



Low pressures  
pressure gauges

# IMPL series



Ham-Let Industrial Mechanical  
Pressure gauges



# IMPL series

## data sheet:

### General:

The Industrial, L - Low pressures gauge series are gaseous media positive and negative low pressures measurement devices with long usability and durability for indoor, outdoor and harsh surroundings, industrial, instrumentation and process applications.

The L series pressure gauges is a capsule mechanical device, Case sizes 63, 100, 160mm (2½", 4", 6") suitable for vacuum to pressure up to 250inchH2O (600mbar)

### Features:

- All stainless steel case and wetted parts.
- Bayonet ring.
- Front-sided screw for zero point adjustment with an adjusting range of ±5%.
- Case is filled or dry.
- Case protection: IP 54.
- **Measuring ranges**
  - Vacuum/ Pressure: 0-1inchH2O up to 0-250inchH2O (0-2.5mbar up to 0-600mbar)  
For case size 63mm (2½") 0-25inchH2O (0-25mbar) and up.
  - Compound: -0.4-06inchH2O up to -150-100inchH2O (-1-1.5mbar up to -400-200mbar)  
For case size 63mm (2½") -4-6inchH2O (-10-15mbar) and up.

### Materials of construction

Part		Material
<b>Wetted parts:</b>	Process connection	SS 316L
	Bourdon tube	
<b>Case</b>		SS 304L
<b>Window</b>		Laminated safety glass
<b>Movement</b>		Stainless Steel
<b>Dial</b>		Aluminum (black figures, white background)
<b>Pointer</b>		Aluminum (black)

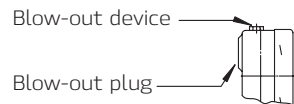
Ham-Let IMP gauges L Series



Technical Data L Series

Case Size		63mm (2½")	100mm (4")	160mm (6")
<b>Accuracy</b>		±1.6% of span EN 837-1 Class 1.6 ASME B40.1 Grade B	±1.6% of span EN 837-1 Class 1.6 ASME B40.1 Grade 1A	±1.6% of span EN 837-1 Class 1.6 ASME B40.1 Grade 1A
<b>Case Configurations</b>	<b>Process connection position</b>			
	<b>Mounting device (Optional)</b>			
<b>Process Connection</b>	½", 12mm Tube adapter			
	¾", 10mm Tube adapter			
	¼", 6mm Tube adapter			
	½" BSP-P/NPT		+	+
	¼" BSP-P/NPT	+	+	+
	1/8" BSP-P/NPT	+		
	M20x1.5		+	+
M12x1.5	+	+	+	
<b>Case Ventilation Filled Only</b>	By blow -out device		+	
<b>Weight</b> <sup>(1)</sup> Pound (Kg.)	Unfilled	0.44 (0.20)	1.32 (0.60)	2.20 (1.00) <sup>(2)</sup>
	Filled	0.57 (0.26)	2.09 (0.95)	3.97 (1.80) <sup>(2)</sup>

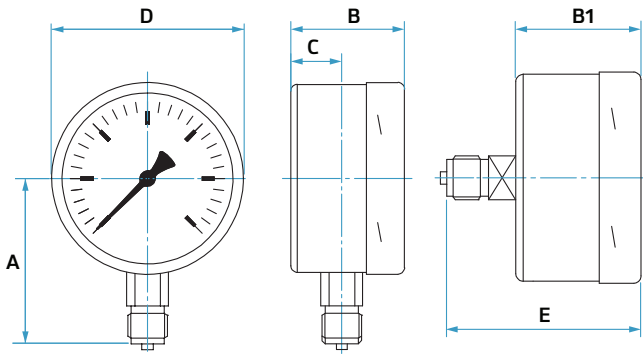
(1) Approx. without mounting device.  
 (2) For 160mm (6") ≥ 25mbar - Unfilled 2.09 (0.95), Filled 3.97 (1.80).





## Ham-Let IMP gauges L Series

### Configuration And Mounting Dimensions



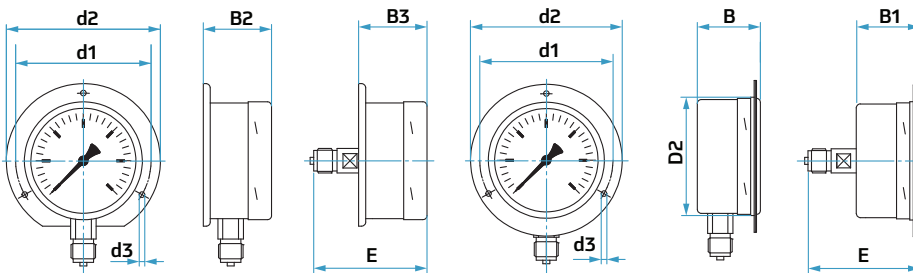
Lower Mount

Lower Back Mount

Case Size		A		B		B1		C		D		E	
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
63	2 1/2	54	2.13	38 (1)	1.5(1)	37	1.46	10	0.4	64	2.52	60	2.36
100	4	87	3.43	55	2.17	55	2.17	20 (2)	0.79 (2)	101	3.98	85	3.35
160	6	115	4.53	55	2.17	55	2.17	15	0.59	161	6.34	85	3.35
≤6 inCH <sub>2</sub> O (16mbar)				51	2.01	51	2.01	15	0.59			81	3.18
160	6	115	4.53	51	2.01	51	2.01	15	0.59	161	6.34	81	3.18
≥10 inCH <sub>2</sub> O (25 mbar)				51	2.01	51	2.01	15	0.59			81	3.18

### Back Flange Mounting

### Front Flange Mounting



Case Size		B2		B3		D2		d1		d2		d3	
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
63	2 1/2	41 (1)	1.61 (1)	40	1.57	66	2.6	75	2.95	85	3.35	3.6	0.14
100	4	59	2.32	59	2.32	103	4.06	116	4.57	132	5.20	4.8	0.19
160	6	58	2.28	58	2.28	163	6.42	178	7.01	196	7.72	5.8	0.23
≤6 inCH <sub>2</sub> O (16mbar)				54	2.13	54	2.13	163	6.42			178	7.01
160	6	54	2.13	54	2.13	163	6.42	178	7.01	196	7.72	5.8	0.23
≥10 inCH <sub>2</sub> O (25 mbar)				54	2.13	54	2.13	163	6.42			178	7.01

(1) For case size 63 filled: B=47 mm (1.85 inch), B2=50 mm (1.97 inch)  
 (2) For range ≤ 6 inCH<sub>2</sub>O (16mbar): C=15.5 mm (0.61 inch)

## Ordering Information For Industrial Mechanical Pressure Gauges

**OPTIONAL**

**IMP**

Industrial Mechanical Pressure gauge

**H**

Series

<b>H</b> - Heavy duty
<b>G</b> - General use
<b>S</b> - Safety pattern
<b>L</b> - Low pressures
<b>P</b> - Process

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Gauge size

	mm	inch
<b>40</b> -	40	1 1/2
<b>50</b> -	50	2
<b>63</b> -	63	2 1/2
<b>10</b> -	100	4
<b>11</b> -	115	4 1/2
<b>16</b> -	160	6

**- L P**

Process Connection Type

Connection type	Connection Size	
<b>P</b> - BSP-P	1/8, 1/4, 1/2	inch
<b>N</b> - NPT	1/8, 1/4, 1/2	inch
<b>M</b> - Metric (Mx1.5)	12M, 20M	mm
<b>T</b> - Tube adapter	06M,10M,12M	mm
	1/4 ,3/8 ,1/2	inch
<b>V</b> - Face Seal Male swivel	1/4	inch
<b>F</b> - Face Seal Female swivel	1/4	inch
<b>H</b> - High pressure Male	916	(9/16) inch
	High pressure Female	1/4 inch
		16m mm

**1/4**

Process Connection Location

<b>L</b>	Lower mount	
<b>B</b>	Lower Back mount	
<b>C</b>	Center Back mount	

**N - B**

Mounting Device

<b>N</b> - None
<b>R</b> - Rear Flange
<b>F</b> - Front Flange
<b>U</b> - U - Clamp

**PO25**

Dial Range Units\*

<b>B</b> - bar
<b>P</b> - psi
<b>M</b> - millibar
<b>K</b> - kPa
<b>I</b> - MPa
<b>H</b> - inH <sub>2</sub> O
<b>A</b> - psi/bar
<b>C</b> - psi/kPa
<b>D</b> - psi/kgf/cm <sup>2</sup>
<b>E</b> - bar/psi
<b>F</b> - MPa/bar
<b>G</b> - kPa/H <sub>2</sub> O
<b>T</b> - Meter
<b>L</b> - kgf/cm <sup>2</sup>
<b>O</b> - mm H <sub>2</sub> O
<b>S</b> - Atmosphere

**E**

Case

<b>D</b> - Dry
<b>E</b> - Fillable (Empty)
<b>G</b> - Glycerin (99%)
<b>L</b> - Low Temperature Glycerin (86%)
<b>S</b> - Silicon Oil

**-**

Dial Range

See Table page 28

See page 29

**\*Primary / Secondary units**

**Primary**  
Black outer scale, defines the gauge range

**Secondary**  
Red inner scale, corresponds with gauge range

## Ordering Information For Certification

Accuracy, Material and various standards conformance certifications are available for ordering.

**IMP**

Industrial Mechanical Pressure gauge

**C**

Certificate

**-**

Class

<b>00</b> - General
<b>21</b> - 2.1 <sup>(1)</sup> - Pass / fail
<b>22</b> - 2.2 <sup>(1)</sup> - Inspection
<b>31</b> - 3.1 <sup>(1)(2)</sup> -Test Results, Item approval

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Category

<b>A</b> - Accuracy <sup>(3)</sup>
<b>M</b> - Material <sup>(2)(4)</sup>
<b>S</b> - Standard conformance <sup>(5)</sup>
<b>T</b> - Quality Test

**M**

Type

<b>Blank</b> - General
<b>GC</b> - GOST - Customs declaration Russia
<b>GR</b> - GOST - R
<b>TR</b> - GOST-Type Russia
<b>TU</b> - GOST-Type Ukraine
<b>TK</b> - GOST-Type Kazakhstan
<b>S</b> - Standard conformance
<b>BP600</b> - Up to 600 bar (10,000 psi) scale
<b>BP01K</b> - Up to 1000 bar (15,000 psi) scale

**Blank**

(1) According EN10204 (2) Material certificate 3.1 is available for 63mm & up. (3) Per item (serial No.) (4) Per item type (5) Per order.

### Warning!

The system designer and user have the sole responsibility for selecting products suitable for their special application requirements, ensuring their safe and trouble-free installation, operation, and maintenance. Application details, material compatibility and product ratings should all be considered for each selected product. Improper selection, installation or use of products can cause property damage or personal injury.