

# 1377 Duragauge® Pressure Gauge with PLUS!™ Performance Option

## FEATURES

- Solid front safety case with pressure relief back
- Dial sizes 4 ½", 6" and 8 ½"
- ±0,5 % of span (ASME B40.100 Grade 2A)
- Customizable dial printing options

## TYPICAL USES

- Refineries
- Chemical and petrochemical plants
- Offshore oil rigs
- Water and wastewater pressure control
- Pulp and water
- Mining and metals
- Equipment skids
- Specialized OEM equipment



**1377**  
4 ½" dial size



## SPECIFICATIONS

Accuracy:	±0,5 % of span (ASME B40.100 Grade 2A)
Dial Size:	4 ½" (115 mm); 6" (152 mm); 8 ½" (216 mm)
Range:	Vacuum, Compound to 2000 bar/30,000 psi
Process Connection Location:	Lower, back
Process Connection:	¼ NPT Male, ½ NPT Male, G ½ B Male, M20x1,5 Male, 9/16 -18 UNF-2B (high pressure connection)
Case Style:	Solid front with pressure relief back
Window:	Glass (STD.), safety glass, acrylic, non-glare glass (OPT.)
Movement:	Rotary, adjustable
Movement Materials:	Stainless steel 400, Teflon® coated pinion gear and segment
Dial:	Aluminum, white background, black scale
Pointer:	Micrometer, adjustable, aluminum
Weather Protection:	Dry case: Case not sealed, recommended for weather protected environment only
Dampening Options:	<b>PLUS!™</b> Performance, Throttle screw, dampeners, capillary, diaphragm seals and snubbers
Mounting:	Stem, surface (STD.), flush or remote (OPT.)
Approvals:	CRN, CE (PED), EAC

## WETTED COMPONENTS

Bourdon Tube	Process Connection Materials	Joints
1.4404 / 316L St.st.	1.4404 / 316L St.st.	Welded
1.4404 / 316L St.st.	Steel	Welded
K-Monel® 500	Monel® 400	Welded
C510 Phos. Bronze	Brass	Silver brazed

## KEY BENEFITS

- Ideal for panel mounting
- Available 8 ½" dial size for remote reading

## NON-WETTED COMPONENTS

Case	Ring	Back Cover
Aluminum, black epoxy	Steel, hinged, black enamel	Stainless steel 300

## MIN./MAX. TEMPERATURE LIMITS

VERSION	AMBIENT	PROCESS	STORAGE
Dry	-29 °C to 93 °C (-20 °F to 200 °F)	-29 °C to 121 °C (-20 °F to 250 °F)	-40 °C to 121 °C (-40 °F to 250 °F)
<b>PLUS!™</b>	-40 °C to 66 °C (-40 °F to 150 °F)	-40 °C to 93 °C (-40 °F to 200 °F)	-40 °C to 66 °C (-40 °F to 150 °F)

Note: Other than discoloration of the dial and hardening of the gasketing that may occur as ambient or process temperatures exceeds 150°F, non-liquid-filled gauges with standard glass windows, can withstand continuous operating temperatures up to 121 °C (250 °F). Accuracy at temperatures above or below the reference ambient temperature of 20 °C (68 °F) will be affected by approximately 0,3% per 10 K.

Gauges with welded joints will withstand 400 °C (750 °F), 232°C (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.

For continuous use and for process or ambient temperatures above 121 °C (250 °F), a diaphragm seal or capillary or siphon is recommended.

**1377 Duragauge<sup>®</sup> Pressure Gauge  
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<b>ORDERING CODE</b>		<b>EXAMPLE:</b>	<b>45</b>	<b>1377</b>	<b>S</b>	<b>S</b>	<b>04</b>	<b>L</b>	<b>1BR</b>	<b>XLL</b>
<b>Dial Size</b>										
45	4 ½" (115 mm)		45							
60	6" (152 mm)									
85	8 ½" (216 mm)									
<b>Model Code</b>										
1377	Solid front process gauge			1377						
<b>System (tube and process connection)</b>										
A	Bronze tube, brass process connection, Max. pressure 70 bar/1,000 psi									
P	K-Monel <sup>®</sup> 500 tube, Monel <sup>®</sup> 400 process connection, Max. pressure 2000 bar/30,000 psi									
R	1.4404/316L St.st. tube, steel process connection, Max. pressure 1400 bar/20,000 psi									
S	1.4404/316L St.st. tube and process connection, Max. pressure 1400 bar/20,000 psi				S					
<b>Case Design</b>										
S	Solid front case, dry					S				
<b>Process Connection Sizes</b>										
02	¼ NPT Male (N/A for ranges over 1400 bar/20,000 psi)									
04	½ NPT Male (N/A for ranges over 1400 bar/20,000 psi)						04			
09	9/16-18 UNF-2B (high pressure fitting, standard for pressures over 1400 bar/20,000 psi)									
15	G ½ B Male (system S only, N/A for ranges over 1000 bar/15,000 psi)									
16	M20x1,5 Male (system S only, N/A for ranges over 1000 bar/15,000 psi)									
<b>Process Connection Location</b>										
L	Lower							L		
B	Back									
<b>Range (coding examples only, see range table on page 4 for all standard ranges)</b>										
<b>Single Scales</b>										
15#	15 psi									
1BR	1 bar								1BR	
1KG	1 kg/cm <sup>2</sup>									
100KP	100 kPa									
<b>Dual Scales</b>										
15#/BR	15 psi inner scale / 1 bar outer scale									
1BR/#	1 bar inner scale / 15 psi outer scale									
<b>Options (If choosing an option(s) must include a "X")</b>										
<b>Dampening</b>										
LL	PLUS! <sup>™</sup> Performance									X_
NZ	PLUS! <sup>™</sup> Performance silicone free									
TS	Throttle screw (Standard with PLUS! <sup>™</sup> Performance)									
<b>Case/Ring/Dial</b>										
D3	DuraVis <sup>™</sup> Retroreflective Dial (4 ½" only)									LL

continued at page 3



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**ORDERING CODE**      **EXAMPLE:**    45    1377    S    S    04    L    1BR    XLL

Options (If choosing an option(s) must include a "X")

**Windows/Pointers**

- PD      Acrylic window
- SG      Safety glass
- NG      Non-glare glass
- EP      Maximum pointer, adjustable
- SH      Red set hand, stationary

**Bourdon tube system/Movement**

- OS      Overload stop
- VS      Underload stop
- TB      Tip Bleed (S tube only, 1400 bar/20,000 psi max.)
- AB      Gauges calibrated to compensate for absolute pressure
- PR      Receiver gauge 3-15 psi
- VY      Krytox Lubricated Movement (Silicone Free)

**Marking/Tagging**

- DA      Dial marking (Text marking on the dial)
- NH      Stainless steel tag wired to case

**Cleaning**

- 6B      Cleaned for oxygen service

**Testing/Certificates**

- C3      MTR according to EN 10204 3.1 (system S and P only)
- C4      Individual calibration chart (in accordance with ASME B40.100:2013. Accuracy traceable to NIST)
- C7      PED Declaration of conformity (for ranges  $\geq 200$  bar)
- EAC      EAC Declaration of conformity for Eurasian Customs Union
- HY      Hydrostatic/pneumatic testing  
 (system pressurized to 150% of rated system pressure for 5 minutes. Overload stop STD.)
- MQ      PMI positive material identification certificate
- ML      Mass spectrometer leak test



**1377 Duragauge<sup>®</sup> Pressure Gauge  
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**STANDARD PRESSURE RANGES**

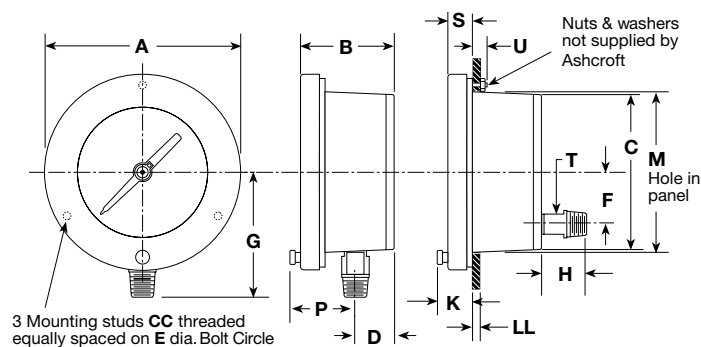
	psi	bar	kPa	MPa	kg/cm <sup>2</sup>
<b>Vacuum</b>	30IMV	N1BR	N100KP	N1MP	N1KG
	-	N1/0.6BR	N100/60KP	0.1/0.06MP	N1/0.6KG
<b>Compound</b>	V/15#	-	-	-	-
	-	N1/1.5BR	N100/150KP	N0.1/0.15MP	N1/1.5KG
	V/30#	-	-	-	-
	-	N1/3BR	N100/300KP	N0.1/0.3MP	N1/3KG
	V/60#	-	-	-	-
	-	N1/5BR	N100/500KP	N0.1/0.5MP	N1/5KG
	V/100#	-	-	-	-
	-	N1/9BR	N100/900KP	N0.1/0.9MP	N1/9KG
	15#	1BR	100KP	0.1MP	1KG
	20#	-	-	-	-
<b>Positive Pressure</b>	-	1.6BR	160KP	0.16MP	1.6KG
	30#	-	-	-	-
	-	2.5BR	250KP	0.25MP	2.5KG
	60#	4BR	400KP	0.4MP	4KG
	-	6BR	600KP	0.6MP	6KG
	100#	-	-	-	-
	120#	-	-	-	-
	-	10BR	1000KP	1MP	10KG
	160#	-	-	-	-
	200#	-	-	-	-
	-	16BR	1600KP	1.6MP	16KG
	300#	-	-	-	-
	-	25BR	2500KP	2.5MP	25KG
	400#	-	-	-	-
	500#	-	-	-	-
	600#	40BR	4000KP	4MP	40KG
	800#	-	-	-	-
	-	60BR	6000KP	6MP	60KG
	1000#	-	-	-	-
	1500#	100BR	10000KP	10MP	100KG
	2000#	-	-	-	-
	-	160BR	16000KP	16MP	160KG
	3000#	-	-	-	-
	-	250BR	25000KP	25MP	250KG
	4000#	-	-	-	-
	5000#	-	-	-	-
	6000#	400BR	40000KP	40MP	400KG
	8000#	-	-	-	-
-	600BR	60000KP	60MP	600KG	
10000#	-	-	-	-	
15000#	1000BR	100000KP	100MP	1000KG	
20000#	-	-	-	-	
-	1600BR	-	160MP	1600KG	
30000#	-	-	-	-	



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**DIMENSIONS IN MM [INCH]**

For reference only, consult Ashcroft for specific dimensional drawings

DIAL SIZE INCHES	A	B	C	D	E	F	G	H	K	M	P	S	T	U	CC	LL	WEIGHT (KG)
<b>4 1/2</b>	152 [6]	73 [2 7/8]	121 [4 3/4]	27 [1 1/16]	137 [5 3/8]	41 [1 5/8]	100 [3 15/16]	35 [1 3/8]	27 [1 1/16]	124 [4 7/8]	54 [2 1/8]	16 [5/8]	16 [5/8]	19 [3/4]	#10-24	3...13 [1/8...1/2]	1,13
<b>6</b>	192 [7 7/16]	73 [2 7/8]	121 [4 3/4]	27 [1 1/16]	178 [7]	41 [1 5/8]	114 [4 1/2]	35 [1 3/8]	27 [1 1/16]	165 [6 1/2]	54 [2 1/8]	16 [5/8]	16 [5/8]	19 [3/4]	1/4-20	3...13 [1/8...1/2]	1,13
<b>8 1/2</b>	257 [10 1/16]	73 [2 7/8]	121 [4 3/4]	27 [1 1/16]	244 [9 5/8]	41 [1 5/8]	152 [6]	35 [1 3/8]	27 [1 1/16]	229 [9]	54 [2 1/8]	16 [5/8]	16 [5/8]	19 [3/4]	1/4-20	3...13 [1/8...1/2]	2,04

**4 1/2" and 6" lower connection**
**4 1/2" and 6" back connection**

**8 1/2" lower connection**
**8 1/2" back connection**
