

# Models 65, 150, F65 & F150

## Glass Tube Purgemeters

Porter variable area flowmeters include 65mm and 150mm scale length tube assemblies and are available in either forged body or side-plate construction. Forged body models feature a wrap-around window for full 180° tube visibility and an attractive forged one-piece black anodized aluminum body. Side-plate constructed models are conveniently interchangeable with competitive designs.

Porter control valves, including the exclusive Torque Guard cartridge, can be added to either style flowmeter for precise flow indication and control in one economical unit. Multi-tube side-plate models, ranging from two to six tubes, are available with or without control valves and can include individual inlet and outlet connections or manifold ports according to your specifications.



## Contact Information:    Product Features:

Parker Hannifin Corporation  
**Porter Instrument Division**  
245 Township Line Road  
Hatfield, PA 19440

**phone 215 723 4000**  
**fax 215 723 2199**  
**industrial@parker.com**

[www.parker.com/porter](http://www.parker.com/porter)

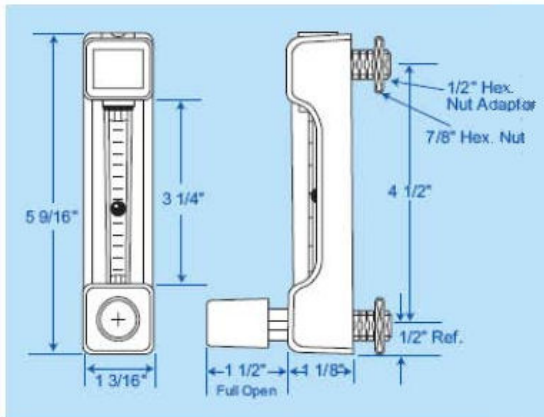
- Interchangeable flow tube assemblies and valves allow configuration changes without removal from process system
- Rib-guided, compression sealed flow tubes for maximum float stability
- Ceramic scales fired on flow tubes against a contrasting background provide high visibility and durability
- Standard or high-resolution metering valves available on inlet or outlet
- Ten-to-one rangeability



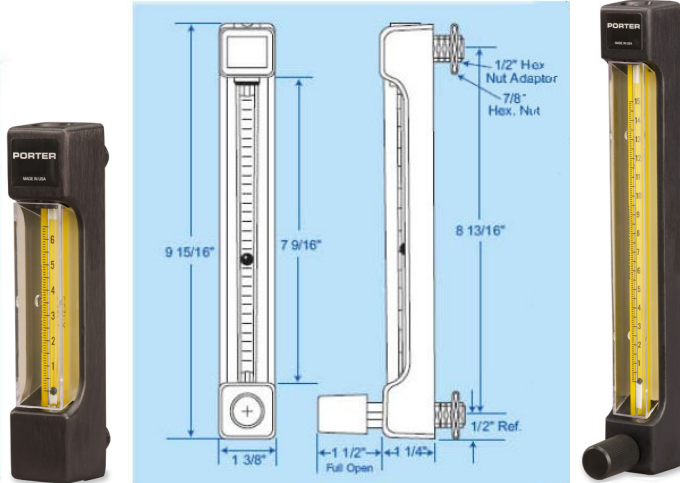
**ENGINEERING YOUR SUCCESS.**

# Forged Body Flowmeters

The Porter models F65 and F150 forged body flowmeters feature a compact, one-piece, black anodized forged aluminum body with wraparound window for full 180° visibility of the flow tube. These units are available with aluminum, brass or 316 stainless steel wetted parts.



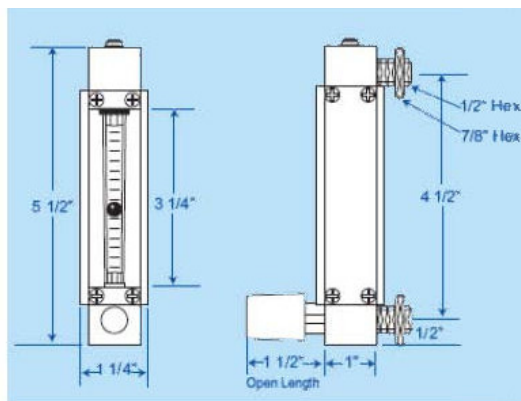
Model F65



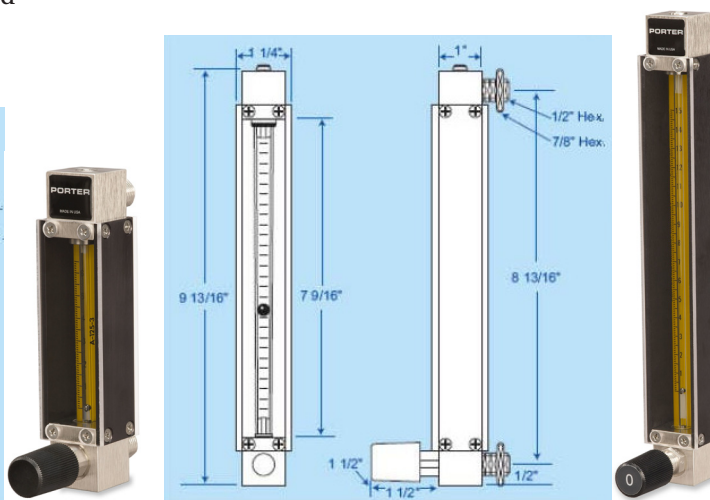
Model F150

# Forged Body Flowmeters

The Porter models 65 and 150 side plate constructed flowmeters combine a traditional body style with innovative design features. They are available with aluminum, brass or 316 stainless steel wetted parts. Multi-tube (2 to 6 tube) versions are available with optional valves and manifold inlet/outlet ports.



Model 65



Model 150

## Specifications

### **Scale:**

*Length:* Models F65 and 65-65mm; Models F150 and 150-150mm

*Type:* Fused on metering tube with contrasting yellow background.

*Graduations:* Standard- Models F65 and 65: 0-65mm w/ calibration data; Models F150 and 150: 0-150mm w/ calibration data.

*Optional:* Direct Reading Scale

**Capacities:** See chart on next page

### **Ratings:**

*Pressure/Temperature:* Neoprene packing/ Buna N O-rings- 200 psig at temperatures up to 160°F, Viton® packing/ Viton O-rings- 200 psig at temperatures up to 200°F.

### **Performance:**

*Accuracy:* Models F65 and 65: +/- 10% full scale; Models F150 and 150: +/- 5% full scale. Accuracy specified for 100%-10% of scale reading (10 to 1 rangeability).

*Repeatability:* Models F65 and 65: +/-0.5% of full scale reading; Models F150 and 150: +/- 0.25% of full scale reading.

### **Connections:**

*Standard:* 1/8" female NPT threaded adaptors with locknuts for front panel mounting. *Optional:* 1/8" compression fitting; 1/4" compression fitting; 1/4" NPT female; 1/4" I.D. Hose

## To Order, Specify:

- Model Number
- Tube Number
- Float Material
- Connections ( type & size)
- Fluid Specifications (specify gravity & viscosity)
- Flow Rate
- Operating Pressure
- Operating Temperature
- Material of Construction
  - a) end fitting
  - b) side plates or meter body
  - c) elastomers

## Materials of Construction

### **Metering Tube-**

Borosilicate glass

### **Floats-**

*Standard:* glass, stainless steel. *Optional:* sapphire, carboloy and tantalum

### **Structual Members-**

*Metering body:* (F65 and F150) black anodized aluminum.

*Optional:* stainless steel.

*Wetted Parts:* aluminum, brass or 316 stainless steel

### **Shields-**

Clear polycarbonate

### **Tube packing and O-rings-**

*Standard:* Neoprene packing and Buna N O-rings with aluminum or brass construction. Viton packing and Viton O-rings with stainless steel construction.

*Optional Materials:* Teflon®

## Materials of Construction

### **Model Numbers and Description**

#### **Example:**

F65	A	V	2
-----	---	---	---

#### **Basic Model**

F65-65mm forged body  
F150-150mm forged body  
65-65mm side plate body  
150-150mm side plate body

#### **Body Material**

A- Aluminum  
B- Brass  
S- Stainless steel

#### **Valve**

O- No Valve  
V- Standard cartridge control valve  
HR- High resolution control valve

#### **Valve Size**

0 thru 6 high resolution control valve  
1 thru 3 standard cartridge valve  
1-TG torque guard taper 1  
2-TG torque guard taper 2

# Flowmeter Capacities

Models F65 & 65			Models F150 & 150					
Tube Number	cc/min	cc/min	Tube Number	cc/min	cc/min	Tube Number	cc/min	cc/min
Float Material	air @ STP	water @ 70F	Float Material	air @ STP	water @ 70F	Float Material	air @ STP	water @ 70F
A-125-3			B-125-6			B-250-0		
Glass	45	.57	Glass	34	.39	Glass	942	14
Sapphire	68	.90	Sapphire	55	1.48	Sapphire	1360	28
Stainless Steel	135	2.2	Stainless Steel	102	2.2	Stainless Steel	2290	53
Carboloy	245	4.8	Carboloy	203	3.8	Carboloy	3395	91
Tantalum	260	5.5	Tantalum	251	4.3	Tantalum	3625	100
A-125-5			B-125-10			B-250-1		
Glass	78	.80	Glass	50	.55	Glass	2400	49
Sapphire	120	1.28	Sapphire	77	1.04	Sapphire	3080	77
Stainless Steel	235	3.35	Stainless Steel	150	2.5	Stainless Steel	4600	125
Carboloy	380	6.6	Carboloy	263	5.3	Carboloy	6750	200
Tantalum	450	9.5	Tantalum	284	6.6	Tantalum	7360	218
A-125-7			B-125-20			B-250-2		
Glass	445	6	Glass	89	1.1	Glass	5180	113
Sapphire	610	11	Sapphire	144	2.15	Sapphire	6630	171
Stainless Steel	975	22	Stainless Steel	278	4.9	Stainless Steel	9900	282
Carboloy	1385	38	Carboloy	473	10	Carboloy	14140	427
Tantalum	1540	42	Tantalum	560	12	Tantalum	15400	467
A-157-1			B-125-30			B-250-3		
Glass	410	4.5	Glass	365	4.7	Glass	7700	173
Sapphire	545	8.5	Sapphire	514	10	Sapphire	9640	260
Stainless Steel	948	18	Stainless Steel	835	19	Stainless Steel	14300	420
			Carboloy	1252	36	Carboloy	20100	625
			Tantalum	1370	41	Tantalum	22000	680
A-157-2			B-125-40			B-250-4		
Glass	1195	19	Glass	850	16	Glass	12100	278
Sapphire	1595	34	Sapphire	1100	27	Sapphire	15300	417
Stainless Steel	2410	64	Stainless Steel	1700	46	Stainless Steel	22500	675
			Carboloy	2430	73	Carboloy	32400	990
			Tantalum	2620	81	Tantalum	34200	1067
A-250-1			B-125-50			B-250-45		
Glass	2195	38	Glass	2340	55	Glass	13885	296
Sapphire	2900	63	Sapphire	3080	79	Sapphire	17600	485
Stainless Steel	4400	118	Stainless Steel	4640	132	Stainless Steel	26010	770
Carboloy	6390	190	Carboloy	6600	200	Carboloy	37040	1150
Tantalum	6880	200	Tantalum	7000	214	Tantalum	39230	1270
A-250-2			B-125-60			B-250-5		
Glass	4475	95	Glass	3800	87	Glass	16300	360
Sapphire	5790	144	Sapphire	5070	126	Sapphire	20590	565
Stainless Steel	8490	246	Stainless Steel	7580	210	Stainless Steel	30800	900
Carboloy	12200	370	Carboloy	10770	330	Carboloy	42200	1300
Tantalum	12950	390	Tantalum	11500	353	Tantalum	44100	1420
A-250-3			B-125-65			B-250-6		
Glass	6145	135	Glass	4187	94	Glass	20470	482
Sapphire	8100	208	Sapphire	5410	138	Sapphire	23300	708
Stainless Steel	11900	350	Stainless Steel	7969	226	Stainless Steel	38900	1142
Carboloy	16980	515	Carboloy	10960	335	Carboloy	49000	1646
Tantalum	18360	570	Tantalum	11885	365	Tantalum	53300	1760
A-250-4			B-125-70			B-250-7		
Glass	10740	240	Glass	5600	124	Glass	8820	203
Sapphire	13460	365	Sapphire	7400	186	Sapphire	11260	295
Stainless Steel	20000	600	Stainless Steel	10990	313	Stainless Steel	16600	494
Carboloy	27500	870	Carboloy	15570	472	Carboloy	22900	716
Tantalum	29000	910	Tantalum	16660	505	Tantalum	23400	780
A-250-5			B-157-1			B-250-8		
Glass	13890	385	Glass	340	3.7	Glass	22360	580
Sapphire	18000	480	Sapphire	540	9.3	Sapphire	29140	780
Stainless Steel	26700	840	Stainless Steel	882	18	Stainless Steel	41420	1300
Carboloy	37870	1175				Carboloy	61620	1784
Tantalum	41800	1225				Tantalum	62500	2060
A-250-6			B-157-2			B-250-9		
Glass	22800	530	Glass	1180	20	Glass	23300	550
Sapphire	28900	795	Sapphire	1570	38	Sapphire	30500	840
Stainless Steel	42400	1205	Stainless Steel	2420	65	Stainless Steel	45000	1332
Carboloy	63500	1835				Carboloy	61680	1956
Tantalum	67800	1965				Tantalum	65370	2160