

BYPASS ROTAMETER (FLBPR)

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 Bernoulli's theorem, the principle mentioned above can be theoretically expressed as follows.

Usefulness where the measurement must be made in a hazardous or remote area, or where electric power

is either not available or would be potentially dangerous.

Rangeability can be 5:1 or 7:1.

Scale readings that can be graduated in direct units for flow in the main pipeline.

Changing the range or cleaning the tube without disassembling the meter or removing it from the bypass line.

STANDARD RANGES FOR WATER AT 20°C

Model	NB	Maximum Flowrate (M3/HR.)	Model	Maximum NB (M3/HR.)	Flowrate		
FLGT-10-BPR-25	FLMT-10-BPR-25	25	5	FLGT-10-BPR-275	FLMT-10-BPR-275	275	650
FLGT-10-BPR-40	FLMT-10-BPR-40	40	10	FLGT-10-BPR-300	FLMT-10-BPR-300	300	800
FLGT-10-BPR-50	FLMT-10-BPR-50	50	20	FLGT-10-BPR-350	FLMT-10-BPR-350	350	1000
FLGT-10-BPR-80	FLMT-10-BPR-80	80	36	FLGT-10-BPR-400	FLMT-10-BPR-400	400	1500
FLGT-10-BPR-100	FLMT-10-BPR-100	100	80	FLGT-10-BPR-450	FLMT-10-BPR-450	450	2000
FLGT-10-BPR-125	FLMT-10-BPR-125	125	125	FLGT-10-BPR-500	FLMT-10-BPR-500	500	2500
FLGT-10-BPR-150	FLMT-10-BPR-150	150	150	FLGT-10-BPR-600	FLMT-10-BPR-600	600	3000
FLGT-10-BPR-200	FLMT-10-BPR-200	200	320	FLGT-10-BPR-700	FLMT-10-BPR-700	700	4000
FLGT-10-BPR-225	FLMT-10-BPR-225	225	450	FLGT-10-BPR-800	FLMT-10-BPR-800	800	5000
FLGT-10-BPR-250	FLMT-10-BPR-250	250	550	Other Sizes on request			

SPECIFICATION

Type of tapping: Flange, D and D/2, corner

Accuracy: ±2% of full flow

Rangeability: 7:1 or 5:1

STANDARD MATERIAL OF CONSTRUCTION

Orifice Flange	: SS 316 L, SS 316, SS 304, CS etc.
Orifice Plate	: SS 316, L, SS 316, SS 304, Hastelloy 'C', Monel, PVC etc.
Carrier Rings	: SS 316 L, SS 316, Mild steel, PP etc.
By Pass Line	: SS 316 L, SS 316, SS 304, Mild steel, PVC etc.
Wetted Parts of the Rotameter	: SS 316 L, SS 316, SS 304, Mild steel, PP etc.

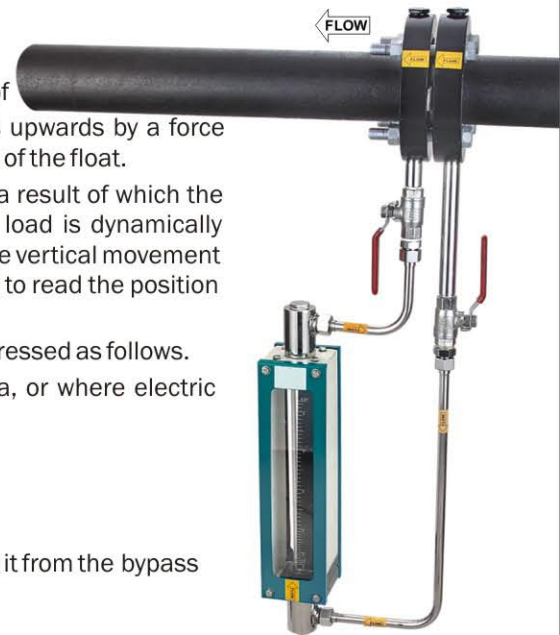
ACCESSORIES

Hi-low flow switch

4-20 mA transmitter

METER ASSEMBLY

Glass Tube Rotameter	: FLGT-10
Metal Tube Rotameter	: FLMT-10



Horizontal Flow (Right to Left)

