



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.

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**

NEW!



F261 Series

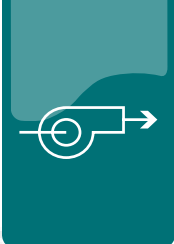


6

FLOW

SPECIFICATIONS		
Switch	SPDT switch rating	Minimum Fluid Temperature¹
Enclosure	UL: Type 3R or Type 4 CE: IP43 (IP23 with drain hole plug removed) or IP67	20°F (-29°C)
Wiring Connections	Three color-coded screw terminals and one ground terminal	Maximum Fluid Temperature²
Conduit Connection	One 7/8" (22 mm) hole for 1/2" trade size (or PG16) conduit	250°F (121°C)
Pipe Connector	Standard: 1" 11 1/2" NPT threads	Ambient Conditions
Maximum Fluid Pressure	290 psi (20 bar)	-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						
Volts 50/60 Hz	UL60730/UL1059				EN60730	
	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



FLOW RATES FOR STANDARD MODELS, 1-3" PADDLES

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

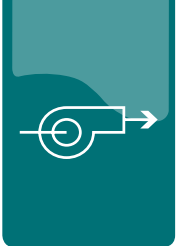
		GPM (m ³ /hr) Required to Activate Switch for Pipe Size (in.)									
		1	1-1/4 ¹	1-1/2 ¹	2	2-1/2 ²	3	4 ³	5 ³	6 ³	8 ³
Minimum Adjustment	Flow Increase (Close R to Y)	4.20 (0.95)	5.80 (1.32)	7.50 (1.70)	13.7 (3.11)	18.0 (4.09)	27.5 (6.24)	65.0 (14.8)	125 (28.4)	190 (43.2)	375 (85.2)
	Flow Decrease (Close 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)

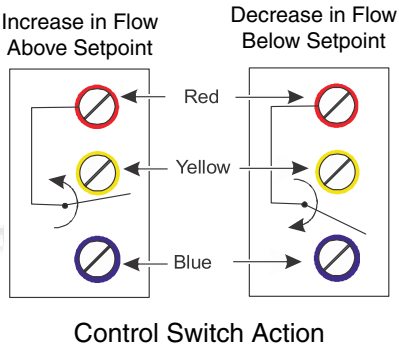


OPERATION / CONTROL SWITCH ACTION

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.



Switch Action

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

ORDERING INFORMATION

MODEL

- F261KAH-V01C
- F261MAH-V01C
- F261MAL-V01C
- F261KEH-V01C
- F261KFH-V01C
- F261MEH-V01C
- F261MFH-V01C

DESCRIPTION

- Paddle flow switch with NEMA 3R enclosure 1, 2, 3 & 6" stainless steel paddles
- Paddle flow switch with NEMA 4 enclosure 1, 2, 3 & 6" stainless steel paddles
- Paddle flow switch with NEMA 4 enclosure 1, 2, 3 & 6" stainless steel paddles
- Low flow paddle flow switch NEMA 3R 1/2 x 1/2" external NPTF
- Low flow paddle flow switch NEMA 3R 3/4 x 3/4" external NPTF
- Low flow paddle flow switch NEMA 4 1/2 x 1/2" external NPTF
- Low flow paddle flow switch NEMA 4 3/4 x 3/4" external NPTF