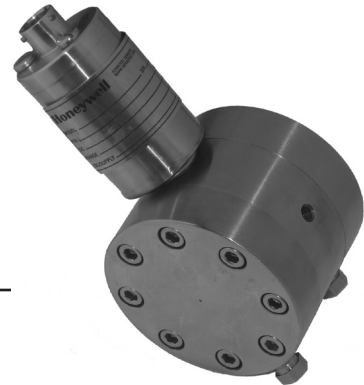


Model 420

DP Mid Range Two Wire Wet/Wet Differential Pressure Transducer



DESCRIPTION

The Model 420 DP two-wire mid range differential pressure transmitters utilize supply voltage of 9 Vdc to 32 Vdc to produce a two-wire 4 mA to 20mA process loop output for differential pressure ranges of 50 psid to 750 psid. A minimum full scale accuracy of 0.5% is achieved. Stainless steel construction ensures

durability under harsh, industrial conditions and includes zero and span adjustments. A variety of options are available with the Model 420 including choice of pressure adaptors and pressure ports.

FEATURES

- 0.5% accuracy
- 50 psid to 750 psid range
- Stainless steel
- Intrinsically safe available (2N option only)⁴
- CE approved⁵

Model 420

PERFORMANCE SPECIFICATIONS

Characteristic	Measure
Pressure ranges	50, 75, 100, 150, 200, 300, 500, 750 psid
Accuracy	±0.5 % full scale
Linearity	±0.25 % full scale (typical)
Hysteresis	±0.13 % full scale (typical)
Non-repeatability	±0.07 % full scale (typical)
Output (standard)	4 mA to 20 mA
Line pressure	1500 psi
Resolution	Infinite

ENVIRONMENTAL SPECIFICATIONS

Characteristic	Measure
Temperature, operating	18 °C to 82 °C [0 °F to 180 °F]
Temperature, compensated	16 °C to 71 °C [60 °F to 160 °F]
Temperature, effect, zero	±1.0 % full scale/ 38 °C [100 °F]
Temperature, effect, span	±1.0 % reading/ 38 °C [100 °F]

ELECTRICAL SPECIFICATIONS

Characteristic	Measure
Strain gage type	Bonded foil
Excitation (calibration)	15 Vdc to 40 Vdc
Maximum load resistance	500 ohm
Shunt calibration data	Included
Elec. termination (std)	PTIH-10-6P or equiv. (Hermetic stainless)
Mating conn. (not incl)	PT06A-10-6S or equiv. (AA111)

MECHANICAL SPECIFICATIONS

Characteristic	Measure
Media	Gas, liquid
Overload-safe	1500 psi either side
Pressure port	1/8-27 NPT female (2)
Wetted parts material	17-4 PH stainless steel
Case material	Stainless steel

RANGE CODES

Range Code	RANGE	Range Code	RANGE
BN	50 psid	CL	200 psid
BP	75 psid	CP	300 psid
BR	100 psid	CR	500 psid
CJ	150 psid	CT	750 psid

OPTION CODES

Range Code	Many range/option combinations are available in our quick-ship and fast-track manufacture programs. Please see http://sensing.honeywell.com/TMsensor-ship for updated listings.
Pressure ranges (psid)	50, 75, 100, 150, 200, 300, 500, 750
Temperature compensation	1a. 60 °F to 160 °F 1c. 0 °F to 185 °F 1b. 30 °F to 130 °F
Internal amplifiers	2k. 4 mA to 20 mA (two wire)
Internal amplifier enhancements	3d. Remote buffered shunt calibration
Pressure ports²	5h. 1/8-27 NPT female 5c. 7/16-20 UNF female
Electrical termination	6a. Bendix PTIH-10-6P (or equiv.) 6 pin (250 °F) 6h. Integral cable: Silicone (-54 °C to 150 °C) 6e. Integral cable: Teflon (-54 °C to 245 °C) 6i. Integral underwater cable (8 m [26 ft]) (max. 80 °C) ¹ 6f. Integral cable: PVC (-30 °C to 70 °C) 6j. 1/2-14 conduit fitting with 1,5 m [5 ft] 4 conductor PVC cable 6g. Integral cable: Neoprene (-20 °C to 80 °C) ¹
Special calibration	9a. 10 point (5 up/5 down) 20% increments @ 20 °C [68 °F] 9b. 20 point (10 up/10 down) 20% increments @ 20 °C [68 °F]
Wetted diaphragm	17-4 stainless steel
O-ring seals	26a. Metal 26c. Teflon

WIRING CODES

Connector/ two-wire current/ 4 mA to 20 mA	
A	(+) supply
B	No connection
C	No connection
D	(+) output (4 mA to 20 mA)
E	Case ground
F	No connection

Model 420

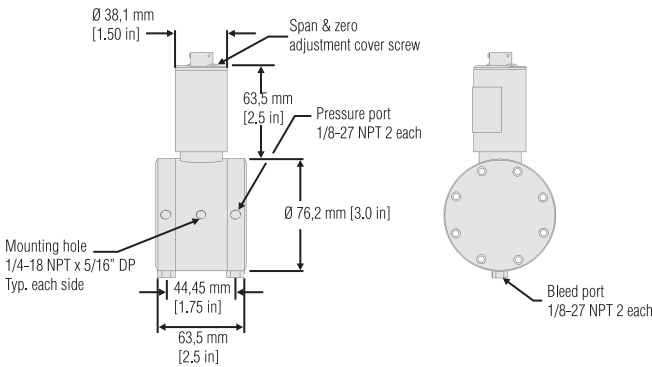
DP Mid Range Two Wire Wet/Wet Differential Pressure Transducer

NOTES

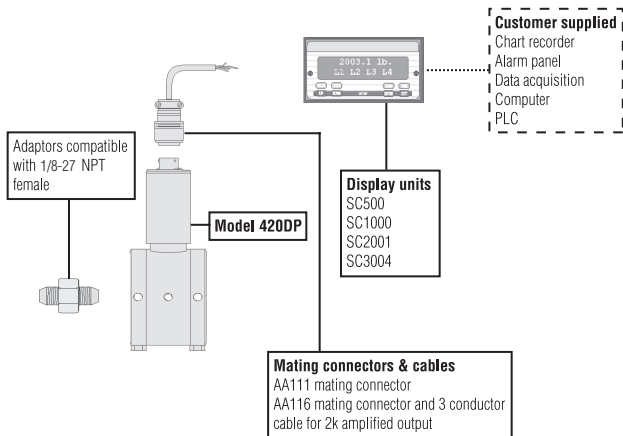
1. Availability varies according to range.
2. Some pressure port options may require axial orientation.
3. Range dependent; consult factory. Termination dependent; consult factory.
4. Internal amp and termination dependent; consult factory.

Unless otherwise specified on order, amplified units with 4 mA to 20 mA output will provide 4 mA at 0 psid and 20 mA at positive full scale and the unit will not operate in the negative direction. An available alternative is to specify 4 mA at negative full scale and 20 mA at positive full scale.

MOUNTING DIMENSIONS AND CHARACTERISTICS



TYPICAL SYSTEM DIAGRAM



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.

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