

Compact Orifice Flow Meter



General's compact orifice flow meter is the next version of orifice assembly, It produces the most accurate & repeatable measurement when used in single phase flow or steam flow.

The compact flow meter gives the advantage of most simple installation & direct mounting of DP transmitter thereby eliminating the need of tube, fittings & other accessories.

This flow meter uses corner tap design of ISO-5167.



Features & Benefits:

- Fully integrated solution eliminates the need of fittings, tubing, valve, adaptors, manifold & mounting brackets
- Unique wafer body allows for installation in any flange location
- Unique design ensures the proper alignment within pipe, resulting in higher accuracy.

Compact Flow meter specifications:

- Line sizes : 1/2" to 12"
- Orifice plate design: Square Edged Concentric
- Orifice pressure taps: Corner taps
- Beta ratio: 0.4 / 0.65
- Service: Liquid / Gas / Vapour
- Temperature Limit:
 - For direct Mounting: upto 110°C.
 - For remote mounting: upto 454°C.
- Maximum working pressure: Pressure suitable upto 600#

Typical Orifice Bore sizes (mm): The table below shows the typical bore values for compact orifice flow meter.

Line size	With Beta ratio = 0.4	With Beta Ratio = 0.65
1/2" (15 NB)	6.32mm	10.27mm
1" (25 NB)	10.65mm	17.31mm
1.5" (40 NB)	16.36mm	26.58mm
2" (50 NB)	21.00mm	34.13mm
3" (80 NB)	31.16mm	50.64mm
4" (100 NB)	40.90mm	66.46mm
6" (150 NB)	61.62mm	100.13mm
8" (200 NB)	81.08mm	131.76mm
10" (250 NB)	101.80mm	165.43mm
12" (300 NB)	121.92mm	198.12mm

Above Orifice bore calculation is considering sch. STD

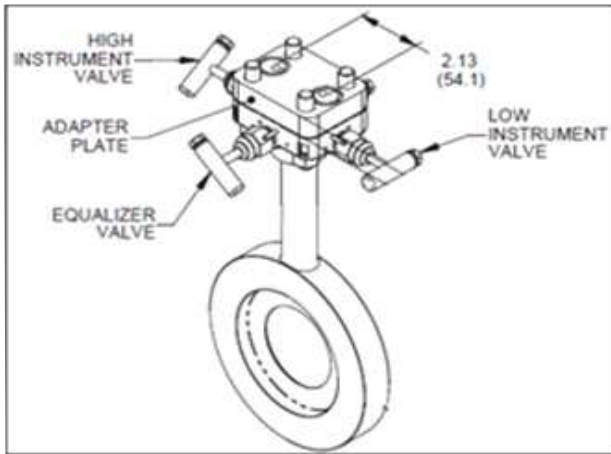
Straight length requirement for Compact Flow meter

Upstream Straight Length	Beta Ratio →	0.45	0.60
	Reducer		5
Single 90° bend or Tee		16	44
Two or more 90° bend in same plane		10	44
Two or more 90° bend in different plane		50	60
Expander		12	28
Ball/gate Valve (fully open)		12	18
Downstream straight length		6	7

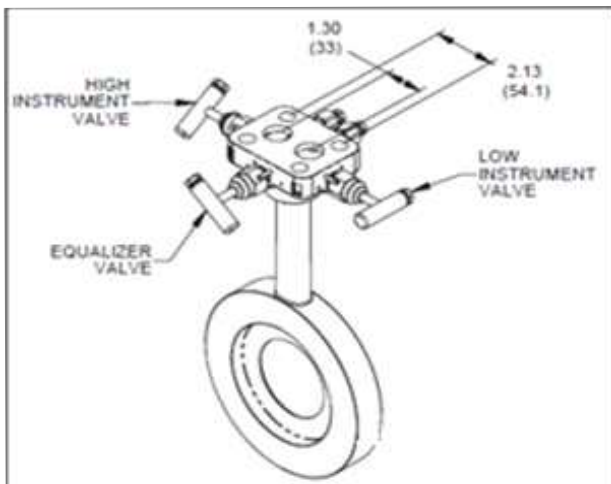
Compact Orifice Flow Meter

General

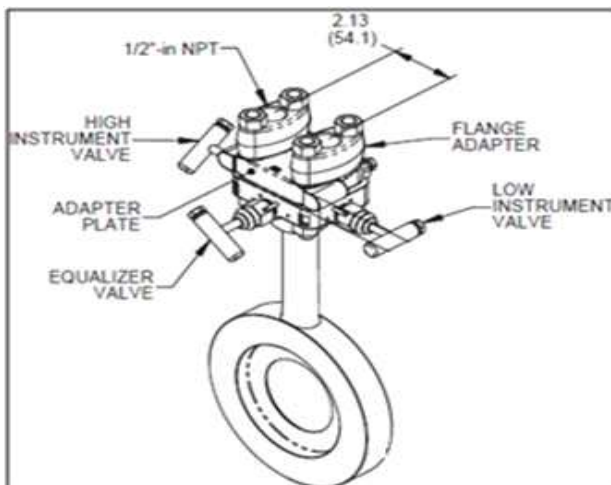
Typical arrangement of compact orifice flow meter:



Arrangement for Traditional 3way Manifold



Arrangement for Direct Mounting Of DPT



Arrangement for Direct Mounting Of DPT

