



FLS304 is a heavy duty flow switch which interrupts the electric control circuit of the boiler/chiller when there is insufficient water circulation in the boiler/chiller pipe owing to some abnormal condition. The FLS304 flow switch is operated by an electrical blade-type tripping device (stainless steel blade) and can be installed on pipework from 1" to 8" in diameter.

- * For pipe size from 1" to 8"
- * Applicable to hot and chilled water
- * Solid die-cast aluminum casing
- * Spray and dust proof, IP64/IP67

- * Single changeover contact (SPDT)
- * Easy to mount with 1" fitting
- * Complete with cable gland & 4 stainless steel blades
- *CE approved

Installation

Mount so that the direction indicated by the arrow coincides with the flow.

For correct operation it is advisable to: -

- mount on the return pipe
- mount on horizontal pipe (mounting on vertical piping is possible after appropriate setting)
- keep a certain distance from sources of turbulences (elbows, valves, etc); recommended min. distance is equal to 5 times the pipe diameter
- keep a min. distance of 55 mm between the pipework and the lower base of the appliance.

Adjustment of flow rate setting

Setting of FLS304 is by means of relative screw; fully tighten the screw to obtain minimum flow rate setting, fully loosen the scew to have maximum flow rate setting. The following table gives the values for limiting flow rate settings in m³/h in relation to the pipe diameter. The FLS304 flow switch is supplied with the setting screw fully tightened (minimum setting).

Pipe diameter inches	Blade length mm	Flow rate with minimum setting (screw fully tightened) m³/h		Flow rate with maximum setting (screw fully loosened) m³/h	
		close	open	close	open
1" 1½" 1½" 2" 2½" 3" 4" 5" 6" 8"	34 34 57 57 88 88 88 167 167	0.9 1.2 1.6 3.2 4.2 6.3 13.5 12.1 17.2	0.4 0.6 0.9 2.2 3.5 5.7 12.0 9.0 12.0 36.0	2.0 2.6 3.3 7.1 8.0 12.0 28.0 30.0 35.0 90.0	1.5 1.9 2.6 5.1 7.0 10.5 26.0 28.0 32.0 85.0

Technical data

Contact data 6(2) A, 250 VAC, changeover contact (SPDT)

Max. fluid pressure 10 bar tested to 15bar

Max. fluid temperature 110°C Storage temperature range -20...+80°C

Weight 600 g

Degree of protection IP64 standard (IP67 option)

Approvals CE mark in conformity with European Directives EEC 89/336, EEC 73/23

Body casing and cover

Bellows

Blade

Fitting

Die-cast aluminium

Phosphor bronze

Stainless steel (*)

Brass, 1" male

(*) Blade length varies according to the pipe diameter (see table)

Dimension and wiring

The normally open(N.O.) contact will close to indicate there is flow. It will open to indicate there is no flow.





