BASIC INLINE LIQUID VARIABLE AREA FLOW METER

Ideal for monitoring pump performance as well as measuring fluids in hydraulic circuits and cooling systems.



TECHNICAL SPECIFICATIONS

Measuring Accuracy

±2.0% of full scale

Repeatability

±1% of full scale

Flow Measuring Range

0.1-150 GPM (0.5-550 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.

DTE 25 is a registered trademark of Exxon Mobil.

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

Standard viscosities up to 110 cSt. For viscosities between 110 to 430 cSt contact factory.

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.

Superior Exterior Design

Weather-tight for use outdoors and/or on systems where wash downs are required.

Rugged and Reliable

These meters are constructed with all metal pressure vessels that allow safe and 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)

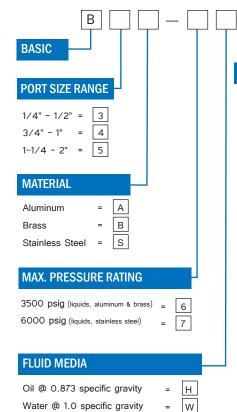
	Aluminum	Brass	Stainless Steel
Casing & End Ports	Anodized Aluminum	Brass	Stainless Steel
Seals	Buna-N® (STD), EPR, FKM or FFKM	Buna-N [®] (STD), EPR, FKM or FFKM	FKM with PTFE backup (STD), Buna-N®, EPR or FFKM
Transfer Magnet	PTFE coated Alnico	PTFE coated Alnico	PTFE coated Alnico
All other internal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

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

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PORTING/THREAD TYPE

1/4" NPTF, dry seal 3 only = \$ 3/8" NPTF, dry seal 3 only = \$ 1/2" NPTF, dry seal 3 only = \$ 3/4" NPTF, dry seal 4 only = \$ 1" NPTF, dry seal 4 only = \$ #6 SAE, O-ring seal 3 only = \$ #8 SAE, O-ring seal 3 only = \$ #10 SAE, O-ring seal 4 only = \$ #12 SAE, O-ring seal 4 only = \$ #16 SAE, O-ring seal 5 only = \$ 1-1/4" NPTF, dry seal 5 only = \$ 2" NPTF, dry seal 5 only = \$ 2" NPTF, dry seal 5 only = \$ #20 SAE, O-ring seal 5 only = \$ #24 SAE, O-ring seal 5 only = \$ #32 SAE, O-ring seal 5 only = \$ #30 SPP 3 only = \$ 1/2" BSPP 3 only = \$ 3/4" BSPP 4 only = \$ 1-1/4" BSPP 5 only = \$ 1-1/2" BSPP 5 only = \$ 2" BSPP 5 only = \$	(all female)	Size	
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 4 only = H #16 SAE, O-ring seal 4 only = H #16 SAE, O-ring seal 5 only = K 1-1/4" NPTF, dry seal 5 only = L 2" NPTF, dry seal 5 only = M #20 SAE, O-ring seal 5 only = M #24 SAE, O-ring seal 5 only = P #32 SAE, O-ring seal 5 only = P 1/2" BSPP 3 only = T 3/4" BSPP 4 only = U 1-1/4" BSPP 5 only = W 1-1/2" BSPP 5 only = W 1-1/2" BSPP 5 only = W	1/4" NPTF, dry seal	3 only	= S
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 = G #10 SAE, O-ring seal 4 only = H #16 SAE, O-ring seal 4 only = H #16 SAE, O-ring seal 5 only = K 1-1/4" NPTF, dry seal 5 only = L 2" NPTF, dry seal 5 only = L 2" NPTF, dry seal 5 only = D #20 SAE, O-ring seal 5 only = N #24 SAE, O-ring seal 5 only = P #32 SAE, O-ring seal 5 only = Q 3/8" BSPP 3 only = T 3/4" BSPP 4 only = U 1-1/4" BSPP 5 only = W 1-1/2" BSPP 5 only = W 1-1/2" BSPP 5 only = W	3/8" NPTF, dry seal	3 only	= A
1" NPTF, dry seal	1/2" NPTF, dry seal	3 only	= B
#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 5 only = K 1-1/4" NPTF, dry seal 5 only = L 2" NPTF, dry seal 5 only = M #20 SAE, O-ring seal 5 only = M #24 SAE, O-ring seal 5 only = P #32 SAE, O-ring seal 5 only = P 1/2" BSPP 3 only = T 3/4" BSPP 4 only = U 1-1/4" BSPP 5 only = W 1-1/2" BSPP 5 only = W 1-1/2" BSPP 5 only = W	3/4" NPTF, dry seal	4 only	= C
#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 3/8" BSPP 3 only = R 1/2" BSPP 3 only = U 1" BSPP 4 only = U 1-1/4" BSPP 5 only = W 1-1/2" BSPP 5 only = W	1" NPTF, dry seal	4 only	= D
#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 3/8" BSPP 3 only = R 1/2" BSPP 3 only = U 1" BSPP 4 only = U 1" BSPP 5 only = W 1-1/4" BSPP 5 only = W 1-1/2" BSPP 5 only = W	#6 SAE, O-ring seal	3 only	= E
#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 3/8" BSPP 3 only = R 1/2" BSPP 3 only = T 3/4" BSPP 4 only = U 1-1/4" BSPP 5 only = W 1-1/2" BSPP 5 only = W	#8 SAE, O-ring seal	3 only	= F
#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 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 = W	#10 SAE, O-ring seal	3 only	= G
#10 Sile, or ling seal 1-1/4" NPTF, dry seal 1-1/2" NPTF, dry seal 2" NPTF, dry seal 5 only M #20 SAE, O-ring seal #24 SAE, O-ring seal 5 only P #32 SAE, O-ring seal 5 only R 1/2" BSPP 3 only R 1/2" BSPP 4 only U 1-1/4" BSPP 5 only W 1-1/2" BSPP 5 only W 1-1/2" BSPP	#12 SAE, O-ring seal	4 only	= H
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 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	#16 SAE, O-ring seal	4 only	= J
2" NPTF, dry seal 5 only = M #20 SAE, O-ring seal 5 only = P #32 SAE, O-ring seal 5 only = Q 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	1-1/4" NPTF, dry seal	5 only	= K
#20 SAE, O-ring seal 5 only = N #24 SAE, O-ring seal 5 only = P #32 SAE, O-ring seal 5 only = Q 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	1-1/2" NPTF, dry seal	5 only	= L
#24 SAE, O-ring seal 5 only = P #32 SAE, O-ring seal 5 only = Q 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" NPTF, dry seal	5 only	= M
#32 SAE, O-ring seal 5 only = Q 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	#20 SAE, O-ring seal	5 only	= N
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	#24 SAE, O-ring seal	5 only	= P
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	#32 SAE, O-ring seal	5 only	= Q
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	3/8" BSPP	3 only	= R
1" BSPP 4 only = V 1-1/4" BSPP 5 only = W 1-1/2" BSPP 5 only = Y	1/2" BSPP	3 only	= T
1-1/4" BSPP 5 only = $\frac{V}{V}$ 1-1/2" BSPP 5 only = $\frac{V}{V}$	3/4" BSPP	4 only	= U
1–1/2" BSPP 5 only = Y	1" BSPP	4 only	= V
	1-1/4" BSPP	5 only	= W
2" BSPP 5 only = X	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.

SPECIAL SCALE/CUSTOM PRODUCT

OPTIONAL FLOW DIRECTIONS

Standard Flow, Uni-Directional

Reverse Flow = $\mathbb{R} \setminus \mathbb{F}$ Bi-Directional Flow (For bi-directional flow refer to

bi-directional data sheet. Please consult factory for availability and delivery time.)

FLOW RANGES

Liquid		Size		
0.1-1.0 GPM	0.5-4 LPM	3 only	=	0 1
0.2-2.0 GPM	1-8 LPM	3 & 4	=	0 2
0.5-5.0 GPM	2-19 LPM	3 & 4	=	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
2-25 GPM	10-95 LPM	4 & 5	=	2 5
4-30 GPM	15-115 LPM	4 only	=	3 0
4-40 GPM	20-150 LPM	4 only	=	4 0
6-50 GPM	20-190 LPM	4 & 5	=	5 0
6-75 GPM	30-280 LPM	5 only	=	7 5
10-100 GPM	50-375 LPM	5 only	=	8 8
25-150 GPM	100-550 LPM	5 only	=	9 9

MECHANICAL - SIZE CODE

Note: For special scales consult factory.

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

A B

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