

# IN-LINE FLOWMETERS FOR ULTRA-PURE WATER

## FL-500UP Series



Optional

- ✓ Fluid is Always in Sight
- ✓ Direct-Reading English and Metric Scales
- ✓ Electro-Polished Version of Standard 316 SS Shaft and Spring Optionally Available
- ✓ PVDF End Fittings
- ✓ Polysulfone Body
- ✓ Perfluoroelastomer Seals
- ✓ Easily Mounted in Any Pipe Orientation

The FL-500UP is a specialized meter for monitoring the flow rate of ultra-pure water to tools, on de-ionized water returns, and UPW returns. Also available are accessory switches for signaling specific flowrates. Each switch kit contains all the necessary hardware for quick and trouble-free mounting. Kits include a ring-shaped PTFE-coated ceramic magnet that fits around the float in the flowmeter, and a proximity switch mounted in a rugged housing that easily clamps to the body of the flowmeter. As the changing flow causes the float to move within the tube, the magnet moves with it, and its magnetic field trips the proximity switch at the predetermined flow rate. An adjustment screw allows for easy flow rate adjustment. Add 2 switches to indicate both high and low flow rate limits.

**Note:** Switch activates over a 25% FS band; above and below this band, the relay deactivates.

**Caution:**  
Polysulfone should not be used in direct sunlight or any other significant sources of ultraviolet light.

FL-505UP shown smaller than actual size.



### SPECIFICATIONS

**Accuracy:** ±5% FS  
**Pressure Drop:** 4 psi at full scale flow  
**Maximum Pressure:** 150 psig @ 20°C (68°F)  
**Maximum Temperature:** 65°C (150°F) @ 0 psig  
**Dimensions:** 177.8 mm (7") long,  
**FL-505 through FL-515:** 50.8 mm (2") Dia.  
**FL-530 through FL-550:** 76.2 mm (3") Dia.

To Order			
Model No.	Female NPT End Fittings	Dual Scales	
		GPM	LPM
FL-505UP	1	0.5 to 5	2 to 20
FL-510UP	1	1 to 10	4 to 38
FL-515UP	1	1.5 to 15	6 to 55
FL-520UP	1.5	2 to 20	8 to 75
FL-530UP	1.5	3 to 30	11 to 110
FL-540UP	1.5	4 to 40	15 to 150
FL-550UP	1.5	5 to 50	20 to 200

### Accessory Switch Kits (Field Installable)

Model No.	For Sizes
FL-500-S1	FL-505, -510, -515
FL-500-S2	FL-520, -530, -540, -550

Switch ratings: 8 W, 100 Vdc/120 Vac [at 25°C (77°F)]  
 Comes complete with operator's manual.

For NIST traceable certificate add suffix "-NIST" to model number for additional cost.

For optional electro-polished 316 SS shaft and spring, add suffix "-EP" to model number for additional cost.

**Ordering Examples:** FL-505UP, 1" flowmeter, 0.5 to 5 GPM (2 to 20 LPM) range.

FL-550UP, 1.5" flowmeter, 5 to 50 GPM (20 to 200 LPM) range.