

2005 Flow Control Innovation Award Winner

Promass Transmitter Features



Promass 83

- » Push-button operation for easy programming
- » Quick setup for fast and easy commissioning
- » Simultaneously record several process variables for various process conditions during measuring operation
- » Touch control operation allows programming without opening electronics
- » 4-line backlit display
- » Advanced diagnostics, batching and concentration measurement
- » IP 67 powder-coated die-cast aluminum field housing



We put you first.
And keep you ahead.



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And keep you ahead.

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Proline® Promass E Coriolis Flowmeter

Product Guide for
Petroleum and
Production Metering



Measurement Solutions

Proline Promass E Coriolis Meters

Leading the field with Coriolis innovations

- » Perfected straight dual tube design to make true "Fit-and-Forget" meters, eliminating the need for expensive pipe supports and long lengths of straight pipe runs in your installation
- » Solved the problem of zero point drift through highly sophisticated welding and manufacturing techniques that ensure highest accuracy in welding tolerances and lowest impact on zero point stability
- » Developed DSP (Digital Signal Processing) technology for Promass 83 transmitter to improve the signal-to-noise ratio and ensure optimum speed and accuracy – it is the fastest on the market

Benefits of Coriolis Flowmeters from FMC Technologies

- » Self-draining designs eliminate problems with clogging
- » High-speed measuring with 20 ms response time
- » Increased immunity to common pipeline noise
- » Immunity to pipeline loading stress
- » Routine re-zeroing of the meters is not necessary
- » No supports or braces are needed for installation
- » Temperature changes do not affect zero point stability

Sensors best price, density accuracy, and stability

- » Highest density accuracy
- » Compact, dual-tube design
- » Rupture disk in the sensor housing (optional)
- » Universal sensor, handles most applications – sizes 3/8" to 3"
- » Sensor material: stainless steel 904L/316L
- » Maximum fluid temperatures up to 284°F

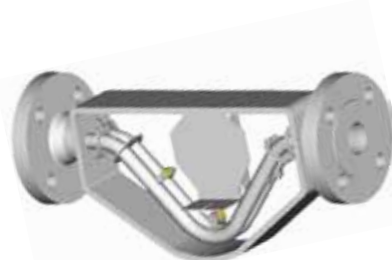
SIZE RANGE ¹	lb/min	BPH	GPM
3/8"	0 to 73.5	13	9
1/2"	0 to 238	41	29
1"	0 to 660	113	79
1-1/2"	0 to 1,650	283	198
2"	0 to 2,570	441	309
3"	0 to 6,600	1,132	794

ACCURACY	
Liquid	
Flow Accuracy	+/- 0.15% of rate
Linearity	5% to 100% of max flow
Repeatability	+/- 0.075% in 5 runs *
Gas	
Mass of Flow Rate	+/- .75%
Density Accuracy	
Field/Reference	± 0.0005 g/cc
Special Cal.	± 0.001 g/cc
Standard Cal.	± 0.02 g/cc

* Per API Chapter 5.6 Table 1

FEATURES	
Tube Materials	904L
Process Temperature Range	-40 to 284°F
Max. Pressure Rating	1,200 psi
Remote Version	Yes

¹Flow rates based on process water



Transmitters most economical, multi-purpose, and highly sophisticated

Features
4-Line Backlit Display
Programming
HART
FieldTool
Touch Control
Housing
Compact aluminum
Compact stainless steel
Remote aluminum mount
65 ft. Maximum Remote Distance
Outputs¹
11 Fixed modules
8 Flexible modules
4 I/O combinations
Profibus-PA/DP
FOUNDATION Fieldbus
Modbus
Measured Variables
Mass flow
Volumetric flow
Density
Temperature
3 Totalizers
Sensor Memory Chip (S-Dat)
Transmitter Memory Chip (T-Dat)
Special Functions (F-Chip)
Advanced diagnostics
Concentration measurement
Batching
Quick Setup
Hazardous Area Approvals
XP; FM Cl. I Div. 1
Power Supply
85-260 VAC
20-55 VAC/16-62 VDC

¹Max number of:

Current outputs	3
Frequency outputs	2
Status/relay outputs	2
Status inputs	1