





# **General Information**

These "hot tap" versions of the proven IP insertion flow sensors are designed to install or be serviced without depressurizing the pipe. Like all IP sensors, they have a paddlewheel rotor and jewel bearings for superior lowflow performance. Rotation of the rotor is detected by a non-drag Hall-effect sensor, which interfaces easily with many types of electronic control. A display, divider, or analog transmitter can be installed on the end of the sensor, or the signal can be sent without amplification for hundreds of feet to remote electronics.

Insertion and removal under pressure is possible due to the 2" full-port isolation valve, which comes with a nipple for installation on the pipe fitting. If it is necessary to do the initial installation under pressure, any standard hot tap drilling machine with 2" NPT adapter, such as a Transmate or a Mueller, can be used. Ordinarily, it is not necessary to use an installation tool, since the smalldiameter tube can be controlled by hand at all but the highest pressures.

# **Specifications**

Sensor

Hall Effect Sensor 12 VDC current sink-

ing pulse

**Materials** 

Sensor Body Brass, 316 SS, PVC

**PVDF** 

Shaft Nickel-bound tungsten

> carbide, zirconia ceramic optional

Ruby

**Bearings** Valve

Rotor

**PVC** 

2" Gate valve

Brass & SS Bronze STD, 316SS

optional

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

**Accuracy** ± 1-1/2% FS

**Maximum Pressure** 

**PVC** 150 psi @75° F (10 bar) Brass & SS

200 psi (14bar)

**Insertion Force** 0.44 X pressure in pipe

Pipe Size

IP 115 2" - 10" (50-250mm) 10" - 48" (250 -1200mm) IP 215

**Temperature** 

130° F (55° C) @ 0 psi PVC

Brass & SS 200° F (93° C)

**Fitting Size** 2" NPT

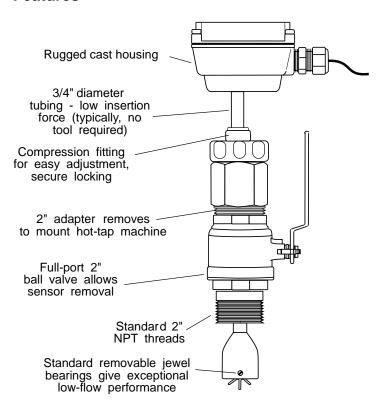
**Power** 5-24 VDC 1.5 mA

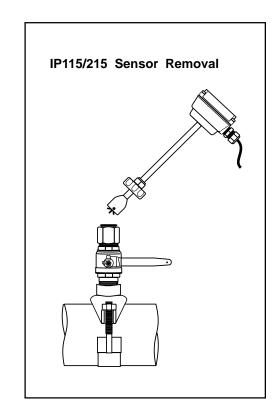
**Nominal K-factor** 11 Hz / FPS (3.6 Hz/M/s)

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

**Maximum Cable Run** 2,000' (650m)

# **Features**

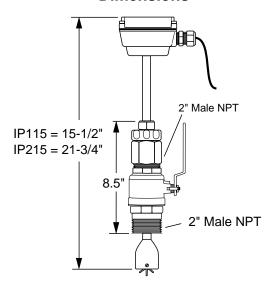




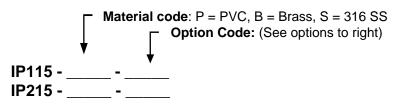
# Flow Range (GPM)

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**



#### **Option Codes**

**01** Ceramic shaft

03 Bidirectional flow (Hall-Effect only)

06 LMI connector 07 Connector

### **Muis Controls Ltd.**