

F25 CORROSION RESISTANT FLOW SWITCHES

FEATURES

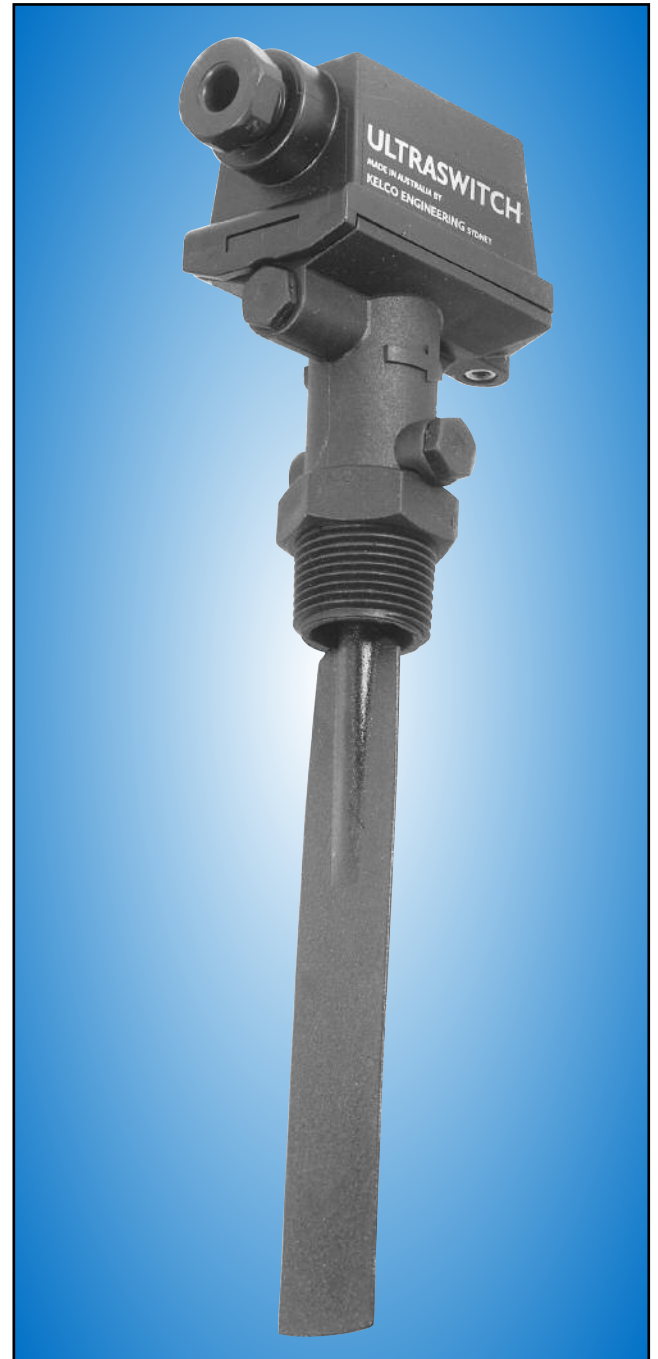
- RELIABLE ROBUST CONSTRUCTION
- WEATHERPROOF ENCLOSURE IP56
- ALL WETTED PARTS IN THERMO PLASTIC
- NO METAL PARTS IN CONTACT WITH FLUIDS
- FULLY ADJUSTABLE FLOW SENSITIVITY
- SUITS PIPE SIZES 25MM TO 150MM +
- REED SWITCH OR SOLID STATE RELAY OUTPUT
- TOTALLY SERVICEABLE DESIGN
- FULL 18 BAR (260 PSI) PRESSURE RATING
- ENERGY AUTHORITY APPROVED

APPLICATIONS

- Loss of flow protection for pumps
- Control of flow in ultra pure water systems
- Flow status signalling in water treatment plants
- Control of effluent and fluid neutralising systems
- Corrosive and saline ground water applications
- Applications involving sea water or brine solutions
- Safety and control signalling for chemical handling
- Control and protection of chemical pumps
- Irrigation and turf watering systems control
- Horticultural and hydroponics system control

The F25 series flow switch has been specifically developed to fill the need for a flow sensor, capable of working reliably in applications in which metal flow switches fail. Typical areas include chemical, process, pharmaceutical, scientific and agricultural uses in which the metal components of traditional flow switches either interfere with, or are attacked by, the liquids being handled.

Modern thermo plastic pipe systems are used extensively in agriculture, industry, and in commercial and domestic fluid handling. The F25 flow switch has been specifically designed to integrate into plastic piping systems, and to enhance the advantages of such systems. Total avoidance of metal components, in the fluid stream, has been achieved. In addition, an advanced frictionless sensitivity adjusting system gives total external control over the switching threshold.



TECHNICAL DATA

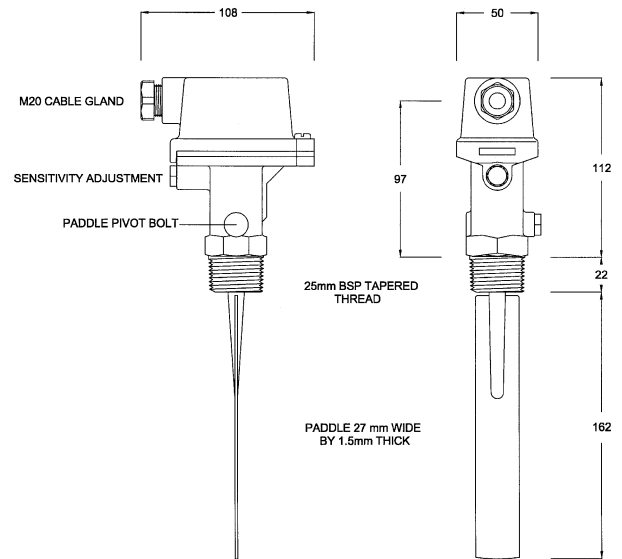
CONSTRUCTION

The F25 series flow switch is made from glass reinforced polypropylene.

Polypropylene is non-ageing and is unaffected by ground conditions. It will not support algae or bacterial growth, and has exceptional resistance to most acids, alkalis and solvents.

The F25 series flow switch should not be used with organic solvents.

DIMENSIONS



ELECTRICAL DATA

Switches can be supplied with a variety of circuit boards to suit specific applications. The electrical specifications of these boards are listed below.

Switch Model	Module Type	Contact Configuration	Switched Power	Switched Voltage Maximum	Switched Current Resistive AC (rms) Maximum	Inductive Loads (Power Factor 0.4)	Typical Application
F25-B	Dry Reed Switch	S.P.S.T. N.O/N.C.	40W	240V AC 200V DC	1A	Not Suitable	PLC & control circuits
F25-C	Dry Reed Switch	S.P.D.T.	40W	240V AC 200V DC	1A	Not Suitable	PLC & control circuits
F25-R	Solid State Relay (Triac)	S.P.S.T. N.O/N.C.	750W	240V AC	4A	4A at 240V AC	AC control circuits & motor control
F25-A-240	Standard Relay 240V AC Coil	S.P.D.T.	2500VA at 250V AC 300VA at 30V DC	240V AC	10A	7.5A at 250V AC 5A at 30V DC	General AC or DC control
F25-A-24	Standard Relay 24V AC Coil	S.P.D.T.	2500VA at 250V AC 300VA at 30V DC	240V AC	10A	7.5A at 250V AC 5A at 30V DC	General AC or DC control

The circuit boards fitted to the F25-B and the F25-R switches are supplied as normally off switches that turn on when flow starts. Turning the circuit board end for end will reverse this standard switch function. Circuit boards with S.P.D.T. contacts, such as the F25-C and the boards that include built in relays, should not be reversed. Normally on and normally off functions are available directly from the terminal blocks of these switches.

Data on maximum and minimum flow rates needed to actuate F25 flow switches is not included. Pipe size, paddle arm trimming and sensitivity settings all interact to determine the switching thresholds. The unique magnetic system employed in the Ultraswitch F25 series provides a range of settings unequalled - covering extreme sensitivity to very low flows through to relative insensitivity to quite high flow rates.

OPERATING ENVIRONMENT

Maximum Operating Pressure (Static or Dynamic) at Ambient Temperature	1800 Kpa 260 P.S.I.
Minimum Burst Pressure at Ambient Temperature	7000 Kpa 1000-P.S.I.
Maximum Operating Temperature	80 Degrees C at a pressure 1 bar absolute, see note below
Minimum Operating Temperature	-20°C
Ph Range Standard Switch	1 to 14

Note: Switching point flow rate data given in the table above refers to water at 15°C as the process fluid. In the interest of safety, maximum operating pressure given in the operating parameters table must be de-rated linearly in direct proportion to temperature increase, to a maximum pressure of 1 bar absolute at 80 degrees Centigrade. In other words only use this switch at elevated temperatures in non pressurised systems that are totally open to atmosphere in all circumstances and under all conditions.

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