BI-DIRECTIONAL VARIABLE AREA FLOW METER

Ideal for monitoring pump performance and media flows through hydraulic circuits and cooling systems.

TECHNICAL SPECIFICATIONS

Choice ofMaterials
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

MATERIALS OF CONSTRUCTION (NON-WETTED COMPONENTS)

<table>
<thead>
<tr>
<th></th>
<th>Aluminum</th>
<th>Brass</th>
<th>Stainless Steel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Window Tube</td>
<td>Polycarbonate</td>
<td>Polycarbonate</td>
<td>Polycarbonate</td>
</tr>
<tr>
<td>Window Seals</td>
<td>Buna-N® (STD), PTFE</td>
<td>Buna-N® (STD), PTFE</td>
<td>Buna-N® (STD), PTFE</td>
</tr>
</tbody>
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MATERIALS OF CONSTRUCTION (WETTED COMPONENTS)

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</tr>
</thead>
<tbody>
<tr>
<td>Casing &amp; End Ports</td>
<td>Anodized Aluminum</td>
<td>Brass</td>
<td>Stainless Steel</td>
</tr>
<tr>
<td>Seals</td>
<td>Buna-N® (STD), EPR, FKM or FFKM</td>
<td>Buna-N® (STD), EPR, FKM or FFKM</td>
<td>FKM with PTFE backup (STD), Buna-N®, EPR or FFKM</td>
</tr>
<tr>
<td>Transfer Magnet</td>
<td>PTFE coated Alnico</td>
<td>PTFE coated Alnico</td>
<td>PTFE coated Alnico</td>
</tr>
<tr>
<td>All other internal parts</td>
<td>Stainless Steel</td>
<td>Stainless Steel</td>
<td>Stainless Steel</td>
</tr>
</tbody>
</table>

DTE 25 is a registered trademark of Exxon Mobil.

Bena-N is a registered trademark of Chemische Werke Hüls.

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

Measure 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.

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PART NUMBER GUIDE

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)

Size

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

FLOW RANGES

Liquid

Size

3 only

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

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

MECHANICAL - SIZE CODE

<table>
<thead>
<tr>
<th>DIM</th>
<th>Series 3</th>
<th>Series 4</th>
<th>Series 5</th>
<th>Series 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1-7/8&quot; (48mm)</td>
<td>2-3/8&quot; (60 mm)</td>
<td>3-1/2&quot; (90mm)</td>
<td>3-1/2&quot; (90mm)</td>
</tr>
<tr>
<td>B</td>
<td>6-9/16&quot; (167mm)</td>
<td>7-5/32&quot; (182mm)</td>
<td>10-1/8&quot; (258mm)</td>
<td>12-5/8&quot; (322mm)</td>
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