

# Series GT 1000

## Glass Tube Flowmeter

Product Data  
1000-0500G-B

### DESIGN FEATURES

- Brass or 316 L SS (1.4404) end fittings
- Flanged or threaded connections
- Horizontal or vertical connections
- Horizontal end fittings 360 degrees rotatable
- Ten-to-one rangeability
- Painted cast aluminium frame with outstanding environmental resistance
- O-Ring seal design allows tube removal without removal from the process piping
- Panel mounting options available

### DESCRIPTION

The GT 1000 Glass Tube flowmeter combines ruggedness and simplicity in design to provide an outstanding industrial meter. End fitting materials of brass or 316 L SS (1.4404) with vertical or horizontal flanged or threaded connections, allow for versatility of process compatibility and installation.

### SPECIFICATIONS

#### Performance

- Accuracy classification*
- Standard: Class 2.5 acc VDE/VDI 3513
  - Optional: Class 1.6 acc VDE/VDI 3513

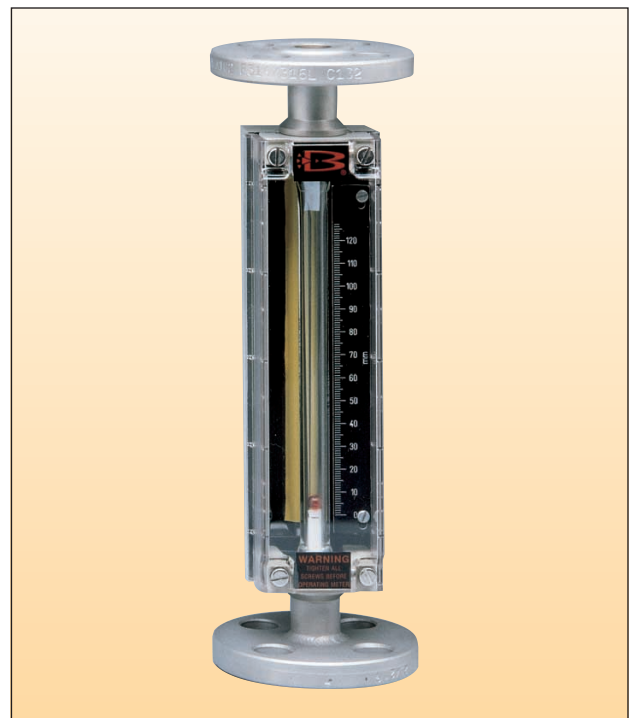
- Repeatability*
- $\leq \pm 0.5$  % of rate

#### Ratings

- Operating temperature limits*
- $-18$  °C up to  $121$  °C (above  $93$  °C with pressure reduction)

#### Construction data

- Housing*
- Standard: Cast aluminium. Cast components are degreased and acrylic coated.
  - Optional: Epoxy coated cast aluminium housing.
- Window*
- Polycarbonate. An ultraviolet inhibitor is added to the base resin to reduce decay due to exposure to unfiltered sunlight.
- End fittings*
- Brass or 316 L SS (1.4404)
- Tube material*
- Borosilicate glass
- Float material*
- Meter size 2 - 6 : Pyrex, Sapphire, 316 SS, Carboly or Tantalum ball float.  
Meter size 7: Pyrex, 316 SS or monel ball float.  
Meter size 8 - 13: 316 L SS.  
For other float materials consult factory.



Model GT 1024

### Maximum Operating Pressure

| TUBE<br>SIZE | MAXIMUM OPERATING PRESSURE (BAR)<br>(UP TO 93°C) |              |                          | PRESSURE<br>REDUCTION<br>FROM 93-121°C<br>BAR / °C |
|--------------|--------------------------------------------------|--------------|--------------------------|----------------------------------------------------|
|              | THREADED                                         | FLANGED      |                          |                                                    |
|              |                                                  | ANSI 150 LBS | ANSI 300 LBS / DIN PN 40 |                                                    |
| 2            | 38                                               | 19           | 38                       | 0,095                                              |
| 6            | 31                                               | 19           | 31                       | 0,095                                              |
| 7            | 24                                               | 19           | 24                       | 0,095                                              |
| 8            | 20,7                                             | 19           | 20,7                     | 0,095                                              |
| 9            | 16,5                                             | 16,5         | 16,5                     | 0,075                                              |
| 10           | 13,8                                             | 13,8         | 13,8                     | 0,055                                              |
| 12           | 9                                                | 9            | 9                        | 0,042                                              |
| 13           | 6,9                                              | 6,9          | 6,9                      | 0,032                                              |

#### O-Ring material

- Standard: Viton
- Optional: Buna, Kalrez or EPDM

#### Scale length

meter size 2 - 6: 127 mm  
meter size 7 - 10: 250 mm  
meter size 12 - 13: 200 mm

#### Scale inscription

Milimetre, percent of max. flow or direct reading units on a detachable aluminium plate.

#### Connections

NPT or BSP female, 150 lbs ANSI B16.5 or PN 40 DIN 2527/2635, horizontal or vertical. For other connection types consult factory.



**SERV' INSTRUMENTATION**

## Brooks Instrument

## CAPACITY TABLE

Maximum flow rates for air and water with standard floats

| SIZE | TUBE         | FLOAT                    | MODEL<br>CODE | WATER |         | V.I.C. <sup>2)</sup><br>cSt | AIR    |         |
|------|--------------|--------------------------|---------------|-------|---------|-----------------------------|--------|---------|
|      |              |                          |               | l/h   | ΔP(kPa) |                             | m³n/h  | ΔP(kPa) |
| 2    | R-2-127-AAAT | Glass                    | A1            | 0.023 | 0.08    | 1.0                         | 0.0021 | 0.08    |
|      |              | sapphire                 | A2            | 0.047 | 0.09    | 1.0                         | 0.0033 | 0.10    |
|      |              | 316 SS                   | A3            | 0.119 | 0.17    | 1.0                         | 0.0063 | 0.19    |
|      |              | Carboloy                 | A4            | 0.241 | 0.27    | 1.0                         | 0.0111 | 0.30    |
|      |              | Tantalum                 | A5            | 0.269 | 0.33    | 1.0                         | 0.0122 | 0.34    |
|      | R-2-127-AAT  | Glass                    | B1            | 0.048 | 0.08    | 1.0                         | 0.0040 | 0.08    |
|      |              | sapphire                 | B2            | 0.091 | 0.09    | 1.0                         | 0.0061 | 0.10    |
|      |              | 316 SS                   | B3            | 0.236 | 0.18    | 1.0                         | 0.0119 | 0.20    |
|      |              | Carboloy                 | B4            | 0.439 | 0.29    | 1.0                         | 0.0203 | 0.32    |
|      |              | Tantalum                 | B5            | 0.512 | 0.34    | 1.0                         | 0.0220 | 0.37    |
|      | R-2-127-DT   | Glass                    | C1            | 0.25  | 0.08    | 1.0                         | 0.0153 | 0.08    |
|      |              | sapphire                 | C2            | 0.45  | 0.10    | 1.0                         | 0.0238 | 0.11    |
|      |              | 316 SS                   | C3            | 0.99  | 0.22    | 1.0                         | 0.0388 | 0.24    |
|      |              | Carboloy                 | C4            | 1.57  | 0.38    | 1.0                         | 0.0604 | 0.42    |
|      |              | Tantalum                 | C5            | 1.68  | 0.41    | 1.0                         | 0.0638 | 0.46    |
|      | R-2-127-AT   | Glass                    | D1            | 0.80  | 0.09    | 1.0                         | 0.0394 | 0.10    |
|      |              | sapphire                 | D2            | 1.29  | 0.13    | 1.0                         | 0.0522 | 0.14    |
|      |              | 316 SS                   | D3            | 2.33  | 0.27    | 1.0                         | 0.0812 | 0.30    |
|      |              | Carboloy                 | D4            | 3.63  | 0.47    | 1.0                         | 0.1180 | 0.52    |
|      |              | Tantalum                 | D5            | 3.90  | 0.52    | 1.0                         | 0.1250 | 0.58    |
|      | R-2-127-BT   | Glass                    | E1            | 2.8   | 0.16    | 1.0                         | 0.121  | 0.18    |
|      |              | sapphire                 | E2            | 4.3   | 0.21    | 1.0                         | 0.156  | 0.23    |
|      |              | 316 SS                   | E3            | 7.2   | 0.45    | 1.0                         | 0.236  | 0.51    |
|      |              | Carboloy                 | E4            | 10.9  | 0.75    | 1.0                         | 0.338  | 0.83    |
|      |              | Tantalum                 | E5            | 11.8  | 0.89    | 1.0                         | 0.356  | 0.98    |
|      | R-2-127-CT   | Glass                    | F1            | 4.4   | 0.21    | 1.0                         | 0.186  | 0.23    |
|      |              | sapphire                 | F2            | 6.7   | 0.32    | 1.0                         | 0.246  | 0.35    |
|      |              | 316 SS                   | F3            | 11.2  | 0.63    | 1.0                         | 0.372  | 0.70    |
|      |              | Carboloy                 | F4            | 17.2  | 1.17    | 1.0                         | 0.536  | 1.30    |
|      |              | Tantalum                 | F5            | 18.2  | 1.26    | 1.0                         | 0.568  | 1.40    |
| 6    | R-6-127-AT   | Glass                    | G1            | 9.6   | 0.45    | 1.0                         | 0.404  | 0.50    |
|      |              | sapphire                 | G2            | 14.8  | 0.72    | 1.0                         | 0.520  | 0.80    |
|      |              | 316 SS                   | G3            | 23.5  | 1.53    | 1.0                         | 0.754  | 1.70    |
|      |              | Carboloy                 | G4            | 34.6  | 2.61    | 1.0                         | 1.082  | 2.90    |
|      |              | Tantalum                 | G5            | 37.8  | 2.80    | 1.0                         | 1.160  | 3.10    |
|      | R-6-127-BT   | Glass                    | H1            | 27    | 2.34    | 1.0                         | 1.042  | 2.60    |
|      |              | sapphire                 | H2            | 38    | 3.70    | 1.0                         | 1.330  | 4.10    |
|      |              | 316 SS                   | H3            | 57    | 7.50    | 1.0                         | 1.920  | 8.30    |
|      |              | Carboloy                 | H4            | 89    | 14.40   | 1.0                         | 2.660  | 16.00   |
|      |              | Tantalum                 | H5            | 99    | 20.50   | 1.0                         | 2.880  | 23.00   |
| 7    | R-7M-25-1FT  | GLASS                    | J1            | 35    | 0.25    | 1.0                         | 1.37   | 0.50    |
|      |              | 316 SS                   | J3            | 82    | 0.75    | 1.0                         | 2.62   | 1.00    |
|      |              | MONEL                    | J6            | 85    | 1.00    | 1.0                         | 2.67   | 1.00    |
| 8    | R-8M-25-4FT  | 8-RV-2                   | KA            | 117   | 0.50    | 1.0                         | 3.47   | 0.50    |
|      |              | 8-RV-3                   | KB            | 170   | 0.75    | 2.0                         | 4.96   | 0.75    |
|      |              | 8-RV-8                   | KC            | 246   | 1.25    | 3.7                         | 6.8    | 1.25    |
|      |              | 8-RS-8                   | KD            | 313   | 1.50    | 1.8                         | 9.28   | 1.50    |
|      |              | 8-RV-14                  | KE            | 324   | 2.00    | 5.4                         | 9.42   | 2.00    |
|      |              | 8-RS-14                  | KF            | 396   | 2.50    | 1.9                         | 11.96  | 2.75    |
|      |              | 8-RV-31 <sup>1)</sup>    | KG            | 468   | 4.00    | 7.0                         | 13.81  | 4.25    |
|      |              | 8-RS-31 <sup>1)</sup>    | KH            | 561   | 5.00    | 3.1                         | 17.25  | 5.50    |
|      |              | 8-LJ-48 <sup>1)</sup>    | KJ            | 1044  | 13.00   | 1.0                         | 33.59  | 14.25   |
| 9    | R-9M-25-3FT  | 9-RV-33                  | LA            | 574   | 1.50    | 11.0                        | 16.5   | 1.75    |
|      |              | 9-RS-33                  | LB            | 735   | 1.00    | 2.2                         | 21.2   | 2.00    |
|      |              | 9-RV-87 <sup>1)</sup>    | LC            | 891   | 3.50    | 17.0                        | 25.6   | 4.00    |
|      |              | 9-RS-87 <sup>1)</sup>    | LD            | 1161  | 4.50    | 3.5                         | 33.4   | 4.75    |
|      |              | 9-LJ-160 <sup>1)</sup>   | LE            | 2080  | 10.75   | 1.0                         | 66.3   | 13.75   |
| 10   | R-10M-25-3FT | 10-RV-64                 | MA            | 1488  | 3.00    | 15.0                        | 43     | 3.50    |
|      |              | 10-RS-64                 | MB            | 1830  | 4.00    | 3.7                         | 53     | 4.50    |
|      |              | 10-RV-138 <sup>1)</sup>  | MC            | 2007  | 6.00    | 23.0                        | 57     | 7.00    |
|      |              | 10-RS-138 <sup>1)</sup>  | MD            | 2482  | 7.50    | 5.5                         | 72     | 9.00    |
|      |              | 10-LJ-238 <sup>1)</sup>  | ME            | 5246  | 26.00   | 1.0                         | 167    | 4.00    |
| 12   | R-12M-20-5FT | 12-RV-119                | NA            | 2675  | 1.00    | 30.0                        | 77     | 1.00    |
|      |              | 12-RV-221                | NB            | 3754  | 2.50    | 32.0                        | 108    | 3.00    |
|      |              | 12-RV-343                | NC            | 4488  | 4.00    | 24.0                        | 129    | 5.00    |
|      |              | 12-RS-343                | ND            | 5674  | 5.00    | 10.0                        | 163    | 6.00    |
|      |              | 12-HF-455 <sup>1)</sup>  | NE            | 8782  | 7.50    | 10.0                        | 253    | 8.00    |
|      |              | 12-LJ-740 <sup>1)</sup>  | NF            | 14716 | 28.00   | 1.0                         | 424    | 30.00   |
| 13   | R-13M-20-3FT | 13-RV-510                | PA            | 6775  | 6.50    | 40.0                        | 195    | 7.00    |
|      |              | 13-RS-510                | PB            | 8717  | 9.0     | 20.0                        | 251    | 10.00   |
|      |              | 13-RV-760A <sup>1)</sup> | PC            | 7962  | 9.00    | 45.0                        | 229    | 10.50   |
|      |              | 13-RS-760A <sup>1)</sup> | PD            | 11380 | 14.00   | 25.0                        | 328    | 16.00   |
|      |              | 13-HF-758 <sup>1)</sup>  | PE            | 13594 | 10.00   | 12.0                        | 392    | 11.00   |
|      |              | 13-LJ-1394 <sup>1)</sup> | PF            | 21685 | 50.00   |                             | 626    | 58.00   |

1) These floats are not recommended for gas service unless operating pressure (downstream) exceeds 2 bar.

2) Viscosity Immunity Ceiling.

Maximum flow rates for air at pa 1.013 bar & 0°C when the meter is operated at pa 1.013 bar & 20 °C

For max. flow rates at other process conditions consult your local sales office. Actual capacities may be slightly different.

## Maximum flow rates for air and water with alarm type floats (magnet filled)

| SIZE | TUBE         | FLOAT                    | MODEL CODE | WATER |          | V.I.C. <sup>2)</sup><br>cSt | AIR   |          |
|------|--------------|--------------------------|------------|-------|----------|-----------------------------|-------|----------|
|      |              |                          |            | l/h   | Δ P(kPa) |                             | m³n/h | Δ P(kPa) |
| 7    | R-7M-25-1FT  | 7-XV-11A                 | JN         | 109   | 2.00     | 1.0                         | 3.24  | 2.50     |
|      |              | 7-XS-15                  | JP         | 140   | 2.50     | 1.0                         | 4.25  | 3.00     |
|      |              | 7-XS-23                  | JQ         | 186   | 4.00     | 1.0                         | 5.37  | 4        |
| 8    | R-8M-25-4FT  | 8-XV-14                  | KN         | 324   | 2.00     | 5.4                         | 9.4   | 2.00     |
|      |              | 8-XS-14                  | KP         | 375   | 2.50     | 1.9                         | 11.3  | 2.75     |
|      |              | 8-XV-31 <sup>1)</sup>    | KQ         | 468   | 4.00     | 7.0                         | 13.8  | 4.25     |
|      |              | 8-XS-31 <sup>1)</sup>    | KR         | 559   | 5.00     | 3.1                         | 16.3  | 5.50     |
| 9    | R-9M-25-3FT  | 9-XV-40                  | LN         | 640   | 1.50     | 11.0                        | 18.5  | 1.75     |
|      |              | 9-XS-40                  | LP         | 810   | 1.00     | 2.4                         | 23.4  | 2.00     |
|      |              | 9-XV-87                  | LQ         | 891   | 3.50     | 17.0                        | 25.6  | 4.00     |
|      |              | 9-XS-87                  | LR         | 1161  | 4.50     | 3.5                         | 33.5  | 4.75     |
| 10   | R-10M-25-3FT | 10-XV-64                 | MN         | 1488  | 2.75     | 15.0                        | 43    | 3.25     |
|      |              | 10-XS-64                 | MP         | 1848  | 3.75     | 3.7                         | 54    | 4.25     |
|      |              | 10-XV-138 <sup>1)</sup>  | MQ         | 2007  | 5.75     | 23.0                        | 57    | 7.00     |
|      |              | 10-XS-138 <sup>1)</sup>  | MR         | 2482  | 7.50     | 5.5                         | 72    | 9.00     |
| 12   | R-12M-20-5FT | 12-XV-221                | NN         | 3754  | 2.50     | 32.0                        | 108   | 3.00     |
|      |              | 12-XV-343                | NP         | 4488  | 4.00     | 34.0                        | 128   | 4.50     |
|      |              | 12-XS-343                | NQ         | 5674  | 5.00     | 10.0                        | 164   | 5.50     |
|      |              | 12-XHF-455 <sup>1)</sup> | NR         | 8782  | 7.50     | 10.0                        | 253   | 8.00     |
| 13   | R-13-20-3FT  | 13-XV-510                | PN         | 6775  | 6.50     | 40.0                        | 195   | 7.00     |
|      |              | 13-XS-510                | PP         | 8717  | 9.00     | 20.0                        | 251   | 10.00    |
|      |              | 13-XV-760A <sup>1)</sup> | PQ         | 7962  | 9.00     | 45.0                        | 229   | 10.00    |
|      |              | 13-XS-760A <sup>1)</sup> | PR         | 10659 | 14.00    | 25.0                        | 307   | 15.00    |
|      |              | 13-XHF-758 <sup>1)</sup> | PS         | 13594 | 10.00    | 12.0                        | 392   | 11.00    |

1) These floats are not recommended for gas service unless operating pressure (downstream) exceeds 2 bar.

2) Viscosity Immunity Ceiling.

Maximum flow rates for air at pa 1.013 bar & 0°C when the meter is operated at pa 1.013 bar & 20 °C

For max. flow rates at other process conditions consult your local sales office. Actual capacities may be slightly different.

## OPTIONAL EQUIPMENT

### Needle valves/Flowcontrollers

For flow rate control, needle valves or flowcontrollers may be externally piped to the inlet or outlet side of the instrument via an adapter for vertically oriented connections only. Needle valves can be supplied up to instrument size 10 (1"). We strongly advise not to use solenoid valves as these can cause pressure shocks and damage to glass tubes.

### Alarm contacts meter size 2- 6

Inductive switches for high and/or low flow alarm may be mounted to the instrument to create a highly sensitive, stable and accurate device for signalling high or low flows or deviations from a controlled flow. The inductive alarm can only be used in combination with 316 SS or carbonyl ball floats. The alarm points may be adjusted over the entire flowmeter range and be set so that any two contacts may be made to operate simultaneously. For hazardous area applications Brooks can supply a CENELEC approved ((EEx) ia IIC/(EEx) ib IIC) power supply/amplifier/ relay unit to obtain an intrinsic safe current circuit.

### Alarm contacts meter size 7- 13

The Brooks reed switch alarm is an alarm switch used in conjunction with the GT 1000 Glass Tube flowmeter for signalling high and/or low flow, or deviation from any switch setting.

A magnet embedded in the float actuates the alarm switch. The reed switch is mounted adjacent to the flow tube and is easily adjustable over the entire flow range of the instrument.

The sealed switch assembly consists of a biasing magnet and hermetically sealed reed switch.

Sealed P.V.C. housing and rubber base switch holder prevent mild shock and normal pipe vibration from effecting the switch.

When, due to a high or low flow condition, the float, containing the sealed magnet, comes into close proximity with the switch assembly, it overcomes the biasing magnet and opens the switch contact to energize an auxiliary relay.

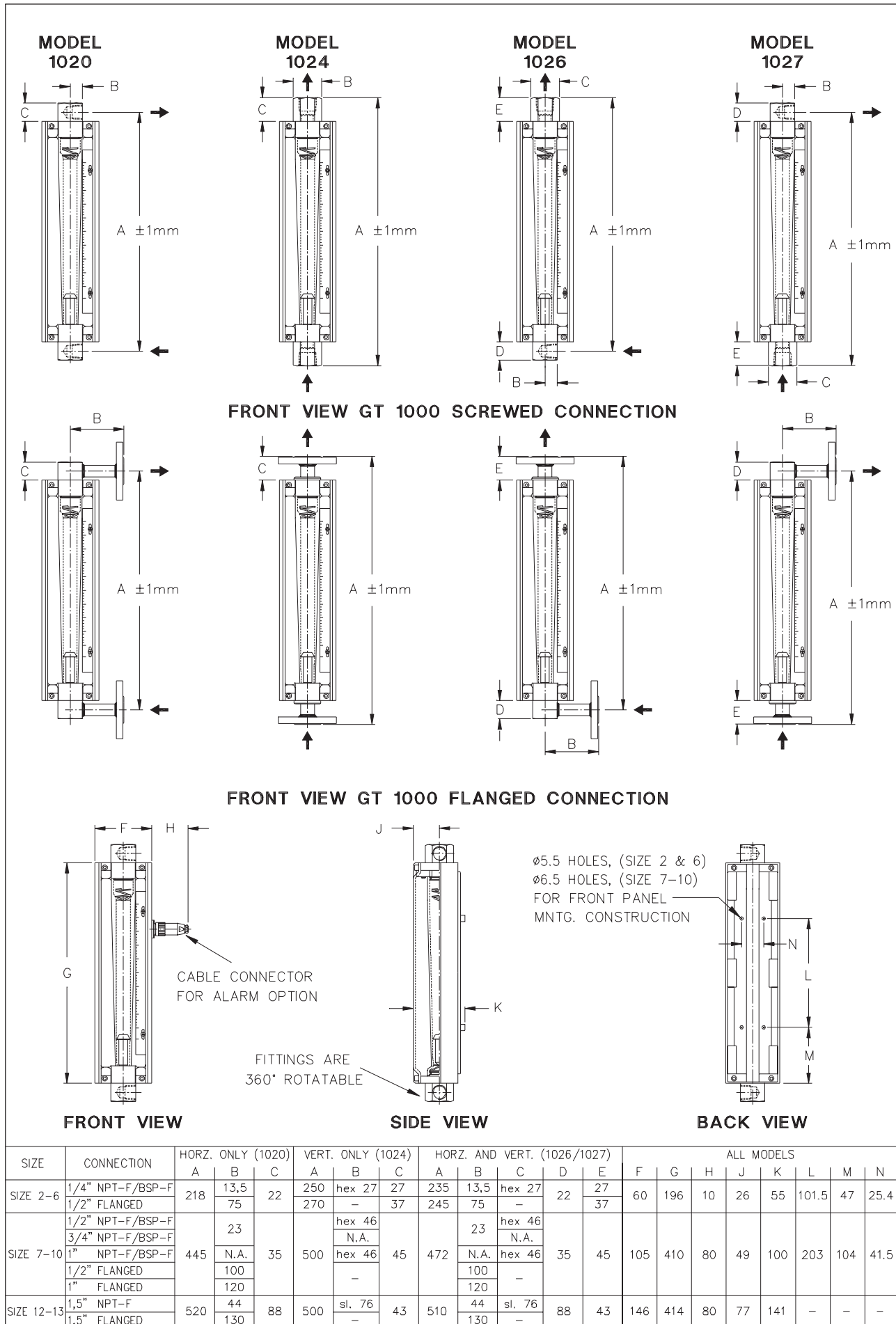
When the float returns to a normal condition, the embedded magnet again comes into close proximity of the switch assembly, but in the opposite direction, whereupon it aids the biasing magnet and the switch closes.

The alarm points may be adjusted over the entire flowmeter range and can be set so that any two contacts may be made to operate simultaneously.

The contact rating of the dry reed switch is relatively low (0.1 A), thus a relay is normally used with the alarm switch.

For hazardous area applications Brooks can supply a CENELEC approved ((EEx) ia IIC/(EEx) ib IIC) power supply/amplifier/ relay unit to obtain an intrinsic safe current circuit.

## DIMENSIONAL DRAWINGS



## MODEL LISTING/ORDERING INFORMATION

| MODEL  | DESCRIPTION                                   |                                                                   |            |        |                                  |   |   |   |   |   |                     |
|--------|-----------------------------------------------|-------------------------------------------------------------------|------------|--------|----------------------------------|---|---|---|---|---|---------------------|
| 1020/M | HORIZONTAL                                    | INLET                                                             | HORIZONTAL | OUTLET |                                  |   |   |   |   |   |                     |
| 1024/M | VERTICAL                                      | INLET                                                             | VERTICAL   | OUTLET |                                  |   |   |   |   |   |                     |
| 1026/M | HORIZONTAL                                    | INLET                                                             | VERTICAL   | OUTLET |                                  |   |   |   |   |   |                     |
| 1027/M | VERTICAL                                      | INLET                                                             | HORIZONTAL | OUTLET |                                  |   |   |   |   |   |                     |
| CODE   | TUBE AND FLOAT TYPE                           |                                                                   |            |        |                                  |   |   |   |   |   |                     |
| —      | TO BE SELECTED FROM THE CAPACITY TABLE        |                                                                   |            |        |                                  |   |   |   |   |   |                     |
| CODE   | FITTING MATERIAL                              |                                                                   |            |        |                                  |   |   |   |   |   |                     |
| 1      | BRASS FITTINGS (WITH THREADED FITTINGS ONLY)  |                                                                   |            |        |                                  |   |   |   |   |   |                     |
| 2      | 316 L SS FITTINGS                             |                                                                   |            |        |                                  |   |   |   |   |   |                     |
| CODE   | O-RING MATERIAL                               |                                                                   |            |        |                                  |   |   |   |   |   |                     |
| 1      | VITON                                         |                                                                   |            |        |                                  |   |   |   |   |   |                     |
| 2      | BUNA                                          |                                                                   |            |        |                                  |   |   |   |   |   |                     |
| 3      | E.P.D.M.                                      |                                                                   |            |        |                                  |   |   |   |   |   |                     |
| 4      | KALREZ                                        |                                                                   |            |        |                                  |   |   |   |   |   |                     |
| CODE   | CONNECTION SIZE                               |                                                                   |            |        |                                  |   |   |   |   |   |                     |
| A      | 1/4"                                          | INLET                                                             | 1/4"       | OUTLET | THREADED (SIZE 2-6 ALL MODELS)   |   |   |   |   |   |                     |
| B      | 1/2"                                          | INLET                                                             | 1/2"       | OUTLET | THREADED (SIZE 7-10 ALL MODELS)  |   |   |   |   |   |                     |
| C      | 3/4"                                          | INLET                                                             | 3/4"       | OUTLET | THREADED (SIZE 7-10 MODEL 1020)  |   |   |   |   |   |                     |
| D      | 1"                                            | INLET                                                             | 1"         | OUTLET | THREADED (SIZE 7-10 MODEL 1024)  |   |   |   |   |   |                     |
| E      | 3/4"                                          | INLET                                                             | 1"         | OUTLET | THREADED (SIZE 7-10 MODEL 1026)  |   |   |   |   |   |                     |
| F      | 1"                                            | INLET                                                             | 3/4"       | OUTLET | THREADED (SIZE 7-10 MODEL 1027)  |   |   |   |   |   |                     |
| G      | 1/5"                                          | INLET                                                             | 1/5"       | OUTLET | THREADED (SIZE 12/13 ALL MODELS) |   |   |   |   |   |                     |
| K      | 1/2"                                          | FLANGED (SIZE 2/6)                                                |            |        |                                  |   |   |   |   |   |                     |
| L      | 1/2"                                          | FLANGED (SIZE 7-10)                                               |            |        |                                  |   |   |   |   |   |                     |
| M      | 1"                                            | FLANGED (SIZE 7-10)                                               |            |        |                                  |   |   |   |   |   |                     |
| N      | 1.5"                                          | FLANGED (SIZE 12/13, FOR ANSI 300 LBS RF FLANGES CONSULT FACTORY) |            |        |                                  |   |   |   |   |   |                     |
| CODE   | CONNECTION TYPE                               |                                                                   |            |        |                                  |   |   |   |   |   |                     |
| A      | NPT FEMALE                                    |                                                                   |            |        |                                  |   |   |   |   |   |                     |
| B      | BSP FEMALE                                    |                                                                   |            |        |                                  |   |   |   |   |   |                     |
| C      | ANSI 150 LBS RF (WITH 316 L SS FITTINGS ONLY) |                                                                   |            |        |                                  |   |   |   |   |   |                     |
| D      | ANSI 300 LBS RF (WITH 316 L SS FITTINGS ONLY) |                                                                   |            |        |                                  |   |   |   |   |   |                     |
| E      | DIN PN 40 RF (WITH 316 L SS FITTINGS ONLY)    |                                                                   |            |        |                                  |   |   |   |   |   |                     |
| CODE   | SCALE TYPE AND ACCURACY CLASS                 |                                                                   |            |        |                                  |   |   |   |   |   |                     |
| L      | MM + CALIBRATION CURVE, CLASS 2.5 VDI         |                                                                   |            |        |                                  |   |   |   |   |   |                     |
| M      | MM + CALIBRATION CURVE, CLASS 1.6 VDI         |                                                                   |            |        |                                  |   |   |   |   |   |                     |
| R      | % + FACTOR TAG, CLASS 2.5 VDI                 |                                                                   |            |        |                                  |   |   |   |   |   |                     |
| S      | % + FACTOR TAG, CLASS 1.6 VDI                 |                                                                   |            |        |                                  |   |   |   |   |   |                     |
| V      | DIRECT READING, CLASS 2.5 VDI                 |                                                                   |            |        |                                  |   |   |   |   |   |                     |
| W      | DIRECT READING, CLASS 1.6 VDI                 |                                                                   |            |        |                                  |   |   |   |   |   |                     |
| CODE   | HOUSING                                       |                                                                   |            |        |                                  |   |   |   |   |   |                     |
| 1      | ACRYLIC COATED                                |                                                                   |            |        |                                  |   |   |   |   |   |                     |
| 2      | EPOXY COATED                                  |                                                                   |            |        |                                  |   |   |   |   |   |                     |
| CODE   | ALARM OPTIONS                                 |                                                                   |            |        |                                  |   |   |   |   |   |                     |
| 0      | NONE                                          |                                                                   |            |        |                                  |   |   |   |   |   |                     |
| 1      | SINGLE ALARM                                  |                                                                   |            |        |                                  |   |   |   |   |   |                     |
| 2      | DUAL ALARM                                    |                                                                   |            |        |                                  |   |   |   |   |   |                     |
| 3      | SINGLE ALARM WITH 220V 50HZ RELAY             |                                                                   |            |        |                                  |   |   |   |   |   |                     |
| 4      | DUAL ALARM WITH 220V 50HZ RELAY               |                                                                   |            |        |                                  |   |   |   |   |   |                     |
| 5      | SINGLE ALARM WITH 110V 60HZ RELAY             |                                                                   |            |        |                                  |   |   |   |   |   |                     |
| 6      | DUAL ALARM WITH 110V 60HZ RELAY               |                                                                   |            |        |                                  |   |   |   |   |   |                     |
| CODE   | PANEL MOUNTING OPTIONS                        |                                                                   |            |        |                                  |   |   |   |   |   |                     |
| 0      | NONE                                          |                                                                   |            |        |                                  |   |   |   |   |   |                     |
| A      | FRONT PANEL MOUNTING PARTS                    |                                                                   |            |        |                                  |   |   |   |   |   |                     |
| B      | BACK PANEL MOUNTING PARTS                     |                                                                   |            |        |                                  |   |   |   |   |   |                     |
| CODE   | VALVE (VERTICAL CONNECTION ONLY)              |                                                                   |            |        |                                  |   |   |   |   |   |                     |
| 0      | NONE                                          |                                                                   |            |        |                                  |   |   |   |   |   |                     |
| A      | 1/4"                                          | BRASS INLET VALVE (SIZE 2/6/7)                                    |            |        |                                  |   |   |   |   |   |                     |
| B      | 1/4"                                          | 316 SS INLET VALVE (SIZE 2/6/7)                                   |            |        |                                  |   |   |   |   |   |                     |
| C      | 1/2"                                          | BRASS INLET VALVE (SIZE 8)                                        |            |        |                                  |   |   |   |   |   |                     |
| D      | 1/2"                                          | 316 SS INLET VALVE (SIZE 8)                                       |            |        |                                  |   |   |   |   |   |                     |
| E      | 1"                                            | BRASS INLET VALVE (SIZE 9/10)                                     |            |        |                                  |   |   |   |   |   |                     |
| F      | 1"                                            | 316 SS INLET VALVE (SIZE 9/10)                                    |            |        |                                  |   |   |   |   |   |                     |
| G      | 1/4"                                          | BRASS OUTLET VALVE (SIZE 2/6/7)                                   |            |        |                                  |   |   |   |   |   |                     |
| H      | 1/4"                                          | 316 SS OUTLET VALVE (SIZE 2/6/7)                                  |            |        |                                  |   |   |   |   |   |                     |
| J      | 1/2"                                          | BRASS OUTLET VALVE (SIZE 8)                                       |            |        |                                  |   |   |   |   |   |                     |
| K      | 1/2"                                          | 316 SS OUTLET VALVE (SIZE 8)                                      |            |        |                                  |   |   |   |   |   |                     |
| L      | 1"                                            | BRASS OUTLET VALVE (SIZE 9/10)                                    |            |        |                                  |   |   |   |   |   |                     |
| M      | 1"                                            | 316 SS OUTLET VALVE (SIZE 9/10)                                   |            |        |                                  |   |   |   |   |   |                     |
| 1024/M | MA                                            | 1                                                                 | 1          | D      | A                                | L | 1 | 0 | 0 | 0 | TYPICAL MODELNUMBER |

## **BROOKS LOCAL AND WORLDWIDE SUPPORT**

Brooks Instrument provides sales and service facilities around the world, ensuring quick delivery from local stock, timely repairs, and local based sales and service facilities.

Our dedication to customer service and support extends to our direct sales force, who are well trained, experienced and equipped. These flow specialists provide consultation and support, assuring successful applications of the Brooks flow measurement and control products.

Calibration facilities are available in local sales and service offices. The primary standard calibration equipment to calibrate the mass flow products is certified by our local Weights and Measures Authorities and traceable to the relevant international standards.

## **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 mass flow products periodically. In many cases this service can be provided under insitu 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 :



### **SERV' INSTRUMENTATION**

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**ISO 9001**  
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The Quality System at Brooks  
Instrument conforms to the quality  
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# **Brooks Instrument**