

## LFT Turbine Flowmeters

The LFT range of Turbine Flowmeters meet the demands of most liquid measurement applications .

They are well suited to the measurement of low viscosity lubricating and non-lubricating fluids, although versions for slurry applications as well as gases are available. A high degree of accuracy and repeatability are attainable using this time served flowmetering principle, which is easily field serviced and re-calibrated.

### Technique

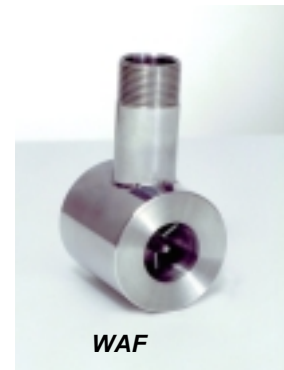
The Rotor blades sweep out the full bore of the meter except for a small tip clearance space . As the blade tips pass the magnetic pick up they initiate a pulse . Flow rate is determined by the frequency of the pulses and Totalised Flow is obtained by summing the pulses .

“ Fluidwell “ Totalisers , which sum the pulses automatically and display Flow Rate and Total Flow instantly on the readout , can be mounted on the Turbine or fitted remotely . Options include: linearisation, pulse/4-20 retransmit , batch control, RS comms, with various power options including 7 year Battery. (EEx ia versions available)

### GENERAL SPECIFICATIONS

#### Materials

Body	: 316 Stainless Steel .
Rotor Supports	: 316 Stainless Steel .
Journal Bearings	: Tungsten Carbide .
Thrust Ball	: 316 Stainless Steel .
Rotor	: ANC1A Stainless Steel .
Rotor Shaft	: Tungsten Carbide .



#### Performance

Linearity	: + / - 0.5 % ( better than + / - 0.2 % when used with “Fluidwell “ Totaliser ) .
Repeatability	: + / - 0.1 % .
Temperature	: - 30 °C to + 120 °C ( maximum + 350 °C with optional High Temperature Pick Up ) .
Pressure Drop	: 250 mbar at maximum quoted Flow rate .

#### Code/Style

BSP	: BSPP Male Threaded .	NPT	: NPT Male Threaded .
FL1	: ANSI 150 Flanged .	FL2	: ANSI 300 Flanged .
FL3	: BS 4504 ( DIN ) PN16 .	FL4	: BS 4504 ( DIN ) PN25 .
WAF	: Wafer .	TRI	: Tri – Clamp .



#### Example Options

HT	: High Temperature Pick Up .
IS	: Intrinsically Safe Pick Up .
2P	: Second Pick Up fitted .

LFT Turbines fitted with the intrinsically safe pick up ( IS option ) are suitable for Hazardous Installations ( Eex ia IIC T4 ) .

**BSP & NPT Style**                      **Maximum Pressure : 250 Bar**

Size	Style	Connection	Flow Range ( litres / min )	Length ( mm )
3/8 "		1/2 " BSP or NPT	1 – 10	70
1/2 "		1/2 " BSP or NPT	2 - 20	70
5/8 "		3/4 " BSP or NPT	5 – 50	76
3/4 "		3/4 " BSP or NPT	14 – 140	76
1"		1" BSP or NPT	27 - 270	88
1 1/2 "		1 1/2 " BSP or NPT	55 – 550	114
2 "		2 "BSP or NPT	114 – 1140	133

**FL1 Style**                      **Maximum Pressure : 19 Bar**                      **FL2 Style**                      **Maximum Pressure : 29 Bar****FL3 Style**                      **Maximum Pressure : 16 Bar**                      **FL4 Style**                      **Maximum Pressure : 25 Bar**

Size	Style	Connection	Flow Range ( litres / min )	Length ( mm )
3/4 "		3/4 " FL1 , FL2 , FL3 or FL4	14 - 140	140
1 "		1 " FL1 , FL2 , FL3 or FL4	27 – 270	152
1 1/2 "		1 1/2 " FL1 , FL2 , FL3 or FL4	55 – 550	165
2 "		2 " FL1 , FL2 , FL3 or FL4	114 – 1140	165
3 "		3 " FL1 , FL2 , FL3 or FL4	227 – 2270	165
4 "		4 " FL1 , FL2 , FL3 or FL4	454 – 4540	210
6 "		6 " FL1 , FL2 , FL3 or FL4	908 - 9080	240

**WAF Style**                      **Maximum Pressure : 100 Bar**

Size	Style	Connection	Flow Range ( litres / min )	Length ( mm )
3/4 "		43 mm R.F. Diameter	14 – 140	50
1 "		52 mm R.F. Diameter	27 - 270	50
1 1/2 "		73 mm R.F. Diameter	55 – 550	64
2 "		92 mm R.F. Diameter	114 – 1140	76
3 "		127 mm R.F. Diameter	227 – 2270	100

**TRI Style**                      **Maximum Pressure : 68 Bar**

Size	Style	Connection	Flow Range ( litres / min )	Length ( mm )
3/4 "		1 " Ferrule	14 – 140	50
1 "		1 1/2 " Ferrule	27 - 270	64
1 1/2 "		2 " Ferrule	55 – 550	88
2 "		2 1/2 " Ferrule	114 – 1140	100

**Order code : LFT / Style / Size / ( Option-see price list for options available )**

e.g. : LFT / WAF / 2 " / HT

Internals Kit 's ( calibrated ) can be supplied , which are very easy to retrofit in to an existing Body on location , ( eliminating the need to return the Turbine ) .

**LFT Internals Kit Order code LFT / Style / Size**

e.g. : LFT / NPT / 1/2