

## Model 2030

## Aerospace Grade Differential Pressure Transducer



Model 2030 is an aerospace grade differential pressure transducer, digitally corrected to provide high-accuracy pressure measurement in an analog output. ASI proprietary sensor design provides added zero stability and high shock and vibration applications including commercial aviation, military, aerospace, UAV, satellite and defense applications.

### Applications

Aviation and suborbital spacecraft  
Commercial and military satellites  
Ground and engine testing  
Test stand

### Benefits

Fomblin oil for O2 applications

### Model Specifications & Performance at 70°F

|                                                                   |                                                                |
|-------------------------------------------------------------------|----------------------------------------------------------------|
| Pressure Ranges Available:                                        | 0 to 1 thru 0 to 500 psid<br>bi-directional or uni-directional |
| Output                                                            | Excitation                                                     |
| 0 to 5 Vdc                                                        | 9 to 32 Vdc                                                    |
| 0.5 to 4.5 Vdc                                                    | 5 Vdc Regulated                                                |
| 4 to 20 mA                                                        | 9 to 32 Vdc                                                    |
| 0 to 10 Vdc                                                       | 14 to 32 Vdc                                                   |
| Accuracy*                                                         | <±0.1% FSO typ., ±0.05% FSO optional                           |
| Proof Pressure                                                    | 3X Range, dependant on port and material<br>4X range optional  |
| Burst Pressure                                                    | 5.0X Range, dependant on port and material                     |
| Line Pressure                                                     | 1,000 psi max                                                  |
| Zero Offset                                                       | ±0.5% FSO (orientation effect, <5 psid)                        |
| Span Tolerance                                                    | ±0.5% FSO                                                      |
| Response Time                                                     | <2 ms typ.                                                     |
| * Accuracy includes linearity(BFSL), hysteresis and repeatability |                                                                |

### Physical Description

|                       |                                                                   |
|-----------------------|-------------------------------------------------------------------|
| Wetted material       | 316L SST, Hastelloy C276                                          |
| Internal Fill         | Fomblin Oil, Silicon Oil optional                                 |
| Electrical Connection | PTIH-10-6P standard, D38999/27YA35PN,<br>Cable, options available |

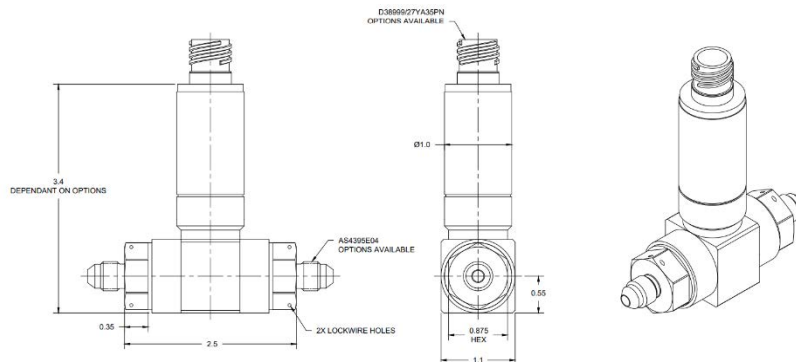
### Environmental Data

#### Temperature

|                   |              |                                                                          |
|-------------------|--------------|--------------------------------------------------------------------------|
| Compensated Range | 0 to 180°F   | standard with ±1 FSO/100°F<br>thermal effect<br>±0.25 FSO/100°F optional |
| Operating Range   | -40 to 250°F |                                                                          |

#### Other

|           |                       |
|-----------|-----------------------|
| Shock     | 100G, 11mS, half sine |
| Vibration | 20Grms, 20 to 2000 Hz |



|                                                                                                                                                                                                                                                                                                                                                                  |     |                       |               |        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------------------|---------------|--------|
| AMERICAN SENSING                                                                                                                                                                                                                                                                                                                                                 | REV | Configuration Control | Document Name | Sheet  |
| CAGE CODE: 8RPR4                                                                                                                                                                                                                                                                                                                                                 | -   | 1                     | DS2030        | 1 of 2 |
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## Ordering Information

**2030**      **D**      **4**      **00500**      **P**      **5**      **B**      **1**      **Blank**  
**MODEL**

### Pressure Reference

D = Differential

### Process Connection

A = 1/4 NPT(M)

B = 1/8 NPT(M)

F = 7/16-20 UNF-2A

1 = AS4395E04

3 = AS5202-04

4 = AS930-04

### Pressure Measurement

See Pressure Code Chart, always five digits

### Pressure Unit

B = bar

P = psi

### Outputs

P = 0.5 to 4.5 Vdc Regulated

2 = 0 to 5 Vdc, 3 wire

4 = 4 to 20 mA

5 = 0 to 10 Vdc, 3 wire

### Electrical

B = Bendix 6 pin, PTIH-10-6P

T = 2 ft Cable

2 = D38999/27YA35PN

### Wetted Material

1 = 316L SST

4 = Hastelloy C276

### Options

Blank = No options

001 = Custom Options, See Factory

'X' in any space = speical

\*for additional options or to create your own, contact ASI

### Standard Wiring

| Pin | 4-20 mA      | Vdc 3 Wire  | Vdc 4 wire/ mV |
|-----|--------------|-------------|----------------|
| 1/A | +EXC (R)     | +EXC (R)    | +EXC (R)       |
| 2/B | -EXC/OUT (G) | -EXC/COM(B) | +OUT (G)       |
| 3/C | N/C          | +OUT(G)     | -OUT (W)       |
| 4/D | N/C          | N/C         | -EXC (B)       |
| 5/E | N/C          | N/C         | N/C            |
| 6/F | N/C          | N/C         | N/C            |

### Pressure Code Chart

| PSI      | Pressure Code | Bar     | Pressure Code |
|----------|---------------|---------|---------------|
| 0 to 1   | 00001         | 0 to 1  | 00001         |
| 0 to 30  | 00050         | 0 to 5  | 00005         |
| 0 to 100 | 00100         | 0 to 10 | 00010         |
| 0 to 200 | 00200         | 0 to 15 | 00015         |
| 0 to 250 | 00250         | 0 to 20 | 00020         |
| 0 to 500 | 00500         | 0 to 30 | 00030         |

\* Custom options available

\*4 wire is non-isolated, contact factory for 4 wire Vdc isolated. Cutom pinout available. One pin may be for Manf use only

|                                                                                                                                                                                                                                                                                                                                                                  |     |                       |               |        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------------------|---------------|--------|
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| CAGE CODE: 8RPR4                                                                                                                                                                                                                                                                                                                                                 | -   | 1                     | DS2030        | 2 of 2 |
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