

ELECTRONIC VOLUMETRIC FLOWMETERS

FDP10 Series

Starts at

\$414



- ✓ Quick Response Time
- ✓ Attitude Insensitive
- ✓ Easy Maintenance
- ✓ Bi-Directional Flow Passage
- ✓ Volumetric Flow Measurement
- ✓ Low Pressure Drop
- ✓ No Long-Term Drift
- ✓ External Access to Zero and Span Adjustments

Evaluate volume flow via a unique, rugged, patent-pending flow passage. Differential pressure measurement across a laminar flow element makes this flowmeter inherently linear. The unique laminar flow element, along with a modern electronics sensor, produces an affordable yet accurate instrument. This method maximizes linearity over the full range of the flowmeter. **Note: Unlike OMEGA's FMA Series mass flowmeters, the FDP Series measures volumetric, not mass, flow. The FDP series must be calibrated and used at only one regulated outlet pressure.**

The FDP10 Series electronic flowmeter is designed for use with most inert gases. The unit is supplied standard with a voltage output, but without an integral display. Optionally available is an integral digital display with RS232 communications. The orientation of all units can be tilted on either axis with little or no effect on flow rates.

This standard high-accuracy unit is supplied with an aluminum body flow block and 1/4" compression fittings. The upper case is molded of high-impact polycarbonate. Air flow from 50 ccm to 5 LPM can be accommodated with 50:1 turndown.

Recommended Reference Book:
Flow Measurement Engineering
Handbook, **OP-9, \$145**
See Section Y
For Additional Books



FDP10 Series electronic flowmeter, shown with optional digital display.

SPECIFICATIONS

Response Time: <50 milliseconds

Accuracy: <±2% FS

Repeatability at Constant Temp: <±1% FS

Turndown Ratio: 50:1

Pressure Drop: 0.05 bar (0.75 psig)

Temperature Range: 10 to 50°C (50 to 122°F)

Supply Voltage: 6 Vdc

Reverse polarity protection to 15 Vdc maximum

Supply Current: 3 mA

Supply current for units with display and RS232 is 10 mA

Output Voltage: 0 to 5V

Output Span: 5V

Calibration Pressure Max: 6.9 bar (100 psig)

Dimensions:

84 x 61 x 25 mm (3.3 x 2.4 x 1.0")

CUSTOM MODELS BUILT TO ORDER!

To Order (Specify Model Number)

Model No.	Price	Range
FDP11-(**)-(*)	\$414	0 to 50 cc/min
FDP12-(**)-(*)	414	0 to 100 cc/min
FDP13-(**)-(*)	414	0 to 200 cc/min
FDP14-(**)-(*)	414	0 to 500 cc/min
FDP15-(**)-(*)	414	0 to 1 LPM
FDP16-(**)-(*)	414	0 to 2 LPM
FDP17-(**)-(*)	414	0 to 5 LPM

Comes complete with operator's manual.

Note: Not for use with flammable gases.

(*) Replace asterisk in model number with regulated outlet pressure in psig.

(**) Replace double asterisk in model number with one of the following gas codes:

A = air; CO2 = carbon dioxide; N = nitrogen; AR = argon; O2 = oxygen

(add \$75 cleaning charge for oxygen service).

For units with display, add suffix "-D" to model number and \$16.

Ordering Example: FDP15-O2-(-50)-D-02CLEAN, volumetric flowmeter calibrated and cleaned for oxygen at 50 psig, room temperature, 0 to 1 actual LPM, with display and voltage output, \$414 + 75 + 16 = \$505.

Accessories

Model No.	Price	Description
FDP10-CON	\$42	9-pin male D-connector 6' extension cable for RS232
FDP10-UNIVERSAL	56	100 to 240 Vac/12 Vdc universal power supply

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• Flow and Level

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