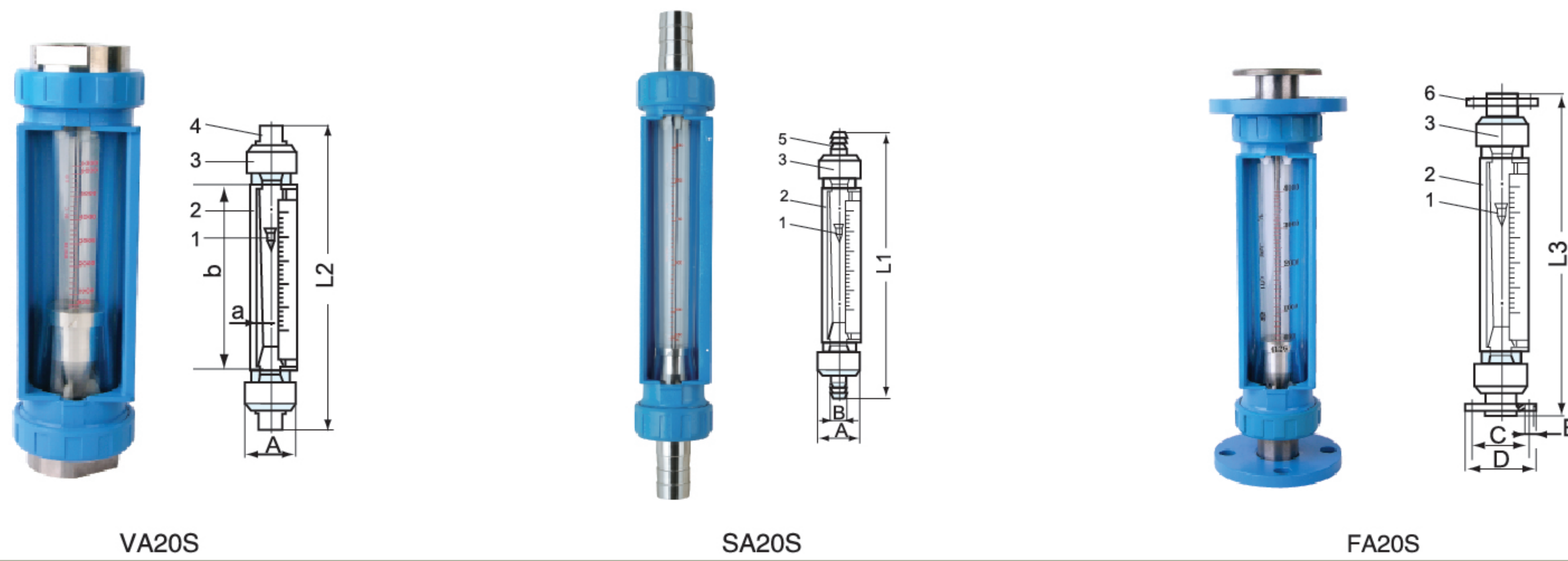


# The Series VA/SA/FA20S Glass Rotameter

High measurement accuracy and good interchangeability



The Series VA/SA/FA20S Glass Rotameter is a variable area flowmeter. Its measuring tube is made of transparent glass. When fluid flows through the tube, the float suspends under the action of hydrodynamic force and its own gravity. The greater the fluid flow rate, the higher the float rises. The flow value can be directly read from the float's position. With excellent chemical compatibility, it becomes a preferred tool for laboratory, food & pharmaceutical, and small-to-medium flow measurement applications. Its lightweight design and easy-to-observe features make it particularly advantageous in scenarios requiring visual operation.

| SPECIFICATIONS            |   |
|---------------------------|---|
| <b>Service</b>            | Compatible liquids or Gases                                       |
| <b>Material</b>           | See material list   |
| <b>Accuracy</b>           | Interchangeability ±2.5%, Single standard ±1.5%                   |
| <b>Temperature Rating</b> | -20°C to 120°C  |
| <b>Connection</b>         | Optional thread connection, hose connection, or flange connection |

## FEATURES

- High measurement accuracy and good interchangeability
- The float rotates only with the fluid flow, featuring no mechanical wear, low maintenance costs, and a long service life. Lightweight and cost-effective
- Provides an economical solution for flow measurement
- Vertical installation without straight pipe sections
- Allows direct observation of fluid status and float position for easy reading

## APPLICATIONS

- Pharmaceutical Industry
- Semiconductor Industry
- Food and Beverage Industry
- Urban Water Supply and Drainage
- Environmental Protection
- New Energy Industry
- Scientific research institution

## Material

| No. | Material            |
|-----|---------------------|
| 1   | 304SS, 316L or PTFE |
| 2   | Aluminum            |
| 3   | Aluminum            |
| 4   | 304SS or PTFE       |
| 5   | 304SS or Aluminum   |
| 6   | 304SS or 45#        |

| MODEL CHART                |                        |            |            |                    |           |           |   |
|----------------------------|------------------------|------------|------------|--------------------|-----------|-----------|---|
| <b>Example</b>             | <b>SA</b>              | <b>20S</b> | <b>-15</b> | <b>-4L/h-40L/h</b> | <b>-L</b> | <b>-1</b> | <b>-S</b>   |
| <b>Series</b>              | The Series VA/SA/FA20S |            |            |                    |           |           | Glass Rotameter   |
| <b>Connection</b>          | VA                     |            |            |                    |           |           | Thread connection type  |
|                            | SA                     |            |            |                    |           |           | Hose connection type  |
|                            | FA                     |            |            |                    |           |           | Flange connection type  |
| <b>Series Code</b>         |                        | 20S        |            |                    |           |           | Series code   |
| <b>Pipe Size</b>           |                        |            | 15         |                    |           |           | Please refer to the technical specification, outline dimension, and material list |
|                            |                        |            | 25         |                    |           |           | Please refer to the technical specification, outline dimension, and material list |
|                            |                        |            | 40         |                    |           |           | Please refer to the technical specification, outline dimension, and material list |
|                            |                        |            | 50         |                    |           |           | Please refer to the technical specification, outline dimension, and material list |
| <b>Flow Range</b>          |                        |            |            | XXXXXXXX           |           |           | Select the range in the technical specification table, e.g., "4L/h-40L/h"         |
| <b>Medium</b>              |                        |            |            |                    | A         |           | Gas   |
|                            |                        |            |            |                    | L         |           | Liquid  |
| <b>Connection Material</b> |                        |            |            |                    |           | 1         | 304 stainless steel   |
|                            |                        |            |            |                    |           | 2         | VA20S: PVC; SA20S: Aluminum; FA20S: PTFE-lined                                    |
|                            |                        |            |            |                    |           | 3         | PTFE (custom-made, please consult the factory)                                    |
| <b>Float Material</b>      |                        |            |            |                    |           | P         | PTFE  |
|                            |                        |            |            |                    |           | S         | 304 Stainless Steel   |

## Specifications

| Pipe Size DN(mm) | Model                            | Measurement Range |           | Working Pressure (MPa) | Temperature     |
|------------------|----------------------------------|-------------------|-----------|------------------------|-----------------|
|                  |                                  | Liquid(L/h)       | Gas(m³/h) |                        |                 |
| 15               | VA10S-15<br>SA10S-15<br>FA10S-15 | 4~40              | 0.12~1.2  | ≤ 1.0                  | -20°C<br>~120°C |
|                  |                                  | 6~60              | 0.3~3     |                        |                 |
|                  |                                  | 10~100            | 0.5~5     |                        |                 |
|                  |                                  | 16~160            | 0.8~8     |                        |                 |
| 25               | VA10S-25<br>SA10S-25<br>FA10S-25 | 25~250            | 1.2~12    | ≤ 1.0                  | -20°C<br>~120°C |
|                  |                                  | 40~400            | 2~20      |                        |                 |
|                  |                                  | 63~630            | 3~30      |                        |                 |
|                  |                                  | 100~1000          | 5~50      |                        |                 |
| *40              | VA10S-40<br>SA10S-40<br>FA10S-40 | 160~1600          | 8~80      | ≤ 0.9                  | -20°C<br>~120°C |
|                  |                                  | 250~2500          | 12~120    |                        |                 |
|                  |                                  | 400~4000          | 5~50      |                        |                 |
|                  |                                  | 1000~10000        | 8~80      |                        |                 |
| *50              | VA10S-50<br>SA10S-50<br>FA10S-50 | 400~4000          | 12~120    | ≤ 0.7                  | -20°C<br>~120°C |
|                  |                                  | 630~6300          | 20~200    |                        |                 |
|                  |                                  | 1000~10000        | 30~300    |                        |                 |
|                  |                                  | 5000~16000        |           |                        |                 |

\*Special-made products must be confirmed with the factory before ordering.

## VA20S Overall Dimensions

| Pipe Size DN(mm) | Window Size(a*b) | VA20S Pipe Thread Connection |     |                               |            |
|------------------|------------------|------------------------------|-----|-------------------------------|------------|
|                  |                  | L2                           | A   | Thread                        | Weight(kg) |
| 15               | 33x235           | 375                          | 58  | 1/2" BSP, *3/8" BSP, 1/2"NPT* | 1.1        |
| 25               | 50x240           |                              | 74  | 1" BSR, *3/4" BSP, 1"NPT*     | 1.8        |
| 40               | 65x235           |                              | 92  | 1 1/2" BSP, 1 1/2"NPT*        | 3.1        |
| 50               | 85x230           |                              | 112 | 2" BSP, 2"NPT*                | 5.1        |

## SA20S Overall Dimensions

| Pipe Size DN(mm) | Window Size(a*b) | SA20S Hose Connection |     |    |            |
|------------------|------------------|-----------------------|-----|----|------------|
|                  |                  | L2                    | A   | B  | Weight(kg) |
| 15               | 33x235           | 400                   | 58  | 17 | 1.1        |
| 25               | 50x240           |                       | 74  | 30 | 1.8        |
| 40               | 65x235           |                       | 92  | 44 | 3.1        |
| 50               | 85x230           |                       | 112 | 54 | 5.2        |

## FA20S Overall Dimensions

| Pipe Size DN(mm) | Window Size(a*b) | FA20S Flange Connection |      |      |       |            |
|------------------|------------------|-------------------------|------|------|-------|------------|
|                  |                  | L3                      | D    | C    | E     | Weight(kg) |
| 15               | 33x235           | 425                     | ø95  | ø65  | 4-ø15 | 2          |
| 25               | 50x240           |                         | ø115 | ø85  | 4-ø15 | 3.4        |
| 40               | 65x235           |                         | ø145 | ø110 | 4-ø18 | 6.3        |
| 50               | 85x230           |                         | ø160 | ø125 | 4-ø18 | 9.8        |
|                  |                  |                         |      |      |       |            |