

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

±2.0% of full scale

Repeatability

±1% of full scale

Flow Measuring Range

0.1-150 GPM (0.4-560 LPM)

Maximum Operating Pressure¹

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.

¹Note: 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

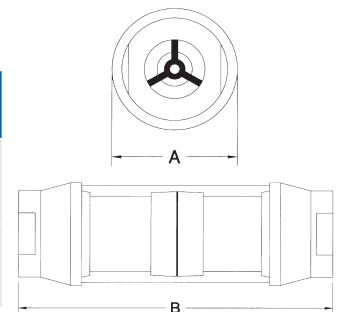
Pyrex is a registered trademark of Corning Incorporated.

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.

HIGH TEMPERATURE FLOW METERS

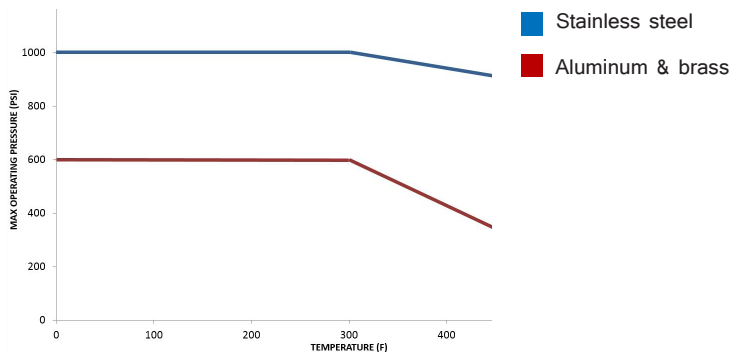
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PART NUMBER GUIDE

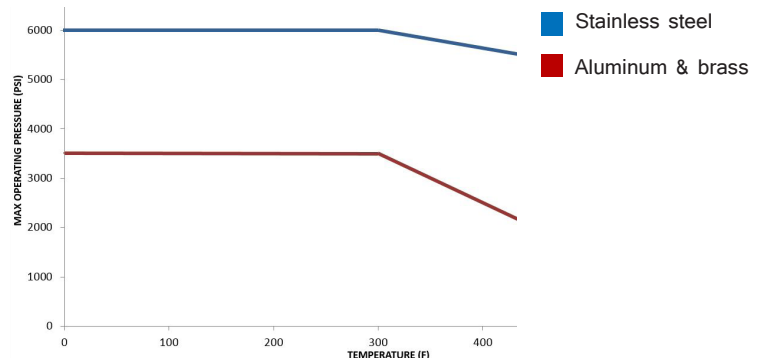
<p>METER STYLE</p> <p>400°F In-line = <input type="text" value="H"/></p> <p>600°F In-line = <input type="text" value="J"/></p>	<p>PORTING/THREAD TYPE</p> <p>(all female)</p> <table border="0"> <tr><td>1/4" NPTF, dry seal</td><td>3 only</td><td>=</td><td><input type="text" value="S"/></td></tr> <tr><td>3/8" 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="R"/></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>	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"/>	<p>SPECIAL SCALE/CUSTOM PRODUCT</p>	<p>OPTIONAL FLOW DIRECTIONS</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>PORT SIZE RANGE</p> <p>1/4" - 1/2" = <input type="text" value="3"/></p> <p>3/4" - 1" = <input type="text" value="4"/></p> <p>1-1/4" - 2" = <input type="text" value="5"/></p>	<p>MATERIAL</p> <p>Aluminum = <input type="text" value="A"/></p> <p>Brass = <input type="text" value="B"/></p> <p>Stainless Steel = <input type="text" value="S"/></p>	<p>MAX. PRESSURE RATING</p> <p>600 psig (air/gas, aluminum & 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 & brass) = <input type="text" value="6"/></p> <p>6000 psig (liquids, stainless steel) = <input type="text" value="7"/></p>	<p>FLOW RANGES</p> <table border="0"> <thead> <tr> <th>Liquid</th> <th>Air</th> <th>Size</th> <th>=</th> <th><input type="text" value="0"/></th> <th><input type="text" value="1"/></th> </tr> </thead> <tbody> <tr><td>0.1-1.0 GPM</td><td>2-12 SCFM</td><td>3 only</td><td>=</td><td><input type="text" value="0"/></td><td><input type="text" value="1"/></td></tr> <tr><td>0.2-2.0 GPM</td><td>4-23 SCFM</td><td>3 & 4</td><td>=</td><td><input type="text" value="0"/></td><td><input type="text" value="2"/></td></tr> <tr><td>0.5-5.0 GPM</td><td>5-50 SCFM</td><td>3 & 4</td><td>=</td><td><input type="text" value="0"/></td><td><input type="text" value="5"/></td></tr> <tr><td>1-10 GPM</td><td>10-100 SCFM</td><td>3 & 4</td><td>=</td><td><input type="text" value="1"/></td><td><input type="text" value="0"/></td></tr> <tr><td>1-15 GPM</td><td>25-150 SCFM</td><td>3 & 4</td><td>=</td><td><input type="text" value="1"/></td><td><input type="text" value="5"/></td></tr> <tr><td>2-20 GPM</td><td>20-215 SCFM</td><td>4 only</td><td>=</td><td><input type="text" value="2"/></td><td><input type="text" value="0"/></td></tr> <tr><td>2-25 GPM</td><td>20-250 SCFM</td><td>4 & 5</td><td>=</td><td><input type="text" value="2"/></td><td><input type="text" value="5"/></td></tr> <tr><td>3-30 GPM</td><td>30-330 SCFM</td><td>4 only</td><td>=</td><td><input type="text" value="3"/></td><td><input type="text" value="0"/></td></tr> <tr><td>4-40 GPM</td><td>30-400 SCFM</td><td>4 only</td><td>=</td><td><input type="text" value="4"/></td><td><input type="text" value="0"/></td></tr> <tr><td>5-50 GPM</td><td>40-500 SCFM</td><td>4 only</td><td>=</td><td><input type="text" value="5"/></td><td><input type="text" value="0"/></td></tr> <tr><td>5-50 GPM</td><td>30-470 SCFM</td><td>5 only</td><td>=</td><td><input type="text" value="5"/></td><td><input type="text" value="0"/></td></tr> <tr><td>8-75 GPM</td><td>30-750 SCFM</td><td>5 only</td><td>=</td><td><input type="text" value="7"/></td><td><input type="text" value="5"/></td></tr> <tr><td>10-100 GPM</td><td>150-900 SCFM</td><td>5 only</td><td>=</td><td><input type="text" value="8"/></td><td><input type="text" value="8"/></td></tr> <tr><td>20-150 GPM</td><td>150-1300 SCFM</td><td>5 only</td><td>=</td><td><input type="text" value="9"/></td><td><input type="text" value="9"/></td></tr> </tbody> </table>	Liquid	Air	Size	=	<input type="text" value="0"/>	<input type="text" value="1"/>	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"/>						
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<p>FLUID MEDIA</p> <p>Air & Gases = <input type="text" value="A"/></p> <p>Oil & 0.873 specific gravity = <input type="text" value="H"/></p> <p>Water & 1.0 specific gravity = <input type="text" value="W"/></p> <p><i>Note: For special scales consult the factory.</i></p>	<p><i>Note: SAE porting not available in Brass. Consult factory for SAE brass monitor requirements.</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.