

## JT-121 insertion paddle wheel flow sensor(Magnetic Coupling)



### Features: -

- Four Bladed Paddle For Optimal Performance .
- Open Cell Design For Linear And Repeatable Output.
- Dynamic Range With Virtually No Pressure Drop.
- Corrosive Resistant Plastic For Aggressive Fluids.
- Wide Choice of installation Fittings.
- Lower installation and maintenance cost.

### GENERAL DESCRIPTION

**JT-121** is paddle Wheel type Polymer body Flow sensor suitable for clear liquid application. Being light weight and compact, Installation is easiest, still robust. **Vats JT-121** is most simple and most economical flow sensing device for clear liquids. Proven and long lasting bearing materials have made this sensor a common choice of all OEMs. **JT- 121** sensor can be installed in wide range of pipe sizes. Variety of materials is available in installation fittings like ABS, PVC, MS, and SS. These fittings include Tees, Saddles, with specific Weld Ends, Thread Ends or Flange Ends and Weldon Adaptor.

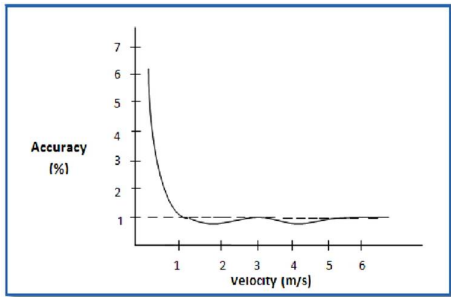
### TECHNICAL

Technical Data	Power	Material
<b>Velocity:</b> 1 To 5 m/s <b>Linearity:</b> +/- 1 % OF Full scale <b>Repeatability:</b> +/- 0.5 % of Full scale <b>Temperature range:</b> 0 to 50°C <b>Viscosity range:</b> up to 20 cp. <b>Pressure Range:</b> up to 7 Bar	<b>Power supply:</b> 12-24 V DC +/-10% <b>Current rating:</b> <10 mA <b>Output Voltage:</b> 12-24 V DC <b>Output Signal:</b> NPN/PNP <b>Protection:</b> Short Circuit and Reverse polarity <b>Cable Type:</b> 3 Core PTFE Inner with PVC Coating	<b>Sensor Body:</b> PP <b>Paddle:</b> Delryn <b>PIN :</b> T.C <b>O Ring:</b> Silicone/Viton <b>Rating:</b> IP-68

### APPLICATIONS: -

Water Treatment	Agriculture	Chemicals	Power
Boiler Condensate	Food And Beverages	WasteWater	Textiles

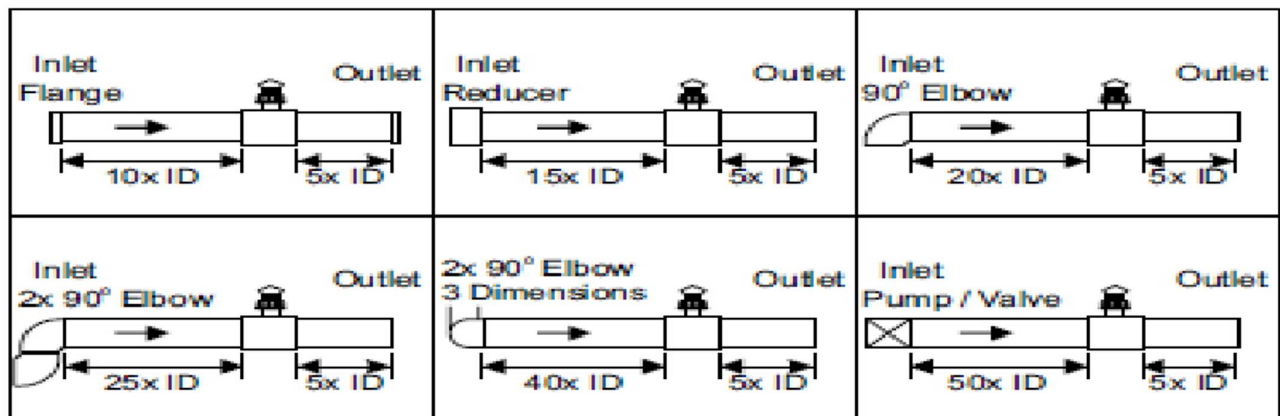
## ACCURACY DIAGRAM AND LINE SIZE SELECTION CHART



Pipe size(NB)	15	25	40	50	65	80
Min Flow M <sup>3</sup> /Hr	0.2	0.8	1.9	3.5	5.8	7.5
Max Flow M <sup>3</sup> /Hr	2.1	8.0	19	35	58	75
Pipe size(NB)	100	125	150	200	250	300
Min Flow M <sup>3</sup> /Hr	14	22	31	56	87	126
Max Flow M <sup>3</sup> /Hr	140	220	310	560	870	1260

### MECHANICAL

Straight inlet and outlet distances that must be maintained when installing fittings in pipe lines in order to achieve Laminar flow conditions. The most important layouts that could lead to turbulence in the flow are shown below, together with mentioned minimum and inlet and outlet distances. These insure turbulent, problem-free measurement conditions at the measurement point. For more Installation guidelines please refer manual. for best results Reynolds number (R) is greater than 5000 especially for viscous liquids. to Calculate R use following formula



#### NOTE:

1. *In Vertical Piping only Upstream flow is recommended*
2. *Flow Meter should be installed before valve*
3. *Y type strainer is must for recommend result.*