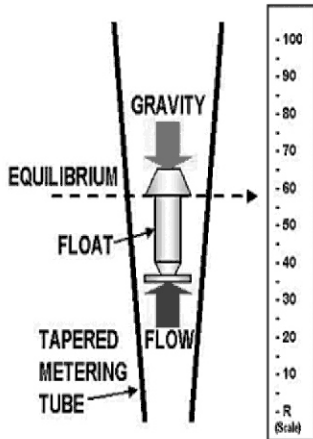


ROTAMETERS

When fluid or gas flows through a taper tube containing a float, a pressure difference of P1 and P2 is created between upper and lower side of the float. The float moves upwards by a force obtained by multiplying the pressure differential by the maximum cross sectional area of the float.



Due to taper tube, as the float moves upwards, the fluid passing area increases as a result of which the differential pressure decreases. Upward movement of float stops when the dead load is dynamically balanced by the differential pressure. Tapering of metering tube is so designed that the vertical movement of the float becomes linearly proportional to the rate of flow and the scale is provided to read the position of the float, thus giving birth to flow rate indication.

Based on Bemoulli's theorem, the principle mentioned above can be theoretically expressed as follows.

FLOW FORMULA

$$Q = CA \frac{\sqrt{2g V (a p v)}}{Af y}$$

Where

Q = Volumetric flow rate
C = Flow coefficient
A = Fluid passing Area
g = gravimetric acceleration

V = Volume of Float
Af = Maximum pressure receiving area of float.
P = Float Density
y = Fluid Density

THERE ARE VARIOUS TYPES OF FLOW METERS AVAILABLE NAMELY :

- GLASS TUBE ROTAMETERS
- PLASTIC BODY ROTAMETERS
- METAL TUBE ROTAMETERS WITH DIGITAL FLOW RATE INDICATION
- METEL TUBE ROTAMETER WITH TRANSMITTER
i.e. 4-20 mA output & DIGITAL TOTALISER
(OPERATING ON 4-20mA OUTPUT
- BY-PASS ROTAMETER COMPLETE ASSEMBLIES
- GANG / MULTIPLE ROTAMETERS
- ROTEMERS AS PER SAMPLE & OR DRAWING

DETAILS REQUIRED

- ◆ Name of Fluid
- ◆ Flow Ranges, Min. & Max.
- ◆ Line / Connection size
- ◆ Wetted Parts Material Preferred
- ◆ Flanged or Screwed or other End Connections
- ◆ Position of connections
- ◆ Operating Sp. Gr. or Density
- ◆ Operating Viscosity
- ◆ Op. Temp. & Pressure

LOW FLOW PLASTIC BODY ROTAMETERS

with or without Flow Control Valve

FOR AIR OR GASES

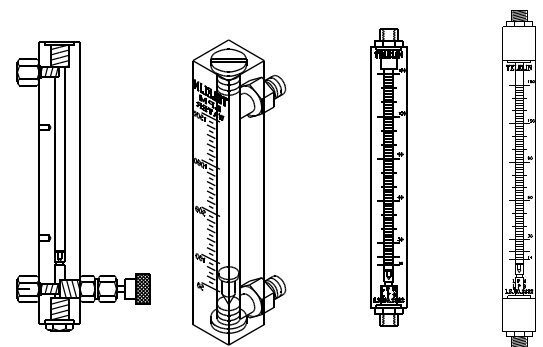
Minimum Range : 50 to 500 MI/Min.

Maximum Range : 15 to 150 LPM

FOR WATER OR LIQUIDS

Minimum Range : 10 to 100 CC/Min.

Maximum Range : 1 to 10 LPM



LOW FLOW GLASS TUBE ROTAMETERS

with or without Flow Control Valve

FOR AIR OR GASES

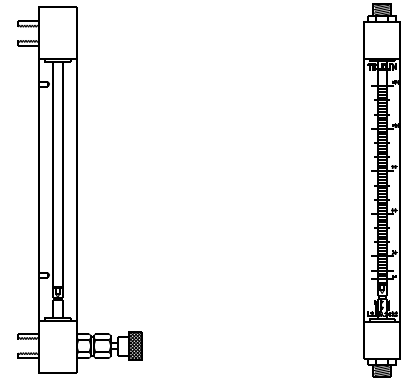
Minimum Range : 5 to 50 MI/Min.

Maximum Range : 15 to 150 LPM

FOR WATER OR LIQUIDS

Minimum Range : 10 to 100 CC/Min.

Maximum Range : 1 to 10 LPM



HIGH FLOW PLASTIC BODY ROTAMETERS

MODEL NO. PB-796 FL / SC

FOR AIR OR GASES

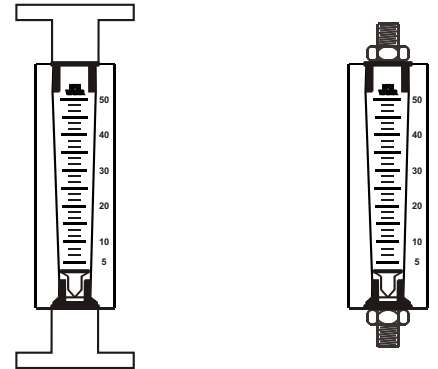
Minimum Range : 5 to 50 MI/Min.

Maximum Range : 400 to 6000 LPM

FOR WATER OR LIQUIDS

Minimum Range : 0.1 to 1 LPM

Maximum Range : 20 to 200 LPM



HIGH FLOW GLASS TUBE ROTAMETERS

MODEL NO. GT-797 FL / FLS / SC

FOR AIR OR GASES

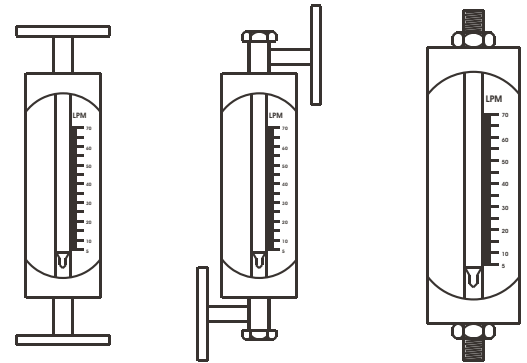
Minimum Range : 5 to 50 MI/Min.

Maximum Range : 400 to 6000 LPM

FOR WATER OR LIQUIDS

Minimum Range : 0.1 to 1 LPM

Maximum Range : 30 to 350 LPM



GANG OR MULTIPLE ROTAMETERS

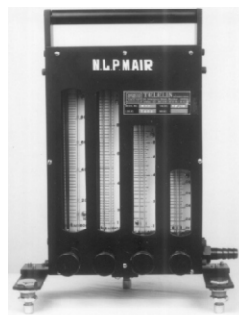
MODEL NO. PB-800 / GT-800

HAVING COMMON INLET

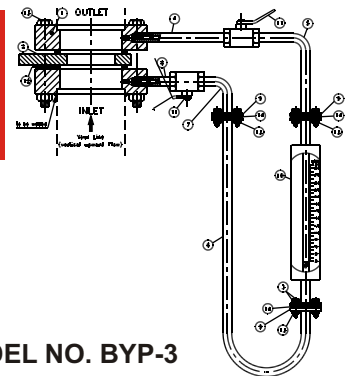
OR INDIVIDUAL INLETS.

IN CUSTOMERS GIVEN RANGES

FOR GASES OR LIQUIDS



**BY-PASS
ASSEMBLIES
for Line Sizes
above 2"**



MODEL NO. BYP-3

DIGITAL METAL TUBE MAGNETIC ROTAMETERS

The inner Float Magnetic Field is detected by the high sensitive magnetic field detection sensor, enabling us to show the digital readout.

As such this flow meter does not require any electrical connection, since it operates on battery, This got an inbuilt two wire transmitter 24 VDC and take 4-20 mA signal.

If Flow Totalization is required rotameter can be manufactured with inbuilt Flow Totalizer

