



## Description & Features:

- Approved for intrinsically-safe applications in Class 1/Div. 1 hazardous areas
- Rugged stainless steel construction with ceramic sensor
- Available ranges include in/Hg up to 8,700 psi
- Wide range of mechanical and electrical connections
- 0.5% FSO accuracy
- NEMA 4X and 6P / IP65, IP67 and IP68
- Approved for outdoor use
- Customizable
- 5 year warranty



## Applications:

- Appropriate for all hazardous areas where an intrinsically safe rating is required, including oil & gas and chemical installations

| Specifications              |                                                                                                                                                                              |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Output Signal               | Standard 2-wire: 4-20 mA / Vs = 8-32 Vdc<br>I.S. protection: Vs = 14-28 Vdc<br>Optional 3-wire: 0-20 mA / Vs = 14-30 Vdc<br>0-10 V / Vs = 14-30 Vdc                          |
| Accuracy                    | ±0.5% FSO IEC 60770                                                                                                                                                          |
| Permissible Load            | Current 2-wire: Rmax = [(Vs - Vs min) / 0.02] Ohm<br>Current 3-wire: Rmax = 500 Ohm<br>Voltage 3-wire: Rmin = 10 kOhm                                                        |
| Influence Effects           | Supply: 0.05% FSO / 10 V<br>Load: 0.05% FSO / kOhm                                                                                                                           |
| Response Time               | ≤10 ms                                                                                                                                                                       |
| Thermal Error               | ≤±0.2% FSO / 10K<br>In compensated range: -13°F to 185°F (-25°C to 85°C)                                                                                                     |
| Permissible Temperatures    | Medium: -40°F to 257°F (-40°C to 125°C)<br>Electronics environment: -13°F to 185°F (-25°C to 85°C)<br>Storage: -40°F to 212°F (-40°C to 100°C)                               |
| Short-circuit Protection    | Permanent                                                                                                                                                                    |
| Reverse Polarity Protection | No damage. No function.                                                                                                                                                      |
| Electromagnetic Protection  | Emission and immunity according to EN 61326                                                                                                                                  |
| I.S. Protection             | Class 1, Div. 1, Groups A, B, C & D                                                                                                                                          |
| Stability                   | Vibration: 10 g RMS (25 to 2,000 Hz)<br>Shock: 500 g / 1 ms                                                                                                                  |
| Pollution Degree            | 4, electrical equipment for outdoor use                                                                                                                                      |
| Housing                     | 316L SS                                                                                                                                                                      |
| Pressure Port               | 316L SS                                                                                                                                                                      |
| Wetted Parts                | Seals: P <sub>N</sub> < 1,450 psi: FKM70. Others available.<br>P <sub>N</sub> > 1,450 psi: FKM90. Others available.<br>Diaphragm: Ceramic Al <sub>2</sub> O <sub>3</sub> 96% |

|                     |                                                                                                                                                         |
|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| Weight              | 140 g                                                                                                                                                   |
| Current Consumption | Current: 25 mA max<br>Voltage: 7 mA max                                                                                                                 |
| Operating Life      | >100 x 10 <sup>6</sup> cycles                                                                                                                           |
| Connecting Cables   | Cable capacitance: Signal line/shield and signal line/signal line: 160 pF/m<br>Cable inductance: Signal line/shield and signal line/signal line: 1 µH/m |

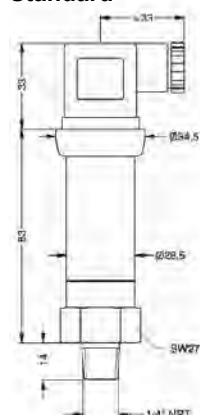
## Order Codes

| Range       | Over-pressure | Burst Pressure | Code   |
|-------------|---------------|----------------|--------|
| 30" Hg Vac  | 58 psi        | 102 psi        | LIS382 |
| 0/15 psi    | 29 psi        | 58 psi         | LIS383 |
| 0/20 psi    | 58 psi        | 73 psi         | LIS384 |
| 0/35 psi    | 58 psi        | 73 psi         | LIS385 |
| 0/60 psi    | 145 psi       | 174 psi        | LIS386 |
| 0/85 psi    | 145 psi       | 174 psi        | LIS387 |
| 0/145 psi   | 290 psi       | 363 psi        | LIS388 |
| 0/230 psi   | 580 psi       | 725 psi        | LIS389 |
| 0/360 psi   | 580 psi       | 725 psi        | LIS390 |
| 0/580 psi   | 1,450 psi     | 1,740 psi      | LIS391 |
| 0/870 psi   | 1,450 psi     | 1,740 psi      | LIS392 |
| 0/1,500 psi | 2,901 psi     | 3,626 psi      | LIS393 |
| 0/2,300 psi | 5,802 psi     | 7,252 psi      | LIS394 |
| 0/3,600 psi | 5,802 psi     | 7,252 psi      | LIS395 |
| 0/5,800 psi | 8,702 psi     | 9,427 psi      | LIS396 |
| 0/8,700 psi | 11,603 psi    | 12,763 psi     | LIS397 |

Note: Intrinsically safe approval only applies to 4-20mA output signal

## Mechanical Connection

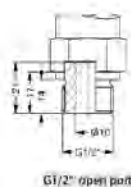
### Standard



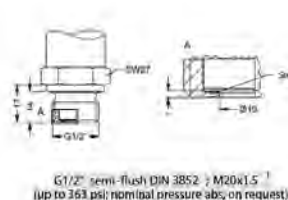
### Optional



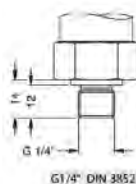
G1/2" EN 837



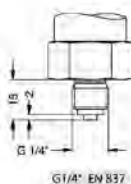
G1/2" (port) port



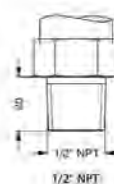
G1/2" semi-flush DIN 3852 : M20x1.5<sup>1</sup>  
(up to 363 psi; nominal pressure abs; on request)



G1/4" DIN 3852



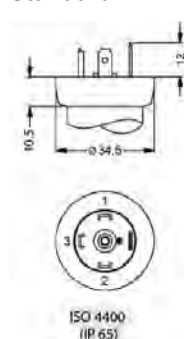
G1/4" EN 837



1/2" NPT

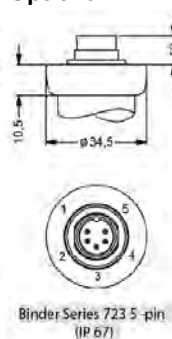
## Electrical Connection

### Standard

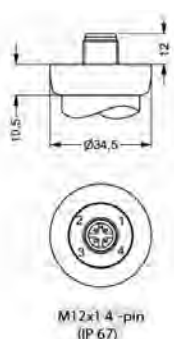


ISO 4400  
(IP 65)

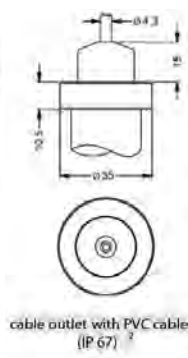
### Optional



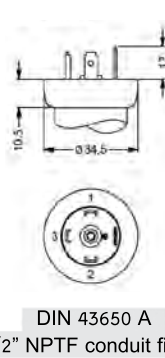
Binder Series 723 5-pin  
(IP 67)



M12x1 4-pin  
(IP 67)



cable outlet with PVC cable  
(IP 67)<sup>2</sup>



DIN 43650 A  
1/2" NPTF conduit fitting



compact field housing  
(IP 67)

## Pin Configuration

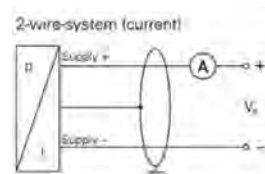
| Pin Configuration     |          |            |                    |               |                                                                                     |                           |
|-----------------------|----------|------------|--------------------|---------------|-------------------------------------------------------------------------------------|---------------------------|
| Electrical Connection |          | ISO 4400   | Binder 723 (5-pin) | M12x1 (4-pin) | Field Housing                                                                       | Cable Colours (DIN 47100) |
| 2-wire system         | Supply + | 1          | 3                  | 1             | IN +                                                                                | White                     |
|                       | Supply - | 2          | 4                  | 2             | IN -                                                                                | Brown                     |
|                       | Ground   | Ground pin | 5                  | 4             |  | Yellow/green (shield)     |
| 3-wire system         | Supply + | 1          | 3                  | 1             | IN +                                                                                | White                     |
|                       | Supply - | 2          | 4                  | 2             | IN -                                                                                | Brown                     |
|                       | Signal + | 3          | 1                  | 3             | OUT +                                                                               | Green                     |
|                       | Ground   | Ground pin | 5                  | 4             |  | Yellow/green (shield)     |

Note: Measurements are in mm

- <sup>1</sup> Possible for nominal pressure ranges ≤ 360 psi  
<sup>2</sup> Standard: 2m PVC cable without ventilation tube.  
 Optional: Cable with ventilation tube

## Wiring Diagram

### Standard



### Optional

