

02-02.1

#### **PVDF FLOWMETER**

### Series 800

#### 800 Series Data sheet

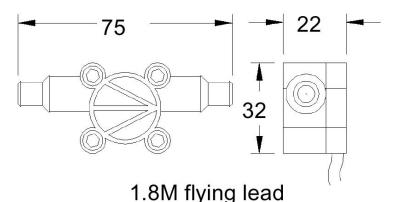
- Low cost
- PVDF or PP body
- 1 2% FSD
- Sapphire bearings
- Hall effect sensor
- 6 Flow ranges
- Pulse output
- 10 Bar rating
- Viton seal as std.
- 8 & 12 mm hose
- 0.1% Repeatability
- 4.5 to 24 V dc
- 125°C Max
- Flow switch option

#### Ideal for

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



The 800 series 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 ac-cept two hose sizes 8mm and 12mm althoughfor OEM use alternatives are available. The bearings are made of sapphire for long life and reliability, the body is moulded PVDF as stan-dard and the 'O' ring seal is typically Viton™.



Model	Flow range L/Min	Linearity % FSD	Typical Freq. Hz	Approx 'K' Factor	Standard Materials of costruction		
803	0 05 – 0 5	2.0	142	17000			
815	0 12 – 1 5	2.0	175	7000	Body and cap	- PVDF	
845	02-45	1.5	260	3500	'O' Ring seal	- Viton	
865	0 25 – 6 5	1.5	230	2100	Magnets	- Ceramic	
810	0 3 – 10	1.0	235	1420	Bearing	- Sapphire	
824	0 5 – 15	1.0	245	980			

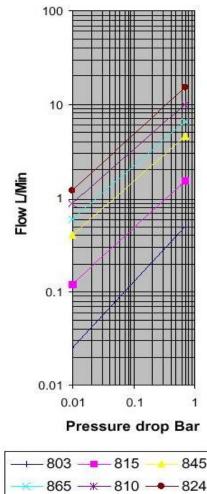


#### **Order Code**

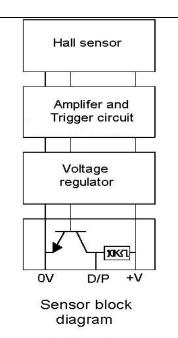
Flow r	ange L/Min	'O' ring Mat	Flow switch option	Body material	Special OEM code
803	= 0.05 - 0.5	$\underline{V}$ = Viton	O =Standard	P =PVDF	O = Standard
815	= 0.12 - 1.5	N = Nitrile	I =Flow switch	O =Special	U = Uncalibrated
845	= 02 - 45	E = EPDM			
865	= 0.25 - 6.5	S = Silicon			
810	= 0.3 - 10				
824	= 0.5 - 15				

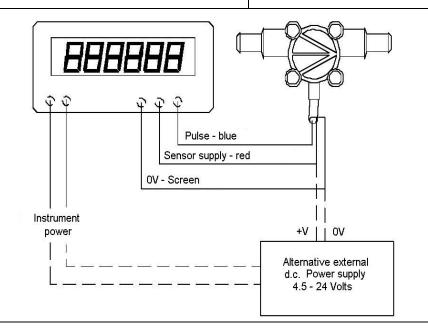
e.g. **865-VOP-O** is a flow range of 0.25 to 6.5 L/Min, viton seal, standard, PVDF bodied flowmeter with a 6 point traceable water calibration.

# Pressure drop Vs flow rate for 800 series meters



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







# MISURATORI VERSATILI Adaptable Flowmeters

#### **Model FT2**

# FT2 (Optical) data sheet

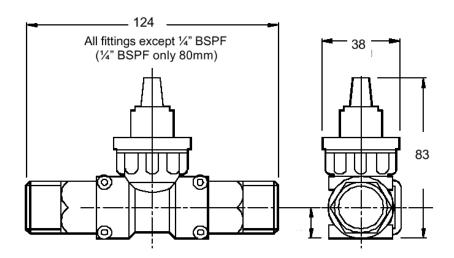
- · Economical
- · PPS body
- $\pm 0.75\%$  reading \*
- · 1- 2% FSD
- Sapphire bearings
- Optical sensing
- · 10 Flow ranges
- · Pulse output
- · 15 Bar rating
- · Viton seal as standard
- Choice of fittings
- · 0.1% Repeatability
- · 5 or 7.5 to 24 V dc
- · 80°C Max

#### Ideal for

- "Drink dispensing
- "Laboratory tests
- "Cooling equipment
- "Semiconductor plant
- "Water treatment
- Low viscosity fluids



This multi-range radial flow turbine meter uses a low inertia turbine supported on robust sap-phire bearings in a chemically resistant hous-ing. Ten flow ranges (0.01 to 160 litres per min-ute), a choice of "plug in" fittings and individual traceable calibration make this meter one of the most flexible available. For OEM applications the fittings can be tailored to suit the installation and speed production. Custom leads or connectors are also available for quantity orders.



<sup>\*</sup> When used with our Metra-smart instrument

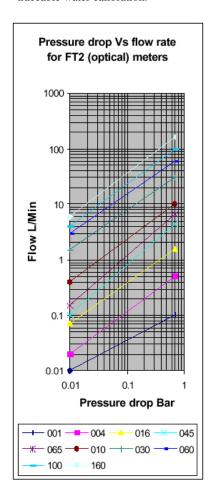


02-03.1

ORDER CODE	Flow Range L/Min	Linearity % FSD	Typical Freq. Hz.	Approx 'K' Factor	Standard Marconstruction	terials of
001	0.01 - 0.10	2.0	100	60000		
004	0 02-0 5	1.5	266	32000	Body and cap	- PPS
016	0 07 – 1 6	1.0	413	15500		
045	0 10 - 4 5	1.0	637	8500	'O' Ring seal	- Viton
065	0 15 - 6 5	1.0	520	4800		
010	0 40 - 10	1.0	417	2500	Bearings	- Sapphire
030	1.50 - 30	1.0	550	1100	1	
060	3.00 - 60	1.0	550	550	End Fitting	- PVDF, PVC,
100	4.00 - 100	1.0	550	330		St St, or Brass
160	6.00 - 160	1.0	640	240	=	,

Detector Type	Electrical connections	#Flow range L/Min	'O' Ring Material	Fitting size	Fitting Material	Special code
<u>20</u> = Optical	<u>0</u> = rubber	See chart above	<u>V</u> = Viton	25 = 1/4" BSP	<u>B</u> = Brass	S= Oem
7-24vdc	grommet	100 etc.	N = Nitrile	50 = 1/2" BSP	S = 316 St St	customer
21 = Optical	P = 4 pin socket		E = EPDM	75 = 3/4" BSP	C = PVC *	
5v dc	N = IP67 Gland		O = Special	<u>10</u> = 1" BSP	P = PVDF	
				8H = 8mm hose		
				0H = 13mm hose	* 60°C max.	

e.g. 200-100-V-10-B is a flowmeter with a flow range of 4.0 to 100 L/Min, viton seal and 1" BSP brass fittings with a standard 6 point traceable water calibration.



At the heart of the meter is a precision turbine that rotates freely on robust sap-phire bearings. This rotation is detected when a turbine blade crosses a powerful infra-red light beam. The resulting output is a NPN pulse that is readily interfaced with most electronic display or recording devices. This combination of materials and technology ensures a long life product with reliable operation throughout. Because the flowmeter is so versatile with respect to flow range and fittings every combination of range and fitting is not available. The chart below shows the maximum standard flow rate/fitting we would recommend to attain our per-formance figures. Alternatives are possible but there would be degradation in the meters performance.

			_				
[	Infra-red						
	sensi	or					
			Ľ				
	Amplif	ier					
	anı						
Tr	lgger	clrcult					
			$\square$				
	Valta	.ge					
	regul	ator					
_			닏				
			Н				
	T	$\forall$					
	⊁	\					
C	V	O/P +	٧				

Sensor block diagnam

			-				
Fitting	Recommended Max flow L/Min.	PVC	PVDF	Brass	316 St St		
8mm hose	4.5	*					
13mm hose	10	*					
1/4" BSP female	4.5			*	*		
½" BSP male	30		*	*	*		
3/4" BSP male	100	*	*	*	*		
1" BSP male	160	*		*	*		