

## GL Flow Gx Gas Bi-Directional Turbine Flowmeters

The Gx range of Turbine Flowmeters are suitable for the measurement of dry gases (inert and flammable) and are designed to operate at line pressures down to 0.01 bar (0.2 psi)

They comprise of one cartridge assembly, 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 or wafer (designed for between flange installations) styles.

The Rotor (fitted with low inertia, precision bearings) is turned by the kinetic energy of the flowing gas at an angular velocity, which in the linear range of the Flowmeter is proportional to the mean axial velocity of the gas.

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 Totalized 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 Support:	316 Stainless Steel
Ball Race Bearings:	440C Stainless Steel
Rotor:	ANC1A Stainless Steel
Rotor Shaft:	316 Stainless Steel

#### Performance

Accuracy:	$\pm 2.0$ % FS ( $< \pm 0.5$ % FS when used with “101” Totalizer)
Repeatability:	$\pm 0.2$ %
Temperature:	-30 to 180 °C (- 22 to + 356 °F)
Pressure Drop:	0.01 bar (0.2 psi) at maximum quoted flow rate (based on test pressure of 1 bar (14.5 psi))
Flow direction:	Standard bi-directional; indication of flow direction optional



#### Style

NPT:	NPT Male Threaded	BSP:	BSPP Male Threaded
FL1:	ANSI 150 Flanged	FL2:	ANSI 300 Flanged

**Option:** IS: Intrinsically Safe Pick Up      QU: Flow Direction Signal



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**NPT & BSP Style****Maximum Pressure: 250 bar (3625 psi)**

Size	Connection	Flow Range lpm (acfm)	Length ( inches )
1/2 "	1/2 " NPT / BSP	8.3 – 117 (0.3 – 4.1)	2.75
5/8 "	3/4 " NPT / BSP	17 – 233 (0.6 – 8.2)	3.0
3/4 "	3/4 " NPT / BSP	42 – 583 (1.5 –21)	3.0
1 "	1" NPT / BSP	83 – 1167 (3 – 41)	3.5
1 1/2 "	1 1/2" NPT / BSP	167 – 2333 (6 – 82)	4.5
2 "	2 " NPT / BSP	300 – 4200 (11 – 148)	5.25

**FL1 Style****Max. Pressure: 20 bar (290 psi)****FL2 Style****Max. Pressure: 50 bar (740 psi)**

Size	Connection	Flow Range lpm (acfm)	Length ( inches )
3/4 "	3/4" FL1 / FL2	42 – 583 (1.5 –21)	5.5
1 "	1" FL1 / FL2	83 – 1167 (3 – 41)	6.0
1 1/2 "	1 1/2 " FL1 / FL2	167 – 2333 (6 – 82)	6.5
2 "	2 " FL1 / FL2	300 – 4200 (11 – 148)	6.5
3 "	3 " FL1 / FL2	583 – 8167 (20 – 288)	6.5
4 "	4 " FL1 / FL2	1167 – 16333 (41 – 577)	8.25

Gx Turbines suitable for Hazardous Installations (Eex ia IIC T4) are available with optional intrinsically safe Pick Up

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

e.g.: Gx / NPT / 3/4 " / IS

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).

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

e.g.: Gxin / FL1 / 4 "



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