

## Lx Turbine Flowmeters

The Lx range of Turbine Flowmeters meet the demand of most liquid measurement applications .

They basically comprise of three component assemblies , fitted inside a stainless steel body ( locked with an internal circlip ) , which has a magnetic pick up fitted and come in a range of threaded , flanged , wafer ( designed The Rotor & Shaft assembly ( 1 off ) which is mounted between journal bearings inside the Rotor Shaft Support assemblies ( 2 off ) is turned by the kinetic energy of the flowing fluid at an angular velocity , which in the linear range of the Flowmeter is proportional to the mean axial velocity of the fluid .

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 .

“ 101 “ 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 .

### 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 “ 101 “ 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 .

#### 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 .



#### Options

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

Lx 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	7 - 70	50
1 1/2"		73 mm R.F. Diameter	14.5 - 145	64
2 "		92 mm R.F. Diameter	30 - 300	76
3 "		127 mm R.F. Diameter	60 – 600	100

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

Size	Style	Connection	Flow Range ( litres / min )	Length ( mm )
3/4"		1 " Ferrule	3.5 – 35	50
1 "		1 1/2" Ferrule	7 – 70	64
1 1/2"		2 " Ferrule	14.5 – 145	88
2 "		2 1/2" Ferrule	30 - 300	100

**Order code : Lx / Style / Size / ( Option )**

e.g. : Lx / 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 ) .

**Lx Internals Kit Order code : Lx / Style / Size**

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

**Lx Turbines can be “ custom made to your requirements “**

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