



ROOTS Meters & Instruments

DATA SHEET

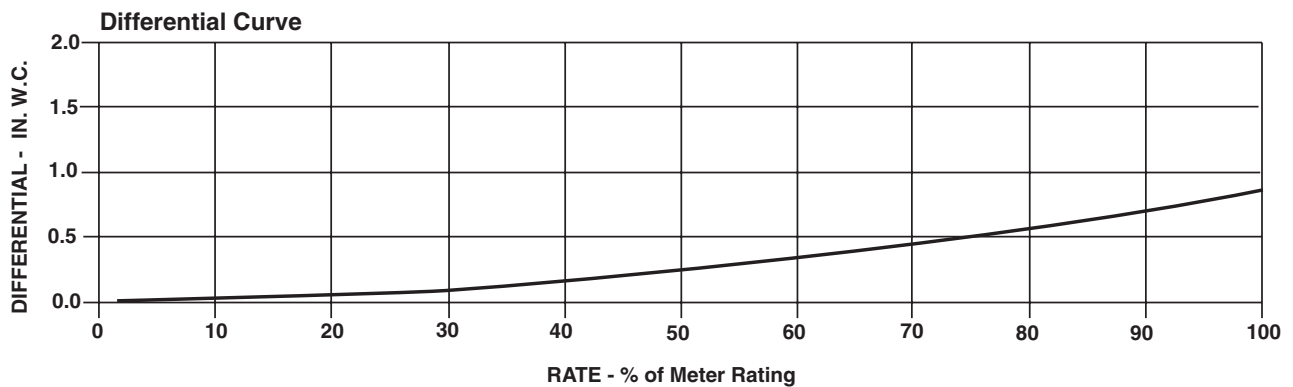
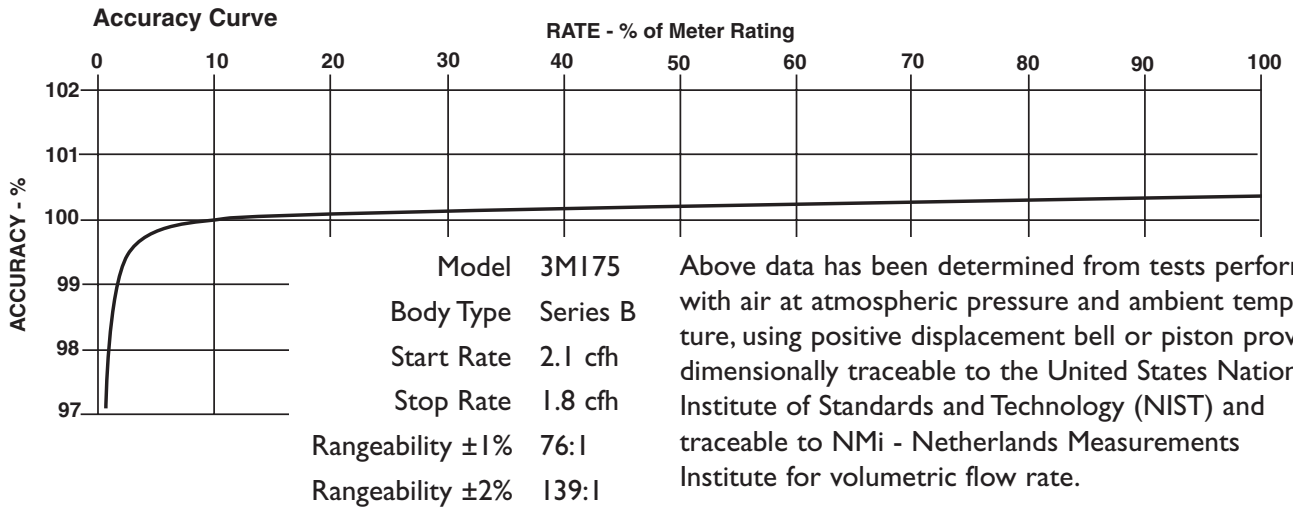
SERIES B3: 3MI75 ROOTS® Meter

| | UNITS Imperial | UNITS Metric |
|---|--------------------|--------------------------|
| Temperature Range | deg. F -40 to +140 | deg. C -40 to +60 |
| Base Rating (Q Max.) | acfh 3000 | m ³ /h 85 |
| Max. Operating Pressure (MAOP) | psig 175 | kPa 1200 |
| Leak Test (125% MAOP) | psig 219 | kPa 1510 |
| Static Test (2 x MAOP) | psig 350 | kPa 2400 |
| Rangeability +/- 1% | ratio 76:1 | ratio 76:1 |
| Rangeability +/- 2% | ratio 139:1 | ratio 139:1 |
| Start Rate | cfh 2.1 | m ³ /h 0,0595 |
| Stop Rate | cfh 1.8 | m ³ /h 0,0510 |
| Flow Rate @ 0.5" w.c., Gas | cfh 2580 | m ³ /h 73,1 |
| Avg. Differential, 100% Flow | in. w.c. 1.1 | mbar 2,6 |
| Max. Pressurization Rate | psig/sec 5 | kPa/sec 35 |
| Max. Operating Speed | rpm 2000 | rpm 2000 |
| Gear Ratio | ratio 400:1 | ratio 141,1764:1 |
| Displaced Volume/Revolution | cf 0.025 | m ³ 0,000708 |
| Drive Rate, CD | cf/rev 10 | m ³ /rev 0,1 |
| Drive Rate, TD | cf/rev 100 | m ³ /rev 1 |
| Temp. Compensating Range (TC,TD) | deg. F -20 to +120 | deg. C -29 to +49 |
| Min. Odometer Reading | cf 0.2 | m ³ 0,002 |
| Odometer Turnover | yrs. 3.8 | yrs. 1,34 |
| Nominal Pipe Size | in. 2 | mm 50,8 |
| Flange-to-Flange | in. 6-3/4 | mm 172 |
| Flange Connection | ANSI 125#FF | ANSI 125#FF |
| Bolts per Flange | qty. 4 | qty. 4 |
| Bolt Size ¹ | in. 5/8 - 11 | in. 5/8 - 11 |
| Flange Bolt Hole Depth | in. 15/16 | mm 23,8 |
| Bolt Torque: Lubricated/Non-Lub. | ft.-lb. 55/60 | N-m 74/81 |
| Restricting Orifice (120%) | in. 17/32 | mm 9,525 |
| Oil Capacity – Side Inlet | oz. 1.25 | ml 37 |
| Oil Capacity – Top Inlet | oz. 7.65 | ml 226 |
| <i>Counter Version (CTR)²</i> | | |
| Net Weight | lbs. 29 | kg 13,2 |
| Shipping Weight | lbs. 31 | kg 14,1 |
| Carton Size | in. 27 x 11 x 9 | cm 69 x 28 x 23 |
| <i>Counter with Instrument Drive (CD)²</i> | | |
| Net Weight | lbs. 33 | kg 15,0 |
| Shipping Weight | lbs. 38 | kg 17,2 |
| Carton Size | in. 31 x 15 x 13 | cm 79 x 38 x 33 |

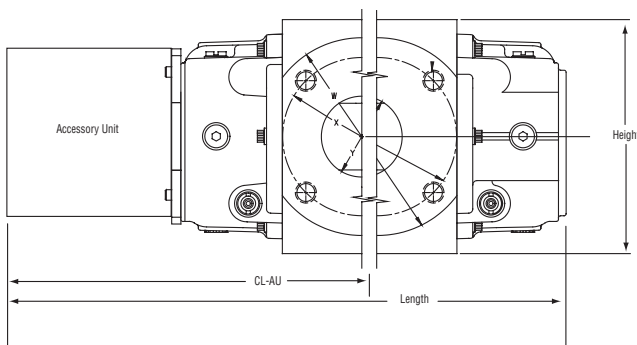
NOTES:

¹ Bolt Length varies by application.

² Weights and dimensions available for CPS,TC,TD,TPS upon request.



| 3M175 Series B3 | Overall Length | | Overall Height | | Width (Flange/Flange) | | Centerline to Accessory End (CL-AU) | | Request Detailed Drawing Number |
|-----------------|----------------|-----|----------------|-----|-----------------------|-----|-------------------------------------|-----|---------------------------------|
| | inches | mm | inches | mm | inches | mm | inches | mm | |
| CTR / TC | 17-1/8 | 435 | 6-31/32 | 177 | 6-3/4 | 172 | 10-7/8 | 276 | D054517-000 |
| CD / TD | 20-31/32 | 533 | 6-31/32 | 177 | 6-3/4 | 172 | 14-23/32 | 374 | D054431-000 |
| CPS / TPS | 9-1/4 | 489 | 6-31/32 | 177 | 6-3/4 | 172 | 13 | 330 | D054670-000 |
| IMC/C | 20-5/8 | 524 | 6-31/32 | 177 | 6-3/4 | 172 | 14-3/8 | 365 | D056486-000 |
| IMC/W | 21-5/8 | 549 | 6-31/32 | 177 | 6-3/4 | 172 | 15-3/8 | 391 | D056702-000 |



To order

Specify: Meter Series, Size and Type (i.e., ROOTS Meter Series B3 3M175 CD).
 For CD or TD, specify Inlet (Top or Side) and ID Rotation (CW-B or CCW-A).
 For Pulsar, specify Single or Dual Connectors and Connector Type (MS Circular, Conduit or Cable Gland).
 For more specific ordering information on the electronic products, request: TS:SSP, TS:IMC/C or S:IMC/W.
 Contact the factory for other available information, options, or special requests.



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