



**BOWA** solution

可调式微压差开关

Adjustable Micro-differential Pressure Switch

### 产品概要:

FSF1系列压力开关是一款压力范围可调，固定回差微压差开关。是靶式流量开关的替代品，可以避免冷水机组每年需要更换靶式流量开关的弊端。针对少量使用且对压差值有不同要求的应用场合而开发的，广泛应用于工程检测水过滤器，泵，热交换器等冷水机组及盘管等的压差。当系统中水流量(压差)上升或下降到设定值时，输出一个报警或切断功能的信号提供给自控系统，也可以用做指示泵或水过滤器的状态。

### 参照标准 Reference Standard:

- 1) UL508
- 2) GB14048-2000《低压开关设备和控制设备总则》；
- 3) GB14048.5-2000《低压开关设备和控制设备第5-1部分控制电器和开关元件-机电式控制电路电器》

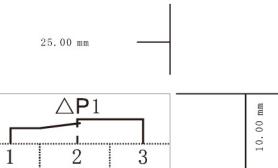


### Product Introduction

FSF1 Series Pressure switch is a pressure range adjustable, fixed hysteresis micro-differential pressure switch. It is great choice to replace target flow switch, which can avoid replacing the target flow switches in water chillers every year. Developed for a small number of applications with different requirements for differential pressure, widely used in engineering monitoring differential pressure in water filters, pumps, heat exchangers and other chillers and coils, etc.. When the amount of water flow (Differential pressure) in the system increases / decreases to the set value, the output of an alarm / cutoff function signal is provided to automatic control system. It can also be used as an indicator of the status of the pumps or water filters.

### 技术参数 Technical Parameters

介质 Medium	水、空气，油等非腐蚀性介质 Water, air, oil and other Non-corrosive medium
接触方式 Electrical Conetections	单刀双掷 (微动) SPDT (micro switch)
电气规格 Electrical Rating	3A 250VAC (无源开关 Passive Switch)
保存温度 Storage Temperature	-29~82°C
使用环境温度 Ambient Temperature	-20~71°C
使用介质温度 Medium Temperature	-20~93°C
高低压侧接口 Connection type & size	1/4" SAE(7/16"-20UNF), NPT 1/4" 黄铜 Brass
最大允许静压 Max. Static Pressure	10/16/20bar (默认Default: 16bar)
最大允许压差 Max. Differential Pressure	10/16/20bar (默认Default: 16bar)
设定点重复性偏差 Setpoint repeatability	±1%
保护等级 Protection Rate	IP54
电气寿命 Electric Working Life	3万次 30,000 times
机械寿命 Mechanic Working Life	10万次 100,000 times
接触电阻 Contacts Resistance	≤100mΩ
绝缘电阻 Insulation resistance	≥10MΩ
介电性能 Dielectric strength	1200V, 1 min下无击穿和闪络现象 No breakdown and flashover



FSF1

流量开关系列  
Flow Switch serial Number

015 M

03 - A

命名规则  
Model Designation

- A: M12 \* 1.25 male thread
- B: 1/4" BSP male thread
- G: 1/4" BSP female thread
- C: 1/4" NPT male thread
- N: 1/4" NPT female thread
- D: 1/4" SAE flare male thread
- S: 1/4" SAE flare female thread
- E: 1/4" ODF solder
- F: High pressure Hose
- H: Copper capillary

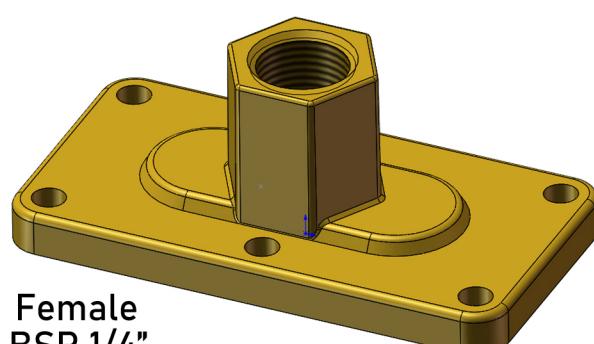
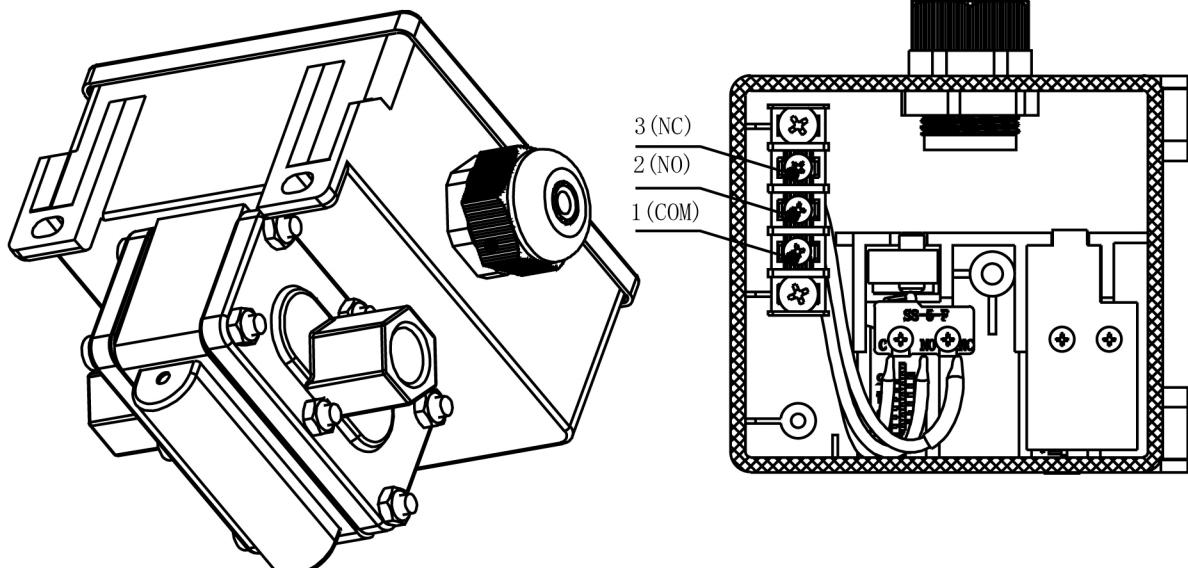
固定回差(kPa)  
Fixed Hysteresis (kPa)

L: 10bar M: 16bar H: 20bar  
最大允许静压 Max. Static Pressure  
最大允许压差 Max. Differential Pressure

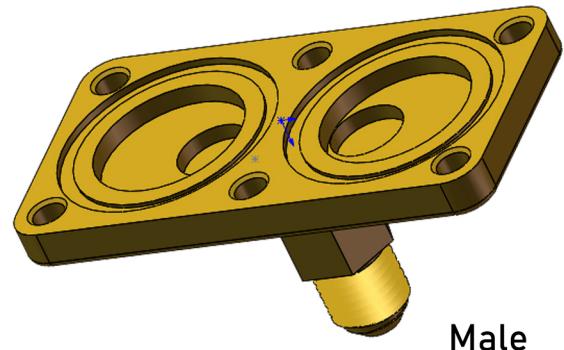
### 常规型号 Common Models

工作压力段 Pressure Section	型号 Model	压力范围 Pressure Range	回差 Hysteresis
	FSF1015M03D	5-15kPa	3kPa
	FSF1030M03D	5-30kPa	3kPa
	FSF1070M05D	6-70kPa	5kPa
	FSF1100M06D	6-100kPa	6kPa
	FSF1200M10D	10-200kPa	10kPa
	FSF1300M15D	20-300kPa	15kPa
	FSF1400M20D	30-400kPa	20kPa

### 外观图 Overall Shape



Female  
BSP 1/4"



Male  
1/4" SAE flare