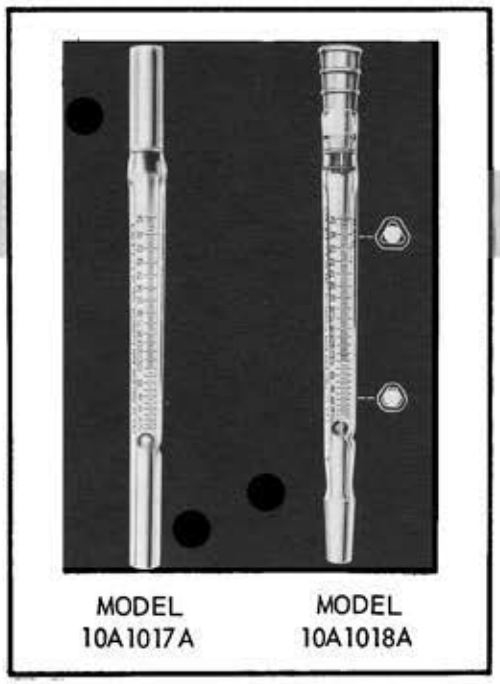
ALL GLASS FLOWRATOR METER

MODELS 10A1017A & 10A1018A



MODEL 10A1017A MODEL 10A1018A

The Models 10A1017A and 10A1018A all glass Flowrator* meters are small size, low cost laboratory type of plain indicating flowmeters. Refer to Specification 10A1017L/18L for complete laboratory flow kits. Refer to Specification 10A1027 for larger sizes.

MATERIALS OF CONSTRUCTION

Tube: Borosilicate glass (Tri-Flat only)

Floats: Glass, stainless steel, sapphire, ✓Tantalum

Float Stops: Teflon[a]

SCALES (etched on tube)

5-inch Dt/Df (diameter ratio), ✓5-inch direct reading, ✓5-inch millimeter scale

PERFORMANCE

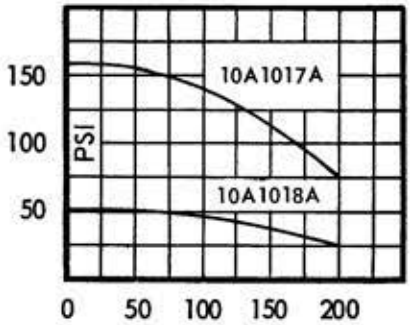
Accuracy: ±2 per cent maximum flow rate, ✓±1 per cent maximum flow rate

Rangeability: 12-1/2 to 1

✓Optional

OPERATIONAL LIMITS

Pressure-Temperature Rating



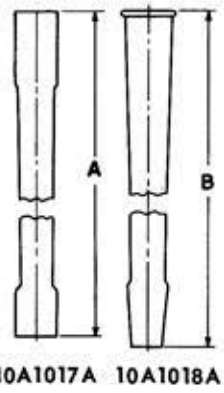
Maximum Recommended Temperature: 200 F

* Flowrator is a trademark of Fischer & Porter Company

CONNECTIONS

Size	08	02	2
Model 10A1017A	1/4"	3/8"	1/2"
Model 10A1018A	10/30	12/30	14/35
Model 10A1017A – Suitable for hose connection (ID).			
Model 10A1018A – inlet – male; outlet – female; both ground standard taper joint.			

DIMENSIONS



10A1017A 10A1018A

Meter Size	A* 10A1017A	B* 10A1018A
08	$9\frac{33}{64}$	$9\frac{11}{16}$
02	$10\frac{33}{64}$	$10\frac{43}{64}$
2	$11\frac{11}{32}$	$11\frac{11}{32}$

*All dimensions in inches

a. Teflon is a trademark of E. I. DuPont de Nemours & Co.

CAPACITIES

Cu Cm/Min AIR @ 14.7 & 70° F	Cu Cm/Min WATER	METER SIZE	TRI-FLAT TUBE	FLOAT	Pressure Drop Across Float Inches H_2O
35,200 *	1105	2	2F1/4-25-5	TA-14	2.73
27,600 *	860	2	2F1/4-20-5	TA-14	2.73
23,400	703	2	2F1/4-25-5	SS-14	1.32
18,400	547	2	2F1/4-20-5	SS-14	1.32
14,100	415	2	2F1/4-16-5	SS-14	1.32
11,750	268	2	2F1/4-25-5	CD-14	0.37
9,100	203	2	2F1/4-20-5	CD-14	0.37
6,950	151	2	2F1/4-16-5	CD-14	0.37
5,580 *	172	02	02F1/8-25-5	TA-18	1.37
4,325 *	130	02	02F1/8-20-5	TA-18	1.37
3,660	107	02	02F1/8-25-5	SS-18	0.66
3,270 *	97.5	02	02F1/8-16-5	TA-18	1.37
2,860	81	02	02F1/8-20-5	SS-18	0.66
2,480	64.5	02	02F1/8-25-5	SA-18	0.33
1,910	48.5	02	02F1/8-20-5	SA-18	0.33
1,420	35.7	02	02F1/8-16-5	SA-18	0.33
960	23.0	02	02F1/8-12-5	SA-18	0.33
681 *	18.6	08	08F1/16-20-4	TA-16	0.68
510 *	13.5	08	08F1/16-16-4	TA-16	0.68
426	10.3	08	08F1/16-20-4	SS-16	0.33
332 *	8.4	08	08F1/16-12-4	TA-16	0.68
315	7.2	08	08F1/16-16-4	SS-16	0.33
271	4.82	08	08F1/16-20-4	SA-16	0.17
196	3.20	08	08F1/16-16-4	SA-16	0.17
136	2.46	08	08F1/16-10-4	SS-16	0.33
122	1.81	08	08F1/16-12-4	SA-16	0.17
83.3	1.37	08	08F1/16-08-4	SS-16	0.33
75	1.05	08	08F1/16-10-4	SA-16	0.17
43.5	.59	08	08F1/16-08-4	SA-16	0.17

* Tantalum floats are not recommended for gas service below 2 psig

FLOAT NOMENCLATURE

CODE	MATERIAL
SA	Sapphire
CD	Constant Density Glass
SS	Stainless Steel
TA	Tantalum

ORDERING INFORMATION

Complete Model Number

Size

Accuracy

Scale

Operating Conditions

- Fluid Measured
- Maximum Flowrate
- Fluid Density
- Fluid Viscosity
- Operating and Maximum Temperature
- Operating and Maximum Pressure

UNIT WEIGHT

Maximum packaged weight size 2 tube – approximately 1 pound.

STANDARD MODELS

10A1017A	Hose Connection type
10A1018A	Ground standard taper joint

ACCESSORIES

(None)

TYPICAL SPECIFICATIONS

The flowmeter shall be of the variable-area type with a glass metering tube with end connections suitable for (hose) or (ground standard taper joint). The meter shall have a (specify material) ball float and Teflon float stops. The ball float shall be guided by three longitudinal flats parallel to the tube axis. The (diameter ratio) (direct reading) (millimeter) scale shall be etched directly on the metering tube. The flow range shall be (specify) of (specify liquid or gas) specific gravity (specify), viscosity (specify) metered at (specify operating temperature and pressure). The maximum operating temperature and pressure are (specify).

FISCHER & PORTER CO.
GENERAL OFFICES: WARMINSTER, PENNSYLVANIA, U.S.A.

. . . a world-wide instrument Company with plants in Australia, Canada, England, France, West Germany, Mexico, the Netherlands and the U.S.A.

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