



# ROOTS<sup>®</sup> Meters & Instruments

## DATA SHEET

### SERIES B3: 8C I 75 ROOTS<sup>®</sup> Meter

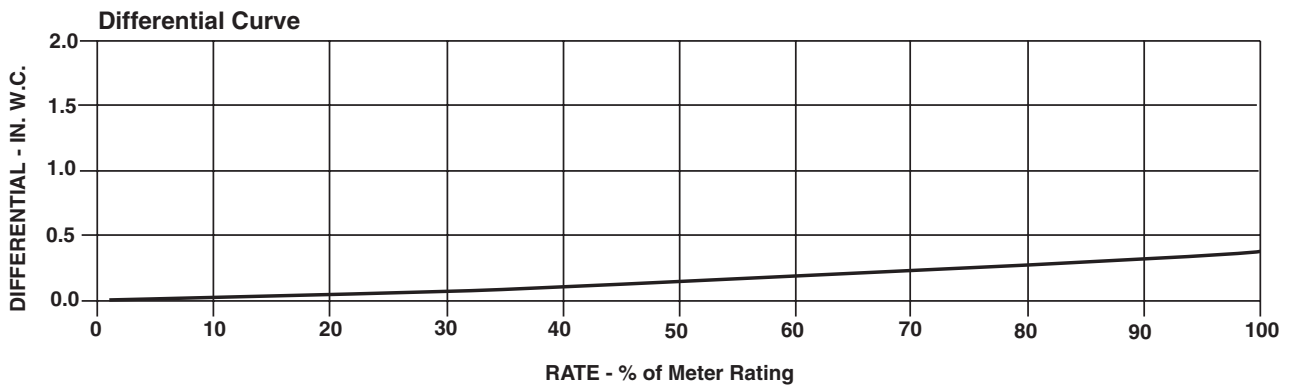
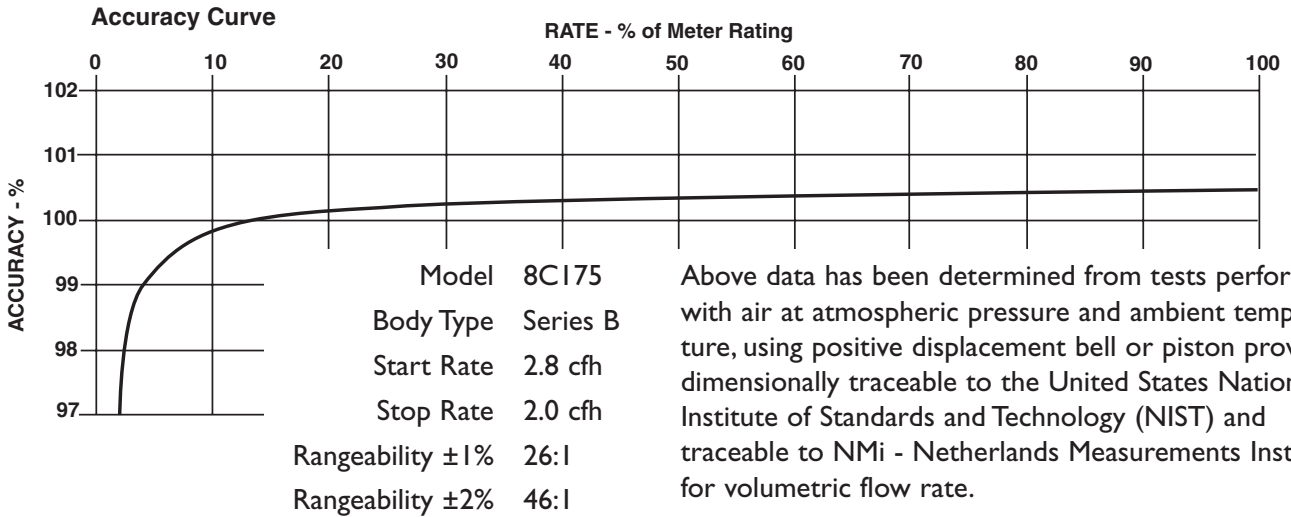
	UNITS	Imperial	UNITS	Metric
Temperature Range	deg. F	-40 to +140	deg. C	-40 to +60
Base Rating (Q Max.)	acfh	800	m <sup>3</sup> /h	22,6
Max. Operating Pressure (MAOP) <sup>1</sup>	psig	175	kPa	1200
Leak Test (125% MAOP)	psig	219	kPa	1510
Static Test (2 x MAOP)	psig	350	kPa	2400
Rangeability +/- 1%	ratio	26:1	ratio	26:1
Rangeability +/- 2%	ratio	46:1	ratio	46:1
Start Rate	cfh	2.79	m <sup>3</sup> /h	0,0790
Stop Rate	cfh	2.03	m <sup>3</sup> /h	0,0575
Flow Rate @ 0.5" w.c., Gas	cfh	800	m <sup>3</sup> /h	22,6
Avg. Differential, 100% Flow	in. w.c.	0.45	mbar	1,1
Max. Pressurization Rate	psig/sec	5	kPa/sec	35
Max. Operating Speed	rpm	1800	rpm	1800
Gear Ratio	ratio	1350:1	ratio	476,4705:1
Displaced Volume/Revolution	cf	0.007407	m <sup>3</sup>	0,000210
Drive Rate, CD	cf/rev	10	m <sup>3</sup> /rev	0,1
Drive Rate, TD	cf/rev	100	m <sup>3</sup> /rev	1
Temp. Compensating Range (TC,TD)	deg. F	-20 to +120	deg. C	-29 to +49
Min. Odometer Reading	cf	0.2	m <sup>3</sup>	0,002
Odometer Turnover	yrs.	14.27	yrs.	5,03
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 <sup>2</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.	55/60	N-m	74/81
Restricting Orifice (120%)	in.	9/32	mm	7,144
Oil Capacity – Side Inlet	oz.	0.8	ml	24
Oil Capacity – Top Inlet	oz.	3	ml	89
<i>Counter Version (CTR)<sup>3</sup></i>				
Net Weight	lbs.	18	kg	8,2
Shipping Weight	lbs.	21	kg	9,5
Carton Size	in.	23 x 11 x 9	cm	58 x 28 x 23
<i>Counter with Instrument Drive (CD)<sup>3</sup></i>				
Net Weight	lbs.	22	kg	10,0
Shipping Weight	lbs.	25	kg	11,3
Carton Size	in.	25 x 14 x 13	cm	66 x 35 x 33

NOTES:

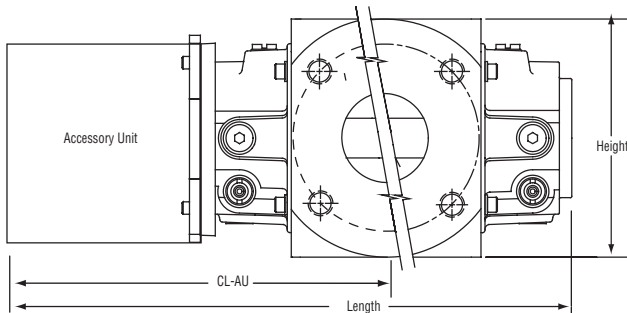
<sup>1</sup> Available with 200 PSIG rating.

<sup>2</sup> Bolt Length varies by application.

<sup>3</sup> Weights and dimensions available for CPS, TC, TD, TPS upon request.



8C175 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	13-3/4	350	6	153	6-3/4	172	9-5/16	237	D054516-000
CD / TD	17-9/16	446	6-9/32	160	6-3/4	172	13-1/8	333	D054430-000
CPS / TPS	15-15/16	405	6	153	6-3/4	172	11-15/32	292	D054669-000
IMC/C	19-23/32	501	6	153	6-3/4	172	15-11/32	382	D056485-000
IMC/W	19-1/4	489	6	153	6-3/4	172	14-9/16	370	D056701-000



#### To order

Specify: Meter Series, Size and Type (i.e., ROOTS Meter Series B3 8C175 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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