

Data Sheet

1187 Low Pressure Bellows Gauge

FEATURES

- Inches of water ranges
- Available with diaphragm seals
- Bellows-actuated mechanism
- Easy adjustable micrometer pointer
- Solid front safety case with pressure relief back
- Brass, 316 stainless steel or Monel® wetted parts

TYPICAL USES

- Oil & gas
- Chemical and petrochemical plants
- Water and wastewater pressure control
- Equipment skids
- Process and industrial applications



1187
4½" dial size



SPECIFICATIONS

Accuracy:	±2%-1%-2% (ASME B40.100 Grade A)
Dial Size:	4½"
Range:	10IW Vacuum to 10 psi
Process Connection Location:	Back
Process Connection Size:	¼ NPT Male, ½ NPT Male
Case Style:	Solid front (dry only)
Movement:	416 Stainless steel
Window Material:	Glass (STD.), Shatter proof glass (OPT.)
Dial:	White aluminum with black markings
Pointer:	Micrometer adjustable
Weather Protection:	IP54
Dampening Options:	Throttle screw, dampeners, capillary, diaphragm seals and snubbers
Mounting:	Flush

KEY BENEFITS

- Highly sensitive system providing a safe means for measuring process media
- Ideal product solution for many installations
- Rugged design

WETTED COMPONENTS

Bellows	Process Connection	Joints
Brass, 316 SS, Monel®	Brass, 316 SS, Monel®	Soldered: Brass Welded: 316 SS, Monel®

NON-WETTED COMPONENTS

Case	Ring	Back Cover
Aluminum, Black Epoxy Coated	Hinged Steel, Black Epoxy Coated	Polypropylene

MIN/MAX TEMPERATURE LIMITS

Version	Ambient	Process	Storage
Dry	-20 °F to 150 °F (-29 °C to 66 °C)	-20 °F to 150 °F (-29 °C to 66 °C)	-40 °F to 150 °F (-40 °C to 66 °C)

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ORDERING CODE	Example:	451187	S	S	02	B	XC4	10IW
Dial Size/Model Code								
451187 - 4½" aluminum case, solid front		451187						
System (tube and process connection)								
A - Brass bellows, brass process connection								
S - 316 Stainless steel bellows, stainless steel process connection			S					
P - K-Monel® 500 bellows, Monel® 400 process connection								
Case Design								
S - Solid front, dry				S				
Process Connection Sizes								
02 - ¼ NPT Male					02			
04 - ½ NPT Male								
Process Connection Location								
B - Back mount connection						B		
Options (If choosing an option(s) must include an "X")								
C4 - Traceable calibration certificate							X_	C4
D3 - DuraVis™ Retroreflective Dial								
6B - Cleaned for gaseous, oxygen service								
F8 - Gauge, flexible line assembly and diaphragm seal								
PD - Acrylic window								
SG - Safety glass								
NG - Non-glare glass								
DA - Marking on dial								
NH - Stainless steel tag wired to case								
NN - Paper tag bonded to case								
Range (coding examples only, see range table on page 3 for all standard ranges)								
Single Scales								
10IW - 10" H ₂ O								10IW

When selecting a diaphragm seal or isolation ring, refer to the [Min/Max Guide](#) for compatibility with this gauge or scan the QR code to the right.



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STANDARD PRESSURE RANGE							
	in. H ₂ O	mmHg	in. Hg	mmH ₂ O	psi	mbar	kPa
Vacuum	N10IW	N18MM	-	-	-	-	-
	N15IW	N28MM	-	-	-	-	-
	N20IW	N37MM	-	-	-	-	-
	N30IW	N56MM	-	-	-	-	-
	N40IW	N75MM	-	-	-	-	-
	N60IW	N110MM	-	-	-	-	-
	N80IW	N150MM	-	-	-	-	-
	N100IW	N180MM	-	-	-	-	-
	N150IW	N270MM	-	-	-	-	-
	-	-	N10IM	-	-	-	-
-	-	N15IM	-	-	-	-	-
-	-	N20IM	-	-	-	-	-
-	-	-	N125/125MW	-	N12.5/12.5MB	N1.25/1.25KP	-
Compound	N5/5IW	-	-	-	-	-	-
	-	-	-	N200/200MW	-	N20/20MB	N2/2KP
	N10/10IW	-	-	-	-	-	-
	-	-	-	N300/300MW	-	N30/30MB	N3/3KP
	-	-	-	N500/500MW	-	N50/50MB	N5/5KP
	N30/10IW	-	-	-	-	-	-
	N20/20IW	-	-	-	-	-	-
	N10/30IW	-	-	-	-	-	-
	N30/30IW	-	-	-	-	-	-
	N40/20IW	-	-	N800/800MW	-	N80/80MB	N8/8KP
	-	-	-	N1250/1250MW	-	N125/125MB	N12.5/12.5KP
	N70/30IW	-	-	-	-	-	-
	-	-	-	N2000/2000MW	-	N200/200MB	N20/20KP
-	-	-	N3000/3000MW	-	N300/300MB	N30/30KP	
Positive Pressure	5IW	-	-	-	-	-	-
	10IW	-	-	250MW	-	25MB	2.5KP
	15IW	-	-	-	-	-	-
	-	-	-	400MW	-	-	-
	-	-	-	-	-	40MB	4KP
	20IW	-	-	-	-	-	-
	-	-	-	600MW	-	-	-
	-	-	-	-	-	60MB	6KP
	30IW	-	-	-	-	-	-
	-	-	-	1000MW	-	-	-
	40IW	-	-	-	-	100MB	10KP
	-	-	-	-	-	-	-
	60IW	-	-	-	-	-	-
	-	-	-	1600MW	-	-	-
	-	-	-	-	-	160MB	16KP
	80IW	-	-	-	-	-	-
	-	-	-	2500MW	-	-	-
	100IW	-	-	-	-	250MB	25KP
	-	-	-	-	5#	-	-
	150IW	-	-	-	-	-	-
-	-	-	4000MW	-	-	-	
-	-	-	-	-	400MB	40KP	
-	-	-	-	8#	-	-	
-	-	-	6000MW	-	-	-	
-	-	-	-	-	600MB	60KP	
-	-	-	-	10#	-	-	

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DIMENSIONS in [] are millimeters

For reference only, consult Ashcroft for specific dimensional drawings

Dial Size Inches	A	B	E	F	H	I	K	M	S	U	CC	LL	Weight (lbs)
4 1/2	6 5/32 [155]	3 7/16 [87]	5 5/8 [137]	1 5/8 [40]	1 1/16 [40]	5/8 [16]	1 3/32 [28]	4 7/8 [124]	1 1/16 [17]	3/4 [19]	#10-24 24	1/16 - 1/4 [2] [6]	2.63 1.2 kg

