

## Model JH

### High Pressure Digital Pressure Gauge



#### DESCRIPTION

Using high pressure autoclave fittings, the Series JH digital pressure test gauge with 0.2 % full scale accuracy uses transducer technology and a stainless steel diaphragm for high over pressure protection. The transducer technology provides enhanced accuracy over the entire pressure range. The JH has no moving parts and thus, may provide a long life with fewer re-calibrations. The stainless steel NEMA construction also provides EMI and RFI protection.

The JH provides high resolution with an easy to read digital display. There are no operator errors due to interpolation of hash marks or parallax errors. The units can be scaled to read in various engineering units. PSI pressures are read x 10 with the 4½-digit display. The Model JHB provides a 4 mA to 20 mA, two-wire output. The Model JHE provides a 0 Vdc to 5 Vdc output. The Model JHR has two programmable limits and relays with no

analog output. The Model JHX provides a 0 Vdc to 5 Vdc output with two programmable limits and relays for process control or alarm indication. The Model JHW is powered by one or two common 9 V alkaline batteries. The Model JHT is powered by a 110 Vac adapter. The JHV, JHB, JHE, JHR and JHX models are powered by an 11 Vdc to 32 Vdc power supply.

Each unit has a membrane face with raised buttons and tactile feedback for setup and operation. The high, low, and clear buttons are easily accessible on this front membrane. Zero adjustment and zero offset/tare functions are standard on each unit. Calibration and setup parameters are stored on a memory chip to protect from loss even when power is interrupted. Unauthorized set ups and calibrations are also blocked with internal security. Various combinations of the front panel buttons can be deactivated.

#### FEATURES

- Pressure ranges from 15000 psi to 60000 psi gage
- Two programmable limits and relays (optional)
- Accuracy - 0.2 % full scale
- High and low detection - Microprocessor based
- 4 mA to 20 mA (two-wire) and 0 Vdc to 5 Vdc analog outputs (optional)
- Customer recalibration
- 4½ digit display with 0.5 in height
- Zero offset/tare
- On/off switch disable feature
- Two programmable limits and relays (optional)
- NEMA 4 rating (optional)
- NIST statement (standard)
- NIST traceable (optional)
- Optional carrying case and panel mounting ring

# Model JH

## PERFORMANCE SPECIFICATIONS

| Characteristic                  | Measure  |
|---------------------------------|--|
| Linearity and hysteresis        | 0.2 % full scale (better than test gauge accuracy)         |
| Pressure range 0 psi to         | 15000, 20000, 25000, 30000, 35000, 40000, 50000, 60000 psi |
| High and low capture            | Standard   |
| Update speed                    | 3 times per sec  |
| Zero and span signal adjustment | Standard: Models JHB, JHE, JHX                             |

## ENVIRONMENTAL SPECIFICATIONS

| Characteristic         | Measure                          |
|------------------------|----------------------------------|
| Temperature, operating | -1 °C to 71 °C [30 °F to 160 °F] |

## ELECTRICAL SPECIFICATIONS

| Characteristic        | Measure   |
|-----------------------|---|
| Rating                | NEMA 2 (optional NEMA 4)                                |
| Power, Model JHW      | One or two 9 V alkaline batteries (included)            |
| Power, Model JHT      | 110 Vac adapter @ 60 Hz (included)                      |
| Power, Model JHV      | 11 Vdc to 32 Vdc @ 100 mA (3 ft cable included)         |
| Power, Model JHB      | 11 Vdc to 32 Vdc (depending on loop resistance) @ 20 mA |
| Power, Model JHE      | 11 Vdc to 32 Vdc @ 100 mA                               |
| Power, Model JHR      | 11 Vdc to 32 Vdc @ 100 mA                               |
| Power, Model JHX      | 11 Vdc to 32 Vdc @ 100 mA                               |
| Electrical connection | 3 ft cable standard: Models JHB, JHE, JHR, JHX, JHV     |

## MECHANICAL SPECIFICATIONS

| Characteristic         | Measure  |
|------------------------|--|
| Diameter               | 93,98 mm [3.7 in]                                |
| Display                | 4½ LCD digits - 12,7 mm [0.5 in] high            |
| Pressure port          | 9/16-18 UNF-2B female (per Autoclave AE F 250-C) |
| Wetted parts           | Stainless steel                                  |
| Case material          | Stainless steel                                  |
| Face membrane          | Tactile feedback raised buttons                  |
| Calibration data       | Stored on memory chip                            |
| Low battery indication | Standard: Model JHW                              |
| Limits and relays      | Models JHR and JHX <sup>1</sup>                  |

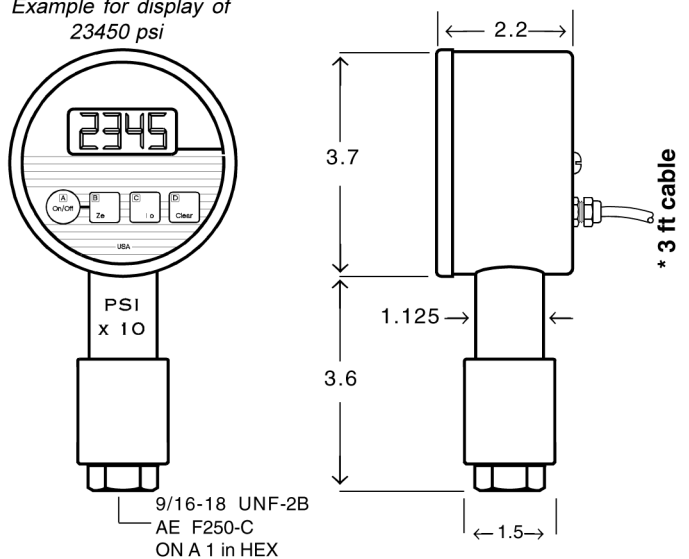
## ADDITIONAL SPECIFICATIONS

| Pressure range (psi)     | Maximum safe over pressure (psi) <sup>2</sup> | Incremental display steps |
|--------------------------|---|---------------------------|
| 0 psi to 15000 psi = 15K | 20000   | 1 x 10                    |
| 0 psi to 20000 psi = 20K | 25000   | 1 x 10                    |
| 0 psi to 25000 psi = 25K | 31000   | 1 x 10                    |
| 0 psi to 30000 psi = 30K | 37000   | 2 x 10                    |
| 0 psi to 35000 psi = 35K | 43000   | 5 x 10                    |
| 0 psi to 40000 psi = 40K | 50000   | 5 x 10                    |
| 0 psi to 50000 psi = 50K | 62000   | 5 x 10                    |
| 0 psi to 60000 psi = 60K | 75000   | 5 x 10                    |

<sup>2</sup> Maximum safe overpressure is the pressure which the unit can experience occasionally without the loss of accuracy or permanent damage

## MOUNTING DIMENSIONS AND CHARACTERISTICS

Example for display of 23450 psi



\* Models JHB, JHE, JHR, JHX, JHV

**No cable for battery powered Model JHW**

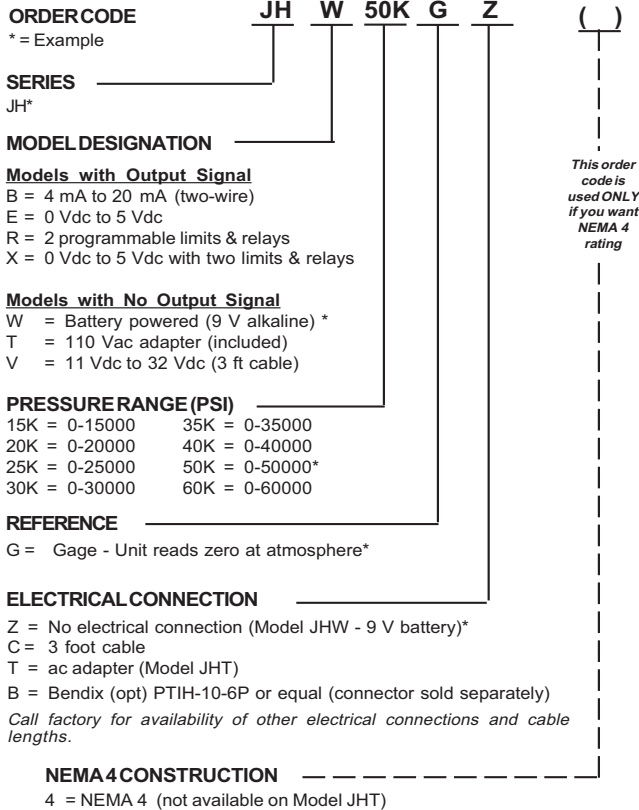
Request certified drawing before designing mountings or fixtures.  
Specifications subject to change without notice.

For reference only

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## ORDER GUIDE



### FIELD SELECTABLE STANDARD UNITS OF MEASURE

|                   |                           |
|-------------------|---------------------------|
| Bar = Bar         | Ft H2O = Feet of water    |
| MBar = Millibar   | In H2O = Inches of water  |
| kPa = Kilopascals | In Hg = Inches of mercury |
| MPa = Megapascals | mmHg = mm of mercury      |

*Consult factory for other units of measure not listed*

### NOTES

- The limit/relay models include two LED status indicators on front face and two form C relays (normally open, common, normally closed) that are rated at a maximum 24 Vdc/Vac at 1 A or 48 Vdc/Vac at 1/2 A.

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### WARNING PERSONAL INJURY

- DO NOT USE these products as safety or emergency stop devices or in any other application where failure of the product could result in personal injury.

**Failure to comply with these instructions could result in death or serious injury.**

### WARNING MISUSE OF DOCUMENTATION

- The information presented in this catalogue is for reference only. DO NOT USE this document as product installation information.
- Complete installation, operation and maintenance information is provided in the instructions supplied with each product.

**Failure to comply with these instructions could result in death or serious injury.**

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