

Smith Meter® Rotary Vane Meters

Bulletin AB01024 Issue/Rev. 0.4 (6/07)

Model Designation

Large Numeral Counters and Printers

1 - 6 - 2 - 3 - - - B - 1

Decimal Position on Reset Totalizer

Blank - No Decimal

1 - Decimal between Wheels 1 and 2 from Right

2 - Decimal between Wheels 2 and 3 from Right

Unit Designation

B - Barrels

G - Gallons

L - Litres

P - Pounds

D - Dekaliters

K - Kilograms

M - Cubic Meters

T - Tons

Counter Gear Plate Ratio

0 - Up-Down Gear

1 - 1:1

5 - 42:1

8a - 8:1

Plate. (Specified

2 - 2:1

7 - 20:1

9 - 10.558:1

Separately.

3 - 8.4:1

8 - 4:1

9A - 21.116:1

See Page 2.)

4 - 10:1

Right Hand Wheel Type



- 2



- 6

Counter Type

6 - 5 Digit Large Numeral Counter

9 - 6 Digit High Capacity Large Numeral Counter

Printer Type (If Included)

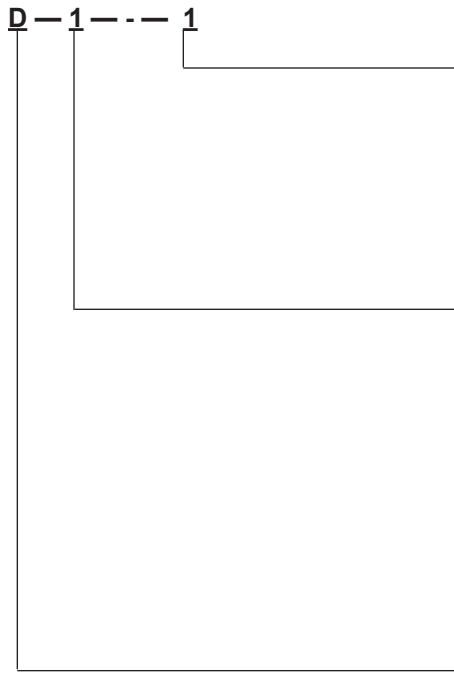
2 - Accumulative with Self-Closing Cover - Outdoor Use (Load Rack)

3 - High Capacity Accumulative with Self-Closing Cover

4 - High Capacity Zero-Start with Self-Closing Cover

6 - Zero Start with Self-Closing Cover - Outdoor Use (Truck)

Up-Down Gear Plate



Gear Plate Ratio

	Up	Down		Up	Down
1 —	1:1	Same	7 —	20:1	Same
2 —	2:1	Same	10 —	1:1	10:1
3 —	8.4:1	Same			
4 —	10:1	Same			
5 —	42:1	Same			

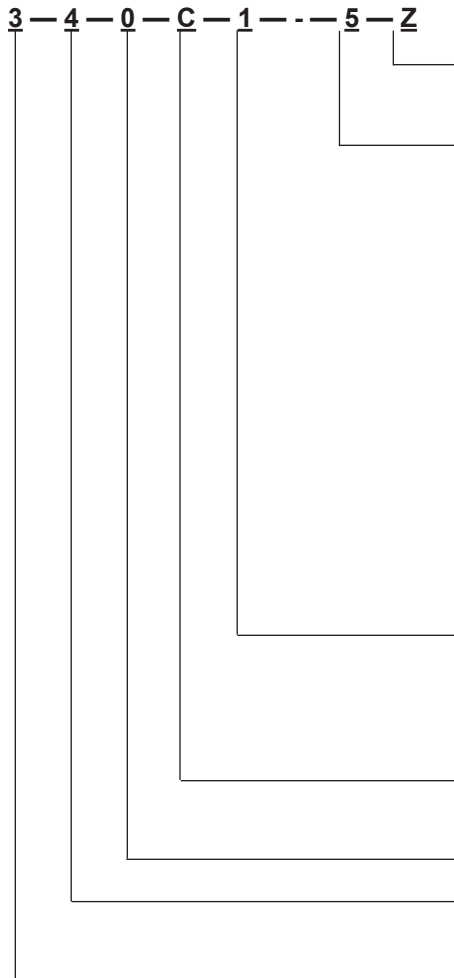
Application*

- 1 - 340-C Preset directly under LNC
- 2 - 340-C Preset with: Swivel Adaptor; Single Head ATC, ATG, or DATC; Type "E", "D" or PEXP Transmitters (also requires Stand-Alone Preset Adaptor 644400-4-02)
 - 340-C Preset with Blind Cover Plate (also requires Retrofit Adaptor 644400-4-01 with Gear Plate mounted on bottom)
 - DATC, PPS, and PEXP
- 3 - 340-C Preset with old style LNC or Lockheed counter (also requires Retrofit Adaptor 644400-4-01)

*For additional application information consult "Preset/LNC/TP Adaptation Guide", Bulletin [AB01026](#).

Up-Down Gear Plate

Preset Counters



Double Digit Right Hand Wheel

Designated by "Z" (for fixed zero).

1st Stage Trip Setting

Meter Size	Normal Trip Settings - Units* % of Max. Flow (in Units/Min)	210-SS1 Applications	
		Gallons	Dekaliters
1"	5%	—	—
2"	5%	+	+
2-1/2"	6%	+	+
3"	6%	30	20
4"	7%	40	20
6"	8%	50	30
8"	10%	+	+
10"	12%	+	+
12"	15%	+	+

Example: 2", T-11 Meter at 100 gpm with Model 340-C Preset (Max. Registration 9,999 gals.). 1st Stg. Trip = .05 x 100 = 5 gals.

*Available from 3-9 increments of 1; 10-90 in increments of 10; 100-900 in increments of 100.

*100-900 settings only available with double digit right hand wheel.

+Consult factory.

Decimal Position

Blank - No Decimal

1 - Decimal between Wheel 1 and 2 from Right

2 - Decimal between Wheel 2 and 3 from Right

Revision

"C" for Current Models

Always "0"

Number of Wheels

4 or 5

Counter Series

Always 3 for Preset

Counter Selection Table (Consult factory for combinations not shown)

Procedure:

- A. **Choose Type of Counter:** 600 Series Large Numeral or 200 Series Non-Reset Type.
 B. **Select Units of Registration:** Gallons, Barrels, Liters, Dekaliters, or Cubic Meters.
 C. **Determine “Meter Gearing”:** Number of Volume Units per revolution of meter output shaft—See Table on Page 4.
 D. **Select “Counter Max. Registration and Resolution”**

Note: Counter resolution determined by Counter Gear Ratio times Meter Gear ratio which gives No. of Volume Units per rev. of counter right hand wheel.

- E. **Proper Counter Model and Preset Model is thus Defined.**

600 Series Large Numeral Counters

Meter Gearing (Volume/Rev.)	Counter Max. Registration and Resolution	LNC Only	LNC and Preset			
		Counter Model	Counter Model	Gear Plate* Model	Normal Preset Counter Model	Preset Max. Registration and Resolution
Gallons Registration						
1 Gal.	9,999.9 9 [†]	621-G1	620-G1	D1-10	340C	9,999
5 Gal.	99,999. 9 [†]	622-G	620-G	D1-2	340C	9,999
10 Gal.	99,999 9 [†]	621-G	620-G	D1-1	340C	9,999
10 Gal.	999,99 9. [†]	664-G	660-G	D1-4	340C-Z	99,990
Barrels Registration						
1 Gal.	9,999.9 9 [†]	625-B1	620-B1	D1-5	340C1	999.9
5 Gal.	9,999.9 9 [†]	623-B1	620-B1	D1-3	340C1	999.9
1 Bbl.	9,999.9 9 [†]	621-B1	620-B1	D1-1	340C1	999.9
1 Bbl.	99,999. 9 [†]	624-B	620-B	D1-4	340C	9,999
Liters Registration						
1 Dek.	99,999 9 [†]	621-L	620-L	D1-1	340C	9,999
1 Dek.	999,99 9. [†]	664-L	660-L	D1-4	340C-Z	99,990
5 Dek.	999,99 9. [†]	662-L	660-L	D1-2	340C-Z	99,990
10 Dek.	999,99 9. [†]	661-L	660-L	D1-1	340C-Z	99,990
Dekaliters Registration						
1 Dek.	99,999. 9 [†]	624-D	620-D	D1-4	340C	9,999
5 Dek.	99,999. 9 [†]	622-D	620-D	D1-2	340C	9,999
10 Dek.	99,999. 9 [†]	621-D	620-D	D1-1	340C	9,999
Cubic Meters Registration						
1 Dek.	999.99 9 [†]	624-M2	620-M2	D1-4	340C2	99.99
5 Dek.	999.99 9 [†]	622-M2	620-M2	D1-2	340C2	99.99
5 Dek.	9,999.9 9 [†]	627-M1	620-M1	D1-7	340C1	999.9
10 Dek.	999.99 9 [†]	621-M2	620-M2	D1-1	340C2	99.99
10 Dek.	9,999.9 9 [†]	624-M1	620-M1	D1-4	340C1	999.9
50 Dek.	9,999.9 9 [†]	622-M1	620-M1	D1-2	340C1	999.9
50 Dek.	99,999 9 [†]	627-M	620-M	D1-7	340C	9,999

[†] Fine graduations on Right Hand Totalizer Wheel not printed on Ticket.

* Up-Down Gear Plate for applications where LNC is mounted directly to Counter. For other applications see “Up-Down Gear Plate,” Page 2.

200 Series Non-Reset Counters*

Meter Gearing (Volume/Rev.)	Counter Max. Registration and Resolution	Counter Model	Counter Gear Ratio
Gallons Registration			
1 Gal.	99,999,999. 9 [†]	214A-G	10:1
5 Gal.	99,999,999. 9 [†]	204A-G	2:1
10 Gal.	99,999,999. 9 [†]	224A-G	1:1
Barrels Registration			
1 Gal.	9,999,999.9 9 [†]	209A-B	42:1
5 Gal.	9,999,999.9 9 [†]	207A-B	8.4:1
1 Bbl.	9,999,999.9 9 [†]	227A-B	1:1
1 Bbl.	99,999,999. 9 [†]	225A-B	10:1
Liters Registration			
1 Dek.	99,999,999. 9 [†]	224A-L	1:1
5 Dek.	999,999,99 9.†	234A-L	2:1
10 Dek.	999,999,99 9.†	237A-L	1:1
Dekaliters Registration			
1 Dek.	99,999,99. 9 [†]	214A-D	10:1
1 Dek.	9,999,999.9 9 [†]	227A-D	1:1
5 Dek.	99,999,999. 9 [†]	204A-D	2:1
10 Dek.	99,999,999. 9 [†]	224A-D	1:1
Cubic Meters Registration			
10 Dek.	9,999,999.9 9 [†]	244-AM	10:1

† Fine Graduations on Horizontal Disk.

* When 200 Series Counters are mounted on:

A. Smith Meter® Preset Accessory Adaptor (539100-1) or Keylock Totalizers, specify drive gear with 3/16" bore.

B. Gearing Adaptor or Dual Counter Shifter, specify Spacer Adaptor (72358-1) and drive gear with 3/16" bore.

Meter Gearing

Meter Model	Volume Throughput per Revolution of Meter Calibrator Output Shaft			Meter Model	Volume Throughput per Revolution of meter Calibrator Output Shaft		
	Gallons*	Barrels	Dekaliters		Gallons*	Barrels	Dekaliters
DuraFlow	1.0	—	—	4" F4-S3 to S7	5	1	5
1" PM	0.25	—	—	6" G6-S1	5	1	5
2" T-11/I-75, ST-40+	1	—	1	6" G6-S3 to S7	5	1	5
2-1/2" ST-75+	1	—	1	8" H-8	10	1	10
3" T-20/I-150, ST-160+	1	—	1	10" JA, JB-10	10	1	10
4" T-40	5	—	1	12" K-12	—	1	10
2" SC-13, C2 (1)***	5	—	1	16" M-16	—	1	50
3" SD-30, SD3-S1	5	—	1	SD3/SD4-NF	5	—	1
3" E3, SE-42+	5	(1)**	1	SF4/SF6-NF	5	—	5
4" F4-S1, E4-S1, SF-60+	5	(1)**	1	SG6-NF	5	—	5

* U.S. Gallons unless specified Imperial Gallons.

+ European models only.

** Available, but only when specified.

*** 1 gallon per revolution if specified.

Revisions included in AB01024 Issue/Rev. 0.4 (6/07):

Page 2: Added note to 1st stage trip setting.

March 2019 - updated branding and contact information.

The specifications contained herein are subject to change without notice and any user of said specifications should verify from the manufacturer that the specifications are currently in effect. Otherwise, the manufacturer assumes no responsibility for the use of specifications which may have been changed and are no longer in effect.