# **HIGH TEMPERATURE FLOW METER**

High Temperature Flow Meter enables flow monitoring of barrel heating fluids, thermal transfer fluids such as Syltherm<sup>®</sup> 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.

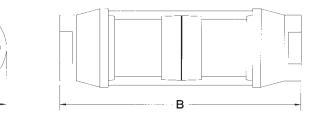


	Aluminum	Brass	Stainless Steel
Window Tube	Pyrex®	Pyrex®	Pyrex®
Window Seals	PTFE	PTFE	PTFE

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"	2-3/8"	3-1/2"	3-1/2"
	(48mm)	(60mm)	(90mm)	(90mm)
В	6-9/16"	7-5/32"	10-1/8"	12-5/8"
	(167 mm)	(182mm)	(258mm)	(322mm)



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# PART NUMBER GUIDE

H L L						
METER STYLE					1	
		PORTING/THREAD TY	ΈE			
High Temperature		(all female)	Size		SP	EC
		1/4" NPTF, dry seal	3 only	= S		
PORT SIZE RANGE		3/8" NPTF, dry seal	3 only	= A	OP	<b>FIO</b>
		1/2" NPTF, dry seal	3 only	= B		
1/4" - 1/2" = 3		3/4" NPTF, dry seal	4 only	= C	Sta	nda
3/4" - 1" = 4		1" NPTF, dry seal	4 only	= D	Rev	/ers
1-1/4 - 2" = 5		#6 SAE, O-ring seal	3 only	= E	Bi-	Dire
		#8 SAE, O-ring seal	3 only	= F	Not bi-d	
MATERIAL		#10 SAE, O-ring seal	3 only	= G	014	nee
Aluminum = A		#12 SAE, O-ring seal	4 only	= H	FLOW RANGE	c
Brass = B		#16 SAE, O-ring seal	4 only	= J		.0
Stainless Steel = S		1-1/4" NPTF, dry seal	5 only	= K	Liquid	Ai
		1-1/2" NPTF, dry seal	5 only	= L	0.1-1.0 GPM	2-
		2" NPTF, dry seal	5 only	= M	0.2-2.0 GPM	4-
MAX. PRESSURE RATING		#20 SAE, O-ring seal	5 only	= N	0.5-5.0 GPM	5-
600 psig (air/gas, aluminum & brass)	= 4	#24 SAE, O-ring seal	5 only	= P	1-10 GPM	10
1000 psig (air/gas, stainless steel)	= 5	#32 SAE, O-ring seal	5 only	= Q	1-15 GPM	25
3500 psig (liquids, aluminum & brass)		1/4" BSPP	3 only	= 8	2-20 GPM	20
6000 psig (liquids, stainless steel)	= 7	3/8" BSPP	3 only	= R	2-25 GPM	20
		1/2" BSPP	3 only	= T	3-30 GPM	30
		3/4" BSPP	4 only	= U	4-40 GPM	30
FLUID MEDIA		1" BSPP	4 only	= V	5-50 GPM	4(
Air & Gases	= A	1-1/4" BSPP	5 only	= W	5-50 GPM	30
Oil & 0.873 specific gravity	= H	1-1/2" BSPP	5 only	= Y	8-75 GPM	30
Water & 1.0 specific gravity	= W	2" BSPP	5 only	X	10-100 GPM	15
					20-150 GPM	15

#### CIAL SCALE/CUSTOM PRODUCT

### ONAL FLOW DIRECTIONS

Standard Flow, Uni-Directional	
Reverse Flow	
Bi-Directional Flow	

See bi-directional datasheet for available ectional ranaes.

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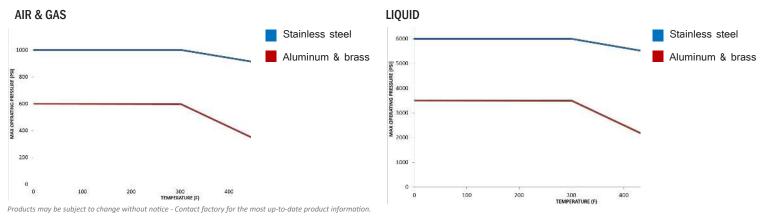
В =

L

=

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

# **TEMPERATURE DE-RATING FOR ALUMINUM & BRASS METERS**



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



Note: For special scales consult the factory.

2440 W. Corporate Preserve Dr. #600, Oak Creek, WI 53154 | www.aw-lake.com