

Certified according to DIN EN ISO 9001

## Technical Datasheet



# HM...R

## Turbine Flow Meters with Female Inch Threads



## Description

Turbine flow meters provide accurate measurement of instantaneous or total flow rates of low-viscosity-fluids.

## Advantages

### Fast response time and high resolution

The response time ranges from 5 up to 50 msec subject to turbine size. Thus rapidly increasing or varying flow rates may be detected. The resolution may amount to as much as approx. 139,000 pulses per litre (cf. »Technical Data«).

### Wide temperature range from -276 up to +350 °C

Standard versions: -20 up to +120 °C

Versions with special bearings for cryogenic fluids: down to -276 °C

Versions with special pickups for heated fluids: up to +350 °C

### Resistant to contamination with solids

Turbine wheel and bearings are designed in a way that solids are flushed through the turbine with the medium. Therefore the turbine does not get blocked.

### Application:

- Tap and demineralised water
- Fuels
- Liquefied gases
- Pharmaceutical fluids
- Light fuel oil
- Solvents

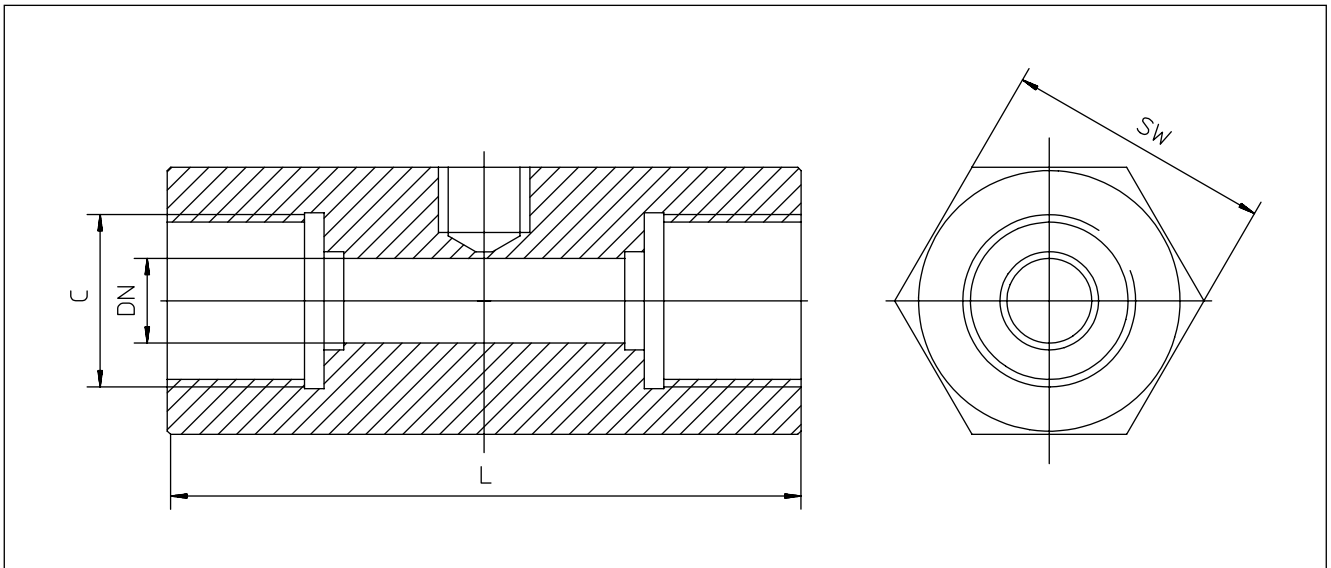
## Technical Data

Type	Measuring range, l/min			K-Factor*, pulses/l		Frequency*, in Hz	
HM 9 RP	00.3	up to	0.8	139,000		1,900	
HM 3/1,5 R	0.3	up to	1.5	32,000	32.500	1,000	
HM 3/4 R	0.5	up to	4	24,000	19,500	1,250	
HM 5/6 R	0.8	up to	6	17,800	17.800	1,740	
HM 5/10 R	1.2	up to	10	11,000	11.000	1,750	
HM 7 R	2.0	up to	20	5,200	5.200	1,800	
HM 9 R	3.3	up to	33	1,900	4.200	1,080	2,200
HM 11 R	6.0	up to	60	1,300	2.730	1,350	2,700
HM 13 R	8.5	up to	85	900	1.900	1,300	2,600
HM 19 R	15	up to	150	310	650	925	2,000
HM 28 R	30	up to	360	155	320	960	2,000
HM 30 R	35	up to	400	130	270	860	1,800

\* For viscosities from 8 mm<sup>2</sup>/s onwards the wheel's axial pitch will be halved, thus K-factors will be higher. The specifications for K-factor and output signal are average values. Individual values are recorded during calibration

Materials	
Materials (Stainless steel as per DIN (AISI))	Housing: Standard: 1.4305 (303) Special: 1.4571 (316 Ti) or 1.4404 (316 L)
	Internal parts: Standard: 1.4305 (303) Special: 1.4571 (316 Ti) or 1.4404 (316 L)
	Wheel: Standard: 1.4122 (303) Special: 1.4460 (329)
	Bearing: Tungsten carbide or Teflon

## Dimensional Drawings (mm)



Type	DN (dia)	L	C	SW	Pressure, bar
HM 3/1.5 R	4	60	G 1/4"	30	630
HM 3/4 R	4	60	G 1/4"	30	630
HM 5 R	5	70	G 3/8"	30	630
HM 7 R	7	74	G 3/8"	30	630
HM 9 R & RP	9	79	G 3/8"	30	630
HM 11 R	11	86	G 3/8"	30	400
HM 13 R	13	97	G 3/4"	41	400
HM 19 R	19	125	G 1/4"	46	400
HM 28 R	28	161	G 1 1/2"	60	315
HM 30 R	30	181	G1 1/2"	60	315

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