

Industrial Flow Switch

Better materials lead to better performance. Originally developed for the fire protection industry, the materials of construction, operation and dependability of the Taco Industrial Flow Switch is superior to any other product on the market. It is overwhelmingly preferred by boiler manufacturers and comes with the industry's only 3 year warranty.



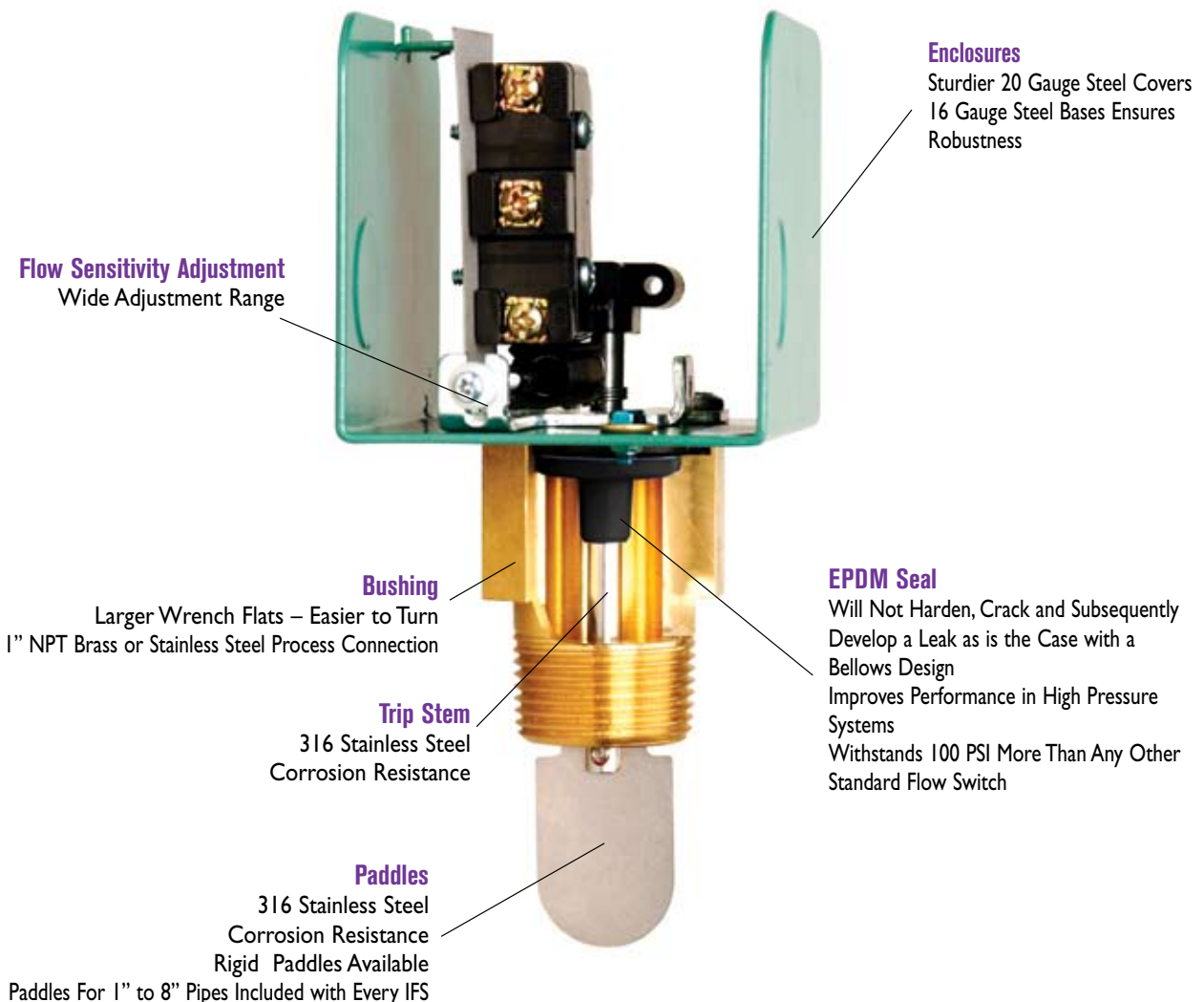
Application

The Taco Industrial Flow Switch (IFS) starts or stops electronically operated equipment when a flow or no flow condition occurs. The IFS can be used in 1" to 8" liquid flow lines, carrying water or any nonhazardous fluid not harmful to brass, stainless steel or EPDM. It is used in a wide variety of applications including heating systems, domestic water boosters, process work, water systems, chillers and on low mass boilers.

Features

- 3 Year Warranty
- EPDM Seal Superior to Competitor's Mechanical Bellows
- Little Mechanical Wear or Fatigue
- Greater Flow Sensitivity and Wider Adjustment Range
- Higher Pressures, 250 PSI Standard
- 250°F Temperature Rating
- Stainless Steel Paddles & Trip Rods
- NEMA 1 and NEMA 4 Models
- Single or Double Switch Models
- High Current Models Available
- For Use on 1" to 8" Diameter Pipe
- UL, CSA, CE Approved

Better Materials Lead to Better Performance



Listings/Approvals

- UL Guide (NKPZ) for industrial control equipment per UL Standard 508 Industrial Control Equipment
- UL Guide (MFHX) for heating/cooling appliance switch per UL Standard 353 Limit Controls
- CSA Class (321106) for industrial control equipment per CSA Standard C22.2 No. 14-M Industrial Control Equipment
- CE (Except IFSH1/H2)

Maximum Service Pressure

- 250 PSI

Enclosure

- Model IFS01/02/H1/H2: NEMA Type 1 (For indoor use only). Formed sheet metal with powdercoat finish.
- Model IFSWS/W2: NEMA Type 4 (For indoor or outdoor use). Die-cast housing and high impact resistant polycarbonate cover.

Switch Contacts

- IFS01/H1/WS: One SPDT (Form C) switch
- IFS02/H2/W2: Two sets of SPDT (Form C) switches to provide versatility in wiring two separate circuits
- IFS01/02/W2: 15 Amps at 125/250VAC, .5 Amps at 125VDC, .25 Amps at 250VDC
- IFSH1/H2: 22 Amps at 125/250VAC
- IFSWS: 10 Amps at 125/250VAC, .5 Amps at 125VDC, .25 Amps at 250VDC
- IFS01/02/W2 Motor Ratings : 120VAC, 1/8 HP, 3.8 AC F.L.A. 22.8 AC L.R.A; 240VAC, 1/4 HP, 2.9 AC F.L.A., 17.4 AC L.R.A
- IFSH1/H2 Motor Ratings : 120VAC, 1/2 HP, 9.8 AC F.L.A. 58.8 AC L.R.A; 240VAC, 1 HP, 8.0 AC F.L.A., 48.0 AC L.R.A
- IFSWS Motor Ratings : 120VAC, 1/3 HP, 7.2 AC F.L.A. 43.2 AC L.R.A; 230VAC, 1/3 HP, 3.6 AC F.L.A., 21.6 AC L.R.A

Pilot Duty Rating

- IFS01/02/H1/H2/W2: 125 VA, 120/240 VAC
- IFSWS: 332 VA, 120/240 VAC

Ambient Temperature Range

- IFS01/02/H1/H2/W2: 32°F - 176°F (0°C - 80°C)
- IFSWS: 32°F - 151°F (0°C - 66°C)

Media Temperature Range

- IFS01/02/H1/H2/W2: 32°F - 250°F (0°C - 121°C)
- IFSWS: -20°F - 250°F (-29°C - 121°C)

Caution

- This device is not intended for applications in explosive environments or hazardous locations

Pipe Connections

- 1" NPT Brass on models IFSxxB
- 1" NPT 316 Stainless Steel on models IFSxxS

Conduit Entrance

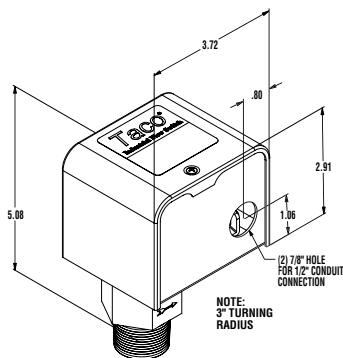
- IFS01/02/H1/H2: Two openings for 1/2" conduit
- IFSWS/W2: One opening for 1/2" conduit

Usage

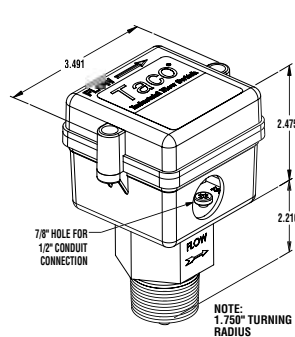
- For pipe sizes 1" - 8"

Dimensions

IFS01/02/H1/H2 Models



IFSWS Models



GPM Required to Actuate Switch

Specifications										
Typical Flow Rates-GPM Required to Actuate Switch										
(For vertical pipe installations)										
Pipe Size (inches)	1	1-1/4	1-1/2	2	2-1/2	3	4	5*	6	8*
Minimum Adjustment	Flow Increase	4.5	4.5	6.0	7.5	13.5	18	35	50	70
	Flow Decrease	3.5	3.5	5.0	5.5	9.5	13	25	40	60
Maximum Adjustment	Flow Increase	9.5	10	13.5	20.0	29	50	70	120	180
	Flow Decrease	7.0	8.5	10.5	18.5	26	45	65	105	160

Notes:

1. Typical flow rates for 1" to 1-1/2" pipe sizes are averages which may vary approximately ±1 GPM with the use of a bronze reducing tee.
2. Typical flow rates for 2" to 8" pipe sizes are averages which may vary approximately ±10% GPM with the use of a 1" weldolet.

(*) Flow rates for these sizes are calculated.

Ordering Information

IFS Ordering

I F S - 1

Process Connection

F Flexible Paddles

R Rigid Paddles

Bushing Material

B Brass

S 316 Stainless Steel

Model

01 Single Switch Model

02 Double Switch Model

H1 High Current Single Switch Model

H2 High Current Double Switch Model

WS NEMA4, Small Turning Radius

W2 NEMA4, Double Switch Model

Paddle Kit Only Ordering

P - 1

Paddle Style

F Standard Flexible

R Rigid

