DIRECT READING FLOW METERS UZ

● NO PRIMARY ELEMENTS ● INDICATION IN DESIRED FLOW UNITS ●
● THREADED OR FLANGED CONNECTION ● CONTROL SWITCHING OPTION ●

SCREWED ENDS

FLANGED ENDS

SWITZER style UZ Direct Reading Flow Indicators/Indicating Switches are versatile instruments designed to accept different paddle sizes to handle a wide range of flow. These are available with either 304 or 316 SS wetted parts. Inline versions with screwed or flanged ends are available for line sizes from 15 to 50 mm as standard.

The easy to fix design reduces installation cost and down time and also eliminates complexity involved in conventional flow measuring methods which warrant primary flow elements and secondary flow measuring devices. Simple mechanism ensures high reliability and near zero failures. A spring supported paddle is deflected by the flow which actuates the metering unit that is completely isolated from the flow chamber by means of a metal bellows seal. The metering gear unit transduces the paddle movement into a pointer travel on a calibrated scale of 250° $^{\pm 10^{\circ}}$ for direct flow indication.

One or two sub-miniature microswitches can be provided inside the case for setting control / alarm function. The switching point can be set between 10–90% of the scale range by adjusting a setting screw which can be locked later. The adjustable setting is achieved by varying the position of the microswitch against a cam assembly.

The adjustments are accessible from the front after removing the gauge glass. The switch function is indicated by a front mounted red (std) or red / green (option) LED.

GENERAL SPECIFICATION

Type	Flow indicator / indicating switch
Dial Size	6" std.; 4½" opt.
Case	304 SS weatherproof to IP:66 for 6" dial. Pressed sheet steel weatherproof to IP:65 for 4½" dial.
Window	Toughened glass for 6" dial. Clear acrylic for 4½" dial.
Mounting	Inline version suitable for Vertical or Horizontal pipes
Process Connection	Screwed or Flanged. Refer Ordering Information.
Max. Line Pressure	16 bar static / 6 bar dynamic
Pressure Loss	200 mbar at maximum flow
Max. Process Temp.	110℃
Range	Refer Table overleaf
Accuracy	± 3% of maximum flow
Switching	Optional through snap acting SPDT microswitch. Refer table
Switch Rating	5A 250 / 125V AC
Switching Deadband	Within 15% of maximum flow
Electrical Connection	Through DIN 43650 Socket
Switch Setting	Between 10 – 90% FSR
Hi-Lo Gap	15% FSR
Materials	
Body	304 SS / 316 SS
Flange (optional)	304 SS / 316 SS
Paddle	316 SS
Gauge Unit Seal	316L SS Bellows
Seal 'O' Ring	Nitrile / Viton® (optional)

∗ Viton® is a registered trademark of DuPont Dow Elastomers

ORDERING INFORMATION

UZ Series Flow Indicator **UZ** **015** **K4** **SL** **0** **A**

Line Size

15 mm NB **015**
20 mm NB **020**
25 mm NB **025**
32 mm NB **032**
40 mm NB **040**
50 mm NB **050**
Non standard size (to specify) .... **- - -**

Body Material

304 SS **K4**
316 SS **K6**

Process Connection

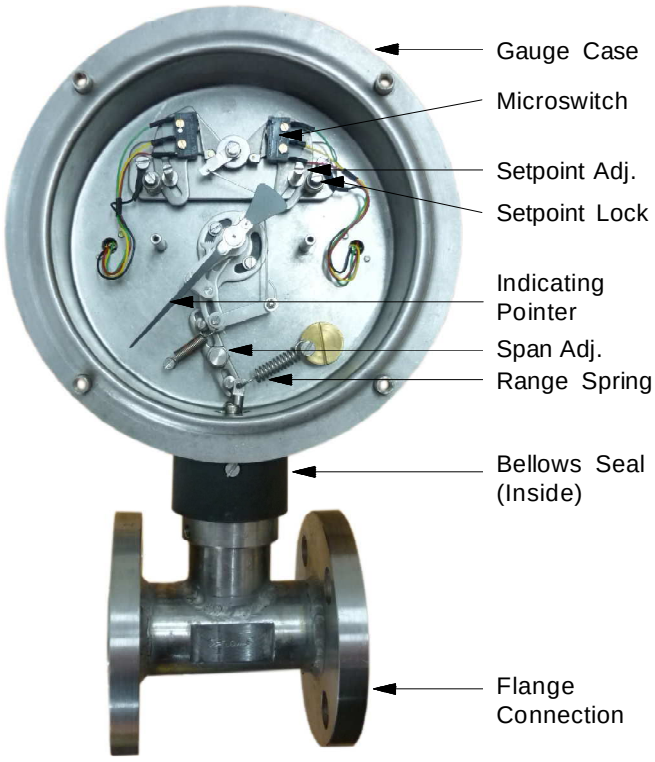
Screwed ends (with pipe thread (same as nominal pipe size) ..... **SL**
Flanged to 1" ANSI 150 RF **F1**
Flanged to 1" ANSI 300 RF **F2**
Flanged to 1¼" ANSI 150 RF **F3**
Flanged to 1¼" ANSI 300 RF **F4**
Flanged to 1½" ANSI 150 RF **F5**
Flanged to 1½" ANSI 300 RF **F6**
Flanged to 2" ANSI 150 RF **F7**
Flanged to 2" ANSI 300 RF **F8**

Control Switch

None **0**
ONE Switch Hi or Lo **1**
TWO Switches Hi & Lo **2**
TWO Switches for DPDT action **3**
LED Indication **4**

Dial Size

6" – Standard ..... **A**
4½" – Optional ..... **B**



INTERNAL VIEW

RANGE TABLE

Size Code	Screwed Version Thread Size (BSPF)	Line Pressure (BAR)		Maximum Flow at 2m / sec Velocity LPM (Water)	Indicating / Switching Range LPM (Water)			
					Standard		Optional	
		Static	Dynamic		Min.	Max.	Min.	Max.
015	1/2"	16	6	60	4	40	2	20
020	3/4"	16	6	100	6	60	4	40
025	1"	16	6	200	10	100	6	60
032	1¼"	16	6	300	20	200	10	100
040	1½"	16	6	400	30	300	20	200
050	2"	16	6	600	50	500	30	300

FOR **SWITZER'S** OFFICES IN INDIA

CHECK AT:

http://www.switzerinstrument.com/offices.htm