

# 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.

### 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.

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.

### 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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## PART NUMBER GUIDE

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**BASIC**

**PORT SIZE RANGE**

1/4" - 1/2" =

3/4" - 1" =

1-1/4 - 2" =

**MATERIAL**

Aluminum =

Brass =

Stainless Steel =

**MAX. PRESSURE RATING**

3500 psig (liquids, aluminum & brass) =

6000 psig (liquids, stainless steel) =

**FLUID MEDIA**

Oil @ 0.873 specific gravity =

Water @ 1.0 specific gravity =

*Note: For special scales consult factory.*

**PORTING/THREAD TYPE**

(all female)

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

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	= <input type="text" value="0"/> <input type="text" value="1"/>
0.2-2.0 GPM	1-8 LPM	3 & 4	= <input type="text" value="0"/> <input type="text" value="2"/>
0.5-5.0 GPM	2-19 LPM	3 & 4	= <input type="text" value="0"/> <input type="text" value="5"/>
1-10 GPM	5-37.5 LPM	3 & 4	= <input type="text" value="1"/> <input type="text" value="0"/>
1-15 GPM	5-55 LPM	3 & 4	= <input type="text" value="1"/> <input type="text" value="5"/>
2-20 GPM	10-75 LPM	4 only	= <input type="text" value="2"/> <input type="text" value="0"/>
2-25 GPM	10-95 LPM	4 & 5	= <input type="text" value="2"/> <input type="text" value="5"/>
4-30 GPM	15-115 LPM	4 only	= <input type="text" value="3"/> <input type="text" value="0"/>
4-40 GPM	20-150 LPM	4 only	= <input type="text" value="4"/> <input type="text" value="0"/>
6-50 GPM	20-190 LPM	4 & 5	= <input type="text" value="5"/> <input type="text" value="0"/>
6-75 GPM	30-280 LPM	5 only	= <input type="text" value="7"/> <input type="text" value="5"/>
10-100 GPM	50-375 LPM	5 only	= <input type="text" value="8"/> <input type="text" value="8"/>
25-150 GPM	100-550 LPM	5 only	= <input type="text" value="9"/> <input type="text" value="9"/>

## 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)

