



# ROOTS® Meters & Instruments

## DATA SHEET

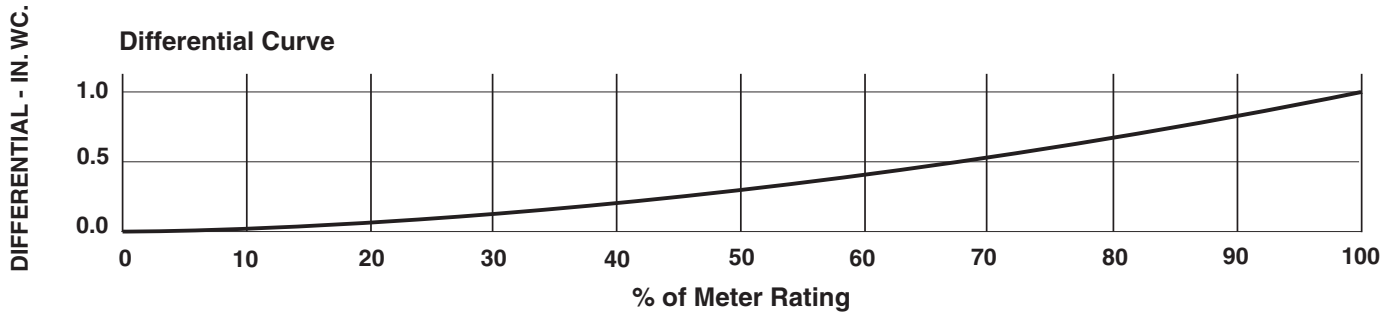
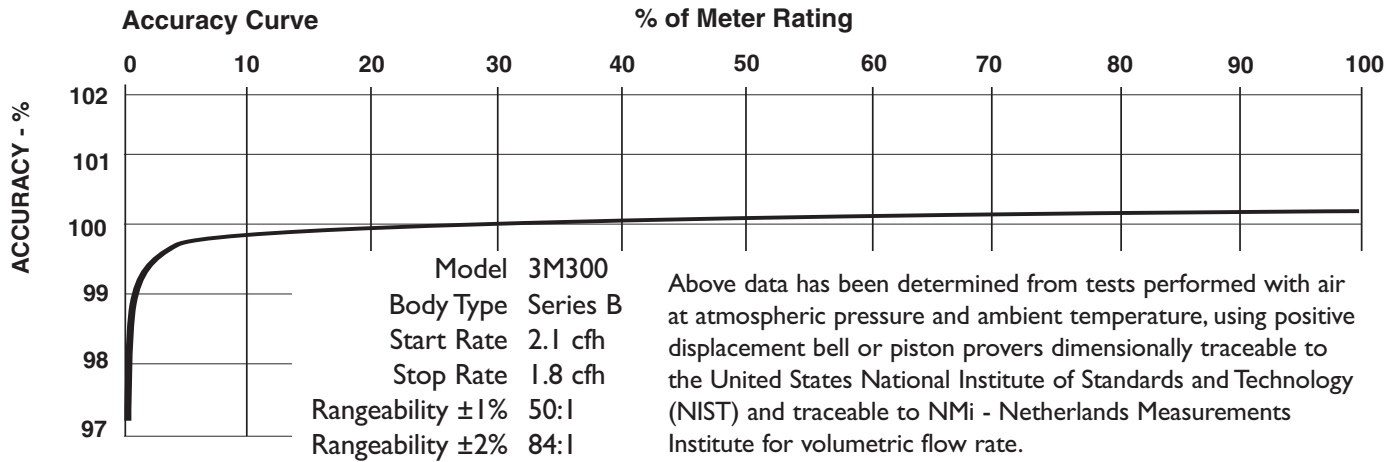
### Series B3 ROOTS® Meter 3M300 High Pressure Rotary Meter

	<b>UNITS</b>	<b>Imperial</b>	<b>UNITS</b>	<b>Metric</b>
Temperature Range	deg. F	-40 to +140	deg. C	-40 to +60
Base Rating (Q Max.)	acfh	3000	m <sup>3</sup> /h	85,0
Max. Operating Pressure (MAOP)	psig	300	kPa	2065
Leak Test (125% MAOP)	psig	375	kPa	2575
Static Test (2 x MAOP)	psig	600	kPa	4130
Rangeability +/- 1%	ratio	50:1	ratio	50:1
Rangeability +/- 2%	ratio	84:1	ratio	84:1
Start Rate	cfh	2.1	m <sup>3</sup> /h	0,0595
Stop Rate	cfh	1.8	m <sup>3</sup> /h	0,0510
Flow Rate @ 0.5" w.c., Gas	cfh	2580	m <sup>3</sup> /h	73,1
Avg. Differential, 100% Flow	in. w.c.	1	mbar	2,5
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 <sup>3</sup>	0,000708
Drive Rate, CD	cf/rev	10	m <sup>3</sup> /rev	0,1
Min. Odometer Reading	cf	0.2	m <sup>3</sup>	0,002
Odometer Turnover	yrs.	3.81	yrs.	1,34
Nominal Pipe Size	in.	2	mm	50,8
Flange-to-Flange	in.	6-3/4	mm	172
Flange Connection	ANSI	300#FF	ANSI	300#FF
Bolts per Flange	qty.	8	qty.	8
Bolt Size <sup>1</sup>	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.	80	N-m	108
Restricting Orifice (100%)	in.	31/64	mm	12,303
Oil Capacity – Side Inlet	oz.	1.25	ml	37
Oil Capacity – Top Inlet	oz.	7.6	ml	225
<i>Counter Version (CTR)<sup>2</sup></i>				
Net Weight	lbs.	29	kg	13,2
Shipping Weight	lbs.	31	kg	14,1
Carton Size	in.	26 x 15 x 16	cm	66 x 38 x 40
<i>Counter with Instrument Drive (CD)<sup>2</sup></i>				
Net Weight	lbs.	31	kg	14,1
Shipping Weight	lbs.	34	kg	15,4
Carton Size	in.	26 x 15 x 16	cm	66 x 38 x 40

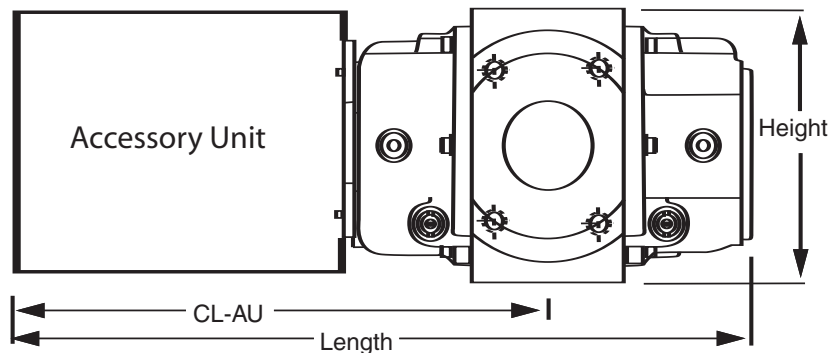
NOTES:

<sup>1</sup> Bolt Length varies by application.

<sup>2</sup> Weights and dimensions available for CPS upon request.



3M300 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	17-5/32	436	6-31/32	177	6-3/4	172	10-29/32	277	D054722-000
CD	20-31/32	533	6-31/32	177	6-3/4	172	14-23/32	374	D054439-000
CPW/CEX	19-1/4	489	6-31/32	177	6-3/4	172	13	330	D056121-000



### To order

Specify: Meter Series, Size and Type (i.e. ROOTS® Meter Series B3 3M300 CD).

For CD, 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 or TS:MC.

Contact the factory for other available information, options, or special requests.



### Process Valve & Equipment Co. | Manufacturer's Rep. & Stocking Distributor

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