

## FPS - Insertion Paddle/Bellows Flow Switch for Liquids



### Benefits and Features

- Adjustable Switch Point
- Position-Independent Installation
- Maximum Pressure 160 PSI/450 PSI
- Adjustable Switching Point
- Brass and SS Construction
- Micro Switch
- Maximum Media Temperature: 250°F

### General Description

FPS flow switches are used wherever reliable control for min. or max. liquid flow is required. The flow switch operates on the paddle-bellows principle. The flowing medium exerts a force on the paddle and thereby actuates a micro switch. The interchangeable paddle, in conjunction with an adjustment screw, allows for a wide variety of switching points and adaptation of the instrument to different pipe sizes.

The internals of the instrument are separated from the process by the bellows, making the FPS an excellent choice for dirty media. The FPS-6000 is a special design used with extremely low switching points.

### Specifications

**Flow media:** liquids

**Installation:** position independent, arrow must point in direction of flow, straight pipe runs of at least 5 x the inner pipe diameter must be maintained on either side of the instrument.

**Fitting:** 1" NPT

**Max. Pressure:** 160 PSI for brass, 450 PSI SS

**Materials:** Brass or 321 SS

**Bellows:** Bronze or 321 SS

**Paddle:** 316 SS

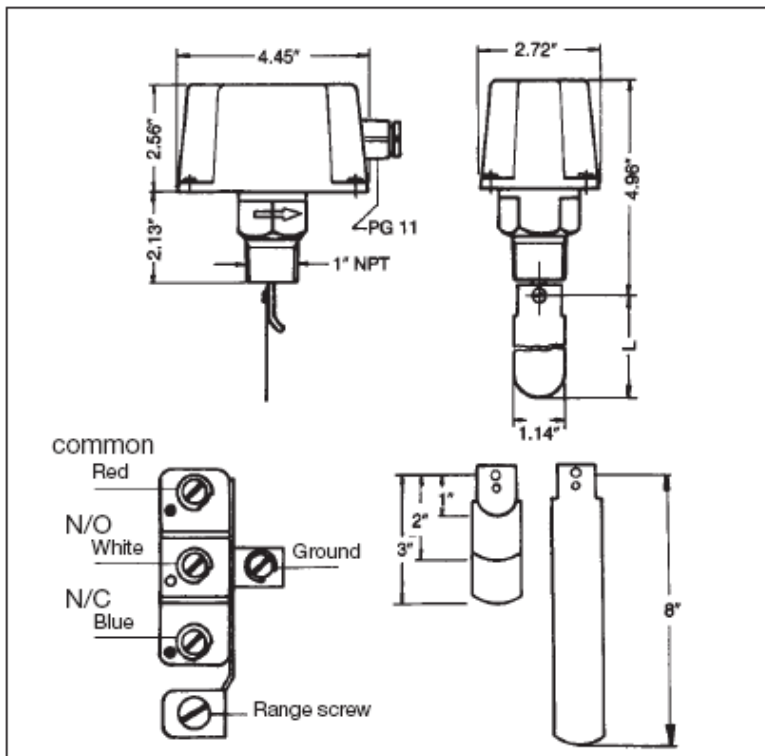
**Micro switch:** SPDT, 220 V, 8 A, 1700 VA

**Housing:** NEMA 4

**Max. Temp.:** 250°F (fluid) 185°F Ambient

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### ↔ Dimensions



### ⊕ Ordering Information

| Order Numbers for standard types |   |                              |   |                              |                |          |                |          |
|----------------------------------|---|------------------------------|---|------------------------------|----------------|----------|----------------|----------|
| Pipe Size                        | Switching ranges<br>Model FPS-5000<br>GPM water |                              | Switching ranges<br>Model FPS-6000<br>GPM water |                              | Model FPS-5000 |          | Model FPS-6000 |          |
|                                  | De-Actuating                                    | Actuating                    | De-Actuating                                    | Actuating                    | Brass          | SS       | Brass          | SS       |
| 1"                               | 2.6- 8.8  | 4.4- 9.3                     | 0.9- 4.4  | 2.6- 4.8                     | FPS-5100       | FPS-5200 | FPS-6100       | FPS-6200 |
| 1½"                              | 3.5- 12.3                                       | 5.7- 13.2                    | 1.1- 6.2  | 4.0- 7.0                     |                |          |                |          |
| 1½"                              | 4.8- 16.3                                       | 7.5- 17.6                    | 2.2- 8.4  | 5.3- 9.7                     |                |          |                |          |
| 2"                               | 9.7- 25.1                                       | 13.7- 26.9                   | 4.0- 15.9                                       | 10.1- 17.6                   |                |          |                |          |
| 2½"                              | 11.9- 28.6                                      | 17.6- 30.2                   | 5.3- 21.6                                       | 13.7- 24.2                   |                |          |                |          |
| 3"                               | 18.9- 47.1                                      | 27.3- 50.2                   | 9.3- 32.6                                       | 21.6- 36.1                   |                |          |                |          |
| 4"                               | 50.2-122.0<br>( 26.9- 76.2)                     | 64.7-127.7<br>( 35.2- 81.0)  | 21.6- 75.3<br>(14.5-51.0)                       | 49.8- 84.1<br>( 33.9- 57.2)  |                |          |                |          |
| 5"                               | 100.8-234.7<br>( 41.0-111.0)                    | 125.1-244.8<br>( 56.8-118.0) | 16.3-149.7<br>(22.0- 77.0)                      | 98.8-166.9<br>( 50.8-86.3)   |                |          |                |          |
| 6"                               | 158.1-360.0<br>( 54.2-134.7)                    | 189.8-385<br>( 74.0-144.0)   | 59.9-209.6<br>(26.9- 94.2)                      | 138.7-233.8<br>(62.1-105.2)  |                |          |                |          |
| 8"                               | 319.7-729.6<br>(170 - 400)                      | 374.7-759.5<br>(204.7-414.8) | 113.2-396.7<br>(95.6-243.5)                     | 262.4-443.4<br>(160.7-272.1) |                |          |                |          |

Values in brackets apply when the extra paddle is used, which is to be shortened accordingly for use in pipes 4" to 6" in diameter.