



JLC International, Inc  
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# Low Cost Turbine Flow Meter Series 800D

## Low flow, chemically resistant flowmeter with integral display

This displaying flowmeter incorporates the 800 series flowmeter with a programmable display to give both total and rate. It has four digit 8mm high LCD display that can be configured to display rate in engineering units per second, minute or hour. The total function has a selectable decimal point and may be reset at any time by pressing and holding the reset button. It is designed to give high performance and competitive pricing with 6 flow ranges from 0.05 to 15 lpm (0.013 to 3.96 gpm). It's totally non-metallic wetted components make this the ideal choice for the metering of aggressive chemicals including ultra-pure water. The standard inlet tubes are either barbed to accept an 8mm hose or 3/8" John guest push-on connections. For OEM use alternatives are available. The bearings are made of sapphire for long life and reliability, the body is molded PVDF as standard and the 'O' ring seal is typically Viton™ although alternatives are available.



At the heart of the meter is a precision turbine that rotates freely on robust sapphire bearings and contains encapsulated ceramic magnets that are detected through the chamber wall by a Hall effect detector. The output is a stream of NPN pulses that are readily interfaced with most electronic display or recording devices. This combination of materials and technology ensures a long life product with reliable operation throughout.



## Features

- Manufactured in PVDF with encapsulated ceramic magnets and sapphire bearings
- 4 digit flow rate / total display and pulse output NPN
- Measurement down to 50 ml/min (0.013 gpm)
- Pressure rating 10 bar (145 psi)
- Temperature rating up to 55 °C (131 °F)
- Barbed connections 8 mm (5/16") or 3/8" John Guest

## Flow Ranges and Pulses

Model	Range liter/min	Range gal/min	Accuracy ± % FS	Frequency Hz <sup>1)</sup>	K-factor 1/liter <sup>1)</sup>	K-factor 1/gallon <sup>1)</sup>
803	0.05.....0.50	0.013.....0.132	2.0	142	17000	64352
815	0.12.....1.50	0.032.....0.396	2.0	175	7000	26498
845	0.20.....4.50	0.053.....1.189	1.5	260	3500	13249
865	0.25.....6.50	0.066.....1.717	1.5	230	2100	7949
810	0.30.....10.0	0.079.....2.642	1.0	235	1420	5375
824	0.50.....15.0	0.132.....3.963	1.0	245	980	3710

1) an approximation; the actual values are provided with each individual flowmeter by means of a calibration certificate and graph.

Table 1



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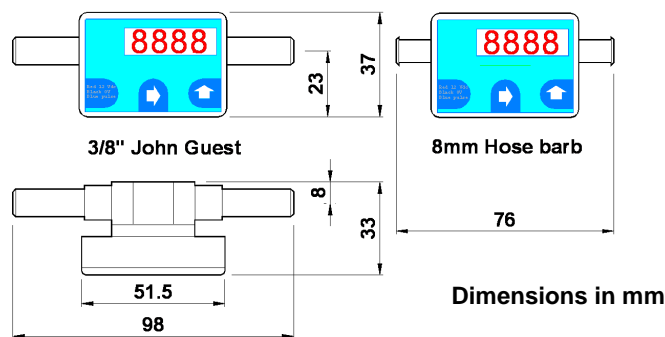
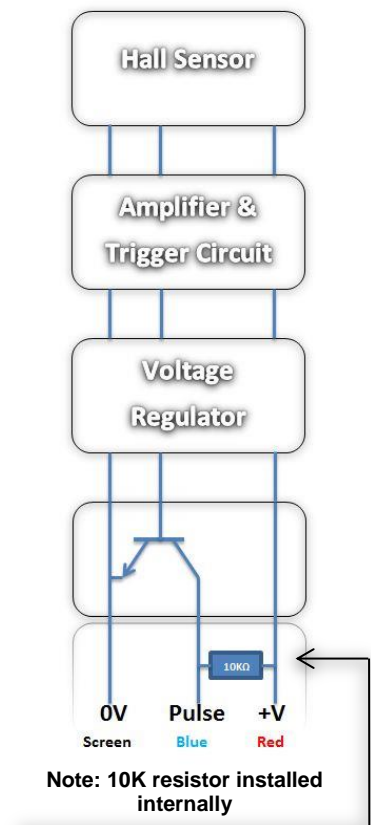
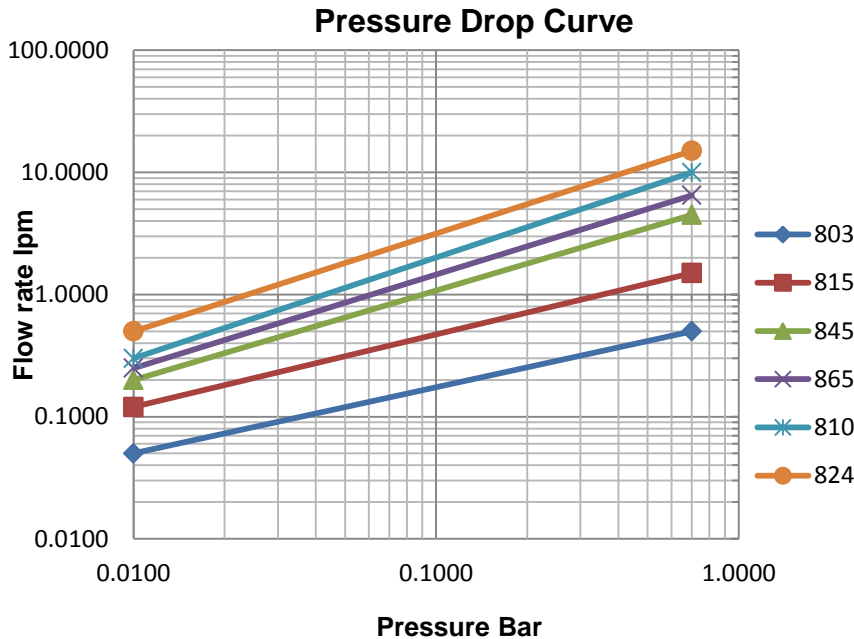
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## Technical Specifications

- Linearity: see table 1
- Repeatability:  $\pm 0.1\%$
- Display: 4-digit for flow rate and total, programmable
- Pulse output: NPN – 5 Volt, Hall Effect – switch current 10 mA max.
- Pressure rating: 10 bar (145 psi)
- Viscosity / particles: up to 10 cP / less than 90 micron
- Temperature rating: -20 °C (-4 °F) up to 55 °C (131 °F)
- Calibration: fully calibrated for water @ 20 °C (68 °F), incl. calibration certificate with K-factors
- Body and internals: PVDF, Sapphire, encapsulated ceramic magnets
- Seals: Viton O ring – Nitrile, EPDM and Silicon optional
- Connections: Barbed 8 (5/16") or 3/8" John Guest straight pipe
- Power supply: 8 – 12 Vdc; 80 mA typical





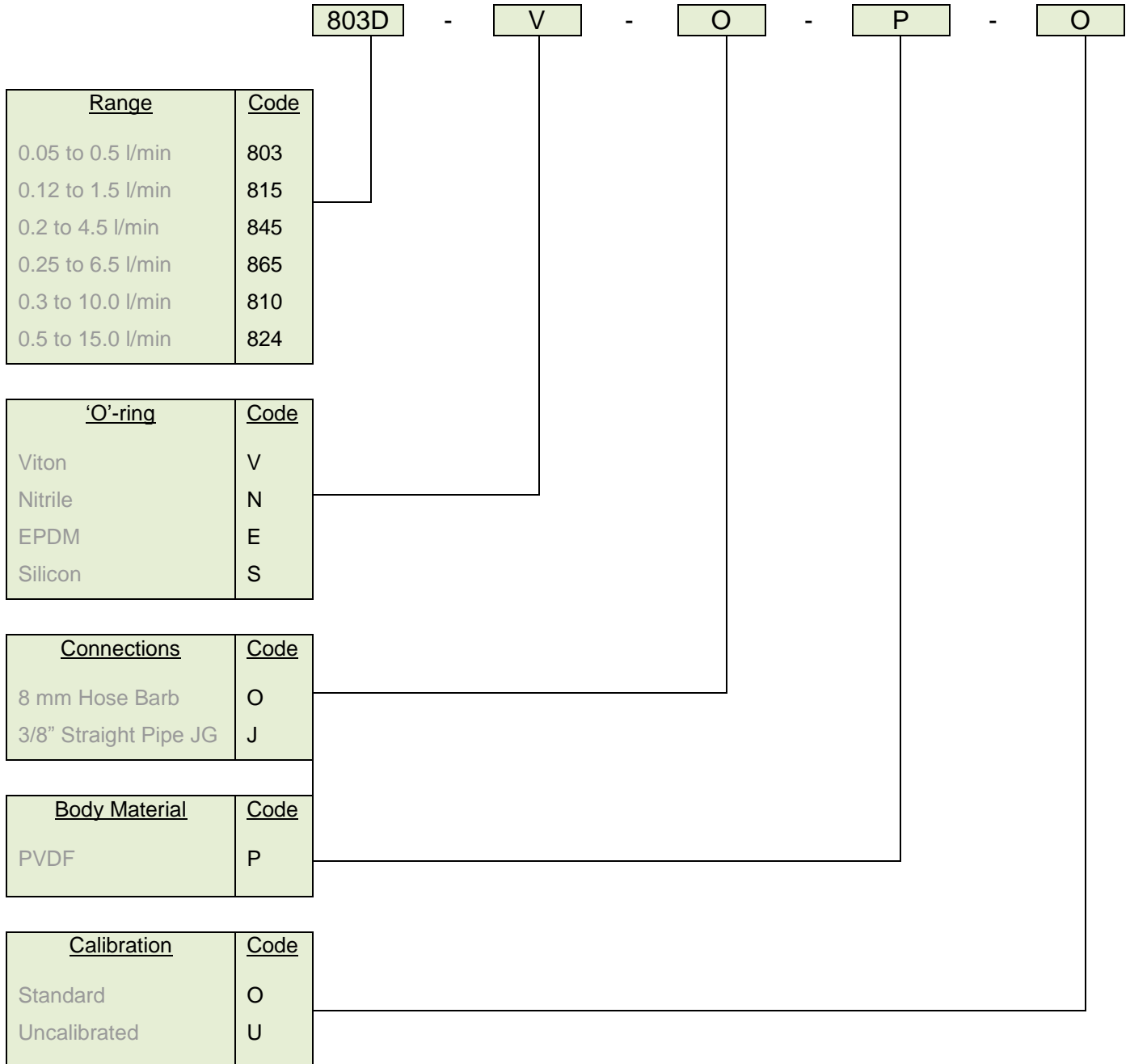
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## Model Numbering System



e.g. 803D-VOP-O: range 0.05 to 0.5 l/min, Viton seal, PVDF body and 6-point traceable water calibration.