

BI-DIRECTIONAL VARIABLE AREA FLOW METER

Ideal for monitoring pump performance as well as measuring fluids in hydraulic circuits and cooling systems where flow is measured in both directions.



TECHNICAL SPECIFICATIONS

Measuring Accuracy

±4.0% of full scale

Repeatability

±1% of full scale

Flow Measuring Range

0.5-100 GPM (2-350 LPM)

Maximum Operating Pressure

Aluminum and brass meters: 3500 PSIG (240 Bar)

Stainless steel meters: 6000 PSIG (410 Bar)

Maximum Operating Temperature

240°F (116°C) Note: for operation to 600°F (316°C), see our High Temperature Data sheet.

Standard Calibration Fluids

Oil meters: DTE 25® @ 110°F (43°C), 0.873 sg

Water meters: tap water @ 70°F (21°C), 1.0 sg

Filtration Requirements

74 micron filter or 200 mesh screen minimum

Viscosity

Viscosities up to 110 cSt

DTE 25 is a registered trademark of Exxon Mobil.

BENEFITS

Choice of Materials

Select from aluminum, brass or stainless steel to meet system and liquid requirements.

Unrestricted Mounting

Allows for horizontal, vertical or inverted installation and does not require straight plumbing on inlet or outlet.

Bi-Directional

Measures bi-directional flow measurement for liquids.

Rugged and Reliable

These meters are constructed with all metal pressure vessels that allow safe & permanent installation.

High Pressure Operation

The magnetically coupled follower design allows operation to 6000 PSIG.

Multiple Ports Available

Standard selection of NPT, SAE and BSPP ports reduces the amount of adapters required for installation.

MATERIALS OF CONSTRUCTION (NON-WETTED COMPONENTS)

	Aluminum	Brass	Stainless Steel
Window Tube	Polycarbonate	Polycarbonate	Polycarbonate
Window Seals	Buna-N® (STD), PTFE	Buna-N® (STD), PTFE	Buna-N® (STD), PTFE

MATERIALS OF CONSTRUCTION (WETTED COMPONENTS)

	Aluminum	Brass	Stainless Steel
Casing & End Ports	Anodized Aluminum	Brass	Stainless Steel
Seals	Buna-N® (STD), EPR, FKM or FFKM	Buna-N® (STD), EPR, FKM or FFKM	FKM with PTFE backup (STD), Buna-N®, EPR or FFKM
Transfer Magnet	PTFE coated Alnico	PTFE coated Alnico	PTFE coated Alnico
All other internal parts	Stainless Steel	Stainless Steel	Stainless Steel

Buna-N is a registered trademark of Chemische Werke Huls.

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PART NUMBER GUIDE

B — — B I —

BASIC

PORT SIZE RANGE

1/4" - 1/2" = 3

3/4" - 1" = 4

1-1/4 - 2" = 5

MATERIAL

Aluminum = A

Brass = B

Stainless Steel = S

MAX. PRESSURE RATING

3500 psig (liquids, aluminum & brass) = 6

6000 psig (liquids, stainless steel) = 7

FLUID MEDIA

Oil @ 0.873 specific gravity = H

Water @ 1.0 specific gravity = W

Note: For special scales consult the factory.

PORTING/THREAD TYPE

(all female)

1/4" NPTF, dry seal	3 only	=	S
3/8" NPTF, dry seal	3 only	=	A
1/2" NPTF, dry seal	3 only	=	B
3/4" NPTF, dry seal	4 only	=	C
1" NPTF, dry seal	4 only	=	D
#6 SAE, O-ring seal	3 only	=	E
#8 SAE, O-ring seal	3 only	=	F
#10 SAE, O-ring seal	3 only	=	G
#12 SAE, O-ring seal	4 only	=	H
#16 SAE, O-ring seal	4 only	=	J
1-1/4" NPTF, dry seal	5 only	=	K
1-1/2" NPTF, dry seal	5 only	=	L
2" NPTF, dry seal	5 only	=	M
#20 SAE, O-ring seal	5 only	=	N
#24 SAE, O-ring seal	5 only	=	P
#32 SAE, O-ring seal	5 only	=	Q
1/4" BSPP	3 only	=	8
3/8" BSPP	3 only	=	R
1/2" BSPP	3 only	=	T
3/4" BSPP	4 only	=	U
1" BSPP	4 only	=	V
1-1/4" BSPP	5 only	=	W
1-1/2" BSPP	5 only	=	Y
2" BSPP	5 only	=	X

Note: SAE porting not available in Brass. Consult factory for SAE brass meter requirements.

CUSTOM PRODUCT

OPTIONAL FLOW DIRECTIONS

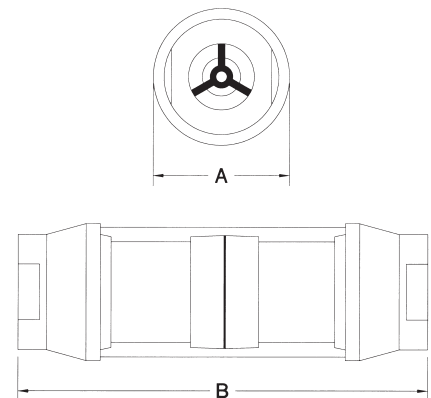
Bi-Directional Flow = B I

FLOW RANGES

Liquid		Size
0.5-5.0 GPM	2-19 LPM	3 only = 0 5
1-10 GPM	5-37.5 LPM	3 & 4 = 1 0
1-15 GPM	5-55 LPM	3 & 4 = 1 5
2-20 GPM	10-75 LPM	4 only = 2 0
4-30 GPM	15-115 LPM	4 only = 3 0
6-50 GPM	20-190 LPM	5 only = 5 0
6-75 GPM	30-280 LPM	5 only = 7 5
10-100 GPM	50-375 LPM	5 only = 8 8

MECHANICAL - SIZE CODE

DIM	Series 3	Series 4	Series 5	Series 5 (2" port only)
A	1-7/8" (48mm)	2-3/8" (60 mm)	3-1/2" (90mm)	3-1/2" (90mm)
B	6-9/16" (167mm)	7-5/32" (182mm)	10-1/8" (258mm)	12-5/8" (322mm)



Products may be subject to change without notice - Contact factory for the most up-to-date product information.