

# HIGH TEMPERATURE FLOW METER

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

**Liquids:** ±2.0% of full scale

**Air/Gas:** ±2.5% of full scale in center third of measuring range; ±4.0% in upper & lower thirds

### Repeatability

±1% of full scale

### Flow Measuring Range

0.1-150 GPM (0.4-560 LPM)

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

#### Liquids

Aluminum & brass: 3500 PSIG (240 Bar)

Stainless steel: 6000 PSIG (410 Bar)

#### Air/Gas

Aluminum & brass: 600 PSIG (40 Bar)

Stainless steel: 1000 PSIG (69 Bar)

**Maximum Operating Temperature**  
400°F (204°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.

## BENEFITS

### Choice of Materials

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

### Unrestricted Mounting

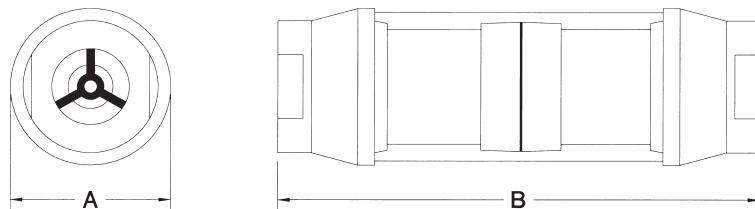
Allows for horizontal, vertical or inverted installation and does not require straight plumbing on inlet or outlet.

### Multiple Ports Available

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

### Bi-Directional or Reverse Flow Options

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



## 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 & End Ports	Anodized Aluminum	Brass	Stainless Steel
Seals	FKM w/ PTFE backup	FKM w/ PTFE backup	FKM 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)

# HIGH TEMPERATURE FLOW METERS

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## PART NUMBER GUIDE

H     -       -         -        

### METER STYLE

High Temperature

### PORTING/THREAD TYPE

(all female)

	Size	
1/4" NPTF, dry seal	3 only	= <span style="border: 1px solid black; padding: 2px;">S</span>
3/8" NPTF, dry seal	3 only	= <span style="border: 1px solid black; padding: 2px;">A</span>
1/2" NPTF, dry seal	3 only	= <span style="border: 1px solid black; padding: 2px;">B</span>
3/4" NPTF, dry seal	4 only	= <span style="border: 1px solid black; padding: 2px;">C</span>
1" NPTF, dry seal	4 only	= <span style="border: 1px solid black; padding: 2px;">D</span>
#6 SAE, O-ring seal	3 only	= <span style="border: 1px solid black; padding: 2px;">E</span>
#8 SAE, O-ring seal	3 only	= <span style="border: 1px solid black; padding: 2px;">F</span>
#10 SAE, O-ring seal	3 only	= <span style="border: 1px solid black; padding: 2px;">G</span>
#12 SAE, O-ring seal	4 only	= <span style="border: 1px solid black; padding: 2px;">H</span>
#16 SAE, O-ring seal	4 only	= <span style="border: 1px solid black; padding: 2px;">J</span>
1-1/4" NPTF, dry seal	5 only	= <span style="border: 1px solid black; padding: 2px;">K</span>
1-1/2" NPTF, dry seal	5 only	= <span style="border: 1px solid black; padding: 2px;">L</span>
2" NPTF, dry seal	5 only	= <span style="border: 1px solid black; padding: 2px;">M</span>
#20 SAE, O-ring seal	5 only	= <span style="border: 1px solid black; padding: 2px;">N</span>
#24 SAE, O-ring seal	5 only	= <span style="border: 1px solid black; padding: 2px;">P</span>
#32 SAE, O-ring seal	5 only	= <span style="border: 1px solid black; padding: 2px;">Q</span>
1/4" BSPP	3 only	= <span style="border: 1px solid black; padding: 2px;">8</span>
3/8" BSPP	3 only	= <span style="border: 1px solid black; padding: 2px;">R</span>
1/2" BSPP	3 only	= <span style="border: 1px solid black; padding: 2px;">T</span>
3/4" BSPP	4 only	= <span style="border: 1px solid black; padding: 2px;">U</span>
1" BSPP	4 only	= <span style="border: 1px solid black; padding: 2px;">V</span>
1-1/4" BSPP	5 only	= <span style="border: 1px solid black; padding: 2px;">W</span>
1-1/2" BSPP	5 only	= <span style="border: 1px solid black; padding: 2px;">Y</span>
2" BSPP	5 only	= <span style="border: 1px solid black; padding: 2px;">X</span>

### SPECIAL SCALE/CUSTOM PRODUCT

### OPTIONAL FLOW DIRECTIONS

Standard Flow, Uni-Directional =    

Reverse Flow = R F

Bi-Directional Flow = B I

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

### FLOW RANGES

Liquid	Air	Size	
0.1-1.0 GPM	2-12 SCFM	3 only	= <span style="border: 1px solid black; padding: 2px;">0</span> <span style="border: 1px solid black; padding: 2px;">1</span>
0.2-2.0 GPM	4-23 SCFM	3 & 4	= <span style="border: 1px solid black; padding: 2px;">0</span> <span style="border: 1px solid black; padding: 2px;">2</span>
0.5-5.0 GPM	5-50 SCFM	3 & 4	= <span style="border: 1px solid black; padding: 2px;">0</span> <span style="border: 1px solid black; padding: 2px;">5</span>
1-10 GPM	10-100 SCFM	3 & 4	= <span style="border: 1px solid black; padding: 2px;">1</span> <span style="border: 1px solid black; padding: 2px;">0</span>
1-15 GPM	25-150 SCFM	3 & 4	= <span style="border: 1px solid black; padding: 2px;">1</span> <span style="border: 1px solid black; padding: 2px;">5</span>
2-20 GPM	20-215 SCFM	4 only	= <span style="border: 1px solid black; padding: 2px;">2</span> <span style="border: 1px solid black; padding: 2px;">0</span>
2-25 GPM	20-250 SCFM	4 & 5	= <span style="border: 1px solid black; padding: 2px;">2</span> <span style="border: 1px solid black; padding: 2px;">5</span>
3-30 GPM	30-330 SCFM	4 only	= <span style="border: 1px solid black; padding: 2px;">3</span> <span style="border: 1px solid black; padding: 2px;">0</span>
4-40 GPM	30-400 SCFM	4 only	= <span style="border: 1px solid black; padding: 2px;">4</span> <span style="border: 1px solid black; padding: 2px;">0</span>
5-50 GPM	40-500 SCFM	4 only	= <span style="border: 1px solid black; padding: 2px;">5</span> <span style="border: 1px solid black; padding: 2px;">0</span>
5-50 GPM	30-470 SCFM	5 only	= <span style="border: 1px solid black; padding: 2px;">5</span> <span style="border: 1px solid black; padding: 2px;">0</span>
8-75 GPM	30-750 SCFM	5 only	= <span style="border: 1px solid black; padding: 2px;">7</span> <span style="border: 1px solid black; padding: 2px;">5</span>
10-100 GPM	150-900 SCFM	5 only	= <span style="border: 1px solid black; padding: 2px;">8</span> <span style="border: 1px solid black; padding: 2px;">8</span>
20-150 GPM	150-1300 SCFM	5 only	= <span style="border: 1px solid black; padding: 2px;">9</span> <span style="border: 1px solid black; padding: 2px;">9</span>

### MAX. PRESSURE RATING

600 psig (air/gas, aluminum & brass) = 4

1000 psig (air/gas, stainless steel) = 5

3500 psig (liquids, aluminum & brass) = 6

6000 psig (liquids, stainless steel) = 7

### MATERIAL

Aluminum = A

Brass = B

Stainless Steel = S

### FLUID MEDIA

Air & Gases = A

Oil & 0.873 specific gravity = H

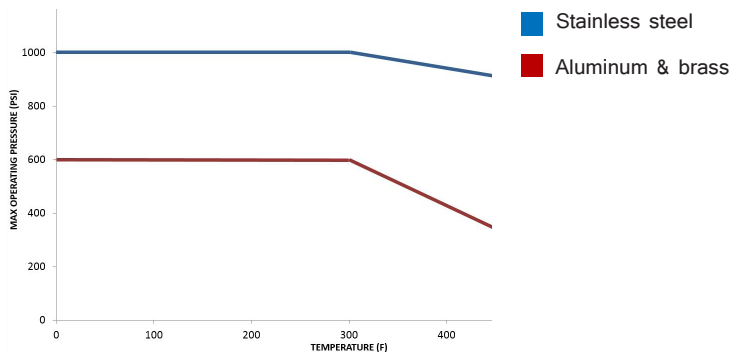
Water & 1.0 specific gravity = W

*Note: For special scales consult the factory.*

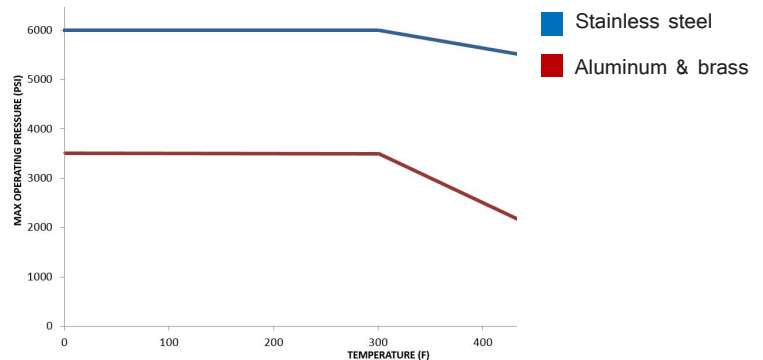
*Note: SAE porting not available in Brass. Consult factory for SAE brass monitor requirements.*

## TEMPERATURE DE-RATING FOR ALUMINUM & BRASS METERS

### AIR & GAS



### LIQUID



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