass
- Qty pack 25



PART NUMBER	DESCRIPTION
605	Standard coin/key combo
605LK	Standard LESS key
606	Key ONLY

### 3 in 1 Radiator Air Vent Wrench

- Inserts
- Extracts
- Renews threads



**PART NUMBER**  
4947

### Radiator Valve Handles



PART NUMBER	DESCRIPTION
621	Three Lugs

### Radiator Spud Wrench for 1/2" - 2" Spuds



**PART NUMBER**  
4558

### Inspection Mirror - Telescoping

- Fully adjustable
- 1-1/2" Diameter mirror
- Individual display card



PART NUMBER	LENGTH
4914	24"