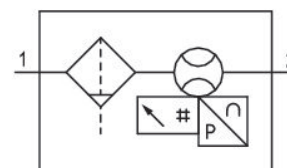


AF2 series flow rate sensor, filter version 652, Ethernet

G652AVBP4JA001N

General series information 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

Frame size
652

Switching principle

Flow measuring principle: calorimetric

Protocol

TCP/IP
OPC UA
MQTT

Nominal flow

1630 l/min

Nominal flow Qn min., standard

8 l/min

Nominal flow Qn max., standard

1630 l/min

Nominal flow Qn min., extended

1630 l/min

Nominal flow Qn max., extended

2445 l/min

Compressed air connection

G 1/2

Certificates

CE declaration of conformity
RoHS

Working pressure min.

0 bar

Working pressure max

16 bar

Min. ambient temperature

-20 °C

Max. ambient temperature

50 °C

Min. medium temperature

-20 °C

Max. medium temperature

50 °C

Medium

Compressed air

Argon	Electrical connection 2, coding
Nitrogen	X-coded
Helium	Power consumption max.
Carbon dioxide	5 W
Filter porosity	Operational voltage
5 µm	24 V DC
Display	Operating voltage DC, min.
OLED	36 V DC
Flow display unit	Operating voltage DC, max.
l/sec	57 V DC
l/min	Response time
m ³ /min	< 0.3 s
m ³ /h	Shock resistance max.
ft ³ /s	30 g, 11 ms
m ³ /min	Vibration resistance
Pressure display unit	1 g (10 - 2000 Hz) IEC 60068 - 2-6
bar	Reproducibility
psi	± 1.5% of the measured value
Temperature display unit	Protection class
°C	IP65
°F	IP67 according to IEC 60529
Electrical connection 2, type	Weight
Plug	0.73 kg
Electrical connection 2, thread size	
M12x1	
Electrical connection 2, number of poles	
8-pin	

Material

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

Technical information

The pressure dew point must be at least 15 °C under 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.

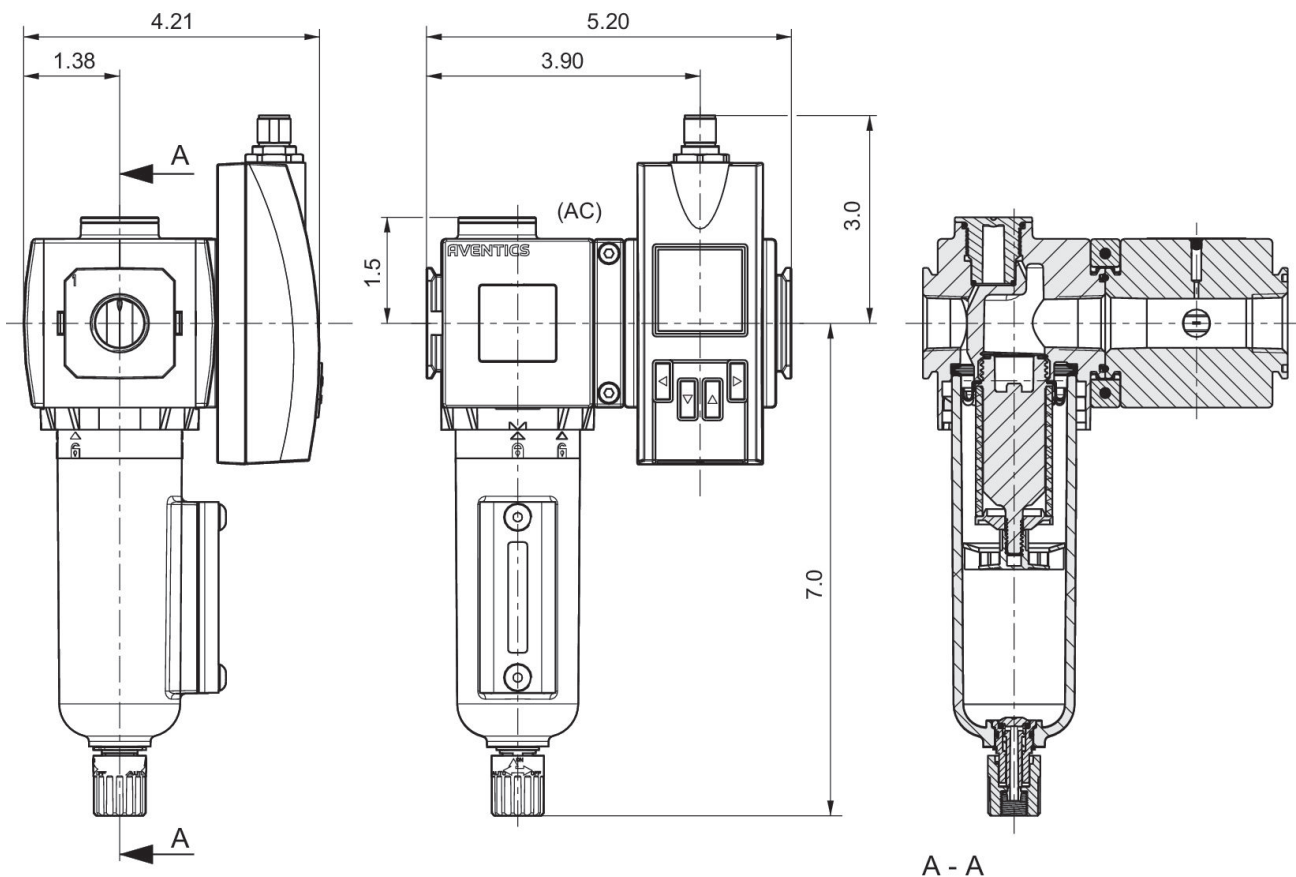
5 microns - $\pm 4\%$ of measured value + 0.5% of standard full scale $\pm 8\%$ of measured value + 1% of extended full scale

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

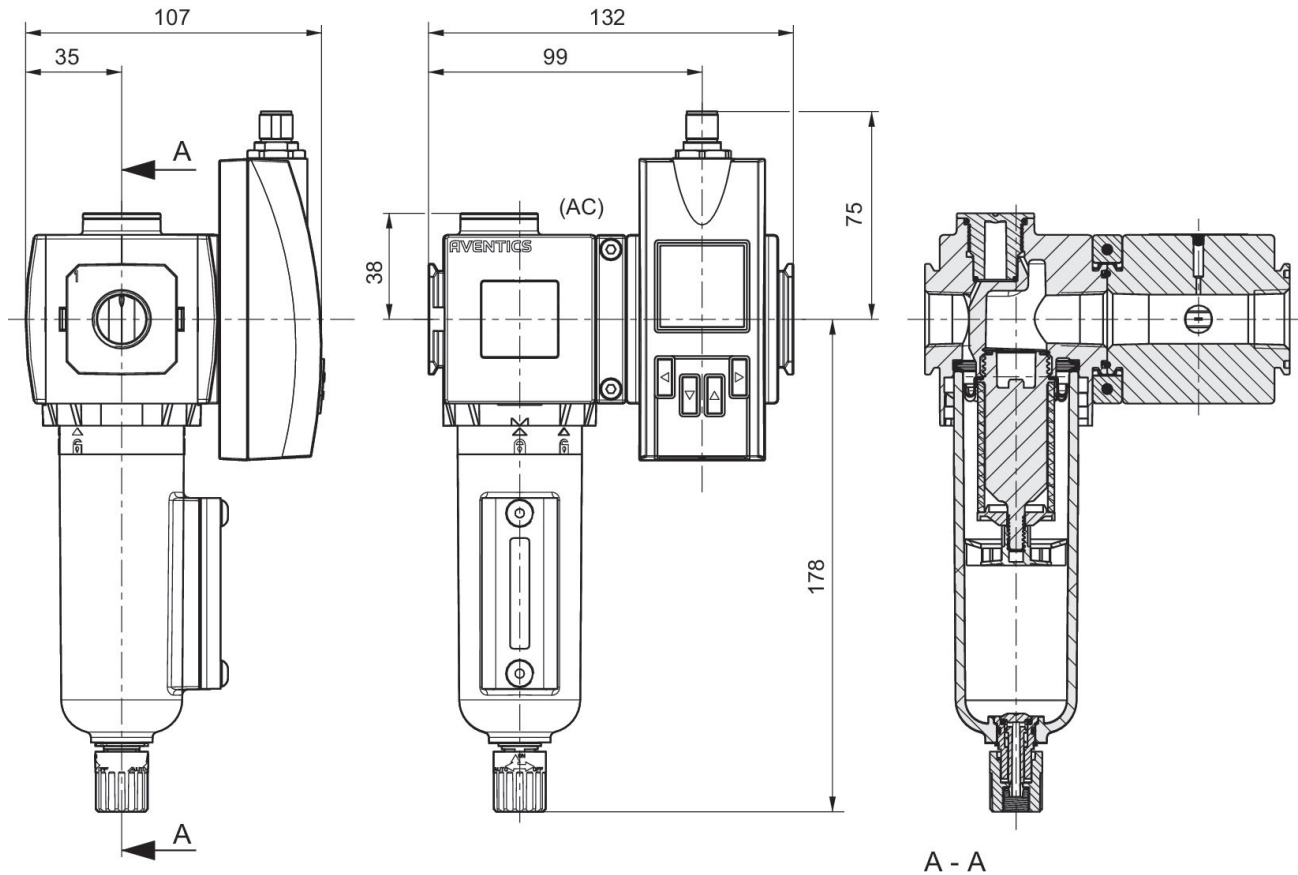
The oil content of compressed air must remain constant during the life cycle.

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

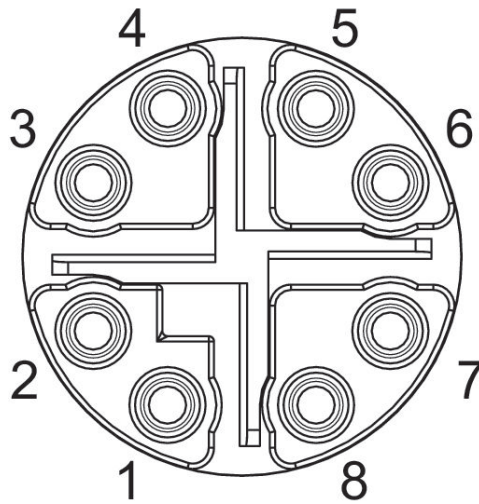


Dimensions in mm



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-	