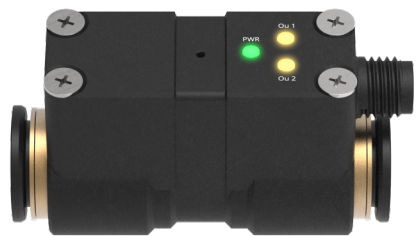


MP SENSOR

9999660_InLine_ADC_qs_2_a



InLine

Quickstart

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This document is designed to be a quickstart and an operating manual. Further documentation and downloads for the product can be found at www.automationdirect.com

Safety Notes

- ▶ Do not use the device in the area of personal and machine safety.
- ▶ The InLine is not a safety module according to the EU Machinery Directive.
- ▶ Connection, mounting, and setting may only be performed by trained specialists.
- ▶ The maximum permitted overpressure must not be exceeded.
- ▶ Also comply with the national safety and accident prevention regulations.
- ▶ Repairs may only be carried out by the manufacturer. Any intervention in or changes to the device are not permitted.
- ▶ Wiring work and the opening and closing of electricalconnections may only be carried out when the power is switched off.
- ▶ Incorrect handling or improper use can lead to malfunctions in your application.
- ▶ Pressure sensors of the InLine series are intended for filtered, dry or lubed compressed air & neutral gases.

Maintenance

- The InLine is maintenance-free. We recommend:
- ▶ checking the screw connections and plug-in connections regularly.

Returns

Clean removed devices before returning them in order to protect our employees and the environment from hazards caused by adhering residual measuring material. A check of faulty devices can only be examined when accompanied by a completed return form. This form includes information about all materials which came into contact with the device, including those which were used for testing purposes, operation, or cleaning.

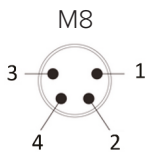
Disposal



Dispose of device components and packaging materials in accordance with the relevant national waste treatment and disposal regulations of the delivery area. The devices must be disposed of properly and do not belong in regular domestic waste.

Electrical connection

- ▶ Only operate the InLine via a supply with secure disconnection from the circuit (PELV according to DIN VDE 0100-410, IEC 60364-4-41, HD 60364.4.41, EN 60079-14). The power circuit must be potential free.
- ▶ Carefully mount the M8-plug connector, in order to ensure the enclosure rating IP65.
- ▶ Consider the pin assignment (see below).
- ▶ The pressure sensor has two signal outputs which can be wired according to the pin-assignment.



Contact	Identification	Wire Color	Description
1	UB+	brown	Power supply
2	OUT 2	white	Digital Output 2: PNP
3	0 V	blue	Ground, reference ground for current output
4	OUT 1 / IO-Link	black	Digital Output 1: PNP

Installation conditions

- When installing/uninstalling the system must be depressurised.
- ▶ The mounting location site shall be easily accessible and free of vibration.
 - ▶ The sensors may be mounted in any orientation.
 - ▶ The ambient temperature shall not exceed the speci- fied limits („Technical Data“).
 - ▶ Do not mount the devices at a location where high pressure peaks can occur.

Programming

- ▶ The simplest method to get a programmed switch is ordering this device already presettet.

IO-Link interface

- ▶ General information on the device

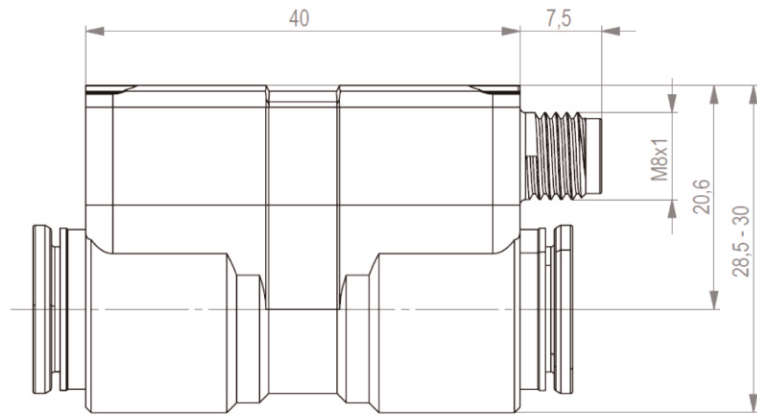
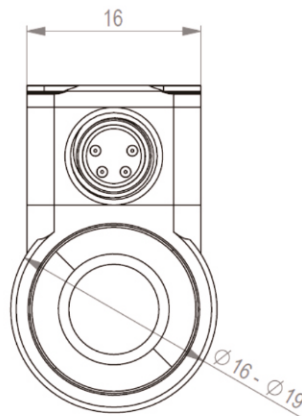
IO-Link specification	Version 1.1
Process data width *	24 bit
Measured value information	16 bit
Switching point information	2 bit
Max. Cycle time	5 ms

- ▶ Process data
The process data length of the sensor is 24 bits. Both the switching states (OUT1 and OUT2) and current measured values are transmitted. The 16 bits of the measured value are scaled according to the measuring range.

* Process data (24 bit)																							
Measuring value (16 bit)																not used		OUT1	OUT2				
0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	15	16	.	.	.	.	21	22	23

- ▶ SIO mode (standard IO-mode)
In SIO mode, the sensor operates like a normal pressure sensor with standard output signals. The digital output is always at pin 4 (output 1) of the electrical connection. Pin 2 (output 2) is a second digital output.
- ▶ IO-Link mode (communication mode)
The sensor switches to IO-Link communication mode when connected to an IO-Link master. IO-Link communication is only possible via pin 4 of the electrical connection.

Dimensional drawings (mm)



Technical Data

Output	2x switching signal (PNP)
Output voltage	Approx. Ub -1.5 V
Output current	max. 150 mA per output
Operating medium	Filtered, dry or oiled air and non-corrosive gases
Operating voltage	9...30 VDC
Current consumption	< 25 mA
Mounting position	any
Electrical connection	M8 4-pole
EMV / Interference emission	EN61000-6-4
EMV / Interference immunity	EN61000-6-2
Accuracy	± 0.5% FS
Weight	20 - 30 g
IO-Link specification	Version 1.1
Short-circuit / reverse polarity protection	Yes / yes
Material (housing)	Plastic PBT/PC
Max. overpressure	With -14.5...14.5 psi: 29 psi, With 0...145 psi: 217.6 psi
Measuring range	-14.5...14.5 psi, 0...145 psi
Process connection	Hose connection 5/32", 1/4", 5/16", 3/8", 6mm
Output function	NO / NC (programmable)
Protection class	IP68
Operating temperature	Operation -20°...+85°C
Repeatability	±0.2% FS
Transmission rate	COM 2 / 38.4 kBit/s