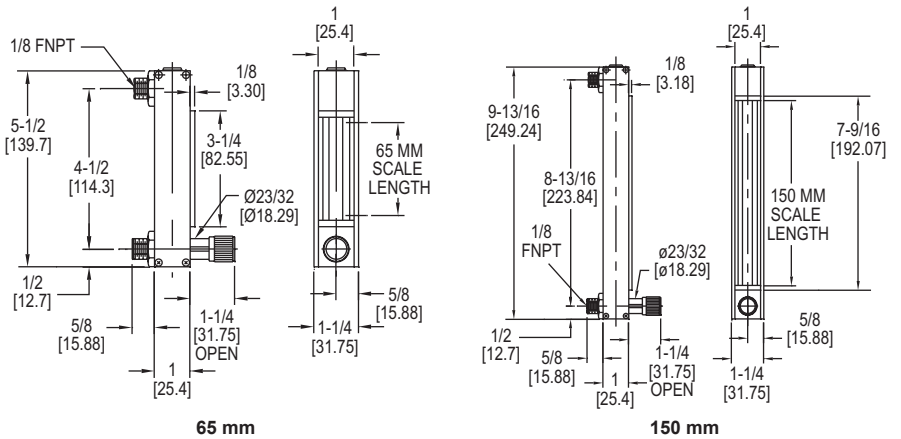


# DIRECT READING GLASS FLOWMETERS

## 65 mm and 150 mm, Interchangeable Flowtubes, Direct Reading Scales



Panel Mounting: Drill two 5/8" dia. holes at 4.5" apart for 65mm models and 8.812" apart for 150 mm models (center-to-center).

The **SERIES DR** Direct Read Variable Area Glass Flowmeters are ideal for the direct flow measurement of air, water, and other commonly used gases. These flowmeters are designed with direct read scales with no need for correlation charts. They feature borosilicate glass tubes in 150 mm or 65 mm scales with aluminum and SS metering valve options.

**FEATURES/BENEFITS**

- Permanently fused ceramic scale with vertical locator line, reflective lens background and 1.5 X magnification lens reduces parallax and eye fatigue saving time
- Long operating life with thick polycarbonate front shield that protects tube from breakage and serves as a magnifying lens to enhance reading resolution
- Optional needle valve for flow rate control eliminating the need for a separate valve reducing cost
- Increased protection with included safety blow-out back panel for added safety

**APPLICATIONS**

- Gas or liquid metering
- Paper manufacturing
- Chemical processing
- Semiconductor systems
- Water and air pollution analysis systems
- Laboratory systems

**MODEL CHART - 65 MM SCALE**

Model Without Valve		Model With Valve		Max. Flow Rate
Aluminum	SS	Aluminum	SS	Air SCFH (SCCM)
DR10010*	DR12010*	DR10410*	DR12410*	0.24 (130+)
DR10022	DR12022	DR10422	DR12422	0.65 (300+)
DR10030*	DR12030*	DR10430*	DR12430*	1.1 (500+)
DR10042	DR12042	DR10442	DR12442	2.2 (1000+)

Note: Add suffix "M" for metric scale. \*Denotes glass float.  
†Metric models use ccm as unit of measure for water & LPM for air.

**MODEL CHART - 65 MM SCALE**

Model Without Valve		Model With Valve		Max. Flow Rate
Aluminum	SS	Aluminum	SS	Air SCFH (L/min)
DR10062	DR12062	DR10462	DR12462	5.6 (2.1)
DR10070*	DR12070*	DR10470*	DR12470*	11 (5)
DR10082	DR12082	DR10482	DR12482	20 (9.5)
DR10090*	DR12090*	DR10490*	DR12490*	55 (24)
DR100102	DR120102	DR104102	DR124102	100 (50)

Note: Add suffix "M" for metric scale. \*Denotes glass float.

**MODEL CHART - 65 MM SCALE**

Model Without Valve		Model With Valve		Max. Flow Rate
Aluminum	SS	Aluminum	SS	Water GPH (SCCM)
DR100120*	DR120120*	DR104120*	DR124120*	0.02 (1.5)
DR100132	DR120132	DR104132	DR124132	0.1 (6.5)
DR100140*	DR120140*	DR104140*	DR124140*	0.13 (8)
DR100152	DR120152	DR104152	DR124152	0.36 (24)
DR100172	DR120172	DR104172	DR124172	0.9 (55)
DR100180*	DR120180*	DR104180*	DR124180*	2.2 (140)
DR100192	DR120192	DR104192	DR124192	4.4 (280)
DR100200*	DR120200*	DR104200*	DR124200*	10 (600)
DR100212	DR120212	DR104212	DR124212	24 (1500)

Note: Add suffix "M" for metric scale. \*Denotes glass float.

**SPECIFICATIONS**

**Service:** Compatible gases or liquids.  
**Wetting Materials:** Flowtube: Borosilicate glass; Float: 316 SS (black glass as indicated); Float stops: PTFE; End fittings: Anodized aluminum or 316 SS; O-rings: Buna-N on aluminum models and fluoroelastomer on SS models.  
**Temperature Limit:** 250°F (121°C).  
**Pressure Limit:** 250 psig (17 bar).  
**Accuracy:** ±5% FS @ 70°F (21.1°C) and 14.7 psia (1 atm absolute).  
**Repeatability:** ±0.25% of scale reading.  
**Scales:** Direct reading 65 mm or 150 mm scales for air or water.  
**Turn-Down Ratio:** 10:1.  
**Connection:** 1/8" female NPT.  
**Mounting:** Vertical.  
**Valve:** 6-turn needle (standard on models with valve).

**MODEL CHART - 150 MM SCALE**

Model Without Valve		Model With Valve		Max. Flow Rate
Aluminum	SS	Aluminum	SS	Air SCFH (SCCM)
DR20032	DR22032	DR20432	DR22432	0.33 (160)
DR20082	DR22082	DR20482	DR22482	0.54 (270)
DR200132	DR220132	DR204132	DR224132	2 (840)

Note: Add suffix "M" for metric scale.

**MODEL CHART - 150 MM SCALE**

Model Without Valve		Model With Valve		Max. Flow Rate
Aluminum	SS	Aluminum	SS	Air SCFH (L/min)
DR200182	DR220182	DR204182	DR224182	3.8 (1.8)
DR200232	DR220232	DR204232	DR224232	10 (4.8)
DR200282	DR220282	DR204282	DR224282	16 (7.5)
DR200332	DR220332	DR204332	DR224332	35 (16)
DR200382	DR220382	DR204382	DR224382	90 (44)

Note: Add suffix "M" for metric scale.

**MODEL CHART - 150 MM SCALE**

Model Without Valve		Model With Valve		Max. Flow Rate
Aluminum	SS	Aluminum	SS	Water GPH (SCCM)
DR200432	DR220432	DR204432	DR224432	0.05 (3.2)
DR200482	DR220482	DR204482	DR224482	0.075 (4.6)
DR200532	DR220532	DR204532	DR224532	0.34 (21)
DR200582	DR220582	DR204582	DR224582	0.75 (46)
DR200632	DR220632	DR204632	DR224632	2.2 (140)
DR200682**	DR220682	DR204682**	DR224682	3.6 (230)
DR200732	DR220732	DR204732	DR224732	7.5 (480)
DR200782	DR220782	DR204782	DR224782	21 (1300)

Note: Add suffix "M" for metric scale. \*\*Not available in metric scale.

**OPTIONS**

Use order code:	Description
NISTCAL-FL1	NIST traceable calibration certificate

Flowmeters, Variable Area & In-Line