

Certified according to DIN EN ISO 9001

Technical Datasheet



HM...E

Turbine Flow Meters with Ermeto Fittings

Description

Turbine flow meters are used for the precise measurement of instantaneous flow rates and flow quantities of low-viscosity fluids.

HM...E turbines are equipped with Ermeto fittings.

Application:

- Fuel oil
- Tap and demineralised water
- Fuels
- Liquefied gases
- Solvents

Advantages

Fast response time and high resolution

The turbinewheel's low moment of inertia allows a fast acceleration from standstill up to full number of revolutions within 5 to 50 msec. For that reason dynamic measurements can be done. The resolution can amount to as much as 35,000 pulses per litre (cf. technical data)

Wide temperature range from -273 up to 350°C

Standard turbine flow meters: -20 up to +120°C

Special models for cryogenic liquids: -273°C

Special models with high-temperature pickups: up to +350°C

Low contamination risk

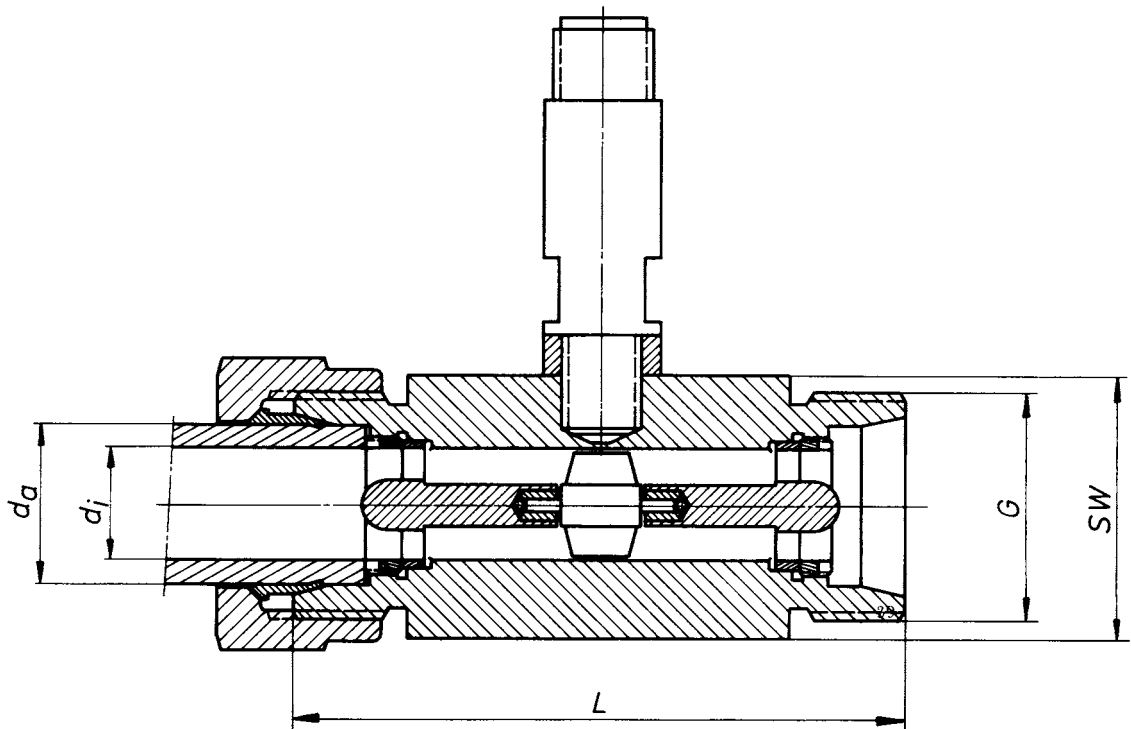
The spacing of the turbinewheel and bearing mount is wide enough to protect against particles in fluid jamming the turbinewheel. Furthermore the twist of flow in this area has a self-cleaning effect for the bearing.

Technical Data

Type	Measuring Range, ltr./min	K-Factor*, pulses/ltr.	Frequency*, in Hz	Output Signal, mVss
HM 3/1,5 E	0.3 up to 1.5	32,000 32,500	1,000 1,000	0.5 up to 5
HM 3/4 E	0.5 up to 4	24,000 19,500	1,700 1,250	0.5 up to 5
HM 5/6 E	0.8 up to 6	17,800 17,800	1,740 1,780	1.0 up to 10
HM 5/10 E	1.2 up to 10	11,000 11,000	1,750 1,750	1.0 up to 10
HM 7 E	2.0 up to 20	5,200 5,200	1,800 1,800	1.5 up to 15
HM 9 E	3.3 up to 33	1,900 4,200	1,080 2,200	1.7 up to 17
HM 11 E	6.0 up to 60	1,300 2,730	1,350 2,700	2.0 up to 20
HM 13 E	8.5 up to 85	900 1,900	1,300 2,600	2.5 up to 25
HM 17 E	12 up to 120	380 840	800 1,650	2.7 up to 27
HM 19 E	15 up to 150	310 650	800 1,600	2.9 up to 30
HM 22 E	20 up to 200	217 450	800 1,600	3.1 up to 31
HM 24 E	25 up to 250	170 362	800 2,000	3.8 up to 40
HM 28 E	30 up to 360	155 320	960 2,000	4.0 up to 42
HM 30 E	35 up to 400	130 270	860 1,850	4.1 up to 45
HM 36 E	40 up to 500	60 135	600 1,200	4.3 up to 48

* The wheel's axial pitch is halved for viscosities from 8 mm²/s onwards, therefore pulse rates of dia 9 to 36 will double.
All K-factors and output signals are average values. Exact specifications can be taken from individual calibration records.

Dimensional Drawings (mm)



Type	d_i	d_a	L	G	SW	PN, ar	Ermeto-thread
HM 3 E	3	6	50	M14x1.5	30	630	m6s
HM 5 E	5	8	56	M16x1.5	30	630	m8s
HM 7 E	7	12	62	M20x1.5	30	630	m12s
HM 9 E	9	14	68	M22x1.5	30	630	m14s
HM 11 E	11	16	76	M24x1.5	30	400	m16s
HM 13 E	13	20	84	M30x2	36	400	m20s
HM 17 E	17	25	96	M36x2	41	400	m25s
HM 19 E	19	25	107	M36x2	46	400	m25s
HM 22 E	22	28	117	M36x2	46	160	m28L
HM 24 E	24	30	122	M42x2	50	400	m30s
HM 28 E	28	38	140	M52x2	55	315	m38s
HM 30 E	30	35	149	M45x2	55	160	m35L
HM 36 E	36	42	165	M52x2	60	160	m42L

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