

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

- - -

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)

| | | | |
|-----------------------|--------|---|--------------------------------|
| 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"/> |
| 1/4" BSPP | 3 only | = | <input type="text" value="8"/> |
| 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 =

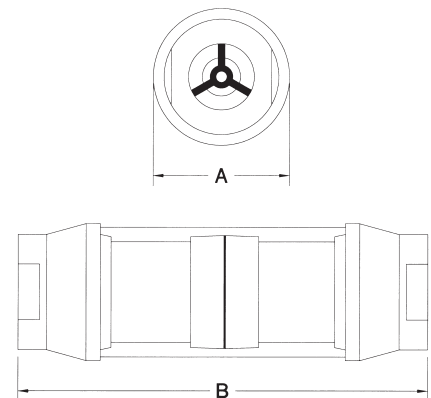
Bi-Directional Flow (For bi-directional flow refer to bi-directional data sheet. Please consult factory for availability and delivery time.)

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) |



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