

# Model JP: Food/ Pharmaceutical Digital Pressure Gauge



- Tri-Clover sanitary fittings
- Two programmable limits and relays (optional)
- Test gauge accuracy - 0.2 % full scale
- High and low detection - Microprocessor based
- NEMA 4
- Customer recalibration
- Zero offset/tare
- On/off switch disable feature
- Two programmable limits and relays (optional)
- NEMA 4 rating (optional)
- NIST statement

## Notes

1. 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.

**How to order:** (Quick-ship range/option combinations available. See Web site.)  
See order code information below.

## Order codes

See order guide on next page.

Using Tri-Clover sanitary fittings, the Series JP 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 JP 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 JP 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 such as InHg, Ft H<sub>2</sub>O, etc. The Model JPB provides a 4 mA to 20 mA, two-wire output. The Model JPE provides a 0 Vdc to 5 Vdc output. The Model JPR has two programmable limits and relays with no analog output. The Model JPX provides a 0 Vdc to 5 Vdc output with two programmable limits and relays for process control or alarm indication.

The Model JPW is powered by one or two common 9 V alkaline batteries. The Model JPT is powered by a 110 Vac adapter. The Model JPV is 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 de-activated. Please consult factory.

The Model JP has an on/off switch that can be operated in three different modes. In the first mode, the unit is turned on and off manually. In the second mode, the unit is set to remain on continuously, i.e., the unit cannot be turned off. In the third mode, the unit is turned on and off manually, and the unit also has an automatic shut off if the hi/lo button is not pushed after four minutes.

## Specifications

### Performance

Linearity and hysteresis	0.2 % full scale (better than test gauge accuracy)
Pressure range 0 psi to	1, 2, 5, 10, 20, 50, 100, 200, 500 psi
High and low capture	Standard
Update speed	3 times per sec
Zero and span signal adjustment	Standard: Models JPB, JPE, JPX

### Environmental

Temperature, operating	-1 °C to 71 °C [30 °F to 160 °F]
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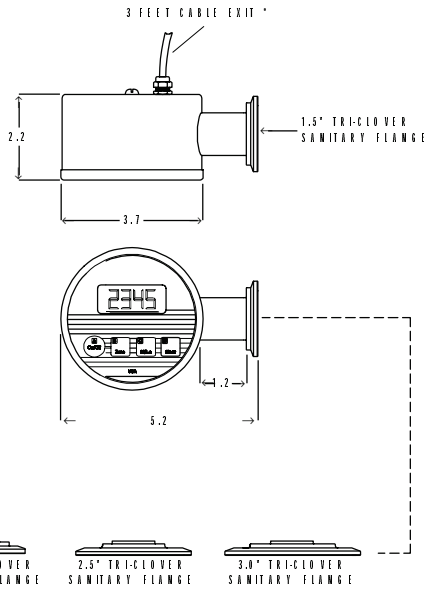
### Electrical

Rating	NEMA 4
Power, Model JPW	One or two 9 V alkaline batteries (included)
Power, Model JPT	110 Vac adapter @ 60 Hz (included)
Power, Model JPV	11 Vdc to 32 Vdc @ 100 mA (3 ft cable included)
Power, Model JPB	11 Vdc to 32 Vdc (depending on loop resistance) @ 20 mA
Power, Model JPE	11 Vdc to 32 Vdc @ 100 mA
Power, Model JPR	11 Vdc to 32 Vdc @ 100 mA
Power, Model JPX	11 Vdc to 32 Vdc @ 100 mA
Electrical connection	3 ft cable standard: Models JPB, JPE, JPR, JPX, JPV

### Mechanical

Diameter	93,98 mm [3.7 in]
Display	4½ LCD digits - 12,7 mm [0.5 in] high
Pressure port	Sanitary flanges: 1.5 in, 2.0 in, 2.5 in, 3.0 in
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 JPW
Limits and relays	Models JPR and JPX*

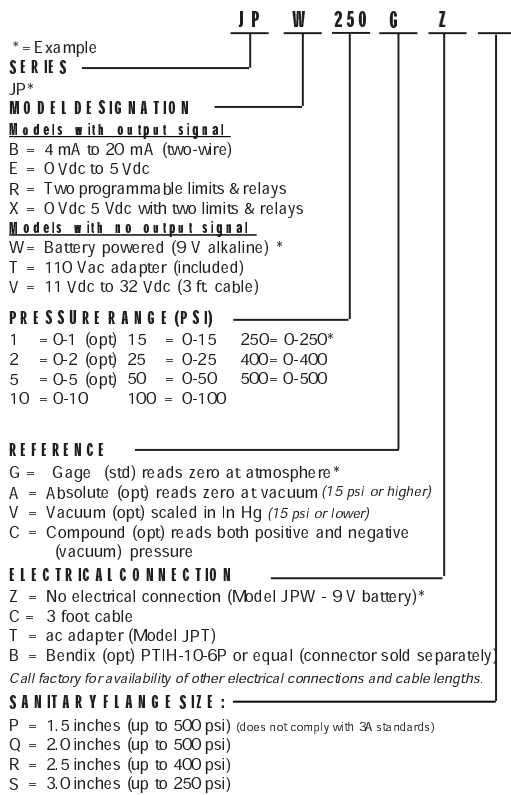
**Mounting dimensions and characteristics**



**\*Models JPB, JPE, JPR, JPX, JPW**  
**No cable for battery powered Model JPW**

Request certified drawing before designing mountings or fixtures.  
 For reference only § specifications subject to change without notice.

**Order guide**



**FIELD SELECTABLE STANDARD UNITS OF MEASURE**  
 Bar = Bar FtH<sub>2</sub>O = Feet of water  
 MBar = Millibar In H<sub>2</sub>O = 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

**Additional specifications**

Pressure range 0 to: (psi)	Maximum safe over pressure (psi) <sup>1, 2</sup>				Incremental display steps
	1.5 in flange dia.	2.0 in flange dia.	2.5 in flange dia.	3.0 in flange dia.	
1 (opt)	10	10	10	10	0.001
2 (opt)	15	15	15	15	0.002
5 (opt)	25	25	25	25	0.005
10	50	50	50	50	0.01
15	75	75	75	75	0.01
25	125	125	125	125	0.02
50	250	250	250	250	0.05
100	500	500	500	350	0.1
250	600	600	600	350	0.2
400	600	600	600	NA	0.5
500	600	600	NA	NA	0.5
Max. flange pressure at 100 °F	600	600	600	350	

<sup>1</sup> Maximum safe overpressure is the pressure which the unit can experience occasionally without the loss of accuracy or permanent damage.  
<sup>2</sup> Maximum pressure: 1 1/2, 2, 2 1/2 inch dia. flange - 600 psi at 100 °F; 3 inch dia. flange - 350 psi at 100 °F temperatures above; 100 °F reduce maximum flange pressure. Please call factory.

**Accessories order codes**

	Accessory
MR2	Panel mounting ring
NISTCERTS	NIST certification (in addition to NIST statement)
CC2	Carrying case

\* Stainless steel available