

## Industrial Automation

IMI Norgren

**34D Electronic Pressure Sensor** for Pneumatic & Allfluid Applications



Breakthrough engineering for a better world

| Introduction                                | 2 |
|---|---|
| Electronic Pressure Sensors                 | 3 |
| 34D Electronic Pressure Sensor with IO-Link | 4 |
| Technical Specifications                    | 6 |
| Standard Options                            | 6 |
| Accessories                                 | 7 |

# Breakthrough engineering for a better world

We create solutions for our customers which enable smarter, safer, more productive and sustainable factories, production lines and warehouse operations. Our pneumatic and electric motion systems help machine builders and end users around the world automate and optimise manufacturing and warehousing processes.

We have partnered with customers in industrial automation for over a century, applying our experience and innovation to create lasting value for their businesses. Our solutions support critical industries such as automotive, food and beverage, pharmaceuticals and even the space industry. We support the automation of precision manufacturing, product assembly, testing and packaging.

We use the latest digital technologies in our automation products and constantly innovate in close partnership with our customers. By applying our deep expertise, we can solve their toughest automation challenges, today and tomorrow. Through increased productivity, efficiency and safety, our customers can serve their own customers better, creating sustainable competitive advantage and delivering growth.

Our world-class product portfolio includes IMI Norgren, IMI Bimba, and IMI Bahr.

#### Electronic Pressure Sensors

Pressure sensing technology is critical when pressure monitoring for plant security, or pressure control for high level functionality are needed in an application.

Pressure sensors can be used to automatically monitor pressure levels in a pneumatic system, or be used for more complex monitoring functions in air, water, hydraulic or any allfluid fluid applications.

We can offer our customers over 50 years of pressure switch and sensor technology experience and expertise to find the appropriate solution for our customers.

Electronic pressure sensors are particularly suitable in applications where the classic mechanical pressure switch is not suitable.

Offering benefits in accuracy, life span and functionality our range is suitable for modern manufacturing technologies. Pressure set points are programmable either manually or remotely via IO-Link, with high levels of visibility via LEDs and digital displays.









## 34D Electronic Pressure Sensor with IO-Link

The IMI Norgren 34D pressure sensor has a robust stainless steel body with G1/4 media connection port and M12 electrical connection, and is ideally suited for aggressive process control environments.

#### **Product Highlights:**

- Easy installation Body rotatable by 345 degrees relative to the body for easy alignment of the display during installation
- Connected IO-Link capability allows remote set-up and access to application performance data for improved system monitoring
- Simple set-up Easy and quick manual set up via three push buttons, or remotely via IO-Link
- Easy to use Large 10mm, two colour programmable display to easily identify switching status. LED status indicators can be viewed from rear.
- **Universal** Pneumatic and Allfluid process media in single product series with 9 different pressure range options from vacuum to 600 bar, making it suitable for all applications
- Robust Stainless steel (1.4404 / 316L) body with laser etched labelling and IP67 ingress protection
- Reliable Ceramic capacitive measuring cell provides for very high over pressure capability such as occurs with water hammer and cavitation (dynamic pressure peaks). The measuring cell is also very good at handling aggressive or abrasive media.



●● Gang mounting option using modular brackets ●●



●● IO-Link Capability ●●



•• Easy to use ••



• Easy Installation with housing rotatable through 345 degrees ••

#### Technical Specifications

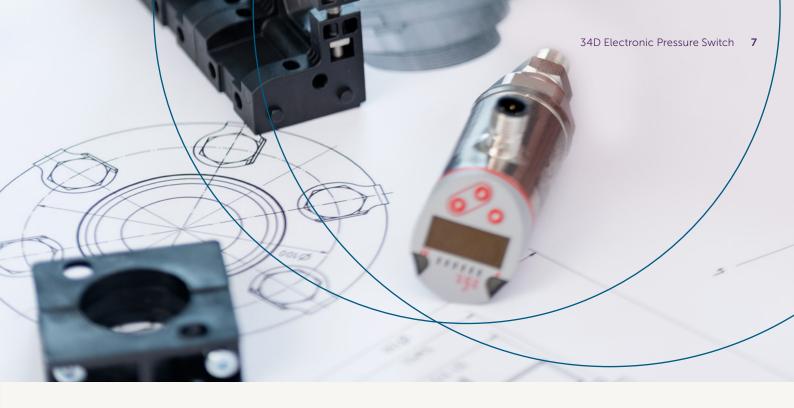
- Suitable for aggressive environments robust stainless steel body with FKM sealing and laser etched label
- Ceramic capacitive measuring cell
- Connection cable with straight or angled M12 connector
- Vacuum to 600 bar pressure ranges
- -25°C to 80°C operating temperature
- High accuracy  $< \pm 0.5\%$  of span
- Fast response time < 3 ms
- High shock and vibration resistance 50 g (11 ms), 20 g (10 ... 2000 Hz)
- Two output options
  - 2 x PNP / NPN (1 x IO-Link configurable)
  - 1 x PNP (IO-Link configurable), 1 x Analogue 4.20 mA / 0.10 v

- Process connection rotatable by 345 degrees relative to the body for easy alignment
- Status LEDs indicate units of measure
- Switching point LEDs visible from 360 degrees
- Angled display for easier visibility and operation
- Parameter setting options:
  - lower overall weight of machine
  - hysteresis
  - window; normally open
  - normally closed; analogue output; IO-Link
- Ingress protection up to IP67

## Standard Options

| Standard Model   | Description                         | Port<br>Size | Pressure<br>Range | Over<br>Pressure | Output Signals  |
|------------------|-------------------------------------|--------------|-------------------|------------------|---|
| 34D-V101G-DD1-AA | 34D Pressure Sensor<br>with IO-Link | G1/4         | -1 1bar           | 10 bar           | 2 x PNP/NPN<br>(1 x IO-Link configurable)                     |
| 34D-V101G-DA1-AA | 34D Pressure Sensor<br>with IO-Link | G1/4         | -1 1bar           | 10 bar           | 1 x PNP (IO-Link configurable),<br>1 x analogue (420mA, 010V) |
| 34D-V110G-DD1-AA | 34D Pressure Sensor<br>with IO-Link | G1/4         | -1 10bar          | 75 bar           | 2 x PNP/NPN<br>(1 x IO-Link configurable)                     |
| 34D-V110G-DA1-AA | 34D Pressure Sensor<br>with IO-Link | G1/4         | -1 10bar          | 75 bar           | 1 x PNP (IO-Link configurable),<br>1 x analogue (420mA, 010V) |
| 34D-P016G-DD1-AA | 34D Pressure Sensor<br>with IO-Link | G1/4         | 0 16bar           | 85 bar           | 2 x PNP/NPN<br>(1 x IO-Link configurable)                     |
| 34D-P016G-DA1-AA | 34D Pressure Sensor<br>with IO-Link | G1/4         | 0 16bar           | 85 bar           | 1 x PNP (IO-Link configurable),<br>1 x analogue (420mA, 010V) |
| 34D-P040G-DD1-AA | 34D Pressure Sensor with IO-Link    | G1/4         | 0 40bar           | 200 bar          | 2 x PNP/NPN<br>(1 x IO-Link configurable)                     |
| 34D-P040G-DA1-AA | 34D Pressure Sensor<br>with IO-Link | G1/4         | 0 40bar           | 200 bar          | 1 x PNP (IO-Link configurable),<br>1 x analogue (420mA, 010V) |
| 34D-P100G-DD1-AA | 34D Pressure Sensor<br>with IO-Link | G1/4         | 0 100bar          | 300 bar          | 2 x PNP/NPN<br>(1 x IO-Link configurable)                     |
| 34D-P100G-DA1-AA | 34D Pressure Sensor<br>with IO-Link | G1/4         | 0 100bar          | 300 bar          | 1 x PNP (IO-Link configurable),<br>1 x analogue (420mA, 010V) |
| 34D-P160G-DD1-AA | 34D Pressure Sensor<br>with IO-Link | G1/4         | 0 160bar          | 350 bar          | 2 x PNP/NPN<br>(1 x IO-Link configurable)                     |
| 34D-P160G-DA1-AA | 34D Pressure Sensor<br>with IO-Link | G1/4         | 0 160bar          | 350 bar          | 1 x PNP (IO-Link configurable),<br>1 x analogue (420mA, 010V) |
| 34D-P250G-DD1-AA | 34D Pressure Sensor<br>with IO-Link | G1/4         | 0 250bar          | 500 Bar          | 2 x PNP/NPN<br>(1 x IO-Link configurable)                     |
| 34D-P250G-DA1-AA | 34D Pressure Sensor<br>with IO-Link | G1/4         | 0 250bar          | 500 Bar          | 1 x PNP (IO-Link configurable),<br>1 x analogue (420mA, 010V) |
| 34D-P400G-DD1-AA | 34D Pressure Sensor<br>with IO-Link | G1/4         | 0 400bar          | 800 bar          | 2 x PNP/NPN<br>(1 x IO-Link configurable)                     |
| 34D-P400G-DA1-AA | 34D Pressure Sensor<br>with IO-Link | G1/4         | 0 400bar          | 800 bar          | 1 x PNP (IO-Link configurable),<br>1 x analogue (420mA, 010V) |
| 34D-P600G-DD1-AA | 34D Pressure Sensor with IO-Link    | G1/4         | 0 600bar          | 800 bar          | 2 x PNP/NPN<br>(1 x IO-Link configurable)                     |
| 34D-P600G-DA1-AA | 34D Pressure Sensor<br>with IO-Link | G1/4         | 0 600bar          | 800 bar          | 1 x PNP (IO-Link configurable),<br>1 x analogue (420mA, 010V) |
|                  |                                     |              |                   |                  |   |

| Accessory Model  | Description  |
|------------------|--|
| 34D-BRKT-BODY    | 34D Bracket - Body                                     |
| 34D-BRKT-ANGLED  | 34D Bracket - Angled                                   |
| 34D-COVER-PROTEC | 34D Protective Cover                                   |
| 34D-LABEL-TAG    | 34D Label Tag  |
| 34D-DAMPING-SCRW | 34D Damping Screw                                      |
| 34D-FLANGE-ADPT  | 34D Flange Adaptor                                     |
| 34D-14G-G-ADPT   | 34D Adaptor G1/4 G1/4                                  |
| 34D-14G-NPT-ADPT | 34D Adaptor G1/4 1/4NPT                                |
| 523057000000000  | Connector M12 x 1 Straight x 2 m Long                  |
| 523052000000000  | Connector M12 x 1 Straight x 5 m Long                  |
| 523055000000000  | Connector M12 x 1 Straight -<br>Wireable Without Cable |
| 523058000000000  | Connector M12 x 1 Angled x 2 m Long                    |
| 523053000000000  | Connector M12 x 1 Angled x 5 m Long                    |
| 523056000000000  | Connector M12 x 1 Angled -<br>Wireable Without Cable   |



#### Accessories

The 34D pressure sensor is supported by a large range of cables, mounting brackets and flange adaptors.

Mounting brackets and flange adaptors



Angle mounting bracket



Cables



Cable M12 x 1 4-pin, straight



Protective cover



Process connection adaptors





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