

Mid-West[®] Instrument



Now Available!

Model 105 TANK LEVEL GAUGE for LIQUID HYDROGEN SERVICE



No Liquid Fill required

***Over-Range Protection
High over Low
and Low over High!***



Mid-West Model 105 bellows design provides a simple, compact, accurate, direct-acting, low range differential pressure level indicator. Accuracy $\pm 1\%$ of Full Scale

Range Model 105: 0-10" H₂O to 0-50" H₂O (25 mbar to 125 mbar)

Benefits:

- Stainless Steel Gauge Front, Stainless Steel Body with Shatter-Proof Glass Lens.
 - Provides superior safety and corrosion resistance.
- Dry gauge design with no internal liquid fill
 - No costly clean up from liquid fill leaking
 - No chance of unacceptable or incompatible fill fluid being in the gauge.
 - No gauge damage/accuracy loss caused by liquid fill expansion or contraction when exposed to temperature extremes in Hydrogen level applications.
- Single bellows design is more compact and light weight.
 - Substantial weight savings over competitive range gauges.
 - Can be panel mounted in a one piece panel.
 - Can be mounted on tanks using std. 2" pipe mount brackets or 3/4" pipe nipple brackets.
- Mid-West Instrument performs Helium leak testing on units for Hydrogen service.

Product Description:

The Model 105 design is an all-stainless steel differential pressure gauge capable of operating at low differential pressures. Safe working pressure is 1500 PSIG standard. The DPI is equipped with a Bi-directional Over Pressure Relief Valve (OPV). When the Differential Pressure exceeds 130% of the range the OPV equalizes the pressure between the Hi and Lo side's 1/4" FNPT Dual top and bottom connections are provided as standard. The DPI is also equipped with a Micro adjust pointer, If necessary the pointer can be re-zeroed. Body is made of stainless steel with 316 Stainless Steel internals. Viton Seals are provided as standard with other elastomers available. Dial is 6" diameter with white lettering on a black dial.(white dial with black lettering optional) The temperature limits are rated at -40°C to 200°F. Proof pressure is two times working pressure at ambient temperatures.

Product Features:

- Ability to create custom dials for horizontal and vertical tanks
- Various Dial layouts available: **Single Scale, Dual Scale and Tri-Scale**
- Micro-Adjust pointer (if necessary the pointer can be re-zeroed)
- In house Oxygen Cleaning (optional)
- Private Labeling (optional)
- White ink on Black dial or Black ink on White dial
- **Industry best lead time reduces inventory requirements**



Gauge Specifications

| 105 | |
|------------------------------|---|
| Accuracy | ±1% of Full Scale |
| DP Range | 0-10" H2O to 0-50" H2O (25 mbar to 125 mbar) |
| Safe Working Pressure | 1500 PSIG (3000 PSIG optional) |
| Body Material | 316 Stainless Steel |
| Dial Case & Bezel | 316 Stainless Steel |
| Internals | 316 Stainless Steel Multiple Bellows |
| Port | Dual Top and Bottom, 1/4" FNPT connections with optional snubbers |
| Seals | Viton® Standard, other elastomers available |
| Dial | 6" Black dial with White lettering (White dial with Black lettering optional) |
| Standard Mounting | Panel Mountable |
| Optional Mounting | 2" Pipe Mount |
| Warranty | Five Year |

60 YEARS experience in the field of supplying quality Differential Pressure Gauges.

Proof Pressure: Two times working pressure at ambient temperatures

Temperature Limits: -40°F (-40°C) to 200°F (93°F)

Standards:

ASME B1.20.1 CSA-C22.2 No.14 NEMA Std. No. 250
ASME B40.100 UL Std. No. 50 SAE J514