

## IMPH series Data Sheet:

## General:

The industrial mechanical, H-Heavy duty pressure gauges series is designed to be used in industrial, instrumentation and process applications that require long durability with accuracy and easy maintainability for indoor, outdoor and harsh environments.
The H series pressure gauges are a bourdon tube mechanical devices. Case sizes $40,63,100,160 \mathrm{~mm}\left(11 / 2^{\prime \prime}, 21 / 2^{\prime \prime}, 4^{\prime \prime}, 6 "\right)$ suitable for vacuum to pressure up to 1000bar (15,000psi).

## Features:

- All stainless steel case and wetted parts.
- Bayonet ring and adjustable pointer for easy adjustment.
- Safety laminated glass front.
- Case is filled fillable dry.

Case protection: IP 65 (IP 54 for 160mm (6") case with range 30psi (2.5bar) and below).

- Safety category (EN 837-1) S1 for pressure gauges with blow-out device 100 mm (4") and 63 mm ( $21 / 2^{\prime \prime}$ ) cases.


## - Measuring Ranges

- Vacuum: 30" Hg Vac. to 0 psi (-1 to 0 bar)
- Compound: 30 " Hg Vac. through 0 to 300 psi
(-1 through 0 to 15 bar)
- Pressure: 0 to 15,000 psi ( 0 to 1,000 bar), 40 mm ( $11 / 2^{\prime \prime}$ ) case up to 10,000psi (600 bar)


## Materials of construction

| Part | Material |  |
| :--- | :--- | :--- |
| Wetted <br> Parts | Process <br> connection | SS 316L |
| Bourdon tube |  |  |$n$

## Technical data



| Case Size |  | 40mm (11/2") | $63 \mathrm{~mm}\left(21 / 2^{\prime \prime}\right)$ | 100 mm (4") | 160 mm (6") |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Accuracy | Up to <br> 6,000psi (400 bar) | $\pm 1.6 \%$ of span EN 837-1 Class 1.6 ASME B40.1 Grade B | $\pm 1.6 \%$ of span EN 837-1 Class 1.6 ASME B40.1 Grade B | $\pm 1.0 \%$ of span EN 837-1 Class 1.0 ASME B40.1 Grade 1A | $\pm 1.0 \%$ of span <br> EN 837-1 Class 1.0 <br> ASME B40.1 Grade 1A |
|  | 10,000psi (600bar) and above (4) | $\pm 2.5 \%$ of span EN 837-1 Class 2.5 ASME B40.1 Grade C | $\pm 2.5 \%$ of span EN 837-1 Class 2.5 ASME B40.1 Grade C | $\pm 1.0 \%$ of span EN 837-1 Class 1.0 ASME B40.1 Grade 1A | $\pm 1.0 \%$ of span EN 837-1 Class 1.0 ASME B40.1 Grade 1A |
| Case <br> Configurations | Process connection position | $\square$ | $\square \sim$ | - |  |
|  | Mounting device (Optional) |  |  | - - | - |
| Process Connection | 1/2", 12 mm Tube adapter |  |  | + |  |
|  | 3/8", 10mm Tube adapter | + (1) | + |  |  |
|  | 1⁄14", 6mm Tube adapter | + | + |  |  |
|  | 1⁄2" BSP-P/NPT |  |  | + | + |
|  | 1/4" BSP-P/NPT | + (1) | + | + | + |
|  | 1/8" BSP-P/NPT | + | + |  |  |
|  | M20×1.5 |  |  | + | + |
|  | M12×1.5 | + (1) | + | + | + |
|  | 1/4" face seal Male/Female swivel | + (1) | + |  |  |
| Blow-Out Device | Blow-out device at the top of the case |  |  |  | + |
|  | Blow-out plug in the back of the case, $\varnothing 40 \mathrm{~mm}\left(11 / 2^{\prime \prime}\right)$ |  |  | + |  |
|  | Blow-out plug at the top of the case |  | + |  |  |
| Case <br> Ventilation | By blow-out device / Plug |  | + |  | + |
|  | Internal pressure compensation by pressure equalizing membrane | + (2) |  | + |  |
| Weight (3) | Unfilled | 0.15 (0.07) | 0.40 (0.18) | 1.33 (0.60) | 2.43 (1.10) |
| Pound (Kg.) | Filled | 0.22 (0.10) | 0.55 (0.25) | 2.10 (0.95) | 4.30 (1.95) |

(1) Center back only
(2) For pressure ranges up to 0-200psi (0-16bar)
(3) Approx. without mounting device
(4) See Maximal pressure per connection type, page 6


Ham-Let IMP gauges H Series

Configuration And Mounting Dimensions


Lower Mount


Lower Back Mount


Center Back Mount

| Case Size |  | A |  | B |  | B1 |  | C |  | D |  | $E$ |  | F |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| mm | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch |
| 40 | 11/2 | 34.5 | 1.36 | 28 | 1.1 | 30 | 1.18 | 10 | 0.4 | 40 | 1.57 | 47 | 1.85 | - | - |
| 63 | $21 / 2$ | 54 | 2.13 | 33 | 1.3 | 37 | 1.46 | 10 | 0.39 | 64 | 2.52 | 59 | 2.32 | 18 | 0.71 |
| 100 | 4 | 87 | 3.43 | 55 | 2.17 | 55 | 2.17 | 20 | 0.79 | 101 | 3.98 | 97 | 3.82 | 30 | 1.18 |
| 160 | 6 | 115 | 4.53 | 51 | 2.01 | 51 | 2.01 | 15.5 | 0.61 | 161 | 6.34 | 92.5 | 3.64 | 30 | 1.18 |

## Back Flange Mounting

## Front Flange Mounting



| Case Size |  | B2 |  | B3 |  | D2 |  | d1 |  | d2 |  | d3 |  | d4 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| mm | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch |
| 40 | 2/11 | - | - | - | - | 41.8 | 1.64 | 51 | 2.01 | 61 | 2.4 | 3.6 | 0.14 | 46 | 1.81 |
| 63 | 2/12 | 36 | 1.42 | 40 | 1.57 | 66 | 2.6 | 75 | 2.95 | 85 | 3.35 | 3.6 | 0.14 | - | - |
| 100 | 4 | 58.5 | 2.3 | 58.5 | 2.3 | 103 | 4.06 | 116 | 4.57 | 132 | 5.2 | 4.8 | 0.19 | - | - |
| 160 | 6 | 54 | 2.13 | 54 | 2.13 | 163 | 6.42 | 178 | 7.01 | 196 | 7.72 | 5.8 | 0.23 | - | - |

