

DBSF-K and the DBSF-1RE Flow Switches have been designed for the monitoring of liquids in pipes from 1 to 8 inches. (25 to 200 mm Diameter.)

The Flow Switch is particularly suitable as a No Flow or Low Flow protection switch for general industrial plants, Sprinkler Systems, Anti-Fire Systems, Steam Boilers and Irrigation Plants.

**General information**

The standard unit is available with a 1 inch BSP brass fitting and stainless steel paddles. However, a full stainless steel version is available for sea water and more aggressive media.

The flow switch may be mounted in any position with the arrow in the direction of flow.

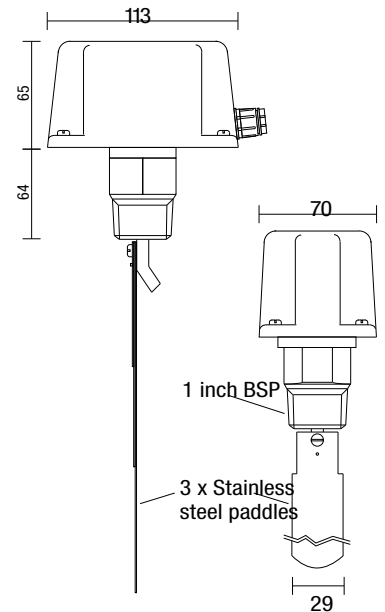
For best results, the flow switch should be kept away from elbows, valves, bends etc. Care must be taken when installing the paddles near the bottom of pipes to prevent slugs from jamming the smooth operation.

To maintain accuracy, 5 pipe diameters of straight pipe should be provided upstream and downstream of the flow switch far from filters, valves etc.

For maximum sensitivity, cut the paddle to the maximum possible length which will not foul the bottom of the pipe fitting.

The DBSF-1RE is more sensitive than the standard model DBSF-K and can detect smaller flows in standard or larger diameters of pipe. This is of particular importance on pressure systems or pumps controlled by variable speed drives.

**FS-DBSF-K**



MODEL	W	Amps	PRICE	Paddles	Max. Volts	REMARKS
<b>FS-DBSF-K</b>	150	2	<b>156.00</b>	Stainless Steel	415	<b>RED</b> = Common
<b>FS-DBSF-1RE</b>	150	2	<b>196.00</b>	Stainless Steel	415	<b>WHITE</b> = Normally open, close on flow
<b>FS-PADDLE</b>			<b>28.00</b>	Stainless Steel		<b>BLUE</b> = Normally closed, open on flow

**TECHNICAL FEATURES**

Dust-tight microswitch with change over contacts  
 Maximum current: 15A Res. 8A Inductive 24 - 250 Vac  
 1A Inductive 415 Vac

Working temperature: -40 to +85 degrees C  
 Maximum liquid temperature: 120 degrees C  
 Maximum liquid pressure: 1100 kPa

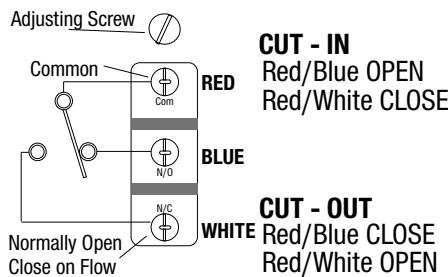
Paddles: Stainless Steel  
 Casing: 113 x 70 x 65 mm IP65  
 Mounting: 1 inch BSP

When leaving the factory, the unit is adjusted to the minimum setting.  
 If you turn the adjusting screw clockwise, the cut-out values will be higher.

**ELECTRICAL WIRING**

Red-White Closes when flow Increases N/O,  
 Red-Blue Opens when flow increases N/C.

Red-White Opens when flow decreases N/O,  
 Red-Blue Closes when flow decreases N/C.



**DBSF-K STANDARD FLOW SWITCH**

PIPE DIAMETER	MINIMUM				MAXIMUM				
	CUT - OUT		CUT - IN		CUT - OUT		CUT - IN		
Inches	mm	m <sup>3</sup> /h	l/sec	m <sup>3</sup> /h	l/sec	m <sup>3</sup> /h	l/sec	m <sup>3</sup> /h	l/sec
1.00	25	0.6	0.167	1.0	0.278	2.0	0.556	2.1	0.583
1.25	30	0.8	0.222	1.3	0.361	2.8	0.778	3.0	0.833
1.50	40	1.1	0.306	1.7	0.472	3.7	1.028	4.0	1.111
2.00	50	2.2	0.611	3.1	0.861	5.7	1.583	6.1	1.694
2.50	65	2.7	0.750	4.0	1.111	6.5	1.806	7.0	1.944
3.00	80	4.3	1.194	6.2	1.722	10.7	2.972	11.4	3.167
4.00	100	11.4	3.167	14.7	4.083	27.7	7.694	29.0	8.056
5.00	125	22.9	6.361	28.4	7.889	53.3	14.81	55.6	15.44
6.00	150	35.9	9.972	43.1	11.97	81.7	22.69	85.1	23.64
8.00	200	72.6	20.17	85.1	23.64	165.7	46.03	172.5	47.92

**DBSF-1RE SENSITIVE FLOW SWITCH**

PIPE DIAMETER	MINIMUM				MAXIMUM				
	CUT - OUT		CUT - IN		CUT - OUT		CUT - IN		
Inches	mm	m <sup>3</sup> /h	l/sec	m <sup>3</sup> /h	l/sec	m <sup>3</sup> /h	l/sec	m <sup>3</sup> /h	l/sec
1.00	25	0.2	0.056	0.6	0.167	1.0	0.278	1.1	0.306
1.25	30	0.25	0.069	0.9	0.250	1.4	0.389	1.6	0.444
1.50	40	0.5	0.139	1.2	0.333	1.6	0.444	2.2	0.611
2.00	50	0.9	0.250	2.3	0.639	3.6	1.000	4.1	1.139
2.50	65	1.2	0.333	3.1	0.861	4.9	1.361	5.5	1.528
3.00	80	2.1	0.583	4.9	1.361	7.4	2.056	8.2	2.278
4.00	100	4.9	1.361	11.3	3.139	17.1	4.750	19.1	5.306
5.00	125	9.7	2.694	22.4	6.222	34.0	9.44	37.9	10.53
6.00	150	13.6	3.778	31.5	8.75	47.6	13.22	53.2	14.78
8.00	200	25.7	7.14	59.6	16.56	90.1	25.03	100.7	27.97