

FEATURES

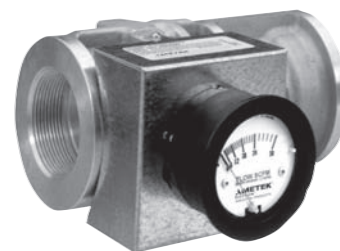
- Direct reading in SCFM
- Low pressure drop (2-4" typical) across the flow meter
- Non-clogging, low impedance air stream
- Light weight aluminum
- No moving parts
- Large easy-to-read dial
- Accurate within 2% at standard conditions
- Good repeatability
- Available in 2", 3" and 4" sizes
- Factory configured for quick installation
- .048" Allen key supplied for gauge adjustment

OPTIONS

- Corrosion-resistant version with Chem-Tough™ or in stainless steel
- FDA-approved Food Tough™ surface conversion

BENEFITS

- **OPTIMIZE SYSTEM EFFICIENCY**
Measuring the correct air flow can assist you in fine-tuning to your system's optimal efficiency.
- **BALANCE MULTI-PIPING SYSTEMS**
When evacuating CFM from more than one pipe, different run lengths or end system impedance can cause one pipe to handle more CFM than the other. With an accurate CFM reading, piping can be balanced by bleeding air in/out or by creating an extra impedance.
- **DETECT CHANNELING OR PLUGGING**
For systems in which channeling or plugging can occur, a change in the CFM measured can help indicate the unseen changes in your system.



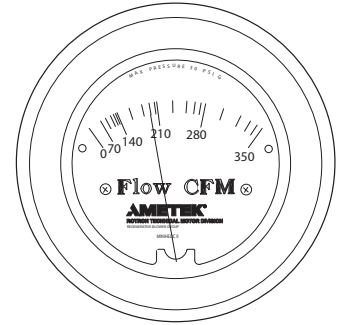
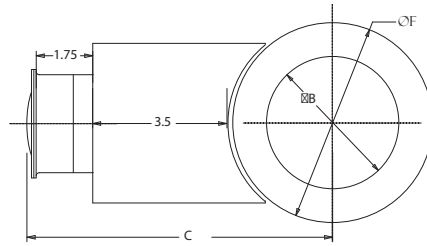
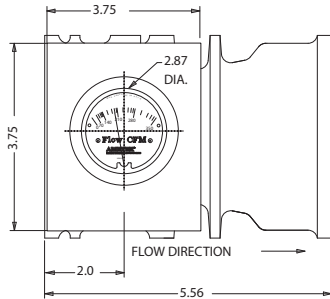
		Part/Model Number					
		FM20C030Q	FM20C045Q	FM20C065Q	FM20C125Q	FM20C175Q	FM20C225Q
Specification	Units	550599	550600	550601	550602	550603	550604
Flow Rate	CFM	6-30	9-45	13-65	25-125	35-175	45-225
	m3/hr	10-50	15-77	22-111	43-213	60-300	77-383
Threads B	-	2-11.5	2-11.5	2-11.5	2-11.5	2-11.5	2-11.5
Dimension C	Inches	7.18	7.18	7.18	7.18	7.18	7.18
	mm	182.4	182.4	182.4	182.4	182.4	182.4
Dimension D	Inches	7.0	7.0	7.0	5.8	5.8	5.8
	mm	177.8	177.8	177.8	147.3	147.3	147.3
Dimension E	Inches	2.0	2.0	2.0	2.0	2.0	2.0
	mm	50.8	50.8	50.8	50.8	50.8	50.8
Dimension F	Inches	3.75	3.75	3.75	3.75	3.75	3.75
	mm	95.3	95.3	95.3	95.3	95.3	95.3

		Part/Model Number					
		FM30C250Q	FM30C350Q	FM30C475Q	FM40C450Q	FM40C600Q	FM40C850Q
Specification	Units	550605	550606	550607	550608	550609	550610
Flow Rate	CFM	50-250	70-350	95-475	90-450	120-600	170-850
	m3/hr	85-425	119-595	162-808	153-795	204-1020	289-1445
Threads B	-	3-8	3-8	3-8	4-8	4-8	4-8
Dimension C	Inches	7.18	7.18	7.18	7.18	7.18	7.18
	mm	182.4	182.4	182.4	182.4	182.4	182.4
Dimension D	Inches	7.0	7.0	7.0	5.8	5.8	5.8
	mm	177.8	177.8	177.8	147.3	147.3	147.3
Dimension E	Inches	2.0	2.0	2.0	2.0	2.0	2.0
	mm	50.8	50.8	50.8	50.8	50.8	50.8
Dimension F	Inches	3.75	3.75	3.75	3.75	3.75	3.75
	mm	95.3	95.3	95.3	95.3	95.3	95.3

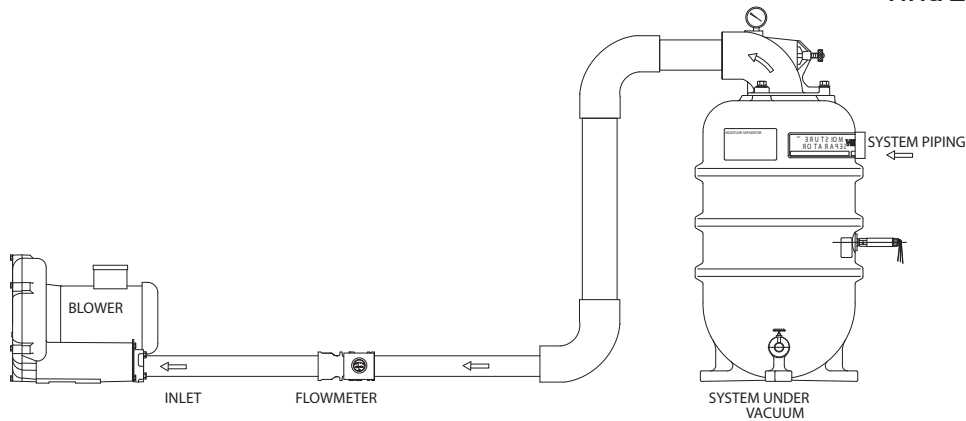
This document is for informational purposes only and should not be considered as a binding description of the products or their performance in all applications. The performance data on this page depicts typical performance under controlled laboratory conditions. AMETEK is not responsible for blowers driven beyond factory specified speed, temperature, pressure, flow or without proper alignment. Actual performance will vary depending on the operating environment and application. AMETEK products are not designed for and should not be used in medical life support applications. AMETEK reserves the right to revise its products without notification. The above characteristics represent standard products. For product designed to meet specific applications, contact AMETEK Technical & Industrial Products Sales department.

AMETEK DYNAMIC FLUID SOLUTIONS
75 North Street, Saugerties, NY 12477
USA: +1 215-256-6601 - Europe: +49 7703 930909 - Asia: +86 21 5763 1258
Customer Service Fax: +1 215.256.1338
www.ametekdfs.com

TYPICAL FLOW METER ARRANGEMENT



TYPICAL GAUGE FACE



HIGH TEMPERATURE/PRESSURE CORRECTION

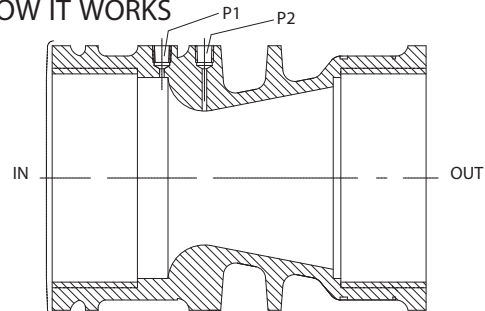
$$SCFM_2 = \frac{SCFM_1}{\sqrt{\left(\frac{14.7}{Pf_2}\right) \times \left(\frac{530}{Tf_2 + 460}\right)}}$$

Pf_2 = Absolute Pressure in

PSIA Tf_2 = Temperature in °F

- Use on inlet to limit need to correct for high pressure or elevated outlet temperature
- Standard model limits = 140°F and 30 PSIG

HOW IT WORKS



ROTRON'S ~ flow meter is a venturi style design. After air enters the inlet, the pressure is measured in the P1 tap. The second tap, P2, measures the pressure at the throat. The differential between P1 and P2 registers across a special calibrated CFM gauge to provide accurate readings. The throat is then expanded back to the original size to keep pressure loss to under 2-4 IWG.

This document is for informational purposes only and should not be considered as a binding description of the products or their performance in all applications. The performance data on this page depicts typical performance under controlled laboratory conditions. AMETEK is not responsible for blowers driven beyond factory specified speed, temperature, pressure, flow or without proper alignment. Actual performance will vary depending on the operating environment and application. AMETEK products are not designed for and should not be used in medical life support applications. AMETEK reserves the right to revise its products without notification. The above characteristics represent standard products. For product designed to meet specific applications, contact AMETEK Technical & Industrial Products Sales department.

Remote air flow rate monitoring and system automation control can now be achieved through the use of 4-20 mA output signals. Our 4-20 mA analog outputs are proportional to system flow rates and can be used with PLC controlled operations to monitor system performance. Those same outputs provide digital displays for direct readings in SCFM when paired with our LCD Digital Readout option. Combined with our Variable Frequency Drives, you can now achieve a completely automated system capable of adjusting blower performance to meet changing system demands. Maintaining your system at peak performance gives your company the competitive edge needed in today's marketplace.

DIFFERENTIAL PRESSURE TRANSMITTER

4-20 mA signal output control signals provide flow rate monitoring capabilities from remote locations

NEMA 1R-raintight enclosure protects the integrated DC power supply and rugged differential pressure transducer

Suitable for remote mounting up to 10' from flow meter

Weight: 3 oz.

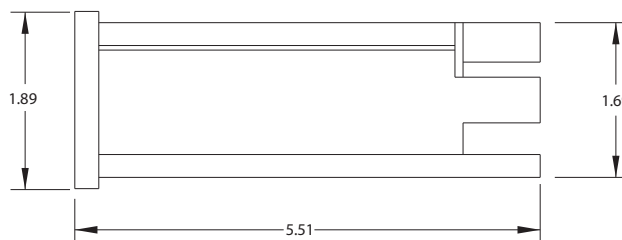
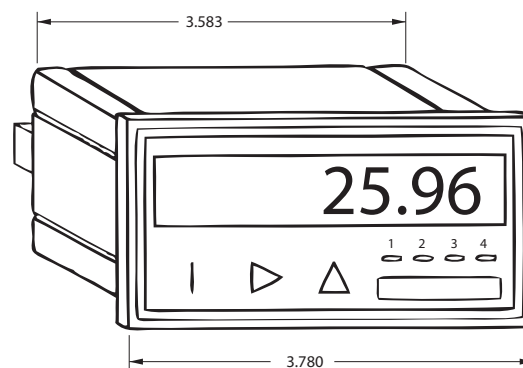
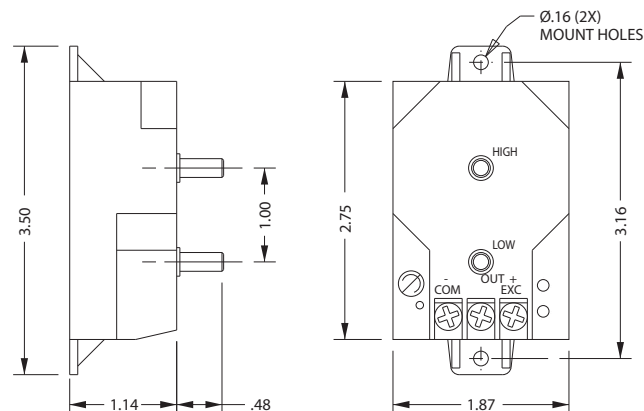
Signal Output: 4-20 mA, DC¹

Hi/Lo pressure fittings feature snap lock action to ensure trouble-free connections²

System includes standard flowmeter for on-site readings and troubleshooting

Operating temperature: 0°F to 150°F

Drawing available



LCD DIGITAL READOUT OPTIONS

Factory configured to display direct readings in SCFM to a remote location up to 50' from signal output¹ NEMA 4, IP65 enclosure ready for panel mount installation power supply and rugged differential pressure transducer

Suitable for remote mounting up to 10' from flow meter installation

Power input: 120 VAC, 50/60Hz AC, Field configurable to 240VAC

Display: 5 digit, 7 segment, .5" high LED w/3.3Hz update rate

Operating temperature: 10°C to 40°C

Weight: 1lb., 14oz.

Drawing available

Note 1: 4-20 mA output control wiring to be customer supplies. Shielded, 2 conductor cables, 22 AWG is recommended for runs up to 100'. For longer runs contact factory

Note 2: Use 5/16" OD stiff wall tubing-connect "Lo" on flowmeter to "Lo" on 4-20 mA enclosure, "Hi" on flowmeter to "Hi" on 4-20 mA enclosure. Tubing must be equal in length. (Maximum length is 10 feet)

DIFFERENTIAL PRESSURE TRANSMITTER

FM20S030Q	FM20S045Q	FM20S065Q	FM20S125Q	FM20S175Q	FM20S225Q	FM30S250Q	FM30S350Q	FM30S475Q	FM40S450Q	FM40S600Q	FM40S850Q
550838	550839	550840	550841	550842	550843	550844	550845	550846	550847	550848	550849

LCD DISPLAY

FM20L030Q	FM20L045Q	FM20L065Q	FM20L125Q	FM20L175Q	FM20L225Q	FM30L250Q	FM30L350Q	FM30L475Q	FM40L450Q	FM40L600Q	FM40L850Q
550860	550861	550862	550863	550864	550865	550866	550867	550868	550869	550870	550871

This document is for informational purposes only and should not be considered as a binding description of the products or their performance in all applications. The performance data on this page depicts typical performance under controlled laboratory conditions. AMETEK is not responsible for blowers driven beyond factory specified speed, temperature, pressure, flow or without proper alignment. Actual performance will vary depending on the operating environment and application. AMETEK products are not designed for and should not be used in medical life support applications. AMETEK reserves the right to revise its products without notification. The above characteristics represent standard products. For product designed to meet specific applications, contact AMETEK Technical & Industrial Products Sales department.