

# HM SERIES - HIGH PRESSURE TURBINE FLOW METER

Ideal when measuring the flow of fluids under high pressures, such as in hydraulic testing. It is also ideal for chemical injection systems.



## TECHNICAL SPECIFICATIONS

**Measuring Accuracy**  
± 1.0% of reading or better

**Repeatability**  
± 0.05%

**Flow Measuring Range**  
.08 to 32 GPM (gal/min)

**Turn Down Ratio**  
10:1

**Maximum Operating Pressure**  
Working pressure up to 20,000 psi

**Maximum Operating Temperature**  
Depends on sensor used, refer to sensor technical guide.

**Filtration Requirement**  
300 microns

**End Connections**  
Medium pressure AutoClave



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## BENEFITS

### Industry Standard

Standard end connections are AutoClave®, (also available in Grayloc® and Techlok®.)

### High Pressure Suitable

The HM Series of turbine flow meters can handle low viscosity fluids flowing under extremely high pressures, such as hydraulic and fuel systems and offshore chemical injection systems.

### Hazardous Area Approved Sensors

A complete line of hazardous area approved sensors and displays are available for the HM Series meters.

### Durable & Cost-Effective

This meter's rugged stainless steel construction provides a durable and economic flow metering solution to sanitary environments.

### Explosion Proof (EX) Options Available

## MATERIALS OF CONSTRUCTION

<b>Body</b>	1.3980 Stainless Steel
<b>Rotor Support</b>	316 Ti Stainless Steel
<b>Rotor</b>	329 Stainless Steel
<b>Bearings/Shaft</b>	Tungsten Carbide

## RECOMMENDED SENSORS\*

Model	Sensor Type	Temp (°F)
<b>EX Meters</b>		
RT-30EX	Hazardous area rated local flow rate transmitter	-6 to 140
HUB-40EX	Hazardous area rated sensor	-40 to 140
<b>Non EX Meters</b>		
RT-30SD	Local flow rate transmitter	-40 to 140
VTEK/P	Pulse output sensor	-40 to 248
VTEK/P-EX	Intrinsic safe pulse output sensor	-40 to 185

\*For additional sensors such as extended temperature range, contact factory.



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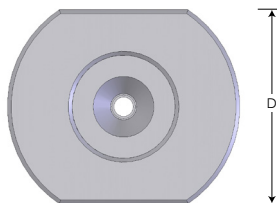
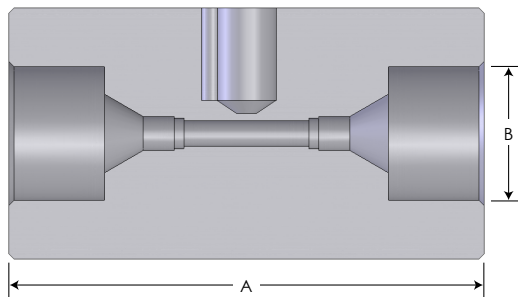
## METER SPECIFICATIONS

Part Number	Range (gal/min)	Medium Pressure AutoClave	K-Factor* (Pulses/ gal)	Frequency (0-max. Hz)	Pressure Rating (psi)
HM 003/TS-AC/xx (EX C)	0.08 to 0.4	9/16"	123,000	1,100	15,000**
HM 004/TS-AC/xx (EX C)	0.13 to 1.05	9/16"	94,600	1,700	15,000**
HM 005/TS-AC/xx (EX C)	0.2 to 1.6	3/4"	67,400	1,750	15,000**
HM 006/TS-AC/xx (EX C)	0.3 to 2.6	3/4"	45,400	2,100	15,000**
HM 007/TS-AC/xx (EX C)	0.5 to 5	1"	19,000	1,650	15,000**
HM 009/TS-AC/xx (EX C)	0.9 to 9	1"	19,000	2,750	15,000**
HM 011/TS-AC/xx (EX C)	1.6 to 16	1"	5,000	1,350	15,000**
HM 013/TS-AC/xx (EX C)	2.25 to 22.5	1-1/2"	3,500	1,300	15,000
HM 017/TS-AC/xx (EX C)	3.2 to 32	1-1/2"	1,440	840	15,000

\*Average figures, exact figures can be taken from the calibration record supplied with each flow meter. \*\*20,000 psi if NOT used with RT-30EX or HUB-40EX. EX versions available.

## METER DIMENSIONS

Part Number	A	B	D
HM 003/TS-AC/xx EX C	3.54"	13/16"	1.97"
HM 004/TS-AC/xx EX C	3.54"	13/16"	1.97"
HM 005/TS-AC/xx EX C	4.13"	3/4"	1.97"
HM 006/TS-AC/xx EX C	4.13"	3/4"	1.97"
HM 007/TS-AC/xx EX C	5.31"	1-3/8"	1.97"
HM 009/TS-AC/xx EX C	5.31"	1-3/8"	1.97"
HM 011/TS-AC/xx EX C	5.51"	1-3/8"	1.97"
HM 013/TS-AC/xx EX C	6.89"	1-7/8"	2.76"
HM 017/TS-AC/xx EX C	7.01"	1-7/8"	2.76"



## SAMPLE PART NUMBER

**HM 003/TS-AC/xx EX C**

xx = viscosity group. See table below.

## VISCOSITY GROUPS

Turbine Size	Viscosity	Viscosity Group #	Turbine Size	Viscosity	Viscosity Group #
HM 003	1 - 9 CST	15	HM 011	1 - 9 CST	15
HM 003	10 - 30 CST	57	HM 011	10 - 19 CST	52
HM 004	1 - 19 CST	27	HM 011	20 - 30 CST	77
HM 004	20 - 30 CST	77	HM 011	30 CST >	80
HM 005	1 - 9 CST	15	HM 013	1 - 7 CST	10
HM 005	10 - 30 CST	57	HM 013	8 - 14 CST	40
HM 006	1 - 19 CST	27	HM 013	15 - 19 CST	65
HM 006	20 - 30 CST	77	HM 013	19 - 29 CST	75
HM 007	1 - 19 CST	27	HM 013	30 CST >	80
HM 007	20 - 30 CST	77	HM 017	1 - 7 CST	10
HM 009	1 - 9 CST	15	HM 017	8 - 9 CST	35
HM 009	10 - 19 CST	52	HM 017	10 - 29 CST	55
HM 009	20 - 30 CST	77	HM 017	30 CST >	80



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