

## FEATURES

- Easy to install on vertical panel
- Optional valve for flow control
- Suitable for measuring gas and liquid flow
- Corrosion resistant
- Easy reading
- Easy to maintain and replace
- Wide rangeability 10:1



## PRODUCT OVERVIEW

The panel-mounted glass tube rotameter is the simplest and most economical rotameter for general application flow metering with panel mounting capability. Sangan Sanat panel-mounted glass tube rotameters are generally manufactured in small size and low flow rates. The operation of a rotameter is based on the variable area principle. Variable area refers to the area between a tapered acrylic tube and a float inside the tube.

The flow of a fluid raises the float inside a tapered tube, increasing the area through which the fluid can pass. The larger the flow, the higher will be the float position. Float position is directly proportional to the flowrate of the fluid, and it moves up or down in proportion to the fluid flowrate.

Therefore, the scale may be graduated directly with the unit of flow. Optional inlet (or outlet) valve makes it possible to control flow rate manually.

## TECHNICAL SPECIFICATION

Size*	: 1/4"
Tube material	: Glass
Connection material	: Brass
Float material	: Glass or stainless steel (Depends on range and media)
Body block material	: SS304 or brass
Max pressure	: 6 barg
Max Temperature	: 80°C
Accuracy	: ±2.5% of full scale
Connection type*	: Hose/Thread
Connection size	: Refer to the flow range tables

\* Optional connection types and sizes may be possible depending on fluid type and flow range. Please contact us for these cases.

## DESIGN STANDARD

Glass 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
L10	Hose connection	0.6-6 ml/min
L11	Hose connection	1.6-16 ml/min
L32	¼" BSP (F)	0.1-1 l/min
L34	¼" BSP (F)	0.16-1.6 l/min
L51	¼" BSP (F)	0.25-2.5 l/h
L53	¼" BSP (F)	0.5-5 l/h
L55	¼" BSP (F)	1-10 l/h
L61	¼" BSP (F)	4-40 l/h
L63	¼" BSP (F)	6-60 l/h
L65	¼" BSP (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
A13	Hose connection	6-60 ml/min
A20	Hose connection	40-400 ml/min
A31	Hose connection	0.1-1 l/min
A43	¼" BSP (F)	5-45 l/min
A52	¼" BSP (F)	1.6-16 l/h
A54	¼" BSP (F)	6-60 l/h
A56	¼" BSP (F)	10-100 l/h
A58	¼" BSP (F)	25-250 l/h
A59	¼" BSP (F)	40-400 l/h
A61	¼" BSP (F)	60-600 l/h
A64	¼" BSP (F)	100-1000 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 flow ranges table 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 10m<sup>3</sup>/h, the minimum measurable flow rate is 1m<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.