SERIES: FST140

➤ **STABLE OPERATION IN WIDE FLOW RANGE**

➤ **SELF DIAGNOSTIC AND TROUBLE SHOOTING**

➤ **LOCAL TEMPERATURE INDICATOR (OPTION)**

DESCRIPTION

Indumart *FST140 Series* Flow Switches are used for ON/OFF control of low viscosity flow of water or oil in pipes.

The operating principle of the *FST140* is based on temperature dispersion. In this method, the deviation in temperature difference due to the passing flow around the two immersed sensors is measured and related to the flow velocity. Important features of this technique are its independence to the fluid pressure, and operating in very wide flow rate range.

The *FST140 Series* is equipped with a relay output for ON/OFF control operation. A rotary switch allows the user to adjust the switching threshold of the device, and a built-in LED indicates the relay action, and can also be used for the setpoint adjustment procedure.
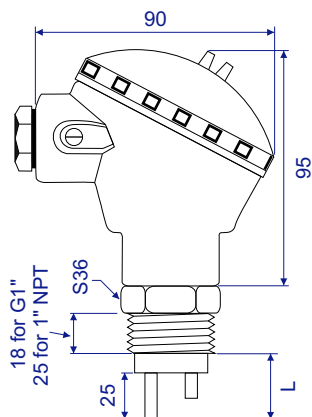
The *FST140* Flow Switch continuously checks both its sensing electrodes and micro-controller systems. Operators will be notified about any fault in these parts with the aid two blinking LEDs.

SPECIFICATIONS

Fluid Speed	1...1500 cm/s for water
	2...3000 cm/s for oil
Process Connection	1" (NPT or G thread)
Wetted Parts	Stainless steel
Probe Operating Length	40...250 mm (as specified)
Output	1 changeover relay (SPDT)
	3A @ 250 VAC
Setpoint Adjustment	Program by rotary switch
Response Time	Approximately 15 seconds
Switching Hysteresis	≤ 10% of span
Output Delay (hold time)	2 seconds
Temperature Drift	0.25% / °C
Warm-up (Preheat) time	45 seconds maximum
Power Supply	24 VDC ± 10%
Permissible Ripple	0.5 Vp-p @ 50 Hz
Power Consumption	6 VA maximum
Electrical Wiring	Screw terminals inside
Enclosure Material	Aluminum; Head type "B"
Local Digital Indicator	Display process temp. (option)
LED Indicators	To indicate output integrity
	and used for calibration
Max. Process Pressure	360 psi (25 bar)
Fluid Temperature	0...100 °C
Wash down Temperature	Up to 140 °C
Ambient Conditions	-10...65 °C; 0...95% RH
IP Rating	Sensor: IP68; Terminals: IP65
Weight	500 grams (1.1 lb) maximum

DIMENSIONS (mm)

90

95

S36

18 for G1"
25 for 1" NPT

25

L

G1" / 1" NPT

ORDERING

FST140 –

Process Medium
Water solutions
Oil and fuels

W
L

Process Connection
1" NPT
G 1"

3
4

Operating Probe Length (L) select 40...250 mm

If local temperature indicator is required, please state at the time ordering.