



# FS Series | FS32 & FS15 Flow Switch

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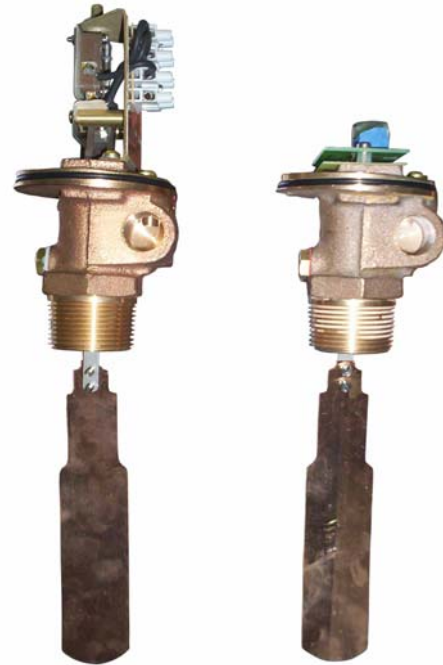
Where the indication of flow or no flow of liquids is critical for your processing or protection of plant and equipment, use one of Mack's range of Australian made, rugged and reliable flow switches.

The FS32 series paddle type, seal-less flow switch consists of a low profile design top assembly with magnetic switching, eliminating any mechanical connection between paddle and switching circuit board. The low profile makes it ideally suitable for installation in confined areas typically found in fire protection systems.

There are two basic models available, direct switching 2-wire model and time delay 3-wire type, both suitable for voltages 24-240v AC and 24-115v DC. All are fitted with our multi-function circuit board, easily configurable on site for switching requirements including time delay from 2 seconds to 60 minutes.

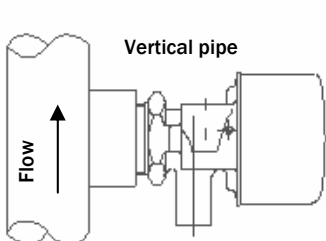
All models are suitable for installation in pipe sizes 25mm and upwards.

Also available – FS15M range of special purpose micro switch models.

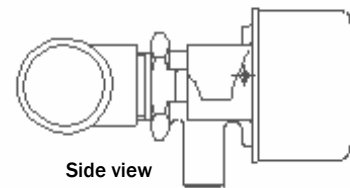
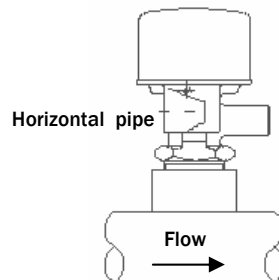


FS15 Series

FS32 Series



Catering for vertical pipe application



Side view  
Catering for decreasing clearances between ceilings and pipework

## FEATURES AND BENEFITS:

- Seal-less design – eliminates potential leaks – no seals to wear or maintain.
- Both models fit pipe sizes 25mm and upwards; “one size fits all”.
- Compact profile – fits in tight spaces – does not restrict pipeline design.
- Standard bronze and stainless steel construction – corrosion resistant for long trouble-free life.
- SSL listed – accepted by insurance companies for fire service systems.
- Multifunctional circuit board – user adjustable for various operations or voltage.
- Australian designed and manufactured – custom designs or material options available.

Accredited To Quality Assurance AS/NZS ISO 9001:2000



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**Service:** Water and other water-like liquids, non-injurious to valve material.  
**Applications:** Fire service, cooling/lubrication/fuel systems, fluid processing, pump protection, boiler feed etc.  
**Description:** Paddle type, seal-less, magnetic switching flow switch.

*Standard models available:*

**FS32AC & DC** Direct switching model, used for circuits not requiring integrated time delay feature.  
**FS32HD** Heavy duty model, used for direct switching currents greater than 0.8 amps.  
**FS32TD** Time delay model, indicates established flow after predetermined time. Mainly used for alarm systems.  
**FS32RTD** Reversed time delay model, indicates no flow condition after predetermined time.  
**FS32PP** Pump Protection model, can be wired to motor contactor to automatically shutdown pump if flow is not established within predetermined time.

Mack Valves also manufactures a range of flow switches using micro switches:

**FS15M** Micro switch model, direct switching 240Vac only for currents higher than FS32AC.  
**FS15MHT** Micro switch High Temperature model, mainly used for boiler feed pump alarm on unattended boilers.  
**FS15RHT** Remote High Temperature model, direct switching, suppression network and electrical connections to alarm circuit are made remote from the high temperature installation location.

		FS32AC & DC (2-wire)	FS32HD, TD, PP etc (3-wire)
Switching		Solid state circuit board – Reed Switch activated	
Power ratings	Std	0-240vac & 0-115vdc 0.8A	24-240Vac & 24-115Vdc 5.0A
	Option	Low current applications less than 0.1A	
Service temperature	Max	70 deg C	
Service pressure	Max	2100kPa (300psi)	
Cover rating		IP53	
Triggering velocity	Min	0.05m/s	
Time delay range		N/A	2 seconds – 60 mins adjustable
Output contacts		N/O & N/C – User selectable	
Connection size	Std	32mm BSPT Male	
	Option	25mm BSPT Male	

		FS15M & FS15MHT 2-wire	FS15RHT 2-wire
Switching		Microswitch	Reed Switch
Power ratings	Std	FS15M – 240Vac 5A FS15MHT – 240Vac 0.8A	240Vac 0.8A
Service Temperature	Max	FS15M – 70 deg C FS15MHT – 149 deg C	Bronze-200 degC SS-300 degC
Service pressure	Max	2100kPa (300psi)	
Cover rating		IP53	
Triggering velocity	Min	0.05m/s	
Time delay range		N/A	N/A
Output contacts		N/O & N/C – User selectable	N/O only
Connection size	Std	32mm BSPT Male	
	Option	25mm BSPT Male	

Body	Std	Gunmetal – LG2
	Option	Nickel/Aluminium/Bronze – AB2, Stainless Steel AISI 316
Cover	Std	Steel Powder Coated
	Option	Screw-On cast metal – Gunmetal, SS, Nickel/Al/Bronze
Paddle Arm Assy	Std	SS AISI 316
	Option	None
Paddle	Std	Copper
	Option	SS AISI 316, PTFE