

SAFSONIC DOPPLER FLOW SWITCH

DFS2

- Single non-invasive clamp-on sensor
- Pipe sizes DN25 to DN3000
- 10 LED Bar graph flow indicator
- Single Form C Relay, SPDT
- 0 - 2m/s (0 - 6ft/s) or 0 - 6m/s (0 -18ft/s)
- Adjustable start-up timer for pump operation
- Adjustable delay timer for relay
- Selectable latching of relay
- Low cost, Quick to install, Easy to use
- No sensor fouling, Zero pressure drop

Example Applications

- Process control
- Pump protection

Example Liquids

- Mining & Dredging Slurries
- Paper & Food Pulps



The DFS2 includes a relay with adjustable high and low set point control and adjustable start-up delay and relay delay timers, two selectable velocity ranges, 0 - 2m/s (0 - 6ft/s) and 0 - 6 /s (0-18ft/s). Flow velocity is indicated on the 10 LED bar graph. DFS2 continuously measures the velocity of liquid in pipes using the non-invasive Doppler principle and energises a relay above or below the set points. The DFS2 is quick and easy to install with no holes in the pipe, no sensor fouling, no maintenance and no downtime for sensor installation. The Safsonic DFS2 is designed for use with liquids, which contain in excess of 0.01% suspended solids or bubbles, having a size greater than 100 microns.

Features & Specifications

Velocity Range	0 to 2 m/s (1 to 6ft/s) 0 to 6 m/s (1 to 20ft/s)
Liquids	Containing 0.01% solids >100micron
Pipes	25-3000mm (1"-120") Most pipe materials
Accuracy	10 LED Bargraph, 1 LED resolution
Repeatability	±2%
Set points	Two set points, Hi & Lo, 0 to 100% of range at 10 intervals
Indication	10 LED bar graph, Signal strength, Hi Alarm, Lo Alarm
Units	Velocity m/s (ft/s)
Range selection	Selector switch for velocity range
Power Supply	115/230Vac ±10%, 50/60Hz, (<6VA) 24VDC, ±10% (<4W)
Outputs	Relay Form C (<1A) Flow Rate Alarm
Inputs	Startup-delay timer reset
Response Time	0-60s Adjustable startup-delay and relay-delay timers
Electronics enclosure	IP67 (NEMA 6) Polycarbonate 120 x 120 x 55mm HxWxD (5" x 5" x 3")

Transducer	IP68 (NEMA 6P) Aluminium epoxy-faced 21 x 80 x 28mm HxWxD (0.8" x 3" x 1.1")
Failsafe mode	Selectable relay latching on/off
Temperature limits	Sensor -20 to 90°C (-4 to 194°F) Electronics -10 to 50°C (14 to 122°F)
Sensor Cable length	3m (9ft)
Shipping	36 x 20 x 13cm (15" x 10" x 5.2"), 1.2kg (3lbs)
Model No.	DFS2-1 (115VAC 50/60Hz) DFS2-2 (230VAC 50/60Hz) DFS2-3 (24VDC)
Model Example	DFS2-1 = 115VAC 50/60Hz
Standards	CE Certified