Flow Monitors From Lake

General Description

Compact and rugged the flow meter
is made from quality material
Construction and measures approximately
167mm (7" l) to 182mm (71/2) in length,
Suitable for permanent installation in
lubrication, cooling irrigation or
water treatment systems.
This Solid metal body enables easy flow
reading regardless of fluid condition I
IE Fluid discoloration.

Note.

1. Monitors liquid flows up to 150 G/Min

2. Dual scale L/min amd (US gals /Min)

3. Pressures up to 6000 Psi (420 bar)

4. Temperatures up to 600 ºF(315ºC)

5. Can be mounted in any position

6. Good viscosity stability

7. No flow straighteners needed

8. Opaque or clear fluids

How to Order.

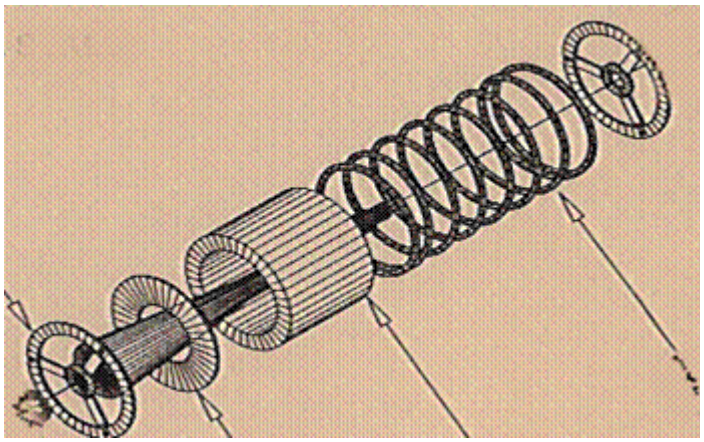
B3B 6WT 05

This is Basic flow meter Brass Body for water
1/2 Bsp Connections max pressure 3500 Psi
flow range 2 - 20 L/min

B	**3**	**B**	**>**	**6**	**W**	**T**	**>**	**0.5**
Model	Meter Size	Body Material	Pressure Rating	Media	Connection			Ranges
B = Basic								01 = 5 L/m
G = Pneumatic	3 = 1/4 > 1/2"	A = Alum	4 = 600 Psi	A = Air	T = 1/2"	Bsp		02 = 8 L/m
M = with switch	4 + 3/4 > 1"	B = Brass	6 = 3500Psi	W = Water	U = 3/4"	Bsp		05 = 20L/m
N = with 2 switches	5 = 11/4 > 11/2"	S = St St	7 = 6000Psi	H = Oil	V = 1"	Bsp		10 = 35L/m
T = Test unit					W = 11/4"	Bsp		15 = 55L/m
J = Hi Temp unit								20 = 75L/m
								25 = 95L/m
								30 = 110L/m
								40 = 150L/m
								50 = 200L/m
								75 = 280L/m

Sharp Edge Orifice Plate flow Meter

(1



(4)

(2) (3)

Internal cartridge

1. Guide Disk

2. Floating orifice disk

3. Transfer magnet

4. Return spring

$$F3 = \frac{1}{Sp\ Gr}$$

SG Correction factor = F3

Materials of construction	Aluminum brass, stainless steel, Lexen outer sleeve
Measuring accuracy	± 2.5% through middle 1/3 of scale 4% within full scale
Measuring repeatability	± 1% of Full scale
Maximum operating pressure	600 PSIG For Air & Gases/ liquids Aluminum and brass 3500Psi
Maximum operating temperature	120º C (250 ºF) Standard on request up to 315ºC (600 ºF)
Minimum flow detection	0.5 l/min
Filtration required	Min 37 micron

Operating Theory

Enclosed in a high pressure casing a high strength magnet(3) in tandem with a sharp edge orifice disk (2) is pressed towards the zero flow position by a linear compression spring (4) a tapered metering pin is positioned concentrically within the annular orifice disk and provides a Variable area opening that increases by the square of linear displacement of the orifice disk. Fluid flow creates pressure differential across the orifice disk pressing the duo against the compression spring. Flow rate is read by aligning the magnetically coupled magnet follower with the graded scale located inside the lexen outer clear sleeve. This type of unit is also available with single or double switches or 4 - 20ma output