

# JT-122

## Insertion SS Paddle Wheel Flow Sensor (Non-Magnetic Coupling)



### FEATURES

- Suitable for Harsh Industrial applications.
- Open cell design for linear and repeatable output.
- Dynamic range with virtually no pressure drop.
- Wide choice of installation Fittings.
- Lower installation and maintenance cost.
- Suitable for *Turbid* water with SS Non magnetic Paddle.

- Use of filter before Flowmeter is necessary
- Straight Run conditions given in manual must be maintained while installation

### GENERAL DESCRIPTION

**JT-122** is only choice for raw water application in MS pipelines with ferrus particles/rust,Featured with Stainless-steel Paddle and Non-magnetic Coupling between paddle and electronics, JT-122 is most robust and advance Sensor in the family of Paddle Wheel Sensor worldwide in all **INDUSTRIAL APPLICATION** .With proper installations, **JT-122** sensor can be installed in wide range of pipe sizes.

### TECHNICALS

| Technical Data                         | Electrical Connection ratings                  | Material                 |
|--|--|--------------------------|
| Velocity: 1 To 5 m/s                   | Power supply: <b>12-24 V DC +/-10%</b>         | Sensor Body: SS 304      |
| Linearity: +/- 1 % of Full scale       | Current Rating: < 10mA                         | Paddle: SS               |
| Repeatability: +/- 0.5 % of Full scale | Output Voltage: <b>12-24 V DC</b>              | PIN: T.C.                |
| Temperature range: 0 to 50° C          | Output Signal: <b>PNP</b>                      | Gasket: PTFE             |
| Viscosity: Upto 20 cp                  | Protection: Short Circuit and Reverse Polarity | Bearing Bush: PEEK       |
| Pressure range: Upto 20- bar           | Cable Type: 3core PTFE inner with PVC Coating  | Protection Rating: IP-68 |

### APPLICATIONS

*Water treatment*

*Cooling*

*construction*

*Oil*

*power*

*textiles*

# 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  |
| Maxflow 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  |
| Maxflow M <sup>3</sup> /Hr  | 140 | 220 | 310 | 560 | 870 | 1260 |

## ELECTRICAL WIRING

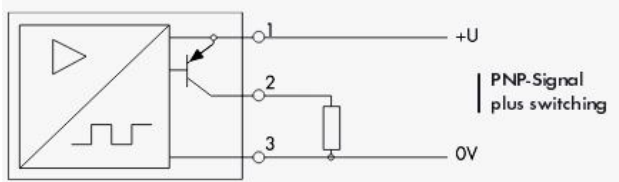
*Variety of Electronic Readers cum controllers are available.*



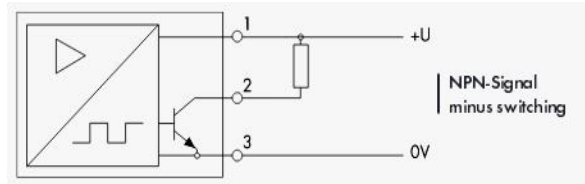
*A : Field Mounted Indicator , J : Panel Mounted Indicator.*

*For Battery Operated Active Sensor please contact the Factory.*

**Connection : PNP Switching**

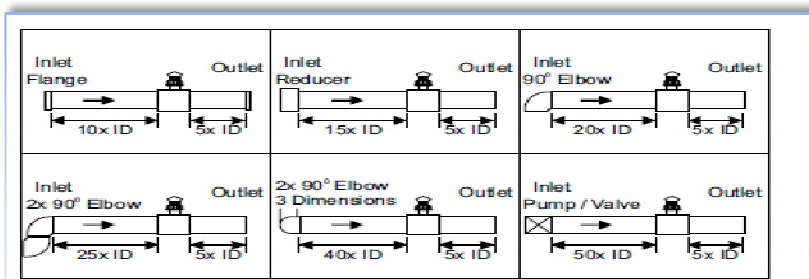


**Connection : NPN Switching**



## MECHANICAL

Straight inlet and outlet distances that must be maintained when installing fittings in pipe lines in order to achieve turbulent 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.**