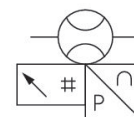


## Series AF2

The pressure dew point must be at least 15 °C below the ambient and medium temperatures and must not exceed 3 °C. The protection class is only ensured when the plug is mounted properly. See the operating instructions for further information. Liquid oil or water must be separated via pre-filtration. If not separated sufficiently, drifting may result. Precision: Standard measurement range:  $\pm 3\%$  of measured value, + 0.3 % of final value. Extended measurement range:  $\pm 8\%$  of measured value, + 1 % of final value.



## Technical data

Industry

Note

Frame size

Switching principle

Protocol

Nominal flow

Nominal flow  $Q_n$  min., standard

Nominal flow  $Q_n$  max., standard

Nominal flow  $Q_n$  min., extended

Nominal flow  $Q_n$  max., extended

Compressed air connection

Certificates

Min. working pressure

Industrial

Output signal: 1 analog output 4 mA ... 20 mA + 1 digital/analog output (PNP, NPN, push-pull, 4 mA ... 20 mA/switchable) + 1 digital output (PNP, NPN, push-pull, switchable), IO-Link V1.1 (COM3/230K4 baud)

Without mounting

DN15

Flow measuring principle: calorimetric

IO-Link

Analog

1060 l/min

5.3 l/min

1060 l/min

1060 l/min

1590 l/min

1/2 NPT

CE declaration of conformity

RoHS

UL (Underwriters Laboratories)

0 bar

# Series AF2 flow rate sensor, IO-Link

652

8652AV004JA0000

2024-03-04

Max. working pressure	16 bar
Min. ambient temperature	-20 °C
Max. ambient temperature	60 °C
Min. medium temperature	-20 °C
Max. medium temperature	60 °C
Medium	Compressed air Argon Nitrogen Carbon dioxide
Display	OLED
Flow display unit	l/sec l/min m <sup>3</sup> /min m <sup>3</sup> /h ft <sup>3</sup> /s m <sup>3</sup> /min
Pressure display unit	bar psi
Temperature display unit	°C °F
Electrical connection 2, type	Plug
Electrical connection 2, thread size	M12x1
Electrical connection 2, number of poles	5-pin
Electrical connection 2, coding	A-coded
Output signal	PNP, NPN, push-pull, 1x IO-Link
Output signal digital	PNP, NPN, push-pull, 1x IO-Link
Output signal analog	4 ... 20 mA
Max. power consumption	12 W
Operational voltage	17-30 V DC
Min. operating voltage DC	17 V DC
Max. operating voltage DC	30 V DC
Response time	< 0.3 s
Short circuit resistance	short circuit resistant
Max. shock resistance	30 g, 11 ms
Vibration resistance	1 g (10 - 2000 Hz) IEC 60068 - 2-6
Reproducibility	± 1.5% of the measured value
Protection class	IP65 IP67 according to IEC 60529
Weight	0.805 kg

## Material

Housing material	Polyamide Polycarbonate Aluminum
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Pipe material	Stainless Steel 1.4301
Seal material sensor	Fluorocarbon caoutchouc
Part No.	8652AV004JA0000

## Technical information

The pressure dew point must be at least 15 °C less than ambient and medium temperature and may not exceed 3 °C.

The protection class is only ensured when the plug is mounted properly. For detailed information, see operating instructions.

The device is designed for installation as a stand-alone device.

Liquid oil or water must be separated via prefiltering. If it is not separated sufficiently, drifting may result.

### Precision

- Standard measurement range:  $\pm 3\%$  of measured value, + 0.3% of final value
- Extended measurement range:  $\pm 8\%$  of measured value, + 1% of final value

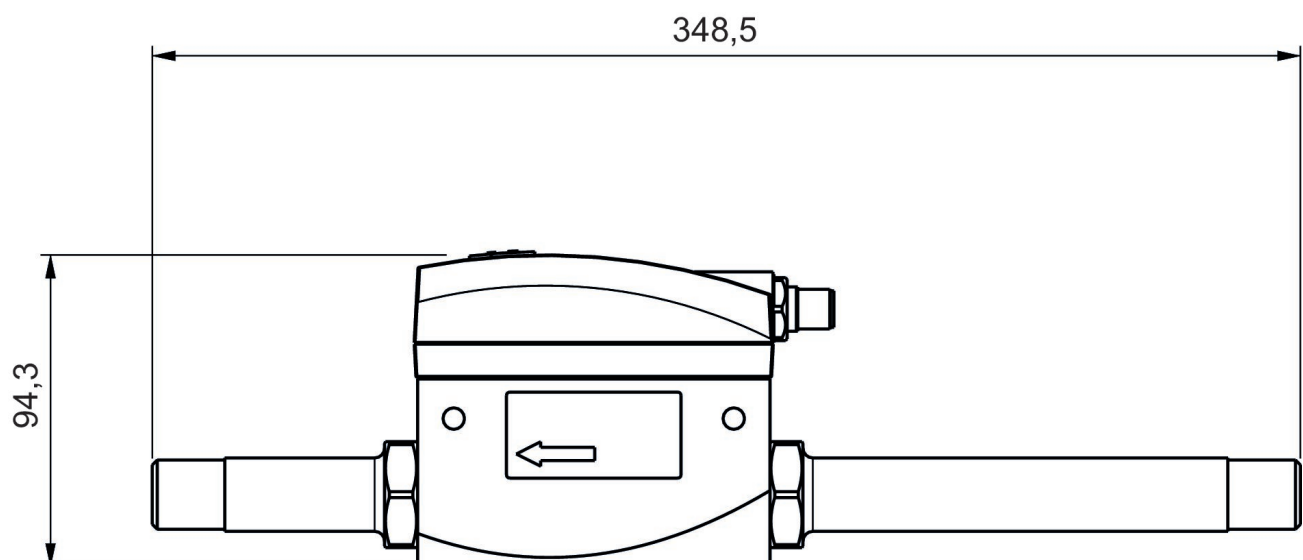
The IO-Link device description (IODD) for the AF2 flow rate sensor is available for download in the Media Center.

The pressure dew point must be at least 15 °C less than ambient and medium temperature and may not exceed 3 °C.

The oil content of compressed air must remain constant during the life cycle.

Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in <https://www.emerson.com/en-us/support>).

## Dimensions in mm



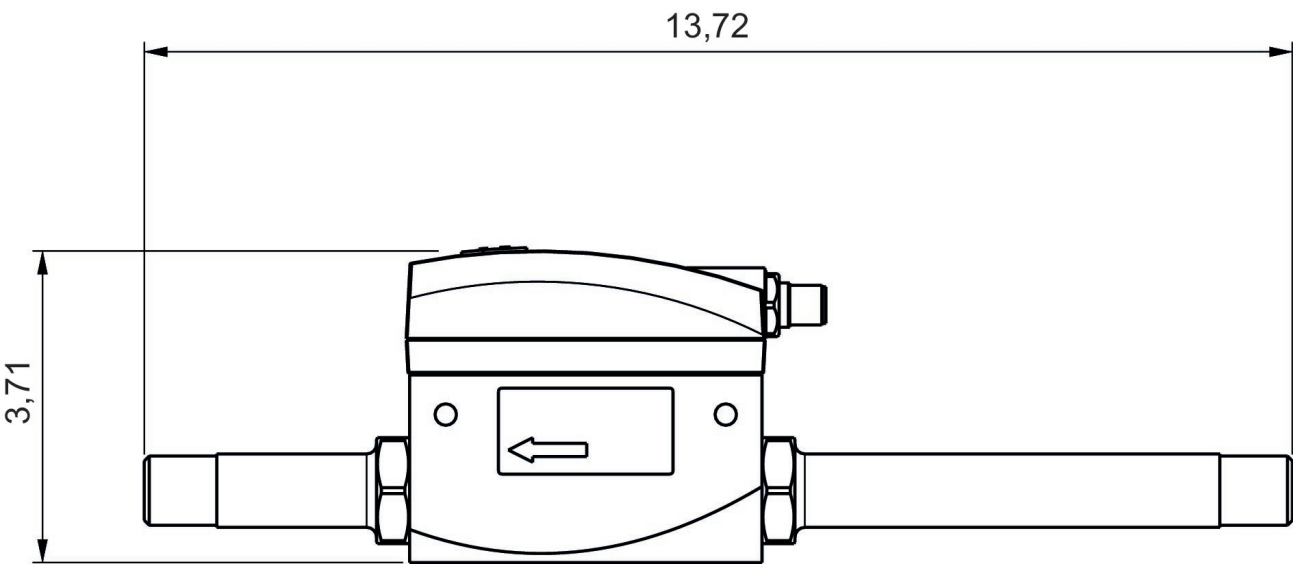
Series AF2 flow rate sensor, IO-Link

8652AV004JA0000

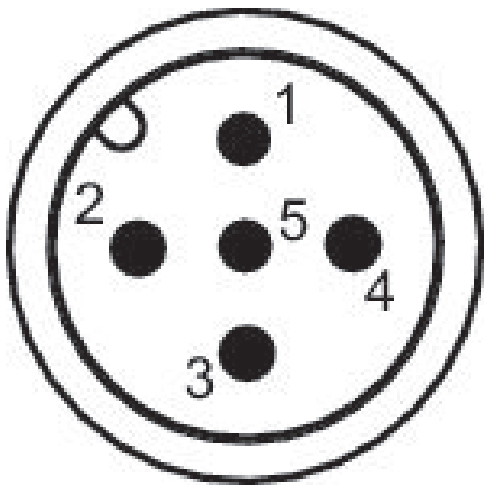
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2024-03-04

Dimensions in inches



Pin assignments



Pin assignments

Pin	Allocation	Wire color
1	L+ Supply Voltage	brown
2	QA (output 4 ... 20 mA)	white
3	m = mass	blue
4	C/Q1 (IO-Link/switch output)	black
5	Analog output 4 ... 20 mA	yellow