

# FT2 Optical Detection

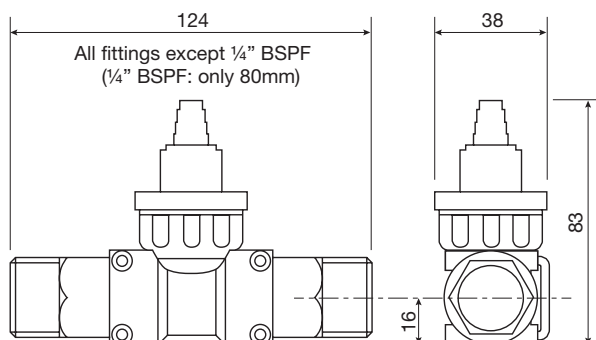


This multi-range radial flow turbine meter uses a low inertia turbine supported on robust sapphire bearings in a chemically resistant housing. 9 flow ranges (0.02 to 160 L/min), a choice of "plug in" fittings and individual traceable calibration make this meter one of the most flexible available. For OEM applications the fittings can be tailored to suit the installation and speed production. Custom leads or connectors are also available for quantity orders.



## IDEAL FOR

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



## FEATURES

- Economical
- PPS body
- $\pm 0.75\%$  reading\*
- 1-1.5% FSD
- Sapphire bearings
- Optical sensing
- 9 Flow ranges
- Pulse output
- 15 Bar rating
- Viton® seal as standard
- IP65
- Choice of fittings
- 0.1% Repeatability
- 5 or 7.5 to 24Vdc
- -10 to +80°C

\* When used with our Metra-Smart instrument

Fitting	Weight in kg			
	PVC	PVDF	Brass	316 St St
8mm hose	0.082			
13mm hose	0.156			
1/4" BSP female			0.195	0.187
1/2" BSP male		0.124	0.279	0.319
3/4" BSP male	0.107	0.108	0.344	0.250
1" BSP male	0.120	0.124	0.377	0.404



HISPACONTROL S.L.

Pº Delicias 65 Bis

28045 Madrid

Tel. 915 308 552

hc@hispacontrol.com

www.hispacontrol.com

## Ordering codes

Detector Type
<b>20 = Optical 7-24V dc</b>
21 = Optical 5V dc
Electrical connections
<b>0 = Rubber grommet</b>
P = 4 pin socket
N = IP67 gland
Model
004
016
045
065
010
030
060
<b>100</b>
160
Seal Material
<b>V = Viton®</b>
N = Nitrile
E = EPDM
K = Kalrez
Fitting Size
25 = 1/4" BSP
50 = 1/2" BSP
75 = 3/4" BSP
<b>10 = 1" BSP</b>
8H = 8mm hose
OH = 13mm hose
Fitting Material
<b>B = Brass</b>
S = 316 St St
C = PVC (60°C max)
P = PVDF
Special Code
S = OEM customer

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 sensed using optical detection. The resulting output is an 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.



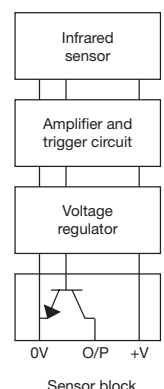
## TECHNICAL SPECIFICATIONS

Model	Flow range L/Min	Linearity % FSD	Typical Freq. Hz.	Approx. 'K' Factor
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

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	*		*	*

## Standard Materials of Construction

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



# FT2 Hall Effect Detection



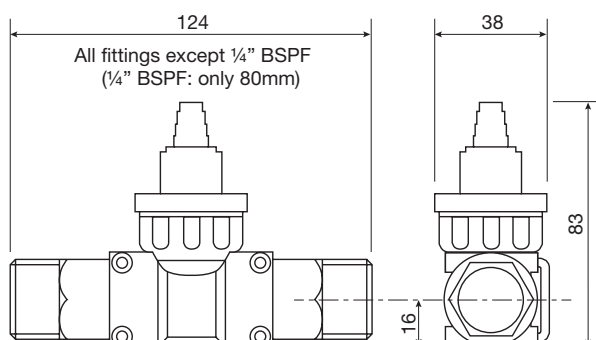
This multi-range radial flow turbine meter uses a low inertia turbine supported on robust sapphire bearings in a chemically resistant housing. Nine flow ranges (0.05 to 160 L/min), a choice of "plug in" fittings and individual traceable calibration make this meter one of the most flexible available.

It uses Hall effect sensing so that opaque fluids may still be metered. 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.



## IDEAL FOR

- Opaque fluids
- Laboratory tests
- Cooling equipment
- Semiconductor plant
- Water treatment
- Low viscosity fluids



## FEATURES

- Economical
- PPS body
- $\pm 0.75\%$  reading \*
- 1-2% FSD
- Sapphire bearings
- Hall effect sensing
- 9 Flow ranges
- Pulse output
- 15 Bar rating
- IP65
- Viton™ seal as standard
- Choice of fittings
- 0.1% Repeatability
- 5 to 24Vdc
- -15°C Min to 125°C

\* When used with our Metra-Smart instrument

Fitting	Weight in kg			
	PVC	PVDF	Brass	316 St St
8mm hose	0.082			
13mm hose	0.156			
1/4" BSP female			0.195	0.187
1/2" BSP male		0.124	0.279	0.319
3/4" BSP male	0.107	0.108	0.344	0.250
1" BSP male	0.120	0.124	0.377	0.404

## Ordering codes

<b>Detector Type</b>
<b>22 = Hall effect</b>
<b>Electrical connections</b>
<b>0 = Rubber grommet</b>
P = 4 pin socket
N = IP67 gland
<b>Flow range L/min</b>
004
016
045
065
010
030
060
<b>100</b>
160
<b>Seal Material</b>
<b>V = Viton®</b>
N = Nitrile
E = EPDM
K = Kalrez
<b>Fitting Size</b>
25 = 1/4" BSP
50 = 1/2" BSP
75 = 3/4" BSP
<b>10 = 1" BSP</b>
8H = 8mm hose
OH = 13mm hose
<b>Fitting Material</b>
<b>B = Brass</b>
S = 316 St St
C = PVC (60°C max)
P = PVDF
<b>Special Code</b>
S = OEM customer

e.g. **220-100-V-10-B** is a flowmeter with a flow range of 6.0 to 100 L/min, Viton™ seal and 1" BSP brass fittings with a standard 6 point traceable water calibration.

The 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.



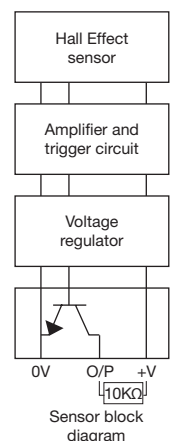
## TECHNICAL SPECIFICATIONS

Model	Flow range L/Min	Linearity % FSD	Typical Freq. Hz.	Approx. 'K' Factor
004	0.05 - 0.5	2.0	133	16000
016	0.12 - 1.6	1.5	207	7700
045	0.13 - 4.5	1.5	318	4250
065	0.25 - 6.5	1.0	260	2400
010	0.60 - 10	1.0	218	1250
030	2.50 - 30	1.5	275	550
060	5.00 - 60	1.5	275	275
100	6.00 - 100	2.0	275	165
160	10.0 - 160	1.5	320	120

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	*		*	*

## Standard Materials of Construction

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





# PULSITE Solo



**5 year**  
typical battery life

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



## 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
- 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