Honeywell

Model JA

High Accuracy Digital Pressure Gauge

DESCRIPTION

The Series JA digital pressure test gauge with 0.1 % full scale accuracy uses transducer technology and a stainless steel diaphragm for high overpressure protection. The transducer technology provides enhanced accuracy over the entire pressure range. The JA 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 JA 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 Model JAB provides a 4 mA to 20 mA, two-wire output. The Model JAE provides a 0 Vdc to 5 Vdc output. The Model JAR has two programmable limits and relays with no analog output. The Model JAX provides a 0 Vdc to 5 Vdc output with two programmable limits and relays for process control or alarm indication. The Model JAW is powered by one or two common 9 V alkaline batteries. The Model JAT is powered by a 110 Vac adapter. The Model JAV 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.

FEATURES

- 4 mA to 20 mA (two-wire) and 0 Vdc to 5 Vdc analog outputs
- Two programmable limits and relays (optional)
- High accuracy - 0.1 % full scale
- High and low detection - Microprocessor based
- Ranges to 10000 psi, gage or absolute
- 4½ digit display with 0.5 in height
- Customer recalibration
- Zero offset/tare
- On/off switch disable feature
- Two programmable limits and relays (optional)
- NEMA 4 rating (optional)
- Optional carrying case and panel mounting ring
- NIST traceable (optional)

Model JA

PERFORMANCE SPECIFICATIONS

Characteristic	Measure
Linearity and hysteresis	0.1 % full scale (better than test gauge accuracy)
Pressure range 0 psi to	10, 20, 50, 100, 200, 500, 1000, 2000, 5000 and 10000 psi
High and low capture	Standard
Update speed	3 times per sec
Zero and span signal adjustment	Standard: Models JAB, JAE, JAX

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 JAW	One or two 9 V alkaline batteries (included)
Power, Model JAT	110 Vac adapter @ 60 Hz (included)
Power, Model JAV	11 Vdc to 32 Vdc @ 100 mA (3 ft cable included)
Power, Model JAB	11 Vdc to 32 Vdc (depending on loop resistance) @ 20 mA
Power, Model JAE	11 Vdc to 32 Vdc @ 100 mA
Power, Model JAR	11 Vdc to 32 Vdc @ 100 mA
Power, Model JAX	11 Vdc to 32 Vdc @ 100 mA
Electrical connection	3 ft cable standard: Models JAB, JAE, JAR, JAX, JAV

MECHANICAL SPECIFICATIONS

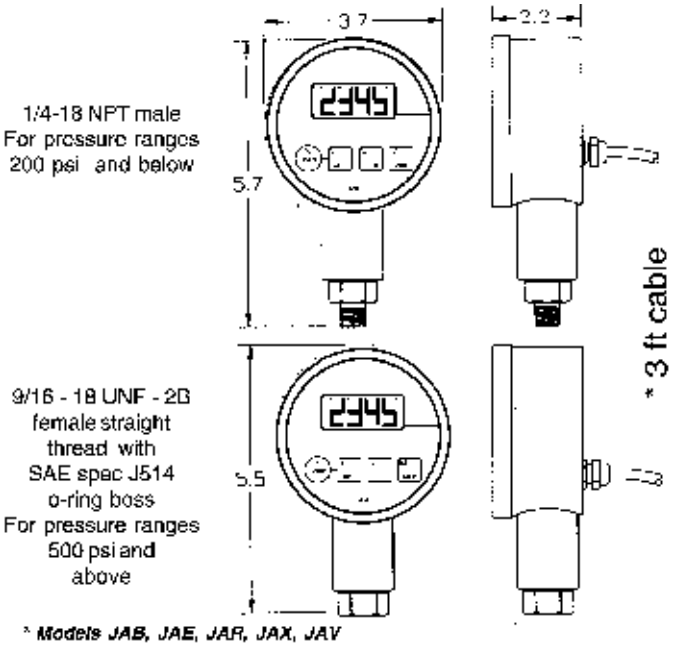
Characteristic	Measure
Diameter	93,98 mm [3.7 in]
Display	4½ LCD digits - 12,7 mm [0.5 in] high
Pressure port	1/4-18 NPT male (200 psi and below)
	1/4-18 UNF 2B female straight thread with SAE spec J514 o-ring boss (500 psi and above)
Wetted parts	Stainless steel
Case material	Stainless steel
Face membrane	Tactile feedback raised buttons
Calibration data	Stored on memory chip
Low battery indication	Standard: Model JAW
Limits and relays	Models JAR and JAX1

ADDITIONAL SPECIFICATIONS

Pressure range (psi)	Maximum safe over pressure (psi)[2]	Incremental display steps
0 psi to 10 psi = 10	50	0.01
0 psi to 20 psi = 20	100	0.01
0 psi to 50 psi = 50	250	0.05
0 psi to 100 psi = 100	500	0.1
0 psi to 200 psi = 200	1000	0.1
0 psi to 500 psi = 500	1500	0.5
0 psi to 1000 psi = 1K	2000	1
0 psi to 2000 psi = 2K	4000	1
0 psi to 5000 psi = 5K	7500	5
0 psi to 10000 psi = 10K	15000	5

[2] Maximum safe overpressure is the pressure which the unit can experience occasionally without the loss of accuracy or permanent damage

MOUNTING DIMENSIONS AND CHARACTERISTICS



For reference only

Model JA

High Accuracy Digital Pressure Gauge

ORDER GUIDE

JA W 1K G Z ( )

* = Example

SERIES

JA = High accuracy 0.1% full scale*

MODEL DESIGNATION

Models with Output Signal

B = 4 mA to 20 mA (two-wire)
E = 0 Vdc to 5 Vdc
R = 2 programmable limits & relays
X = 0 Vdc to 5 Vdc with two limits & relays

Models with No Output Signal

W = Battery powered (9 V alkaline) *
T = 110 Vac adapter (included)
V = 11 Vdc to 32 Vdc (3 ft. cable)

This order code is used ONLY if you want NEMA 4 Rating.

PRESSURE RANGE (PSI)

0-10 = 10	0-200 = 200	0-5000 = 5K
0-20 = 20	0-500 = 500	0-10000 = 10K
0-50 = 50	0-1000 = 1K*	
0-100 = 100	0-2000 = 2000	

REFERENCE

G = Gage (std) reads zero at atmosphere*
A = Absolute (opt) reads zero at vacuum*(15 psi or higher)*

ELECTRICAL CONNECTION

Z = No electrical connection (Model JAW - 9 volt battery)*
C = 3 foot cable
T = ac adapter (Model JAT)
B = Bendix (opt) PTIH-10-6P or equal (connector sold separately)

Call factory for availability of other electrical connections and cable lengths.

The following order code is used ONLY if you want this option.

NEMA 4 CONSTRUCTION

4 = NEMA 4 (not available on Model JAT)

FIELD SELECTABLE STANDARD UNITS OF MEASURE

Bar = Bar	Ft H20 = Feet of water
MBar = Millibar	In H20 = 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

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.

Warranty. Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Honeywell's standard product warranty applies unless agreed to otherwise by Honeywell in writing; please refer to your order acknowledgement or consult your local sales office for specific warranty details. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace, at its option, without charge those items it finds defective. **The foregoing is buyer's sole remedy and is in lieu of all warranties, expressed or implied, including those of merchantability and fitness for a particular purpose. In no event shall Honeywell be liable for consequential, special, or indirect damages.**

While we provide application assistance personally, through our literature and the Honeywell web site, it is up to the customer to determine the suitability of the product in the application.

Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this printing. However, we assume no responsibility for its use.

For more information about Sensing and Control products, visit www.honeywell.com/sensing or call +1-815-235-6847
Email inquiries to info.sc@honeywell.com

⚠ 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.

Sensing and Control
Automation and Control Solutions
Honeywell
1985 Douglas Drive North
Golden Valley, MN 55422 USA
+1-815-235-6847
www.honeywell.com/sensing

Honeywell

008690-1-EN IL50 GLO
May 2008