

Full-View[®] Series 1110 & 1140

Variable Area

Industrial Glass Tube, Variable Area Flowmeters

Model
1110Model
1140

Description

The Brooks[®] Full-View[®] glass tube meters are designed to offer a wide variety of meter configurations to meet a broad range of metering applications. The packing gland seal construction provides for long-term, leak-free, and reliable flow measurement.

Features

- Glass tube flow meters designed to offer a wide variety of meter configurations to meet a broad range of metering applications
- Rugged dowel-pin side plate construction protects glass tube from installation stresses and piping vibration
- Rotatable connections allows user to install in a variety of piping configurations
- Externally adjustable gland bolts provides easy maintenance without removing meter
- Flanged/NPT, vertical or horizontal connections, meter can be easily adapted to customer's piping

Product Specifications

Capacities and Pressure Drops	See Capacities and Pressure Drop Tables
Flow Accuracy (127mm, 150mm, 250mm tubes)	Standard: $\pm 2\%$ Full Scale
	Optional: $\pm 1\%$ Full Scale
Repeatability	0.5% Full Scale
Pressure Ratings/PED Categories	See Pressure Ratings & PED Categories Tables for maximum non-shock pressure
	Note: CRN meters have a lower pressure rating
Scales	Standard: Detachable aluminum plate
	Lengths: 127mm, 200mm and 250mm
	Graduations: Choice of direct reading units, millimeter or percentage of maximum flow
Ambient Temperature Limits	33 to 125°F (1°C to 52°C)
Operating Fluid Temperature Limits	Maximum: 250°F (121°C) for metallic end fittings
	Minimum: 33°F (1°C)
Dimensions	See Dimensions Figure

Product Specifications (Continued)

Materials of Construction	
Metering Tube	Borosilicate glass
Protective Tube Sleeve	UV stabilized polycarbonate (Size 8 [1/2"] and larger)
Window	Scratch resistant, UV stabilized polycarbonate
Floats (see Float Types figure)	Size 2-6: (Spherical) Sapphire, glass, Carboloy®, 316 stainless steel Sizes 8-13: 316 stainless steel
Float Stops	Standard: Sizes 2-8: 316 stainless steel spring Sizes 9-13: Aluminum for brass fittings; 316 stainless steel for 316 stainless steel fittings
Housing and Window Bezel	Standard: Aluminum with polyurethane paint
End Fittings	316 stainless steel, brass (brass fittings not available with flanged connection)
Packing Material	Standard: Teflon®, Neoprene®, Viton® fluoroelastomers
O-rings	Standard: Teflon, Buna, Viton fluoroelastomers
Gland Rings	Standard: Steel
Gland Followers	Standard: Sizes 2-9 aluminum; Sizes 10-13 steel
Side Plate Gaskets	Anchorite
Bolts	18-8 stainless steel
Connections (See Connections Table)	150 lbs. flanges per ANSI B 16.5 NPT female connections
Connection Orientation	Vertical or horizontal on inlets and outlets Connection rotatable 360° at 90° intervals
Optional Equipment	Mountings: Brackets for flush or front of panel Valves: Available for connection sizes 1/4" through 1" only. Horizontal stem in outlet or inlet and fitting sizes 2-10

Pressure Ratings and PED Categories

Meter Size	End Fitting Material	Maximum Operating Pressure (psig) ¹			PED CAT.
		@ 70°F (21°C)	@ 150°F (66°C)	@ 250°F (121°C)	
2	Metal 316 SS (w/CRN)	500	500	500	SEP
		200	200	200	
6	Metal 316 SS (w/CRN)	450	450	450	
		200	200	200	
8	Metal 316 SS (w/CRN)	300	300	300	
		160	160	160	
9	Metal 316 SS (w/CRN)	175	175	175	
		100	100	100	
10	Metal 316 SS (w/CRN)	100	100	100	
		60	60	60	
12	Metal	75	75	75	SEE NOTE 2
13	Metal	100	100	100	

NOTES:

¹Flanged unit pressure ratings are limited to ANSI flange or tube ratings whichever is lower.

²Sizes 12 and 13 do not conform to Pressure Equipment Directive 97/23/EC, therefore it cannot be sold or used in the EU/EFTA.

Capacities:

Sizes 2 & 6, 150mm Scale, Rib Guided Tube, Spherical Float

METER SIZE	TUBE	FLOAT	MAXIMUM FLOW RATE	
			WATER (CC/MIN.)	AIR @ 14.7 PSIA AND 70°F (21°C)
2	R-2-15-AAAA See Note Below*	GLASS *	0.59	50.0 SCC/MIN
		SAPPHIRE	1.10	79.0 SCC/MIN
		STN. STL.	2.60	150.0 SCC/MIN
		CARBOLOY	5.20	280.0 SCC/MIN
	R-2-15-D	GLASS	5.58	361.0 SCC/MIN
		SAPPHIRE	10.20	491.0 SCC/MIN
		STN. STL.	19.80	790.0 SCC/MIN
		CARBOLOY	31.90	1170.0 SCC/MIN
	R-2-15-B	GLASS	50.6	2.3 SLPM
		SAPPHIRE	76.2	2.9 SLPM
		STN. STL.	127	4.4 SLPM
		CARBOLOY	189	6.4 SLPM
R-2-15-C	GLASS	81.1	3.7 SLPM	
	SAPPHIRE	123	4.8 SLPM	
	STN. STL.	208	7.2 SLPM	
	CARBOLOY	312	10.1 SLPM	
6	R-6-15-A	GLASS	191	8.3 SLPM
		SAPPHIRE	284	10.6 SLPM
		STN. STL.	468	15.7 SLPM
		CARBOLOY	690	22.0 SLPM
	R-6-15-B	GLASS	548	22.6 SLPM
		SAPPHIRE	809	28.6 SLPM
		STN. STL.	1290	41.6 SLPM
		CARBOLOY	1850	58.1 SLPM

* R-2-15-AAAA TUBE WITH GLASS FLOAT NOT AVAILABLE WITH 1% ACCURACY.

Connections

Meter Size	Model 1110 Inlet & Outlet Horizontal (NPT)	Model 1114 Inlet & Outlet Vertical (NPT)	Model 1140 Inlet & Outlet Horizontal (Flange)	Model 1144 Inlet & Outlet Vertical (Flange)
2 to 6	1/4"	1/4"	1/2"	1/2"
8	1/2"	1/2"	1/2"	1/2"
9	3/4"	3/4"	1"	1"
10	3/4"	1"	1"	1"
12	1-1/2"	1-1/2"	1-1/2"	1-1/2"
13	1-1/2"	2"	2"	2"

Product Specifications (Continued)

Capacities:

Sizes 2 & 6,, 250mm Scale, Rib Guided Tube, Spherical Float

METER SIZE	TUBE	FLOAT	MAX. FLOW RATE	
			WATER (CC/MIN.)	AIR @ 14.7 PSIA AND 70°F (21.1°C)
2	R-2-25-D	GLASS	5.5	366 SCC/MIN
		SAPPHIRE	10.1	500 SCC/MIN
		STN. STL.	19.8	810 SCC/MIN
		CARBOLOY	32.2	1200 SCC/MIN
	R-2-25-B	GLASS	49.0	2.2 SLPM
		SAPPHIRE	74.5	2.86 SLPM
		STN. STL.	124	4.3 SLPM
	R-2-25-C	GLASS	82	3.78 SLPM
		SAPPHIRE	125	4.95 SLPM
STN. STL.		212	7.45 SLPM	
6	R-6-25-B	GLASS	550	22.8 SLPM
		SAPPHIRE	810	29.0 SLPM
		STN. STL.	1300	42.0 SLPM
		CARBOLOY	1860	58.5 SLPM

Capacities:

Sizes 8 to 13, 250mm Scale, Rib Guided Tube, Standard Float

METER SIZE	TUBE	FLOAT	WATER				AIR @ 14.7 PSIA AND 70°F (21°C)			
			GPM	LPM	PRESSURE DROP INCHES W.C.	VISCOSITY IMMUNITY CEILING, CS (**)	SCFM	SLPM	PRESSURE DROP INCHES W.C.	PSI CRITICAL (*)
8	R-8M-25-2	8-RV-3	0.55	2.08	2.0	2.0	2.22	62.9	3.0	0
		8-RV-8	0.78	2.95	5.0	3.3	3.22	91.2	6.0	0
		8-RS-8	1.00	3.79	6.0	1.7	4.18	118.4	7.0	0
		8-RS-14	1.32	5.00	11.0	1.8	5.48	155.2	12.0	0
		8-RV-31	1.50	5.68	17.0	6.0	6.12	173.3	19.0	30
		8-RS-31	1.89	7.15	22.0	2.6	7.76	219.8	25.0	30
	R-8M-25-4	8-LJ-48	3.01	11.39	45.0	1.0	13.01	368.4	51.0	30
		8-RV-3	0.78	2.95	4.0	2.0	3.17	89.8	4.0	0
		8-RV-8	1.09	4.13	7.0	3.7	4.45	126.0	8.0	0
		8-RS-8	1.40	5.30	10.0	1.8	5.86	166.0	11.0	0
		8-RS-14	1.83	6.93	17.0	1.9	7.56	214.1	19.0	0
		8-RV-31	2.06	7.80	23.0	7.0	8.32	235.6	28.0	30
		8-RS-31	2.59	9.80	33.0	3.1	10.66	301.9	37.0	30
		8-LJ-48	4.88	18.47	93.0	1.0	20.32	575.5	106.0	30
9	R-9M-25-1	9-RV-33	1.90	7.19	5.0	10.0	7.96	225.4	6.0	0
		9-RS-33	2.52	9.54	6.0	2.3	10.46	296.2	7.0	0
		9-RV-87	3.08	11.66	12.0	15.0	12.56	355.7	14.0	30
		9-RS-87	4.04	15.29	14.0	3.4	16.84	476.9	16.0	30
	R-9M-25-3	9-RV-33	2.53	9.58	6.0	11.0	10.45	295.9	7.0	0
		9-RS-33	3.24	12.26	7.0	2.4	13.45	380.9	8.0	0
		9-RV-87	3.92	14.84	14.0	17.0	16.25	460.2	16.0	30
		9-RS-87	5.12	19.38	17.0	3.5	21.20	600.4	20.0	30
		10-RV-64	4.54	17.18	8.0	14.0	18.05	511.2	9.0	0
		10-RS-64	5.64	21.35	10.0	3.0	23.65	669.8	12.0	0
10	R-10M-25-1	10-RS-138	8.02	30.36	21.0	5.0	34.60	979.9	23.0	30
		10-LJ-238	14.91	56.43	52.0	1.0	66.00	1869.1	59.0	30
		10-RV-64	6.28	23.77	11.0	15.0	25.76	729.5	13.0	0
		10-RS-64	7.84	29.67	15.0	3.7	32.15	910.5	17.0	0
	R-10M-25-3	10-RS-138	10.93	41.37	29.0	5.5	45.90	1299.9	33.0	30
		10-LJ-238	23.10	87.43	98.0	1.0	105.70	2993.4	112.0	30
		12-RV-221	9.33	35.31	8.0	28.0	37.81	1070.8	9.0	0
		12-RV-343	11.71	44.32	12.0	35.0	47.12	1334.4	14.0	30
12	R-12M-25-4	12-RS-221	12.46	47.16	9.0	4.0	50.65	1434.4	10.0	0
		12-RV-221	17.21	65.14	10.0	29.0	70.80	2005.1	11.0	0
	R-12M-25-5	12-RV-343	20.95	79.30	15.0	36.0	86.45	2448.3	17.0	30
		12-RS-221	22.40	84.78	12.0	4.2	91.85	2601.2	14.0	0
13	R-13M-25-1	13-RV-510	19.94	75.47	12.0	40.0	81.55	2309.5	14.0	0
		13-RS-510	26.89	101.78	15.0	7.3	108.00	3058.6	17.0	0
		13-RS-760	31.85	120.55	21.0	9.0	131.00	3709.9	24.0	30
		13-LJ-1394	54.60	206.66	46.0	1.0				
	R-13M-25-3	13-RV-510	31.78	120.29	17.0	42.0	130.90	3707.1	19.0	0
		13-RV-760	37.60	142.32	24.0	52.0	155.20	4395.3	27.0	30
		13-RS-510	42.52	160.94	23.0	7.6	176.60	5001.3	26.0	0
		13-RS-760	49.55	187.55	32.0	9.3	217.70	6165.3	36.0	30
		13-LJ-1394	98.60	373.20	92.0	1.0				

(*) MINIMUM OPERATING DOWNSTREAM PRESSURE FOR GAS SERVICE (PSIG)

(**) VISCOSITY IMMUNITY CEILING LISTED IS FOR STAINLESS STEEL FLOAT AND FLUID SP.GR. 1.0, WHEN THE VISCOSITY OF THE FLUID EXCEEDS THE VISCOSITY IMMUNITY CEILING (VIC), A CALCULATED CORRECTION IS APPLIED TO ACCOUNT FOR THE DIFFERENCE BETWEEN FACTORY CALIBRATION FLUID AND PROCESS FLUID.

Product Specifications (Continued)

Capacities:

Sizes 8 to 13, 127mm Scale, Rib Guided Tube, Standard Float

METER SIZE	TUBE	FLOAT	WATER				AIR @ 14.7 PSIA AND 70°F (21°C)			
			GPM	LPM	PRESSURE DROP INCHES W.C.	VISCOSITY IMMUNITY CEILING, CS (**)	SCFM	SLPM	PRESSURE DROP INCHES W.C.	PSI CRITICAL (*)
8	R-8M-127-1	8-RV-3	0.50	1.89	2.0	2.0	2.05	58.1	2.0	0
		8-RV-8	0.74	2.80	3.0	3.3	3.01	85.2	4.0	0
		8-RS-8	0.92	3.48	4.0	1.7	3.84	108.7	4.0	0
		8-RS-14	1.22	4.62	6.0	1.8	5.03	142.4	7.0	0
		8-RV-31	1.38	5.22	11.0	6.0	5.60	158.6	13.0	30
		8-RS-31	1.70	6.43	13.0	2.6	6.98	197.7	15.0	30
9	R-9M-127-1	8-LJ-48	2.59	9.80	22.0	1.0	10.93	309.5	25.0	30
		9-RV-33	1.70	6.43	4.6	10.0	7.00	198.2	6.0	0
		9-RS-33	2.20	8.33	5.3	2.3	9.05	256.3	6.0	0
		9-RV-87	2.64	9.99	11.5	15.0	11.08	313.8	13.0	30
	R-9M-127-3	9-RS-87	3.46	13.10	13.0	3.4	14.40	407.8	15.0	30
		9-RV-33	3.90	14.76	8.4	11.0	15.75	446.0	10.0	0
		9-RS-33	4.90	18.55	10.8	2.4	20.35	576.3	13.0	0
		9-RV-87	5.55	21.01	18.1	17.0	23.30	659.9	21.0	30
		9-RS-87	6.75	25.55	21.7	3.5	28.75	814.2	25.0	30
		10-RV-64	6.02	22.79	9.2	15.0	24.33	689.0	11.0	0
10	R-10M-127-3	10-RS-64	7.56	28.61	11.4	3.7	30.80	872.3	13.0	0
		10-RV-138	8.01	30.32	17.2	23.0	33.45	947.3	20.0	30
		10-RS-138	9.94	37.62	21.0	5.5	41.63	1179.0	24.0	30
		10-LJ-238	22.47	85.05	61.0	1.0	109.30	3095.4	70.0	30
12	R-12M-127-1	12-RV-221	8.60	32.55	8.0	28.0	35.23	997.7	9.0	0
		12-RV-343	10.74	40.65	12.0	35.0	43.55	1233.3	14.0	30
		12-RS-221	11.49	43.49	8.0	4.0	47.10	1333.9	10.0	0
		12-RS-343	13.97	52.88	13.0	4.3	56.70	1605.7	15.0	30
		12-LJ-740	24.30	91.98	28.0	1.0	99.80	2826.3	32.0	30
13	R-13M-127-1	13-RV-510	19.28	72.97	12.0	40.0	78.25	2216.0	14.0	0
		13-RV-760	22.90	86.68	17.0	50.0	92.80	2628.1	20.0	30
		13-RS-510	26.35	99.73	14.0	7.3	105.30	2982.1	16.0	0
		13-RS-760	31.30	118.47	20.0	9.0	126.10	3571.2	23.0	30
		13-LJ-1394	47.45	179.60	38.0	1.0				
	R-13M-127-3	13-RV-510	30.40	115.06	16.0	42.0	125.00	3540.0	18.0	0
		13-RV-760	34.90	132.10	22.0	52.0	144.20	4083.7	25.0	30
		13-RS-510	41.30	156.32	20.0	7.6	175.25	4963.1	23.0	0
		13-RS-760	46.50	176.00	27.0	9.3	199.80	5658.3	31.0	30
		13-LJ-1394	93.80	355.03	70.0	1.0				

(*) MINIMUM OPERATING DOWNSTREAM PRESSURE FOR GAS SERVICE (PSIG)

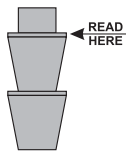
(**) VISCOSITY IMMUNITY CEILING LISTED IS FOR STAINLESS STEEL FLOAT AND FLUID SP.GR. 1.0, WHEN THE VISCOSITY OF THE FLUID EXCEEDS THE VISCOSITY IMMUNITY CEILING (VIC), A CALCULATED CORRECTION IS APPLIED TO ACCOUNT FOR THE DIFFERENCE BETWEEN FACTORY CALIBRATION FLUID AND PROCESS FLUID.

Float Types



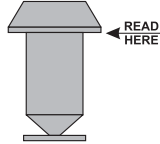
Spherical

Lowest meter capacity or medium capacity with low viscosity fluids.



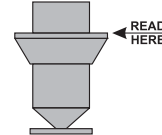
Type LJ

Maximum flowmeter capacity with limited viscosity immunity.



Type RV (rib guided)

Highest immunity to viscous fluids with medium meter capacity. (most stable)

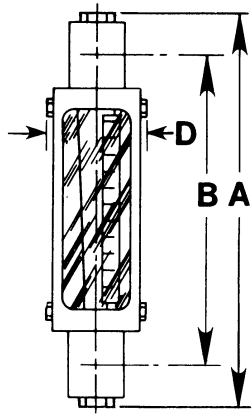


Type RS (rib guided)

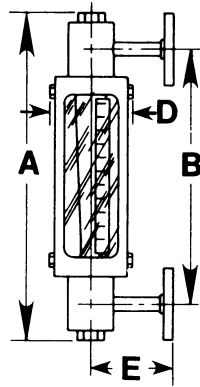
High flow capacity with some immunity to viscous fluids.

(Descriptions refer to floats used in the same size tube)

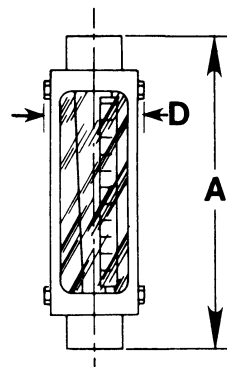
Product Dimensions



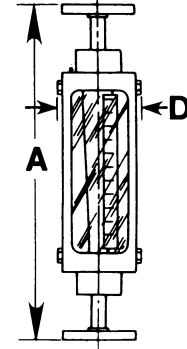
Model 1110



Model 1140



Model 1114



Model 1144

All dimensions in inches.

Meter Size	1110 - 1140				1114		1144		All Meters	All Meters
	Nominal Scale Length (MM)				Nominal Scale Length (MM)		Nominal Scale Length (MM)			
	127		250		127	250	127	250		
	A	B	A	B	A	A	A	A		
2-6*	10.12	8.59	15.12	13.59	9.63	14.63	14.88	19.88	2.38	3.5
8	15.38	11.5	20.38	16.5	12	17	17.88	22.88	3.25	3.5
9	17	12.5	22	17.5	12.25	17.25	17.75	22.75	3.75	4
10	17.88	12.5	22.88	17.5	12.25	17.25	17.5	22.5	4.44	4
12	20.12	15.5	25.12	20.5	15.88	20.88	21.38	26.38	4.38	5
13	21.25	15.5	26.25	20.5	15.12	20.12	20.63	25.63	4.88	5

* Also available in 150mm scale length. Dimensions are identical to 127mm scale length
Flange dimensions apply to 150# raised face flanges

All dimensions in millimeters.

Meter Size	1110 - 1140				1114		1144		All Meters	All Meters
	Nominal Scale Length (MM)				Nominal Scale Length (MM)		Nominal Scale Length (MM)			
	127		250		127	250	127	250		
	A	B	A	B	A	A	A	A		
2-6*	257.0	218.2	384.0	345.2	244.6	371.6	378.0	505.0	60.5	88.9
8	390.7	292.1	517.7	419.1	304.8	431.8	454.2	581.2	82.6	88.9
9	431.8	317.5	558.8	444.5	311.2	438.2	450.9	577.9	95.3	101.6
10	454.2	317.5	581.2	444.5	311.2	438.2	444.5	571.5	112.8	101.6
12	511.0	393.7	638.0	520.7	403.4	530.4	543.1	670.1	111.3	127.0
13	539.8	393.7	666.8	520.7	384.0	511.0	524.0	651.0	124.0	127.0

* Also available in 150mm scale length. Dimensions are identical to 127mm scale length
Flange dimensions apply to 150# raised face flanges

Model Code

Code Description	Code Option	Option Description							
I. Base Model Numbers		Connection Size	Size 2	Size 6	Size 8	Size 9	Size 10	Size 12	Size 13
	111	Threaded	1/4"	1/4"	1/2"	3/4"	3/4" (A)	1-1/2"	1-1/2" (B)
	114	Flanged*	1/2"	1/2"	1/2"	1"	1"	1-1/2"	2"
		(A) 3/4" Horizontal Connections, 1" Vertical Connections (B) 1-1/2" Horizontal Connections, 2" Vertical Connections *Not available w/CRN							
II. Connection Orientation	0 D	Inlet-Horizontal	Outlet-Horizontal						
	4 D	Inlet-Vertical	Outlet-Vertical						
	6 D	Inlet-Horizontal	Outlet-Vertical						
	7 D	Inlet-Vertical	Outlet-Horizontal						
III. Meter Size	C	Size 2							
	P	Size 2 w/CRN							
	G	Size 6							
	Q	Size 6 w/CRN							
	J	Size 8							
	R	Size 8 w/CRN							
	K	Size 9							
	S	Size 9 w/CRN							
	L	Size 10							
	T	Size 10 w/CRN							
IV. Tube Designator		Size 2	Size 6	Size 8	Size 9	Size 10	Size 12	Size 13	
	1	-	-	R-8M-127-1	R-9M-127-1	-	-	R-13M-127-1*	
	2	-	R-6-15-A	-	R-9M-127-3	R-10M-127-3	R-12M-127-3*	-	
	3	R-2-15-B	R-6-15-B	R-8M-25-2	R-9M-25-1	R-10M-25-1	R-12M-25-4*	R-13M-25-1*	
	4	R-2-15-C	-	R-8M-25-4	R-9M-25-3	R-10M-25-3	12-RV-119	13-RV-510	
	5	R-2-15-D	R-6-25-B*	-	-	-	-	-	
	6	-	-	-	-	-	-	-	
	7	R-2-25-B*	-	-	-	-	-	-	
	8	R-2-25-C*	-	-	-	-	-	-	
	9	R-2-25-D*	-	-	-	-	-	-	
	A	R-2-15-AAAA	-	-	-	-	-	-	
	* Not available with CRN								
V. Float Designator		Size 2	Size 6	Size 8	Size 9	Size 10	Size 12	Size 13	
	1	Spherical	Spherical	8-RV-3	9-RV-33	10-RV-64	12-RV-221	13-RV-510	
	2	-	-	8-RV-8	9-RS-33	10-RS-64	12-RS-221	13-RS-510	
	3	-	-	8-RS-8	9-RV-87	-	-	13-RS-760	
	4	-	-	-	9-RS-87	10-RS-138	12-RV-119	13-RV-510	
	5	-	-	8-RS-14	-	10-LJ-238	-	13-LJ-1394	
	6	-	-	8-RV-31	-	-	-	-	
	7	-	-	8-RS-31	-	-	-	-	
	8	-	-	8-LJ-31	-	-	-	-	
VI. Float Material	A	Glass							
	B	Sapphire							
	C	316 Stainless Steel							
	D	Carboly							

Model Code (continued)

Code Description	Code Option	Option Description		
VII. Scale Inscription	A	No inscription (blank) (GAS/LIQUID)		
	B	MM scale (GAS/LIQUID)		
	C	0-100 LINEAR (GAS/LIQUID)		
	D	% OF MAX FLOW (GAS/LIQUID)		
	M	Special Inscription (Special calibration not required) (GAS)		
	4	Special Inscription (Special calibration not required) (LIQUID)		
	N	Special Calibration with SCALE 2% FS AIR (GAS)		
	p	Special Calibration with SCALE 2% FS WATER (LIQUID)		
	Q	Special Calibration with SCALE 2% FS OIL (VISCOSITY)		
	R	Special Calibration with SCALE 1% FS AIR (GAS)		
S	Special Calibration with SCALE 1% FS WATER (LIQUID)			
VIII. Materials of Construction (Teflon O-ring and Packing Standard)		Fitting Packing O-ring End Connections		
	D	316 SS Teflon Teflon NPT or Flange		
	E	316 SS Neoprene Buna NPT or Flange		
	F	316 SS Viton Viton NPT or Flange		
	G	Brass* Teflon Teflon NPT only		
	H	Brass* Neoprene Buna NPT only		
	J	Brass* Viton Viton NPT only		
	* Not available with CRN			
IX. Connection Type	A	NPT		
	B	150# R.F. flange*		
		* Not available with CRN		
X. Accessories (Select up to 3)	A	None		
	G	Horizontal Valve on Inlet (To Size 10 Only)		
	H	Horizontal Valve on Outlet (To Size 10 Only)		
	M	Flush Panel Mounting Brackets		
	N	Front of Panel Mounting Brackets		
	Q	Clean for Oxygen Service		
	R	NIST Traceable		
	S	Dual Detachable Scales		

Sample Standard Model Code

I	II	II	IV	V	VI	VII	VIII	IX	X
111	0	D	J	A	4	C	D	D	A

Models 1110 and 1140 - Approximate Shipping Weights

METER SIZE	SHIPPING WEIGHT - LB [KG]	
	NPT CONNECTIONS	FLANGED CONNECTIONS
2 TO 6	7 [3.2]	10 [4.5]
8	12 [5.5]	13 [5.9]
9	18 [6.2]	20 [9]
10	25 [11.4]	29 [13.2]
12	26 [11.8]	35 [15.9]
13	40 [18.2]	52 [23.6]

Brooks Service and Support

Brooks is committed to assuring all of our customers receive the ideal flow solution for their application, along with outstanding service and support to back it up. We operate first class repair facilities located around the world to provide rapid response and support. Each location utilizes primary standard calibration equipment to ensure accuracy and reliability for repairs and recalibration and is certified by our local Weights and Measures Authorities and traceable to the relevant International Standards.

Visit www.BrooksInstrument.com to locate the service location nearest to you.

START-UP SERVICE AND IN-SITU CALIBRATION

Brooks Instrument can provide start-up service prior to operation when required. For some process applications, where ISO-9001 Quality Certification is important, it is mandatory to verify and/or (re)calibrate the products periodically. In many cases this service can be provided under in-situ conditions, and the results will be traceable to the relevant international quality standards.

CUSTOMER SEMINARS AND TRAINING

Brooks Instrument can provide customer seminars and dedicated training to engineers, end users, and maintenance persons.

Please contact your nearest sales representative for more details.

HELP DESK

In case you need technical assistance:

Americas ☎ 1 888 554 FLOW
Europe ☎ +31 (0) 318 549 290
Asia ☎ +81 3 (0) 5633 7100

Due to Brooks Instrument's commitment to continuous improvement of our products, all specifications are subject to change without notice.

DS-VA-1110-1140-eng (0414)

TRADEMARKS

Brooks Brooks Instrument, LLC
Carboloy General Electric Co.
Full-View Brooks Instrument, LLC
Neoprene DuPont Performance Elastomers
Teflon E.I. DuPont de Nemours & Co.
Viton DuPont Performance Elastomers



Brooks Instrument
407 West Vine Street
P.O. Box 903
Hatfield, PA 19440-0903 USA
T (215) 362 3700
F (215) 362 3745
E-Mail BrooksAm@BrooksInstrument.com
www.BrooksInstrument.com

Brooks Instrument
Neonstraat 3
6718 WX Ede, Netherlands
T +31 (0) 318 549 300
F +31 (0) 318 549 309
E-Mail BrooksEu@BrooksInstrument.com

Brooks Instrument
1-4-4 Kitasuna Koto-Ku
Tokyo, 136-0073 Japan
T +81 (0) 3 5633 7100
F +81 (0) 3 5633 7101
E-Mail BrooksAs@BrooksInstrument.com