

Turbomolecular Pumps **MAG W 300** with integrated controller

Technical Information 175.53.02



The new MAG W 300

Wide-range turbomolecular pump with active magnetic suspension and integrated controller.



As an expert in high vacuum technology, Oerlikon Leybold Vacuum has a long-term experience in the development and production of turbomolecular pumps. The products are designed to meet the needs of the analytical and research market as well as the semiconductor and coating industry.

We have an installed base of more than 100,000 units in the field. More than 30 years experience with MAGLEV pumps in these industries and close collaboration with major OEMs positioned Oerlikon Leybold Vacuum as a leader for Vacuum Solutions.

Features at a Glance

- New 5-axis magnetic bearing and drive system, combining highest reliability and efficiency with low vibration and noise level
- Robust system performance, providing high pumping speeds and compression ratios for all gases
- Integrated state-of-the-art converter for bearing and drive system, eliminating the need for a conventional bench-top controller solution and interconnecting cables
- Innovative communication concept by industrial communication modules to meet current standards and future trends for easy integration into customer equipment
- Easy system integration due to compact, space-saving design

Customer Benefits

As the first member of a new design platform of wide-range turbomolecular pumps with integrated electronics the new 5-axis magnetically levitated MAG W 300i fulfills customer expectations:

- Highest pumping speed at minimum footprint
- Setting new benchmarks on maintenance-free systems
- Suitable for vibration-sensitive applications like analytical, electron microscopy, thin film deposition or research and development, for example
- Flexibility due to the modular design concept. Alternatively, the controller will be available as a bench-top unit

Design Details

- Installation in any orientation
- DN 100 or 160 ISO-K and CF high vacuum connection
- DN 16 KF with clamp shoe fore-vacuum connection
- Purge / vent port
- Optional water or air cooling
- CE and RoHS conform; UL fulfilled
- Two slots for industrial communication modules
 - Standard 9-pin 24 V SPS(PLC)-IO
 - Optional interfaces possible: Ethernet, ProfiBus, DeviceNet, RS232 / RS485

Technical Data

		MAG W 300	MAG W 400
Inlet flange	DN	100	160
Pumping speed			
N ₂	l/s	300	365
H ₂	l/s	190	200
He	l/s	260	290
Compression			
N ₂			2.0 x 10 ⁹
H ₂			3.2 x 10 ³
He			9.2 x 10 ⁴
Max. fore-vacuum pressure	mbar		8
Weight	kg		12

Ordering Information

		MAG W 300 iP*	MAG W 400 iP*
High vacuum flange size		DN 100	DN 160
- ISO-K	P/N	410300V0505	410400V0505
- CF	P/N	410300V0506	410400V0506
Power supply TURBO.POWER 500			410300V0221
Water cooling device			410300V0101
Air cooling device			410300V0102
DC cable (connection of power supply and controller), 5 m			410300V2005
Additional cables and accessories			upon request

* iP = integrated converter and purge/vent port

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