## Honeywell



## Model BX • oem pressure sensor

The Model BX pressure capsule is intended for OEM's needing a small, high performance pressure sensor. The unique sensor module design eliminates the need for oil filled capsules and corrugated diaphragms providing a true, robust sensing surface for long life and superior performance. Constructed of a brazed assembly of 300 series stainless steel, the BX can tolerate a wide variety of corrosive media without risk of leaking silicon oil. The small, flush mount diaphragm is ideal for medical, beverage and food processing applications where stringent sanitation requirements are necessary.

Unlike other low cost sensors, the BX's output is compensated for temperature changes, greatly improving system performance at no extra cost.


- Small size, low cost
- Oil free isolated sensor
- Flush mount, non-corrugated diaphragm
- High impedance device
- Constant current
- Ideal for portable equipment
- Eliminates risk of leaking \& contamination
- Satisfies sanitary requirements
- Low current draw, can be run on batteries
- Works with readily available $4-20 \mathrm{~mA}$ amplifier ICs



## TECHNICAL SPECIFICATIONS

## range

$15,25,50,100,200,300$ psig
( $1,2,3,7,14,20$ bar g)
(bar values are approximate)

## PHYSICAL

| Proof Pressure | $2 \times$ rated range |
| :--- | :---: |
| Burst Pressure | $10 \times$ rated range |
| Material in Contact | Brazed assembly of 300 series |
| With Media | SS parts |


| Shock | 50 g's peak (5 milliseconds) |
| :--- | :---: |
| Vibration | Meets MIL-STD-810-C, Figure 514.2-5, <br> Curve AP, 46.3 g rms minimum |
| Weight | Less than 0.5 oz (approx 13 gm ) |
| ELECTRICAL |  |


| Full Scale Output | $50 \mathrm{mV} \pm 1 \mathrm{mVdc}$ <br> at rated excitation @ $25^{\circ} \mathrm{C}$ |
| :--- | :---: |
| Zero Output | $0 \mathrm{mVdc} \pm 5 \%$ FSO @ $25^{\circ} \mathrm{C}$ |
| Excitation | $4 \mathrm{~mA} @ 5.0 \mathrm{Vdc}$ maximum |
| Input Impedance | 900 W (nominal) |
| Output Impedance | 5500 W (nominal) |
| Insulation Resistance | $1000 \mathrm{M} \mathrm{W} @ 250$ Vdc maximum |
| Electrical Connection | Four \#22 AWG solid wires |

## PERFORMANCE

| Accuracy | $\pm 1 \%$ FSO BFSL including effects of |
| :--- | :---: |
| nonlinearity, hysteresis and nonrepeatability |  |


| Operating | $-40^{\circ}$ to $212^{\circ} \mathrm{F}$ |
| :--- | :---: |
| Temperature Range | $\left(-40^{\circ}\right.$ to $\left.100^{\circ} \mathrm{C}\right)$ | | $50^{\circ}$ to $130^{\circ} \mathrm{F}$ |  |
| :--- | :---: |
| Compensated | $\left(0^{\circ}\right.$ to $\left.80^{\circ} \mathrm{C}\right)$ |
| Temperature Range | $\pm 1 \%$ FSO for any $55^{\circ} \mathrm{C}\left(100^{\circ} \mathrm{F}\right)$  <br> Thermal Effect change within the compensated range |
| on Zero | $\pm 1 \%$ for any $55^{\circ} \mathrm{C}\left(100^{\circ} \mathrm{F}\right)$ |
| Thermal Effect on | change within the compensated range |
| Full Scale Output |  |

NOTE: All specifications are measured at $25^{\circ} \mathrm{C}$ and rated excitation unless otherwise specified.

## DIMENSIONS

$x x . x x=$ inches
$(x x . x)=m m$


## WARRANTY/REMEDY

Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Contact your local sales office for warranty information. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace without charge those items it finds defective. The foregoing is Buyer's sole remedy and is in lieu of all other warranties, expressed or implied, including those of merchantability and fitness for a particular purpose.
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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.

