

# 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

H-Series 400°F (204°C)

J-Series 600°F (315°C)<sup>2</sup>

### 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.

<sup>2</sup>Note: Series J stainless steel meters only

## MATERIALS OF CONSTRUCTION (NON-WETTED COMPONENTS)

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

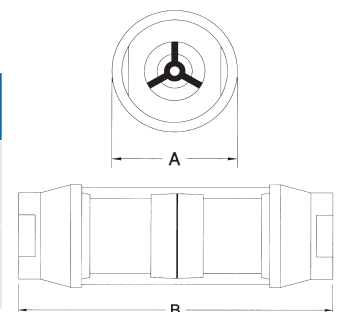
Pyrex is a registered trademark of Corning Incorporated.

## 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.

# HIGH TEMPERATURE FLOW METERS

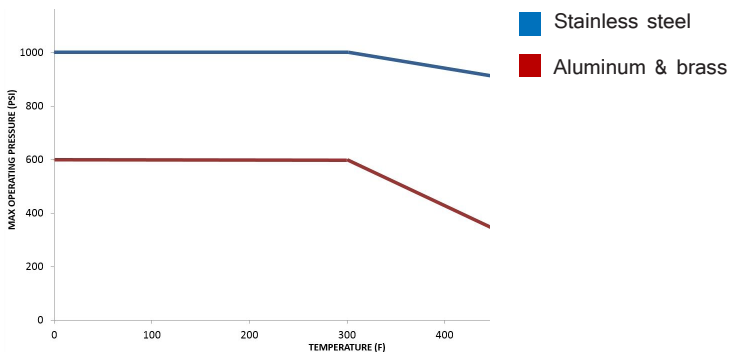
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## PART NUMBER GUIDE

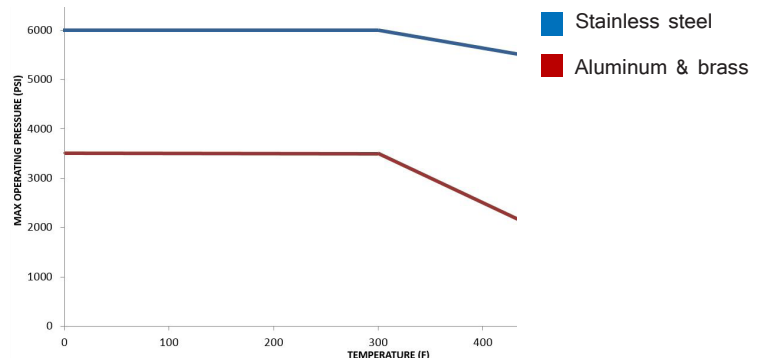
<p><b>METER STYLE</b></p> <p>400°F In-line = <input type="text" value="H"/></p> <p>600°F In-line = <input type="text" value="J"/></p>	<p><b>PORTING/THREAD TYPE</b></p> <p>(all female)</p> <table border="0"> <tr><td>1/4" NPTF, dry seal</td><td>3 only</td><td>=</td><td><input type="text" value="S"/></td></tr> <tr><td>3/8" NPTF, dry seal</td><td>3 only</td><td>=</td><td><input type="text" value="A"/></td></tr> <tr><td>1/2" NPTF, dry seal</td><td>3 only</td><td>=</td><td><input type="text" value="B"/></td></tr> <tr><td>3/4" NPTF, dry seal</td><td>4 only</td><td>=</td><td><input type="text" value="C"/></td></tr> <tr><td>1" NPTF, dry seal</td><td>4 only</td><td>=</td><td><input type="text" value="D"/></td></tr> <tr><td>#6 SAE, O-ring seal</td><td>3 only</td><td>=</td><td><input type="text" value="E"/></td></tr> <tr><td>#8 SAE, O-ring seal</td><td>3 only</td><td>=</td><td><input type="text" value="F"/></td></tr> <tr><td>#10 SAE, O-ring seal</td><td>3 only</td><td>=</td><td><input type="text" value="G"/></td></tr> <tr><td>#12 SAE, O-ring seal</td><td>4 only</td><td>=</td><td><input type="text" value="H"/></td></tr> <tr><td>#16 SAE, O-ring seal</td><td>4 only</td><td>=</td><td><input type="text" value="J"/></td></tr> <tr><td>1-1/4" NPTF, dry seal</td><td>5 only</td><td>=</td><td><input type="text" value="K"/></td></tr> <tr><td>1-1/2" NPTF, dry seal</td><td>5 only</td><td>=</td><td><input type="text" value="L"/></td></tr> <tr><td>2" NPTF, dry seal</td><td>5 only</td><td>=</td><td><input type="text" value="M"/></td></tr> <tr><td>#20 SAE, O-ring seal</td><td>5 only</td><td>=</td><td><input type="text" value="N"/></td></tr> <tr><td>#24 SAE, O-ring seal</td><td>5 only</td><td>=</td><td><input type="text" value="P"/></td></tr> <tr><td>#32 SAE, O-ring seal</td><td>5 only</td><td>=</td><td><input type="text" value="Q"/></td></tr> <tr><td>1/4" BSPP</td><td>3 only</td><td>=</td><td><input type="text" value="8"/></td></tr> <tr><td>3/8" BSPP</td><td>3 only</td><td>=</td><td><input type="text" value="R"/></td></tr> <tr><td>1/2" BSPP</td><td>3 only</td><td>=</td><td><input type="text" value="T"/></td></tr> <tr><td>3/4" BSPP</td><td>4 only</td><td>=</td><td><input type="text" value="U"/></td></tr> <tr><td>1" BSPP</td><td>4 only</td><td>=</td><td><input type="text" value="V"/></td></tr> <tr><td>1-1/4" BSPP</td><td>5 only</td><td>=</td><td><input type="text" value="W"/></td></tr> <tr><td>1-1/2" BSPP</td><td>5 only</td><td>=</td><td><input type="text" value="Y"/></td></tr> <tr><td>2" BSPP</td><td>5 only</td><td>=</td><td><input type="text" value="X"/></td></tr> </table> <p><i>Note: SAE porting not available in Brass. Consult factory for SAE brass monitor requirements.</i></p>	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"/>	<p><b>SPECIAL SCALE/CUSTOM PRODUCT</b></p>	<p><b>OPTIONAL FLOW DIRECTIONS</b></p> <p>Standard Flow, Uni-Directional = <input type="text" value=""/> <input type="text" value=""/></p> <p>Reverse Flow = <input type="text" value="R"/> <input type="text" value="F"/></p> <p>Bi-Directional Flow = <input type="text" value="B"/> <input type="text" value="I"/></p> <p><i>Note: See bi-directional datasheet for available bi-directional ranges.</i></p>
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<p><b>MAX. PRESSURE RATING</b></p> <p>600 psig (air/gas, aluminum &amp; brass) = <input type="text" value="4"/></p> <p>1000 psig (air/gas, stainless steel) = <input type="text" value="5"/></p> <p>3500 psig (liquids, aluminum &amp; brass) = <input type="text" value="6"/></p> <p>6000 psig (liquids, stainless steel) = <input type="text" value="7"/></p>	<p><b>FLUID MEDIA</b></p> <p>Air &amp; Gases = <input type="text" value="A"/></p> <p>Oil &amp; 0.873 specific gravity = <input type="text" value="H"/></p> <p>Water &amp; 1.0 specific gravity = <input type="text" value="W"/></p> <p><i>Note: For special scales consult the factory.</i></p>																																																																																																		

## 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.