



## SINGLE TUBE FLOW METERS

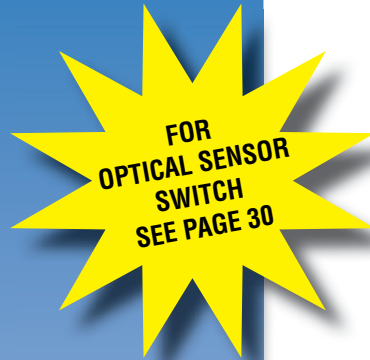
### S STYLE

Model S single-tube flow meters pictured on this page are similar to P meters in design, employing the same interchangeable flow tubes, valves and accessories. Likewise they may be panel or bench mounted.



The important advantage of the S meter is convenience in applications, where frequent changing of tubes in meter cases is desired.

An example is when several flow tubes are used in conjunction with a single meter case, or when because of the nature of the fluid, periodic cleaning necessitates disassembly.



Aalborg's® exclusive TUBELOK™ design facilitates simple installation and replacement of tubes in mounting cases.

As a result of the “non-rotating” adapter feature, glass flow tubes are prevented from turning during the tightening phase of the assembly procedure.

### design features

- ✓ TUBELOK™ design simplifies installation and replacement of tubes.
- ✓ Rib-guided or fluted metering tubes facilitate stable, accurate readings.
- ✓ Magnifier lens in front shield to enhance reading resolution.
- ✓ OPTIGRAD™ scales minimize parallax and eye fatigue.
- ✓ Simple means of panel mounting.
- ✓ Interchangeable flow tubes and floats.



## BUILT-IN VALVES

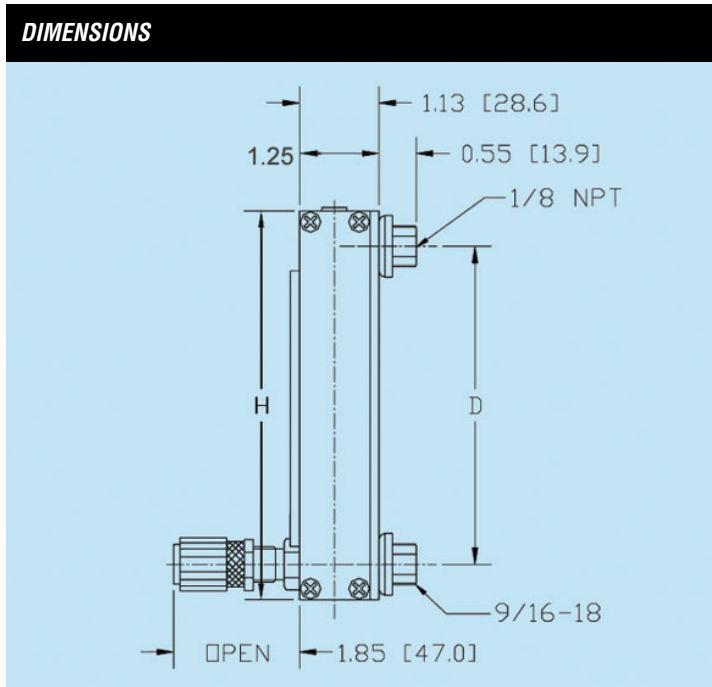
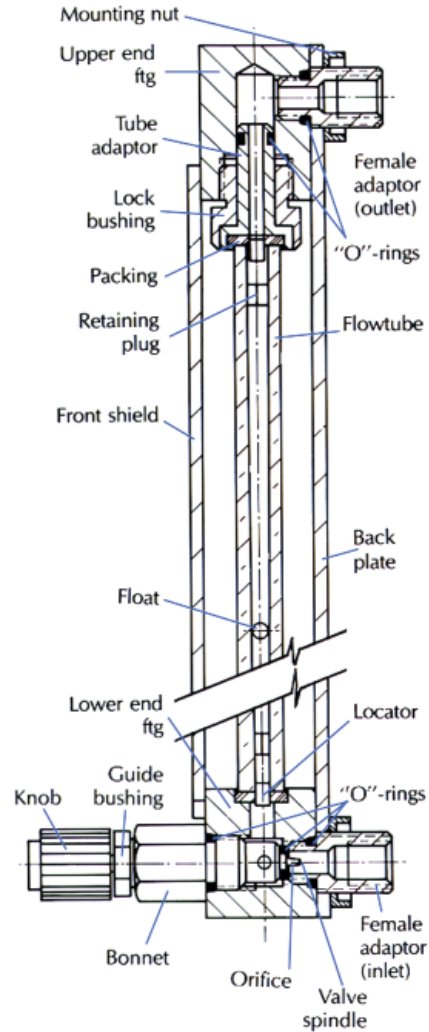
Meters are available with built-in needle valves (CV™), high precision metering valves (MFV™) with “non-rising stems”, or with no valves. The higher cost of MFV™ valves is justified whenever high sensitivity control and resolution are desirable particularly in conjunction with metering tubes of very low flow rates. Generally, for gas metering it is recommended that valves are positioned at inlets (bottom) for liquids valves may be positioned either at inlets or outlets (top). For vacuum services, valves must be mounted at outlets. If unspecified at the time of ordering, meters will be shipped with valves mounted at the inlets.

| SPECIFICATIONS                       |  |
|--------------------------------------|--|
| <b>STANDARD ACCURACY</b>             | ±2% FS mm scales except 042 and 032 flow tubes. ±5% FS direct reading scales and 042 and 032 flow tubes. |
| <b>CALIBRATED ACCURACY</b>           | ±1% FS optional.   |
| <b>REPEATABILITY</b>                 | ±0.25%.  |
| <b>USEFUL FLOW RANGE</b>             | 10:1 minimum with one float.<br>Better than 20:1 with combination of two floats installed in meters.     |
| <b>MAXIMUM OPERATING TEMPERATURE</b> | 200 psig/13.8 bars.  |
| <b>MAXIMUM OPERATING TEMPERATURE</b> | 250 °F/ 121 °C.  |

| **MATERIALS OF CONSTRUCTION                               |  |
|---|--|
| <b>FLOW TUBES</b>   | Heavy walled borosilicate glass.   |
| <b>FLOATS</b>   | Glass, Sapphire, 316 Stainless Steel, Carboloy® and Tantalum.  |
| <b>CHOICE OF MOUNTING FITTINGS IN CONTACT WITH FLUIDS</b> | a) Aluminum, black anodized.<br>b) Brass, chrome plated.<br>c) 316 stainless steel.  |
| <b>SIDE PANELS</b>  | Aluminum, black anodized.  |
| <b>FRONT SHIELD</b>                                       | Lexan® with longitudinal magnifier lens for enhanced reading resolution.   |
| <b>BACK PLATE</b>   | 1/8" thick white acrylics.   |
| <b>O-RINGS AND PACKING</b>                                | Buna-N® o-rings in aluminum model.<br>Viton® o-rings in stainless steel meters.<br><b>OPTIONAL</b> Viton®, PTFE/Kalrez® and EPR. |
| <b>CONNECTIONS</b>  | 1/8" NPT female inlet and outlet connections.  |
| <b>OPTIONAL</b>   | 1/4" FNPT, hose and compression fittings are available.  |

\*\*The selection of materials of construction, is the responsibility of the customer. The company accepts no liability.

| DIMENSIONS FOR S STYLE METERS |            |                      |
|-------------------------------|------------|----------------------|
| SCALE LENGTH<br>(A)           | ALL METERS |                      |
|                               | HEIGHT (H) | CENTER TO CENTER (D) |
| 65mm                          | 6.156      | 5.156                |
| 150mm                         | 10.46      | 9.469                |



BULLETIN EM2020025 S

# S

## ORDERING INFORMATION MODEL S METERS

| CODE |                |
|------|----------------|
| S    | S STYLE METERS |

| CODE | NUMBER OF CHANNELS        |
|------|---------------------------|
| 1    | SINGLE CHANNEL (ONE TUBE) |

| CODE | SIZE   |
|------|--------|
| 6    | 65 mm  |
| 1    | 150 mm |

| CODE | MATERIAL        |
|------|-----------------|
| A    | ALUMINUM        |
| B    | BRASS           |
| S    | STAINLESS STEEL |

| CODE | VALVE POSITION                 |
|------|--------------------------------|
| 1    | MFV (HIGH PRECISION) INLET     |
| 3    | NO VALVE                       |
| 4    | CV (STANDARD CARTRIDGE) INLET  |
| 5    | MFV (HIGH PRECISION) OUTLET    |
| 6    | CV (STANDARD CARTRIDGE) OUTLET |

| CODE | SEALS                           |
|------|---------------------------------|
| V    | VITON® STD ON STAINLESS METERS  |
| B    | BUNA® STD ON BRASS AND ALUMINUM |
| E    | EPR                             |
| T    | PTFE/KALREZ®                    |

| CODE | FITTINGS         |
|------|------------------|
| A    | 1/8" FNPT        |
| B    | 1/4" FNPT        |
| C    | 1/8" HOSE NIPPLE |
| D    | 1/4" HOSE NIPPLE |
| E    | 1/8" COMPRESSION |
| F    | 1/4" COMPRESSION |
| G    | VCR              |

| CODE | MANIFOLD |
|------|----------|
| 0    | NONE     |

S 1 6 S 1 — V A 0 — \*TUBE

### EXAMPLE: S16S1-VA0

S-Style meter, Single Channel, 65mm, Stainless, High precision valve at inlet, Viton Seals, 1/8" FNPT fittings, No Manifold.

#### Optional Accessories

**TP1**-Tripod for single channel meter.

#### \*Tube selection:

**Millimeter tubes:** Tables 6 thru 9  
**Direct Reading tubes:** Tables 11 thru 22.