



# MODEL FS

## FLOW SWITCH FOR BULK MATERIAL

The Model FS Flow Switch is designed to produce a signal if the flow of material at any critical point is interrupted. This signal can then be used to correct the difficulty and/or warn the operator.

Several switches can be used, each one placed at critical points along the conveying system. A continuous flow of material past the switch holds the paddle-shaft-counter-weight out of the actuated position. If flow stops, the paddle is allowed to pivot and actuate the switch. When this occurs a signal is generated to start or stop supporting machinery, or to activate visual or audible alarm systems.

Model FS is also fully adjustable. The paddle and counterweight assemblies can be positioned at various points along the shaft and rotated to any angular position. The shaft itself will adjust laterally. Inside, the actuating cams can be rotated so that switch actuation will occur at pre-determined points.

This versatile switch can be mounted on all types of conveyors and feeders: in discharge openings of bins, bunkers, or hoppers; in angled and vertical chutes; or in discharge chutes of any configuration. It is available with aluminum housing, and in standard or explosion proof models. The paddle and shaft are both of stainless steel.

MODEL	DESCRIPTION
<b>FS-1</b>	One SP/DT microswitch
<b>FS-1X</b>	Explosion proof with one SP/DT microswitch
<b>FS-2</b>	Two SP/DT microswitches
<b>FS-2X</b>	Explosion proof with two SP/DT microswitches
<b>FS-2D</b>	Special NEMA 4,4X & NEMA 9; Class II, Div. 1, Groups E, F & G Enclosure - Two SP/DT microswitches
<b>FS-5</b>	Two DP/DT microswitches
<b>FS-5X</b>	Explosion Proof - Two DP/DT microswitches
<b>FS-5D</b>	Special NEMA 4,4X & NEMA 9; Class II, Div. 1, Groups E, F & G Enclosure - Two DP/DT microswitches

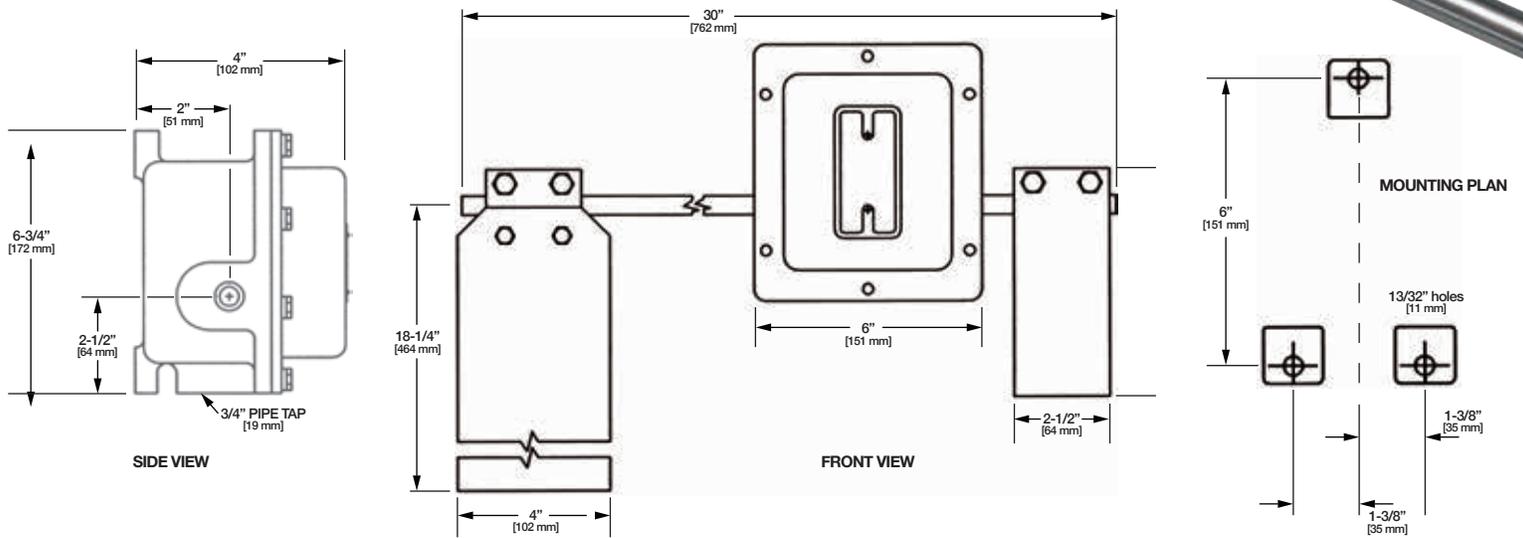
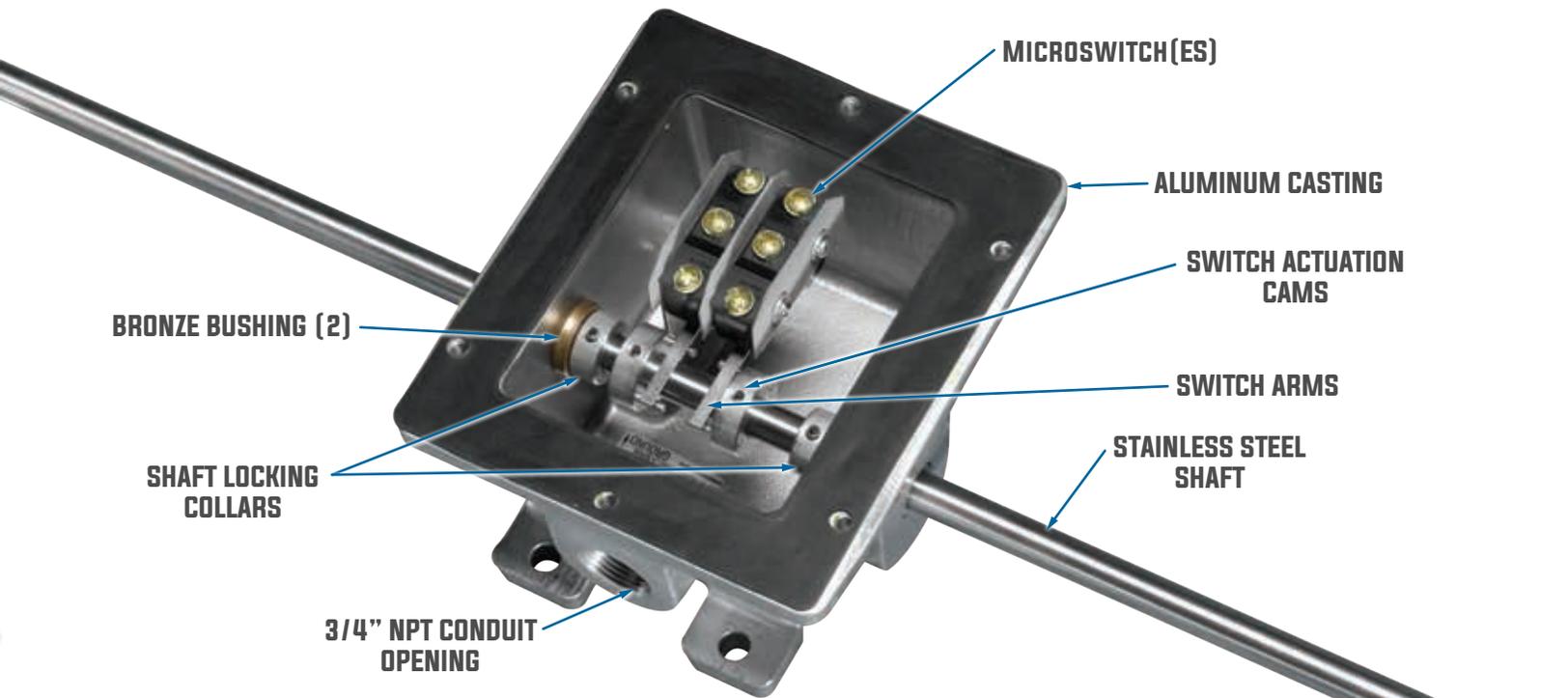


### WHY IS IT NECESSARY?

The Model FS is versatile enough to be used in a variety of applications; it can provide proof that material is actually flowing from a chute onto a conveyor belt, or it can be used to actuate a misting system to reduce dust only when material is present.

*FS Flow Switch is in position to indicate any interruption in the flow of material along the last moving conveyor belt.*

# MODEL FS TECHNICAL INFORMATION



## INSTALLATION INSTRUCTIONS

1. A cam on the shaft actuates the switch. Loosening the cam (or cams on the two switch unit) and the shaft locking collars permits the shaft to be moved laterally in the casting. The paddle sensor and counterweight can be positioned anywhere on the shaft. Use the 3/32" dia. allen wrench furnished.
2. Housing can be mounted in any position. Counterweight permits paddle operation in any position from vertical to horizontal.
3. After mounting the unit the cover should be removed to adjust the cam on the shaft to give switch actuation at the desired point. Both the paddle and the counterweight may have to be loosened, rotated, and re-tightened on the shaft to achieve proper actuation.
4. The paddle or counterweight may be easily field altered to suit application.

## TECHNICAL INFORMATION

**Housing** — Aluminum, NEMA 4/4X or NEMA 7/9 enclosure.

**Conduit Opening** — One (1) 3/4" NPT.

**Shaft and Paddle** — Stainless Steel.

**Switch Specifications** — SP/DT 20 amp @ 125, 250, or 480 VAC; 10 amp @ 125 VAC "L"; 1 hp @ 125 VAC; 2 hp @ 250 VAC; 1/2 amp @ 125 VDC; 1/4 amp @ 250 VDC.

**Optional DP/DT** 15A @ 125V or 250V AC; 3/4 hp 125V AC; 1 1/2 hp 250V AC

**Enclosures** — FS-1 and FS-2; NEMA 3 and 4: Dust and Weather-tight. FS-1X and FS-2X: NEMA 7 — Class I, Div. 1, Groups C & D and NEMA 9 Class II, Div. 1, Groups E, F, and G explosion proof.

**Note:** Switches may be wired for single throw operation, either normally open or normally closed as required.