



General Information

Ruby bearings and a non-drag pickoff give these adjustable insertion flow sensors the widest flow range of any of the paddlewheel types. A sensor detects the passage of miniature magnets in the six rotor blades. The resulting square-wave signal can be sent for hundreds of feet without a transmitter, over unshielded cable. This signal can be connected directly to many PLC's and other controls without any additional electronics.

Installation fittings are standard 1-1/2" or 2" NPT. A depth adjustment system allows two basic sizes to cover pipe sizes from 2" to 48". Fittings such as saddles and weldolets may be purchased locally, and are also available from SeaMetrics.

A modular system of electronics can be installed directly on the flow sensor, in a splashproof cast housing. The FT420 provides digital rate and total display, as well as programmable pulse and optional 4-20 mA analog outputs. The AO45 is a blind analog transmitter. Programmable pulse for pump pacing comes from the PD10. Each of these controls is also available in a wall mount housing.

Specifications

Materials

Sensor	Brass, 316 SS, PVC
Rotor	PVDF
Shaft	Nickel-bound tungsten carbide or zirconia ceramic optional Ruby
Bearings	Ruby

Range 0.3 - 30 FPS (0.1 - 9 M/s)

Accuracy ± 1-1/2% FS

Maximum Pressure

PVC	150 psi (10 bar)
Brass & SS	250 psi (17 bar)

Insertion Force 0.44 X pressure in pipe

Pipe Size

IP 101	2"-10" (50-250mm)
IP 201	10"- 48" (250-1200mm)

Temperature

PVC	140° F (60° C) @ 0 psi
Brass & SS	250° F (121° C)

Fitting Size

PVC	2" NPT
Brass & SS	1-1/2" NPT

Power

5-24 VDC 1.5mA

Sensor/Signal

Hall Effect (NPN) Current sinking pulse, 20 mA maximum

Nominal K-factor

11 Hz/ FPS (3.6 Hz/M/s)

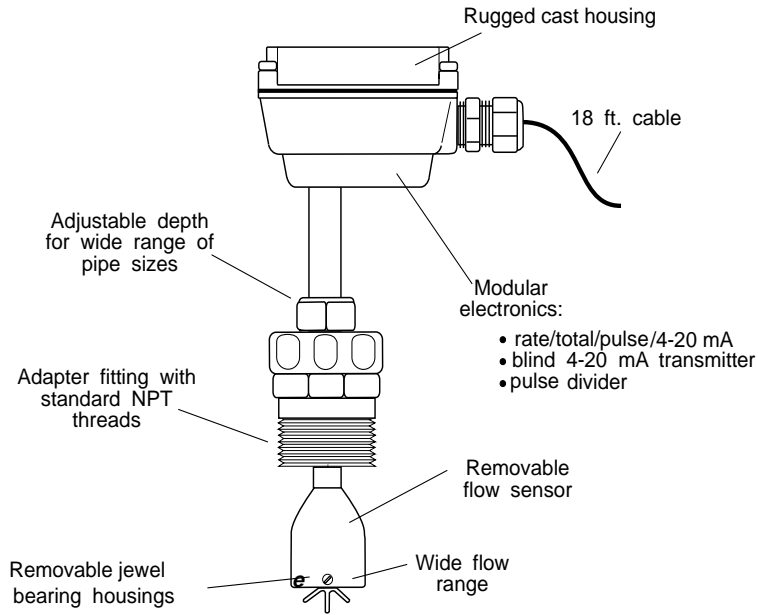
Cable

#22 AWG 3-con, 18' (6m)

Maximum Cable Run

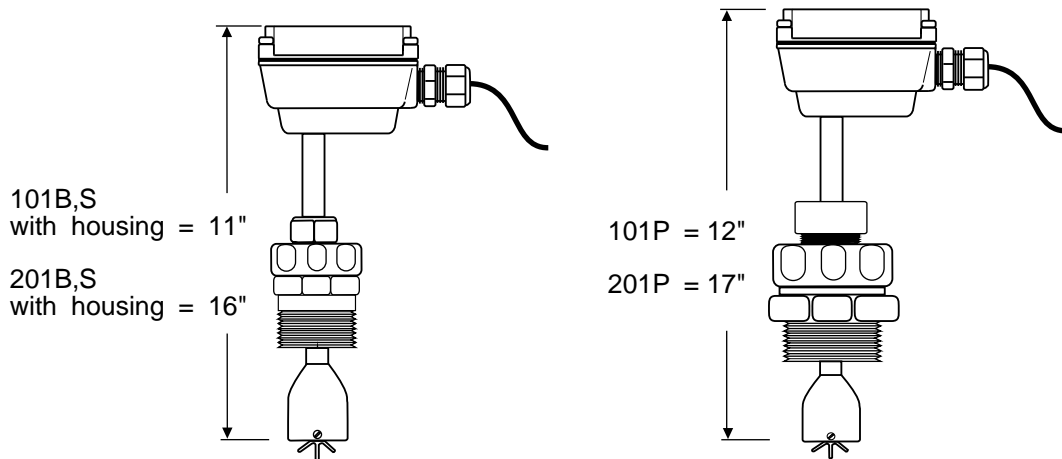
2,000' (650m)

Features



Flow Range (GPM)		
Pipe Size	Min Flow	Max Flow
2	3	300
3	7	700
4	12	1,100
6	30	2,500
8	50	4,500
10	75	7,000
12	100	10,000
16	175	16,000
24	400	35,000

Dimensions



How To Order

Material code: P = PVC, B = Brass, S = (316 SS)
 Option Code

IP101 - _____ - _____
 IP201 - _____ - _____

- Option Codes
- 01 Ceramic shaft
 - 03 Bidirectional flow (Hall-Effect only)
 - 06 LMI connector
 - 07 SeaMetrics connector



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