

54D Electronic Pressure Sensor for Pneumatic Applications



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Breakthrough Engineering for a Better World

Norgren is part of global engineering organisation IMI plc. IMI is at the forefront of delivering the solutions we need in a changing world and is focused on **creating tremendous value by solving key industry problems in attractive markets and employing the best.**

Norgren has a proud history of creating innovative engineering solutions in precise motion control and fluid technology, and we collaborate with our customers across more than 50 countries in critical areas such as Factory Automation, Material Handling, Rail, Energy, Process Control, Life Science and Commercial Vehicles.

From improving speed, productivity, reliability and efficiency of equipment, to generating significant energy and cost savings, or lowering total cost of ownership across many industries, Norgren's high-quality solutions are designed to help customers pursue progress, achieve new goals and overcome problems.

With market-leading industry expertise, we offer the capability, resources, engineering intelligence and global support infrastructure to tackle the largest project demands.

Our world-class portfolio of fluid and motion control products include Norgren, Buschjost, FAS, Herion, Kloehn, Maxseal and Thompson Valves. Supplied either individually or combined into powerful customised solutions to meet customer needs.

Breakthrough engineering you can count on.

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 switches 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.

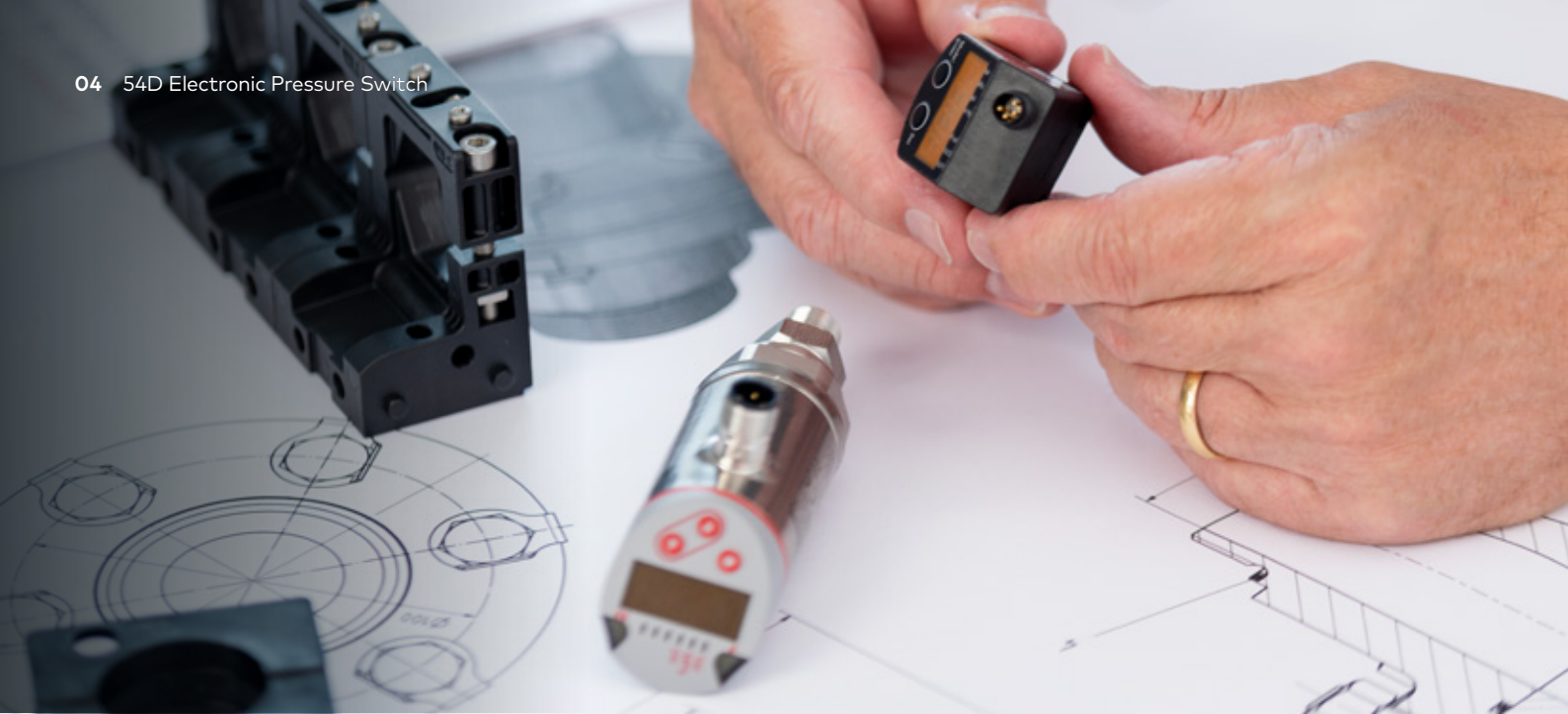
We can offer our customers over 50 years of pressure switch technology experience and expertise to find the appropriate solution for our customers.

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 the Norgren 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.



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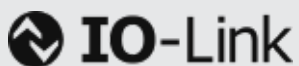


54D Electronic Pressure Sensor with IO-Link

The new Norgren 54D pressure sensor allows customers to react quickly and effectively to changing requirements through its in built intelligence. Delivering flexibility, 54D features easy installation, easy viewing and reliable operation. With a compact and lightweight design, G1/8 media connection port and M8 electrical connector 54D is ideally suited for monitoring general vacuum and compressed air applications, particularly end of arm tooling applications.

Product Highlights:

- » **Easy installation** – Using integrated mounting holes or a DIN rail bracket, and M8 electrical connector for maximum flexibility
- » **Connected** – IO-Link capability allows remote set-up and application performance data for improved system monitoring
- » **Accurate** – High accuracy of $< \pm 0.5\%$ of span
- » **Simple set-up** – Easy and quick manual set up via push buttons, or remote setup of multiple switches via IO-Link
- » **Easy to use** – Two colour display for easy identification of correct pressure setting
- » **Robust** – PBT engineering polymer housing is mechanically strong and heat resistant
- » **Reliable** – Specially coated piezoresistive silicon measuring cell that is resistant to moisture, and high IP65 ingress protection as standard





Differential pressure option
Auxiliary pressure connection for
differential pressure sensing



IO-Link Capability
Application performance data



Easy Installation
Mountable DIN rail option for
control cabinet mounting



Easy to use
Two colour configurable
display for units of measure

Technical Specifications

- » Suitable for monitoring compressed air in general purpose pneumatic applications
- » IO-Link capability
- » Two output options
 - 2 x PNP
 - 1 x PNP (IO-Link configurable), 1 x Analogue 4.20 mA)
- » Specially coated piezoresistive silicon measuring cell
- » Capable of detecting vacuum and pressure in a single switch
- » Straight or angles M8 connector cables
- » Vacuum to 16 bar pressure ranges
- » 0°C to 70°C operating temperature
- » Configurable display for units of measure (bar, psi, kPA, InHg)
- » Option for differential pressure sensing – capable of detecting blocked filter element
- » High accuracy $\pm 0.5\%$ of span
- » Two colour display
- » Status LEDs indicate units of measure
- » Angled display for easier visibility and operation
- » Parameter setting options:
 - hysteresis
 - window; normally open
 - normally closed; analogue output; IO-Link
- » Ingress protection IP65
- » Mounting on end of arm tooling or in control cabinet
- » Mounting hole positions backwards compatible with previous series

Standard Options

Standard Model	Description	Port Size	Auxiliary Port Size	Pressure Range	Over Pressure	Type of Pressure	Output Signal
54D-V101G-DD0-AA	54D Pressure Sensor	G1/8	-	-1..1 bar	20 bar	Relative	2 x PNP
54D-V101G-DA1-AA	54D Pressure Sensor with IO-Link	G1/8	M5	-1..1 bar	20 bar	Relative + Differential	1 x PNP (IO-Link Configurable), 1 x Analogue
54D-V110G-DD0-AA	54D Pressure Sensor	G1/8	-	-1..10 bar	20 bar	Relative	2 x PNP
54D-V110G-DA1-AA	54D Pressure Sensor with IO-Link	G1/8	M5	-1..10 bar	20 bar	Relative + Differential	1 x PNP (IO-Link Configurable), 1 x Analogue
54D-P016G-DD0-AA	54D Pressure Sensor	G1/8	-	0..16 bar	20 bar	Relative	2 x PNP
54D-P016G-DA1-AA	54D Pressure Sensor with IO-Link	G1/8	M5	0..16 bar	20 bar	Relative + Differential	1 x PNP (IO-Link Configurable), 1 x Analogue

Accessory Model	Description
54D-DINRAIL-CLIP	DIN Rail Clip / Bracket
0523449000000000	Connector M8 x 1 Straight x 1.5 m Long
0523447000000000	Connector M8 x 1 Straight x 5 m Long
0523446000000000	Connector M8 x 1 Angled x 1.5 m Long
0523448000000000	Connector M8 x 1 Angled x 5 m Long

Accessories

The 54D pressure sensor is supported by a range of cables, mounting brackets and flange adaptors



M8 x 1 straight
connector

M8 x 1 90° angled
connector

DIN rail bracket

Norgren operates four global centres of technical excellence and a sales and service network in 50 countries, as well as manufacturing capability in Brazil, China, Czech Republic, Germany, India, Mexico UK and the USA.

For information on all Norgren companies visit

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Supported by distributors worldwide.

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