

- Wide-Angle visibility
- Interchangeable tubes and floats
- No tools need to remove tube for cleaning or capacity change
- Rugged solid construction
- Stainless steel meter body
- Wetted parts - choice of 316 stainless steel or KYNAR end fittings. KYNAR has a Hastelloy C tube adapter spring.
- Integral control valve
- Polycarbonate shield affords personnel protection in the rare event of accidental tube breakage
- Self-supporting tripod stand
- Sturdy carrying case



**Series 10A6130LK
Purgemaster™
Flowmeter Lab Kit**

PURGEMASTER™ FLOWMETER LAB KIT

The Fischer & Porter Series 10A6130LK **Purgemaster Lab Kit** is an ideal choice for every laboratory where a rugged heavy-duty flowmeter is required. Each lab kit includes two (2) complete meters with inlet needle valve, in a choice of either 316 ss or KYNAR® fluoropolymer material end fittings, two 1/4" and two 1/8" size metering tubes, six (6) floats, and a free standing tripod support. A full set of flow curves is provided with each kit.

The **Purgemaster Lab Kit** comes attractively and securely packed in a sturdy foam-lined carrying case.

The **Purgemaster Lab Kit** offers a wide range of flows by simple tube and float substitutions. Range changing is simplified by easy removal of flowmeter tube which requires no tools.

Engineering Specifications

Maximum Flow Range: 0.2 to 2000 cc/min. of water or 30 scc/min. to 135 scfh of air at 14.7 psia and 70° F.

Accuracy: Standard $\pm 2\%$ of full scale reading.
Option: $\pm 1\%$ calibration with specific tube and float combinations.

Repeatability: 0.5% of full scale reading.

Metering Tube Sizes: With 1/8" or 1/4" nominal I.D.

Float and Tube Type: Ball type floats with Tri-Flat™ tubes.

Scale Lengths: 5 inch (130mm) and 6 inch (150mm)

Scale Calibration: Millimeter scales with standard air and water curves.

Operational Limits

Table 1

Maximum Fluid Pressure (psig)			
End Fitting Material			
316ss		Kynar	
Max. 250°F	Design 100°F	Max. 150°F	Design 100°F
250	250	150	200

Minimum Fluid Temperature: -20°F(-29°C)

Ambient Temperature Limits: -40 to 150°F (-40 to 60°C)

Materials of Construction

Tubes: Borosilicate glass

Floats: Black Glass, Sapphire, 316 Stainless Steel, Carboloy

Float Stops: Teflon

O-Rings: Viton

Caution

It is important that the O-ring material be compatible with the process fluid. Meter tube breakage can occur if the wrong material is used. For example: VITON O-RINGS MUST NEVER BE USED FOR AMMONIA SERVICE.

Operator Protection Shield: Polycarbonate

Warning

Operating the meter without the operator protection shield in place may result in bodily injury.

Fittings: 316 stainless steel or KYNAR with Hastelloy C tube adapter springs.

Connections: Standard — 1/4" NPT facing rear.

Service

Glass tubes are not recommended for either hot or strong alkalies, fluorine, hydrofluoric acid, steam or water over 200°F (93°C); this meter is limited to the temperature given per Table 1. Meter tubes should be periodically inspected for signs of wear. Erosion, stress cracks or nicks provide early warning for tube replacement. With certain fluids, the glass may erode evenly so that wear is not visibly noticeable. If wear is suspected the tube should be replaced.

Kynar® is a registered trademark of Pennwalt Corporation.

**TABLE II - 5" Scale Length Capacities
(Maximum Flow Rates)
Tri-flat Meter with Spherical Floats**

Standard Scale 130 mm

Maximum Capabilities		Tube	Float
Liquid @ 1.0 sp. gr.	Air @ 14.7 psia & 70°F		
6.0 cc/min.	390 scc/min.	FP-1/8-08-G-5	BG
10.8 cc/min.	540 scc/min.	FP-1/8-08-G-5	SA
21.2 cc/min.	844 scc/min.	FP-1/8-08-G-5	SS
43.0 cc/min.	1950 scc/min.	FP-1/8-25-G-5	BG
64.8 cc/min.	2490 scc/min.	FP-1/8-25-G-5	SA
108 cc/min.	3720 scc/min.	FP-1/8-25-G-5	SS
170 cc/min.	7400 scc/min.	FP-1/4-16-G-5	BG
414 cc/min.	14000 scc/min.	FP-1/4-16-G-5	SS
570 cc/min.	49 scfh	FP-1/4-40-G-6	BG
1340 cc/min.	96 scfh	FP-1/4-40-G-6	SS
2000 cc/min.	135 scfh	FP-1/4-40-G-6	CA

The standard tube and float combinations provided in the Lab Kit span the flow ranges shown in Table II. Other tube and floats may be ordered in addition to those provided in the Lab Kit by specifying tube number and float material. Refer to Specification 10A6100 to order additional tube/float combinations.

Floats: Ball type; floats used in kit and listed below:

Qty	Size	Dwg No.
1	1/8" Glass (Black)	303F008G41
1	1/8" Stainless Steel	030F010T60
1	1/8" Sapphire	303F009F40
1	1/4" Glass (Black)	303F016G41
1	1/4" Stainless Steel	303F018T60
1	1/4" Carboloy	303F019W35

Equipment Description

The lab kit shall contain two (2) flowmeters of the variable-area type with Borosilicate glass metering tube and O-ring type seals of Viton. Scale length shall be five (5) or six (6) inch. The meter frame shall be of 304 stainless steel. The flowmeter shall be equipped with a built-in standard needle control valve on the inlet end. Wetted parts of the end fittings shall be made of 316 stainless steel or KYNAR and connections of 1/4" NPT facing rear. The metering tube and operator protection shield shall be easily removable for range changing or cleaning without removing the meter from the line or without the use of tools.

Weight: 6.0 lbs. (for entire Lab Kit)

Ordering Information

MODEL NUMBER DESIGNATION

10A6132LK

End Fitting Material

316 Stainless Steel A
KYNAR B

EACH KIT CONTAINS

- 1 ea. Flowmeter with 1/8" Diameter Tube
- 1 ea. Flowmeter with 1/4" Diameter Tube
- 1 ea. Glass Metering Tube, 1/8"
- 1 ea. Glass Metering Tube, 1/4"
- 3 ea. Floats, 1/8" (black glass, sapphire, stainless steel)
- 3 ea. Floats, 1/4" (black glass, carboloy, stainless steel)
- 1 ea. Tripod Stand
- 1 ea. Set of Flow Curves (IB-10A9025)
- 1 ea. Carrying Case
- 1 ea. Instruction Manual for 10A6130 Rev. 1, 10A9024



ABB Automation Inc.
125 East County Line Road
Warminster, PA 18974 USA
Tel: 215-674-6000
Fax: 215-674-7183

ABB Instrumentation Ltd
Howard Road, St. Neots
Cambs, England, PE19 3EU
Tel: +44 (0)1480-475-321
Fax: +44 (0)1480-217-948

ABB Instrumentation S.p.A
Via Sempione 243
20016 Pero (Milano) Italy
Tel: +39 (02) 33928 1
Fax: +39 (02) 33928 240

The Company's policy is one of continuous product improvement and the right is reserved to modify the information contained herein without notice.

© 2000 ABB Automation Inc. Printed in USA (5/00)