# MPG2000BBL D4-M2 Min/Max Intrinsically Safe Battery-Powered Digital Pressure Gauges

meriam®

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- ▲ **Selectable Units, Min/Max, Shutoff Time**
- ▲ **Easy Keypad Setup and Zero**
- ▲ **±0.25% Test Gauge Accuracy**
- ▲ **316L Stainless Steel Sensor**
- ▲ **All Metal Housing**

Meriam MPG2000BBL series digital pressure gauges successfully address the modern demands of process pressure measurement in hazardous locations.

Standard features include min/max capture, zeroing on gauge reference ranges, selectable engineering units, pass code protection, adjustable display shutoff time, field recalibration and a ruggedized all-metal housing.

Typical applications are instrumentation and control in the process industries, hydraulics, pneumatics, industrial gases, and OEM applications.

**Agency Approval**
Factory Mutual Approved Intrinsically Safe for Hazardous Locations USA & Canada
Class I, Division 1, Groups A, B, C, D
T3C Ta = –40 to 82°C; T4 Ta = –40 to 66°C,
CL I Zone 0 AEx/Ex ia IIC
T3 Ta = –40 to 82°C; T4 Ta = –40 to 66°C

**Ranges and Resolution**
See table below. Units may be changed to any listed with same sensor range. Fixed resolution.

**Accuracy** (Includes linearity, hysteresis, repeatability)
Standard: ±0.25% of full scale ±1 least significant digit
**HA** option: ±0.1% FS ±1 LSD (see table for availability)

**Display**
3 readings per second nominal display update rate
4 digit LCD, 0.5" H and 5 character 0.25" H alphanumeric
Red LED backlight

**Batteries**
Two 1.5 V AAA Panasonic LR03 alkaline cells
Approx. 150 to 1000 hours depending on backlight usage
Low battery symbol on display

**Controls and Functions**
Center button turns gauge on or off, hold to zero gauge reference models, activate backlighting for 1 min. if low light detected, cycle through min/max functions.
▲ (Units) increase settings, engineering unit selection
▼ (Time) decrease settings, auto shutoff time selection
Internal lockout switch: disable setup and calibration.

**Auto Shutoff**
Default 5 minutes. Selectable 1 minute to 8 hrs or on/off.

**Min/ Max Memory**
Min/max can be user configured to be individually enabled or disabled, saved or cleared at power off

**Pass Code Protected Calibration**
Non-interactive zero, span, and linearity, ±10% of range

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**Overpressure, Burst, Vacuum**
2 X pressure range for 3 psi to 2000 psi sensors
5000 psig for ranges using 3000 psig sensor
7500 psig for ranges using 5000 psig sensor
Over-range and under-range display warnings
Vacuum service: 15 psig, 15 psia, 30 psia, 100 psig, 100 psia, 200 psig
Burst: 4 X pressure rating or 10,000 psi, whichever is less

**Weight**
9 ounces (approx.), shipping wt. 1 pound (approx.)

**Housing Materials and Circuit Board Protection**
Epoxy powder coated aluminum case, rear cover, and bezel. Rubber gaskets, polycarbonate label. Reinforced sensor area. Moisture resistant circuit board coating.

**Connection and Material**
1/4" NPT male fitting, 316L stainless steel wetted parts

**Temperature Ranges**

| | |
|---|---|
| Compensated: | 32 to 158°F (0 to 70°C) |
| Storage: | –40 to 203°F (–40 to 95°C) |
| Operating: | –40 to 180°F (–40 to 82°C) |

**Sensor Ranges and Engineering Units** * -HA option not available

| 3 psig * | Res | 15 psig vac * | Res | 30 psia | Res | –15V100psig * | Res | 300 psig | Res |
|---|---|---|---|---|---|---|---|---|---|
| 3PSIG | .001 | 100KPAVAC | .1 | 2KGCMA | .001 | 100PSIVAC | .1 | 300PSIG | .1 |
| 6INHGG | .001 | 0.1MPAVAC | .0001 | 2ATMA | .001 | 100PSICPD | .1 | 610INHGG | .1 |
| 85INH2OG | .1 | 1BARVAC | .001 | 30 psig | Res | 200INHGVAC | .1 | 4800ZING | 1 |
| 50ZING | .01 | 1KGCMVAC | .01 | 30PSIG | .01 | 2770INH2OVAC | 1 | 700FTH2O | .1 |
| 210GCMG | .1 | 1ATMVAC | .001 | 60INHGG | .01 | 1600ZINVAC | 1 | 2000KPAG | 1 |
| 150MMHGG | .1 | 15 psig | Res | 850INH2OG | 1 | 5200MMHGVAC | 1 | 2MPAG | .001 |
| 150TORRG | .1 | 15PSIG | .01 | 480ZING | .1 | 5200TORRVAC | 1 | 20BARG | .01 |
| 200MBARG | .1 | 30INHGG | .01 | 2100GCMG | 1 | 700KPAVAC | 1 | 20KGCMG | .01 |
| 200CMH2OG | .1 | 400INH2OG | .1 | 1600MMHGG | 1 | 0.7MPAVAC | .001 | 20ATMG | .01 |
| 2000MMH2OG | 1 | 240ZING | .1 | 1600TORRG | 1 | 7BARVAC | .01 | 500 psig | Res |
| 7FTH2O | .001 | 1000GCMG | 1 | 2000MBARG | 1 | 7KGCMVAC | .01 | 500PSIG | .1 |
| 20KPAG | .01 | 760MMHGG | .1 | 2100CMH2OG | 1 | 7ATMVAC | .01 | 1020INHGG | 1 |
| 5 psig * | Res | 760TORRG | .1 | 70FTH2O | .01 | 100 psig | Res | 1150FTH2O | 1 |
| 5PSIG | .001 | 1000MBARG | 1 | 200KPAG | .1 | 100PSIG | .1 | 3500KPAG | 1 |
| 10INHGG | .01 | 1000CMH2OG | 1 | 0.2MPAG | .0001 | 200INHGG | .1 | 3.5MPAG | .001 |
| 140INH2OG | .1 | 35FTH2O | .01 | 2BARG | .001 | 2770INH2OG | 1 | 35BARG | .01 |
| 80ZING | .1 | 100KPAG | .1 | 2KGCMG | .001 | 1600ZING | 1 | 35KGCMG | .01 |
| 350GCMG | .1 | 0.1MPAG | .0001 | 2ATMG | .001 | 7000GCMG | 1 | 35ATMG | .01 |
| 260MMHGG | .1 | 1BARG | 1 | 60 psig | Res | 5200MMHGG | 1 | 1000 psig | Res |
| 260TORRG | .1 | 1KGCMG | 1 | 60PSIG | .01 | 5200TORRG | 1 | 1000PSIG | 1 |
| 350MBARG | .1 | 1ATMG | 1 | 120INHGG | .1 | 7000MBARG | 1 | 2040INHGG | 1 |
| 350CMH2OG | .1 | ±15 psig * | Res | 1660INH2OG | 1 | 7000CMH2OG | 1 | 2300FTH2O | 1 |
| 3500MMH2OG | 1 | ±15PSIVAC | .01 | 960ZING | 1 | 230FTH2O | .1 | 7000KPAG | 1 |
| 12FTH2O | .01 | 15PSICPD | .01 | 4200GCMG | 1 | 700KPAG | .1 | 7MPAG | .001 |
| 35KPAG | .01 | ±30INHGVAC | .01 | 3100MMHGG | 1 | 0.7MPAG | .0001 | 70BARG | .01 |
| 15 psia | Res | ±400INH2OVAC | 1 | 3100TORRG | 1 | 7BARG | .001 | 70KGCMG | .01 |
| 15PSIA | .01 | ±240ZINVAC | .1 | 4100MBARG | 1 | 7KGCMG | .001 | 70ATMG | .01 |
| 30INHGA | .01 | ±1000GCMVAC | 1 | 4200CMH2OG | 1 | 7ATMG | .001 | 2000 psig | Res |
| 400INH2OA | .1 | ±760MMHGVAC | 1 | 140FTH2O | .1 | –15V200 psig * | Res | 2000PSIG | 1 |
| 240ZINA | .1 | ±760TORRVAC | 1 | 400KPAG | .1 | 200PSIVAC | .1 | 4070INHGG | 1 |
| 1000GCMA | 1 | ±1000MBARVAC | 1 | 0.4MPAG | .0001 | 200PSICPD | .1 | 4600FTH2O | 1 |
| 760MMHGA | .1 | ±1000CMH2OVAC | 1 | 4BARG | .001 | 400INHGVAC | .1 | 14MPAG | .01 |
| 760TORRA | .1 | ±100KPAVAC | .1 | 4KGCMG | .001 | 5500INH2OVAC | 1 | 140BARG | .1 |
| 1000MBARA | 1 | ±0.1MPAVAC | .0001 | 4ATMG | .001 | 3200ZINVAC | 1 | 140KGCMG | .1 |
| 1000CMH2OA | 1 | ±1BARVAC | .001 | 100 psia | Res | 1400KPAVAC | 1 | 140ATMG | .1 |
| 100KPAA | .1 | ±1KGCMVAC | .001 | 100PSIA | .1 | 1.4MPAVAC | .001 | 3000 psig | Res |
| 0.1MPAA | .0001 | ±1ATMVAC | .001 | 200INHGA | .1 | 14BARVAC | .01 | 3000PSIG | 1 |
| 1BARA | .001 | 30 psia | Res | 2770INH2OA | 1 | 14KGCMVAC | .01 | 6100INHGG | 1 |
| 1KGCMA | .001 | 30PSIA | .01 | 1600ZINA | 1 | 14ATMVAC | .01 | 6900FTH2O | 1 |
| 1ATMA | .001 | 60INHGA | .01 | 7000GCMA | 1 | 200 psig | Res | 20MPAG | .01 |
| 15 psig vac * | Res | 850INH2OA | 1 | 5200MMHGA | 1 | 200PSIG | .1 | 200BARG | .1 |
| 15PSIVAC | .01 | 480ZINA | .1 | 5200TORRA | 1 | 400INHGG | .1 | 200KGCMG | .1 |
| 30INHGVAC | .01 | 2100GCMA | 1 | 7000MBARA | 1 | 5500INH2OG | 1 | 200ATMG | .1 |
| 400INH2OVAC | .1 | 1600MMHGA | 1 | 7000CMH2OA | 1 | 3200ZING | 1 | 5000 psig | Res |
| 240ZINVAC | .1 | 1600TORRA | 1 | 700KPAA | .1 | 480FTH2O | .1 | 5000PSIG | 1 |
| 1000GCMVAC | 1 | 2000MBARA | 1 | 0.7MPAA | .0001 | 1400KPAG | 1 | 35MPAG | .01 |
| 760MMHGVAC | .1 | 2100CMH2OA | 1 | 7BARA | .001 | 1.4MPAG | .001 | 350BARG | .1 |
| 760TORRVAC | .1 | 200KPAA | .1 | 7KGCMA | .001 | 14BARG | .01 | 350KGCMG | .1 |
| 1000MBARVAC | 1 | 0.2MPAA | .0001 | 7ATMA | .001 | 14KGCMG | .01 | 340ATMG | .1 |
| 1000CMH2OVAC | 1 | 2BARA | .001 | | | 14ATMG | .01 | | |

**How to Specify**

**MPG2000BBL** range **-D4-M2 -** options

**Range**—see table at left

| | |
|---|---|
| psi = PSI | kg/cm² = KGCM |
| inHg = INHG | g/cm² = GCM |
| oz/in² = ZIN | kPa = KPA |
| $inH_2O$ = INH2O | MPa = MPA |
| $ftH_2O$ = FTH2O | mbar = MBAR |
| mmHg = MMHG | bar = BAR |
| torr = TORR | $cmH_2O$ = CMH2O |
| $mmH_2O$ = MMH2O | atm = ATM |

G = gauge reference pressure
CPD = compound; inHg vacuum, psi pressure
VAC = gauge reference vacuum
A = absolute reference

Any range may be ordered as the default engineering unit. If vacuum gauge requires a minus sign, please specify. The listed ranges are rounded off.

| **Optional**—add to end of model number | |
|---|---|
| **HA** | High accuracy, ±0.1% FS ±1 LSD. Not available with 3 psi, 5 psi, bipolar, or vacuum sensors. See table at left for availability. |
| **Accessories** | |
| **NC** | 5 point NIST traceability certificate, test data and date |
| **RRB** | Protective rubber boot |

Example: **MPG2000BBL300PSIG-D4-M2-HA**
Battery powered, backlit display, 0-300.0 psig, 4 digit display, min/max memory, high accuracy
Gauge model number may vary from part number ordered.

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