

# HIGH TEMPERATURE FLOW METER

Enables flow monitoring of barrel heating fluids, thermal transfer fluids such as Syltherm® coolant flows, hydraulic circuits and sub-circuits.



## TECHNICAL SPECIFICATIONS

### Measuring Accuracy

±2.0% of full scale

### Repeatability

±1% of full scale

### Flow Measuring Range

0.1-150 GPM (0.4-560 LPM)

### Maximum Operating Pressure<sup>1</sup>

#### Liquids

Aluminum and brass meters: 3500 PSIG (240 Bar)

Stainless steel meters: 6000 PSIG (410 Bar)

#### Air/Gas

Aluminum and brass meters: 600 PSIG (40 Bar)

Stainless steel meters: 1000 PSIG (69 Bar)

### Maximum Operating Temperature

H-Series 400°F (204°C)

J-Series 600°F (315°C)

### Standard Calibration Fluids

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

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

Air meters: air @ 70°F (21°C), 1.0 sg & 100 PSIG (6.8 bar)

### 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.

<sup>1</sup>Note: See Temperature/Pressure De-rating Chart on back. DTE 25 is a registered trademark of Exxon Mobil.

## MATERIALS OF CONSTRUCTION (NON-WETTED COMPONENTS)

	Aluminum	Brass	Stainless Steel
Window Tube	Pyrex®	Pyrex®	Pyrex®
Window Seals	PTFE	PTFE	PTFE

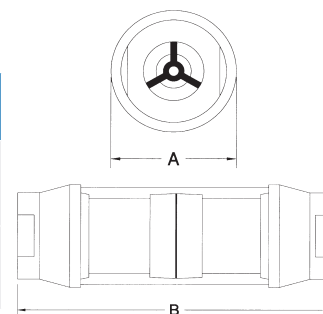
Pyrex is a registered trademark of Corning Incorporated.

## MATERIALS OF CONSTRUCTION (WETTED COMPONENTS)

	Aluminum	Brass	Stainless Steel
Casing and End Ports	Anodized Aluminum	Brass	Stainless Steel
Seals			
H-Series (400°F)	FKM w/ PTFE backup	FKM w/ PTFE backup	FKM w/ PTFE backup
J-Series (600°F)	FFKM w/ PTFE backup	FFKM w/ PTFE backup	FFKM w/ PTFE backup
Transfer Magnet	PTFE coated Alnico	PTFE coated Alnico	PTFE coated Alnico
All other internal parts	Stainless Steel	Stainless Steel	Stainless Steel

## MECHANICAL - SIZE CODE

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



## BENEFITS

### Choice of Materials

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

### Unrestricted Mounting

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

### Multiple Ports Available

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

### Bi-Directional and Reverse Flow Option Offered

High temperature monitors are also available in bidirectional and reverse flow versions. Contact the factory for more information.

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## PART NUMBER GUIDE

**METER STYLE**

400°F In-line =

600°F In-line =

**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"/>
1/4" BSPP	3 only	= <input type="text" value="R"/>
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"/>

**SPECIAL SCALE/CUSTOM PRODUCT**

**OPTIONAL FLOW DIRECTIONS**

Standard Flow, Uni-Directional =

Reverse Flow =

Bi-Directional Flow =

*Note: See bi-directional datasheet for available bi-directional ranges.*

**PORT SIZE RANGE**

1/4" - 1/2" =

3/4" - 1" =

1-1/4" - 2" =

**MATERIAL**

Aluminum =

Brass =

Stainless Steel =

**MAX. PRESSURE RATING**

600 psig (air/gas, stainless steel) =

1000 psig (air/gas, aluminum & brass) =

3500 psig (liquids, aluminum & brass) =

6000 psig (liquids, stainless steel) =

**FLUID MEDIA**

Air & Gases =

Oil & 0.873 specific gravity =

Water & 1.0 specific gravity =

**FLOW RANGES**

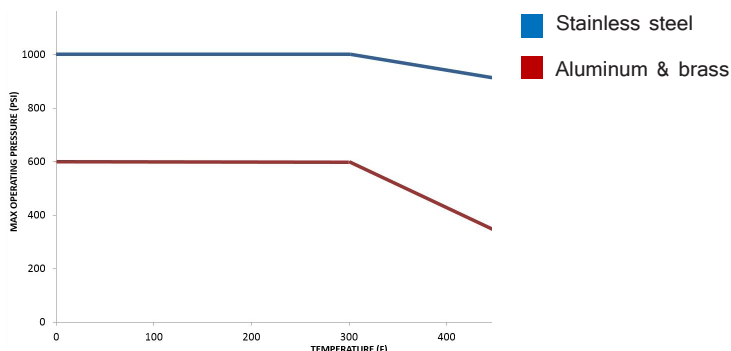
Liquid	Air	Size	
0.1-1.0 GPM	2-12 SCFM	3 only	= <input type="text" value="0"/> <input type="text" value="1"/>
0.2-2.0 GPM	4-23 SCFM	3 & 4	= <input type="text" value="0"/> <input type="text" value="2"/>
0.5-5.0 GPM	5-50 SCFM	3 & 4	= <input type="text" value="0"/> <input type="text" value="5"/>
1-10 GPM	10-100 SCFM	3 & 4	= <input type="text" value="1"/> <input type="text" value="0"/>
1-15 GPM	25-150 SCFM	3 & 4	= <input type="text" value="1"/> <input type="text" value="5"/>
2-20 GPM	20-215 SCFM	4 only	= <input type="text" value="2"/> <input type="text" value="0"/>
2-25 GPM	20-250 SCFM	4 & 5	= <input type="text" value="2"/> <input type="text" value="5"/>
3-30 GPM	30-330 SCFM	4 only	= <input type="text" value="3"/> <input type="text" value="0"/>
4-40 GPM	30-400 SCFM	4 only	= <input type="text" value="4"/> <input type="text" value="0"/>
5-50 GPM	40-500 SCFM	4 only	= <input type="text" value="5"/> <input type="text" value="0"/>
5-50 GPM	30-470 SCFM	5 only	= <input type="text" value="5"/> <input type="text" value="0"/>
8-75 GPM	30-750 SCFM	5 only	= <input type="text" value="7"/> <input type="text" value="5"/>
10-100 GPM	150-900 SCFM	5 only	= <input type="text" value="8"/> <input type="text" value="8"/>
20-150 GPM	150-1300 SCFM	5 only	= <input type="text" value="9"/> <input type="text" value="9"/>

Note: For special scales consult the factory.

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

## TEMPERATURE DE-RATING FOR ALUMINUM & BRASS METERS

### AIR & GAS



### LIQUID

