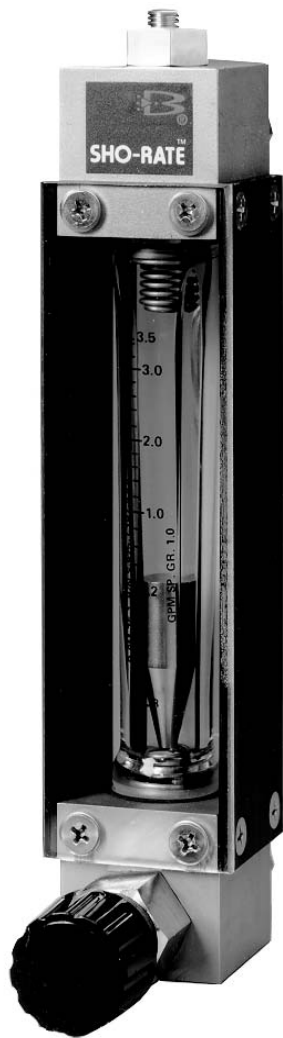


Model 1358 Sho-Rate™ "50", Size 8, Flow Indicator



*Model 1358-V
Sho-Rate "50" Meter
with optional Needle
Control Valve*

Essential Instructions

Read this page before proceeding!

Brooks Instrument designs, manufactures and tests its products to meet many national and international standards. Because these instruments are sophisticated technical products, you must properly install, use and maintain them to ensure they continue to operate within their normal specifications. The following instructions must be adhered to and integrated into your safety program when installing, using and maintaining Brooks Products.

- Read all instructions prior to installing, operating and servicing the product. If this instruction manual is not the correct manual, please see back cover for local sales office contact information. Save this instruction manual for future reference.
- If you do not understand any of the instructions, contact your Brooks Instrument representative for clarification.
- Follow all warnings, cautions and instructions marked on and supplied with the product.
- Inform and educate your personnel in the proper installation, operation and maintenance of the product.
- Install your equipment as specified in the installation instructions of the appropriate instruction manual and per applicable local and national codes. Connect all products to the proper electrical and pressure sources.
- To ensure proper performance, use qualified personnel to install, operate, update, program and maintain the product.
- When replacement parts are required, ensure that qualified people use replacement parts specified by Brooks Instrument. Unauthorized parts and procedures can affect the product's performance and place the safe operation of your process at risk. Look-alike substitutions may result in fire, electrical hazards or improper operation.
- Ensure that all equipment doors are closed and protective covers are in place, except when maintenance is being performed by qualified persons, to prevent electrical shock and personal injury.

Pressure Equipment Directive (PED)

All pressure equipment with an internal pressure greater than 0.5 bar (g) and a size larger than 25mm or 1" (inch) falls under the Pressure Equipment Directive (PED). The Directive is applicable within the European Economic Area (EU plus Norway, Iceland and Liechtenstein). Pressure equipment can be traded freely within this area once the PED has been complied with.

- Section 1 of this manual contains important safety and operating instructions related to the PED directive.
- Meters described in this manual are in compliance with EN directive 97/23/EC module H *Conformity Assessment*.
- All Brooks Instrument Flowmeters fall under fluid group 1.
- Meters larger than 25mm or 1" (inch) are in compliance with category I, II, III of PED.
- Meters of 25mm or 1" (inch) or smaller are Sound Engineering Practice (SEP).



! WARNING

GLASS TUBE EXPLOSION HAZARD

Plastic protective sleeve must remain over glass tube.
Fasten meter windows securely.
Do not operate above pressure and temperature limits.
Avoid pressure and flow surges.
Do not service or repair while pressurized.
Read and understand instruction manual.
Failure to comply could result in serious personal injury or property damage.

! WARNING

GLASS TUBE EXPLOSION HAZARD

Protective sleeve must remain over glass tube.
Fasten meter windows securely.
Failure to comply could result in serious personal injury or property damage.

Installation and Operation Manual

X-VA-1358-eng

Part Number: 541B041AAG

April, 2009

Model 1358

Dear Customer,

We appreciate this opportunity to service your flow measurement and control requirements with a Brooks Instrument device. Every day, flow customers all over the world turn to Brooks Instrument for solutions to their gas and liquid low-flow applications. Brooks provides an array of flow measurement and control products for various industries from biopharmaceuticals, oil and gas, fuel cell research and chemicals, to medical devices, analytical instrumentation, semiconductor manufacturing, and more.

The Brooks product you have just received is of the highest quality available, offering superior performance, reliability and value to the user. It is designed with the ever changing process conditions, accuracy requirements and hostile process environments in mind to provide you with a lifetime of dependable service.

We recommend that you read this manual in its entirety. Should you require any additional information concerning Brooks products and services, please contact your local Brooks Sales and Service Office listed on the back cover of this manual or visit www.BrooksInstrument.com

Yours sincerely,

Brooks Instrument

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Model 1358

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1-1 Description

The Brooks® Sho-Rate “50” Series of low flow indicators provides a cost-effective means of flow indication where the accuracy requirements are not severe. Available options include an integral needle control valve as well as flow controllers piped to the inlet or outlet of the meter.

1-2 Design Features

- Ten-to-one rangeability
- Heavy-wall, precision bore borosilicate glass metering tube
- A wide range of scales on the metering tube
- Tube removable without disconnecting the instrument
- Interchangeable tubes and floats
- Piping connections rotatable through 360° at 90° intervals
- Easily panel mounted

1-3 Specifications

WARNING

Do not operate this instrument in excess of the specifications listed below. Failure to heed this warning can result in serious personal injury and/or damage to the equipment.

WARNING

Glass metering tubes are designed for operation up to the maximum operating pressures and temperatures as specified herein. Due to the inherent brittle characteristics of glass and conditions beyond our control, tube breakage could result even within specified operating conditions. Do not use glass tube meters with fluids that are toxic, or chemically react with glass such as water above 140°F, steam, alkalis, flourine, hydrofluoric acid, or molten metal. Failure to heed warning can result in serious personal injury and/or damage to the equipment.

Pressure Ratings

200 psig (1,378 kPa) at temperatures up to 250°F (121°C). Fluid temperatures below 32°F (0°C) will cause frosting of the glass metering tube. Consult factory for applications below this temperature.

Pressure Equipment Directive (PED) 97/23/EC:

Flowmeters mentioned in this instruction manual are Sound Engineering Practice (SEP).

Model 1358

Scales

Type (Standard): Fused on meter tube

Length: 75 mm, nominal

Graduations:

Standard: direct read on tube in gpm water or scfm air.

Optional: special direct read decal on tube. Consult factory for available ranges. Direct read on metal scale plate mounted beside tube.

Capacities and Pressure Drops

Refer to Table 1-1

Standard accuracy:

±10% of full scale from 100% to 10% of scale reading.

Repeatability

0.5% full scale

Rangeability

Ten to one

Table 1-1 Capacities

Water (gpm)	Maximum Flow Rate		Float
	Pressure Drop Without Valve Inches W.C.	Pressure Drop With Valve Inches W. C.	
0.8	12.6	13.6	8-RV-8
1.5	22.2	27.0	8-RJ-10
2.5	61.0	85.2	8-RJ-23
3.5	88.7	121.0	8-RJ-30
5.0	172	238.0	8-RJ-39
Air (scfm)	Pressure Drop Without Valve Inches W.C.	Pressure Drop With Valve Inches W.C.	Float
3.4	14.34	15.5	8-RV-8
6.0	25.34	30.8	8-RJ-10
12.0	69.34	97.3	8-RJ-23
15.0	101.34	138.3	8-RJ-30

NOTE: All air flows are at 14.7 psia and 70°F.

Connections

Standard: Horizontal female 3/8" NPT threaded adaptors.

Optional: Horizontal female 3/8" NPT threaded adaptors with locknut for front of panel mounting.

Dimensions


See Figure 1-1

Materials of Construction:

Metering Tube

Borosilicate glass

Protective Tube Sleeve
UV stabilized polycarbonate

	! WARNING
GLASS TUBE EXPLOSION HAZARD	
<p>Plastic protective sleeve must remain over glass tube. (Meter sizes 7 -13 only) Fasten meter windows securely. Do not operate above pressure and temperature limits. Avoid pressure and flow surges. Do not service or repair while pressurized. Read and understand instruction manual. Failure to comply could result in serious personal injury or property damage.</p>	

Float
316 stainless steel

End Fittings
Chrome plated brass or 316 stainless steel

Side Plates
Standard: Black anodized aluminum
Optional: 316 stainless steel

Window
Scratch resistant, UV stabilized polycarbonate

! WARNING
GLASS TUBE EXPLOSION HAZARD
<p>Protective sleeve must remain over glass tube. Fasten meter windows securely. Failure to comply could result in serious personal injury or property damage.</p>

Back Cover
Milk white polycarbonate

Float Stops
Stainless steel

Model 1358

Tube Packing

Standard: Neoprene® (Brass meters), Viton-A® fluoroelastomers (316 stainless steel meters).

Optional: Teflon®, EPM

O-rings

Standard: Buna-N (Brass meters), Viton-A

Optional: (316 stainless steel meters): EPM, Kalrez®

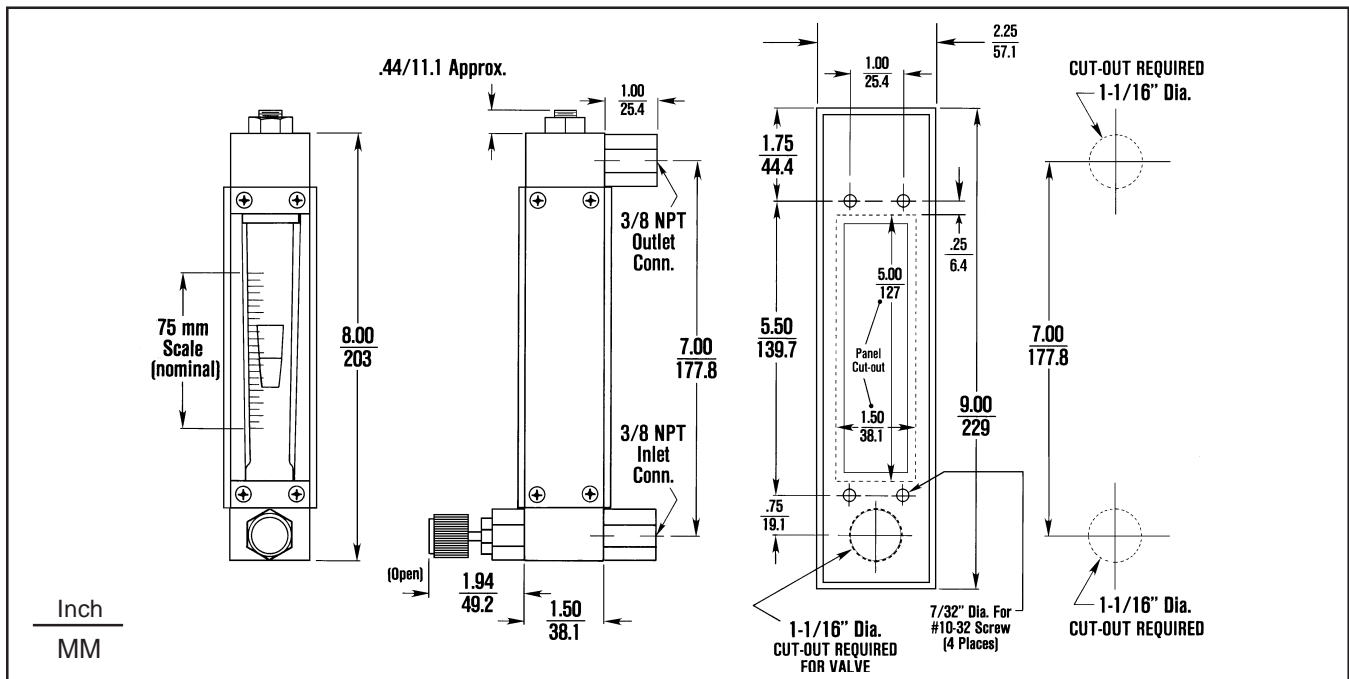


Figure 1-1 Model 1358 Dimensions

1-4 Optional Equipment**Mounting**

Flush panel mounting bezel

Front of panel mounting locknuts

Standard Needle Valve

The standard needle valve can be supplied integrally mounted or externally piped to the inlet or outlet of the instrument.

Flow Controllers

Flow controllers can be supplied integrally mounted or externally piped to the inlet or outlet of the instrument. For the flow controller's complete instruction manual go to our website: BrooksInstrument.com, select Documentation, Precision Valves & Flow Controllers, select FC8800, or FC8900.

2-1 Receipt of Equipment

When the instrument is received, the outside packing case should be checked for damage incurred during shipment. If the packing case is damaged, the local carrier should be notified at once regarding his liability. A report should be submitted to your nearest Product Service Department.

Brooks Instrument

407 W. Vine Street
P.O. Box 903
Hatfield, PA 19440 USA
Toll Free (888) 554 FLOW (3569)
Tel (215) 362 3700
Fax (215) 362 3745
E-mail: BrooksAm@BrooksInstrument.com
www.BrooksInstrument.com

Brooks Instrument

Neonstraat 3
6718 WX Ede, Netherlands
P.O. Box 428
6710 BK Ede, Netherlands
Tel +31 (0) 318 549 300
Fax +31 (0) 318 549 309
E-mail: BrooksEu@BrooksInstrument.com

Brooks Instrument

1-4-4 Kitasuna Koto-Ku
Tokyo, 136-0073 Japan
Tel +81 (0) 3 5633 7100
Fax +81 (0) 3 5633 7101
Email: BrooksAs@BrooksInstrument.com

Remove the envelope containing the packing list. Carefully remove the instrument from the packing case. Make sure spare parts are not discarded with the packing materials. Inspect for damaged or missing parts.

2-2 Recommended Storage Practice

If intermediate or long-term storage of equipment is required, it is recommended that the equipment be stored in accordance with the following:

- a. Within the original shipping container.
- b. Stored in a sheltered area, preferably a warm, dry, heated warehouse.
- c. Ambient temperature of 70° F (21° C) nominal, 109° F (43° C) maximum, 45° F (7° C) minimum.
- d. Relative humidity 45% nominal, 60% maximum, 25% minimum.
Upon removal from storage a visual inspection should be conducted to verify the condition of equipment is "as received".

Model 1358

2-3 Return Shipment

Prior to returning any instrument to the factory, contact your nearest Brooks location for a Return Materials Authorization Number (RMA#). This can be obtained from one of the following locations:

Brooks Instrument

407 W. Vine Street
P.O. Box 903
Hatfield, PA 19440 USA
Toll Free (888) 554 FLOW (3569)
Tel (215) 362 3700
Fax (215) 362 3745
E-mail: BrooksAm@BrooksInstrument.com
www.BrooksInstrument.com

Brooks Instrument

Neonstraat 3
6718 WX Ede, Netherlands
P.O. Box 428
6710 BK Ede, Netherlands
Tel +31 (0) 318 549 300
Fax +31 (0) 318 549 309
E-mail: BrooksEu@BrooksInstrument.com

Brooks Instrument

1-4-4 Kitasuna Koto-Ku
Tokyo, 136-0073 Japan
Tel +81 (0) 3 5633 7100
Fax +81 (0) 3 5633 7101
Email: BrooksAs@BrooksInstrument.com

Any instrument returned to Brooks requires completion of Form RPR003-1, Brooks Instrument Decontamination Statement, as well as, a Material Safety Data Sheet (MSDS) for the fluid(s) used in the instrument. This is required before any Brooks Personnel can begin processing. Copies of the form can be obtained from any Brooks Instrument location listed above.

2-4 Transit Precautions

To safeguard against damage during transit, transport the instrument to the installation site in the same container used for transportation from the factory if circumstances permit.

2-5 Installation**A. Location**

For proper operation the Model 1358 must be mounted within 6 degrees of true vertical. The inlet connection to the flowmeter is in the bottom end fitting. The connections are normally horizontal female NPT. The use of a level is recommended to assure vertical positioning. Piping must be adequately supported to prevent undue strain on the flowmeter.

B. Piping Arrangement

It is recommended that bypass piping be installed around the flowmeter so it may be isolated from the process line for servicing and cleaning. Refer to Figure 2-1 for a typical installation.

⚠ CAUTION

Do not allow the float to fall out of the metering tube. A damaged Float will affect the accuracy of the meter. Be careful not to break the tube by pulling on it at an extreme angle or applying excessive force.

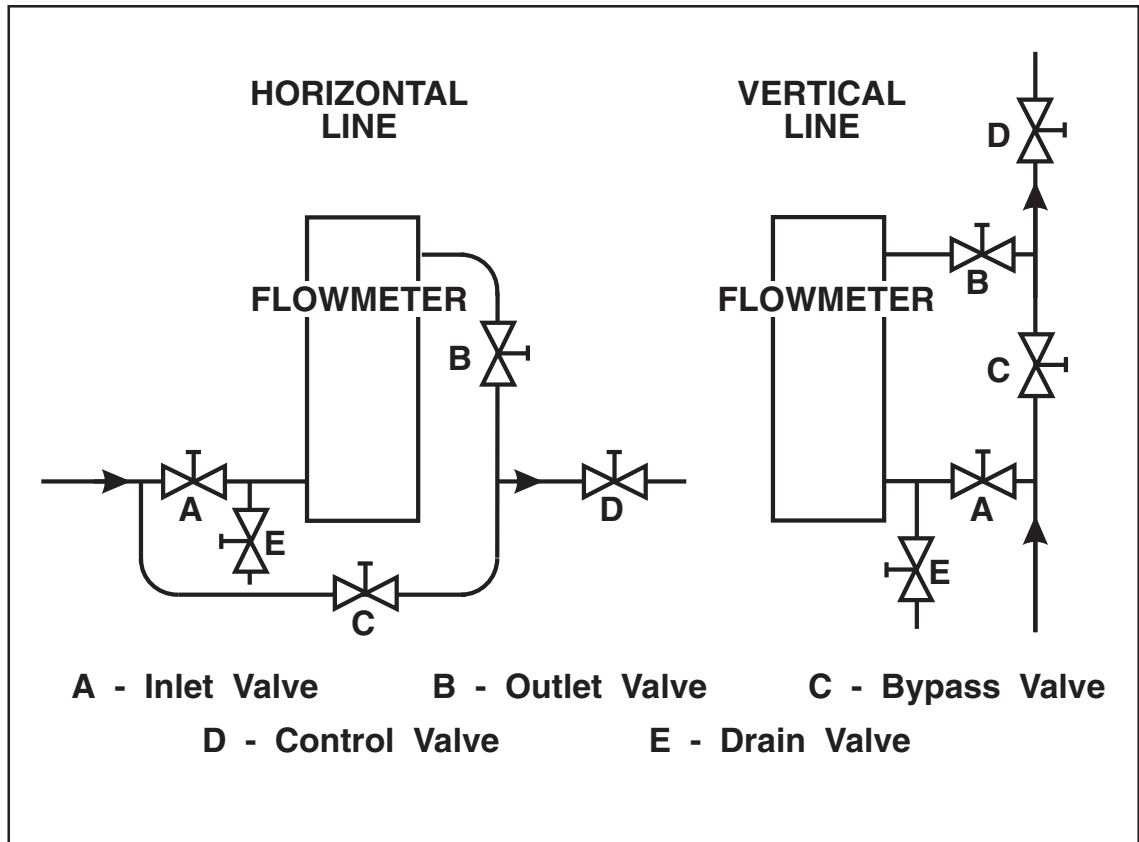


Figure 2-1 Typical Bypass Installation


⚠ WARNING

If the inlet and outlet valves adjacent to the flowmeter are to be closed for any reason, the flowmeter must be completely drained. Failure to do so may result in thermal expansion of the liquid which can cause rupture of the meter and possible personal injury.

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3-1 Operating Instructions

After the flowmeter has been properly installed in the system, it is ready for operation.

	⚠ WARNING
	GLASS TUBE EXPLOSION HAZARD
<p>Plastic protective sleeve must remain over glass tube. (Meter sizes 7 -13 only)</p> <p>Fasten meter windows securely.</p> <p>Do not operate above pressure and temperature limits.</p> <p>Avoid pressure and flow surges.</p> <p>Do not service or repair while pressurized.</p> <p>Read and understand instruction manual.</p> <p>Failure to comply could result in serious personal injury or property damage.</p>	

To initiate flow through a flowmeter using bypass piping, refer to Figure 3-1.

1. Close flowmeter isolation valves (A) and (B).
2. Fully open bypass valve (C) and slightly open control valve (D).
3. Initiate process flow. When flow has stabilized, fully open isolation valve (B), then slowly open isolation valve (A) fully.
4. Close bypass valve (C).
5. Regulate process flow using control valve (D).
6. If meter is left in bypass configuration, open drain valve (E) to prevent tube damage caused by thermal expansion of the process liquid.

⚠ WARNING
If the inlet and outlet valves adjacent to the flowmeter are to be closed for any reason, the flowmeter must be completely drained. Failure to do so may result in thermal expansion of the liquid which can cause rupture of the meter and possible personal injury.

⚠ WARNING
GLASS TUBE EXPLOSION HAZARD
Protective sleeve must remain over glass tube. Fasten meter windows securely. Failure to comply could result in serious personal injury or property damage.

Model 1358

Rate of flow is indicated by reading the increments inscribed on the metering tube or direct etched scale parallel with the metering edge of the float. For the correct reading edge of the float, refer to Figure 3-2.

! CAUTION

A built-in needle control valve may be provided to control the flow through the flowmeter. These control valves are designed for fine control. Excessive tightening may damage the valve seat and limit its effectiveness as a control valve. If tight shut-off is required, it is recommended that a separate shut-off valve be installed in the line immediately before the flowmeter.

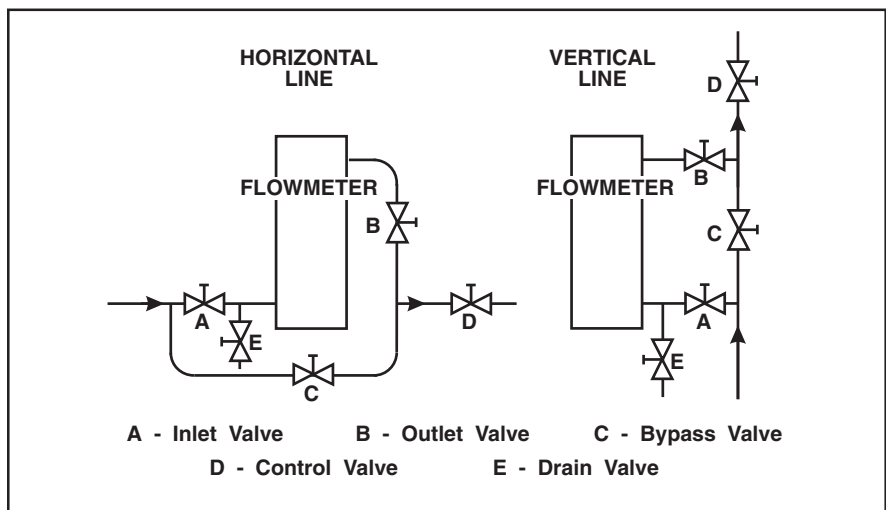


Figure 3-1 Typical Bypass Installation

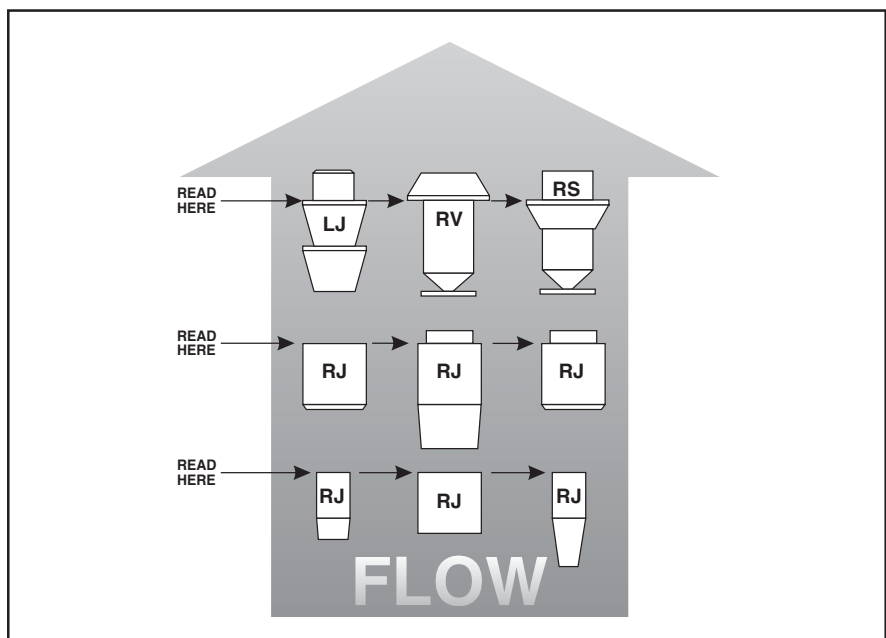



Figure 3-2 Reading Edge of floats

4-1 General

	⚠ WARNING
METER/CONTROLLER SEAL COMPATIBILITY	
<p>Products in this manual may contain metal or elastomeric seals, gaskets, O-rings or valve seats. It is the "user's" responsibility to select materials that are compatible with their process and process conditions. Using materials that are not compatible with the process or process conditions could result in the Meter or Controller leaking process fluid outside the pressure boundary of the device, resulting in personnel injury or death.</p> <p>It is recommended that the user check the Meter or Controller on a regular schedule to ensure that it is leak free as both metal and elastomeric seals, gaskets, O-rings and valve seats may change with age, exposure to process fluid, temperature, and /or pressure.</p>	

Model 1358 flowmeters require little maintenance except routine cleaning. It is necessary to remove the flowmeter from the line for tube and float cleaning. The tube and float may be cleaned with a soft absorbent swab. To disassemble the flowmeter proceed as follows:

- a. Remove the front and rear window shields.
- b. Loosen the seal spindle or jack screw by turning it counterclockwise with a 5/32" hex wrench.
- c. The tube may now be canted out of the meter housing.
- d. Remove the polycarbonate sleeve surrounding the flow tube.
- e. Remove the float and float stops from the tube.

⚠ CAUTION
Do not allow the float to fall out of the metering tube. A damaged float will affect the accuracy of the meter. Be careful not to break the tube by pulling on it at an extreme angle or applying excessive force.

- f. Using a suitable solvent, carefully swab and flush the inside of the metering tube. Clean the float and blow dry all parts thoroughly.
- g. The packing seats may now be removed. It is recommended that the packing be replaced each time the meter is serviced.

Model 1358

- h. With the metering tube out, the seal spindle or jack screw may be rotated clockwise for removal. It should not be necessary to remove the seal spindle unless the O-ring which seals the spindle requires replacement. The O-ring may be used as long as it is not torn or distorted.
- i. The needle control valve assembly may be removed by turning the valve body counterclockwise. The valve seat, stem and packing then may be removed easily from the valve body for cleaning or replacement.

Reassemble the flowmeter as follows:

- a. Use the reverse of Steps a through e of the disassembly procedure to reassemble the meter.
- b. Prior to installing the needle control valve assembly make certain that the valve stem is turned completely counterclockwise (fully open position) to prevent damage to the valve seat.

 WARNING

Pressure test the meter before returning it to service. Hydrostatic pressure testing should be performed by qualified personnel or serious injury and/or damage to the equipment can result.

5-1 General

When ordering parts please specify:
Brooks Serial Number, Model Number, Part Number, Description and
Quantity. Refer to Figures 5-1 and Tables 5-1.

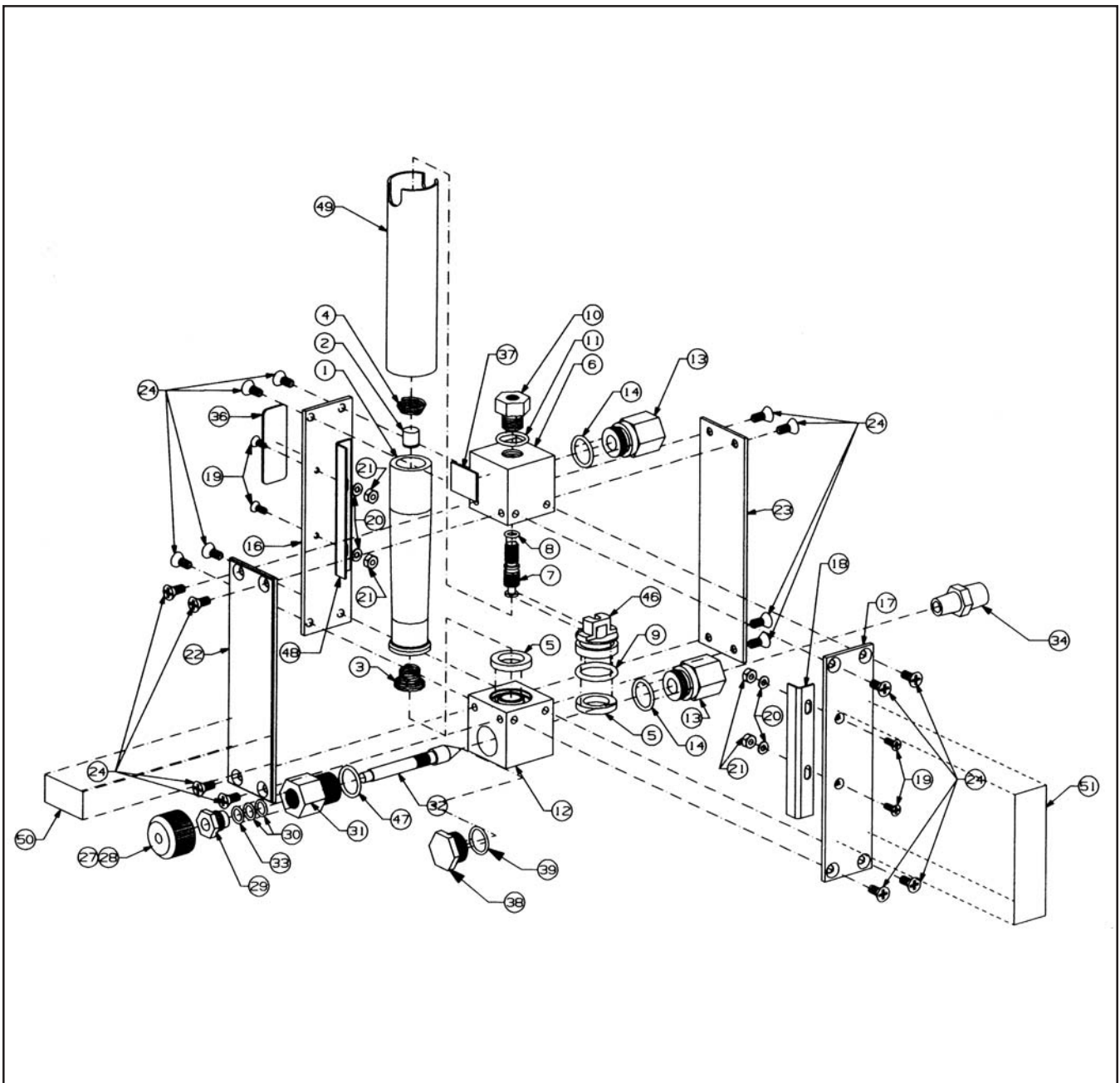


Figure 5-2 Exploded View, Size 8 Model 1358 Brooks Sho-Rate

Model 1358

Table 5-1 Model 1358 Parts List

REF NO	QTY	DESCRIPTION	PART NO
1	1	GLASS METERING TUBE	PER S/N
2	1	316 S.S. FLOAT 8-RV-8 8-RJ-10 8-RJ-23 8-RJ-30 8-RJ-39	S346B148BMA 349D078BMA 349D080BMA 349D077BMA 349D076BMA
3	1	INLET FLOAT STOP SPRING FLOAT STOP 0.8, 3.5 & 5 GPM SPRING FLOAT STOP 1.5 & 2.5 GPM	820B253BMA 820B254BMA
4	1	OUTLET FLOAT STOP SPRING FLOAT STOP 0.8, 3.5 & 5 GPM SPRING FLOAT STOP 1.5 & 2.5 GPM	820B253BMA 820B254BMA
5	2	TUBE SEAL PACKING VITON EPM NEOPRENE TEFLON	589B043QTA 589B043SYA 589B043TDA 589B241QMA
6	1	SEAL END FITTING 316 SS BRASS	325G001BMF 325G001GGL
7	1	SEAL SPINDLE 316 SS BRASS	817A055BMA 817A055GGJ
8	1	SEAL SPINDLE O-RING VITON BUNA-N EPM KALREZ	375B010QTA 375B010SUA 375B010SYA 375B010TTA
9	1	SEAL PLUG O-RING VITON BUNA-N EPM KALREZ	375B211QTA 375B211SUA 375B211SYA 375B211TTA
10	1	JACKSCREW PLUG 316 SS BRASS	618J005BMA 618J005GGJ
11	1	JACKSCREW PLUG O-RING VITON BUNA-N EPM KALREZ	375B905QTA 375B905SUA 375B905SYA 375B905TTA
12	1	VALVE END FITTING W/VALVE: 316 SS W/VALVE: BRASS W/VALVE, FOR BASEPLATE: 316 SS W/VALVE, FOR BASEPLATE: BRASS NO VALVE: 316 SS NO VALVE: BRASS	325H002BMF 325H002GGL 325H064BMF 325H064GGL 325J006BMF 325J006GGL

Table 5-1 Model 1358 Parts List (Continued)

13	2	ADAPTER 3/8" NPT ADAPTER, NO LOCKNUT: 316 SS 3/8" NPT ADAPTER, NO LOCKNUT: BRASS 3/8" NPT ADAPTER, FOR LOCKNUT: 316 SS 3/8" NPT ADAPTER, FOR LOCKNUT: BRASS 1/2" NPT ADAPTER, NO LOCKNUT: 316 SS 1/2" NPT ADAPTER, NO LOCKNUT: BRASS	014C023BMA 014C023GGJ 014C034BMA 014C034GGJ 014C028BME 014C028GGJ
14	2	ADAPTER O-RING VITON BUNA-N EPM KALREZ	375B908QTA 375B908SUA 375B908SYA 375B908TTA
15	2	LOCKNUT FOR FRONT OF PANEL MOUNTING	573B018AC0
16	1	LEFT SIDE PLATE SS SIDE PLATE ALUMINUM SIDE PLATE SS SIDE PLATE FOR LEFT DET. SCALE ALUMINUM SIDE PLATE FOR LEFT DET. SCALE	614A008BMF 614A008FBJ 614A175BMF 614A175FBJ
17	1	RIGHT SIDE PLATE SS SIDE PLATE ALUMINUM SIDE PLATE SS SIDE PLATE FOR RIGHT DET. SCALE ALUMINUM SIDE PLATE FOR RIGHT DET. SCALE	614A008BMF 614A008FBJ 614A174BMF 614A174FBJ
18	1	RIGHT DETACHABLE SCALE	PER S/N
19	2	SCALE SCREW	753L267CEA
20	2	SCALE WASHER	962A006AWA
21	2	SCALE NUT	573D012AWA
22	1	FRONT WINDOW	794A012NZ%
23	1	BACK WINDOW	615A012PBA
24	16	SCREWS-SIDE PLATES & WINDOWS	753L424AWA
25	1	PLASTIC BEZEL BEZEL, W/VALVE BEZEL, NO VALVE	075B013NZD 075B025NZD
26	4	BEZEL MOUNTING SCREW	753A429AWA
27	1	VALVE KNOB	498C080NCQ
28	1	VALVE KNOB COVER	219Z237NCQ
29	1	VALVE PACKING NUT	573R012GGJ
30	2	VALVE O-RING VITON BUNA-N EPM KALREZ	375B011QTA 375B011SUA 375B011SYA 375B011TTA

Model 1358

Table 5-1 Model 1358 Parts List (Continued)

31	1	VALVE BONNET 316 SS BRASS	950Z067BMA 950Z067GGJ
32	1	VALVE STEM	949Z198BMA
33	1	VALVE BACKING O-RING	375B011QMA
34	1	REDUCING BUSHING 3/8" NPT TO 1/4" NPT, SS 3/8" NPT TO 1/4" NPT, BRASS 3/8" NPT TO 3/4" NPT, SS	014B231BMA 014B231GGA 014B234BMA
36	1	WARNING LABEL	502Z969MYA
37	1	LOGO LABEL	502C329AAA
38	1	VALVE PLUG	618Q005BMA
39	1	VALVE PLUG O-RING VITON BUNA-N EPM KALREZ	375B908QTA 375B908SUA 375B908SYA 375B908TTA
40	1	TRIANGULAR BASE PLATE	594B064NQA
41	1	SPIRIT LEVEL FOR BASEPLATE	515B011AAA
42	3	THUMB SCREW FOR BASEPLATE	753H404GGL
43	1	STANDOFF FOR BASEPLATE	830Z001GGH
44	1	SCREW FOR BASEPLATE	751E510AWA
45	2	SNAP PLUG FOR BASEPLATE	620Z172AAA
46	1	SEAL PLUG 316 SS BRASS	618Z021BMA 618Z021GGJ
47	1	VALVE BONNET O-RING VITON BUNA-N EPM KALREZ	375B908QTA 375B908SUA 375B908SYA 375B908TTA
48	1	LEFT DETACHABLE SCALE	PER S/N
49	1	PROTECTIVE PLASTIC SLEEVE	794Z133NZA
REF NO	QTY.	LABEL	
50	1	WARNING LABEL	502Y449MYA
51	1	WARNING LABEL	502Y445MYA

Installation and Operation Manual

X-VA-1358-eng

Part Number: 541B041AAG

April, 2009

Model 1358

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Model 1358

LIMITED WARRANTY

Seller warrants that the Goods manufactured by Seller will be free from defects in materials or workmanship under normal use and service and that the Software will execute the programming instructions provided by Seller until the expiration of the earlier of twelve (12) months from the date of initial installation or eighteen (18) months from the date of shipment by Seller. Products purchased by Seller from a third party for resale to Buyer ("Resale Products") shall carry only the warranty extended by the original manufacturer.

All replacements or repairs necessitated by inadequate preventive maintenance, or by normal wear and usage, or by fault of Buyer, or by unsuitable power sources or by attack or deterioration under unsuitable environmental conditions, or by abuse, accident, alteration, misuse, improper installation, modification, repair, storage or handling, or any other cause not the fault of Seller are not covered by this limited warranty, and shall be at Buyer's expense.

Goods repaired and parts replaced during the warranty period shall be in warranty for the remainder of the original warranty period or ninety (90) days, whichever is longer. This limited warranty is the only warranty made by Seller and can be amended only in a writing signed by an authorized representative of Seller.

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

TRADEMARKS

- Brooks Brooks Instrument, LLC
- Kalrez DuPont Performance Elastomers
- Neoprene E.I. DuPont de Nemours & Co.
- Sho-Rate Brooks Instrument, LLC
- Teflon E.I. DuPont de Nemours & Co.
- Viton-A DuPont Performance Elastomers



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