

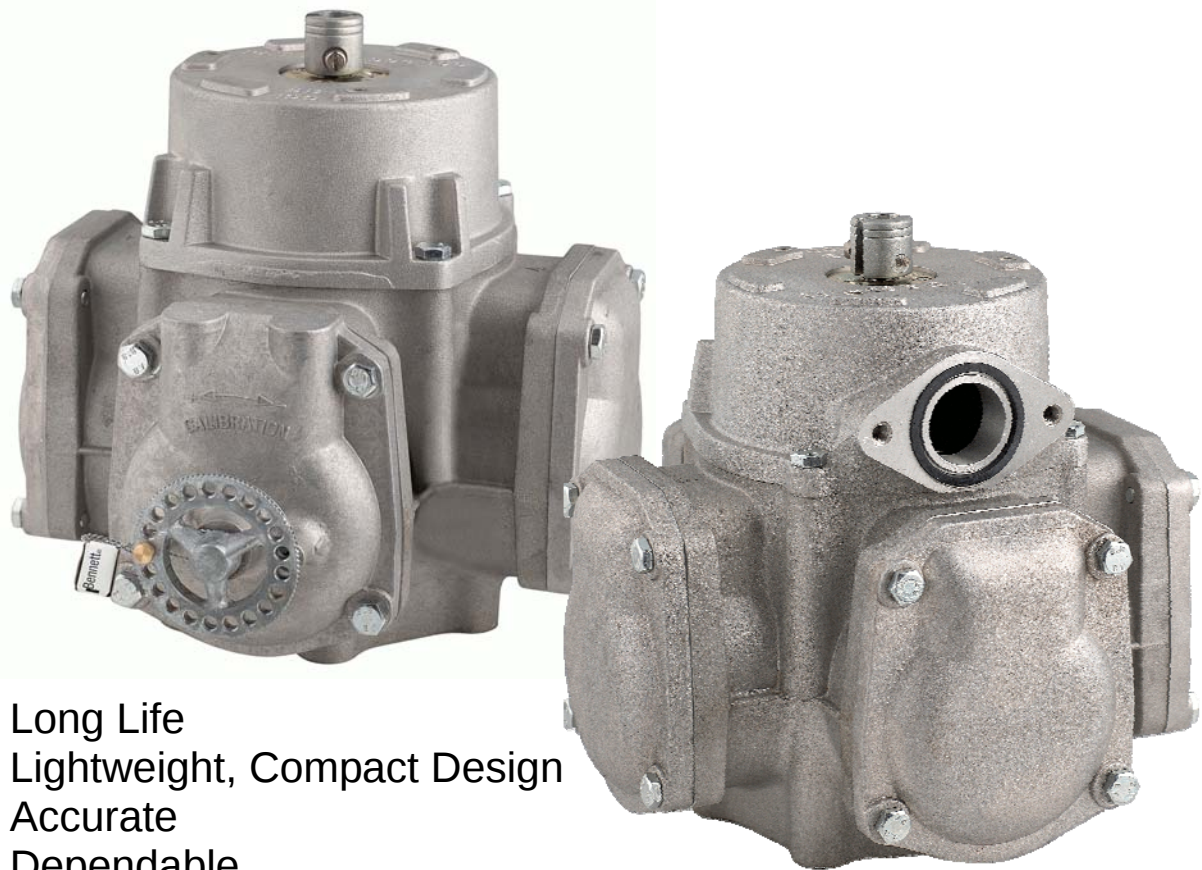
SB-100 Series Meter

Precision Meter

The meter is the fundamental source of data and information from a fuel dispenser.

The Marketer depends on the meter for accurate information to manage his business.

The fuel customer depends on the meter to accurately deliver the fuel for which he is paying.



- Long Life
- Lightweight, Compact Design
- Accurate
- Dependable
- Easily Serviced and Rebuildable
- Custom configurations for OEM Applications



U.L. Listed—Flammable Liquid Meter
File MH28133

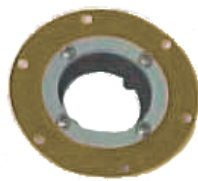
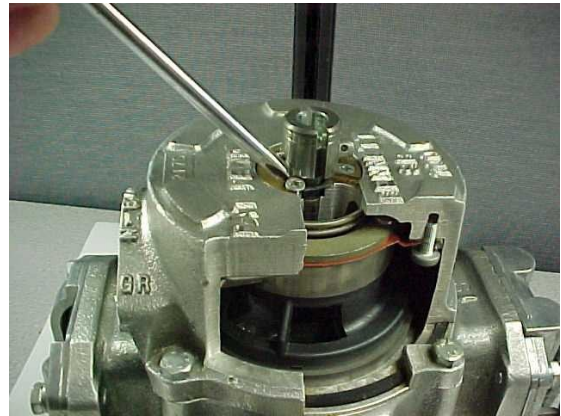
Approved in USA by N.T.E.P., Certificate #91-095A1
Other Weights & Measure and Safety approvals available,
consult factory for more information

Jim Biesecker, Component Business Manager
Direct: 231.798.262 ~ **Fax:** 231.799.6200 ~ **Cell:** 616.638.3616
www.BennettPump.com ~ JBiesecker@BennettPump.com

SB-100 Series Meter

Bennett SB-100 Meter Improvements

- Changed from softer aluminum valve plate to hard stainless steel for superior wear characteristics
- Changed to a sleeve style bearing to better resist fuel contaminants
- Changed Diaphragm to stronger material to resist rupture
- Changed Distributor from aluminum to a composite material for superior sand and dirt resistance to improve calibration stability



Older Styles - Brown or Red



Current Style - Black



Old Distributor (Dark Charcoal Color) - Hard Coated Anodized Aluminum Material.
0 - 1 Bump



Old Distributor (Shiny Black color) - Teflon Impregnated Molded Resin Material.
0 - 1 Bumps



Old Distributor (Shiny Black color) - Teflon Impregnated Molded Resin Material.
4 Bumps

Current Distributor has four small protrusions (bumps) located in the above position (white color added for photographic clarity). You can reach in the outlet of the meter and turn the meter by hand and feel for these four bumps to confirm that you have the current distributor. Older distributors had 0-2 bumps.

SB-100 Series Meter

Bennett Type 40 Meter

- Manufactured from 1939 to 1990
- Great meter in LEADED fuels
- Experienced unacceptable calibration drift in UNLEADED Fuels
- Expensive to manufacture



Bennett SB-100 Meter

- Introduced in 1991
- Initial problems due to contaminants in fuel (dirt, sand, and fine powder abrasives resulting from gasoline refining processes at some refineries) that tended to scratch surfaces of the valve plate and the distributor. This problem was particularly prevalent in sandy, desert environments. This problem was fixed in 1994.



Bennett SB-100 Meter Today

- Early problems completely resolved
- Long Life Meter when Bennett specified proper filtration is used.
- Quality as good or better than Wayne or Gilbarco meters



Computerized Testing Program

- Every SB-100 Meter is tested against a master flow meter for both slow flow and fast flow accuracy
- The test fluid used is a nonflammable solvent whose viscosity is between gasoline and standard diesel. **(Every meter should be checked and recalibrated when dispensers are installed according to the provisions of Bennett's Dispenser Installation Manual.)**

NOTE: Due to variations in installation and in products dispensed, owners are responsible to ensure that meters are calibrated following dispenser installation. **Bennett is not responsible for the calibration that must be done at the time of dispenser installation.**

- A software program determines whether the meter passes the stringent calibration accuracy requirements.

SB-100 Series Meter

- Mechanical Calibration meters may be adjusted within certain parameters to pass our testing.
- eCal meters must be within testing parameters or they are rejected. Rejection of any meters whether mechanical adjustment or eCal type is extremely rare.
- Test data is recorded for each meter according to the meter serial number.
- The test data is used for various quality measurement purposes including trend analysis.
- The master test meter is calibrated every 30 days, or immediately if our trend analysis detects a suspected problem with the meter.
- The calibration tools for testing the master meter are verified and certified for accuracy once per year by the State of Michigan's regulatory agency that has adopted the standards from the U.S. National Institute of Standards, National Type Evaluation Program (the national metrology regulatory agency). Calibration tools may be certified more often than once per year if data trend analysis points to any suspected problem with the tools.

METER CALIBRATION CERTIFICATE

Part No: 116723511 Date: 7-22-05
 Job: 81231 Sheet: 1 of 2
 Customer: Summit Sensor Technician: SH

	SN	13 ppm (60 lpm)	Avg	% ERROR	13 ppm (60 lpm)	Avg	% Spread
1	1781	662889	00	0.0	709	0.0	0.0
2	90	104	04	5.04	5.10	5.14	7.10
3	92	102	01	1.02	0.09	0.06	0.07
4	93	104	03	1.03	0.06	0.04	0.04
5	94	102	00	1.02	0.06	0.04	0.04
6	96	101	00	1.01	0.02	0.04	0.04

METER CALIBRATION CERTIFICATE

Part No: 116723505 Date: 9-14-05
 Job: 81231 Sheet: 1 of 2
 Customer: Summit Sensor Technician: SH

	SN	13 ppm (60 lpm)	Avg	% ERROR	13 ppm (60 lpm)	Avg	% Spread
1	1781	662889	00	0.0	709	0.0	0.0
2	90	104	04	5.04	5.10	5.14	7.10
3	92	102	01	1.02	0.09	0.06	0.07
4	93	104	03	1.03	0.06	0.04	0.04
5	94	102	00	1.02	0.06	0.04	0.04
6	96	101	00	1.01	0.02	0.04	0.04



What happens if a meter fails at the final testing station?

It is extremely rare that a meter fails our final test. If one does fail, a senior production associate carefully disassembles the meter and attempts to determine the cause of the failure. If the cause of the failure is an assembly mistake, the meter is re-assembled correctly and must pass a second final test. If the senior production associate cannot determine the cause of the failure, the meter is passed to our engineering group for examination including measurement of parts to ensure that all parts are meeting our strict tolerance specifications. All meters must pass our testing stations before they are used in a customer product. Meters that cannot pass our testing station are scrapped.

SB-100 Series Meter

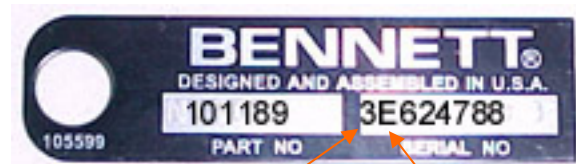
Bennett SB-100 Meter—Determining the Age of the Meter

- Identified by date code on either an adhesive metallic tag , metal Part Number/Serial Tag, or adhesive white tag.
- Serial #3E624788 shown at right....3E is the date code signifying manufacturing in March (month 3), 2003 (E = 2003). Current models use the white adhesive tag.
- Date Codes:

A = 1999
B = 2000
C = 2001
D = 2002
E = 2003
F = 2004
G = 2005
H = 2006
I = SKIP
J = 2007
K = 2008
L = 2009
M = 2010
N = 2011
O = SKIP
P = 2012
Q = 2013
R = 2014
S = 2015
T = 2016
U = 2017
V = 2018
W = 2019
X = 2020
Y = 2021
Z = 2022



Z = 1998 12 = December



3 = March E = 2003

