



Turbomolecular MagLev

Model **MK-R**



Reliability

5 active axis MagLev technology



Compact Design

Installation in ANY orientation



Process Capable

Durable rotor design for high gas load



Ease Of Use

Automatic calibration



Performance

Pumping speeds from 1650 l/sec to 4200 l/sec

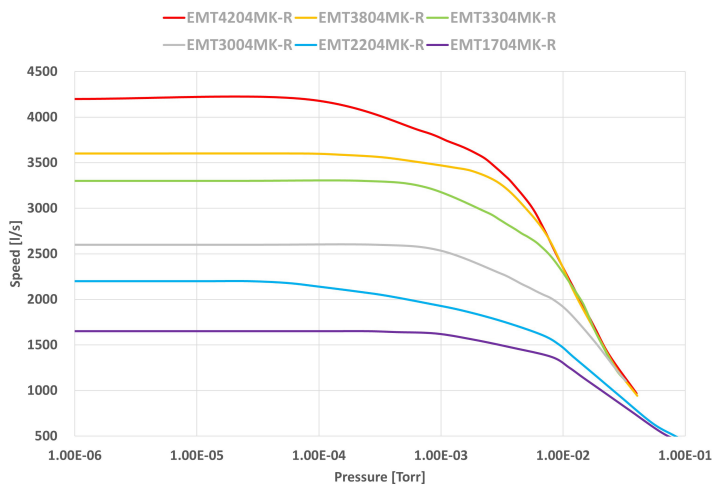


Max
N₂ **7** slm
Ar **3** slm

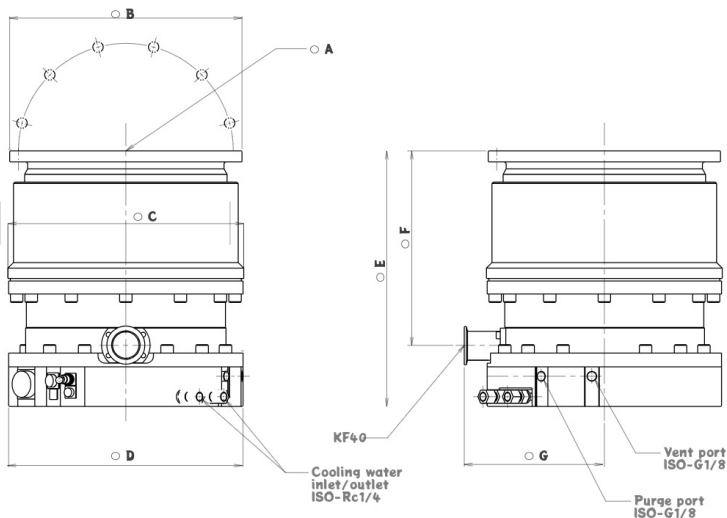
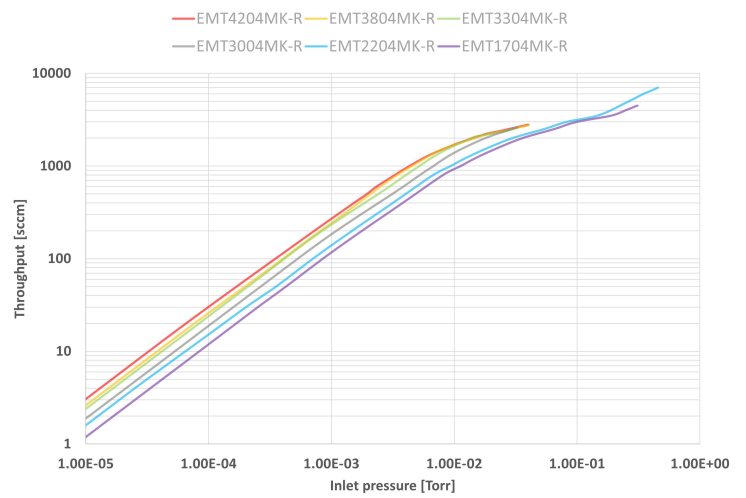


Specifications	EMT1704MK-R	EMT2204MK-R	EMT3004MK-R	EMT3304MK-R	EMT3804MK-R	EMT4204MK-R	
Inlet flange	ISO-F200	ISO-F250	ISO-F250	ISO-F320	ISO-F320	ISO-F400	
Outlet flange	KF40	KF40	KF40	KF40	KF40	KF40	
Volume flow rate	N ₂	1650 L/s	2200 L/s	2600 L/s	3300 L/s	4200 L/s	
	N ₂ (with inlet screen)	1570 L/s	2100 L/s	2500 L/s	2700 L/s	4000 L/s	
	H ₂	1550 L/s	1800 L/s	2300 L/s	2300 L/s	2700 L/s	
Maximum compression ratio	N ₂	> 2×10 ⁸	> 2×10 ⁸	> 1×10 ⁸	> 1×10 ⁸	> 2×10 ⁸	
	H ₂	3×10 ³	3×10 ³	3×10 ³	3×10 ³	2×10 ³	
Base pressure	< 2×10 ⁻⁷ Pa [1.5×10 ⁻⁹ Torr]	< 2×10 ⁻⁷ Pa [1.5×10 ⁻⁹ Torr]	< 2×10 ⁻⁷ Pa [1.5×10 ⁻⁹ Torr]	< 2×10 ⁻⁷ Pa [1.5×10 ⁻⁹ Torr]	< 5×10 ⁻⁷ Pa [3.8×10 ⁻⁹ Torr]	< 5×10 ⁻⁷ Pa [3.8×10 ⁻⁹ Torr]	
Maximum throughput	N ₂	12900 Pa·L/s [7000 sccm]	12900 Pa·L/s [7000 sccm]	4790 Pa·L/s [2600 sccm]	4790 Pa·L/s [2600 sccm]	5160 Pa·L/s [2800 sccm]	5160 Pa·L/s [2800 sccm]
	Ar	5530 Pa·L/s [3000 sccm]	5530 Pa·L/s [3000 sccm]	3500 Pa·L/s [1900 sccm]	4240 Pa·L/s [2300 sccm]	2580 Pa·L/s [1400 sccm]	2580 Pa·L/s [1400 sccm]
Maximum backing pressure	100 Pa [0.75 Torr]	100 Pa [0.75 Torr]	110 Pa [0.82 Torr]	110 Pa [0.82 Torr]	100 Pa [0.75 Torr]	100 Pa [0.75 Torr]	
Maximum continuous running pressure of N ₂ gas	220 Pa [1.65 Torr]	220 Pa [1.65 Torr]	170 Pa [1.28 Torr]	170 Pa [1.28 Torr]	160 Pa [1.2 Torr]	160 Pa [1.2 Torr]	
Vibration (0 - peak)	<0.01 μm	<0.01 μm	<0.01 μm	<0.01 μm	<0.01 μm	<0.01 μm	
Rated rotational speed	27000 min ⁻¹	27000 min ⁻¹	27000 min ⁻¹	27000 min ⁻¹	24000 min ⁻¹	24000 min ⁻¹	
Mounting orientation	Any	Any	Any	Any	Any	Any	
Approx. Weight	62 kg	59 kg	66 kg	65 kg	73 kg	70 kg	

Volume Flow Rate N₂



Throughput for N₂



Model MK-R Dimensions (mm)	EMT1704	EMT2204	EMT3004	EMT3304	EMT3804	EMT4204
A	ISO-F200	ISO-F250	ISO-F250	ISO-F320	ISO-F320	ISO-F400
B	285	335	335	425	425	510
C	340	340	380	380	415	415
D	338	338	342	342	342	342
E	424	369	441	361	417	360
F	336	281	357	277	333	276
G	202	202	201	201	205	205