

## FEATURES

- Suitable for measuring gas and liquid flow
- Heavy duty design
- Easy to maintain and replace
- Suitable for high temperature
- Suitable for high pressure
- Option for in-built valve
- Wide rangeability



## PRODUCT OVERVIEW

The mini metal tube rotameter is one of the rotameter types, specifically designed for high pressure and high temperature application and low flow range.

Unlike the acrylic tube and glass tube rotameters, float is not visible because of the metal tube. Instead, a magnetic coupling is used to transfer float movement to a pointer installed outside the tube in the display unit.

Inlet/outlet direction may be either bottom/top or back/back. Connections are threaded as standard.

Optional connection types are possible based on request.

Optional control valve is possible. Please specify when ordering.

## TECHNICAL SPECIFICATION

Size	:	1/4"
Height	:	110mm
Material	:	316 stainless steel and 304 stainless steel.

## DESIGN STANDARD

Mini metal tube rotameters are designed according to VDI/VDE 3513 Blatt 1. Maximum permissible error is defined according to VDI/VDE 3513 Blatt 2.

Other applicable standards are ISA RP16.5, ISA RP16.6 and VDI/VDE 3513 Blatt 3.

#### FLOW RANGES FOR WATER

Range Code	Conn Size and Type	Range for Water at 20°C
L53	¼" NPT (F)	0.5-5 l/h
L55	¼" NPT (F)	1-10 l/h
L59	¼" NPT (F)	2.5-25 l/h
L61	¼" NPT (F)	4-40 l/h
L63	¼" NPT (F)	6-60 l/h
L65	¼" NPT (F)	10-100 l/h
L00	Please specify	Please specify

#### FLOW RANGES FOR AIR

Range Code	Conn Size and Type	Range for Air at 20°C, 1 atm
A54	¼" NPT (F)	6-60 l/h
A56	¼" NPT (F)	10-100 l/h
A57	¼" NPT (F)	16-160 l/h
A59	¼" NPT (F)	40-400 l/h
A63	¼" NPT (F)	80-800 l/h
A66	¼" NPT (F)	160-1600 l/h
A67	¼" NPT (F)	200-2000 l/h
A68	¼" NPT (F)	250-2500 l/h
A69	¼" NPT (F)	300-3000 l/h
A00	Please specify	Please specify

#### SELECTION GUIDE FOR WATER/AIR

To select the right flowmeter for your application, please specify the following when ordering a rotameter for water or air flow measurement:

1) Fluid name (water or air):
2) Flow range (minimum and maximum):
3) Operating pressure:
4) Operating temperature:
5) Maximum pressure:
6) Maximum temperature:

#### SELECTION GUIDE FOR OTHER FLUIDS

The flow ranges specified in the table on the left are for air and water, only.

If the fluid is other than air and water, specify the below information. Our sales engineers will help you choose the right rotameter.

1) Fluid name:
2) Flow range (minimum and maximum):
3) Operating pressure:
4) Operating temperature:
5) Maximum pressure:
6) Maximum temperature:
7) Fluid density:
8) Fluid viscosity (only for liquids):

#### NOTES

- Each meter is calibrated individually in our flow calibration site. As a standard rule, meters intended for liquid measurement are calibrated by water and those intended for gas measurement are calibrated by air. We also provide correction factors to convert meter reading to operating condition if requested.
- Rangeability of rotameters is generally 10:1. This means that if the desired maximum flow rate is 10 m<sup>3</sup>/h, the minimum measurable flow rate is 1 m<sup>3</sup>/h. The meter cannot measure from zero!
- The scale on the meter is correct ONLY for the specified fluid at pressure and temperature shown on the meter. If the fluid, operating temperature or operating pressure are different from what is written on the meter scale, correction factors need to be applied. In this case, contact us to provide you with the necessary correction coefficients