

Ideal for low viscosity fluids flowing under extremely high pressure, such as hydraulic and fuel systems and offshore chemical injection systems



#### TECHNICAL SPECIFICATIONS

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

**Repeatability**  
± 0.05%

**Flow Measuring Range**  
.008 to 12,000 GPM (gal/min)

**Turn Down Ratio**  
10:1

**Maximum Operating Pressure**  
Working pressure is flange dependent

**Maximum Operating Temperature**  
Fluid temperature of -384° to 662°F

**Filtration Requirement**  
300 microns

**End Connections**  
Equipped with flanges as per DIN or ANSI

#### BENEFITS

##### Fast Response Time & High Resolution

The Turbine wheel's low moment of inertia allows a fast acceleration from standstill up to full number of revolutions within 5 to 50 sec. For that reason, dynamic measurements can be made. The resolution can amount to as much as 35,000 pulses per liter.

##### Wide Temperature Range

Standard turbine: -4 up to 248°F  
Special models for cryogenic liquids: -459°F  
Special models w/ hi-temp pickups: up to 662°F.

##### Low Contamination Risk

The spacing of the turbine wheel and bearing mount is wide enough to protect against particles in fluid jamming the turbine wheel. And the Twist of flow in this area has a self-cleaning effect for the bearing.

#### MATERIALS OF CONSTRUCTION

<b>Body</b>	316 Stainless Steel Ti / 316L
<b>Rotor Support</b>	316 Stainless Steel Ti
<b>Rotor</b>	429 Stainless Steel / 329
<b>Bearings</b>	Tungsten Carbide with Nickel binder

#### SENSOR OPTIONS

Model	Sensor Type	Temp (°F)
VTEK/P	Pulse output sensor	-150 to 325
VTEK/P -EX	Pulse output sensor	-40 to 185
RT-30SD	Local flow rate transmitter	-40 to 140
RT-30EX	Hazardous area rated local flow rate transmitter	

*\* For additional sensors available, contact factory.*

**METER SPECIFICATIONS**

Part Number	Range (gal/min)	K-Factor (Pulses/ Gal)	Frequency (0-max. Hz)
HM 9 EP	0.008 to 0.2	36,723	1970
HM 3/1.5	0.08 to 0.4	8,454	1,000 1,000
HM 3/4	0.13 to 1.06	6,340	1,250 1,250
HM 5/6	0.2 to 1.6	4,703	1,740 1,780
HM 5/10	0.3 to 2.6	2,906	1,750 1,750
HM 7	0.5 to 5	1,374	1,800 1,800
HM 9	0.9 to 9	502	1,080 2,200
HM 11	1.6 to 16	343	1,350 2,700
HM 13	2.2 to 22	238	1,300 2,600
HM 17	3.2 to 32	100	800 1,650
HM 19	4 to 40	82	925 1,600
HM 22	5.3 to 53	57	800 1,600
HM 24	6.6 to 66	45	800 2,000
HM 28	7.9 to 95	41	960 2,000
HM 30	9.2 to 106	34	860 1,850
HM 36	10.6 to 132	16	600 1,200
HM 40	13.2 to 198	28	1,320 1,400
HM 50	18.5 to 317	17	1,400
HM 65	26.4 to 528	6	850
HM 80	42.8 to 845	3	615
HM 100	66 to 1320	2	560

Pulses/ m3			
Part Number	Range (gal/min)	K-Factor (Pulses/Gal)	Frequency (0-max. Hz)
HM 125	79 to 1744	1189	495
HM 150	94 to 2642	898	420
HM 200	114 to 3540	9	134
HM 250	219 to 6604	70	150
HM 300	423 to 12,680	36	110

**VISCOSITY GROUPS**

Turbine size	Viscosity	Viscosity Group #	Turbine size	Viscosity	Viscosity Group #
HM 003	1 - 9 cST	15	HM 019	20 - 29 cST	75
HM 003	10 - 30 cST	57	HM 019	30 cST >	80
HM 004	1 - 19 cST	27	HM 022	1 - 7 cST	10
HM 004	20 - 30 cST	77	HM 022	8 - 9 cST	35
HM 005	1 - 9 cST	15	HM 022	10 - 29 cST	55
HM 005	10 - 30 cST	57	HM 022	30 cST >	80
HM 006	1 - 19 cST	27	HM 024	1 - 7 cST	10
HM 006	20 - 30 cST	77	HM 024	8 - 9 cST	35
HM 007	1 - 19 cST	27	HM 024	10 - 29 cST	55
HM 007	20 - 30 cST	77	HM 024	30 cST	80
HM 009	1 - 9 cST	15	HM 028	1 - 7 cST	10
HM 009	10 - 19 cST	52	HM 028	8 - 29 cST	45
HM 009	20 - 30 cST	77	HM 028	30 cST >	80
HM 011	1 - 9 cST	15	HM 030	1 - 7 cST	10
HM 011	10 - 19 cST	52	HM 030	8 - 29 cST	45
HM 011	20 - 30 cST	77	HM 030	30 cST >	80
HM 011	30 cST >	80	HM 036	1 - 7 cST	10
HM 013	1 - 7 cST	10	HM 036	8 - 29 cST	45
HM 013	8 - 14 cST	40	HM 036	30 cST	80
HM 013	15 - 19 cST	65	HM 040	1 - 9 cST	15
HM 013	19 - 29 cST	75	HM 040	15 - 29 cSt	75
HM 013	30 cST >	80	HM 040	30 cST >	80
HM 017	1 - 7 cST	10	HM 050	1 - 9 cST	15
HM 017	8 - 9 cST	35	HM 050	15 - 19 cSt	65
HM 017	10 - 29 cST	55	HM 050	20 - 29 cSt	75
HM 017	30 cST >	80	HM 050	30 cST >	80
HM 019	1 - 7 cST	10	HM 065	1 - 7 cST	10
HM 019	8 - 9 cST	35	HM 065	8 - 14 cST	40
HM 019	10 - 14 cST	50	HM 065	15 - 29 cST	70
HM 019	15 - 19 cST	65	HM 065	30 cST >	80