DRESSER

ROOTS Meters & Instruments

DATA SHEET

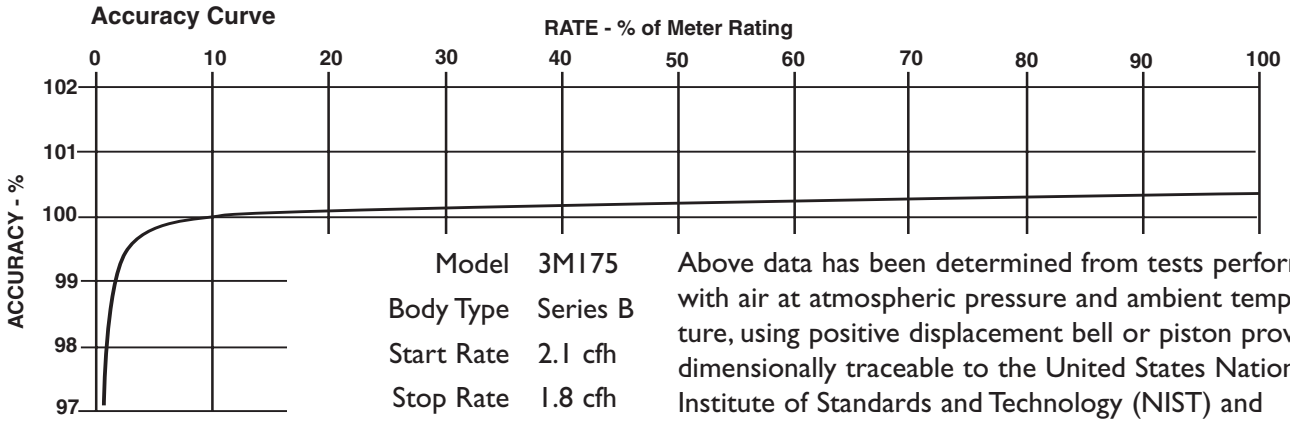
SERIES B3: 3M175 ROOTS® Meter

	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	150#FF	ANSI	150#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
Counter Version (CTR)[2]				
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
Counter with Instrument Drive (CD)[2]				
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:

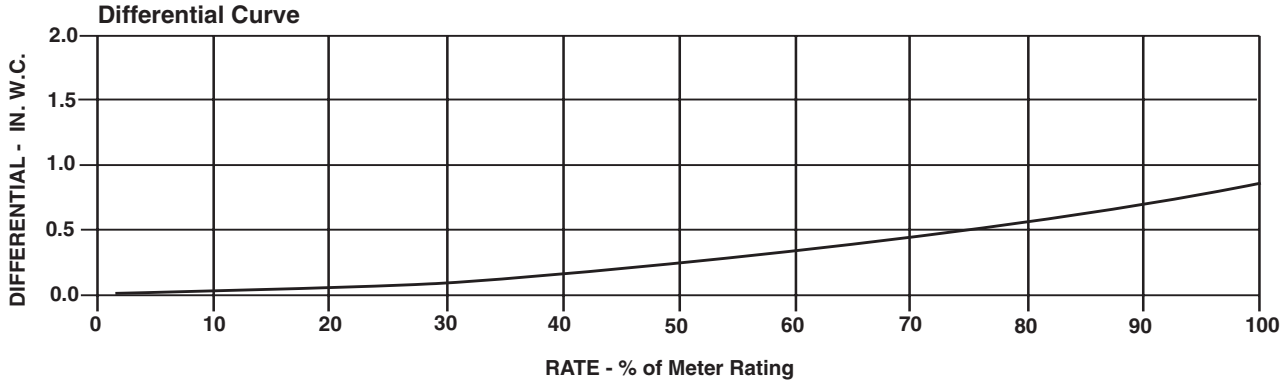
[1] Bolt Length varies by application.

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

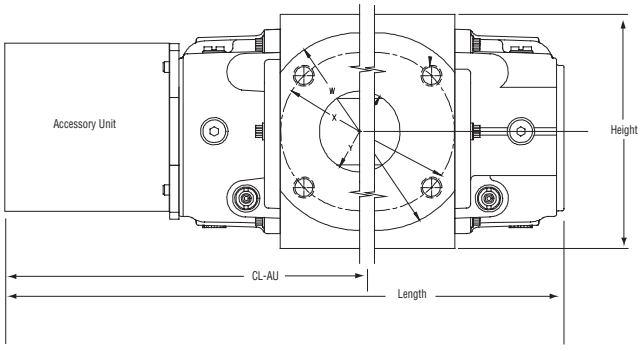


Model	3M175
Body Type	Series B
Start Rate	2.1 cfh
Stop Rate	1.8 cfh
Rangeability ±1%	76:1
Rangeability ±2%	139:1

Above data has been determined from tests performed with air at atmospheric pressure and ambient temperature, using positive displacement bell or piston provers dimensionally traceable to the United States National Institute of Standards and Technology (NIST) and traceable to NMi - Netherlands Measurements Institute for volumetric flow rate.



3M175 Series B3	Overall Length inches	Overall Length mm	Overall Height inches	Overall Height mm	Width (Flange/Flange) inches	Width (Flange/Flange) mm	Centerline to Accessory End (CL-AU) inches	Centerline to Accessory End (CL-AU) mm	Request Detailed Drawing Number
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 Pulser, 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.

DRESSER
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