



# Shimadzu TMP-3403LMC

## Technical Specifications

Turbo molecular pump model	TMP-3403LMC
Cooling method	Water
Ultimate pressure	$10^{-7}$ Pa order
Maximum Argon through put (Note 1)	2200 mL/min
Maximum allowable inlet pressure (Nitrogen gas)	10 Pa
Maximum allowable outlet pressure	270 Pa
Pumping speed (Note 2)	N <sub>2</sub> 3300 L/s He 3100 L/s H <sub>2</sub> 2400 L/s
Compression ratio	N <sub>2</sub> $1 \times 10^9$ He $1 \times 10^5$ H <sub>2</sub> $6 \times 10^4$
Rated speed	22020 rpm
Start-up time	15 minutes
Mounting position	In any desired direction (Note 3)
Bake-out temperature at an inlet flange	120 °C or less
Vibration level (by Shimadzu's method)	0.01 $\mu$ m or less (0-peak)
Inlet flange	VG350 (Note 4)
Outlet flange	KF40
Mass	70 kg
Admissible throughput of purge gas	20 to 30 mL/min (Note 1)
Admissible pumping speed of backing vacuum pump in case of gas purge	1500 L/min or more
Environmental Temperatures	Operation : 0 to 40 °C / Storage : -25 to 70 °C
Admissible ambient magnetic field	Radial direction 3 mT Axial direction 15 mT
Water	Flow rate 2 to 4 L/min Pressure 0.2 to 0.5 MPa Temperature 5 to 25 °C

(Note 1) mL/min : volume flow rate at 0 °C , 1 atm. (Compatible with SCCM.)

(Note 2) Without a protective net. Pumping speed for N<sub>2</sub> is 3000 L/s with a protective net.

(Note 3) The outlet flange of the turbo molecular pump should face horizontally or vertically when installing the pump horizontally and obliquely.

(Refer to 5.1.1 「Pump Mounting Direction」 )

(Note 4) VG300, VG250 and ISO320B Special are also available.



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## SALES

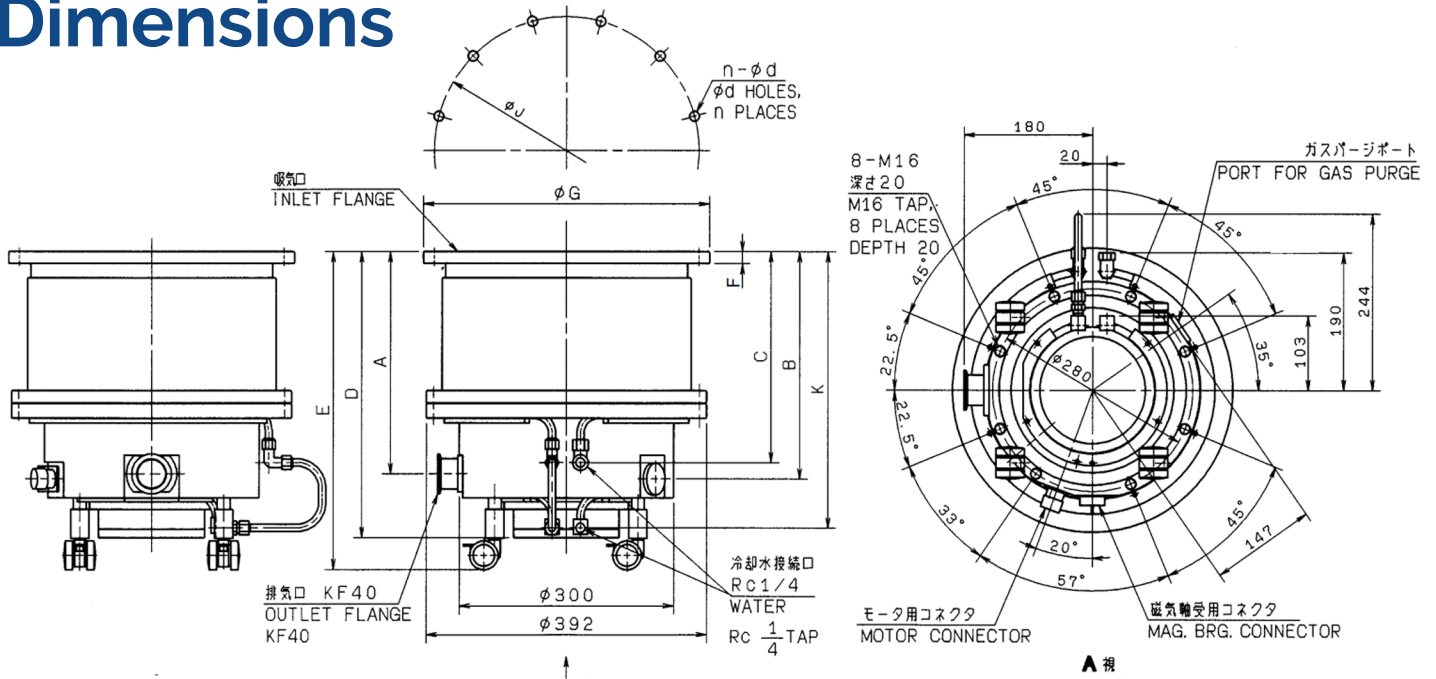
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## Dimensions



INLET FLANGE	Parts number	A	B	C	D	E	F	$\phi G$	K	$\phi H$	$n-\phi d$
VG350	P/N 262-78503-52	287	294	270	375	420	22	$\phi 450$	360	$\phi 420$	12- $\phi 15$
ISO320B Special	P/N 262-78503-53	287	294	270	375	420	22.5	$\phi 425$	360	$\phi 395$	12- $\phi 13$
VG300	P/N 262-78503-57	307	314	290	395	440	18.5	$\phi 400$	380	$\phi 370$	12- $\phi 13$
VG250	P/N 262-78503-58	331	338	314	419	464	18.5	$\phi 350$	404	$\phi 320$	12- $\phi 13$

## Applications

- semiconductor
- industrial
- research & development
- ultra high vacuum applications