

Insertion Paddle Wheel type Flow Sensors Series - P812

NK Instruments Pvt. Ltd. has Insertion Paddle Wheel type Flow Sensors series P812, which are reliable in performance, rugged & requires almost no maintenance.

The series P812 has open collector signal output (sink) and has a wide velocity range of 0.5 to 5 m/s (0.3 to 20 ft/s). The sensor uses to measures liquid flow rates in full pipe. Sensors can be installed in 15 NB to 500 NB (0.5 to 20 inches) Line size and even bigger by using the Hot Tab Assembly.

To install these sensors in process lines, specifically designed T fittings are offered. These fittings are available in various type of T-fittings like Threaded End, Flanged End, and Weld on Adapter, Block design without pipe and Hot Tab Assembly etc. The Sensor mounting fitting is essential to for proper installation and better performance of the Flow Sensor. The Flow Sensor for pipe line size bigger than 150 mm, we suggest to use Hot Tab Assembly for its safe installation and maintenance.

APPLICATIONS

- Water Treatment
- Filtration Systems
- Chemical / Pharmaceutical
- Bottling / Distillery
- Concrete Batching plant
- Textile / Process machine automation



PP Sensor Rod



SS Sensor Rod



Flameproof Flow Sensor



Hot Tab Assembly

TYPE OF SENSOR INSTALLATION FITTINGS

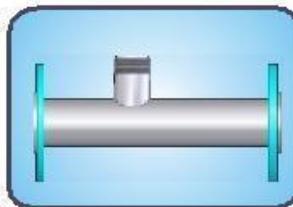
Weld Block



SS T fitting with threaded end



SS T fitting with stub end



SS T fitting with welded flange



Weld Adaptor



TECHNICAL SPECIFICATIONS FOR P812

- Velocity Range : 0.5 to 5 m/s (1.6 to 16.4 ft./s)
- Max. % of Solids : 1% of fluid volume, non-abrasive, non-magnetic, <100 micron in dia. & length.
- Pipe Size Range : 15 NB to 500 NB (0.5 to 20 inches), for bigger sizes with Hot Tap assembly
- Linearity : ± 1% of full range
- Repeatability : ± 0.5% of full
- Range length Min. Reynolds Number : 4500
- Sensor Body : Polypropylene (black) or PVDF (black) SS 304 / SS 316
- rings : Viton / Teflon
- Rotor Pin : Hastelloy C
- Rotor : Black PVDF
- Frequency : 38 Hz per m/s nominal (11.6Hz per ft/s nominal)
- Supply Voltage : 10 to 24 VDC regulated
- Supply Current : <20 mA @ 10 to 24 VDC
- Output Type : Pulse output (NPN)
- Cable Length : 5m (16.4 ft.) standard
- Operating Pressure : PP Sensor Rod : max 6 bar (87 psi)
SS Sensor Rod : Max 12 bar (175 psi)
- Operating Temperature : PP Sensor Rod : -10°C to 70°C (14°F to 158°F)
SS Sensor Rod : -10°C to 100°C (14°F to 212°F)

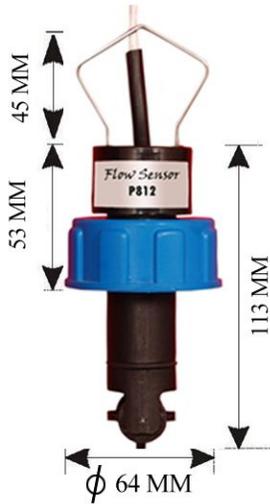
LINE SIZE SELECTION FOR THE VERY COMMON REQUIREMENTS :

Size	15 NB	25 NB	40 NB	50 NB	65 NB	80 NB	100 NB
Min Flow m3/hr	0.23	0.88	2.04	3.50	6.30	8.00	14.0
Max Flow m3/hr	2.60	8.80	20.4	35.0	63.0	80.0	140

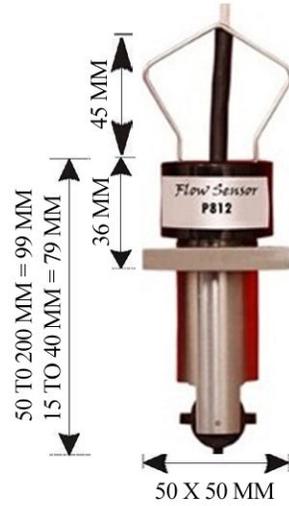
DIMENSIONAL DETAILS OF FLOW SENSORS & FITTINGS

TYPE OF FLOW SENSORS

PP FLOW SENSOR



SS FLOW SENSOR



TYPE OF FITTINGS

PLASTIC THREADED END FITTINGS



SIZE	L	H
15 NB	250 MM	88 MM
25 NB	165 MM	100 MM
40 NB	210 MM	115 MM

PLASTIC SOLVENTABLE FITTING

Plastic (ABS) flow sensor installation T fittings with solventable end is available for Line size 1/2" (15 NB), 1" (25 NB) & 1/2" (40 NB).



SIZE	L	H
15 NB	90 MM	88 MM
25 NB	110 MM	100 MM
40 NB	130 MM	115 MM

Plastic (PVC) flow sensor installation T fittings with solventable end is available for Line size 2" (50 NB), 2 1/2" (65 NB).

SIZE	L	H
30 NB	142 MM	142 MM
65 NB	165 MM	165 MM

Note: Tolerance level is 1 MM

TYPE OF FITTINGS

STUB END FLANGE FITTINGS



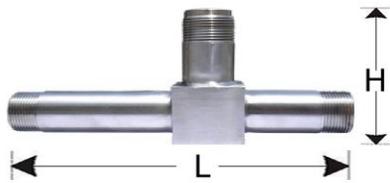
SIZE	L	H
15 NB	270 MM	96 MM
25 NB	270 MM	102 MM
40 NB	250 MM	104 MM
50 NB	300 MM	115 MM
65 NB	350 MM	129 MM
80 NB	450 MM	143 MM
100 NB	500 MM	164 MM

WELDED FLANGE END FITTINGS



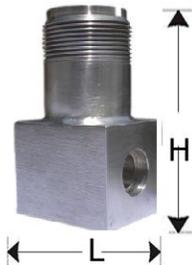
SIZE	L	H
15 NB	270 MM	96 MM
25 NB	270 MM	102 MM
40 NB	250 MM	104 MM
50 NB	300 MM	115 MM
65 NB	350 MM	129 MM
80 NB	450 MM	143 MM
100 NB	500 MM	164 MM

STAINLESS STEEL THREADED END FITTINGS



SIZE	L	H
15 NB	270 MM	96 MM
25 NB	275 MM	102 MM
40 NB	250 MM	104 MM

STAINLESS STEEL BLOCK DESIGN FITTINGS

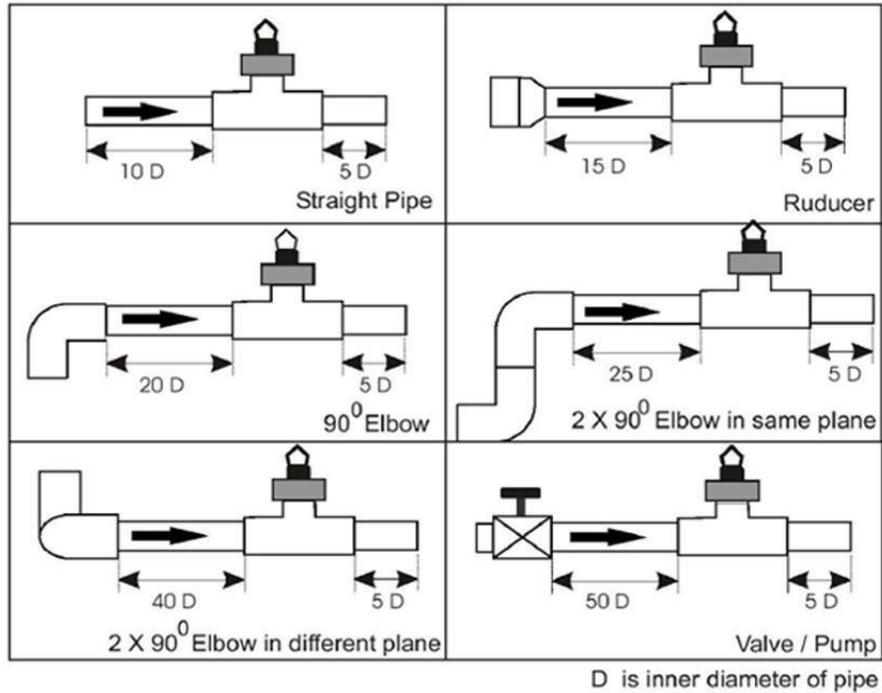


SIZE	L	H
15 NB	55 MM	96 MM
25 NB	55 MM	102 MM

Note: Tolerance level is 1 MM

Fitting Installation Condition

All type of flow meter requires straight run, as per site condition following straight pipe lengths must be provided for best result.



Continuous efforts for product development may necessitate changes in these details without notice

Authorised Dealer



NK Instruments Pvt. Ltd.

B-501/504, 5th floor, Raunak Arcade, Near THC Hospital, Gokhale Road, Naupada,
Thane(W) 400602. Maharashtra INDIA Telefax Nos.: 91-22-25301330 / 31 / 32
E-Mail: sales@nkinstruments.com Web: <http://www.nkinstruments.com>
Skype: nitinkelkarskype Gtalk: nkinstruments2006

