

## For Commercial and Industrial Applications

Job Name \_\_\_\_\_

Contractor \_\_\_\_\_

Job Location \_\_\_\_\_

Approval \_\_\_\_\_

Engineer \_\_\_\_\_

Contractor's P.O. No. \_\_\_\_\_

Approval \_\_\_\_\_

Representative \_\_\_\_\_

# Series FS-200-W and FS-204-W Flow Switch

## Sizes: For pipes 1" - 6" (25 – 150mm)

Series FS-200-W and FS-204-W Flow Switches provides accurate monitoring of liquid flow in pipelines servicing water systems, heating systems, air conditioning, and processing installations for industrial and commercial applications. The flow switches are designed to act as an automatic control or safety devices for liquid flow. The single-pole, double-throw switch can be wired to start or stop a motor when a flow or no flow condition exists or to activate an alarm when flow is inadequate. The switch then turns off the alarm when adequate flow is restored.

## Features

- EPDM Seal for Superior Performance over Mechanical Bellows
- Universal Design – Replaces Flow Switches by McDonnell Miller, Penn, Taco, Potter and others
- Single Pole Double Throw Switch for Operating Signal Devices, Motors, Alarms, Metering Devices and Heating Units
- Four Heavy Duty Stainless Steel Paddles
- Two 7/8" Electrical Knock-Outs for 1/2" Conduit
- For Use on 1" to 6" Diameter Pipe
- 1" NPT Pipe Connection

## Models

FS-200-W-general purposes

FS-204-W-wet locations

## Standards



Underwriter's Laboratories Listed U.S.A. No. 11S1

## Pressure-Temperature

**Maximum Service Pressure:** 160 psi

**Maximum Temperature:** 250°F (121°C)

**Minimum Fluid Temperature:** 33°F (0.5°C)



FS-200-W

## Materials

<b>Enclosure:</b>	FS-200-W: NEMA 1 – General Purpose FS-204-W: NEMA 4 – Wet Locations
<b>Control Chassis Material:</b>	FS-200-W: 13 gauge galvanized steel FS-204-W: Anodized cast aluminum
<b>Control Cover Material:</b>	FS-200-W: 16 gauge powder coated steel FS-204-W: Powder coated cast aluminum
<b>Contacts:</b>	SPDT switch 7.4 FLA, 44.4 LRA @120VAC Motor Duty
<b>Pilot Duty Rating:</b>	125VA@120/240VAC
<b>Usage:</b>	1" to 6" pipe sizes (see Flow Chart)

Watts product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Watts Technical Service. Watts reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on Watts products previously or subsequently sold.



## Flow Rates

FLOW RATES Required to Actuate the No. FS-200-W and FS-204-W Flow Switch in Horizontal Pipe. Flow rates in U.S. gallons per minute (GPM). Velocity in feet per second (FPS).

		FLOW SPECIFICATIONS								
PIPE SIZE		1"	1¼"	1½"	2"	2½"	3"	4"	5"	6"
MINIMUM ADJUSTMENT	FLOW INCREASES	4.5	8.1	11.8	16.5	25	33	51	85'	120'
	FLOW DECREASES	2.2	6.8	7.6	9.3	19	22	38	75'	100'
MAXIMUM ADJUSTMENT	FLOW INCREASES	14.8	22.1	25.7	32.3	75	90'	110'	170'	240'
	FLOW DECREASES	13.8	20.1	23.7	30.5	72	85'	100'	155'	220'

\*Calculated for various pipe sizes. Flow rates may vary  $\pm 10\%$  from values above.



A Watts Water Technologies Company

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