TECHNICAL PRODUCT

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800 Series Flowmeter



The 800 series flowmeter is designed to give high performance and competitive pricing with 6 flow ranges from 0.05 to 15 L/min. Its totally non-metallic wetted components makes this the ideal choice for the metering of aggressive chemicals including ultra-pure water. The standard inlet tubes are barbed to accept two hose sizes 8mm and 12mm although for OEM use alternatives are available. The bearings are made of sapphire for long life and reliability, the body is moulded PVDF as standard and the 'O' ring seal is typically Viton[®].



- Laboratory tests
- Cooling equipment
- Active flow alarms
- Semiconductor plant
- Engine test
- Food and beverage







- Low cost
- PVDF or PP body
- 1- 2% FSD
- Sapphire bearings
- Hall Effect sensor
- 6 Flow ranges
- Pulse output (NPN Std)
- Pulse output (PNP Option)
- 10 Bar rating
- Viton[®] seal as standard
- 8mm and 12mm hose
- 0.1% Repeatability
- 4.5 to 24Vdc
- -25°C Min to 125°C Max
- IP67
- NSF Certified for use in food and beverage production



800 Series Flowmeter

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Ordering codes

Model		
803		
815		
845		
865		
810		
824		
	'O' ring mtl	
	V = Viton®	
	N = Nitrile	
	E = EPDM	
	S = Silicon	
	Options	
	0 = Standard	
	2 = NPN - PNP	
	Body m	aterial
	P = PVE)F
	0 = Spe	cial
		Special OEM code
		0 = Standard
		U = Uncalibrated

e.g. **865-V0P-0** is a flow range of 0.25 to 6.5 L/min, Viton[®] seal, standard, PVDF bodied flowmeter with a 6 point traceable water calibration.

Standard Materials of Construction

Body and cap	- PVDF
'O' Ring seal	- Viton®
Magnets	- Over-moulded
Bearings	- Sapphire

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At the heart of the meter is a precision turbine that rotates freely on robust sapphire bearings and contains over-moulded magnets that are detected through the chamber wall by a Hall effect detector. The output is a stream of NPN/PNP 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. There are two temperature options 125°C or 60°C. The 60°C unit is fitted with two LEDs to monitor the power and pulse output, both NPN and PNP transistor outputs are available on each flow meter.



TECHNICAL SPECIFICATIONS

Model	Flow range L/Min	Linearity % FSD	Typical Freq. Hz.	Approx 'K' Factor
803	0.05 - 0.5	2.0	142	17000
815	0.12 - 1.5	2.0	175	7000
845	0.20 - 4.5	1.5	260	3500
865	0.25 - 6.5	1.5	230	2100
810	0.30 - 10.0	1.0	235	1420
824	0.50 - 15.0	1.0	245	980
Weight	0.050kg			



TECHNICAL PRODUCT



800 Displaying Series Flowmeter





- Laboratory tests
- Cooling equipment
- Semiconductor plant
- OEM applications



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This displaying flowmeter incorporates the 800 Series flowmeter with a programmable display to give both total and rate. It has a four digit 8mm high LCD display that can be configured to display the flow 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 L/min. Its 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 moulded PVDF as standard and the 'O' ring seal is typically Viton[™], although alternatives are available.



- IP65
- Low cost
- 4 digit rate/total display
- PVDF
- 1- 2% FSD
- Sapphire bearings
- Hall effect sensor
- 6 Flow ranges
- Auto cal feature
- Pulse output
- 10 Bar rating
- 8mm hose or 3/8" tails*
- 0.1% Repeatability
- 8 to 12Vdc
- -10° to +55°C

*John Guest style connections

800 Displaying Series Flowmeter

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Ordering codes

803 L/min 815 L/min 845 L/min 865 L/min 810 L/min 814 L/min *0' ring mtl *0' ring mtl V = Viton® N = Nitrile E = EPDM S = Silicon Options 0 = Standard P = PVDF 0 = Special Special OEM code 0 = Standard U = Uncalibrated	Flow range	
845 L/min 865 L/min 810 L/min 824 L/min 'O' ring mtl V = Viton® N = Nitrile E = EPDM S = Silicon Options O = Standard P = PVDF O = Special Special OEM code O = Standard U = Uncalibrated	803 L/min	
865 L/min 810 L/min 824 L/min 'O' ring mtl V = Viton® N = Nitrile E = EPDM S = Silicon Options O = Standard P = PVDF O = Special Special OEM code O = Standard U = Uncalibrated	815 L/min	
810 L/min 824 L/min 'O' ring mtl V = Viton® N = Nitrile E = EPDM S = Silicon Options O = Standard P = PVDF O = Special Special OEM code O = Standard U = Uncalibrated	845 L/min	
*O' ring mtl V = Viton® N = Nitrile E = EPDM S = Silicon Options 0 = Standard P = PVDF 0 = Special Special OEM code 0 = Standard	865 L/min	
<pre>'0' ring mtl V = Viton® N = Nitrile E = EPDM S = Silicon Options 0 = Standard Body material P = PVDF 0 = Special Special OEM code 0 = Standard U = Uncalibrated</pre>	810 L/min	
V = Viton® N = Nitrile E = EPDM S = Silicon Options O = Standard P = PVDF O = Special Special OEM code O = Standard U = Uncalibrated	824 L/min	
N = Nitrile E = EPDM S = Silicon Options O = Standard Body material P = PVDF O = Special Special OEM code O = Standard U = Uncalibrated	'0' ring mtl	
E = EPDM S = Silicon Options 0 = Standard Body material P = PVDF O = Special Special OEM code 0 = Standard U = Uncalibrated	V = Viton®	
S = Silicon Options O = Standard Body material P = PVDF O = Special Special OEM code O = Standard U = Uncalibrated	N = Nitrile	
Options O = Standard Body material P = PVDF O = Special Special OEM code O = Standard U = Uncalibrated	E = EPDM	
0 = Standard Body material P = PVDF 0 = Special Special OEM code 0 = Standard U = Uncalibrated	S = Silicon	
Body material P = PVDF O = Special Special OEM code O = Standard U = Uncalibrated	Options	
P = PVDF O = Special Special OEM code O = Standard U = Uncalibrated	0 = Stan	dard
0 = Special Special OEM code 0 = Standard U = Uncalibrated		Body material
Special OEM code 0 = Standard U = Uncalibrated		P = PVDF
0 = Standard U = Uncalibrated		0 = Special
U = Uncalibrated		Special OEM code
		0 = Standard
Dianlay		U = Uncalibrated
Display		Display
Disp		Disp

e.g. **865-V 0 P-0-Disp** is a flow range of 0.25 to 6.5 L/min, Viton[™] seal, standard, PVDF bodied flowmeter with a 6 point traceable water calibration.

The "John Guest" fittings must be specified separately if required. The display units and decimal points must be specified at the time of ordering. The meter may be purchased uncalibrated as the program has a self calibrate facility that simply requires the passing of a known volume of liquid through the meter. At the heart of the meter is a precision turbine that rotates freely on robust sapphire bearings and contains over-moulded magnets that are detected through the chamber wall by a Hall effect detector. The output is a stream of NPN pulses that are directly interfaced with the electronic display. This combination of materials and technology ensures a long life product with reliable operation throughout. The 4 digit display is a seven segment 8mm high LED with a flashing colon for flow rate indication. Current consumption is up to 80mA and the unit will operate from 8 to 12Vdc, the recommended PSU is 9 volts at 100mA. There is a 5 volt pulse output for interfacing with other computers or recording instruments.



TECHNICAL SPECIFICATIONS

Model	Flow range L/Min	Linearity % FSD	Typical Freq. Hz.	Approx 'K' Factor
803	0.05 - 0.5	2.0	142	17000
815	0.12 - 1.5	2.0	175	7000
845	0.20 - 4.5	1.5	260	3500
865	0.25 - 6.5	1.5	230	2100
810	0.30 - 10.0	1.0	235	1420
824	0.50 - 15.0	1.0	245	980
Weight	0.081kg			

Standard Materials of Construction

- Body and cap PVDF
- 'O' Ring seal Viton™
- Magnets PVDF coated ceramic

Bearings

- Sapphire



diagram

TITAN ENTERPRISES LTD.

TECHNICAL PRODUCT DATA SHEET



800 Series Low Power Flowmeter





- Drink dispensing
- Laboratory tests
- Cooling equipment
- Active flow alarms
- Semiconductor plant
- OEM applications













The low power (4uA @ 3.3V) flowmeter is designed to give high performance and competitive pricing with 6 flow ranges from 0.05 to 15 litres per minute. Its totally non-metallic wetted components makes this the ideal choice for the metering of aggressive chemicals including ultra-pure water. The standard inlet tubes are barbed to accept a hose size of 8mm although for OEM use alternatives are available. The bearings are made of sapphire for long life and reliability, the body is moulded PVDF as standard and the 'O' ring seal is typically Viton[®].



- Low cost
- PVDF
- 1- 2% FSD
- Sapphire bearings
- Low power sensor
- 6 Flow ranges
- 10 Bar rating
- Viton[®] seal as standard
- 8mm hose tails
- 0.1% Repeatability
- 3.3 V 4uA
- -25°C Min to 80°C Max
- 50gms

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800 Series Low Power Flowmeter

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At the heart of the meter is a precision turbine that rotates freely on robust sapphire bearings and contains chemically resistant ceramic magnets that are detected through the chamber wall by a low power detector. The output is a stream of 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.

Ordering codes

Model	
803	
815	
845	
865	
810	
824	
	'0' ring mtl
	V = Viton®
	N = Nitrile
	E = EPDM
	S = Silicon
	Options
	3 = 3.3 V
	Body material
	P = PVDF
	Special OEM code
	0 = Standard
	U = Uncalibrated

e.g. 865-V3P-0 is a flow range of 0.25 to 6.5 L/Min, Viton® seal, standard, PVDF bodied flowmeter with a 6 point traceable water calibration.

Standard Materials of Construction

Body and cap	- PVDF
'O' Ring seal	- Viton®
Magnets	- PVDF coated ceramic
Bearings	- Sapphire

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TECHNICAL SPECIFICATIONS

Model	Flow range L/Min	Linearity % FSD	Typical Freq. Hz.	Approx 'K' Factor
803	0.05 - 0.5	2.0	47	5650
815	0.12 - 1.5	2.0	58	2300
845	0.20 - 4.5	1.5	86	1150
865	0.25 - 6.5	1.5	76	700
810	0.30 - 10.0	1.0	78	470
824	0.50 - 15.0	1.0	81	325

5 year typical battery life

Titan's flexible, battery powered Pulsite Solo digital rate and total indicator with dc power capability

cc.Kg.gms.Ltr/min/Hr/Se

General Information

These panel or surface mounting digital instruments that require no external power, are designed to be as versatile as possible permitting customisation to suit the application. Programming is simple the front panel keys are used with easy to follow screen prompts.

- Clear 6 digit LCD display with enunciators
- 8mm high main digits with 2.5mm enunciators
- Simple setting procedure
- Password protected
- Programmable scaling for rate and total
- Programmable time base for rate
- 96 x 48mm 1/8 DIN case
- Environmentally protected tough polymer housing
- Panel or surface mount
- Replaceable battery
- Front panel programmable
- 5 to 24 V dc power with the battery as backup
- Coil and switch inputs

F

Logic\transistor inputs (external power recommended)



Technical Specification

Display	IP64 Enclosure
Enclosure	Tough polymer housing
Display	Trans-reflective LCD display with 6 x 8mm
	high numerals with 2.5mm enunciators
Power	
Solo	Battery 5 years typical life
	External 5 – 24V dc
Input	
Pulse	2kHz max
Coil	3mV – 24V sine wave, 2 KHz max
Switch:	Limited to 100Hz
Unit Display	9.99999 to 999999
Enunciators	
Total	No units displayed, Gall, cc, kg, gms or Ltr
Rate	Total time units – Sec, min & Hr

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