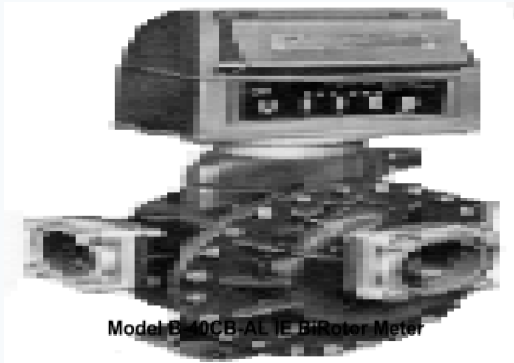


All-Aluminium BiRotor Meter B-40CBAL

POSITIVE DISPLACEMENT METERS

Description

IE all-aluminium positive displacement meters offer the exclusive BiRotor principle of true rotary operation – no sliding, oscillating or reciprocating parts. A rugged but simple design plus two rotors that are statically and dynamically balanced means long life and low maintenance costs. The all-aluminium BiRotor meter occupies a minimum of space and comes in a variety of flange configurations, permitting versatility in any piping arrangement. They are recommended for aircraft refueling, hydrant pits, hydrant carts, fueler trucks or any service requiring meters of all-aluminium construction. A wide variety of counters and accessories are available.



Model B-40CB-AL IE BiRotor Meter

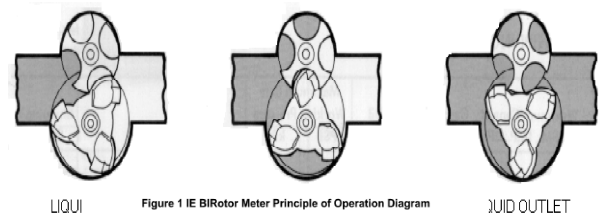
ALL-ALUMINIUM BIROTOR METER B-40CBAL

Design Features

- Two rotors with no metal-to-metal contact are the only moving parts in the measuring chamber
- Friction-free stainless steel ball bearing rotor mountings assure greater accuracy and lower pressure drop
- Simple dry adjustment permits calibration while the meter is under pressure without loss of liquid
- Unit-built assemblies are easily accessible for inspection, cleaning or replacement
- BiRotor meters are reversible and do not require reversing gears
- Temporary overspeeding will not damage a BiRotor Meter

Principle Of Operation

The two spiral fluted rotors within the measuring chamber are dynamically balanced, but hydraulically unbalanced. (Refer to Figure 1). As the product enters the intake of the measuring unit chamber, the two rotors divide the product into precise segments to the outlet of the measuring unit chamber. During this “liquid transition”, the rotation of the two rotors is directly proportional to the liquid throughput. A gear train located outside the measuring unit chamber conveys mechanical rotation of the rotors to a mechanical or electronic register for totalization of the liquid throughput.



WARNING: Do not operate this instrument in excess of the specifications listed below. Failure to heed warning may result in serious personal injury or damage to equipment.

SPECIFICATIONS (Standard Meters)

Materials of construction:

Outer Housing and Cover – aluminium
Counter Base Plate – aluminium

Measuring Unit:

Body and End Covers – aluminium
Rotors – aluminium
Rotor Shafts – nitralloy
Rotor Bearings – stainless steel
Counter Drive Shafts – stainless steel
Counter Drive Gears – stainless steel
Drive Shaft Bushings – teflon

All-Aluminium meters have only aluminium or stainless steel in contact with the liquid product.

Product temperature Range: -20°F to 150°F
-29°C to 66°C

ACCESSORIES

The wide range of accessories such as preset counters, pulse transmitters, control valves, large numerical registers, ticket printers and strainers enable the meter assembly to be adapted to a wide range of liquid measurement or control systems.

RECOMMENDED SPARE PARTS

O-Rings
Gaskets

ORDERING INFORMATION

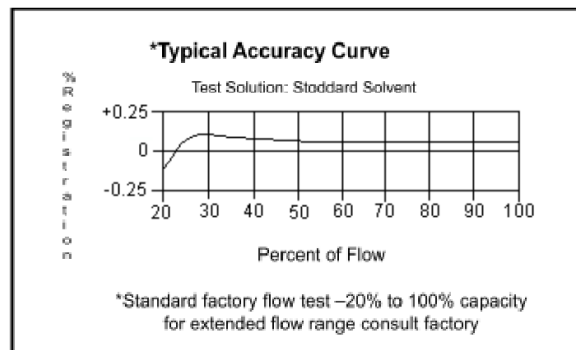
In order to accurately process an order, such information as product to be metered, product viscosity, product temperature range, ambient temperature range, rate of flow, operating pressure, units of registration, accessories required and optional features needed must be specified by the customer.

CAPACITY, CONNECTIONS and

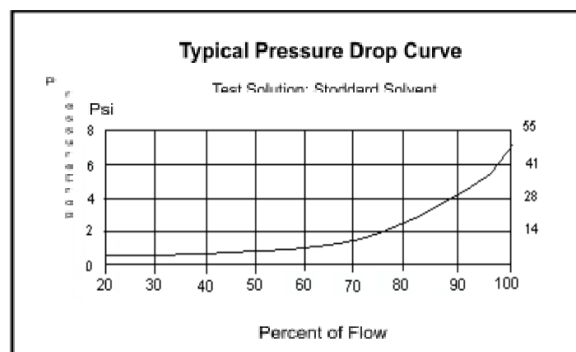
APPROXIMATE SHIPPING WEIGHT

Model	Maximum Capacity Gasoline, Light Oil				Maximum Safe Working Pressure		Connections	Shipping Weight*	
	US GPM	IMP. GPM	Lit/ MIN	Bbls./ Hrs.	PSI	KPa		Lbs.	Kg.

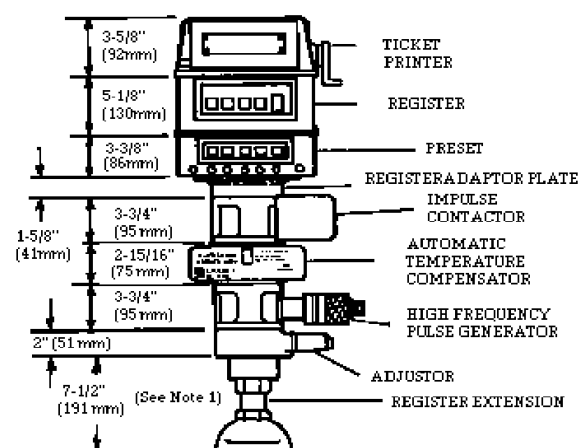
PERFORMANCE



PRESSURE DROP



TYPICAL ACCESSORY "STACK-UP"



B-40CB-AL	100	80	375	140	125	861	2" Screwed Connections 1-1/2" Screwed Connections	62	28
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REGISTRATION



SERIES 10

Horizontal Straight
Reading 6-digit, Non-
Reset, Height: 1-7/8"



LARGE DIAL REGISTER AND PRINTER –
Printer available as Accumulative type (7-digit)
To show batch size by totalizer differences.
Zero start (6-digit) shows batch size directly
without reference to totalised registration.



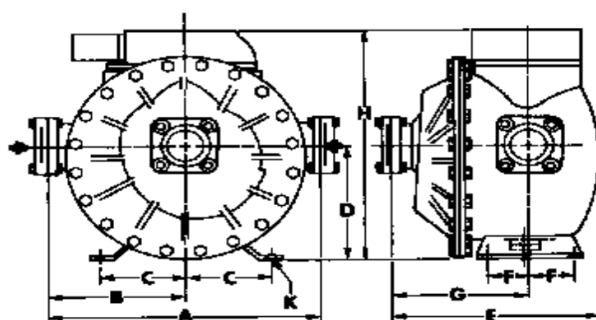
LARGE DIAL REGISTER – Large Visible Reset

Totalizing Register featuring one-handed reset
operation. Consists of a 5-digit reset totalizer
and an 8-digit non-reset totalizer.



**LARGE DIAL REGISTER, PRINTER AND
PRESET – Fully automatic 4 or 5-digit
mechanical preset for single or two-stage
electric control. First stage adjustable from 3 to
9, or from 20 to 90 by 10's. Final stage
trimmable to stop at 0. Electrical switches have
two positions and one to four single pole,
double throw switches. Printer optional.**

DIMENSIONS (For Certified Dimension Prints Contact Factory)



Meter Model	Mm Inches	Dimensions									
		A	B	C	D	E	F	G	H	J	K
B-40CB-AL	mm	318 12-1/2	159 6-1/4	106 4-5/32	165 6-1/2	233 9-3/16	52 2-1/16	163 6-7/16	332 13-1/16		14 9/16