

## Model BDR

### Universal Pressure Transducer



#### DESCRIPTION

The BDR Series pressure transducers are suitable for universal test measurement applications in ranges from 150 psig to 15,000 psig. The BDR Series features 0.5 % BFSL (300 psig

and greater) or 0.75% BFSL (150 psig) accuracies. Designed to meet the demands of the OEM market.

#### FEATURES

- 0 psig to 150 psig, to 0 psig to 15000 psig range
- 4 mA to 20 mA or 0 Vdc to 5 Vdc output
- Welded stainless steel
- Configurable electrical connection
- Optional custom units of measurement available

# Model BDR

## PERFORMANCE SPECIFICATIONS

Characteristic	Measure
Pressure ranges	0 psig to 150 psig to 0 psig to 15000 psig
Accuracy <sup>4</sup> 150 psig range	±0.75 % best-fit straight line
Accuracy <sup>4</sup> 300 psig and above range	±0.5 % best-fit straight line
Output	±5 Vdc (option 2d) or 4 mA to 20 mA (option 2p)
Resolution	Infinite

## ENVIRONMENTAL SPECIFICATIONS

Characteristic	Measure
Temperature, operating	-29 °C to 85 °C [-20 °F to 185 °F]
Temperature, compensated	16 °C to 71 °C [60 °F to 160 °F]
Temperature effect, zero	0.01 % full scale/°F
Temperature effect, span	0.01 % full scale/°F

## ELECTRICAL SPECIFICATIONS

Characteristic	Measure
Excitation (acceptable) ±5 Vdc	9 Vdc to 28 Vdc @ 40 mA
Excitation (acceptable) 4 mA to 20 mA	9 Vdc to 28 Vdc
Electrical termination	PTIH-10-6P or equivalent

## MECHANICAL SPECIFICATIONS

Characteristic	Measure
Media	Gases, liquids compatible with stainless steel
Overload, safe	50 % over capacity
Overload, burst	250 % over capacity or 24000 psig whichever is less
Pressure port	1/4-18 NPT male
Wetted parts material	17-4 stainless steel, all-welded construction
Weight	10 oz

## RANGE CODES

Range Code	Available ranges	Range Code	Available ranges
CJ	150 psig	DL	2000 psig
CL	200 psig	DM	2500 psig
CN	250 psig	DN	3000 psig
CP	300 psig	DR	5000 psig
CR	500 psig	DS	6000 psig
CT	750 psig	DT	7500 psig
CV	1000 psig	DV	10000 psig
DJ	1500 psig	EJ	15000 psig

## OPTION CODES

Range Code	Many range/option combinations are available in our quick-ship and fast-track manufacture programs. Please see <a href="http://sensing.honeywell.com/TMsensor-ship">http://sensing.honeywell.com/TMsensor-ship</a> for updated listings.
Pressure ranges	150, 200, 300, 500, 750, 1000, 1500, 2000, 2500, 3000, 5000, 7500, 10000, 15000 psig
Temperature compensation	1a. 60 °F to 160 °F 1j. 0 °C to 50 °C 1k. -20 °C to 85 °C 1m. -25 °C to 100 °C
Internal amplifiers	2d. ±5 Vdc 2p. 4 mA to 20 mA (two-wire output)
Pressure ports	5b. 1/4-18 NPT male
Electrical termination	6a. Bendix PTIH-10-6P (or equivalent), 6 pin (max 250 °F) 6m. DIN 43650 6n. DIN 40050 6q. Molded integral cable: Polyurethane

## Universal Pressure Transducer/Transmitter

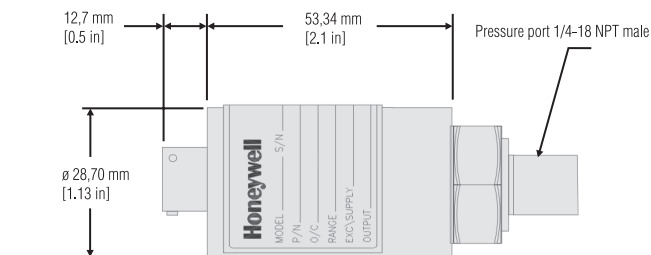
### INTERNAL AMPLIFIERS

Amplifier specifications	Vehicle voltage output: Option 2d	Current two-wire: Option 2p
Output signal	5 Vdc	4 mA to 20 mA
Input power (voltage)	9 Vdc to 28 Vdc	9 Vdc to 28 Vdc
Input power (current)	40 mA	4 mA to 28 mA
Frequency response	300 Hz	300 Hz
Power supply rejection	60 db	60 db
Operating temperature	-20 °F to 185 °F	-20 °F to 185 °F
Reverse voltage protection	Yes	Yes
Short circuit protection	Momentary	Yes
Wiring code: connector (std) <sup>5</sup>	A (+) Supply B Output com.** C Supply ret.** D (+) Output E No connection F No connection	A (+) Supply B No connection C No connection D (+) Output E Case ground F No connection
Wiring code: cable <sup>1,2</sup>	R (+) Supply BI Output com* G Supply ret.* W (+) Output	R (+) Supply BI (+) Output W Case ground

\* Black and green wires are internally connected.

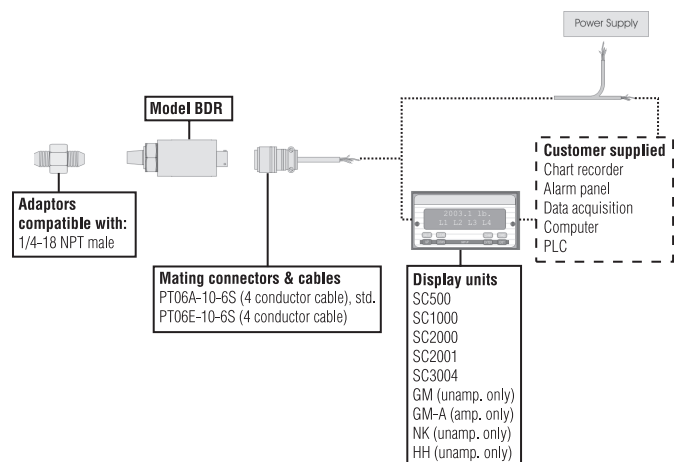
\*\* Pins B and C are internally connected.

### MOUNTING DIMENSIONS AND CHARACTERISTICS



For reference only

### TYPICAL SYSTEM DIAGRAM



### SPECIAL REQUIREMENTS (CONSULT FACTORY)

Have a special requirement? New case pressure, different cable lengths, electrical connectors, or materials? Consult our factory by calling +1 614-850-5000 (800-848-6564). Customization is key to our test and measurement business. Special outputs, wiring codes, and calibrations are all standard to us.

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## NOTES

1. G=Green; B=Blue; W=White; Bl=Black; Br=Brown; Y=Yellow; R=Red; O=Orange. Color specifying cable and number or letter specifying connector.
2. No mating connector necessary with cable option.
3. Pins B and C are internally connected.
4. Accuracies stated are expected for best-fit straight line for all errors, including linearity, hysteresis & non-repeatability thru zero. For 0.25% accuracy, consult factory.
5. Interconnecting shunt cal. 1 terminal with shunt cal. 2 terminal provides 50 % (unamplified units), 75 % (4 mA to 20 mA three-wire only), 80 % (voltage amp) of full scale output for quick calibration.
6. Output varies with range.

## Find out more

Honeywell serves its customers through a worldwide network of sales offices, representatives and distributors. For application assistance, current specifications, pricing or name of the nearest Authorized Distributor, contact your local sales office. To learn more about Honeywell's test and measurement products, call **+1-614-850-5000**, visit **[www.honeywell.com/sensotec](http://www.honeywell.com/sensotec)**, or e-mail inquiries to **[info.tm@honeywell.com](mailto:info.tm@honeywell.com)**

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# Universal Pressure Transducer/Transmitter

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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.

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.

## **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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