

# FS7-4

## Flow Switch



FS7-4LJ  
FS7-4J  
FS7-4SJ

FS7-4WJ  
FS7-4SWJ

The FS7-4 flow switch is a paddle type flow switch for mounting in 1 1/4 to 6" (B) pipe of a process pipe run, and is used for a water cut-off relay to detect the water flow or level.

Because the flow sensing section is composed of a paddle and a sealed stainless tube with a magnet connected to a microswitch, it is highly sensitive, durable and highly reliable. The settings of switch actuation by the flow rate that operates or stops the switch can be set by an adjustment screw.

### Specifications

Body/ operating unit	Applicable fluid	Water (non-corrosive)													
	Operation & output	ON-OFF (microswitch SPDT contacts)													
	Model No.	Item	Wetted area material	Max. pressure	Temperature range	Flow speed	Mass	Color	Mounting						
	FS7-4LJ	Body: brass Paddle: phosphate bronze	2MPa	150°C	2m/s max.	5.4kg	Black	R1 1/4 inch tapped body right in the horizontal pipe run							
	FS7-4WJ														
	FS7-4J														
	FS7-4SWJ	Body: SUS316 Paddle: SUS301				3.6kg									
	FS7-4SJ														
	FS7-4LJ														
Actuation flow rate (standard value)	Pipe size (B)		8	10	12	14	16	20	24	30	36				
Min. adjustment (factory settings)	Actuation	ℓ /min	356	560	799	977	1294	1968	2846	4455	6522				
		m/s	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18				
	Stoppage	ℓ /min	178	280	401	488	647	984	1423	2229	3259				
		m/s	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09				
Max. adjustment	Actuation	ℓ /min	530	836	1200	1465	1942	2952	4269	6684	9780				
		m/s	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27				
	Stoppage	ℓ /min	473	746	1067	1302	1726	2623	3793	5942	8694				
		m/s	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24				
Contact rating (motor duty)	Voltage		120Vac		240Vac		120Vdc		240Vdc		120 to 240Vac				
	Load														
	Full load	7.4A		3.7A		0.3A		0.15A		Pilot load 125VA					
	Locked rotor	44.4A		22.2A											
FS7-4WJ/J/SWJ/SJ															
Actuation flow rate (standard value)	Pipe size (B)		1 1/4	1 1/2	2	2 1/2	3	4	5	6	8	10	12	14	16
Min. adjustment (factory settings)	Actuation	ℓ /min	18	23	37	57	92	126	168	213	394	696	1094	1465	1942
		m/s	0.32	0.30	0.29	0.32	0.33	0.26	0.22	0.19	0.20	0.23	0.25	0.27	0.27
	Stoppage	ℓ /min	10	13	22	35	58	79	117	184	337	594	935	1223	1620
		m/s	0.20	0.17	0.17	0.19	0.20	0.16	0.15	0.16	0.17	0.20	0.21	0.23	0.23
Max. adjustment	Actuation	ℓ /min	28	38	60	90	134	232	317	434	795	1397	2203	2850	3777
		m/s	0.51	0.48	0.46	0.49	0.47	0.48	0.41	0.39	0.41	0.46	0.50	0.53	0.53
	Stoppage	ℓ /min	22	26	41	64	110	142	192	270	496	874	1374	1874	2483
		m/s	0.38	0.33	0.32	0.34	0.38	0.29	0.26	0.24	0.26	0.29	0.31	0.35	0.35
Paddle dimension to use			For 1 1/4		For 2B		For 3B	For 4B	For 5B	For 6B					
Contact rating (motor duty)	Voltage		115Vac		230Vac		115Vdc		230Vdc		115 to 230Vac				
	Load														
	Full load	7.4A		3.7A		0.3A		0.15A		Pilot load 125VA					
	Locked rotor	44.4A		22.2A											
General	Straight pipe length required for mounting	At least 5 times the pipe diameter is required on both upstream and downstream sides for mounting.													
Accessories	Flow switch	Accessories													
	FS7-4LJ	Paddle: FS7-28 (6B), FS7-28L (12B) • When the pipe size is 18 to 16B, use a paddle for 6B, when 20 to 36B, use a 12B paddle.													
	FS7-4WJ FS7-4SWJ	Paddle: FS7-28 for FS7-4WJ, FS7-28S for FS7-4SWJ • When the pipe size is 2, 3, 4 or 5B, trim the 6B paddle to match the size.													
	FS7-4J FS7-4SJ	Paddle: FS7-28 for FS7-4J, FS7-28S for FS7-4SJ • When the pipe size is 2, 3, 4 or 5B, trim the 6B paddle to match the size.													
	Approval bodies	CSA													

MECHANICAL CONTROLLERS

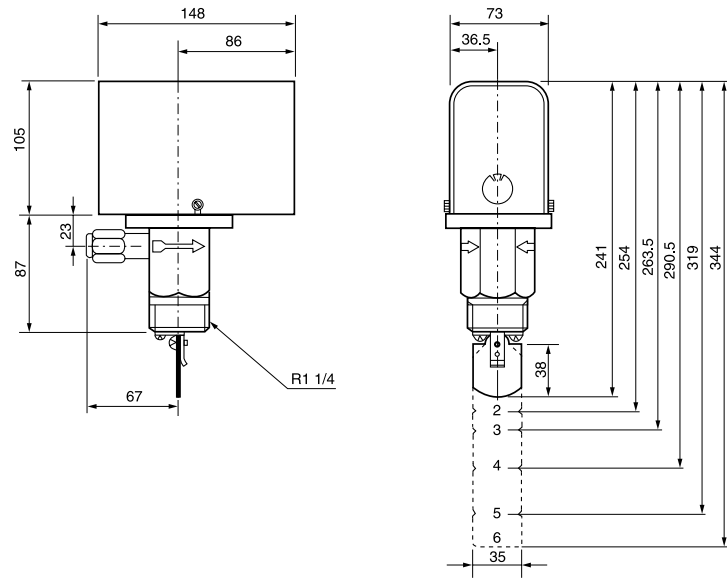
### Selection Guide

Model No.	Description
FS7-4LJ	Flow switch
FS7-4WJ	Flow switch (splash-proof), NEMA-4X (IP56)
FS7-4SWJ	Flow switch (splash-proof), NEMA-4X (IP56)
FS7-4J	Flow switch
FS7-4SJ	Flow switch

Dimensions

(Unit: mm)

• FS7-4LJ, FS7-4J, FS7-4SJ



• FS7-4WJ, FS7-4SWJ

