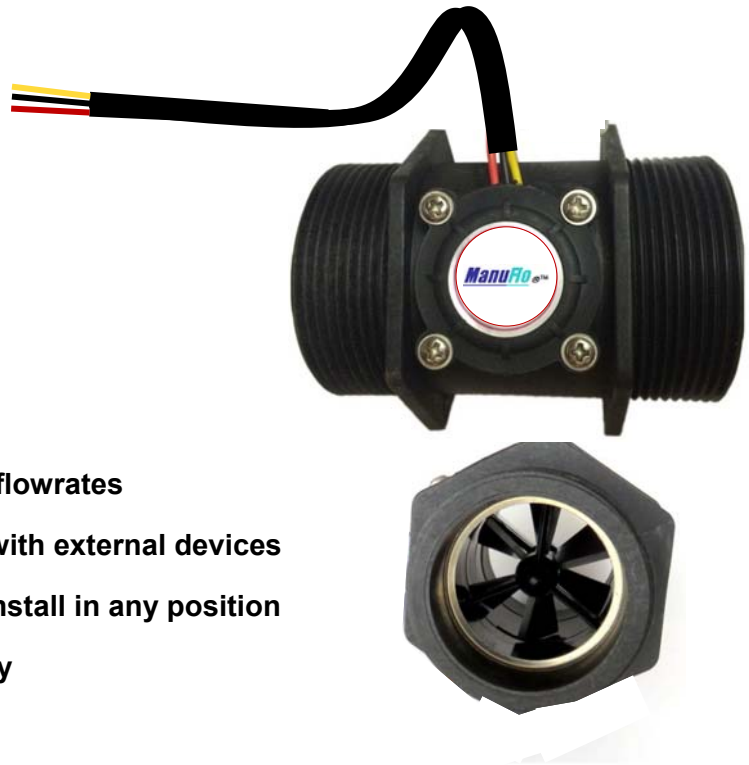


### FEATURES:

- 40mm and 50mm sizes
- Nylon Glass filled durable construction
- Magnetic Turbine with no Internal gears
- Excellent for gravitational low flow rates
- Shock, heat, cold and moisture resistant
- Hall effect pulse output
- High pulse rate for precision monitoring flowrates
- For flow rate or as a volumetric counter with external devices
- With BSP threaded ends for quick easy install in any position
- +/- 2% accuracy with +/- 0.5% repeatability



### PRODUCT DESCRIPTION:

METP are economical Turbine flowmeters in sizes 40 and 50mm suitable for volumetric flow measurement of liquid with consistency of water.

They are light weight, small and easy to install. The product is especially viable for use in high-precision metrology flowrate and accumulation monitoring or batching with higher pulse output rates per litre. Being a temperature resistant product and to IP65 waterproofing ensures the meter can even be used at temperatures to 80 deg.C.

Accuracy is assured due to the centred turbine which captures low to medium flow ranges ideal for gravitational flow applications. The METP is constructed from durable components with internally set stainless steel shaft and stainless steel beads to assist in rotation, thereby improving the sensitivity of the turbine.

The unit is customised by ManuFlo for use with local quality standards.

A calibration certificate from the ManuFlo test facility is supplied with each meter.

NOTE: Connect with a range of ManuFlo batch controllers or indicators e.g. ME995-7, FRT303-D or ME5-T/F.

### INSTALLATION:

#### Position / Direction:

The meter can be mounted horizontally in any position, inclined upwards or vertically. Water flow must follow the directional arrow on body of meter.

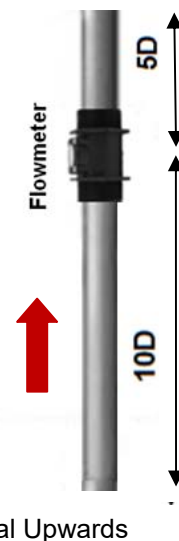
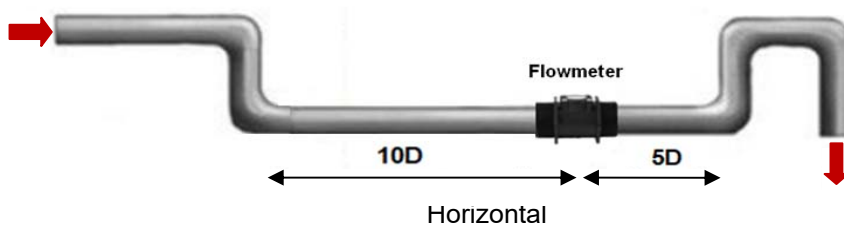
#### Full Pipe:

Pipe should be fully charged at all times at the mounting point of the flowmeter.

#### Accuracy:

To ensure optimal accuracy of measurement, the pipe must be full at all times and should have straight pipe of length  $>10 \times$  pipe diameter (10D) upstream of sensor and also straight pipe of length  $>5 \times$  pipe diameter (5D) downstream of sensor.

**e.g. 50mm flowmeter requires** 500mm of 50mm  $\varnothing$  pipe upstream of flowmeter, and 250mm downstream of flowmeter.



Specifications		
Meter Size	DN40	DN50
Thread Size:	G1½" M	G2" M
Voltage Range:	5 - 24 VDC	
Cable Allocation:	Red wire = Positive VDC, Black wire = Negative/Ground, Yellow wire = Pulse Sig. Output. (0.3 metre length, 3 wire flying lead)	
Load Capacity:	≤10mA (5 VDC)	
Working Temperature:	-10 to 80°C	
Humidity Range:	35% - 90% RH	
Max. Pressure:	1250 kPa	
Flow Range Capability:	7 - 250 Litres/minute	10 - 350 Litres/minute
Flowrange; Accuracy @ +/- 5% Accuracy @ +/- 2%	7 - 15 L/min 15 - 250 L/min	10 - 20 L/min. 25 - 350 L/min
*Dimensions:	56mm x 92mm	68mm x 92mm
*Weight:	150g	210g
Pulse Out Type:	Hall Effect (10mA<5VDC)	
Output Pulse Data:	Width: 50% duty cycle +/- 10%, 0.25 to 10KHz	
Pulses Per Litre <small>(approximately):</small>	30	13.7

ORDER CODES:	40mm: METP40	50mm: METP50
Connectors BSP-f Barrel-Union Poly (pair)	SBU40	SBU50

**CABLE TERMINATION:**

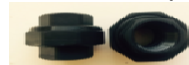
-  + 5 to 24 VDC
-  - Negative/Ground wire
-  Pulse/Signal wire

**PRECAUTIONS:**

1. If the water quality is of poor quality, please add a filter at the inlet.
2. Do not exceed the stated flow range capability or damage can occur.
3. Avoid non compatible aggressive chemicals.
4. Avoid sudden heavy impact. (Water hammer to be avoided).
5. Fluid temperature should not exceed 80 C.
6. If pulses irregular or cease, remove from pipeline and unblock rotor.
7. Blow through the turbine to see it spins freely.

**Suggested options:-**

Barrel Union connectors for ease of removal from pipeline: SBU40, SBU50.



**METP Flowmeter can be fitted to:-**

- Direct PLC NPN inputs.
- Scaled pulses via UIC/D interface cards.
- Visual rate/total display via FRT303-D
- Batching via ME995-7 batch controllers.



**ManuFlo** –the liquid measurement experts  
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