FLUID FLOW SWITCH
F261 SERIES

NEW!

Johnson Controls

DESCRIPTION

The **Johnson Controls F261 Series flow switches** respond to fluid flow in lines carrying water, ethylene glycol, or other nonhazardous fluids. These models also work in applications with swimming pool water and lubricating oils.

The **F261 Series flow switches** use a variety of paddle sizes to respond to fluid flow rates in applications with pipe sizes greater than 1 inch trade size. Models are available for 1/2" and 3/4" applications as well.

FEATURES

- ***Type 3R (NEMA) or Type 4 (NEMA)***
- ***Viton® diaphragms allow use in fluid lines carrying chlorinated water, treated water, or other nonhazardous fluids***
- ***Low-flow operation on low-flow models***
- ***Maximum fluid pressure of 290 psig***

F261 Series

SPECIFICATIONS

Switch	SPDT switch rating
Enclosure	UL: Type 3R or Type 4 CE: IP43 (IP23 with drain hole plug removed) or IP67
Wiring Connections	Three color-coded screw terminals and one ground terminal
Conduit Connection	One 7/8" (22 mm) hole for 1/2" trade size (or PG16) conduit
Pipe Connector	Standard: 1" 11 1/2" NPT threads
Maximum Fluid Pressure	290 psi (20 bar)
Minimum Fluid Temperature[1]	20°F (-29°C)
Maximum Fluid Temperature[2]	250°F (121°C)
Ambient Conditions	-40 to 140°F (-40 to 60°C)
Approvals	cULus Listed: UL 60730, File E6688, FCC Compliant to CRFR47, Part 15, Subpart B, Class B
Media	Water, ethylene glycol, brine, sea water, swimming pool water and lubricating oils
Warranty	1 year

TECHNICAL SPECIFICATIONS

Standard Controls Electrical Ratings

	UL60730/UL1059				EN60730	
Volts 50/60 Hz	**24**	**120**	**208**	**240**	**24**	**230**
Horsepower	–	1	1	1	–	–
Full Load Amperes	–	16	10	10	–	8
Locked Rotor Amperes	–	96	60	60	–	48
Resistive Amperes	16	16	10	10	16	16
Pilot Duty VA	125	720	720	720	77	720

NEW!

FLUID FLOW SWITCH

F261 SERIES

FLOW RATES FOR STANDARD MODELS, 1-3" PADDLES

Table 3: Flow Rates for Standard Models, 1-3 in. Paddles

		GPM (m^3/hr) Required to Activate Switch for Pipe Size (in.)									
		1	1-1/4[1]	1-1/2[1]	2	2-1/2[2]	3	4[3]	5[3]	6[3]	8[3]
Minimum Adjustment	Flow Increase (Close R to Y)	4.20 (0.95)	5.80 (1.32)	7.50 (1.70)	13.7 (3.11)	18.0 (4.09)	27.5 (6.24)	65.0 (14.8)	125 (28.4)	190 (43.2)	375 (85.2)
	Flow Decrease (Close R to B)	2.50 (0.57)	3.70 (0.84)	5.00 (1.14)	9.50 (2.16)	12.5 (2.84)	19.0 (4.32)	50.0 (11.4)	101 (22.9)	158 (35.9)	320 (72.7)
Maximum Adjustment	Flow Increase (Close R to Y)	8.80 (2.0)	13.3 (3.02)	19.2 (4.36)	29.0 (6.59)	34.5 (7.84)	53.0 (12.0)	128 (29.1)	245 (55.6)	375 (85.2)	760 (173)
	Flow Decrease (Close R to B)	8.50 (1.93)	12.5 (2.84)	18.0 (4.09)	27.0 (6.13)	32.0 (7.27)	50.0 (11.4)	122 (27.7)	235 (53.4)	360 (81.8)	730 (166)

1. Values for 2 in. paddle trimmed to pipe.
2. Values for a 3 in. paddle trimmed to fit pipe.
3. Values calculated for a factory-installed set of 1, 2, and 3 in. paddles.

FLOW RATES FOR STANDARD MODELS, 6" PADDLES

Table 4: Flow Rates for Standard Models, 6 in. Paddles

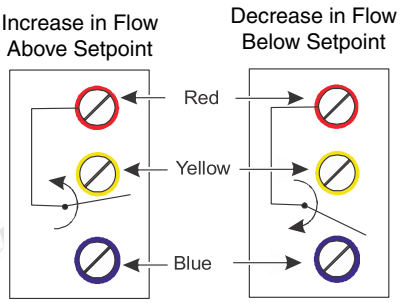
		GPM (m^3/hr) Required to Activate Switch for Pipe Size (in.)			
		4	5	6	8
Minimum Adjustment	Flow Increase (Close R to Y)	37.0 (8.40)	57.0 (12.9)	74.0 (16.8)	205 (46.6)
	Flow Decrease (Close R to B)	27.0 (6.13)	41.0 (9.31)	54.0 (12.3)	170 (38.6)
Maximum Adjustment	Flow Increase (Close R to Y)	81.0 (18.4)	118 (26.8)	144 (32.7)	415 (94.3)
	Flow Decrease (Close R to B)	76.0 (1.93)	111 (25.2)	135 (30.7)	400 (90.8)

OPERATION / CONTROL SWITCH ACTION

Operation

The flow switch responds to pressure exerted on the fluid paddle by the flowing fluid. A range adjustment screw adjusts the rate of the flow required to activate the switch. See Table 3 and 4 for flow rates.

The red terminal is the Common. Red to Yellow closes on flow increase. Red to Blue closes on flow decrease.



Control Switch Action

Switch Action

Flow Action	Switch Closure
Increase	Red to Yellow
Decrease	Red to Blue

ORDERING INFORMATION

MODEL	DESCRIPTION
F261KAH-V01C	Paddle flow switch with NEMA 3R enclosure 1, 2, 3 & 6" stainless steeel paddles
F261MAH-V01C	Paddle flow switch with NEMA 4 enclosure 1, 2, 3 & 6" stainless steeel paddles
F261MAL-V01C	Paddle flow switch with NEMA 4 enclosure 1, 2, 3 & 6" stainless steeel paddles
F261KEH-V01C	Low flow paddle flow switch NEMA 3R 1/2 x 1/2" external NPTF
F261KFH-V01C	Low flow paddle flow switch NEMA 3R 1/2 x 3/4" external NPTF
F261MEH-V01C	Low flow paddle flow switch NEMA 4 1/2 x 1/2" external NPTF
F261MFH-V01C	Low flow paddle flow switch NEMA 4 3/4 x 3/4" external NPTF