

R-101-SR

Glass Tube Variable Area Flowmeter for
Sanitary Application

■ OUTLINE

The **R-101-SR** is a variable area flowmeter designed and manufactured for sanitary services.

The IDF sanitary clamps or unions make its installation on the piping or removing easy. All the liquid wet parts are buff polished.

■ FEATURES

- ❑ Direct sight type and low price.
- ❑ Straight through self-draining design.
- ❑ Supports a large flow rate. (Max.40m³/h)
- ❑ Alarm contact can also be provided.
- ❑ For Foods, Pharmaceuticals and Other Sanitary Process.

■ STANDARD SPECIFICATION

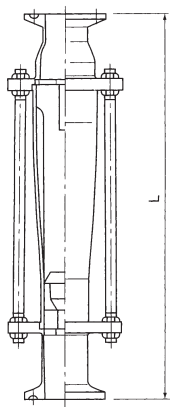
FUNCTION	: LOCAL INDICATION
AVAILABLE METER SIZE	: 10, 15, 20, 25, 40 and 50
POSSIBLE IDF CLAMP(UNION) SIZE	: 1S, 1.5S, 2S, 2.5S, and 3S
PROCESS CONNECTION	: IDF CLAMP or UNION SCREW
FLOW DIRECTION	: BOTTON to TOP
SCALE RANGE (WATER)	: MIN. 5 to 50 L/h MAX. 4 to 40 m ³ /h
FLUID PRESS	: MAX. 0.68MPa (Meter size 25 or smaller) 0.58MPa (Meter size from 40 to 65)
FLUID TEMP.	: MAX. 120°C
It is general data, and the maximum temperature may change by terms of use and environment.	
ALLOWABLE THERMAL SHOCK	: 80°C
INDICATION ACCURACY	: ±1.5% F.S.
MATERIAL	:
TAPERED TUBE	: Heat-resistant glass
BODY TUBES	: SUS304 (SUS316, SUS316L) with #320 to #400 Buff polishing (inner and outer) *
FLOAT	: SUS304 (SUS316, SUS316L) with #320 to #400 Buff polishing *
SEAL	: NBR (EPDM, CR)
COLUMN	: SUS304
COVER	: Transparent PVC (option)
* Electrolytic polishing is also available as an option.	



DIMENSION AND SCALE RANGE

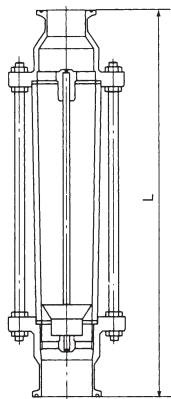
□ R-101-SR ribbed tapered tube version (Scale length = Approx. 200mm)

□ R-101-SRE wide scale range with float rod version
(Scale length = Approx. 100mm)



METER SIZE	CONNECTION SIZE	L (mm) * 1	POSSIBLE SCALE RANGE (L/h) * 2
10	1S	450	50 to 150
15	1S	450	450
20	1S	450	950
25	1S,1.5S	550	1750
40 (1)	1S,1.5S,2S	550	2500
40 (2)	1.5S,2S	550	4250
50	2S,2.5S	550	7600

* 1:L dimension is common both for Clamp and Screw connection.
* 2:POSSIBLE SCALE RANGE is indicated by flow rate of water.
(Density 1.0g/cm³ and 1.0mPa·s viscosity)
In case the measuring object different from above,
a conversion calculation is required. Consult factory for details.



METER SIZE	CONNECTION SIZE	L (mm) * 1	POSSIBLE SCALE RANGE (m ³ /h) * 2	SCALE RANGE (Density 1.0g/cm ³ and 1.0mPa·s viscosity) (m ³ /h)
15	1S,1.5S	350	0.25 to 1.3	0.25 to 1.6
20	1S,1.5S	350	2.8	4
25	1S,1.5S	350	4.5	6.5
40	1.5S,2S	400	10	16
50	2S,2.5S	400	15.5	28
65	2.5S,3S	420	23	40

* 1:L dimension is common both for Clamp and Screw connection.
* 2:POSSIBLE SCALE RANGE is indicated by flow rate of water.
(Density 1.0g/cm³ and 1.0mPa·s viscosity)
In case the measuring object different from above,
a conversion calculation is required. Consult factory for details.

Alarm contact version is available. Consult factory for details.

Cautions on the use of glass tube variable area flowmeters

CAUTION

Avoid the use of glass tube variable area flowmeters for the following services.

- Liquid services subject to impulse pressure in the process.
- Secondary accidents might occur due to the breakage of glass in such services :
 - Toxic fluids such as poisons, stimulant and narcotics
 - Flammable fluids
 - Explosive fluids
- Gas handling process where breakage of glass might result in gas leakage or scattering of glass fragments.
- The installation places of the flowmeters where breakage of glass might be caused by the accidents from the surrounding piping or equipment.
- On-off operation where breakage of glass might be caused by the collision of the float inside meter due to the abrupt change of flow.
- Services where the heat shock by abrupt change of temperature is expected.

* Specification is subject to change without notice.

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