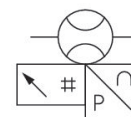


Series AF2

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: ± 3 % of measured value, + 0.3 % of final value. Extended measurement range: ± 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

Max. working pressure

Industrial

Integrated web server, 48 VDC connection via Power over Ethernet

Without mounting

DN15

Flow measuring principle: calorimetric

Ethernet

TCP/IP

OPC UA

MQTT

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

16 bar

AF2 series flow rate sensor, Ethernet

652

8652AV004JA0010

2024-03-04

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 m³/min m³/h ft³/s m³/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	8-pin
Electrical connection 2, coding	X-coded
Output signal	OPC UA, MQTT, Integrated web server
Max. power consumption	5 W
Operational voltage	24 V DC
Min. operating voltage DC	36 V DC
Max. operating voltage DC	57 V DC
Response time	< 0.3 s
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
Pipe material	Stainless Steel 1.4301
Seal material sensor	Fluorocarbon caoutchouc
Part No.	8652AV004JA0010

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 to be installed in AS series air preparation units or to be fitted as a stand-alone device using a W05 block assembly kit.

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

Precision

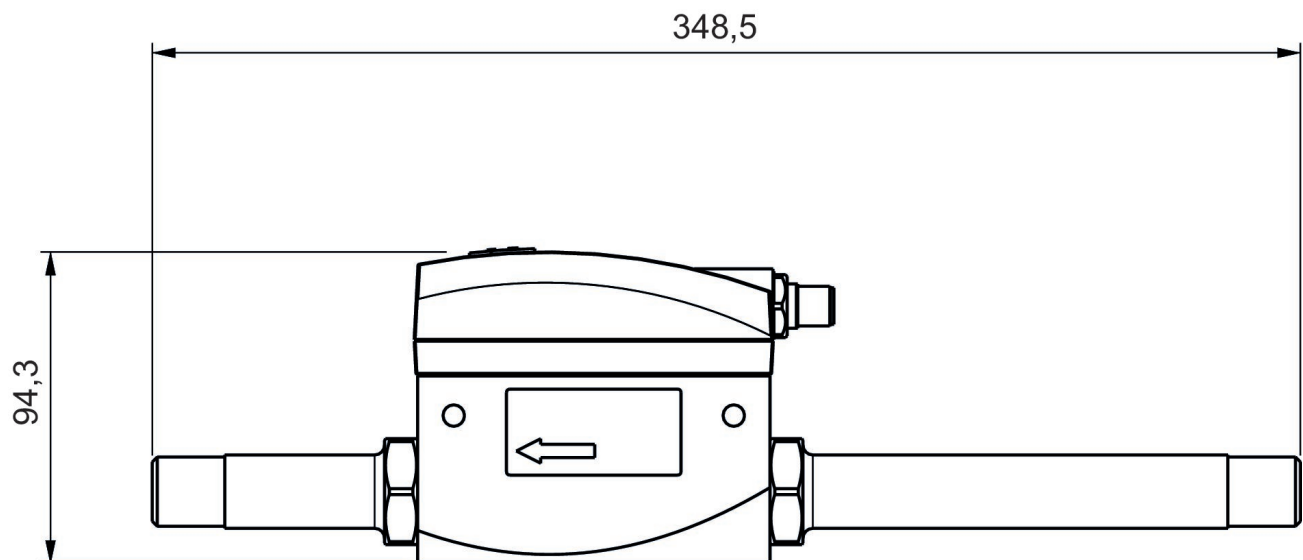
- Standard measurement range: $\pm 3\%$ of measured value, + 0.3% of final value
- Extended measurement range: $\pm 8\%$ of measured value, + 1% of final value

The 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



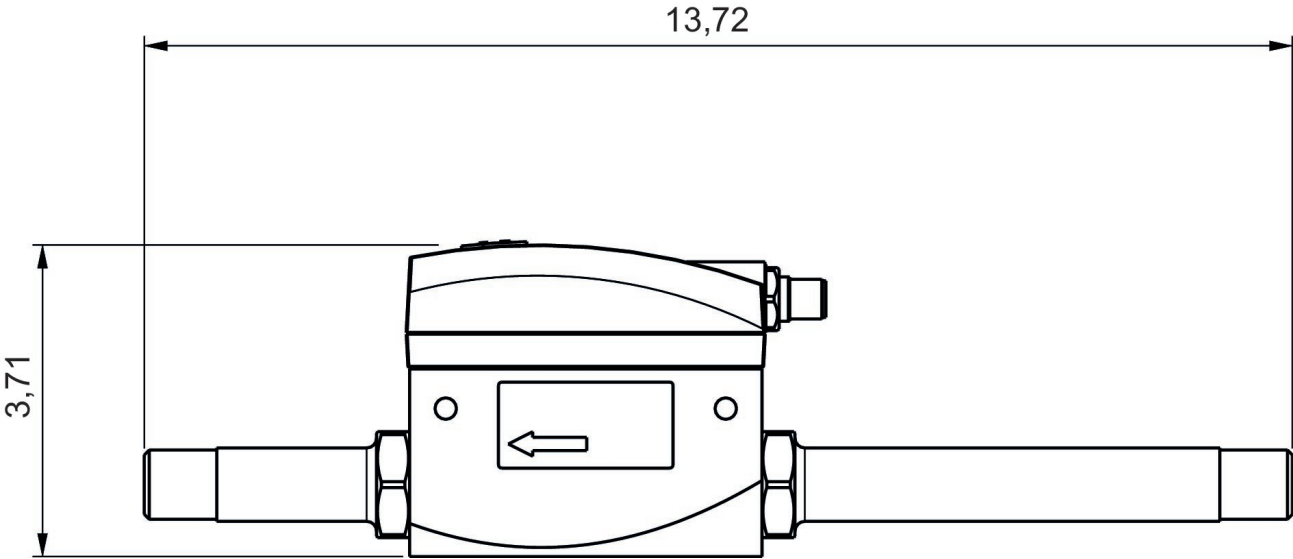
AF2 series flow rate sensor, Ethernet

8652AV004JA0010

652

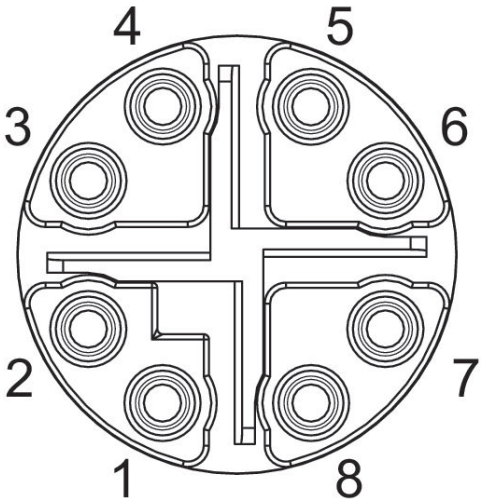
2024-03-04

Dimensions in inches



Pin assignments
M12

X-coded



Pin assignments

Pin	RJ45	Wire color	Identification	10/100 Mbit
1	1	WH / OG	TX(+) + POE	TxData+
2	2	OG	TX(-) + POE	TxData+
3	3	WH / GN	RX(+) - POE	TxData-
4	6	GN	RX(-) - POE	TxData-
7	5	WH / BU	POE+	
8	4	BU	POE+	
5	7	WH / BN	POE-	
6	8	BN	POE-	