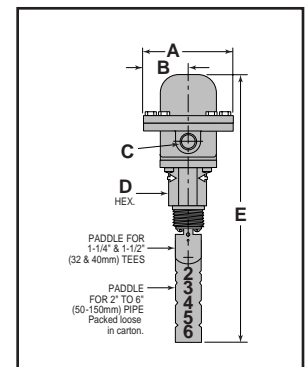
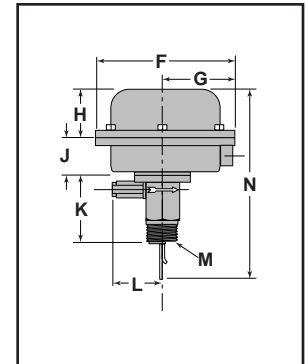


**Flow Switches – Liquid**

**Series FS7-4E**    (for specified models)  
**Industrial Liquid Flow Switches**



- For hazardous environment applications requiring a **NEMA 7 (Class I, Group C or D) or NEMA 9 Class II, Group E, F, or G** rated flow switch
- 1¼" NPT
- Brass with sealed tube construction
- Single pole, double throw snap switch
- Magnetic switching mechanism
- Sensitivity adjusting screw makes flow adjustment easy
- Paddles can be trimmed to suit application needs
- Optional features
  - Extended paddle arm
  - Stainless steel
  - BSPT threads
- Minimum temperature (fluid or ambient) 32°F (0°C)
- Maximum temperature 300°F (149°C)
- Maximum operating pressure
  - 300 psi (21 kg/cm<sup>2</sup>)
  - 1000 psi (70 kg/cm<sup>2</sup>) – Stainless Steel models



**Electrical Ratings**

Voltage	Motor Switch Rating (Amperes)		Pilot Duty
	Full Load	Locked Rotor	
120 VAC	7.4	44.4	125 VA at 120 or 240 VAC 50 or 60 cycles
240 VAC	3.7	22.2	

**Dimensions, in. (mm)**

A	B	C NPT	D	E	F	G
4 <sup>5</sup> / <sub>8</sub> (117)	2 <sup>5</sup> / <sub>16</sub> (59)	1/2	1 <sup>3</sup> / <sub>4</sub> (45)	13 <sup>3</sup> / <sub>4</sub> (350)	7 <sup>1</sup> / <sub>4</sub> (184)	3 <sup>25</sup> / <sub>32</sub> (96)
H	J	K	L	M NPT	N	
2 <sup>7</sup> / <sub>16</sub> (62)	1 <sup>15</sup> / <sub>16</sub> (24)	3 <sup>7</sup> / <sub>16</sub> (87)	2 <sup>5</sup> / <sub>8</sub> (67)	1 <sup>1</sup> / <sub>4</sub>	9 <sup>11</sup> / <sub>16</sub> (246.6)	

FLOW SWITCHES

### Flow Rates

Pipe Size NPT in.	Settings	Mode of Operation		Max. Flow Rate gpm (lpm) w/o Paddle Damage
		Flow gpm (lpm)	No Flow gpm (lpm)	
1¼	Factory or Minimum	4.8 (18.2)	3 (11.4)	47 (177.9)
	Maximum	7.7 (29.1)	5.9 (22.3)	
1½	Factory or Minimum	6.3 (23.8)	3.6 (13.6)	63 (238.5)
	Maximum	10 (37.9)	7 (26.5)	
2	Factory or Minimum	9.9 (37.5)	5.9 (22.3)	105 (397.4)
	Maximum	15.8 (59.8)	11 (41.6)	
2½	Factory or Minimum	15.3 (57.9)	9.5 (36)	149 (564)
	Maximum	23.7 (89.7)	17 (64.3)	
3	Factory or Minimum	24.4 (92.4)	15.4 (58.3)	230 (870.6)
	Maximum	35.5 (134.4)	29.2 (110.5)	
4	Factory or Minimum	33.3 (126)	21.1 (79.9)	397 (1502.7)
	Maximum	61.4 (232.4)	37.7 (142.7)	
5	Factory or Minimum	44.4 (168.1)	31 (117.3)	654 (2475.4)
	Maximum	84 (317.9)	51 (193)	
6	Factory or Minimum	56.3 (213.1)	48.7 (184.3)	900 (3406.5)
	Maximum	114.8 (434.5)	71 (270.6)	
8*	Factory or Minimum	104 (393.6)	89 (336.9)	1,500 (5677.5)
	Maximum	210 (794.9)	131 (495.8)	
10*	Factory or Minimum	184 (696.4)	157 (594.2)	2,500 (9462.5)
	Maximum	369 (1397)	231 (874.3)	
12*	Factory or Minimum	289 (1094)	247 (934.9)	3,500 (13,247.5)
	Maximum	582 (2203)	363 (1374)	
14*	Factory or Minimum	387 (1465)	323 (1223)	4,000 (15,140)
	Maximum	753 (2850)	495 (1874)	
16*	Factory or Minimum	513 (1942)	428 (1620)	5,000 (18,925)
	Maximum	998 (3777)	656 (2483)	

Values are ± 10%  
 \* Equipped with a 6" paddle

### Ordering Information

Model Number	Part Number	Description	Weight lbs. (kg)
FS7-4E	120100	FS7-4 w/NEMA 7 & 9 enclosure	12.3 (5.6)
FS7-4EJ	120135	FS7-4E w/BSPT connections	12.7 (5.8)
FS7-4EL	120150	FS7-4E w/extended paddle & paddle arm	12.3 (5.6)
FS7-4ELJ	120158	FS7-4EL w/BSPT connections	12.7 (5.8)
FS7-4SE	120175	FS7-4S w/NEMA 7 & 9 enclosure	11.7 (5.3)
FS7-4SEJ	120186	FS7-4SE w/BSPT connections	12.0 (5.4)
FS7-4EJ-E	120136	FS7-4EJ - CE conformance rated	12.7 (5.8)

See page 157 for CE Conformance information

**NOTE: DO NOT USE LIQUID FLOW SWITCHES ON SYSTEMS WITH FLOW GREATER THAN 10 FEET (3M) PER SECOND.**



## Flow Switches – Liquid

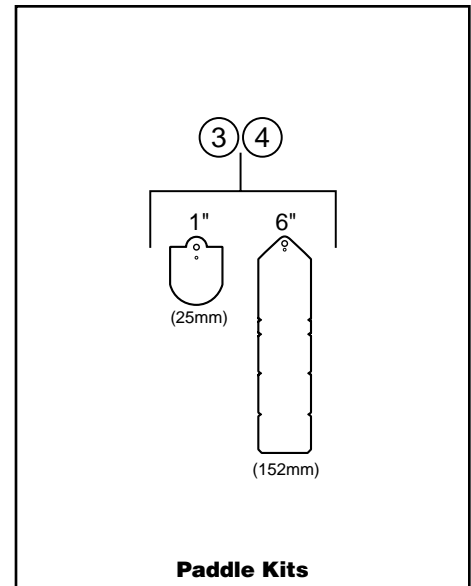
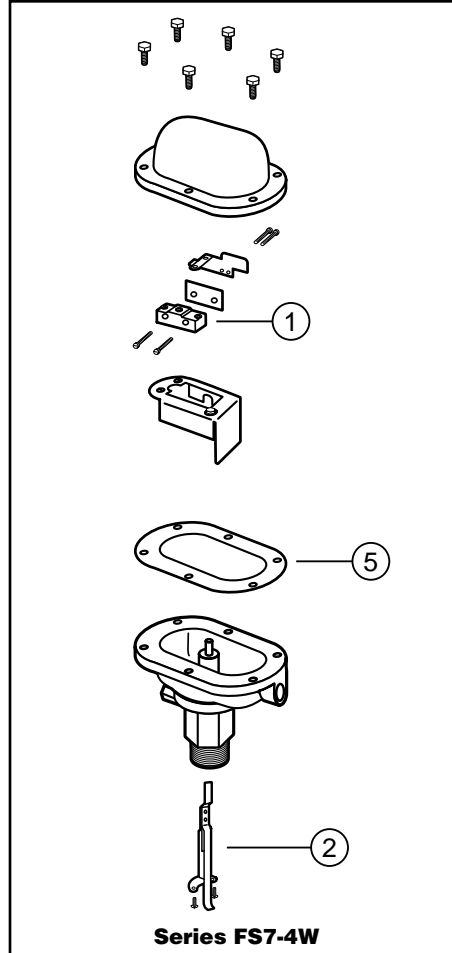
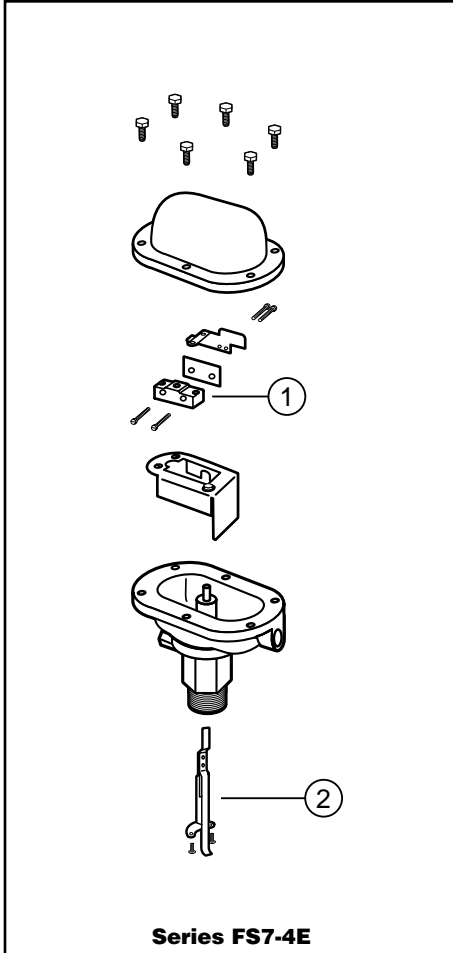
### Series FS7-4E & FS7-4W Industrial Liquid Flow Switches



#### Components

For Series	Item Number	Part Number	Model Number	Description	Weight lbs. (kg)
All models	1	307000	FS7-31	SPDT switch	0.3 (.14)
	2	337550	FS7S-4R-4	Paddle arm	0.4 (.18)
FS7-4E FS7-4W	3	306700	FS7-28	Bronze paddle kit	0.1 (.05)
FS7-4SE FS7-4SW	4	306800	FS7-28S	Stainless steel paddle kit	0.1 (.05)
FS7-4W FS7-4SW	5	307200	FS7-W-43	Gasket	0.1 (.05)

Note: Paddle kits include screws and washers.



FLOW SWITCHES