



Mass Flow Controller / Meter AFC 202 / AFM 302

AFC & AFM Series

Features

For high flow from 30 slm to 250 slm, the traditional analog **Qualiflow Therm AFC 202** and **AFM 302** with elastomeric seals and magnetic valve :

- Unique fast and reliable horizontal magnetic valve.
- Normally open and normally closed version available with colour identification (green for NO, red for NC).
- Special pressure compensated stainless steel valve for ultra fast flow control.
- No particle generation or entrapment.



Calibration

MFCs are calibrated with Nitrogen

Reference Standards..... Temperature □ 273.15K
..... Pressure □ 101325 Pa

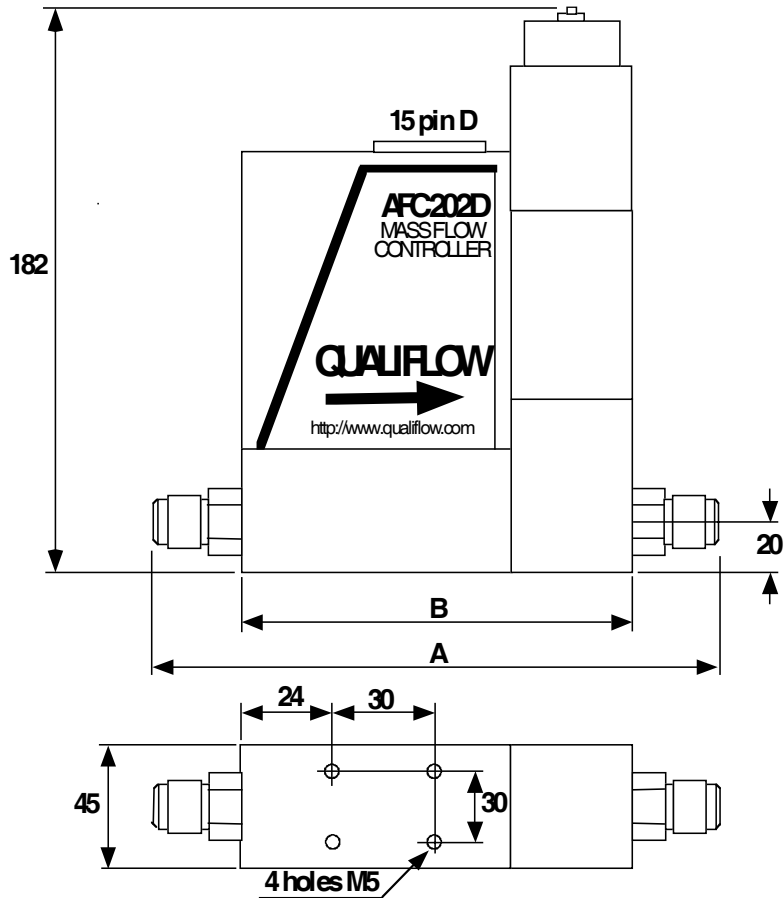
Input and Output

Mass Flow Controller..... ± 15 VDC, 1 A
Mass Flow Meter..... ± 15 VDC, 50 mA
Input and Output Signal..... from 0 to 5 VDC
Electrical Connector..... Card edge

Specifications

Flow Range (equivalent N₂)..... 30 sccm to 250 slm
..... up to 400 slm with H₂
Control Range..... 2 – 100% F.S.
Valve Type..... Electromagnetic
Valve Rest Position..... Normally Open or Closed
Accuracy..... ± 1% of F.S.
Linearity..... ± 0.5% of F.S.
Repeatability..... ± 0.3% of F.S.
Sensibility to Mounting Position..... ± 0.1% of F.S.
Step Response Time..... □ 5 sec. typical (SEMI E17-91)
Operating Temperature..... 5□40°C, Non-condensing
Temperature Coefficient..... < 0.5% F.S./°C
Maximum Inlet Pressure..... 1 MPa (10bar, 150psi)
Minimum Differential Pressure..... 150 kPa for 30 slm F.S.
..... 200 kPa for 50 slm F.S.
..... 250 kPa for 100 slm F.S.
..... 300 kPa for 200 slm F.S.
..... 450 kPa for 400 slm F.S.
Pressure Coefficient..... < 0.1% F.S./10⁵ Pa
Wetted Materials..... 316 L Stainless steel
Surface Finish..... 0.4 μm (16 μinch) R_a max
Leak Integrity..... < 2.10⁻⁹ atm.scc/sec (He)
Standard Seals..... Viton, Neoprene
Fittings..... 3/8" M VCR, Swagelok, other on request
Weight..... 3.7Kg

Dimensions



	AFC 202		AFM 302	
	VCR 3/8 MM	Swagelok 3/8	VCR 3/8	Swagelok
A (mm)	181,4	183,3 (incl. nuts)	141.9	143.8 (incl. nuts)
B (mm)	123	123	83.5	83.5

Pinout configuration

GND	1	A	Setpoint (0-5 VDC)
Common	2	B	Common
Readout (0-5 VDC)	3	C	Common
+15 VDC	4	D	Valve control
NC	5	E	NC
Test point	6	F	-15 VDC
NC	8	J	Sensor upstream
NC	9	K	Sensor com
Extra I/O	10	L	Sensor downstream

Connector 20-pin, type "Golden Finger"

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