Magnetically Levitated Turbo Molecular Pump with Integrated Power Supply Unit

TMP-V04 Series

The power supply unit is integrated into the pump, so there is no need to install cables or use a control rack.

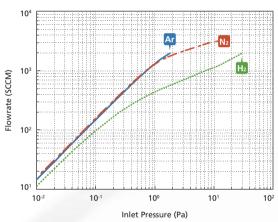
This eliminates troublesome cable routing and reduces the Installation space.



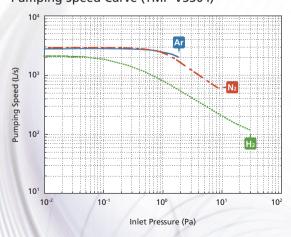
Improved Pumping Performance

Especially targeting sputter processes, the pumping speed is significantly improved in the 1 to 5 Pa range.

Gas Throughput Curve (TMP-V3304)



Pumping Speed Curve (TMP-V3304)





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.

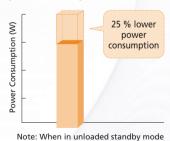
A Profibus communications option can also be selected.



Environmentally-Friendly

Low Power Consumption

Thanks to improved pumping performance and reduced internal loss, power consumption reductions of up to 25 % are achieved in comparison to conventional models. (TMP-V2304)



Allows Local Operation

Status checks and local operation can be performed using the operation panel built into the pump. It is especially effective during maintenance, since operational checks can easily be made on-site.



Local Operation Panel

TMP-V04 Series

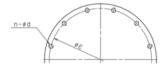
Model		TMP-V1704LM	TMP-V2304LM	TMP-V2804LM	TMP-V3304LM			
Inlet Flange		VG200 / ISO200B	VG250 / ISO250B	VG250	VG300 / ISO320B / VG350			
Outlet		KF40						
Pumping Speed *1	N ₂	1400 L/s	2100 L/s	2800 L/s	3200 L/s			
	Ar	1350 L/s	2000 L/s	2700 L/s	3100 L/s			
Rated Speed		33700) rpm	27600 rpm				
Ultimate Pressure (after baking)		10 ⁻⁷ Pa order						
Maximum Allowable Inlet Pressure During N₂ Continuous Exhaust		4.5	Pa	7 Pa				
Maximum Allowable Outlet Pressure During N₂ Continuous Exhaust		200	Pa	270 Pa				
Power Supply	Voltage	Single phase 200 to 240 V AC ±10 % (50/60 Hz ±2 Hz)						
	Maximum Power Requirements	1.2 kVA						
Weight		60 kg	60 kg 56 kg		94 kg			

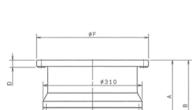
^{*1:} Without a protective net. If the protective net is used, the pumping speed for N₂ gas will be as follows: TMP-V1704LM: 1300 L/s; TMP-V2304LM: 1950 L/s; TMP-V2804LM: 2550 L/s; TMP-V3304LM: 2900 L/s.

External Appearance

Model	Inlet Flange	Α	В	С	D	øΕ	øF	n-ød
TMP-V1704LM	VG200	264	321	411	18.5	ø270	ø300	8-ø13
TIVIF-V 1704LIVI	ISO200B	264	321	411	17.6	ø260	ø285	12-ø11
TMP-V2304LM	VG250	229	286	376	22.5	ø320	ø350	12-ø13
TIVIP-V23U4LIVI	ISO250B	229	286	376	17.6	ø310	ø335	12-ø11
TMP-V2804LM	VG250	331	290	506	16	ø320	ø350	12-ø15
	VG300	288	246	462	22	ø370	ø400	12-ø13
TMP-V3304LM	ISO320B	292	251	467	22.5	ø395	ø425	12-ø13
	VG350	288	246	462	24.5	ø420	ø450	12-ø13

TMP-V1704LM, TMP-V2304LM

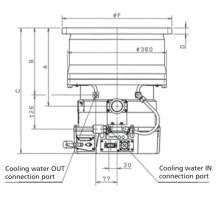




Cooling water IN connection port Cooling water OUT connection port

TMP-V2804LM, TMP-V3304LM







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