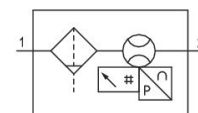


Series AF2

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. If not separated sufficiently, drifting may result. Precision: Standard measurement range: ± 4 % of measured value, + 0.5 % of final value. Extended measurement range: ± 8 % of measured value, + 1 % of final value.



Technical data

Industry

Industrial

Note

Integrated web server, 48 VDC connection via Power over Ethernet
Without mounting

Frame size

652

Switching principle

Flow measuring principle: calorimetric

Protocol

Ethernet
TCP/IP
OPC UA
MQTT

Nominal flow

1630 l/min

Nominal flow Q_n min., standard

8 l/min

Nominal flow Q_n max., standard

1630 l/min

Nominal flow Q_n min., extended

1630 l/min

Nominal flow Q_n max., extended

2445 l/min

Compressed air connection

G 1/2

Certificates

CE declaration of conformity
RoHS
UL (Underwriters Laboratories)

Min. working pressure

0 bar

Max. working pressure

16 bar

Min. ambient temperature

-20 °C

Max. ambient temperature

50 °C

Min. medium temperature

-20 °C

Max. medium temperature

50 °C

AF2 series flow rate sensor, Ethernet

652

G652AVBP4JA001N

2024-03-04

Medium	Compressed air Argon Nitrogen Carbon dioxide
Filter porosity	5 µm
Display	OLED
Flow display unit	l/sec l/min m ³ /min m ³ /h ft ³ /s m ³ /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	0.73 kg

Material

Housing material	Polyamide Polycarbonate Aluminum
Seal material filter	Nitrile butadiene rubber
Seal material sensor	Fluorocarbon caoutchouc
Part No.	G652AVBP4JA001N

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.

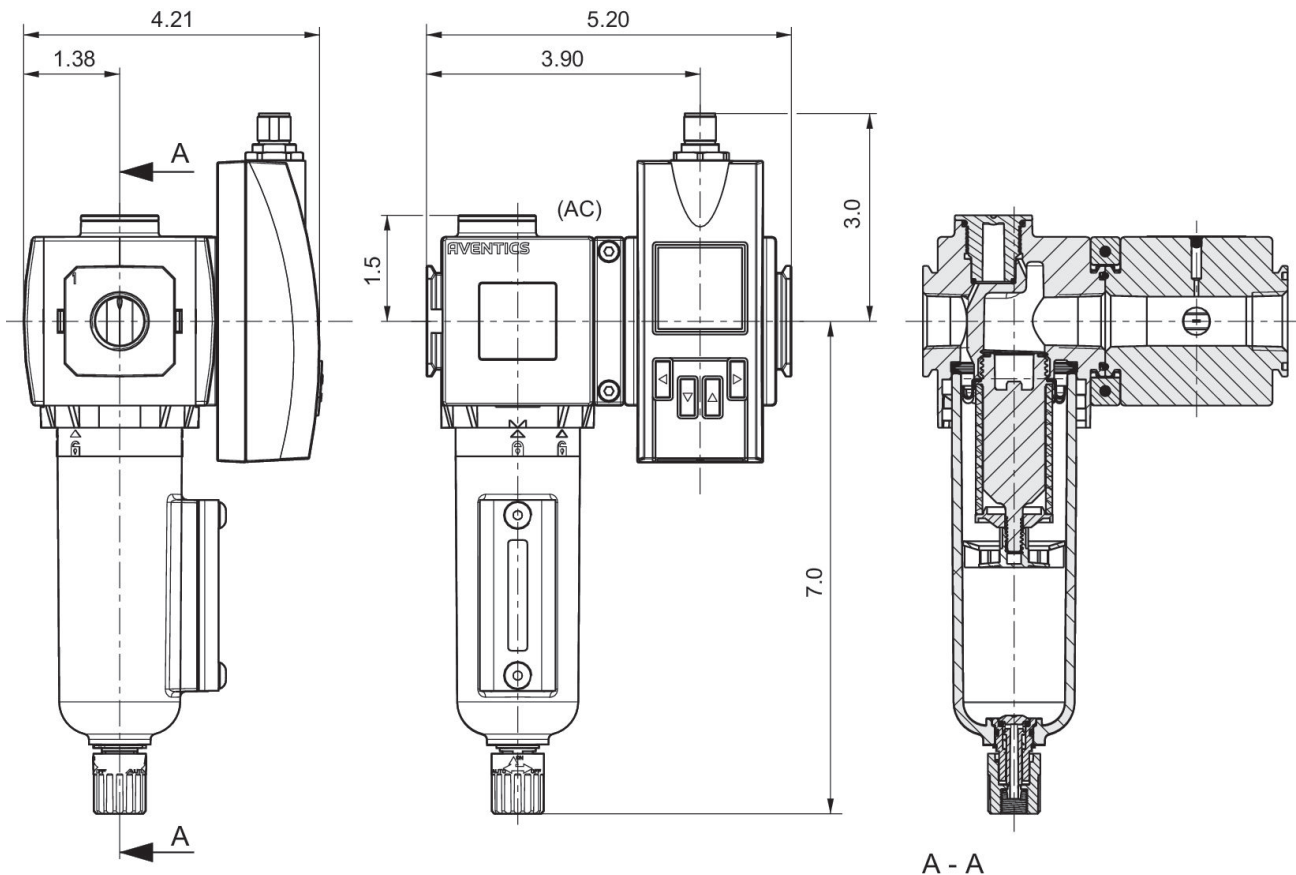
5 microns - $\pm 4\%$ of measured value + 0.5% of standard full scale $\pm 8\%$ of measured value + 1% of extended full scale

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 inches



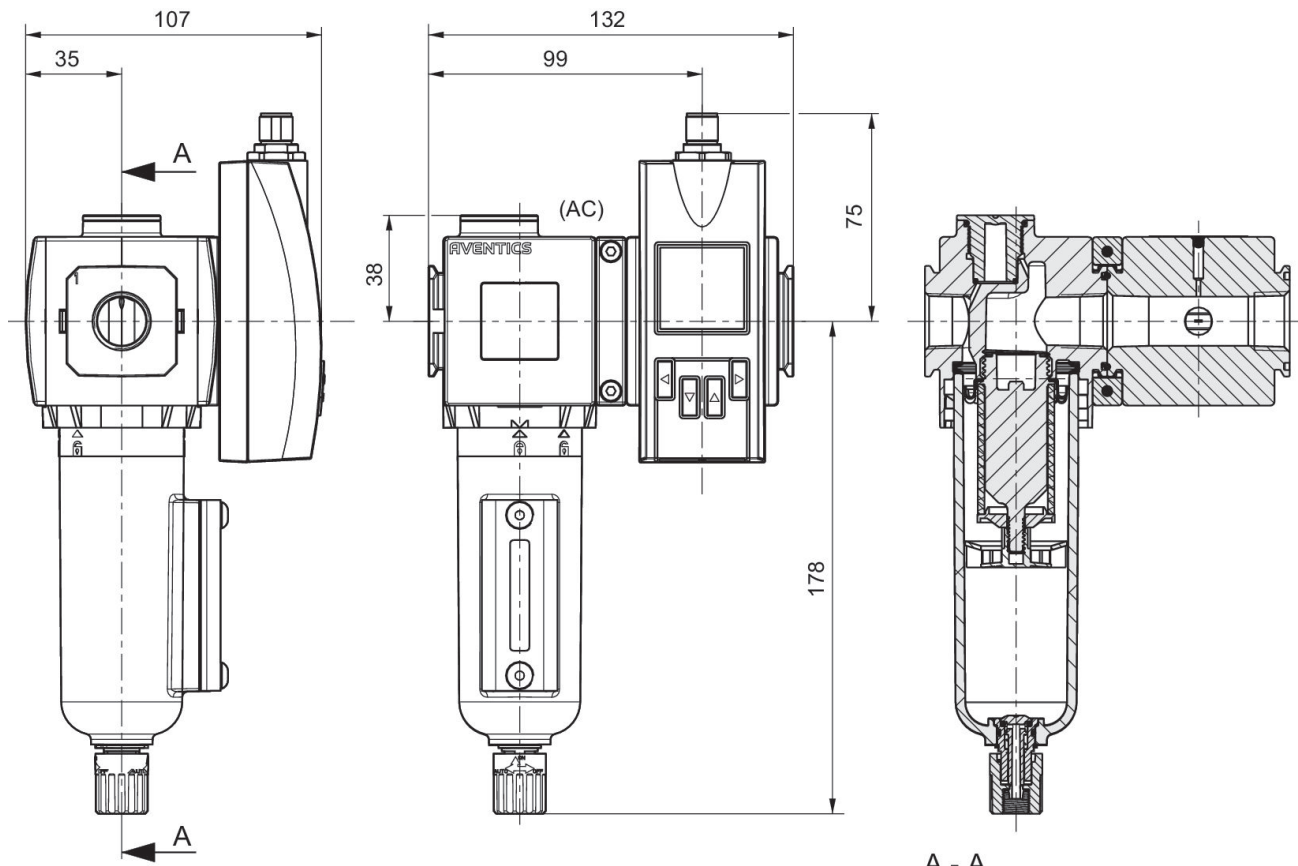
AF2 series flow rate sensor, Ethernet

G652AVBP4JA001N

652

2024-03-04

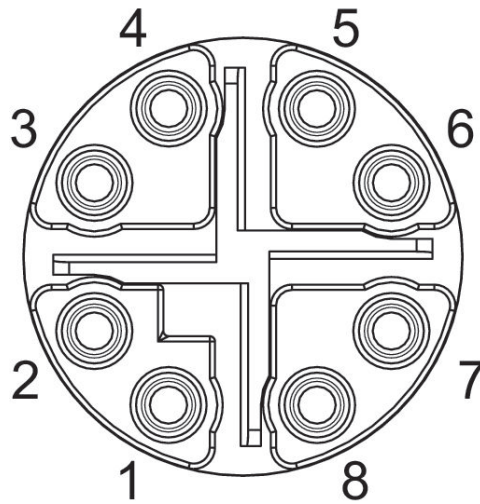
Dimensions in mm



Pin assignments
M12

X-coded

A - A



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-	