

AVAILABLE  
with Signature  
Calibration  
SEE PG. IN-5

# Mid Range Wet/Wet Differential Pressure Transducers

Models Z and A-5



CENELEC



APPROVED  
INTRINSICALLY  
SAFE AMP

50 TO 750 PSID

ACCURACY TO 0.25%

HIGH LINE

AMPLIFIED OUTPUT AVAILABLE



SENSOTEC Models Z and A-5 Mid Range Wet/Wet Differentials are high accuracy, bonded foil strain gage transducers designed to accept fluid in both ports and measure differential pressure ranges of 50 to 750 psid. Standard features such as overload stops and stainless steel construction provide unit durability in rugged industrial environments. Each series is bi-directional and achieves accuracies of .25-.5% full scale. The models are available with extended temperature ranges. Typical applications include flow measurement, depth sensing, pressure equalization, and liquid level.

## Dimensions

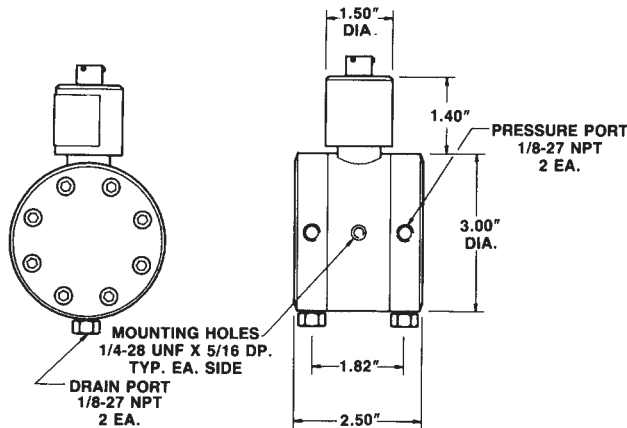
Model Z (Order Code AD122)

Model A-5 (Order Code AD123)

Available Ranges\*

**50; 75; 100; 150; 200; 300; 500; 750** psid

\* Stocked ranges are in bold faced print. Model A-5 is stocked complete and semi-complete. Model Z is stocked semi-complete (3-6 weeks) only.



Model Z or A-5

## Options (See Appendix)

Temperature compensated 1b, 1c, 1d, 1e, 1f; Internal amps 2b, 2c, 2n, 2j; Amp enhancements 3b, 3d; Electrical termination 6e, 6f, 6g, 6h; Int. shunt cal 8a; 25b; Signature calibration 53e

**Premium Options:** 1g, 1i; 2q; 3a; 5c; 6b, 6c, 6i; 10a; 26a

**Accessories:** Mating connectors and connector/cable assemblies; Pressure port adapters

1-800-848-6564

Honeywell  
SENSOTEC

www.honeywell.com/sensing

		<b>Model Z</b> Order Code AD122	<b>Model A-5</b> Order Code AD123
<b>PERFORMANCE</b>	Pressure Ranges.....	50 to 750 psid	50 to 750 psid
	Accuracy (min) .....	±0.25% F.S.	±0.5% F.S.
	Non-Linearity (max).....	±0.15% F.S.	±0.25% F.S.
	Hysteresis (max) .....	±0.10% F.S.	±0.13% F.S.
	Non-Repeatability (max).....	±0.05% F.S.	±0.07% F.S.
	Output (standard) .....	2mV/V	2mV/V
	Resolution .....	Infinite	Infinite
<b>ENVIRONMENTAL</b>	Temperature, Operating .....	-65° F to 250° F	-65° F to 250° F
	Temperature, Compensated .....	60° F to 160° F	60° F to 160° F
	Temperature Effect		
	– Zero (max).....	.5% F.S./100° F	.75% F.S./100° F
	– Span (max).....	.5% Rdg./100° F	1% Rdg./100° F
<b>ELECTRICAL</b>	Strain Gage Type .....	Bonded foil	Bonded foil
	Excitation (calibration) .....	10VDC	10VDC
	Excitation (acceptable).....	Up to 10VDC or AC	Up to 15VDC or AC
	Insulation Resistance .....	5000 megohm @ 50VDC	5000 megohm @ 50VDC
	Bridge Resistance .....	350 ohm	350 ohm
	Shunt Calibration Data .....	Included	Included
	Wiring Code (std) .....	#2 (See Pg. AP-8)	#2 (See Pg. AP-8)
	Electrical Termination (std).....	PTIH-10-6P or equiv. (Hermetic stainless)	PTIH-10-6P or equiv.
	Mating Connector (not incl.).....	PT06A-10-6S or equiv.	PT06A-10-6S or equiv.
<b>MECHANICAL</b>	Media.....	Gas, Liquid	Gas, Liquid
	Maximum Line Pressure .....	1500 psi	1500 psi
	Maximum Overload – safe (either side) .....	1500 psi	1500 psi
	Pressure Port .....	1/8-27 NPT	1/8-27 NPT
	Tapped Mounting Hole (2ea) .....	1/4-28 UNF x 5/16 DP	1/4-28 UNF x 5/16 DP
	Drain Port .....	1/8-27 NPT	1/8-27 NPT
	Wetted Parts Material.....	17-4 PH Stainless	17-4 PH Stainless
	Weight .....	5.0 lbs.	5.0 lbs.
	O-Ring Seals.....	viton	viton
	Dead Volume.....	0.25 cu. in.	0.25 cu. in.
Case Material .....	17-4 Stainless	17-4 Stainless	
<b>INTERNALLY AMPLIFIED UNITS (Optional)</b>	Outputs Available .....	±5VDC, 4-20mA	±5VDC, 4-20mA
	Additional Length.....	2"	2"

**NOTE:** Unless otherwise specified on order, amplified units with **4-20mA output will provide 4mA at 0 psid and 20mA at positive full scale** and the unit will not operate in the negative direction. An available alternative is to specify 4mA at negative full scale and 20mA at positive full scale. Intrinsically safe amp (Option 2n) adds 2" to amplifier housing.

## General Information

How to order (See Pg. AP-19)  
Differential pressure selection flow chart (See Pg. DP-1)

AVAILABLE  
with Signature  
Calibration  
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# High Range Wet/Wet Differential Pressure Transducers

## Models Z and A-5



**AMPLIFIED OUTPUT AVAILABLE**

**2000 to 10,000 psid**

**ACCURACY TO 0.25%**

SENSOTEC Z and A-5 High Range Wet/Wet transducers are engineered to measure differential pressures as great as 10k psid and achieve accuracies of 0.25%-0.5% full scale. Each series is bi-directional and accepts fluid in both ports. 17-4 PH stainless steel ensures durability of these bonded foil strain gage units under harsh industrial conditions. Typical applications include flow measurement, depth sensing, pressure equalization, and hydraulic testing.

**PERFORMANCE**

	<b>Model Z</b> Order Code: BD141	<b>Model A-5</b> Order Code: BD142
Pressure Ranges.....	2000 to 10,000 psid	2000 to 10,000 psid
Accuracy.....	+/- 0.25% F.S.	+/- 0.5% F.S.
Non-Linearity (max).....	+/- 0.15% F.S.	+/- 0.25% F.S.
Hysteresis (max).....	+/- 0.10% F.S.	+/- 0.13% F.S.
Non-Repeatability (max).....	+/- 0.05% F.S.	+/- 0.07% F.S.
Output (standard).....	2mV/V	2mV/V
Resolution.....	Infinite	Infinite

**ENVIRONMENTAL**

Temperature, Operating.....	-65° F to 250° F	-65° F to 250° F
Temperature, Compensated.....	60° F to 160° F	60° F to 160° F
Temperature Effect		
- Zero (max).....	0.5% F.S./100° F	0.75% F.S./100° F
- Span (max).....	0.5% Rdg./100° F	1% Rdg./100° F

**ELECTRICAL**

Strain Gage Type.....	Bonded foil	Bonded foil
Excitation (calibration).....	10VDC	10VDC
Bridge Resistance.....	350 ohm	350 ohm
Wiring Code (std).....	#2 (See Pg. AP-8)	#2 (See Pg. AP-8)
Electrical Termination (std)	PTIH-10-6P or equiv. (Hermetic stainless)	PTIH-10-6P or equiv.
Mating Connector (not incl.).....	PT06A-10-6S or equiv.	PT06A-10-6S or equiv.

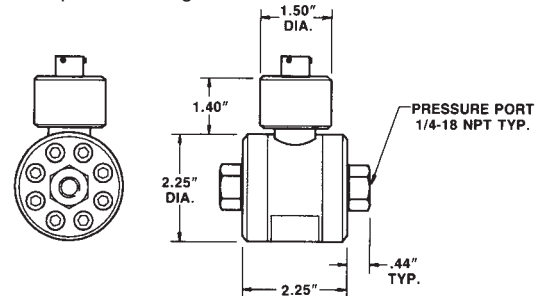
**MECHANICAL**

Media.....	Gas, Liquid	Gas, Liquid
Maximum Line Pressure.....	2000 psi	2000 psi
Maximum Overload - safe..... (either side)		
2000 to 3000 psid.....	100% over capacity	100% over capacity
5000 to 10,000 psid.....	50% over capacity	50% over capacity
Pressure Port.....	1/4-18NPT female	1/4-18NPT female
Wetted Parts Material.....	17-4 PH Stainless	17-4 PH Stainless
Case Material.....	17-4 PH Stainless	17-4 PH Stainless

**NOTES** \*Unless otherwise specified on order, amplified units with **4-20mA output will provide 4mA at 0 psid and 20mA at positive full scale** and the unit will not operate in the negative direction. An available alternative is to specify 4mA at negative full scale and 20mA at positive full scale. Intrinsically safe amp (option 2n) adds 2" to amplifier housing.

**Dimensions**

**Models Z (Order Code BD141)**  
**Models A-5 (Order Code BD142)**  
Available Ranges  
2,000; 3,000; 5,000; 7,500; 10,000 psid



**Options (See Appendix)**

Temperature compensated 1b, 1c, 1d, 1e, 1f; Internal amps 2b, 2c, 2n, 2j, Amp enhancements 3b, 3d; Electrical termination 6e, 6f, 6g, 6h, Int. shunt cal 8a, 25b, Signature calibration 53e.

**Premium Options:** 2q, 3a, 5c, 6b, 6c, 6i, 6j

**Accessories:** Mating connectors and connector/cable assemblies, Pressure port adapters

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