

OnTool DryPump™



**The Best Choice!
Dry Pump that Attaches Directly to your System.**

Cost-effective. Rugged. Flexible.

PFEIFFER  **VACUUM**

Attaches directly to your process system

The OnTool DryPump™ is a compact, rugged dry pump that is especially suitable for use in semiconductor technology, for laboratory applications and in the coating industry.

It enjoys a proven track record in Pfeiffer Vacuum CombiLine™ pumping stations and in combination with our Roots pumps and mag-lev turbopumps.

Installation of the pump directly in or on your "tool", makes for considerable savings in connection with installation, operating and maintenance costs!

The separation of pumping system and gear box avoids cross-contamination and assures longer service life, lower leakage rates as well as less need for service.

OnTool DryPump™ – The best choice!

Top performance in numerous fields



Laboratory applications



Chip fabrication



Coating

Applications

- ▶ Coating
(Plasma coating, thermal evaporation, physical vapor deposition (PVD), chemical vapor deposition (CVD))
- ▶ Semiconductor industry
(Wafer coating, lithography, etching, load-locks, transfer chambers)
- ▶ Research & development
(Laboratory applications)
- ▶ Plant engineering
(Metallurgy, EUV lithography, vacuum furnaces, sinter technology)

Advantages at a glance

- ▶ Compact, multi-stage dry pump
- ▶ Significant initial cost savings through installation directly to the system
- ▶ High process throughputs, low leakage rates
- ▶ Pump-down of corrosive and condensing media (P version)
- ▶ Pump-down of load-locks and clean applications (L version)
- ▶ Reduced contamination due to soft pumping capability
- ▶ No fore-vacuum lines (heated) required
- ▶ High level of reliability due to contactless, wear-free seal
- ▶ Small footprint due to vertical installation
- ▶ Clean room compatible design



EUV high-energy source



Pumping station for coating solar cells

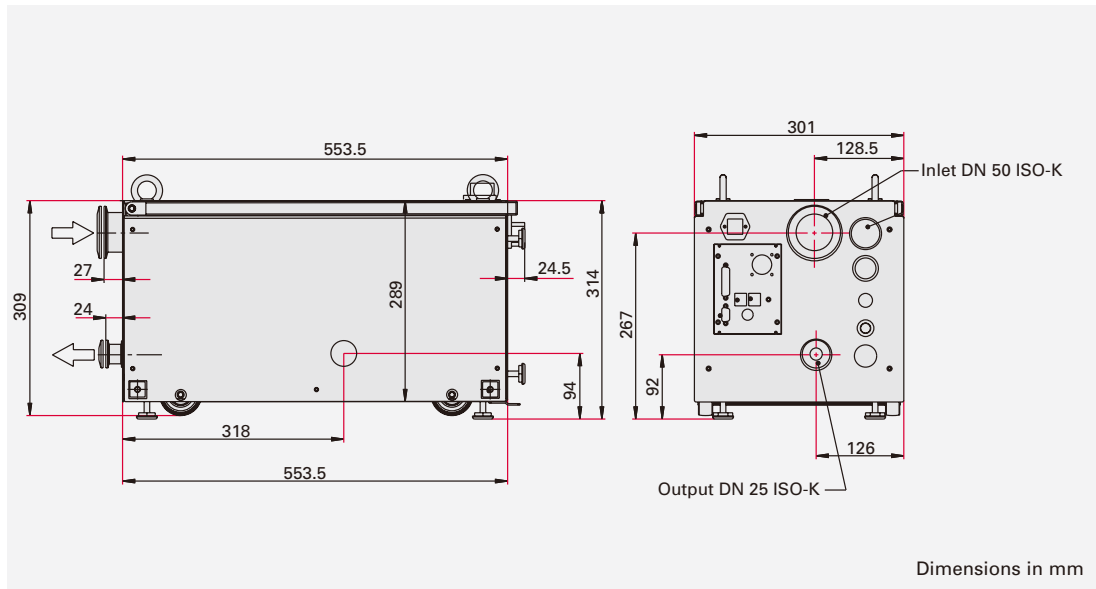


Vacuum furnace

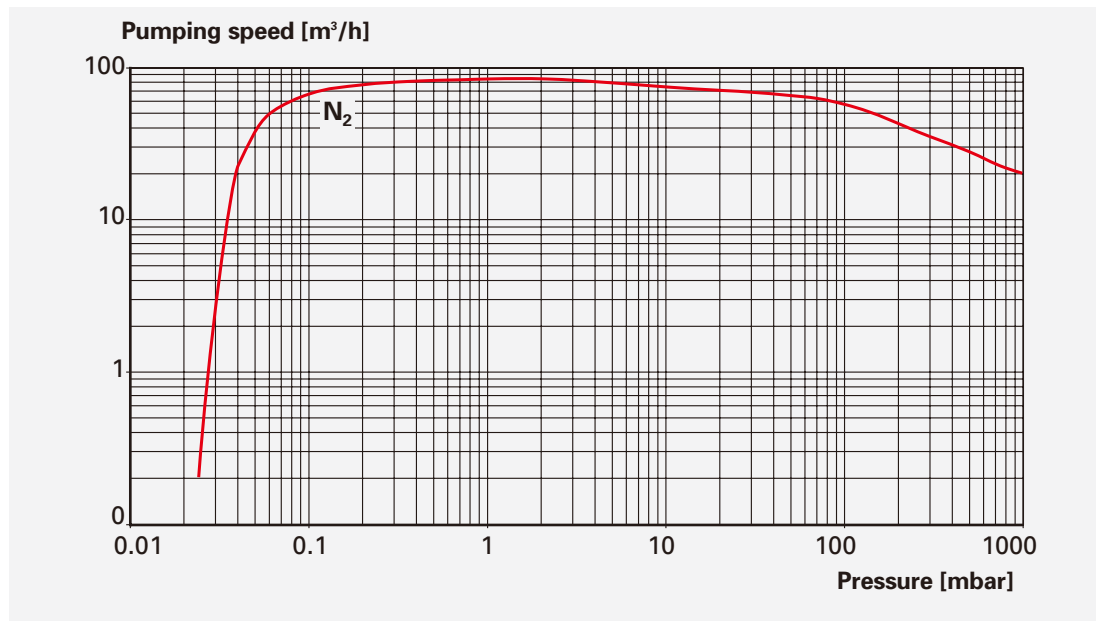


*Vertical installation
minimizes footprint*

Dimensions



Pumping speed



Technical data

	OnTool DryPump™ (P)	OnTool DryPump™ (L)
Version	Process version (P)	Light version (L)
Connections		
Inlet	DN 50 ISO-KF	DN 50 ISO-KF
Exhaust	DN 25 ISO-KF	DN 25 ISO-KF
Nominal pumping speed	84 m³/h (50 cfm)	84 m³/h (50 cfm)
Ultimate pressure	$< 5 \times 10^{-2}$ mbar (37.5 mTorr)	$< 5 \times 10^{-2}$ mbar (37.5 mTorr)
Max. inlet pressure	1000 mbar	1000 mbar
Motor power at 6.5 mbar (5 torr) inlet pressure	< 1.5 KW	< 1.5 KW
Power consumption at 0 throughput	1.2 KW	1.2 KW
Power consumption in idle mode	< 800 W	< 800 W
Noise level with connected exhaust line	< 57 dB (A)	< 57 dB (A)
Cooling water required (inlet temperature 18 °C)	150 l/h	150 l/h
Housing temperature (under load)	~ 45 °C	~ 45 °C
Gas pressure supply	2.5–10 bar (35–145 psia)	–
Sealing gas	30 l/h (0.5 slm)	–
Gas ballast and exhaust dilution	~ 1500 l/h (25 slm)	–
Lubricant F5	0.1 l	0.1 l
Ambient temperature	12–40 °C	12–40 °C
Supply voltage	185–250 VAC (3 phase) or 207–250 VAC (1 phase) 50/60 Hz	185–250 VAC (3 phase) or 207–250 VAC (1 phase) 50/60 Hz
Weight	120 kg (266 lbs)	120 kg (266 lbs)
Interfaces	RS-232 RS-485 RS-485 for DCU and HPU 25-pin Sub-D (Remote) prepared for DeviceNet	RS-232 RS-485 RS-485 for DCU and HPU 25-pin Sub-D (Remote) prepared for DeviceNet

Order number for pumps

Pump	OnTool DryPump™ (P)	OnTool DryPump™ (L)
Vertical	PK T16 920	PK T16 922
Horizontal	PK T16 919	PK T16 921

Order number for accessories

Accessories	
DCU 001 – Display Control Unit	PM 041 816-T
HPU 001 – Handheld Programming Unit	PM 051 510-T

Vacuum is nothing, but everything to us!

Pfeiffer Vacuum has been setting technological milestones for creating, measuring and analyzing vacuum for over 100 years. Our comprehensive product range covers individual components to complex vacuum systems.

Quality and service worldwide from the inventor of the turbopump: Pfeiffer is the international market leader with more than 280,000 turbopumps sold to date.

Do you have questions about your application? Please ask us.



All data subject to change without prior notice. PU 0053 PE (December 2006)



Sales, consulting and service

- ▶ Worldwide on-site service
- ▶ Comprehensive in-factory and on-site training programs
- ▶ Modular service system ranging from spare parts to maintenance contracts

PFEIFFER  **VACUUM**

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