

Magnetically Levitated Turbo Molecular Pump with Integrated Power Supply Unit

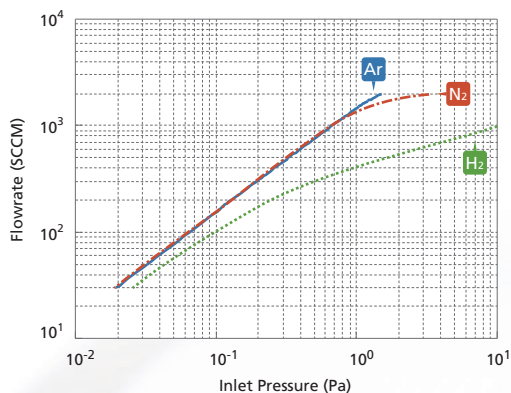
TMP-X05 Series

As a second-generation type of integrated power supply, these pumps are compact but provide excellent pumping performance and high energy-saving performance.

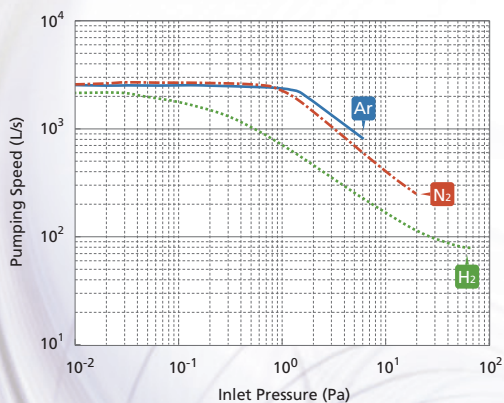
Improved Pumping Performance

High pumping efficiency is realized by applying rarefied gas flow analysis and structure analysis technology. Even further pumping performance improvements have been achieved.

Gas Throughput Curve (TMP-X3405)



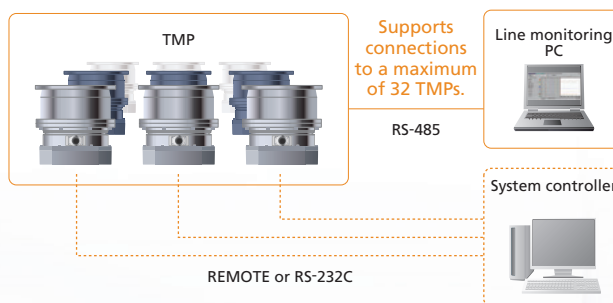
Pumping Speed Curve (TMP-X3405)



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.

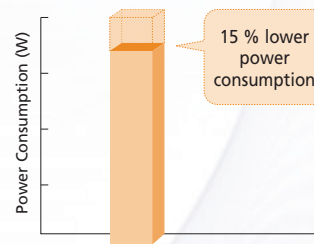
A Profibus communications option can also be selected.



Environmentally-Friendly

Low Power Consumption

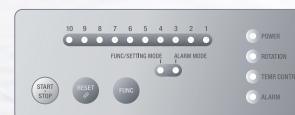
Thanks to improved pumping performance and reduced internal loss, power consumption reductions of up to 15% are achieved in comparison to conventional Shimadzu models. (TMP-X3405)



Note: When in unloaded standby mode

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-X05 Series

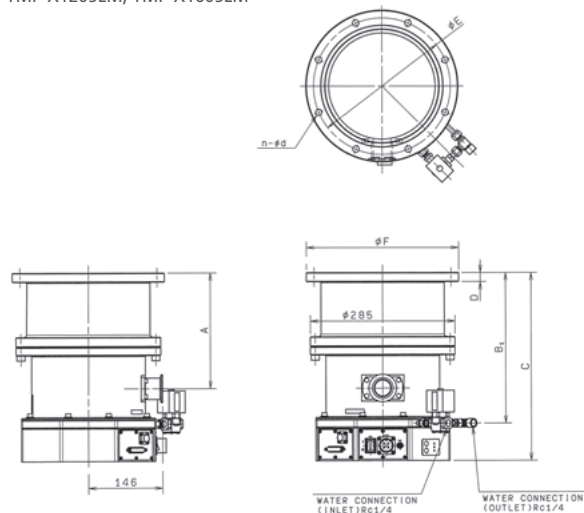
Model		TMP-X1205LM	TMP-X1605LM	TMP-X2905LM/LMC	TMP-X3405LMC
Inlet Flange		VG150 / ISO160B	VG200 / VG250 / ISO200B / ISO250B	VG250 / ISO250B	VG300 / ISO320B / VG350
Outlet		KF40			
Pumping Speed *1	N ₂	1080 L/s (VG150)	1400 L/s (VG200)	2500 L/s	3400 L/s
	H ₂	710 L/s (VG150)	750 L/s (VG200)	1900 L/s	2300 L/s
Rated Speed		37200 rpm		27600 rpm	
Ultimate Pressure (after baking)		10 ⁻⁷ Pa order			
Maximum Allowable Inlet Pressure During N ₂ Continuous Exhaust		28 Pa		40 Pa	
Maximum Allowable Outlet Pressure During N ₂ Continuous Exhaust		266 Pa		270 Pa	
Power Supply	Voltage	Single phase 200 to 240 V AC ±10 % (50/60 Hz ±2 Hz)			
	Maximum Power Requirements	0.75 kVA		1.7 kVA	
Protection Class		IP 54		IP 40	
Weight		43 kg	41 kg	100 kg	89 kg

*1: Without a protective net. If the protective net is used, the pumping speed for N₂ gas will be as follows: TMP-X1205LM: 1020 L/s (VG150), TMP-X1605LM: 1350 L/s (VG200), TMP-X2905LM/LMC: 2300 L/s; TMP-X3405LM/LMC: 3000 L/s.

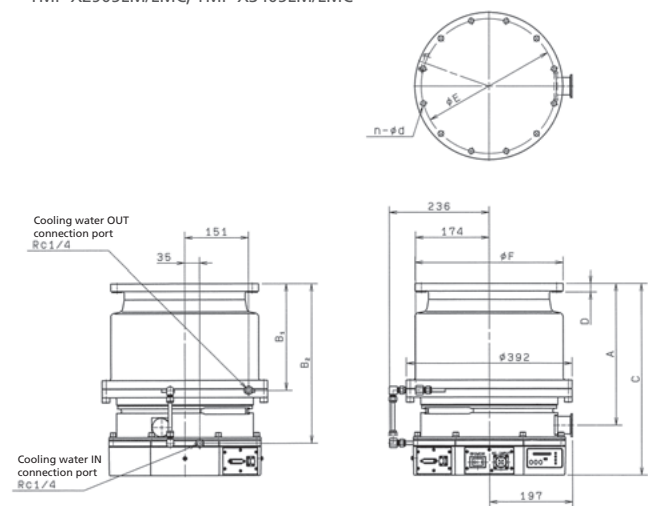
External Appearance

Model	Flange Size	A	B ₁	B ₂	C	D	øE	øF	n-ød
TMP-X1205LM	VG150	294	364	-	439	18	ø210	ø235	8-ø11
	ISO160B	296.5	366.5	-	441.5	18	ø200	ø225	8-ø11
TMP-X1605LM	VG200	229	299	-	374	18	ø270	ø300	8-ø13
	VG250	229	299	-	374	18	ø320	ø350	12-ø13
	ISO200B	229	299	-	374	18	ø260	ø285	12-ø11
TMP-X2905LM/LMC	VG250	339	255	381	458	20.5	ø320	ø350	12-ø13
	ISO250B	332	248	374	451	17.6	ø310	ø335	12-ø11
TMP-X3405LM/LMC	VG300	276	192	318	395	18.5	ø370	ø400	12-ø13
	ISO320B	280	196	322	399	20	ø395	ø425	12-ø13
	VG350	276	192	318	395	22	ø420	ø450	12-ø13

TMP-X1205LM, TMP-X1605LM



TMP-X2905LM/LMC, TMP-X3405LM/LMC



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