



## Inline Turbine Flowmeter



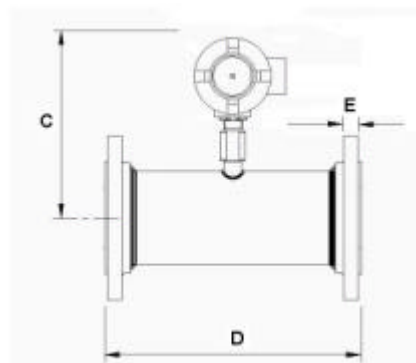
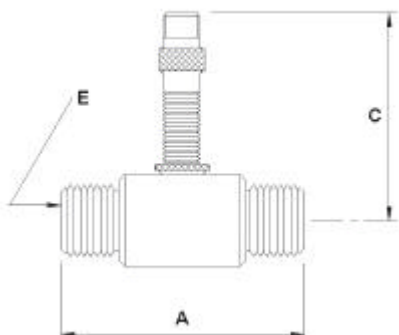
*Petrosystem turbine Flowmeters are designed to provide high order of performance, accuracy & reliability under the severest conditions encountered in Oil, Gas, Petrochemical, Aerospace and other industries.*

*These flowmeters are precise, reliable, rugged and built to international standards. Sizes range from 5 to 300 mm with flanged end connections and 5 to 50 mm with threaded end connections. All flowmeters are individually calibrated on Rockwin's In-house Certified Calibration Laboratory*

- Linearity of +/- 0.50% of the reading
- Rangeability of 10:1
- Both for Liquid & Gas Applications
- SS construction

Special end fittings also available

### MODEL SELECTION

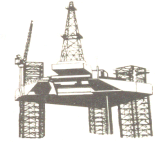


Model No.	Flow Range M3/HR	End Connection Threaded Ends	End Connection Flanged ends	Dimensions A D C
1010	0.11 - 1.1	1/2"	1/2"/DN15	64 127 150
1015S	0.22 - 2.2	3/4"	3/4"/DN20	64 127 150
1015	0.4 - 4	3/4"	3/4"/DN20	64 127 150
1020	0.8 - 8	3/4"	3/4"/DN20	83 140 150
1025	1.6 - 16	1"	1"/DN25	88 152 200
1040	3.4 - 34	1.5"	1.5"/DN40	114 178 200
1050	6.8 - 68	2"	2"/DN50	132 197 200
1075	13.5 - 135	N/A	3"/DN80	254 200
1100	27 - 270	N/A	4"/DN100	356 300
1150	55 - 550	N/A	6"/DN150	368 300

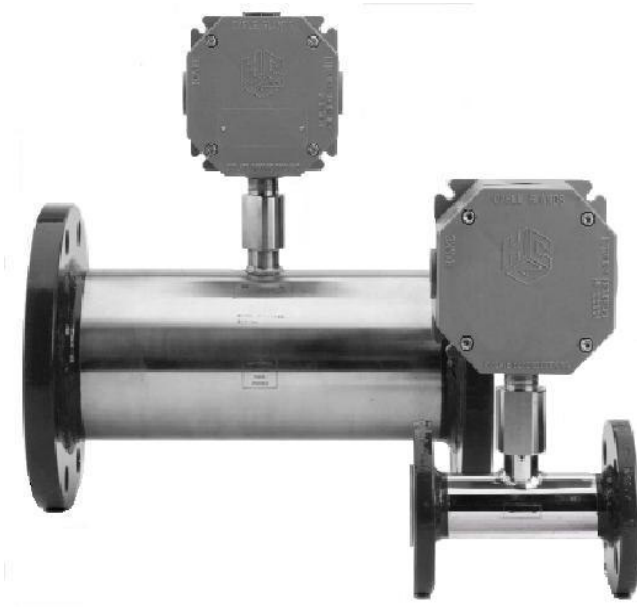


## GENERAL SPECIFICATION

PARAMETER	METERS FOR LIQUIDS	METERS FOR GASES
<b>Flow Range</b>	0.03 to 2700 M3/Hr	0.88 to 8000 AM3/Hr
<b>Accuracy</b>	Linearity: +/- 0.5% over 10% to 100% flow range. +/- 0.25% under specified conditions. Repeatability: +/- 0.02% to +/- 0.05% on 95% confidence level	+/- 1% over 10% to 100% flow range (inclusive of linearity and repeatability)
<b>Max. Pressure</b>	Max. Pressure	Threaded Meters- 250 kg/cm <sup>2</sup> (4000 p.s.i.) Flanged meters- according to flange rating
<b>Pressure Drop</b>	Approx. 0.28 kg/cm <sup>2</sup> (4 psi) at maximum flow (SG 1, Viscosity 1 cst)	Approx. 1 inch w.g. at maximum flow (gas SG 1)
<b>Temperature Range</b>	Tungsten Carbide/Stellite -50°C to +250°C Open Ball Bearings -50°C to +250°C (clean lubricating liquids only)	Shielded Ball bearings -50°C to +150°C
<b>Electrical Connections</b>	MS type Amphenol connector Series 10 SL 3102 supplied with matting connector or terminal block, mounted in weather proof aluminium conduit box.	MS type Amphenol connector Series 10 SL 3102 supplied with matting connector or terminal block, mounted in weather proof conduit box.
<b>Field Electronics</b>	A range of Pre-amplifiers, F/I converters and local display electronics is available.	



## Standard Inline Turbine Flowmete Series 6500



Series 6500 flowmeter is intended for high accuracy measurement of liquids and gases.

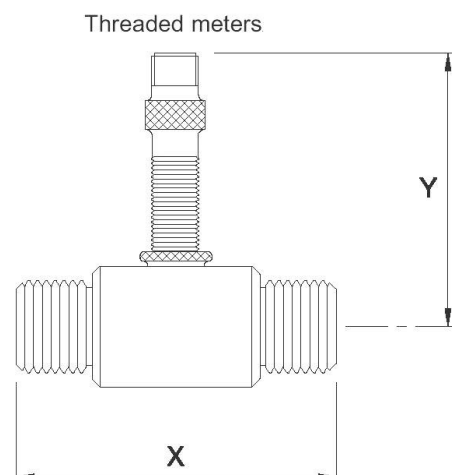
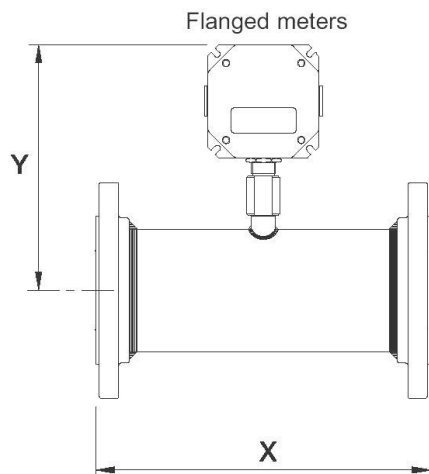
### **Features:**

- wide range of meter sizes
- continuous, reliable on-line flow measurement
- high levels of accuracy and repeatability
- rangeability of 10:1
- low pressure drop
- options to suit extensive applications
- individually calibrated
- can be subject to third party calibration
- ease of repair, leading to minimal down time

### **Applications :**

- oil, gas and petrochemical
- aerospace
- automotive
- Pharmaceutical
- power

### **Dimensional drawing**





## Specification

### Flowmeter:

**Linearity:** (Liquids)  $\pm 0.25\%$  of reading for 2.5" meters and above  
 $\pm 0.5\%$  of reading for 2." Meters and below  
 (Gases)  $\pm 1\%$  of reading

**Repeatability:** (Liquids)  $\pm 0.02\%$  to  $0.05\%$  dependent on size

**Pressure drop:** (Liquids) Typically 300mbar at normal maximum flow rate in water

(Gases) Typically less than 0.4" water gauge at 100% flow rate dependent on gas density

**Process temperature:** (Standard) -20 to 150 °C

(Liquids) -200 to +450 °C

(Gases) -200 to +240 °C

**Maximum pressure:** Flange meters: to flange specification

Threaded meters: 250barG

**Materials of construction:** Body: 304 or 316 stainless steel

Flanges: forged carbon steel or stainless steel

Sleeve bearings: tungsten carbide shaft, Stellite sleeve

Ball bearings: stainless steel ANSI 440C

### General:

**Environmental protection:** IP65

**Hazardous area certification:** CENELEC EEx ia IIC T6  
 Ex d IIB T6

**Installation:** Install in pipeline with at least 10 pipe diameters of straight length upstream and 5 diameters downstream of flowmeter. For greater accuracy use upstream flow straighteners.

### Outputs:

**Standard:** mV pulse typically 100mV peak-to-peak at 1 m/s

**Pre-amplifiers:** 4-20mA current modulated pulse  
 4-20mA analogue

### Electrical:

**Power supply:** Not required for pickup only

24Vdc loop for A10 and FDC 1100

**Termination:** 2 pin Cannon as standard steel

Terminal block housed in conduit box

**Cable entry:** Screw terminals on pre-amplifiers

M25 if used with junction box

## Physical Dimension

Nominal Bord		Flanged meters				Threaded meters			
size		X end to end		Y central line to top of conduit		X end to end		Y central line to top of conduit	
		Mm	Inches	Mm	Inches	Mm	Inches	Mm	Inches
6	0.15	114	4.5	127	5	51	2	127	5
13	0.5	127	5	127	5	64	2.5	127	5
16	0.625	127	5	133	5.25	64	2.5	127	5
19	0.75	140	5.5	140	5.5	83	3.25	133	5.25
25	1	152	6	146	5.75	89	3.5	140	5.5
38	1.5	178	7	152	6	114	4.5	152	6
51	2	197	7.75	165	6.5	133	5.25	165	6.5
64	2.5	254	10	178	7				
102	4	356	14	254	10				
152	6	368	14.5	279	11				
203	8	457	18	311	12.25				
254	10	457	18	336	13.25				
304	12	457	18	362	14.25				