

FOX 10A

Model 10A Thermal Gas Mass Flowmeter

- ✕ Directly measures mass gas flow in scfm or nm^3/h . Available in other engineering units
- ✕ Insertion and in-line models
- ✕ In-line model has built-in flow conditioners
- ✕ Advanced *Power Pro™* Sensor
- ✕ All welded sensor construction
- ✕ Wide turn down—100 to 1
- ✕ Microprocessor based, field rangeable
- ✕ On board display and configuration panel
- ✕ CSA approved explosion-proof
- ✕ FM approval pending
- ✕ CENELEC approval pending
- ✕ CE approved
- ✕ NIST traceable calibration



PRODUCT DESCRIPTION

Fox Industries' Model 10A Thermal Mass Flowmeter is the instrument of choice for reliable and accurate gas mass flow measurement. The instrument measures gas in standard units without the need for temperature and pressure compensation. It provides a 4-20 mA output proportional to mass flow rate in your choice of engineering units (scfm, sfp, nm^3/h , etc.). The optional on-board display/configuration panel provides a bright LED read-out of flow rate and total. It allows the user to field set the meter's full scale, alarms points, and adjust the duct or pipe dimension required for changing application conditions.

All Fox Model 10A Flowmeters are equipped with the revolutionary *Power Pro™* thermal mass flow sensor. The *Power Pro* sensor was designed to operate at a higher power level than previous models. The elevated power level significantly increases its sensitivity to flow. This results in improved accuracy, repeatability and response time.

The Model 10A is available in insertion and in-line configurations. The insertion meter has a rugged 1/2-inch probe in lengths up to 36-inches (91.4 cm). The in-line model is available in 1 to 6-inches (2.5 to 15.2 cm) and delivered with built-in flow conditioners that eliminate the need for long, straight pipe runs. The meter can be ordered with flanged, NPT, or weld-prep end connections. Both models can be supplied with 316 stainless steel, Hastelloy C-276, or other wetted material. The Model 10A is CSA approved for hazardous area locations. The very reliable, very accurate Fox Industries Model 10A Thermal Mass Flowmeter is the right choice for your gas flow applications.



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SPECIFICATIONS

Performance Specs

Accuracy:
 ± 0.75% of reading + 0.5% of full scale
 Calibration:
 NIST traceable
 Repeatability:
 ± 0.2% of reading
 Response Time:
 0.9 seconds (One time constant)

Operating Specs

Flow Rates:
 Insertion Flowmeter
 0 to 20,000 scfm (0 to 100 nmps)
 In-Line Flowmeter

Size	scfm		nm ³ /hr	
	min	max	min	max
1-inch	0-6	0-120	0-10	0-204
1.5-inch	0-15	0-280	0-25	0-476
2-inch	0-23	0-470	0-39	0-800
3-inch	0-50	0-1000	0-85	0-1700
4-inch	0-90	0-1800	0-153	0-3060
6-inch	0-200	0-4000	0-340	0-6800

Note: Standard conditions of air at 70°F and one atmosphere.
 Consult factory for other gases.

Gas Pressure:
 Insertion Flowmeter
 300 psig (21 barg)
 In-Line Flowmeter
 NPT 300 psig (21 barg)
 150# Flange 230 psig (16 barg)

Note: Pressure ratings stated for temperature of 100°F (38°C).

Temperature:
 Sensor -40 to 250°F (-40 to 121°C)
 Sensor 32 to 482°F (0 to 250°C)*
 Enclosure -40 to 131°F (-40 to 55°C)

* Check for availability.

Input Power:
 Explosion proof enclosure
 24 VDC, ± 10%, 0.5 amp
 Remote NEMA 4X enclosure
 115/230 VAC, ±10%, 50/60 Hz, 0.25 amp

Output:
 4-20 mA, isolated
 Alarm relay; dry contact;
 50 VAC, 30 VDC, 3 amp

Physical Specs

Display Parameters:
 Flow scfm (nm³/h)
 Total scf (nm³)
 Elapsed time (hrs)
 Alternates between readings

Explosion Proof Enclosure:
 Cast aluminum; Explosion proof for
 Class I, Divisions 1, Groups B, C, & D
 Temperature: T3C (160°C)
 CSA and CE approved
 Remote NEMA 4X Enclosure:
 Fiberglass; Non-explosion proof;
 NEMA 4X
 Sensor Wetted Materials:
 316 Stainless Steel, Hastelloy C-276
 Insertion Flowmeter:
 Probe diameter 1/2-inch
 Installation Coupling 3/4-inch NPT

Dimensional

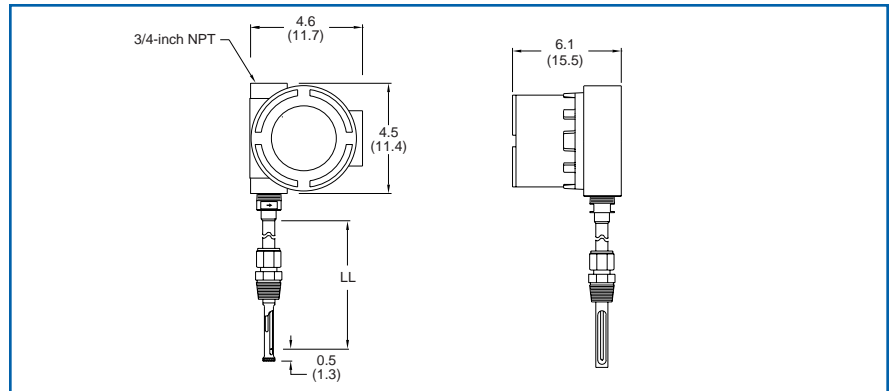
Insertion Flowmeters:
 Length (LL) = 6.0(15.2), 12.0(30.5), 18.0(45.7),
 24.0(61.0), 30.0(76.2), 36.0(91.4)

In-Line Flowmeters:

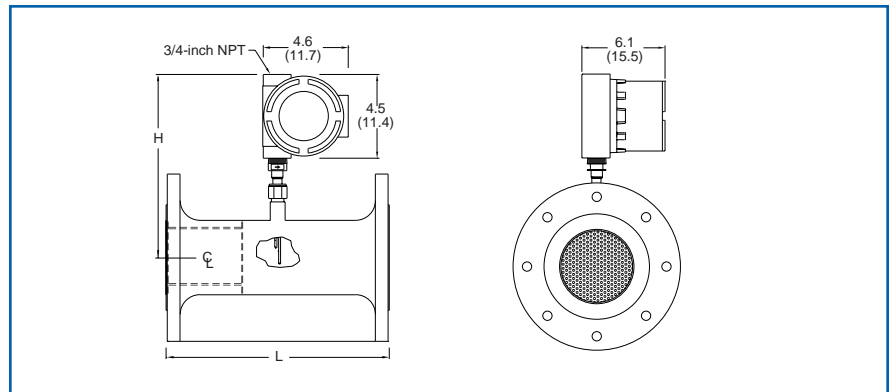
	L	H
1-inch	15.0 (38.1)	8.5 (21.6)
1.5-inch	12.0 (30.5)	8.5 (21.6)
2-inch	12.0 (30.5)	10.0 (25.4)
3-inch	18.0 (45.7)	10.0 (25.4)
4-inch	18.0 (45.7)	11.5 (29.2)
6-inch	24.0 (61.0)	11.5 (29.2)

Note: Dimensions in parenthesis are centimeters. For certified drawings consult factory.

Insertion 6 to 36" (15 to 91 cm)



In-Line with 150# Flanged



In-Line with NPT Fittings and NEMA 4X Enclosure

