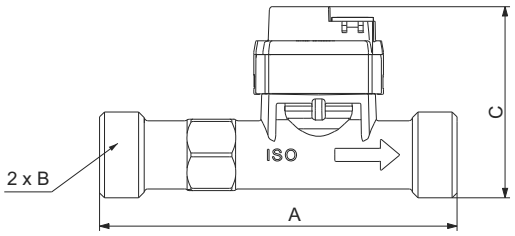
VFS 1 - 12 QT l/min (0.2 - 3.2 gpm)

TM05 4742 2512

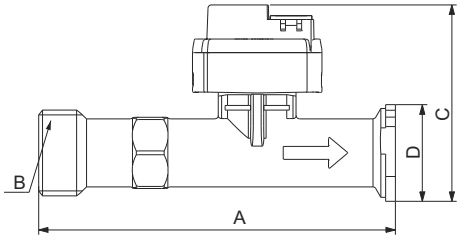
Fig. 61 VFS 1-12 sensor

Dimensions



TM05 4671 2512

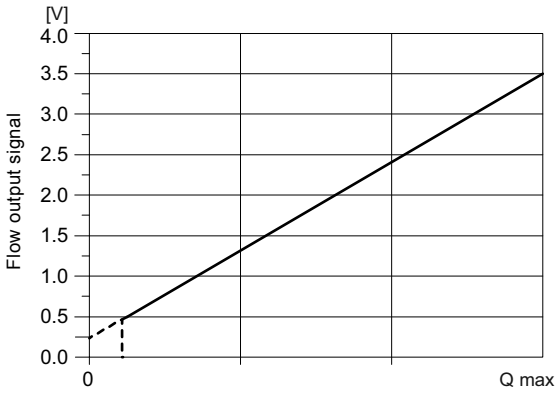
	A	B	C
mm	110	ISO 228/1 - G3/4 A or 3/4" - 14 NPSM	58.8
in	4.33		2.31



TM05 4670 2512

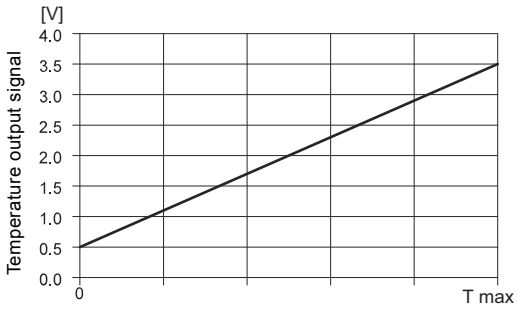
	A	B	C	D
mm	110	ISO 228/1 - G3/4 A	60.5	29.8
in	4.33		2.38	1.17

Sensor output signals



TM06 3360 5214

Fig. 62 Flow response



TM06 3354 5214

Fig. 63 Temperature response

Specifications

Flow	
Measuring range	1-12 l/min (0.2 to 3.2 gpm)
Accuracy (± 1σ), 0-100 °C (32-212 °F)	± 1.5 % FS
Response time (63.2 %)	< 3 s
Resolution	0.06 l/min (0.016 gpm)
Temperature	
Measuring range	0-100 °C (32-212 °F)
Accuracy (± 1σ), 25-80 °C (77-176 °F)	± 1 K
Accuracy (± 1σ), 0-100 °C (32-212 °F)	± 2 K
Response time (63.2 % at 50 % FS flow)	250 ms
Resolution	0.35 K
Media and environment	
Medium types	Kinematic viscosity ≤ 4 mm^2/s (cSt)
Medium temperature (operation)	Water: 0-100 °C (32-212 °F)
Medium temperature (peak)	-25 °C (-13 °F), non-freezing 120 °C (-248 °F) for 5 minutes, up to 3 weeks in sensor lifetime
Ambient air temperature (operation)	-25 - 60 °C (-13 - 140 °F)
Ambient air temperature (peak)	-55 - 90 °C (-67 to 194 °F)
Humidity	0-95 % (relative), non-condensing
System burst pressure	> 16 bar (232 psi)
Electrical data	
Power supply	5 VDC (± 5 %). We recommend grounding of the sensor supply (PELV)
Output signals	Ratiometric
Flow signal	0.5 - 3.5 V (Zero at 0.25 V)
Temperature signal	0.5 - 3.5 V
Power consumption	< 50 mW
Load impedance	> 10 kΩ
Maximum cable length	3 m (9.10 ft)
Materials	
Sensing element	Silicon-based MEMS sensor
Seal (sensor to housing)	EPDM
Housing	Composites (PPS, PA66)
Flow pipe	1.4408
Insert	PPA 40 GF
Wetted materials	Corrosion-resistant coating EPDM or FKM, PPS, PPA 40-GF, 1.4408
Environmental standards	
Enclosure class	IP44 (cable connected)
Temperature cycling	IEC 68-2-14
Vibration (non-destructive)	20-2000 Hz, 10G, 4 h
Electromagnetic compatibility	EN 61326-1