

Product information

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

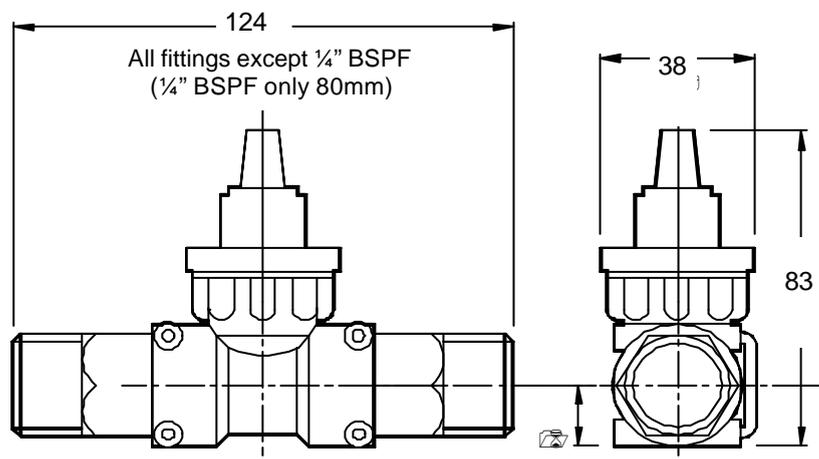
* When used with our Metra-smart instrument

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 sapphire bearings in a chemically resistant housing. Ten flow ranges (0.01 to 160 litres per minute), 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.



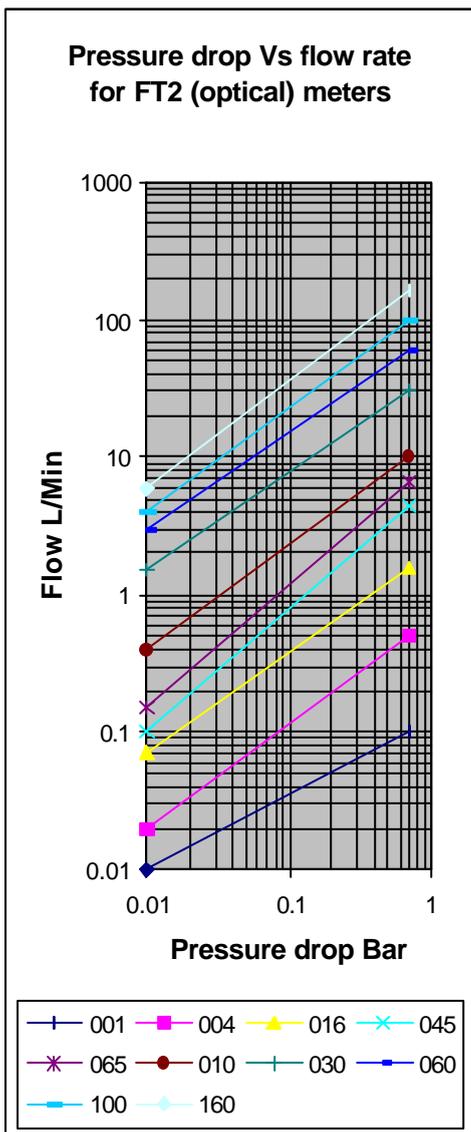
# Order code	Flow range L/Min	Linearity % FSD	Typical Freq. Hz.	Approx 'K' Factor
001	0.01 - 0.10	2.0	100	60000
004	0.02 - 0.5	1.5	266	32000
016	0.07 - 1.6	1.0	413	15500
045	0.10 - 4.5	1.0	637	8500
065	0.15 - 6.5	1.0	520	4800
010	0.40 - 10	1.0	417	2500
030	1.50 - 30	1.0	550	1100
060	3.00 - 60	1.0	550	550
100	4.00 - 100	1.0	550	330
160	6.00 - 160	1.0	640	240

Standard Materials of construction

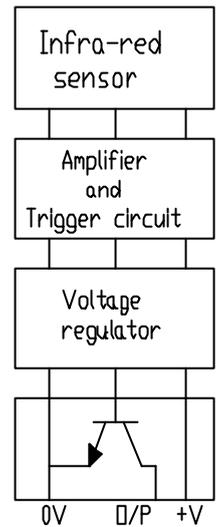
Body and cap - PPS
'O' Ring seal - Viton
Bearings - Sapphire
End fittings - PVDF, PVC, St St, or Brass

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

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 sapphire 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 performance figures. Alternatives are possible but there would be degradation in the meters performance.



Sensor block diagram

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			*	*
1/2" BSP male	30		*	*	*
3/4" BSP male	100	*	*	*	*
1" BSP male	160	*		*	*