

Magnetically Levitated Turbo Molecular Pump

TMP-04 Series

In spite of the simple and compact design, these models provide excellent pumping performance and high energy-saving performance.

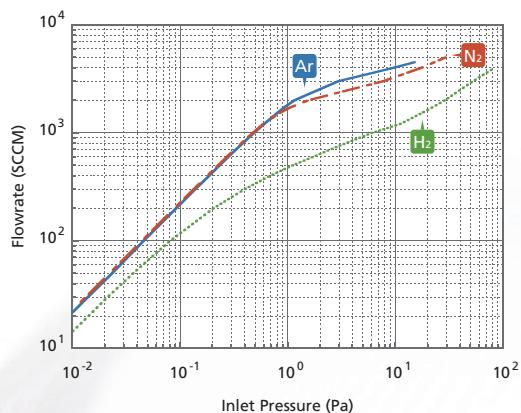
This series is a high pumping throughput type that can be used across a wide pressure range to continuously exhaust large quantities of gas stably.



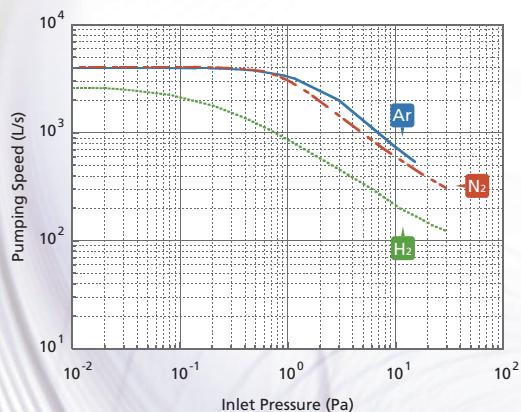
Improved Pumping Performance

For vacuum process of ø300 mm wafers and large LCD glasses, pumping speed is significantly improved in the 1 to 5 Pa range in comparison to conventional models. These pumps can exhaust larger flowrate gas while maintaining the vacuum pressure.

Gas Throughput Curve (TMP-4304)

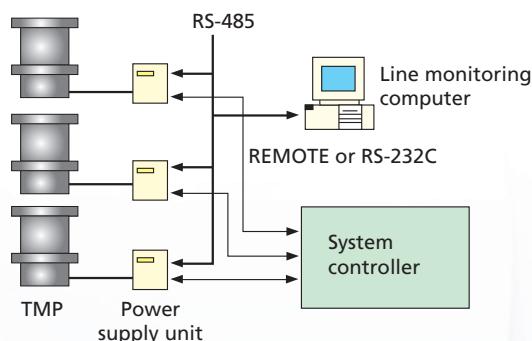


Pumping Speed Curve (TMP-4304)



Network Connection Enabled

Equipped with RS-232C and RS-485-compatible serial communication ports, which enable operations to start/stop the TMP, monitor operational status, and read out the operational log. Thanks to the optional monitor software, up to 32 TMPs can be monitored using a single computer via RS-485 communications.



By-Product-Resistant

Thanks to the rotor coating and pump temperature control, the pump is fully protected from by-products generated by semiconductor and LCD etching process. (Inquire separately regarding the detailed specifications.)

Compact and Highly Functional

All the pumps in the 03 series and 04 series can be supported by two types of power supplies. In addition, they can be operated without adjustment procedures even when the combination of pumps, power supplies, and cables (3 to 30 m in length) is changed.



TMP-04 Series

Turbomolecular Pump Model		TMP-2404LMC	TMP-2804LMC	TMP-3304LMC (0)	TMP-3804LMC		TMP-4304LMC			
Compatible Power Supply Unit		EI-R04M								
Inlet Flange		VG250 ISO250B	VG250 ISO250B		VG300 VG350 ISO320B	VG300 ISO320B		VG350		
Outlet Flange		KF40								
Pumping Speed ^{*1}	N ₂	2100 L/s [VG250] 2800 L/s [ISO250B] 2500 L/s	[VG300] 3800 L/s [ISO320B] 4000 L/s	3200 L/s	[VG300] 3800 L/s [ISO320B] 4000 L/s	4400 L/s				
	H ₂	1770 L/s 2100 L/s 2000 L/s	2200 L/s	2500 L/s	2500 L/s	2600 L/s				
Rated Speed		27000 rpm	27600 rpm	27600 rpm	24000 rpm	24000 rpm				
Ultimate Pressure (after baking)		10 ⁻⁷ Pa order								
Maximum Allowable Inlet Pressure During N ₂ Continuous Exhaust		40 Pa								
Maximum Allowable Outlet Pressure During N ₂ Continuous Exhaust		270 Pa								
Weight		70 kg	84 kg	84 kg	115 kg	105 kg				

*1: Without a protective net.

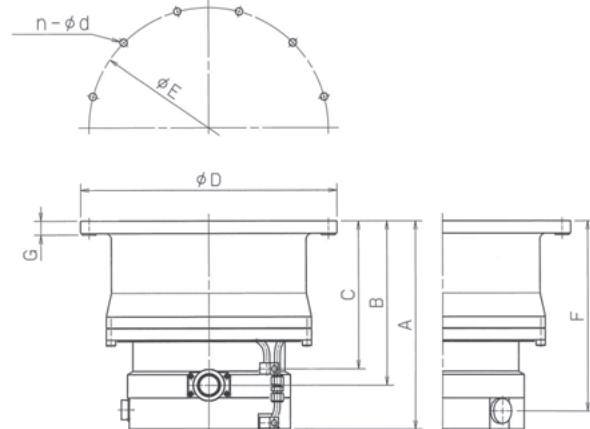
If the protective net is used, the pumping speed for N₂ gas will be as follows: TMP-2404: 2000 L/s; TMP-2804 (VG250): 2550 L/s; (ISO250B): 2300 L/s; TMP-3304 (0): 2900 L/s; TMP-3804 (VG300): 3450 L/s; (ISO320B): 3600 L/s; TMP-4304: 4000 L/s.

Power Supply Unit Model		EI-R04M				
Compatible Pump		TMP-2404LMC	TMP-2804LMC	TMP-3304LMC (0)	TMP-3804LMC	TMP-4304LMC
Input Power Supply	Voltage	Single phase 200 to 240 V AC $\pm 10\%$ (50/60 Hz ± 2 Hz)				
		Maximum Power	1.5 kVA			
Weight		8 kg				

External Appearance

Units: mm

Model	Inlet Flange	A	B	C	øD	øE	n-ød	F	G
TMP-2804LMC	VG250	409	331	303	ø350	ø320	12-ø15	377	16
	ISO250B	409	331	303	ø335	ø310	12-ø11	377	17.6
TMP-3304LMC (0)	VG300	365	288	259	ø400	ø370	12-ø13	333	22
	VG350	365	288	259	ø450	ø420	12-ø13	333	24.5
TMP-3804LMC	ISO320B	370	292	264	ø425	ø395	12-ø13	338	22.5
	VG300	420	342	314 / 409	ø400	ø370	12-ø13	388	20.5
TMP-4304LMC	ISO320B	420	342	314 / 409	ø425	ø395	12-ø13	388	24.5
	VG350	370	292	264 / 359	ø450	ø420	12-ø13	338	24.5



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