Installation and Operation Manual
X-VA-1305-1306-eng-eu
PN 541-C-029-AAG
April, 2008

Models GT 1305 & 1306

Brooks® O-ring Seal Flowmeters

Model 1306

BROOKS® INSTRUMENT

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 Model 1306

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 Model 1305

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.

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

Section 1: Introduction

1-1 Description

The GT 1305 and GT 1306 flowmeters are low cost instruments intended for general metering installations where the operating pressure is within the limitations imposed by the use of borosilicate glass metering tubes. The instruments can be supplied with brass or 316SS female threaded end fittings.

1-2 Specifications

Performance

Accuracy classification	**GT 1305** • Standard Class 6 acc VDE/VDI 3513 • Optional Class 4 acc VDE/VDI 3513 **GT 1306** • Standard Class 2.5 acc VDE/VDI 3513 • Optional Class 1.6 acc VDE/VDI 3513
Repeatability	±0.5 %
Scale length	**GT 1305** 75 mm **GT 1306** 127 mm

Materials of construction

End fittings	Brass or 316 SS, fitted in aluminium collar
Metering tubes	Borosilicate glass
Floats	**#7-1306** Glass, 316 SS or Monel **#8-1305** PPL, Ertacital, Glass, or 316 SS **#10-1305** 316 SS **#8/10-1306** 316 SS
O-ring seals	Viton, Buna or Kalrez
Side plates	Aluminum
Scale type	• Standard Millimeter or percent of maximum flow etched on metering tube • Optional Direct reading engraved on a detachable aluminum plate

Ratings

Meter size	Max. pressure at 90°C(bar)		Max. size temperature °C	Pressure reduction above 90 °C bar/°C
	GT1305	GT1306		
7	-	24	120	0.093
8	13.8	20.7	120	0.093
10	8.9	6.9	120	0.056

WARNING:Do not operate this instrument in excess of the specifications listed above. Failure to heed warning may result in serious personal injury or damage to equipment.

1-3 Capacity Tables

Table 1 Flow ranges for GT 1305

SIZE	TUBE TYPE	FLOAT	MODEL CODE	WATER			V.I.C.[2])	AIR		
				l/h		ΔP(kPa)	cSt	m3n/h		ΔP (kPa)
				min.	max.			min.	max.	at max
8	R-8M-75-1	PPL	C7	-	-	-	-	0.41	4.1	0.32
		Ertacital	C8	-	-	-	-	0.52	5.2	0.50
		Glass	C1	19	190	0.80	1	0.75	7.5	0.90
		316 SS	C3	42	420	2.60	1	1.36	13.6	2.90
8	R-8M-75-1	8-RV-2	CA	20	110	0.35	1.2	0.6	3.4	0.38
		8-RV-3	CB	30	160	0.53	3	0.8	5.0	0.61
		8-RV-8	CC	40	250	1.28	4	1.2	7.5	1.36
		8-RS-8	CD	50	320	1.82	2	1.4	9.7	1.98
		8-RV-14	CE	100	320	2.05	9	2.6	9.7	2.30
		8-RS-14	CF	110	390	3.00	3	3.4	12.0	3.27
		8-HF-23*	CG	160	680	7.70	2	5.0	21.0	8.29
10	R-10M-75-3	10-RV-15	FA	100	660	4.40	12	3.0	23.0	0.48
		10-RV-30	FB	140	960	9.30	13	4.0	30.0	1.04
		10-RV-64	FC	400	1490	2.30	24	14.0	46.0	2.50
		10-RS-64	FD	600	1900	3.05	5	18.0	58.0	3.15
		10-HF-133*	FE	1400	3580	8.36	8	40.0	108.0	8.66

Table 2 Flow Ranges For GT 1306

SIZE	TUBE TYPE	FLOAT	MODEL CODE	WATER		V.I.C.[2])	AIR	
				l/h	ΔP(kPa)	cSt	m3n/h	ΔP (kPa)
7	R-7M-127-1F	Glass	A1	31	0.25	1	1.20	0.25
		316 SS	A3	73	0.75	1	2.30	0.75
		Monel	A6	74	0.75	1	2.40	0.75
8	R-8M-127-4F	8-RV-2	DA	110	0.50	1.2	3.3	0.50
		8-RV-3	DB	160	0.50	3	4.8	0.75
		8-RV-8	DC	225	1.25	4	6.9	1.50
		8-RS-8	DD	300	2.00	2	9.0	2.00
		8-RV-14	DE	310	2.00	7	9.1	2.50
		8-RS-14	DF	380	3.00	3	11.0	3.25
		8-RV-31*	DG	430	6.00	7	12.0	7.00
		8-RS-31*	DH	480	8.25	3	15.5	9.25
10	R-10M-127-3F	10-RV-15	GA	615	0.50	12	18.5	0.50
		10-RV-30	GB	845	1.00	13	25.5	1.00
		10-RV-64	GC	1385	2.25	20	42.0	2.50
		10-RS-64	GD	1725	3.00	5	52.5	3.25
		10-RV-138*	GE	1785	5.75	23	52.5	6.50
		10-RS-138*	GF	2205	7.25	5	66.0	8.25

** These floats are not recommended for gas service unless downstream operating pressure exceeds 2 bar gauge.*
1 The capacities stated are based on 316 SS floats unless otherwise indicated.
2 Viscosity Immunity Ceiling.
3 Air flows are given at 1 bar abs. and 0°C when the meter is operated at 20°C and 1 bar abs.

1-4 Optional Equipment

Screwed-in needle valves
Needle Valves in brass and 316 SS can be mounted to the instrument in inlet or outlet fitting.
We strongly advise not to use solenoid-valves as these can cause pressure shocks and damage to glass tubes.

Screwed-in flow controllers
Brooks self-contained flow controllers are constant differential regulators with built-in flow control needle valve. The internal diaphragm-actuated control valve is positioned by the incoming fluid pressure on one side of the diaphragm, and outlet pressure + spring action on the other side. Variations in the supply and/or discharge pressure disturb the balance of forces on the diaphragm, causing the control valve to close or to open, thus maintaining a fixed differential across the manual flow regulating valve. The series 8800 controllers are designed for all liquid and gas flows with constant downstream pressure. Series 8900 controllers are designed for all liquids and gas flows with constant upstream pressure.

Section 2: Installation

2-1 General

This section contains the procedures for the receipt and installation of the instrument. See Section 1 for dimensional and connection requirements. Do not attempt to start the system until the instrument has been permanently installed. It is important that the start-up procedures be followed in the exact sequence presented.

2-2 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 31-318-549-300
Fax 31-318-549-309
E-mail: BrooksEu@BrooksInstrument.com

Brooks Instrument
1-4-4 Kitasuna Koto-Ku
Tokyo, 136-0073 Japan
Tel 011-81-3-5633-7100
Fax 011-81-3-5633-7101
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.

2-3 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 conditions:

a. Within the original shipping container.
b. Stored in a sheltered area, preferably a warm, dry, heated warehouse.
c. Ambient temperature 21°C (70°F) nominal, 32°C (90°F) maximum, 45°F (7°C) minimum.
d. Relative humidity 45% nominal, 60% maximum, 25% minimum.

2-4 Return Shipment

Prior to returning any instrument to the factory visit the Brooks website www.BrooksInstrument.com for a Return Materials Authorization Number (RMA#), or contact 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 31-318-549-300
Fax 31-318-549-309
E-mail: BrooksEu@BrooksInstrument.com

Brooks Instrument
1-4-4 Kitasuna Koto-Ku
Tokyo, 136-0073 Japan
Tel 011-81-3-5633-7100
Fax 011-81-3-5633-7101
Email: BrooksAs@BrooksInstrument.com

Instrument must have been purged in accordance with the following:

⚠ Warning

Before returning the device purge thoroughly with a dry inert gas such as Nitrogen before disconnecting gas connections. Failure to correctly purge the instrument could result in fire, explosion or death. Corrosion or contamination may occur upon exposure to air.

All flow instruments returned to Brooks requires completion of Form RPR003-1, Brooks Instrument Decontamination Statement, along with a Material Safety Data Sheet (MSDS) for the fluid(s) used in the instrument. Failure to provide this information will delay processing by Brooks personnel. Copies of these forms can be downloaded from the Brooks website www.BrooksInstrument.com or are available from any Brooks Instrument location listed above.

2-5 Transit Precautions

To safeguard the instrument against transportation damage, it is recommended to keep the instrument in its factory container until ready for installation.

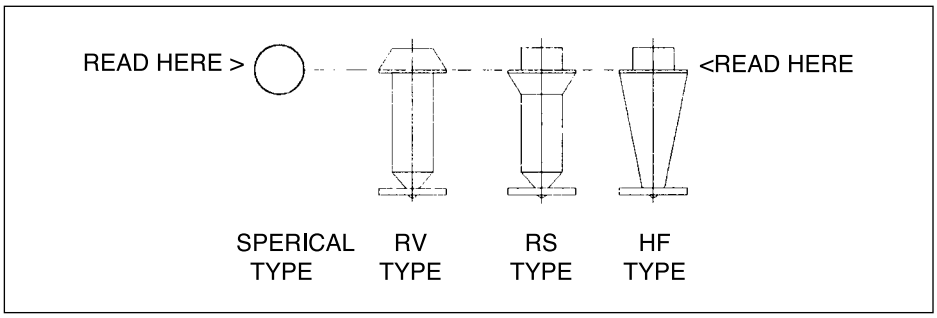
2-6 Installation

The model GT 1300 can be installed as follows:

a Carefully remove any material which could have been used to protect the instrument for damage during shipping.

b The indicator must be installed with the inlet at the bottom and the outlet at the top, and must be installed as near vertical as possible to maintain indicator accuracy.

c It is strongly recommended to install a by-pass piping arrangement around the meter. By-pass piping permits the meter to be isolated from the low line for servicing or cleaning.



Drawing vertical/horizontal line with by-pass piping

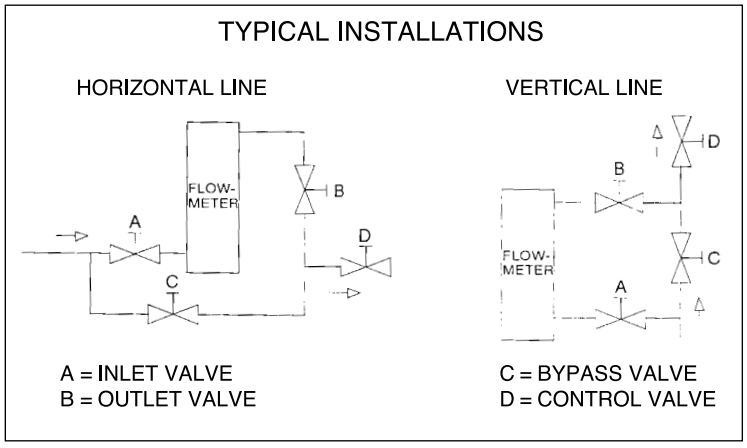
Section3: Operation

3-1 Start-Up

After the flowmeter has been properly installed in the process, it is ready for operation. When initiating flow, slowly open the valve to avoid a flow surge. By-pass is a help in bringing the flow on smoothly. Avoid starting a pump to supply the flowmeter without the use of a valve upstream of the flowmeter.

3-2 Reading the flow rate

Rate of flow is indicated by reading the increments, etched on the scale, mounted adjacent to the metering edge of the float.

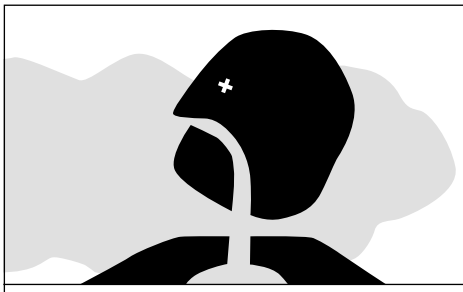


Type of floats with reading edges

Section 4: Maintenance

4-1 General

There is no routine maintenance to be performed on the GT 1300 glass tube flowmeter. If meter operation is affected by defective parts, refer to Section 5, Parts Lists for available replacement parts. No instructions are required for the assembly or disassembly of either model since the procedures are self-evident.



⚠ Warning

METER / CONTROLLER SEAL COMPTABILITY

Products in this manual may obtain metal or elastomeric seals, gaskets, O-rings or valve seats. It is the "user's" responsability 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.

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.

Model 1306 flowmeters require little maintenance except routine cleaning. It is neccessarry to remove the flowmeter from the line for tube and float cleasing. 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. Remove four (4) screwa connecting the bottom end fitting to the side plate.
c. Carefully pull the end fitting and tube away from the side plates and top fitting. DO NOT cock the tube when removing it from the top fitting.
d. Remove the polycarbonate sleeve surrounding the flow tube.
e. Remove the float 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 apllying 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.

⚠ Notice

Anytime the meter is removed for service, new O-rings should be installed in both the inlet and outlet end fitting.

Reassemble the flowmeter as follows:

a. Carefully install the float in the tube with the metering edge up.
b. Carefully hold the tube (with float installed), sleeve, and end fitting, and push the tube into the top fitting.
c. Tighten the four (4) side plate screws in place.
d. Install the front and rear windows.

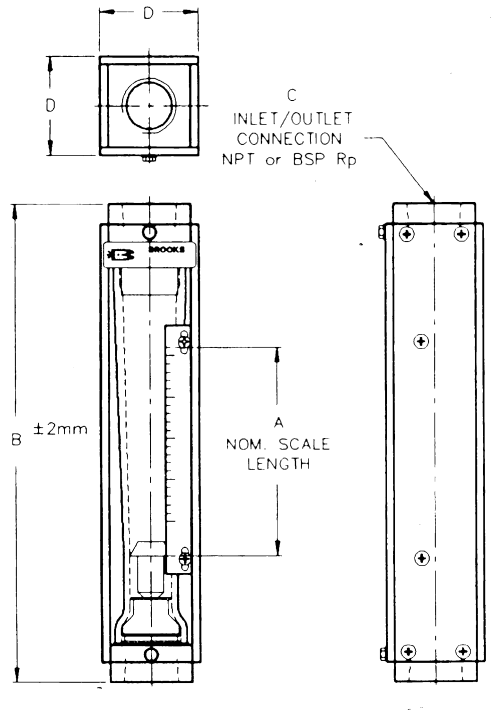
⚠ Warning

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.

4-2 Service information

Should the equipment require repair, contact the nearest sales/service office. It is important that servicing is performed only by trained and qualified service personnel. If the equipment is not properly serviced, serious personal injury and/or damage to the equipment could result.

Section 5: Dimensional drawings



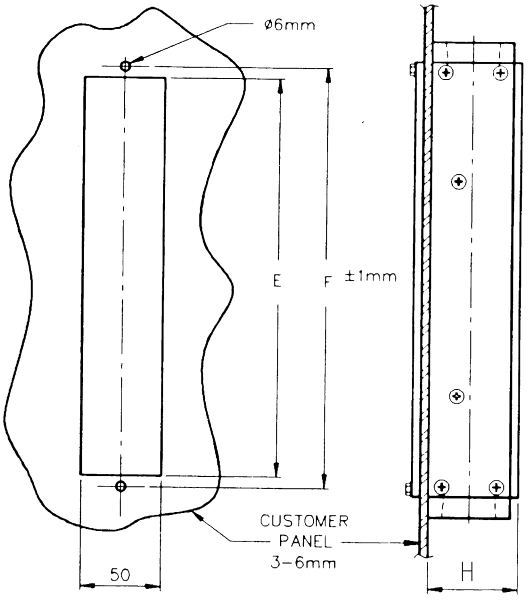
MODEL GT 1305

METER SIZE	A	B	C	D	E	F	G
SIZE 8	75	197	1/2"	60	150	162	160
SIZE 10	75	197	1"	60	150	162	160

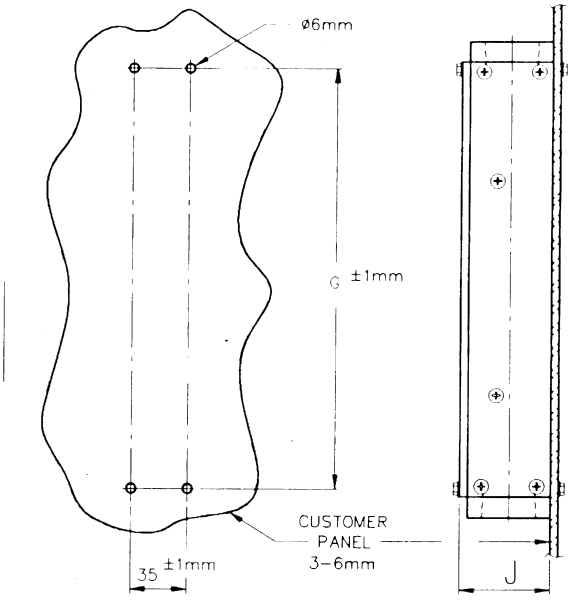
MODEL GT 1306

METER SIZE	A	B	C	D	E	F	G	H	J
SIZE 7	127	300	1/2"	60	250	264	261	55	55
SIZE 8	127	300	1/2"	60	250	264	261	55	55
SIZE 10	127	300	1"	66	250	264	261	58	57

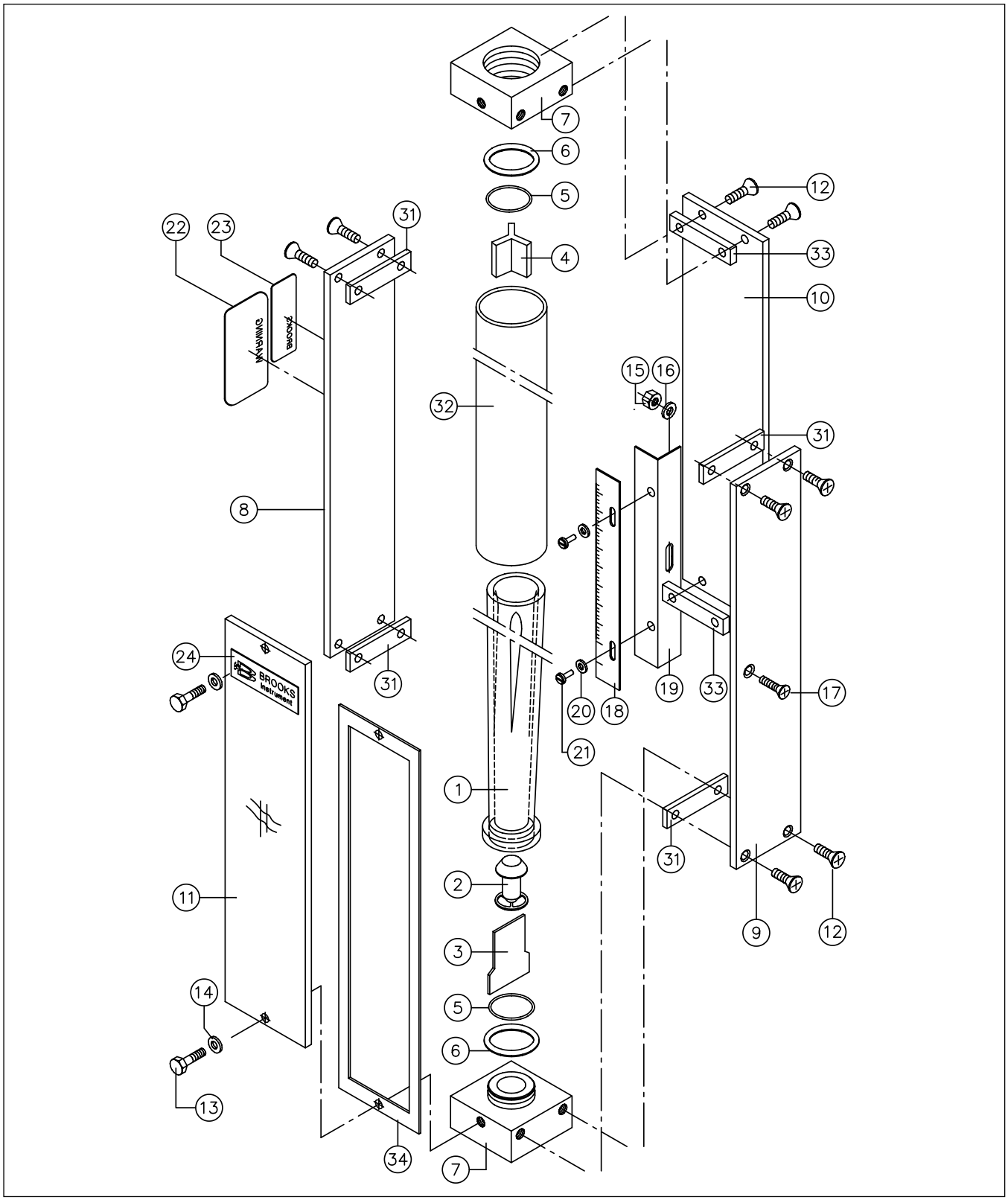
PANEL CUT OUT FOR BACK PANEL MOUNTING



PANEL CUT OUT FOR FRONT PANEL MOUNTING



Section 6: Exploded view and parts lists



Parts list GT 1300

Pos.	Qty	Part number	Description
1*	1	925-H-062-WAA	TUBE R-7M-127-1F PLAIN
1*	1	925-H-094-WAA	TUBE R-7M-127-1F/MM DECAL
1*	1	925-H-095-WAA	TUBE R-7M-127-1F/ PERCENT DECAL
1*	1	925-J-008-WAA	TUBE R-8M-75-1 PLAIN
1*	1	925-J-115-WAA	TUBE R-8M-127-4F PLAIN
1*	1	925-J-349-WAA	TUBE R-8M-127-4F/PERCENT DECAL
1*	1	925-J-407-WAA	TUBE R-8M-127-4F/MM DECAL
1*	1	925-J-408-WAA	TUBE R-8M-75-1/MM DECAL
1*	1	925-J-409-WAA	TUBE R-8M-75-1/PERCENT DECAL
1*	1	925-L-006-WAA	TUBE R-10M-75-3 PLAIN
1*	1	925-L-067-WAA	TUBE R-10M-127-3F PLAIN
1*	1	925-L-142-WAA	TUBE R-10M-127-3F/PERCENT DECAL
1*	1	925-L-143-WAA	TUBE R-10M-127-3F/MM DECAL
1*	1	925-L-145-WAA	TUBE R-10M-75-3/MM DECAL
1*	1	925-L-146-WAA	TUBE R-10M-75-3/PERCENT DECAL
2*	1	345-H-001-BMA	316 SS BALL FLOAT (3/8”)
2*	1	345-H-002-WYA	GLASS BALL FLOAT (3/8”)
2*	1	345-H-016-DBA	MONEL BALL FLOAT (3/8”)
2*	1	345-Z-030-WYA	GLASS BALL FLOAT (1/2”)
2*	1	345-Z-031-BMA	316 SS BALL FLOAT (1/2”)
2*	1	345-Z-035-PAJ	PPL BALL FLOAT (1/2”)
2*	1	345-Z-036-PGG	ERTACITAL BALL FLOAT (1/2”)
2*	1	346-B-001-BNA	8-RV-3, 316 SS FLOAT
2*	1	346-B-034-BMA	8-HF-23, 316 SS FLOAT
2*	1	346-B-049-BNA	8-RV-31, 316 SS FLOAT
2*	1	346-B-050-BNA	8-RS-31, 316 SS FLOAT
2*	1	346-B-148-BNA	8-RV-8, 316 SS FLOAT
2*	1	346-B-149-BNA	8-RV-14, 316 SS FLOAT
2*	1	346-B-154-BNA	8-RS-8, 316 SS FLOAT
2*	1	346-B-155-BNA	8-RS-14, 316 SS FLOAT
2*	1	346-B-205-BNA	8-RV-2, 316 SS FLOAT
2*	1	346-D-025-BMA	10-RV-15, 316 SS FLOAT
2*	1	346-D-027-BMA	10-RV-30, 316 SS FLOAT
2*	1	346-D-031-BMA	10-HF-133, 316 SS FLOAT
2*	1	346-D-145-BMA	10-RV-64, 316 SS FLOAT
2*	1	346-D-146-BMA	10-RV-138, 316 SS FLOAT
2*	1	346-D-149-BMA	10-RS-64, 316 SS FLOAT
2*	1	346-D-150-BMA	10-RS-138, 316 SS FLOAT
3*	1	846-Z-086-QMA	INLET FLOAT STOP # 10
3*	1	846-Z-087-QMA	INLET FLOAT STOP # 7
3*	1	846-Z-088-QMA	INLET FLOAT STOP # 8
4*	1	846-Z-091-QMA	OUTLET FLOAT STOP #7
4*	1	846-Z-092-QMA	OUTLET FLOAT STOP #8
4*	1	846-Z-093-QMA	OUTLET FLOAT STOP #10

Pos.	Qty	Part number	Description
5*	2	375-B-012-QTA	VITON O-RING # 7
5*	2	375-B-012-SUA	BUNA O-RING # 7
5*	2	375-B-012-TTA	KALREZ O-RING # 7
5*	2	375-B-113-QTA	VITON O-RING # 8
5*	2	375-B-113-SUA	BUNA O-RING # 8
5*	2	375-B-113-TTA	KALREZ O-RING # 8
5*	2	375-B-217-QTA	VITON O-RING # 10
5*	2	375-B-217-SUA	BUNA O-RING # 10
5*	2	375-B-217-TTA	KALREZ O-RING # 10
6*	2	375-C-085-VAA	TUBE SEAT GASKET # 7
6*	2	375-C-537-VAA	TUBE SEAT GASKET # 8
6*	2	375-C-538-VAA	TUBE SEAT GASKET # 10
32	1	794-E-008-NZA	Protective Sleeve # 7-8 1306
32	1	794-K-009-NZA	Protective Sleeve #10 1306

Section 7: Model listing/ordering information

BASE MODEL NO.	DESCRIPTION
1305/A	O-ring seal flowmeter, scale length 75 mm
1306/B	O-ring seal flowmeter, scale length 127 mm

CODE TUBE TYPE
* To be selected from the flow range table

CODE FLOAT TYPE
* To be selected from the flow range table

CODE	FITTING MATERIAL
1	Brass
2	316 SS

CODE	O-RING MATERIAL
1	Viton
2	Buna
3	Kalrez

CODE	CONNECTION TYPE
1	NPT
2	BSP

CODE	SCALE TYPE
A	mm Decal + cal. curve, Class 6 (GT 1305 only)
B	mm Decal + cal. curve, Class 4 (GT 1305 only)
C	mm Decal + cal. curve, Class 2.5 (GT 1306 only)
D	mm Decal + cal. curve, Class 1.6 (GT 1306 only)
E	% Decal + factor, Class 6 (GT 1305 only)
F	% Scale + factor, Class 4 (GT 1305 only)
G	% Decal + factor, Class 2.5 (GT 1306 only)
H	% Scale + factor, Class 1.6 (GT 1306 only)
J	DR scale, Class 6 (GT 1305 only)
K	DR scale, Class 4 (GT 1305 only)
L	DR scale, Class 2.5 (GT 1306 only)
M	DR scale, Class 1.6 (GT 1306 only)

CODE	PANEL MOUNTING
1	Long screws for front panel mounting
2	Long screws for back panel mounting

CODE	VALVE
A	½” Brass needle valve on inlet
B	½” 316 SS needle valve on inlet
C	1” Brass needle valve on inlet
D	1” 316 SS needle valve on inlet
E	½” Brass needle valve on outlet
F	½” 316 SS needle valve on outlet
G	1” Brass needle valve on outlet
H	1” 316 SS needle valve on outlet

1305/A	*	*	1	1	1	A	1	A	← Typical model number

How to order:

Please describe:

1 Model Number
2 Quantity required
3 Minimum, normal and maximum flow rate
4 Process fluid, density and viscosity at operating conditions
5 Minimum, normal and maximum operating temperature and pressure
6 Scale inscription
7 Accessories required, i.e. flow controller

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Models GT 1305 & 1306

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. The primary standard calibration equipment to calibrate our flow products 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) 318 549 290	Within Netherlands ☎ 0318 549 290
Asia	☎ +011-81-3-5633-7100	

CE ISO 9001 QUALITY SYSTEM

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.
BUNA ..... DuPont Dow Elastomers
Kalrez ..... DuPont Dow Elastomers
Teflon ..... E.I. DuPont de Nemours & Co.
Viton ..... DuPont Performance Elastomers

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