

GT, GTS, GTX and AccuTest Turbine Gas Meters

Technical Bulletin



The turbine meters are designed to accurately measure natural gas, air, nitrogen, carbon dioxide, propane vapor, and other non-corrosive gases for large volume commercial and industrial uses.

General Information

Meters are available in sizes ranging from 3" up to 12". Inlet pressures up to 1480 PSIG. Operating temperature range is -40°F to 140°F. (-40°C to 60°C). Maximum flow rates at 7" Water Column pressure (.60 Specific Gravity Gas) are:

- 3" – 10,000 SCFH
- 4" – 18,000 SCFH
- 6" – 35,000 SCFH
- 8" – 60,000 SCFH
- 12" – 150,000 SCFH

Meters meet manufacturing standards as specified in ANSI/ASME/AGA Report Number 7.

Features

Maximum allowable operating pressures (MAOP) – from 175 PSIG up to 1480 PSIG.

Body Materials – Cast aluminum, cast steel, or steel depending on pressure rating.

English or metric units of measurement.

Common gear train for 3", 4", 6" and 8" meter sizes thereby reducing spare parts inventory.

Interchangeable pre-calibrated measurement cartridges allow for easy maintenance.

High efficiency inlet Flo-Guide conditioners minimize the effects of flow disturbances in short coupled installations.

GTX model utilizes permanently lubricated bearings for maintenance free use.

AccuTest model incorporates two independent measuring cartridges in one housing, both calibrated to allow proving the meter while in service with ATP software.

Applications

| Model | Description |
|----------|---|
| GT | Basic turbine meter, downstream rotor, integral Flo-Guides®, flush-type lubrication system cleans main bearings while meter is in operation, available in 3" and 12". |
| GTS | Basic turbine meter, pre-machined housings to allow upgrade to AccuTest self-test model, flush-type lubrication system cleans main bearings while meter is in operation, both inlet and outlet Flo-Guides, available in 4", 6" and 8". |
| GTX | Economic turbine meter, permanently lubricated main bearings, inlet Flo-Guide®, available in 4", 6", and 8". |
| AccuTest | Self-proving turbine meter, both inlet and outlet Flo-Guides®, flush-type lubrication system cleans main bearings while meter is in operation, two high frequency RF-type pulsers, secondary reference cartridge, aluminum main and reference rotors, available in 4", 6", and 8" pipe sizes. |

Options

Extended Capacity Ratings

Standard capacity ranges available for all sizes and models. The 4", 6", and 8" GTS and AccuTest turbine meters can utilize a 30° rotor to increase the capacity over the standard 45° rotor.



Rotor Materials

Available in either plastic or metal (Metal must be used for high frequency RF pulser).

| | 3" | 4" | 6" | 8" | 12" |
|-------------|-------------|-------------|-------------|-------------|-------------|
| 45° Plastic | 45° Plastic | 45° Plastic | 45° Plastic | 45° Plastic | 45° Plastic |
| 45° Metal | 45° Metal | 45° Metal | 45° Metal | 45° Metal | |
| 30° Metal | 30° Metal | 30° Metal | 30° Metal | | |



Volume Registration Outputs

The turbine meters come with several outputs: mechanical drive with index, mechanical drive with no index or mechanical drive and electronic (RF, RVP, MFP) pulse output.

Pressure Ratings

| Size | MAOP PSIG (bar) | Material | |
|------|--------------------|------------|----------|
| | | Housing | Top |
| 3" | 275 (19) | Aluminum | NA |
| | 1480 (100) | Steel | NA |
| 4" | 175 (12) | Aluminum | Aluminum |
| | 740 (50) | Cast Steel | Steel |
| | 1480 (100) | Cast Steel | Steel |
| 6" | 175 (12) | Aluminum | Aluminum |
| | 740 (50) | Cast Steel | Steel |
| | 1480 (100) | Cast Steel | Steel |
| 8" | 175 (12) | Aluminum | Aluminum |
| | 740 (50) | Cast Steel | Steel |
| | 1480 (100) | Cast Steel | Steel |
| 12" | 175 (12) | Steel | Aluminum |
| | 275 (19) | Steel | Steel |
| | 740 (50) | Steel | Steel |
| | 1480 (100) | Steel | Steel |



Indexes

Available in either English or metric units of volume with circle type or odometer type indexes.

Pulse Outputs

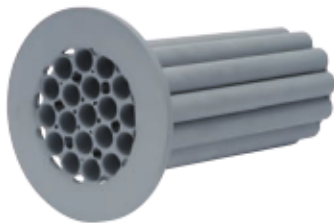
Pulsers can be furnished with the meter.

| | 3" | 4" | 6" | 8" | 12" |
|-----------------------------|----|------------------|----|----|---------|
| Low Frequency | | | | | |
| Remote Volume Pulser (RVPI) | | | | | |
| Medium Frequency | | | | | |
| GT Only | | All Models | | | GT Only |
| RF Pulser | | | | | |
| N/A | | GTS and AccuTest | | | N/A |



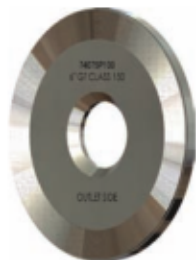
Extended Width (E-Class) Housing

The 4", 6" and 8" turbine meters are available with an extended width housing. The 4" E-Class is available in all pressure ratings while the 6" and 8" E-Class Housings are available in either 175 or 740 PSIG working pressures.



Straightening Vanes

Straightening Vanes are recommended by the A.G.A. Report No. 7 as a means to condition the gas flow to a normal pattern, enabling accurate measurement by the downstream turbine meter.



Restrictor Plate

Restrictor plates limit the flow rate through the meter and prevent overspeeding of the rotor. They are normally installed 5 pipe diameters downstream of the meter between flanges.



Lubrication

Turbine meters require routine maintenance, including lubrication, to insure measurement accuracy and enhance the service life of the meter. Two types of lubrication pump kits are available depending on the working pressure of the meter. For meters operating up to 500 PSIG, a plunger-type pump is available (Part Number 93723K002). For meters operating over 500 PSIG, use the single speed hydraulic hand pump (Part Number 93723K001).



AccuTest Field Prover

The AccuTest Field Prover includes the sensor cables, signal conditioner in a case, DAQ card, computer interface cable, and software program.

Accuracy Curves

The accuracy of the turbine meter can be determined by low, medium, and high-pressure test facilities.

Low Pressure

- 350 cubic foot Bell Prover
- Large Sonic Nozzle provers
- 5 point accuracy curve standard



Medium Pressure

- 120 PSIG recirculating air test loop
- Master turbine meters used as reference
- 6 point accuracy curve standard
- (30 PSIG to 120 PSIG – air)

High Pressure

- Pressures up to 1480 PSIG
- Master turbine meters or sonic nozzles used as reference
- 6 point accuracy curve standard

All facilities are available for recertification of existing meters.



Flow Computer RF Interface Kit

This kit allows the use of a single RF sensor to detect movement of the rotor.

Theory of Operation

Gas measurement in the U.S. and around the world is dominated by diaphragm, rotary, turbine, and orifice meters. Each serves a different segment of the gas industry and each has its own set of advantages and disadvantages.

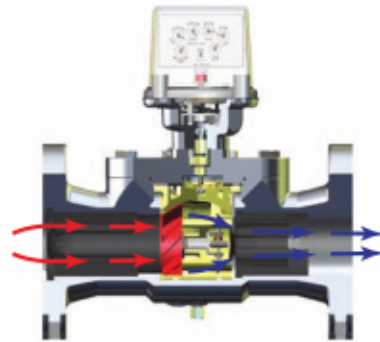
These four main types of meters can be broken into two distinct categories: positive displacement, and inferential. Diaphragm and rotary meters fall into the positive displacement group because they have well-defined measurement compartments that alternately fill and empty as the meter rotates. By knowing the volume displaced in each meter revolution and by applying the proper gear ratio, the meter will read directly in cubic feet or cubic meters.

Turbine and orifice meters have no measurement compartments to trap and then release the gas. These meters are categorized as inferential meters in that the volume passed through them is "inferred" by something else observed or measured. In the orifice meter the volumes are determined by knowing the inlet pressure, differential pressure, plate size, and piping characteristics, all of which "infer" the flow rates that in turn can be integrated over time to provide the volume.

Turbine meters, also called velocity meters, "infer" the volume of gas passing through them by measuring the velocity of the gas stream. Gas moving through the meter impinges on rotor blades resulting in a rotational speed that is proportional to the flow rate. The volume is determined by counting the number of meter rotations.

As defined in A.G.A. Report #7, the turbine meter consists of three basic components:

1. The body which houses all of the parts and physically contains the gas pressure.
2. The measuring mechanism consisting of the rotor, rotor shaft, bearings, and necessary supporting structure.
3. The output and readout device which may be either a mechanical drive to transmit the indicated meter revolutions outside the body for uncorrected volume registrations or for electrical pulse meters, it would be the pulse detector system and all electrical connections needed to transmit the pulses outside.



Gas entering the meter increases in velocity as it flows through the annular passage formed by the nose cone or upstream stator and the interior of the body. The movement of the gas over the angled rotor blades exerts a force to the rotor causing it to rotate. The ideal rotational speed of the rotor is directly proportional to the flow rate of the gas. The actual rotational speed is a function of the annular passageway size and shape, and rotor design. It is also dependent on the load that is imposed due to internal mechanical friction, fluid drag, external loading, and gas density.

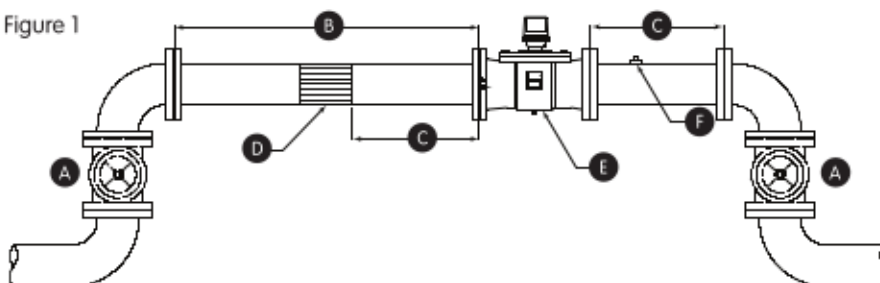
A.G.A. Report #7 was written to provide recommendations as to the correct method for installing turbine meters, using their associated corrective factors, and meeting the operating requirements that pertain to axial flow type meters. Since the turbine meter is a velocity-measuring device, consideration should be given to both the upstream and downstream piping to insure a uniform velocity distribution of the gas through the meter and the rotor by reducing jetting or swirl. Construction of the turbine meter is such so as to minimize minor flow distortions that could affect meter performance. See Figure 1.

The AccuTest turbine meter utilizes a second cartridge downstream of the first or main rotor. This rotor has vanes with a different blade angle and rotates in the opposite direction of the main rotor. Since both rotors are measuring the same flow rate of gas at the same temperature and pressure, then the output registration should be the same off of both rotors. In effect, the meter is a built-in transfer prover to continuously monitor its condition.

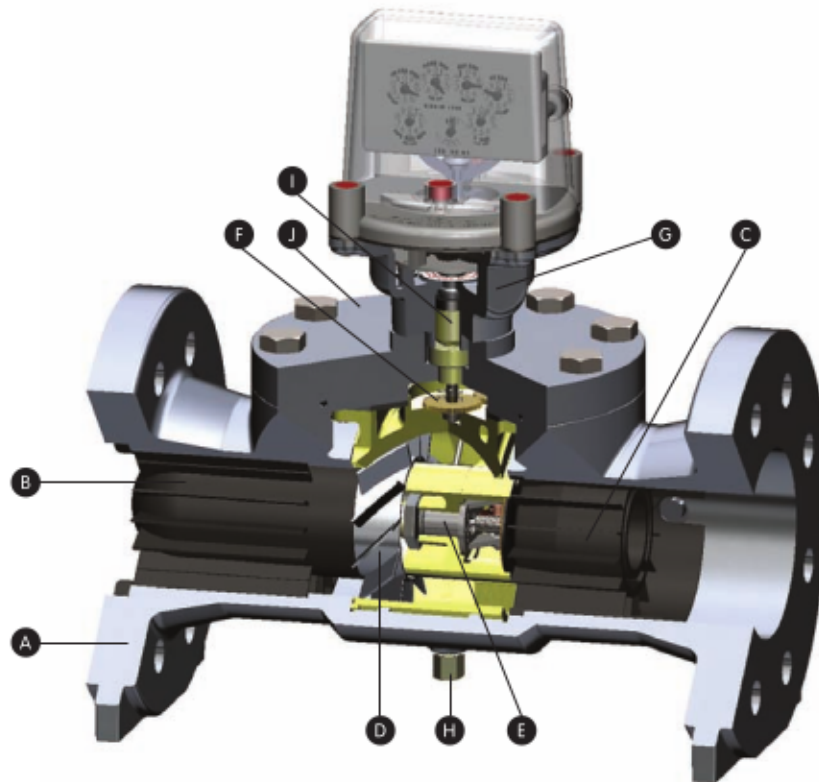
A laptop computer, with inputs from both rotor sensors, multiplies the ratio of pulse frequencies by the ratio of the calibration (K) factors to compute meter accuracy.

$$\text{Accuracy} = \frac{\text{Frequency of main rotor}}{\text{Frequency of reference rotor}} \times \frac{\text{K Factor of reference rotor}}{\text{K Factor of main rotor}}$$

Figure 1



- A** Optional Valve
- B** 10 Nominal Pipe Diameters
- C** 5 Nominal Pipe Diameters
- D** Straightening Vanes
- E** Turbine Meter
- F** Temperature Well (Downstream)



Material Specifications

- A** Housing - Aluminum for pressures up to 275 PSIG. Cast Steel for pressures greater than 275 PSIG. Steel for all 12" housings. 3" housing is clamped (wafer style) between ANSI flanges. 4" through 12" housings are ANSI flanged.
- B** Inlet Flo-Guide® - Black Stanyl TW241F10. 12" GT uses an aluminum Flo-Guide®.
- C** Outlet Flo-Guide® - Black Stanyl TW241F10. Not available on GTX meter. 12" GT uses an aluminum Flo-Guide®.

D Rotor -

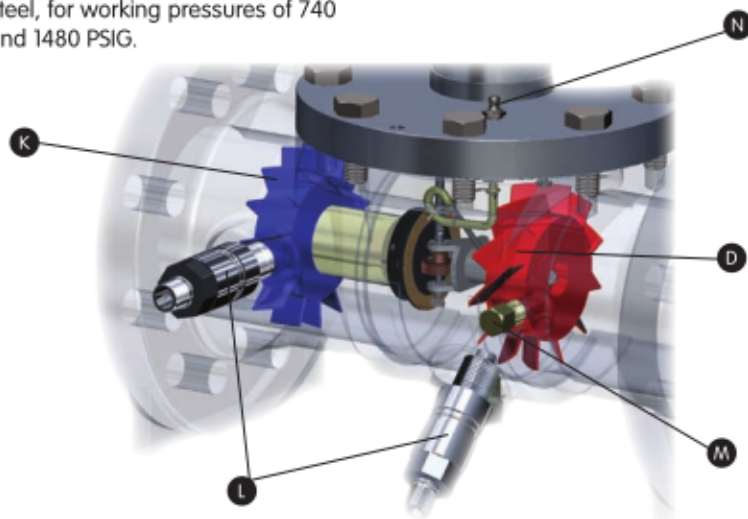
| Angle | Material | Used on |
|-------|----------|-------------|
| 45° | Plastic | All |
| 45° | Aluminum | 4", 6" & 8" |
| 30° | Aluminum | 4", 6" & 8" |

Rotor is located downstream on 3" GT and 12" GT meters. GT and GTX meters are only available with a 45° plastic rotor. GTS meters available with a 45° or 30° rotor in either plastic or aluminum.

- E** Flush-type Lubrication System. System has an internal reservoir that continuously lubricates the main rotor shaft while in operation. Available on GT, GTS and AccuTest meters.

- F** Intermediate Gears - Brass, Designed for each specific meter size and rotor angle.
- G** Gear Train Assembly - Delrin gears, Provides mechanical output drive to an index or corrector.
- H** 1/4" NPT Drain Plug - Steel, zinc plated and yellow chromate.
- I** Magnetic Drive Interface - Isolates high pressure components eliminating the need for seals.
- J** Top Plate - Aluminum, for working pressures of 125 and 275 PSIG. Steel, for working pressures of 740 and 1480 PSIG.

- K** Reference Rotor - Aluminum, AccuTest meter only.
- L** RF Sensor Assembly - Stainless Steel, Standard on AccuTest, optional on 4", 6" and 8" GTS meters.
- M** Pressure Tap - Senses pressure at the rotor. AccuTest and GTS meters only.
- N** Lubrication Fitting - GT, GTS and AccuTest meters only.



GT, GTS, GTX and AccuTest Turbine Meters Capacity Performance

3" GT, Output Drive = 100 Cubic Feet, 45° Rotor

| Line Pressure (PSIG) | Qmax MSCFH | Qmin MSCFH | Range Qmax/Qmin | Min. Actual Flow Rate MACFH | Press. Drop in W.C. |
|----------------------|------------|------------|-----------------|-----------------------------|---------------------|
| 0.25 | 10 | 0.8 | 12 | 0.83 | 4.5 |
| 5 | 13 | 1.0 | 14 | 0.73 | 6.0 |
| 10 | 17 | 1.1 | 15 | 0.65 | 7.5 |
| 15 | 20 | 1.2 | 17 | 0.59 | 9.0 |
| 20 | 23 | 1.3 | 18 | 0.55 | 10.5 |
| 25 | 27 | 1.4 | 20 | 0.51 | 12.1 |
| 50 | 44 | 1.8 | 25 | 0.40 | 19.7 |
| 75 | 61 | 2.1 | 30 | 0.34 | 27.3 |
| 100 | 79 | 2.4 | 33 | 0.30 | 35.0 |
| 125 | 97 | 2.6 | 37 | 0.28 | 42.6 |
| 150 | 114 | 2.9 | 40 | 0.30 | 50.2 |
| 175 | 132 | 3.1 | 43 | 0.24 | 57.9 |
| 200 | 150 | 3.3 | 46 | 0.23 | 65.5 |
| 275 | 205 | 3.9 | 53 | 0.20 | 88.4 |
| 300 | 224 | 4.0 | 55 | 0.19 | 96.1 |
| 400 | 300 | 4.7 | 64 | 0.17 | 127.0 |
| 500 | 379 | 5.3 | 71 | 0.15 | 157.0 |
| 600 | 460 | 5.9 | 78 | 0.14 | 188.0 |
| 700 | 544 | 6.5 | 84 | 0.13 | 218.0 |
| 800 | 630 | 7.1 | 89 | 0.13 | 249.0 |
| 900 | 719 | 7.6 | 95 | 0.12 | 279.0 |
| 1000 | 810 | 8.1 | 100 | 0.12 | 310.0 |
| 1100 | 904 | 8.7 | 104 | 0.12 | 340.0 |
| 1200 | 1000 | 9.2 | 109 | 0.11 | 371.0 |
| 1300 | 1098 | 9.7 | 113 | 0.11 | 402.0 |
| 1400 | 1197 | 10.2 | 118 | 0.11 | 432.0 |

Note: Capacity Table values established @ base pressure of 14.73 PSIA and base temperature of 60°F; 0.60 specific gravity gas. Supercompressibility included.

3" GT, Output Drive = 1.0 Cubic Meters, 45° Rotor

| Line Pressure (bar) | Line Pressure (kPa) | Qmax Sm ³ /h | Qmin Sm ³ /h | Range Qmax/Qmin | Min. Actual Flow Rate Am ³ /h | Press. Drop in mbar |
|---------------------|---------------------|-------------------------|-------------------------|-----------------|--|---------------------|
| 0.02 | 2 | 284 | 24 | 12 | 23.5 | 11.3 |
| 0.30 | 30 | 365 | 27 | 14 | 21.0 | 14.3 |
| 0.70 | 70 | 482 | 31 | 16 | 18.5 | 18.8 |
| 1.00 | 100 | 559 | 33 | 17 | 16.8 | 22.1 |
| 2.00 | 200 | 841 | 41 | 21 | 13.8 | 33.1 |
| 3.00 | 300 | 1124 | 47 | 24 | 12.0 | 44.2 |
| 5.00 | 500 | 1694 | 58 | 29 | 9.8 | 66.3 |
| 7.00 | 700 | 2270 | 67 | 34 | 8.5 | 88.4 |
| 8.00 | 800 | 2559 | 72 | 36 | 8.1 | 99.5 |
| 9.00 | 900 | 2851 | 76 | 38 | 7.7 | 111.0 |
| 10.00 | 1000 | 3143 | 80 | 40 | 7.3 | 122.0 |
| 12.00 | 1200 | 3733 | 87 | 43 | 6.8 | 144.0 |
| 15.00 | 1500 | 4626 | 97 | 48 | 6.1 | 177.0 |
| 20.00 | 2000 | 6143 | 112 | 55 | 5.4 | 232.0 |
| 30.00 | 3000 | 9289 | 140 | 66 | 4.6 | 343.0 |
| 35.00 | 3500 | 10,912 | 153 | 72 | 4.3 | 398.0 |
| 40.00 | 4000 | 12,581 | 165 | 76 | 4.1 | 453.0 |
| 50.00 | 5000 | 16,031 | 188 | 85 | 3.7 | 564.0 |
| 60.00 | 6000 | 19,630 | 211 | 93 | 3.5 | 674.0 |
| 70.00 | 7000 | 23,387 | 233 | 100 | 3.3 | 785.0 |
| 80.00 | 8000 | 27,274 | 254 | 107 | 3.2 | 895.0 |
| 90.00 | 9000 | 31,287 | 275 | 114 | 3.1 | 1006.0 |
| 100.00 | 10,000 | 35,478 | 296 | 120 | 3.0 | 1116.0 |

Note: Capacity Table values established @ base pressure of 101.325 kPa and base temperature of 15°C. Supercompressibility included.

4" GTS and AccuTest, Output Drive = 100 Cubic Feet

| Line Pressure (PSIG) | 45° Rotor | | | | | 30° Rotor | | | | | AccuTest Reference Rotor | |
|----------------------|------------|------------|-----------------|-----------------------------|---------------------|------------|------------|-----------------|-----------------------------|---------------------|--------------------------|-----------------------------|
| | Qmax MSCFH | Qmin MSCFH | Range Qmax/Qmin | Min. Actual Flow Rate MACFH | Press. Drop in W.C. | Qmax MSCFH | Qmin MSCFH | Range Qmax/Qmin | Min. Actual Flow Rate MACFH | Press. Drop in W.C. | Range Qmax/Qmin | Min. Actual Flow Rate MACFH |
| 0.25 | 18 | 1.2 | 15 | 1.20 | 2.4 | 23 | 1.9 | 12 | 1.92 | 3.9 | 10 | 1.80 |
| 5 | 24 | 1.4 | 17 | 1.06 | 3.2 | 30 | 2.2 | 14 | 1.65 | 5.2 | 12 | 1.50 |
| 10 | 30 | 1.5 | 19 | 0.90 | 4.0 | 38 | 2.5 | 15 | 1.48 | 6.5 | 13 | 1.38 |
| 15 | 36 | 1.7 | 21 | 0.85 | 4.8 | 46 | 2.7 | 17 | 1.36 | 7.8 | 14 | 1.29 |
| 20 | 42 | 1.8 | 23 | 0.77 | 5.6 | 54 | 2.9 | 18 | 1.26 | 9.1 | 15 | 1.20 |
| 25 | 48 | 2.0 | 25 | 0.75 | 6.4 | 62 | 3.1 | 20 | 1.18 | 10.5 | 17 | 1.06 |
| 50 | 79 | 2.5 | 31 | 0.58 | 10.5 | 101 | 4.0 | 25 | 0.93 | 17.1 | 21 | 0.86 |
| 75 | 111 | 3.0 | 37 | 0.50 | 14.6 | 141 | 4.8 | 30 | 0.79 | 23.7 | 25 | 0.72 |
| 100 | 142 | 3.4 | 42 | 0.43 | 18.7 | 181 | 5.4 | 33 | 0.70 | 30.3 | 27 | 0.67 |
| 125 | 174 | 3.8 | 46 | 0.40 | 22.7 | 222 | 6.0 | 37 | 0.64 | 36.9 | 31 | 0.58 |
| 150 | 206 | 4.1 | 50 | 0.43 | 26.8 | 263 | 6.6 | 40 | 0.69 | 43.5 | 33 | 0.55 |
| 175 | 238 | 4.4 | 54 | 0.34 | 30.9 | 304 | 7.1 | 43 | 0.55 | 50.2 | 36 | 0.50 |
| 200 | 270 | 4.7 | 57 | 0.41 | 34.9 | 346 | 7.5 | 46 | 0.52 | 56.8 | 38 | 0.47 |
| 275 | 370 | 5.6 | 66 | 0.28 | 47.2 | 472 | 8.9 | 53 | 0.45 | 76.6 | 44 | 0.41 |
| 300 | 403 | 5.8 | 69 | 0.27 | 51.2 | 515 | 9.3 | 55 | 0.44 | 83.3 | 46 | 0.39 |
| 400 | 540 | 6.8 | 80 | 0.24 | 67.5 | 690 | 10.8 | 64 | 0.39 | 110.0 | 53 | 0.34 |
| 500 | 682 | 7.7 | 89 | 0.22 | 83.8 | 871 | 12.3 | 71 | 0.35 | 136.0 | 59 | 0.31 |
| 600 | 828 | 8.5 | 97 | 0.21 | 100.0 | 1057 | 13.6 | 78 | 0.33 | 163.0 | 65 | 0.28 |
| 700 | 978 | 9.4 | 104 | 0.19 | 116.0 | 1250 | 15.0 | 84 | 0.31 | 189.0 | 70 | 0.26 |
| 800 | 1134 | 10.2 | 112 | 0.18 | 133.0 | 1449 | 16.2 | 89 | 0.29 | 216.0 | 74 | 0.24 |
| 900 | 1294 | 10.9 | 118 | 0.18 | 149.0 | 1653 | 17.5 | 95 | 0.28 | 242.0 | 79 | 0.23 |
| 1000 | 1458 | 11.7 | 124 | 0.17 | 165.0 | 1864 | 18.7 | 100 | 0.27 | 269.0 | 83 | 0.22 |
| 1100 | 1627 | 12.5 | 130 | 0.17 | 182.0 | 2079 | 19.9 | 104 | 0.26 | 295.0 | 87 | 0.21 |
| 1200 | 1800 | 13.2 | 136 | 0.16 | 198.0 | 2300 | 21.1 | 109 | 0.26 | 322.0 | 91 | 0.20 |
| 1300 | 1976 | 13.9 | 142 | 0.16 | 214.0 | 2525 | 22.3 | 113 | 0.25 | 348.0 | 94 | 0.19 |
| 1400 | 2155 | 14.7 | 147 | 0.15 | 230.0 | 2754 | 23.4 | 118 | 0.24 | 375.0 | 98 | 0.18 |

Note: Capacity Table values established @ base pressure of 14.73 PSIA and base temperature of 60°F; 0.60 specific gravity gas. Supercompressibility included.

4" GTS and AccuTest, Output Drive = 1.0 Cubic Meters

| Line Pressure (bar) | Line Pressure (kPa) | 45° Rotor | | | | | 30° Rotor | | | | | AccuTest Reference Rotor | |
|---------------------|---------------------|------------|------------|-----------------|-----------------------------|---------------------|------------|------------|-----------------|-----------------------------|---------------------|--------------------------|-----------------------------|
| | | Qmax Sm³/h | Qmin Sm³/h | Range Qmax/Qmin | Min. Actual Flow Rate Am³/h | Press. Drop in mbar | Qmax Sm³/h | Qmin Sm³/h | Range Qmax/Qmin | Min. Actual Flow Rate Am³/h | Press. Drop in mbar | Range Qmax/Qmin | Min. Actual Flow Rate Am³/h |
| 0.02 | 2 | 509 | 34 | 15 | 34 | 6.0 | 651 | 54.1 | 12 | 53.9 | 9.8 | 10 | 51.0 |
| 0.30 | 30 | 657 | 39 | 17 | 30 | 7.7 | 841 | 61.9 | 14 | 48.3 | 12.6 | 12 | 42.0 |
| 0.70 | 70 | 867 | 45 | 19 | 27 | 10.1 | 1109 | 71.4 | 16 | 42.6 | 16.4 | 13 | 39.0 |
| 1.00 | 100 | 1006 | 48 | 21 | 24 | 11.8 | 1287 | 76.4 | 17 | 38.7 | 19.3 | 14 | 36.0 |
| 2.00 | 200 | 1513 | 59 | 26 | 20 | 17.8 | 1935 | 93.7 | 21 | 31.7 | 29.0 | 17 | 30.0 |
| 3.00 | 300 | 2022 | 68 | 30 | 17 | 23.7 | 2587 | 108.5 | 24 | 27.5 | 38.7 | 20 | 25.0 |
| 5.00 | 500 | 3047 | 83 | 36 | 14 | 35.5 | 3897 | 133.5 | 29 | 22.5 | 58.0 | 24 | 21.0 |
| 7.00 | 700 | 4082 | 97 | 42 | 12 | 47.4 | 5221 | 154.9 | 34 | 19.6 | 77.4 | 28 | 18.0 |
| 8.00 | 800 | 4603 | 103 | 45 | 12 | 53.3 | 5887 | 164.6 | 36 | 18.5 | 87.0 | 30 | 17.0 |
| 9.00 | 900 | 5127 | 109 | 47 | 11 | 59.2 | 6558 | 174.0 | 38 | 17.6 | 96.7 | 32 | 16.0 |
| 10.00 | 1000 | 5654 | 114 | 49 | 11 | 65.1 | 7231 | 182.9 | 40 | 16.9 | 106.0 | 33 | 15.0 |
| 12.00 | 1200 | 6714 | 125 | 54 | 10 | 77.0 | 8587 | 199.8 | 43 | 15.6 | 126.0 | 36 | 14.0 |
| 15.00 | 1500 | 8320 | 140 | 60 | 9 | 94.7 | 10,641 | 223.2 | 48 | 14.1 | 155.0 | 40 | 13.0 |
| 20.00 | 2000 | 11,049 | 162 | 68 | 8 | 124.0 | 14,132 | 258.7 | 55 | 12.5 | 203.0 | 46 | 11.0 |
| 30.00 | 3000 | 16,707 | 201 | 83 | 7 | 184.0 | 21,368 | 321.9 | 66 | 10.5 | 300.0 | 55 | 9.2 |
| 35.00 | 3500 | 19,626 | 220 | 89 | 6 | 213.0 | 25,101 | 350.9 | 72 | 9.9 | 348.0 | 60 | 8.5 |
| 40.00 | 4000 | 22,628 | 237 | 95 | 6 | 243.0 | 28,941 | 379.1 | 76 | 9.4 | 397.0 | 63 | 8.1 |
| 50.00 | 5000 | 28,834 | 271 | 106 | 5 | 302.0 | 36,878 | 433.2 | 85 | 8.6 | 493.0 | 71 | 7.2 |
| 60.00 | 6000 | 35,306 | 303 | 116 | 5 | 361.0 | 45,155 | 485.0 | 93 | 8.1 | 590.0 | 77 | 6.6 |
| 70.00 | 7000 | 42,064 | 335 | 126 | 5 | 420.0 | 53,799 | 535.6 | 100 | 7.6 | 687.0 | 83 | 6.1 |
| 80.00 | 8000 | 49,054 | 366 | 134 | 5 | 480.0 | 62,740 | 584.8 | 107 | 7.3 | 783.0 | 89 | 5.7 |
| 90.00 | 9000 | 56,272 | 396 | 142 | 4 | 539.0 | 71,970 | 632.9 | 114 | 7.0 | 880.0 | 95 | 5.4 |
| 100.00 | 10,000 | 63,810 | 426 | 150 | 4 | 598.0 | 81,612 | 681.2 | 120 | 6.8 | 977.0 | 100 | 5.1 |

Note: Capacity Table values established @ base pressure of 101.325 kPa and base temperature of 15°C. Supercompressibility included.

6" GTS and AccuTest, Output Drive = 100 Cubic Feet

| Line Pressure (PSIG) | 45° Rotor | | | | | 30° Rotor | | | | | AccuTest Reference Rotor | |
|----------------------|------------|------------|-----------------|-----------------------------|---------------------|------------|------------|-----------------|-----------------------------|---------------------|--------------------------|-----------------------------|
| | Qmax MSCFH | Qmin MSCFH | Range Qmax/Qmin | Min. Actual Flow Rate MACFH | Press. Drop in W.C. | Qmax MSCFH | Qmin MSCFH | Range Qmax/Qmin | Min. Actual Flow Rate MACFH | Press. Drop in W.C. | Range Qmax/Qmin | Min. Actual Flow Rate MACFH |
| 0.25 | 35 | 1.9 | 18 | 1.94 | 3.3 | 50 | 3.3 | 15 | 3.34 | 6.7 | 10 | 3.50 |
| 5 | 46 | 2.2 | 21 | 1.69 | 4.4 | 66 | 3.8 | 17 | 2.90 | 8.9 | 12 | 2.92 |
| 10 | 58 | 2.5 | 23 | 1.51 | 5.5 | 83 | 4.3 | 19 | 2.59 | 11.2 | 13 | 2.70 |
| 15 | 70 | 2.8 | 25 | 1.38 | 6.6 | 100 | 4.7 | 21 | 2.36 | 13.5 | 14 | 2.50 |
| 20 | 82 | 3.0 | 28 | 1.27 | 7.7 | 117 | 5.1 | 23 | 2.18 | 15.8 | 15 | 2.33 |
| 25 | 94 | 3.2 | 29 | 1.19 | 8.8 | 134 | 5.5 | 25 | 2.03 | 18.1 | 17 | 2.06 |
| 50 | 154 | 4.1 | 38 | 0.94 | 14.4 | 220 | 7.0 | 31 | 1.59 | 29.7 | 21 | 1.07 |
| 75 | 215 | 4.8 | 44 | 0.80 | 20.0 | 307 | 8.3 | 37 | 1.34 | 41.4 | 25 | 1.40 |
| 100 | 276 | 5.5 | 50 | 0.71 | 25.6 | 394 | 9.4 | 42 | 1.19 | 53.2 | 27 | 1.30 |
| 125 | 338 | 6.1 | 55 | 0.64 | 31.2 | 483 | 10.5 | 47 | 1.07 | 65.0 | 31 | 1.13 |
| 150 | 400 | 6.7 | 60 | 0.70 | 36.8 | 572 | 11.4 | 51 | 0.99 | 77.0 | 33 | 1.06 |
| 175 | 463 | 7.2 | 65 | 0.56 | 42.4 | 661 | 12.3 | 55 | 0.92 | 89.0 | 36 | 0.97 |
| 200 | 526 | 7.7 | 69 | 0.53 | 48.1 | 751 | 13.1 | 58 | 0.86 | 101.0 | 38 | 0.92 |
| 275 | 719 | 9.0 | 80 | 0.46 | 64.9 | 1026 | 15.4 | 68 | 0.74 | 138.0 | 44 | 0.80 |
| 300 | 784 | 9.4 | 83 | 0.44 | 70.5 | 1120 | 16.2 | 71 | 0.70 | 151.0 | 46 | 0.76 |
| 400 | 1050 | 11.0 | 95 | 0.39 | 92.9 | 1500 | 18.9 | 82 | 0.61 | 202.0 | 53 | 0.66 |
| 500 | 1325 | 12.5 | 106 | 0.36 | 115.0 | 1893 | 21.4 | 92 | 0.54 | 256.0 | 59 | 0.59 |
| 600 | 1609 | 13.8 | 116 | 0.33 | 138.0 | 2299 | 23.7 | 102 | 0.49 | 310.0 | 65 | 0.54 |
| 700 | 1903 | 15.2 | 125 | 0.31 | 160.0 | 2718 | 26.0 | 111 | 0.45 | 367.0 | 70 | 0.50 |
| 800 | 2205 | 16.5 | 134 | 0.30 | 182.0 | 3150 | 28.2 | 119 | 0.42 | 426.0 | 74 | 0.47 |
| 900 | 2516 | 17.7 | 142 | 0.29 | 205.0 | 3594 | 30.4 | 127 | 0.39 | 486.0 | 79 | 0.44 |
| 1000 | 2836 | 19.0 | 149 | 0.28 | 227.0 | 4051 | 32.5 | 135 | 0.37 | 549.0 | 83 | 0.42 |
| 1100 | 3164 | 20.2 | 157 | 0.27 | 250.0 | 4520 | 34.6 | 143 | 0.35 | 613.0 | 87 | 0.40 |
| 1200 | 3500 | 21.4 | 163 | 0.26 | 272.0 | 5000 | 36.7 | 151 | 0.33 | 678.0 | 91 | 0.38 |
| 1300 | 3842 | 22.6 | 170 | 0.26 | 294.0 | 5488 | 38.7 | 158 | 0.32 | 745.0 | 94 | 0.37 |
| 1400 | 4190 | 23.8 | 176 | 0.25 | 317.0 | 5986 | 40.7 | 165 | 0.30 | 814.0 | 98 | 0.35 |

Note: Capacity Table values established @ base pressure of 14.73 PSIA and base temperature of 60°F, 0.60 specific gravity gas. Supercompressibility included.

6" GTS and AccuTest, Output Drive = 1.0 Cubic Meters

| Line Pressure (bar) | Line Pressure (kPa) | 45° Rotor | | | | | 30° Rotor | | | | | AccuTest Reference Rotor | |
|---------------------|---------------------|------------|------------|-----------------|-----------------------------|---------------------|------------|------------|-----------------|-----------------------------|---------------------|--------------------------|-----------------------------|
| | | Qmax Sm³/h | Qmin Sm³/h | Range Qmax/Qmin | Min. Actual Flow Rate Am³/h | Press. Drop in mbar | Qmax Sm³/h | Qmin Sm³/h | Range Qmax/Qmin | Min. Actual Flow Rate Am³/h | Press. Drop in mbar | Range Qmax/Qmin | Min. Actual Flow Rate Am³/h |
| 0.02 | 2 | 1000 | 55 | 18 | 55 | 8.2 | 1440 | 95.7 | 15 | 95.0 | 16.9 | 10 | 100 |
| 0.30 | 30 | 1291 | 63 | 20 | 49 | 10.5 | 1836 | 108.0 | 17 | 84.1 | 21.5 | 12 | 83 |
| 0.70 | 70 | 1703 | 73 | 23 | 44 | 13.7 | 2403 | 123.6 | 19 | 73.5 | 28.2 | 13 | 77 |
| 1.00 | 100 | 1977 | 78 | 25 | 40 | 16.2 | 2829 | 134.1 | 21 | 67.8 | 33.2 | 14 | 71 |
| 2.00 | 200 | 2972 | 96 | 31 | 32 | 24.3 | 4253 | 164.4 | 26 | 55.3 | 49.9 | 17 | 59 |
| 3.00 | 300 | 3973 | 111 | 36 | 28 | 32.4 | 5679 | 190.0 | 30 | 47.8 | 66.6 | 20 | 50 |
| 5.00 | 500 | 5986 | 137 | 44 | 23 | 48.5 | 8570 | 233.4 | 37 | 38.9 | 101.0 | 24 | 42 |
| 7.00 | 700 | 8020 | 159 | 51 | 20 | 64.7 | 11,473 | 270.0 | 42 | 33.7 | 135.0 | 22 | 36 |
| 8.00 | 800 | 9043 | 169 | 54 | 19 | 72.8 | 12,956 | 287.0 | 45 | 31.7 | 152.0 | 30 | 33 |
| 9.00 | 900 | 10,073 | 178 | 57 | 18 | 80.9 | 14,409 | 302.6 | 48 | 30.0 | 169.0 | 32 | 31 |
| 10.00 | 1000 | 11,107 | 187 | 59 | 17 | 89.0 | 15,902 | 317.9 | 50 | 28.6 | 187.0 | 33 | 30 |
| 12.00 | 1200 | 13,190 | 205 | 64 | 16 | 105.0 | 18,875 | 346.4 | 54 | 26.2 | 221.0 | 36 | 28 |
| 15.00 | 1500 | 16,346 | 229 | 72 | 14 | 129.0 | 23,258 | 384.5 | 60 | 23.6 | 273.0 | 40 | 25 |
| 20.00 | 2000 | 21,708 | 265 | 82 | 13 | 170.0 | 31,119 | 444.7 | 70 | 20.4 | 365.0 | 46 | 21 |
| 30.00 | 3000 | 32,823 | 330 | 100 | 11 | 251.0 | 46,813 | 545.5 | 86 | 16.7 | 549.0 | 55 | 18 |
| 35.00 | 3500 | 38,558 | 359 | 107 | 10 | 291.0 | 55,176 | 592.2 | 93 | 15.4 | 647.0 | 60 | 17 |
| 40.00 | 4000 | 44,455 | 388 | 114 | 10 | 332.0 | 63,881 | 637.2 | 100 | 14.3 | 749.0 | 63 | 16 |
| 50.00 | 5000 | 56,648 | 444 | 128 | 9 | 413.0 | 81,261 | 718.7 | 113 | 12.7 | 953.0 | 71 | 14 |
| 60.00 | 6000 | 69,363 | 497 | 140 | 8 | 494.0 | 99,691 | 796.0 | 125 | 11.4 | 1169.0 | 77 | 13 |
| 70.00 | 7000 | 82,640 | 548 | 151 | 8 | 575.0 | 118,499 | 867.8 | 137 | 10.5 | 1390.0 | 83 | 12 |
| 80.00 | 8000 | 96,374 | 599 | 161 | 7 | 655.0 | 138,322 | 937.6 | 148 | 9.7 | 1622.0 | 89 | 11 |
| 90.00 | 9000 | 110,554 | 648 | 171 | 7 | 736.0 | 159,214 | 1005.9 | 158 | 9.0 | 1867.0 | 95 | 11 |
| 100.00 | 10,000 | 125,364 | 698 | 180 | 7 | 817.0 | 180,742 | 1071.8 | 169 | 8.5 | 2119.0 | 100 | 10 |

Note: Capacity Table values established @ base pressure of 101.325 kPa and base temperature of 15°C. Supercompressibility included.

8" GTS and AccuTest, Output Drive = 1000 Cubic Feet

| Line Pressure (PSIG) | 45° Rotor | | | | | 30° Rotor | | | | | AccuTest Reference Rotor | |
|----------------------|------------|------------|-----------------|-----------------------------|---------------------|------------|------------|-----------------|-----------------------------|---------------------|--------------------------|-----------------------------|
| | Qmax MSCFH | Qmin MSCFH | Range Qmax/Qmin | Min. Actual Flow Rate MACFH | Press. Drop in W.C. | Qmax MSCFH | Qmin MSCFH | Range Qmax/Qmin | Min. Actual Flow Rate MACFH | Press. Drop in W.C. | Range Qmax/Qmin | Min. Actual Flow Rate MACFH |
| 0.25 | 60 | 3.0 | 20 | 3.00 | 1.6 | 88 | 5.9 | 15 | 5.87 | 3.4 | 10 | 6.00 |
| 5 | 79 | 3.4 | 23 | 2.61 | 2.1 | 116 | 6.7 | 17 | 5.11 | 4.5 | 12 | 5.00 |
| 10 | 99 | 3.9 | 26 | 2.33 | 2.7 | 146 | 7.6 | 19 | 4.56 | 5.7 | 13 | 4.62 |
| 15 | 120 | 4.2 | 28 | 2.13 | 3.2 | 176 | 8.3 | 21 | 4.16 | 6.8 | 14 | 4.28 |
| 20 | 141 | 4.6 | 31 | 1.97 | 3.7 | 206 | 9.0 | 23 | 3.85 | 8.0 | 15 | 4.00 |
| 25 | 161 | 4.9 | 33 | 1.84 | 4.3 | 236 | 9.6 | 25 | 3.60 | 9.1 | 17 | 3.53 |
| 50 | 264 | 6.3 | 42 | 1.45 | 7.0 | 388 | 12.4 | 31 | 2.83 | 14.9 | 21 | 2.86 |
| 75 | 368 | 7.5 | 49 | 1.23 | 9.7 | 540 | 14.6 | 37 | 2.41 | 20.7 | 25 | 2.40 |
| 100 | 473 | 8.5 | 56 | 1.09 | 12.4 | 694 | 16.6 | 42 | 2.14 | 26.4 | 27 | 2.22 |
| 125 | 579 | 9.4 | 62 | 0.99 | 15.2 | 850 | 18.4 | 46 | 1.95 | 32.2 | 31 | 1.96 |
| 150 | 686 | 10.3 | 67 | 1.08 | 17.9 | 1006 | 20.1 | 50 | 2.11 | 38.0 | 33 | 1.82 |
| 175 | 793 | 11.1 | 72 | 0.86 | 20.6 | 1164 | 21.6 | 54 | 1.68 | 43.7 | 36 | 1.67 |
| 200 | 901 | 11.8 | 76 | 0.81 | 23.3 | 1322 | 23.1 | 57 | 1.59 | 49.5 | 38 | 1.58 |
| 275 | 1232 | 13.9 | 89 | 0.71 | 31.4 | 1807 | 27.2 | 66 | 1.38 | 66.8 | 44 | 1.36 |
| 300 | 1344 | 14.5 | 92 | 0.68 | 34.2 | 1971 | 28.4 | 69 | 1.33 | 72.6 | 46 | 1.30 |
| 400 | 1800 | 17.0 | 106 | 0.60 | 45.0 | 2640 | 33.2 | 80 | 1.18 | 95.7 | 53 | 1.13 |
| 500 | 2272 | 19.2 | 118 | 0.55 | 55.9 | 3332 | 37.6 | 89 | 1.08 | 119.0 | 59 | 1.02 |
| 600 | 2759 | 21.4 | 129 | 0.51 | 66.7 | 4046 | 41.8 | 97 | 1.00 | 142.0 | 65 | 0.92 |
| 700 | 3262 | 23.4 | 139 | 0.48 | 77.6 | 4784 | 45.8 | 104 | 0.95 | 165.0 | 70 | 0.86 |
| 800 | 3780 | 25.4 | 149 | 0.46 | 88.5 | 5543 | 49.7 | 112 | 0.90 | 188.0 | 74 | 0.81 |
| 900 | 4313 | 27.4 | 158 | 0.44 | 99.3 | 6326 | 53.5 | 118 | 0.87 | 211.0 | 79 | 0.76 |
| 1000 | 4862 | 29.3 | 166 | 0.43 | 110.0 | 7130 | 57.3 | 124 | 0.84 | 234.0 | 83 | 0.72 |
| 1100 | 5424 | 31.2 | 174 | 0.41 | 121.0 | 7955 | 61.0 | 130 | 0.81 | 257.0 | 87 | 0.69 |
| 1200 | 6000 | 33.0 | 182 | 0.40 | 132.0 | 8799 | 64.6 | 136 | 0.79 | 280.0 | 91 | 0.66 |
| 1300 | 6586 | 34.9 | 189 | 0.39 | 143.0 | 9659 | 68.2 | 142 | 0.77 | 303.0 | 94 | 0.64 |
| 1400 | 7183 | 36.7 | 196 | 0.38 | 154 | 10535 | 71.7 | 147 | 0.75 | 326.0 | 98 | 0.61 |

Note: Capacity Table values established @ base pressure of 14.73 PSIA and base temperature of 60°F, 0.60 specific gravity gas. Supercompressibility included.

8" GTS and AccuTest, Output Drive = 10.0 Cubic Meters

| Line Pressure (bar) | Line Pressure (kPa) | 45° Rotor | | | | | 30° Rotor | | | | | AccuTest Reference Rotor | |
|---------------------|---------------------|------------|------------|-----------------|-----------------------------|---------------------|------------|------------|-----------------|-----------------------------|---------------------|--------------------------|-----------------------------|
| | | Qmax Sm³/h | Qmin Sm³/h | Range Qmax/Qmin | Min. Actual Flow Rate Am³/h | Press. Drop in mbar | Qmax Sm³/h | Qmin Sm³/h | Range Qmax/Qmin | Min. Actual Flow Rate Am³/h | Press. Drop in mbar | Range Qmax/Qmin | Min. Actual Flow Rate Am³/h |
| 0.02 | 2 | 1700 | 85.0 | 20 | 84 | 4.0 | 2500 | 166.3 | 15 | 165.5 | 8.7 | 10 | 170 |
| 0.30 | 30 | 2195 | 97.0 | 23 | 76 | 5.1 | 3228 | 190.1 | 17 | 148.4 | 11.1 | 12 | 142 |
| 0.70 | 70 | 2895 | 112.0 | 26 | 67 | 6.7 | 4257 | 219.2 | 19 | 130.8 | 14.6 | 13 | 131 |
| 1.00 | 100 | 3360 | 120.0 | 28 | 61 | 7.9 | 4942 | 234.6 | 21 | 119.0 | 17.2 | 14 | 121 |
| 2.00 | 200 | 5053 | 147.0 | 34 | 50 | 11.8 | 7431 | 288.0 | 26 | 97.3 | 25.7 | 17 | 100 |
| 3.00 | 300 | 6755 | 170.0 | 40 | 43 | 15.8 | 9933 | 333.4 | 30 | 84.5 | 34.3 | 20 | 85 |
| 5.00 | 500 | 10,176 | 209.0 | 49 | 35 | 23.7 | 14,965 | 410.0 | 36 | 69.3 | 51.5 | 24 | 71 |
| 7.00 | 700 | 13,635 | 243.0 | 56 | 31 | 31.6 | 20,051 | 475.8 | 42 | 60.3 | 68.7 | 28 | 61 |
| 8.00 | 800 | 15,373 | 258.0 | 60 | 29 | 35.5 | 22,607 | 505.8 | 45 | 57.0 | 77.3 | 30 | 57 |
| 9.00 | 900 | 17,125 | 273.0 | 63 | 28 | 39.5 | 25,184 | 534.5 | 47 | 54.2 | 85.8 | 32 | 53 |
| 10.00 | 1000 | 18,882 | 287.0 | 66 | 26 | 43.4 | 27,768 | 561.9 | 49 | 51.8 | 94.4 | 33 | 52 |
| 12.00 | 1200 | 22,423 | 313.0 | 72 | 24 | 51.3 | 32,974 | 613.8 | 54 | 47.8 | 112.0 | 36 | 47 |
| 15.00 | 1500 | 27,788 | 350.0 | 79 | 22 | 63.2 | 40,865 | 685.6 | 60 | 43.4 | 137.0 | 40 | 43 |
| 20.00 | 2000 | 36,903 | 405.0 | 91 | 20 | 82.9 | 54,269 | 794.8 | 68 | 38.4 | 180.0 | 46 | 37 |
| 30.00 | 3000 | 55,799 | 504.0 | 111 | 16 | 122.0 | 82,057 | 989.0 | 83 | 32.3 | 266.0 | 55 | 31 |
| 35.00 | 3500 | 65,548 | 550.0 | 119 | 15 | 142.0 | 96,394 | 1078.2 | 89 | 30.3 | 309.0 | 60 | 28 |
| 40.00 | 4000 | 75,574 | 594.0 | 127 | 15 | 162.0 | 111,139 | 1164.8 | 95 | 28.8 | 352.0 | 63 | 27 |
| 50.00 | 5000 | 96,301 | 679.0 | 142 | 13 | 201.0 | 141,619 | 1330.8 | 106 | 26.4 | 438.0 | 71 | 24 |
| 60.00 | 6000 | 117,917 | 760.0 | 155 | 13 | 241.0 | 173,407 | 1490.0 | 116 | 24.8 | 524.0 | 77 | 22 |
| 70.00 | 7000 | 140,488 | 839.0 | 167 | 12 | 280.0 | 206,600 | 1645.4 | 126 | 23.5 | 610.0 | 83 | 20 |
| 80.00 | 8000 | 163,836 | 916.0 | 179 | 11 | 320.0 | 240,936 | 1796.5 | 134 | 22.5 | 695.0 | 89 | 19 |
| 90.00 | 9000 | 187,941 | 992.0 | 190 | 11 | 359.0 | 276,384 | 1944.3 | 142 | 21.6 | 781.0 | 95 | 18 |
| 100.00 | 10,000 | 213,119 | 1067.0 | 200 | 11 | 399.0 | 313,410 | 2092.8 | 150 | 21.0 | 867.0 | 100 | 17 |

Note: Capacity Table values established @ base pressure of 101.325 kPa and base temperature of 15°C. Supercompressibility included.

12" GT, Output Drive = 1000 Cubic Feet, 45° Rotor

| Line Pressure (PSIG) | Qmax MSCFH | Qmin MSCFH | Range Qmax/Qmin | Min. Actual Flow Rate MACFH | Press. Drop in W.C. |
|----------------------|------------|------------|-----------------|-----------------------------|---------------------|
| 0.25 | 150 | 6.0 | 25 | 6.00 | 2.1 |
| 5 | 198 | 6.9 | 29 | 5.22 | 2.8 |
| 10 | 249 | 7.7 | 32 | 4.66 | 3.5 |
| 15 | 300 | 8.5 | 35 | 4.25 | 4.2 |
| 20 | 351 | 9.2 | 38 | 3.93 | 4.9 |
| 25 | 403 | 9.9 | 41 | 3.68 | 5.6 |
| 50 | 661 | 12.6 | 52 | 2.89 | 9.2 |
| 75 | 921 | 15.0 | 62 | 2.46 | 12.8 |
| 100 | 1183 | 17.0 | 70 | 2.19 | 16.3 |
| 125 | 1448 | 18.8 | 77 | 1.99 | 19.9 |
| 150 | 1715 | 20.5 | 84 | 2.16 | 23.4 |
| 175 | 1983 | 22.1 | 90 | 1.72 | 27.0 |
| 200 | 2254 | 23.6 | 95 | 1.62 | 30.6 |
| 275 | 3079 | 27.8 | 111 | 1.41 | 41.3 |
| 300 | 3359 | 29.1 | 116 | 1.36 | 44.8 |
| 400 | 4500 | 33.9 | 133 | 1.21 | 59.1 |
| 500 | 5680 | 38.4 | 148 | 1.10 | 73.3 |
| 600 | 6897 | 42.7 | 161 | 1.03 | 87.6 |
| 700 | 8154 | 46.8 | 174 | 0.97 | 102.0 |
| 800 | 9449 | 50.8 | 186 | 0.92 | 116.0 |
| 900 | 10783 | 54.7 | 197 | 0.89 | 130.0 |
| 1000 | 12154 | 58.6 | 207 | 0.86 | 145.0 |
| 1100 | 13560 | 62.4 | 217 | 0.83 | 159.0 |
| 1200 | 14999 | 66.1 | 227 | 0.81 | 173.0 |
| 1300 | 16465 | 69.7 | 236 | 0.79 | 187.0 |
| 1400 | 17958 | 73.3 | 245 | 0.76 | 202.0 |

Note: Capacity Table values established @ base pressure of 14.73 PSIA and base temperature of 60°F, 0.60 specific gravity gas. Supercompressibility included.

12" GT, Output Drive = 10.0 Cubic Meters, 45° Rotor

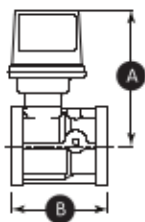
| Line Pressure (bar) | Line Pressure (kPa) | Qmax Sm ³ /h | Qmin Sm ³ /h | Range Qmax/Qmin | Min. Actual Flow Rate Am ³ /h | Press. Drop in mbar |
|---------------------|---------------------|-------------------------|-------------------------|-----------------|--|---------------------|
| 0.02 | 2 | 4289 | 171 | 25 | 170 | 5.2 |
| 0.30 | 30 | 5512 | 195 | 28 | 152 | 6.7 |
| 0.70 | 70 | 7269 | 225 | 32 | 134 | 8.7 |
| 1.00 | 100 | 8438 | 240 | 35 | 122 | 10.3 |
| 2.00 | 200 | 12,689 | 295 | 43 | 100 | 15.4 |
| 3.00 | 300 | 16,962 | 342 | 50 | 87 | 20.5 |
| 5.00 | 500 | 25,554 | 420 | 61 | 71 | 30.8 |
| 7.00 | 700 | 34,239 | 487 | 70 | 62 | 41.0 |
| 8.00 | 800 | 38,604 | 518 | 74 | 58 | 46.2 |
| 9.00 | 900 | 43,004 | 548 | 79 | 55 | 51.3 |
| 10.00 | 1000 | 47,416 | 576 | 82 | 53 | 56.4 |
| 12.00 | 1200 | 56,307 | 629 | 90 | 49 | 66.7 |
| 15.00 | 1500 | 69,782 | 702 | 99 | 44 | 82.1 |
| 20.00 | 2000 | 92,670 | 814 | 114 | 39 | 108.0 |
| 30.00 | 3000 | 140,121 | 1013 | 138 | 33 | 159.0 |
| 35.00 | 3500 | 164,603 | 1105 | 149 | 31 | 185.0 |
| 40.00 | 4000 | 189,780 | 1193 | 159 | 29 | 210.0 |
| 50.00 | 5000 | 241,829 | 1363 | 177 | 27 | 262.0 |
| 60.00 | 6000 | 296,110 | 1527 | 194 | 25 | 313.0 |
| 70.00 | 7000 | 352,790 | 1686 | 209 | 24 | 364.0 |
| 80.00 | 8000 | 411,422 | 1841 | 224 | 23 | 416.0 |
| 90.00 | 9000 | 471,954 | 1992 | 237 | 22 | 467.0 |
| 100.00 | 10,000 | 535,179 | 2144 | 250 | 22 | 518.0 |

Note: Capacity Table values established @ base pressure of 101.325 kPa and base temperature of 15°C. Supercompressibility included.

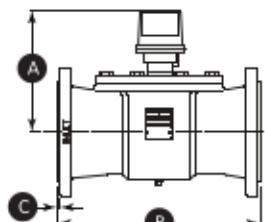
GT, GTS, GTX and AccuTest Turbine Gas Meters - Other Technical Data

Turbine Meter Dimensional Table

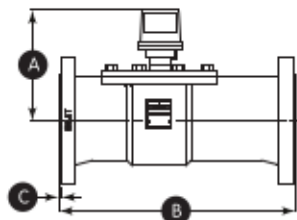
| | MAOP | | | Meter Dimensions | | | | Flange O.D. | Bolt Circle | Flange Bolts | | Hole Size | ANSI | Shipping Weight |
|---------------------------|------|--------|--------|------------------|--------|-------------|--------|-------------|-------------|--------------|--------|-----------|--------|-----------------|
| | PSIG | Bar | kPa | A | B | B (E-Class) | C | | | No. | Dia. | | | |
| 3" GT | 275 | | | 9.18" | 6.52" | | | | | | | | | 10 lbs |
| | 1480 | | | 11.26" | 6.52" | | | | | | | | | 20 lbs |
| | | 19 | 1900 | 233 mm | 166 mm | | | | | | | | | 4.5 kg |
| | | 100 | 10,200 | 286 mm | 166 mm | | | | | | | | | 9.0 kg |
| 4" GTS GTX AccuTest | 175 | | | 10.78" | 14.00" | 14.00" | NA | 9.00" | 7.50" | 8 | 5/8" | | 150 FF | 32 lbs |
| | 740 | | | 10.78" | 14.00" | 15.50" | .06" | 10.00" | 7.87" | 8 | 3/4" | | 300 RF | 150 lbs |
| | 1480 | | | 10.78" | 14.00" | 15.50" | .25" | 10.75" | 8.50" | 8 | 7/8" | | 600 RF | 150 lbs |
| | | 12 | 1200 | 274 mm | 356 mm | 356 mm | NA | 229 mm | 190 mm | 8 | | 19 mm | 150 FF | 14.5 kg |
| | | 50 | 5000 | 274 mm | 356 mm | 394 mm | 1.5 mm | 254 mm | 200 mm | 8 | | 22 mm | 300 RF | 68 kg |
| | | 100 | 10,200 | 274 mm | 356 mm | 394 mm | 6.4 mm | 273 mm | 216 mm | 8 | | 25 mm | 600 RF | 68 kg |
| 6" GTS GTX AccuTest | 175 | | | 11.85" | 16.00" | 16.00" | NA | 11.00" | 9.50" | 8 | 3/4" | | 150 FF | 54 lbs |
| | 740 | | | 11.85" | 18.00" | 22.50" | .06" | 12.50" | 10.62" | 12 | 3/4" | | 300 RF | 275 lbs |
| | 1480 | | | 12.34" | 18.00" | NA | .25" | 14.00" | 11.50" | 12 | 1" | | 600 RF | 275 lbs |
| | | 12 | 1200 | 301 mm | 410 mm | 410 mm | NA | 279 mm | 241 mm | 8 | | 22 mm | 150 FF | 24.5 kg |
| | | 50 | 5000 | 301 mm | 460 mm | 572 mm | 1.5 mm | 318 mm | 270 mm | 12 | | 22 mm | 300 RF | 125 kg |
| | | 100 | 10,200 | 313 mm | 460 mm | NA | 6.4 mm | 356 mm | 292 mm | 12 | | 29 mm | 600 RF | 125 kg |
| 8" GTS GTX AccuTest | 175 | | | 12.97" | 21.00" | 21.00" | NA | 13.50" | 11.75" | 8 | 3/4" | | 150 FF | 90 lbs |
| | 740 | | | 12.97" | 23.00" | 27.25" | .06" | 15.00" | 13.00" | 12 | 7/8" | | 300 RF | 450 lbs |
| | 1480 | | | 13.47" | 23.00" | NA | .25" | 16.50" | 13.75" | 12 | 1 1/8" | | 600 RF | 450 lbs |
| | | 12 | 1200 | 329 mm | 535 mm | 535 mm | NA | 343 mm | 298 mm | 8 | | 22 mm | 150 FF | 47 kg |
| | | 50 | 5000 | 329 mm | 585 mm | 693 mm | 1.5 mm | 381 mm | 330 mm | 12 | | 25 mm | 300 RF | 205 kg |
| | | 100 | 10,200 | 342 mm | 585 mm | NA | 6.4 mm | 419 mm | 349 mm | 12 | | 32 mm | 600 RF | 205 kg |
| 12" GT | 175 | | | 20.00" | 29.00" | NA | .06" | 19.00" | 17.00" | 12 | 7/8" | | 150 FF | 460 lbs |
| | 275 | | | 20.00" | 29.00" | NA | .06" | 19.00" | 17.00" | 12 | 7/8" | | 150 RF | 490 lbs |
| | 740 | | | 20.57" | 30.25" | NA | .06" | 20.50" | 17.75" | 16 | 1 1/8" | | 300 RF | 620 lbs |
| | 1480 | | | 21.00" | 32.75" | NA | .25" | 22.00" | 19.50" | 20 | 1 1/4" | | 600 RF | 970 lbs |
| | | 12 | 1200 | 508 mm | 740 mm | NA | 1.5 mm | 483 mm | 432 mm | 12 | | 25 mm | 150 FF | 209 kg |
| | 19 | 1900 | 508 mm | 740 mm | NA | 1.5 mm | 483 mm | 432 mm | 12 | | 25 mm | 150 RF | 222 kg | |
| | 51 | 5000 | 522 mm | 770 mm | NA | 1.5 mm | 521 mm | 451 mm | 16 | | 32 mm | 300 RF | 280 kg | |
| | 102 | 10,200 | 533 mm | 832 mm | NA | 6.4 mm | 559 mm | 495 mm | 20 | | 35 mm | 600 RF | 440 kg | |



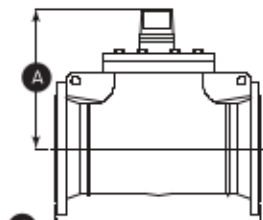
3" GT Turbine Meter



4", 6" & 8" GTS and GTX and AccuTest Turbine Meter



4", 6" & 8" GTS and GTX E-Class Turbine Meter



12" GT Turbine Meter

Ordering Information

- 1 Size
- 2 Model
- 3 Working pressure/Housing length
- 4 Standard or extended capacity (30° or 45° Rotor)
- 5 Drive Output (English or Metric)
- 6 Index (Pointer or Odometer)
- 7 Options