



Type 1279  
Duragauge® pressure  
gauge shown

**WARNING:** Pressure gauges should be selected by considering media and ambient operating conditions to prevent misapplication. Improper application can be detrimental to the gauge, causing failure and possible personal injury or property damage. The information contained in this catalog is offered as a guide to assist in making the proper selection of a pressure gauge. For additional information contact the factory.

**Pressure Ranges:** Select a gauge with a full-scale pressure range of approximately twice the normal operating pressure. The maximum operating pressure should not exceed 75% of the full-scale range. Failure to select a gauge within these criteria may ultimately result in fatigue failure of the Bourdon tube.

**Operating Conditions:** The operating conditions to which a gauge will be subjected must be considered. If the gauge will be subjected to severe vibrations or pressure pulsation, liquid-filling the gauge or the PLUS!™ option may be necessary to obtain normal product life. Other than discoloration of the dial and hardening of the gasketing that may occur as ambient temperatures exceed 150°F, non liquid-filled Type 1279 (phenolic case), 1377 and 1379 (aluminum case) Duragauge® gauges with standard glass windows, can withstand continuous operating temperatures up to 250°F. Liquid-filled gauges can withstand 200°F but glycerin fill and acrylic window will tend to yellow. Accuracy will be affected by approximately 1.5% per 100°F. Gauges with welded joints will withstand 750°F (450°F with silver brazed joints) for short times without rupture, although other

parts of the gauge will be destroyed and calibration will be lost. Proper selection of the Bourdon system material is dependent on the process fluid to which the system will be subjected. If the correct material is not available, the use of a diaphragm seal may be necessary to protect the system from the process fluid. Liquid-filled gauges are recommended for the discharge side of positive displacement pumps.

**Cases:** Many styles and different materials are offered. Two types are available, open and solid front. Solid front cases have a solid wall between the Bourdon tube and the window. Open-front cases have the dial between the Bourdon tube and the window.

**Rings:** The ring, which retains the window, is threaded, bayonet (cam), friction, snap-on or hinged, depending upon case type.

**Pressure Elements:** Available in a wide variety of materials, including: brass, phosphor bronze, alloy steel, 316 stainless steel, Monel and Inconel. Proper selection of the Bourdon system or bellows material depends upon the process fluid to which the system will be subjected. If the correct material is not available, the use of a diaphragm seal may be necessary to protect the system from the process fluid. If the gauge is subject to severe vibration or pressure pulsation, a liquid-filled gauge is recommended.

**Duragauge® PLUS!™ Pressure Gauge:** An exclusive, new, optional feature provides virtually liquid-filled performance in a dry gauge. The PLUS!™ Performance feature is a patented design incorporated into the

industry-standard Ashcroft pressure gauge. PLUS!™ is available in any Duragauge® gauge case style material or range. Historically, pulsation and vibration have reduced gauge life and made gauges difficult to read. Customers have had no alternative to liquid-filled gauges to solve vibration and pulsation problems, until now!

**Movements:** Movements are designed and materials of construction selected to reduce friction and extend wear life. For example, commercial gauges have the unique PowerFlex™ brass movement with polyester segment, whereas the stainless steel movement of the Duragauge® gauge is a rotary-gear design with Teflon-coated wear parts. Other movements are stainless steel with bronze pinion and segment or bronze bushed.

**Dials:** Dials are uniformly graduated and have highly legible black markings. White-coated or brushed aluminum backgrounds are available.

**Windows:** The standard is glass or plastic depending on the type of the gauge. Options are laminated safety glass, nonglare glass or plastic, depending on the type of gauge.

**Pointers:** Duragauge® pressure gauges have micrometer adjustable pointers which can be repositioned without removal. Type 1009 gauges have adjustable pointers. Many other gauges are supplied with nonadjustable pointers which can be reset by removing the ring, and removing and resetting the pointer. Adjustable pointers are available as an option on these gauges.

- 4 1/2" full-size Bourdon tube
- Patented Duratube™ with as-welded-tube construction controls stress for longer life
- "Round Cap Tip" construction lowers stresses for longer life
- Easily adjustable, self-locking micrometer pointer
- Burn-resistant phenol turret case
- Exclusive Teflon coated 400 series stainless steel rotary movement for longer life
- PLUS!™ Performance Option:
  - Liquid-filled performance in a dry gauge
  - Fights vibration and pulsations without liquid-filled headaches

- See pages 6-7 for details
- Order as option XLL
- Epoxy-coated system for superior corrosion resistance

Type 1279 Duragauge® pressure gauge is offered in 4 1/2" phenolic case for superior chemical and heat resistance. Solid-front case design with blow-out back for safety. Dry, liquid-filled, hermetically sealed, weatherproof or PLUS!™ options available. Field convertible to liquid-fill with conversion kit (detailed on page 247). All case styles provide full temperature compensation.


**BOURDON SYSTEM SELECTION**

Ordering Code	Bourdon Tube & Tip Material <sup>(1)</sup> (all joints TIG welded except "A")	Socket Material	Tube Type	Range Selection Limits (psi)	NPT Conn. <sup>(2)</sup>
A	Phosphor Bronze Tube-Brass Tip, Silver Brazed	Brass	C-Tube	12/1000	1/4, 1/2
R	316L stainless steel	1019 steel	C-Tube	12/1500	1/4, 1/2
			Helical	2000/20,000	1/4, 1/2
S	316L stainless steel	316L stainless steel	C-Tube	12/1500	1/4, 1/2
			Helical	2000/20,000	1/4, 1/2
P <sup>(3)</sup>	K Monel	Monel 400	C-Tube	15/1500	1/4, 1/2
			Helical	2000/30,000	1/4, 1/2 <sup>(4)</sup>

- (1) For selection of the correct Bourdon system material, see the media application table on page 253.  
 (2) Other connections available on application.  
 (3) Use for applications where NACE standard MR-01-75 is specified.  
 (4) 30,000 psi range supplied with 1/4 high pressure connection, 1/2 NPT optional.

**STANDARD RANGES**

Pressure psi	Compound psi
0/15	30 in.Hg/15 psi
0/30	30 in.Hg/30 psi
0/60	30 in.Hg/60 psi
0/100	30 in.Hg/100 psi
0/160	30 in.Hg/150 psi
0/200	30 in.Hg/300 psi
0/300	
0/400	<b>Vacuum</b>
0/600	30/0 in.Hg
0/800	34/0 ftH <sub>2</sub> O
0/1000	
0/1500	
0/2000	
0/3000	
0/5000	
0/10,000	
0/20,000	
0/30,000	

**NOTE:**  
Equivalent standard kg/cm<sup>2</sup>, and kPa metric ranges are available.

**TO ORDER THIS 1279 DURAGAUGE:**

Select: \_\_\_\_\_ 45 \_\_\_\_\_ 1279 \_\_\_\_\_ SS\* \_\_\_\_\_ 04L \_\_\_\_\_ XXX \_\_\_\_\_ 2000#

1. Dial size—4 1/2" \_\_\_\_\_

2. Case type—1279 \_\_\_\_\_  
Ring-threaded reinforced polypropylene

3. Bourdon system selection ordering code \_\_\_\_\_

4. Connection—1/4 NPT (02), 1/2 NPT (04), Lower (L), Back (B) \_\_\_\_\_

5. Optional features—see page 249 \_\_\_\_\_

6. Standard pressure range \_\_\_\_\_

7. Accessories—see pages 243-248 \_\_\_\_\_

(\*) "S" denotes solid front case design

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 visit our web site at [www.ashcroft.com](http://www.ashcroft.com)





- 4 1/2" full-size Bourdon tube
- Patented Duratube™ with as-welded-tube construction controls stress for longer life
- "Round Cap Tip" construction lowers stresses for longer life
- Easily adjustable, self-locking micrometer pointer
- Exclusive Teflon coated 400 series stainless steel rotary movement for longer life
- PLUS!™ Performance Option:
  - Liquid-filled performance in a dry gauge
  - Fights vibration and pulsations without liquid-filled headaches
  - Order as option XLL

- Epoxy-coated system for superior corrosion resistance

This solid-front gauge is designed for greater readability by using a large 6" dial and a durable 4 1/2" system. Viewed from the front, it appears to be a 6" gauge. Its glass-filled polypropylene case is highly impact resistant and holds up well in most environments. This general-purpose gauge offers truly functional styling and economy. The result is a gauge that will fit most applications at a price that represents outstanding value.



BOURDON SYSTEM SELECTION					
Ordering Code	Bourdon Tube & Tip Material <sup>(1)</sup> (all joints TIG welded except "A")	Socket Material	Tube Type	Range Selection Limits (psi)	NPT Conn. <sup>(2)</sup>
A	Phosphor Bronze Tube-Brass Tip, Silver Brazed	Brass	C-Tube	12/1000	1/4, 1/2
R	316L stainless steel	1019 steel	C-Tube	12/1500	1/4, 1/2
			Helical	2000/20,000	1/4, 1/2
S	316L stainless steel	316 stainless steel	C-Tube	12/1500	1/4, 1/2
			Helical	2000/20,000	1/4, 1/2
P <sup>(3)</sup>	K Monel	Monel 400	C-Tube	15/1500	1/4, 1/2
			Helical	2000/30,000	1/4, 1/2 <sup>(4)</sup>

(1) For selection of the correct Bourdon system material, see the media application table on page 253.  
 (2) Other connections available on application.  
 (3) Use for applications where NACE standard MR-01-75 is specified.  
 (4) 30,000 psi range supplied with 1/4 high pressure connection, 1/2 NPT optional.

STANDARD RANGES	
Pressure psi	Compound psi
0/15	30 in.Hg/15 psi
0/30	30 in.Hg/30 psi
0/60	30 in.Hg/60 psi
0/100	30 in.Hg/100 psi
0/160	30 in.Hg/150 psi
0/200	30 in.Hg/300 psi
0/300	
0/400	<b>Vacuum</b>
0/600	30/0 in.Hg
0/800	34/0 ftH <sub>2</sub> O
0/1000	
0/1500	
0/2000	
0/3000	
0/5000	
0/10,000	
0/20,000	
0/30,000	

**NOTE:**  
 Equivalent standard kg/cm<sup>2</sup>, and kPa metric ranges are available.

**TO ORDER THIS 2462 DURAGAUGE:**

Select: 45 2462 RS\* 04L XXX 1000#

1. Dial size—4 1/2" \_\_\_\_\_

2. Case type—2462 \_\_\_\_\_  
 Ring-threaded reinforced polypropylene

3. Bourdon system selection ordering code \_\_\_\_\_

4. Connection—1/4 NPT (02), 1/2 NPT (04), Lower (L), Back (B) \_\_\_\_\_

5. Optional features—see page 249 \_\_\_\_\_

6. Standard pressure range \_\_\_\_\_

7. Accessories—see pages 243-248 \_\_\_\_\_

(\*) "S" denotes solid front case design

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## Process Pressure Gauge Type 1259, ASME B 40.1 Grade 2A ( $\pm 0.5\%$ of span)

- Solid front safety case
- Accuracy complies with ASME B 40.1 Grade 2A ( $\pm 0.5\%$  of span)
- As-welded Bourdon Tube for safety and longer life
- Easily adjustable, self-locking micrometer pointer
- Adjustable movement
- Ranges: vac to 20,000 psi
- Date coded socket to ensure pedigree
- Wetted part material printed on dial

The Type 1259 process gauge is offered with an as-welded Bourdon tube to ensure safety and a longer life than competitive gauges. Meeting ASME B40.1, the Type 1259 process gauge has been engineered to meet marketplace requirements.



### BOURDON SYSTEM SELECTION

Ordering Code	Bourdon Tube & Tip Material <sup>(1)</sup> (all joints TIG welded except "A")	Socket Material	Tube Type	Range Selection Limits (psi)	NPT Conn. <sup>(2)</sup>
S	316L stainless steel	316 stainless steel	C-Tube	12/1500	1/4, 1/2
			Helical	2000/20,000	1/4, 1/2
P <sup>(3)</sup>	Monel	Monel	C-Tube	12/1000	1/4, 1/2
			Helical	1500/20,000	1/4, 1/2

- (1) For selection of the correct Bourdon system material, see the media application table on page 253.  
 (2) Other connections available on application.  
 (3) Use for applications where NACE standard MR-01-75 is specified.

### STANDARD RANGES

Pressure psi	Compound psi
0/15	30 in.Hg/15 psi
0/30	30 in.Hg/30 psi
0/60	30 in.Hg/60 psi
0/100	30 in.Hg/100 psi
0/160	30 in.Hg/150 psi
0/200	30 in.Hg/300 psi
0/300	
0/400	<b>Vacuum</b>
0/600	30/0 in.Hg
0/800	34/0 ftH <sub>2</sub> O
0/1000	
0/1500	
0/2000	
0/3000	
0/5000	
0/10,000	
0/20,000	

**NOTE:**  
Equivalent standard kg/cm<sup>2</sup>, and kPa metric ranges are available.

### TO ORDER THIS 1259 PROCESS GAUGE:

Select: \_\_\_\_\_ 45                      1259                      SD                      04L                      XXX                      1000#

- Dial size—4½" \_\_\_\_\_
- Case type—1259 \_\_\_\_\_  
Ring—threaded reinforced polypropylene
- Bourdon system selection ordering code \_\_\_\_\_
- Connection—¼ NPT (02), ½ NPT (04), Lower (L), Back (B) \_\_\_\_\_
- Optional features—see page 249 \_\_\_\_\_
- Standard pressure range \_\_\_\_\_
- Accessories—see pages 243-248 \_\_\_\_\_

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- 4 1/2" full-size Bourdon tube
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- "Round Cap Tip" construction lowers stresses for longer life
- Easily adjustable, self-locking micrometer pointer
- Exclusive Teflon coated 400 series stainless steel rotary movement for longer life
- PLUS!™ Performance Option:
  - Liquid-filled performance in a dry gauge
  - Fights vibration and pulsations without liquid-filled headaches
  - Order as option XLL

- Epoxy-coated system for superior corrosion resistance

Ashcroft® receiver gauges are used in conjunction with pneumatic transmitters to indicate pressure, temperature, flow or other process parameters that can be transmitted by proportional variations in air pressure.

Available in standard transmitter-output air pressure ranges of 3-15 and 3-27 psi.



GAUGE TYPE NUMBER	DIAL SIZES	CASE/RING MATERIAL	SYSTEM ASSEMBLY	RANGE psi	POINTER	MOVEMENT	NPT CONN.	ACCURACY
1279AS-XPR	4 1/2	<b>Case</b> Phenolic, black <b>Ring</b> Polypropylene, threaded, black	Phosphor bronze Bourdon tube, brass socket; (316 stainless steel optional)	3-15 and 3-27	Black, micrometer adjustable	Rotary geared, stainless steel, Teflon® coated pinion gear and segment shaft	1/2 (1/4 Opt)	ASME B 40.1 Grade 2A ( $\pm 0.5\%$ of span)
1377AS-XPR	4 1/2, 6, 8 1/2	<b>Case</b> Aluminum, black epoxy <b>Ring</b> Hinged, steel, black						
1379AS-XPR	4 1/2, 6, 8 1/2	<b>Case</b> Aluminum, black epoxy <b>Ring</b> Threaded polypropylene 4 1/2, 6 Hinged, steel, black 8 1/2						
2462AS-XPR	6	<b>Case</b> Polypropylene, black <b>Ring</b> Polypropylene, bayonet lock, black						

GAUGE TYPE NUMBER	DIAL SIZES	CONNECTION LOCATION	MOUNTING TYPE	MOUNTING METHOD	MOUNTING METHOD CODE
1279AS-XPR	4 1/2	Lower/Back	Stem/Surface	—	—
		Back	Flush	1278M Ring	—
1377AS-XPR	4 1/2, 6, 8 1/2	Back	Flush	—	—
		Lower/Back	Stem/Surface	—	—
1379AS-XPR	4 1/2, 6, 8 1/2	Back	Flush	4 1/2 & 6, 1278M Ring – 8 1/2, Wide Ring std.	—
		Lower/Back	Stem	—	—
2462AS-XPR	6	Lower/Back	Surface	Surface mounting ring	XBF
		Back	Flush	Flush mounting bracket	XBQ

**TO ORDER THESE TYPES 1279/1379/1377/2462 RECEIVER GAUGES:**

Select: \_\_\_\_\_ 45 \_\_\_\_\_ 1279 AS \_\_\_\_\_ 04 L \_\_\_\_\_ XPR \_\_\_\_\_ 3-15 psi

1. Dial size \_\_\_\_\_

2. Case type \_\_\_\_\_

3. Tube & socket material \_\_\_\_\_

4. Connection size, 1/4 (02), or 1/4 (04) \_\_\_\_\_

5. Connection location, (L—Lower), (B—Back) \_\_\_\_\_

6. Optional features (XPR always appears in code for receiver gauge) \_\_\_\_\_

7. Range of transmitted signal (also specify the scale to be shown on the dial face) \_\_\_\_\_

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