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# IN LINE FLOW SWITCH

KELCO

## DN25 (1") Scr BSP Male / Female Brass Body

Item code: UB25-B-D

The UB series inline fllow switches are magnetically actuated piston style sensors that switch in response to very low fluid flows. They are ideal for all types of pressure boosting pump control and for the control of commercial or domestic hot and cold water systems.

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They find applicaton in monitoring industrial safety showers and in many applications where extreme reliability is paramount. The UB series flow switches are also ideal for constant pressure pump control.

#### FEATURES:

- Australian made.
- Suits 20NB (3/4") or 25NB (1") Pipework.
- Versitile all position Mounting.
- 200BAR 2900 PSI Pressure Rating.
- Switches at very low flows.
- IP67 Weatherproof housing.
- Solid machined brass body.
- High flow through rating.
- Handles liquids up to 90 degrees celsius.
- Dimensions (mm): 127 L x 50 W x 93,5 H

#### **APPLICATIONS:**

- Hot and cold water pressure boosting.
- Gravity hot water system control.
- Hot water circulation actuation.
- Safety shower alarm sentinel.
- Wash down pump control.
- Solar hot water control.
- Mains water pressure boosting.

### CONSTRUCTION:

The body of the UB25 flow switch is machined from solid Stainless Steel. The piston is glass reinforced Polypropylene for water applications or Nylon for oil applications. The piston return mechanism and the electrical switching action within the switch are achieved using high power magnets operating through the solid body of the switch. The electrical housing is hose-proof & weatherproof, and is supplied with a 20mm cable gland, for conduit or cable entry. The switch has 25mm 1" BSPT male Inlet and 1" BSPT female outlet. Three electrical modules are available to suit the UB25 flow switch.



Blank = Standard ▶ D = Dieseline Mode

B = S.P.S.T NO Reed Switch C = S.P.D.T NO / NC Reed Switch

R = S.P.S.T NO Solid State Relay



#### **OPERATING PRINCIPLE:**

The Metal body of the UB25 flow switch houses a free sliding piston.

Any flow, either pulsed or continuous, causes the piston to be pushed back within the switch body to a point where liquid can pass around it and out of the switch. When pushed back by flow, the piston actuates a magnetically linked switch.

When flow stops, the piston is pushed back to the off position by magnetic repulsion.

There are no springs in the wet area of the switch, and the magnetically isolated piston provides an exceptionally reliable mechanism. The UB25 flow switches can be mounted in any orientation including upside down, in either horizontal or vertical pipework.

ELECTRICAL DATA:									
Model	Туре	Contact Conf.	Switched Power Max.	Switched Voltage Max.	Switched Current Resistive AC (RMS) Max.	Inductive Loads (Power Factor 0.4)	Typical Application		
UB25-B	Dry Reed Switch	s.p.s.tn.o	40W	240V AC 200V DC	1 Amp	Not Suitable	PLC and General Control Circuits		
UB25-C	Dry Reed Switch	S.P.D.T. Break Before Make	20W	140V AC 150V DC	1 Amp	Not Suitable	PLC Control and Safety Showers		
UB25-R	Solid State Relay	S.P.S.T.	750W	12 to 240V AC	Spike to 40 Amp	4A at 240V AC	AC Control Circuits and AC Motor Control to a Max. of 1 HP, 0,75KW		

OPERATING PARAMETERS:						
Parameters	Standard	With Non-magnetic Piston Retainer Fitted				
Switching Point on a Slowly Rising Flow +/-15%	1.5 Litres per Minute	30 Litres Per Hour +-10%				
Switching Point on a Slowly Falling Flow +/- 15%	1.2 Litres per Minute	30 Litres Per Hour +-10%				
Minimum Gravity Head Required to Actuate the Switch	1.5 Metres	0.5 Metres				
Maximum Recommended Continuous Flow (Water)	90 Litres per Minute	90 Litres per Minute				
Maximum Recommended Operating Pressure, Static or Dynamic	200 Bars (2900 PSI)	200 Bars (2900 PSI)				
Minimum Burst Pressure	400 Bars (5800 PSI)	400 Bars (5800 PSI)				
Maximum Liquid Temperature	90°C	90°C				
Minimum Liquid Temperature	-20°C	-20°C				
Ingress Protection Rating (Weatherproof Rating)	IP67	IP67				