

# VARIABLE AREA TYPE FLOW METER (ROTAMETER)

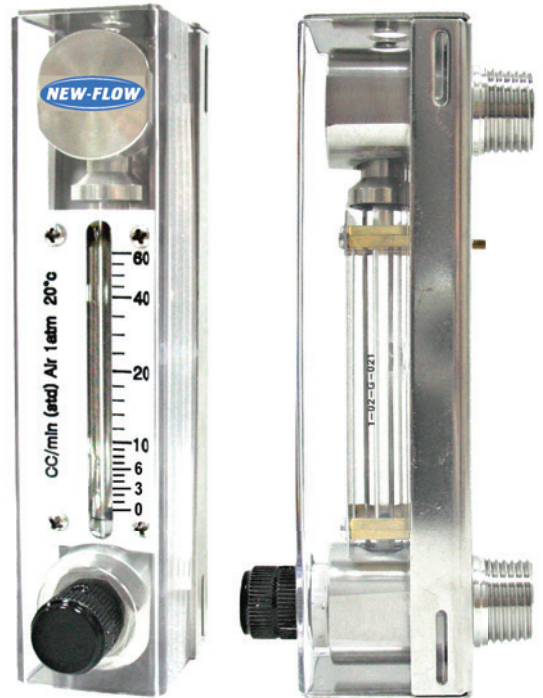
## SM TYPE

The variable area flow meter contains a float & taper tube. The fluid flow through the taper tube and forces up to the float. The flow rate is measured as a function of the area of the opening. This area is displayed as the float that is free to move to produce the varying area.

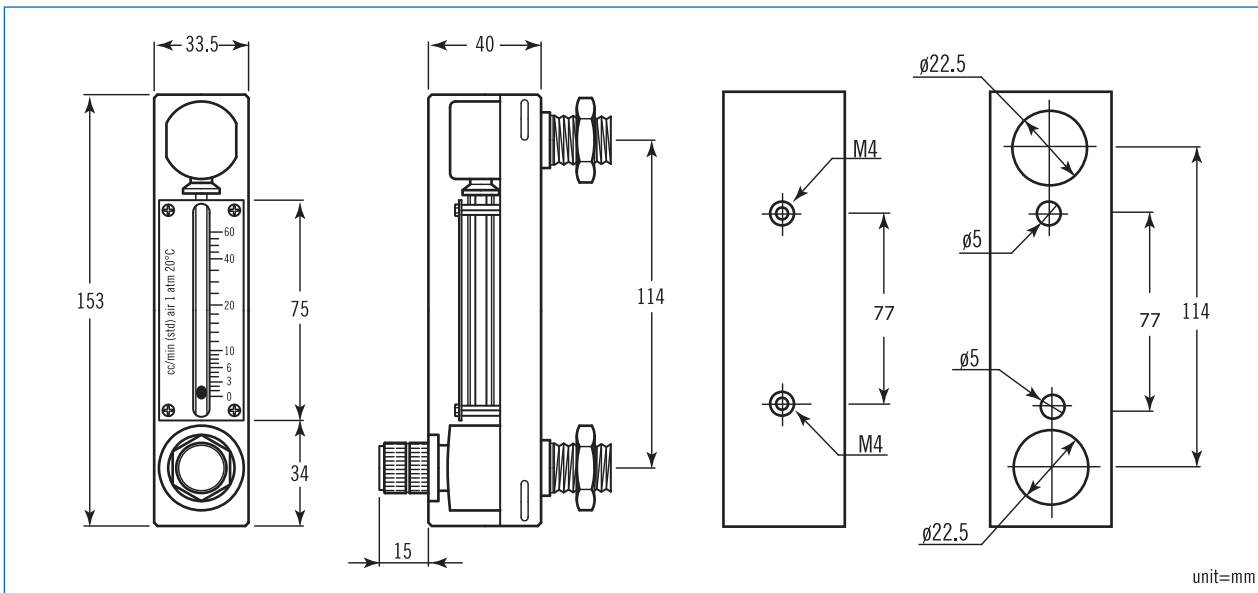
### Technical Data

- Service:** Gases (Air) & Liquid (Water)
- Wetted parts material:**
- Body: SS316
- O-ring: Viton, others on request
- Metering tube: Borosilicate glass
- Needle valve: SS316
- Float: Glass, Sapphire, Stainless steel, Carbonyl, Tantalum
- Mounting:** Horizontal position (Bottom to Top)
- Connection size:** 1/4" NPT female, needle valve available
- Max. working temperature:** 95°C
- Max. working pressure:** Glass tube- 200psig (14kg/cm<sup>2</sup>)
- Accuracy:** ±3% F.S; repeat ability 1%
- Weight:** 0.5~0.6 kg

Approvals:



### Dimensions



### Range Table & Ordering Information

Tube No. : 1-02-G-021

Fluid type: Air (STP)

Item	Flow Range	Float Material	Flow Unit	Ordering Range Code
1	6~60	Glass	Ncc/min, cc per Minute	SM-6~60-CCM-Air-G-021
2	10~100	Sapphire	Ncc/min, cc per Minute	SM-10~100-CCM-Air-SP-021
3	20~200	Stainless Steel	Ncc/min, cc per Minute	SM-20~200-CCM-Air-SS-021
4	34~340	Carbonyl	Ncc/min, cc per Minute	SM-34~340-CCM-Air-CB-021
5	35~350	Tantalum	Ncc/min, cc per Minute	SM-35~350-CCM-Air-Tan-021

Fluid type: Water (70°F)

Item	Flow Range	Float Material	Flow Unit	Ordering Range Code
1	0.072~0.72	Glass	cc/min, cc per Minute	SM-0.072~0.72-CCM-Water-G-021
2	0.13~1.3	Sapphire	cc/min, cc per Minute	SM-0.13~1.3-CCM-Water-SP-021
3	0.33~3.3	Stainless Steel	cc/min, cc per Minute	SM-0.33~3.3-CCM-Water-SS-021
4	0.7~7	Carbonyl	cc/min, cc per Minute	SM-0.7~7-CCM-Water-CB-021
5	0.78~7.8	Tantalum	cc/min, cc per Minute	SM-0.78~7.8-CCM-Water-Tan-021

**Tube No. : 1-02-G-041**

Fluid type: Air (STP)

Item	Flow Range	Float Material	Flow Unit	Ordering Range Code
1	7~70	Glass	Ncc/min, cc per Minute	SM-7~70-CCM-Air-G-041
2	10~100	Sapphire	Ncc/min, cc per Minute	SM-10~100-CCM-Air-SP-041
3	20~200	Stainless Steel	Ncc/min, cc per Minute	SM-20~200-CCM-Air-SS-041
4	40~400	Carboloy	Ncc/min, cc per Minute	SM-40~400-CCM-Air-CB-041
5	40~400	Tantalum	Ncc/min, cc per Minute	SM-40~400-CCM-Air-Tan-041

Fluid type: Water (70°F)

Item	Flow Range	Float Material	Flow Unit	Ordering Range Code
1	0.115~1.15	Glass	cc/min, cc per Minute	SM-0.115~1.15-CCM-Water-G-041
2	0.21~2.1	Sapphire	cc/min, cc per Minute	SM-0.21~2.1-CCM-Water-SP-041
3	0.42~4.2	Stainless Steel	cc/min, cc per Minute	SM-0.42~4.2-CCM-Water-SS-041
4	0.9~9	Carboloy	cc/min, cc per Minute	SM-0.9~9-CCM-Water-CB-041
5	1~10	Tantalum	cc/min, cc per Minute	SM-1~10-CCM-Water-Tan-041

**Tube No. : 1-02-G-061**

Fluid type: Air (STP)

Item	Flow Range	Float Material	Flow Unit	Ordering Range Code
1	50~500	Glass	Ncc/min, cc per Minute	SM-50~500-CCM-Air-G-061
2	70~700	Sapphire	Ncc/min, cc per Minute	SM-70~700-CCM-Air-SP-061
3	100~1000	Stainless Steel	Ncc/min, cc per Minute	SM-100~1000-CCM-Air-SS-061
4	160~1600	Carboloy	Ncc/min, cc per Minute	SM-160~1600-CCM-Air-CB-061
5	170~1700	Tantalum	Ncc/min, cc per Minute	SM-170~1700-CCM-Air-Tan-061

Fluid type: Water (70°F)

Item	Flow Range	Float Material	Flow Unit	Ordering Range Code
1	0.9~9	Glass	cc/min, cc per Minute	SM-0.9~9-CCM-Water-G-061
2	1.55~15.5	Sapphire	cc/min, cc per Minute	SM-1.55~15.5-CCM-Water-SP-061
3	2.9~29	Stainless Steel	cc/min, cc per Minute	SM-2.9~29-CCM-Water-SS-061
4	4.6~46	Carboloy	cc/min, cc per Minute	SM-4.6~46-CCM-Water-CB-061
5	5~50	Tantalum	cc/min, cc per Minute	SM-5~50-CCM-Water-Tan-061

**Tube No. : 1-02-G-081**

Fluid type: Air (STP)

Item	Flow Range	Float Material	Flow Unit	Ordering Range Code
1	200~2000	Glass	Ncc/min, cc per Minute	SM-200~2000-CCM-Air-G-081
2	250~2500	Sapphire	Ncc/min, cc per Minute	SM-250~2500-CCM-Air-SP-081
3	350~3500	Stainless Steel	Ncc/min, cc per Minute	SM-350~3500-CCM-Air-SS-081
4	560~5600	Carboloy	Ncc/min, cc per Minute	SM-560~5600-CCM-Air-CB-081
5	600~6000	Tantalum	Ncc/min, cc per Minute	SM-600~6000-CCM-Air-Tan-081

Fluid type: Water (70°F)

Item	Flow Range	Float Material	Flow Unit	Ordering Range Code
1	4.4~44	Glass	cc/min, cc per Minute	SM-4.4~44-CCM-Water-G-081
2	6.8~68	Sapphire	cc/min, cc per Minute	SM-6.8~68-CCM-Water-SP-081
3	11~110	Stainless Steel	cc/min, cc per Minute	SM-11~110-CCM-Water-SS-081
4	17~170	Carboloy	cc/min, cc per Minute	SM-17~170-CCM-Water-CB-081
5	18~180	Tantalum	cc/min, cc per Minute	SM-18~180-CCM-Water-Tan-081