

HeptaDry™



The HeptaDry™ Innovation.

**Dry Screw Pumps.
Optimum Ultimate Pressure. Absolutely Oil-Free.
Cool-Running.**

PFEIFFER  **VACUUM**

The HeptaDry™ innovation

With HeptaDry, Pfeiffer Vacuum is once again providing the industry with another reliable, high-quality product. The pumps from this new series of dry screw pumps are optimally suited for their applications in connection with low and medium vacuum.

What is HeptaDry?

HeptaDry is a complete line of dry screw pumps. The line is designed for both industrial and coating applications. HeptaDry is the ideal solution for all areas in which oil-free vacuum is required. The pumping speeds that are offered by this series of products range from 100 to 600 m³/h.

Where are the advantages?

First and foremost, these Next Generation pumps are extremely rugged and dependable. One special advantage consists of their single-piece, variable-pitch rotors. They assure the efficient internal compression to reduce energy cost requirements in the HeptaDry pumps. This enables thermally sensitive gases to be pumped as well.

Top performance in any number of fields



Coating



Metallurgy



Electron beam welding

Are there additional advantages?

The HeptaDry pumps are optimally suited for use as stand-alone pumps for processes of up to 10⁻¹ mbar. And when used in combination with our OktaLine Roots pumps, they supply the best ultimate pressure-specific results (5 · 10⁻³ mbar). Moreover, the direct gas flow in the pump prevents deposits. High-quality axial face seals between the bearing and suction chamber make for increased reliability.

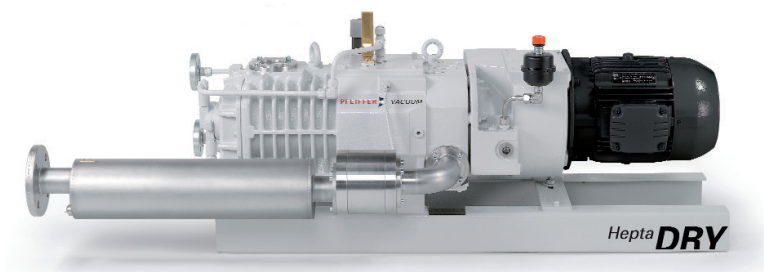
And last but not least!

The innovative design and slow speed of these pumps is gentler to bearings and seals. And as befits a top product from Pfeiffer Vacuum, cleaning is trouble-free and uncomplicated.

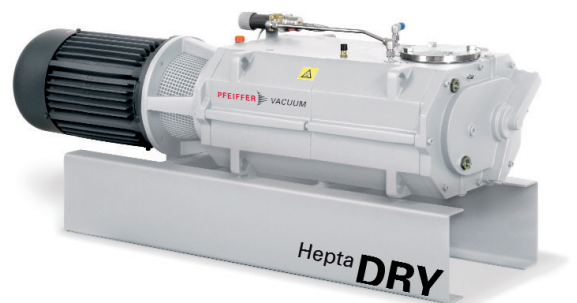
The HeptaDry innovation – Dry screw pumps!

Advantages at a glance

- ▶ Complete series of pumps with pumping speeds from 100 to 600 m³/h
- ▶ Optimum ultimate pressure and broadest range of applications
- ▶ Absolutely dry and oil-free
- ▶ Water cooling with thermostatic valve
- ▶ Lower energy costs due to efficient internal compression
- ▶ High-quality axial face seals
- ▶ Direct gas flow minimizes deposits
- ▶ Low energy consumption, low noise level
- ▶ First-class advice and process know-how
- ▶ Low maintenance and operating costs
- ▶ Worldwide on-site service



Hepta 300



Hepta 400

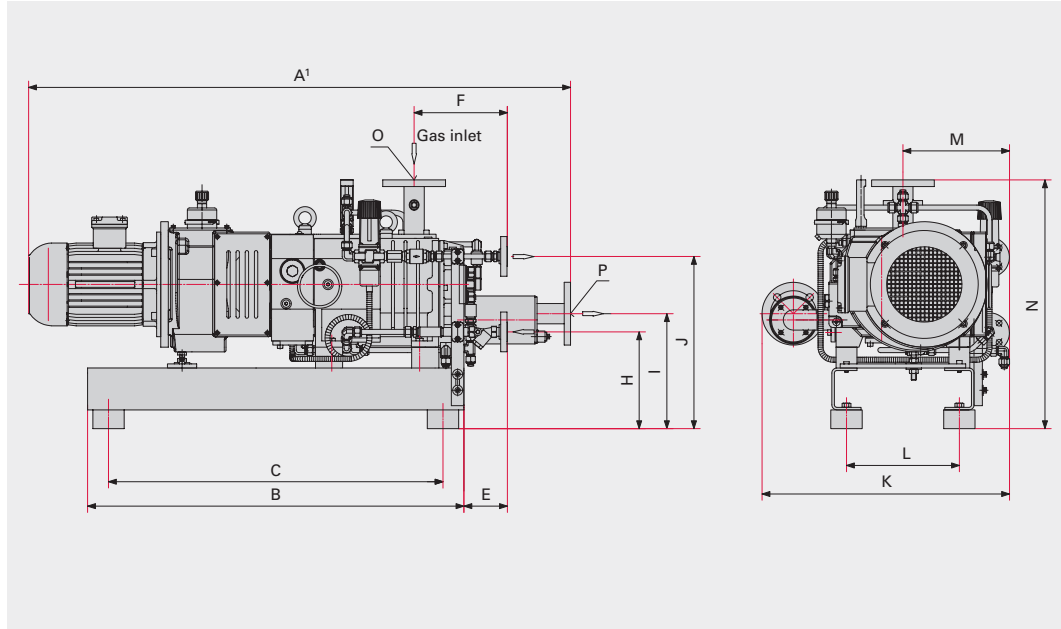
Applications

- ▶ Metallurgy
- ▶ Coating
- ▶ Freeze-drying
- ▶ Load-locks
- ▶ Electron beam welding
- ▶ Gas separation
- ▶ Vacuum filling

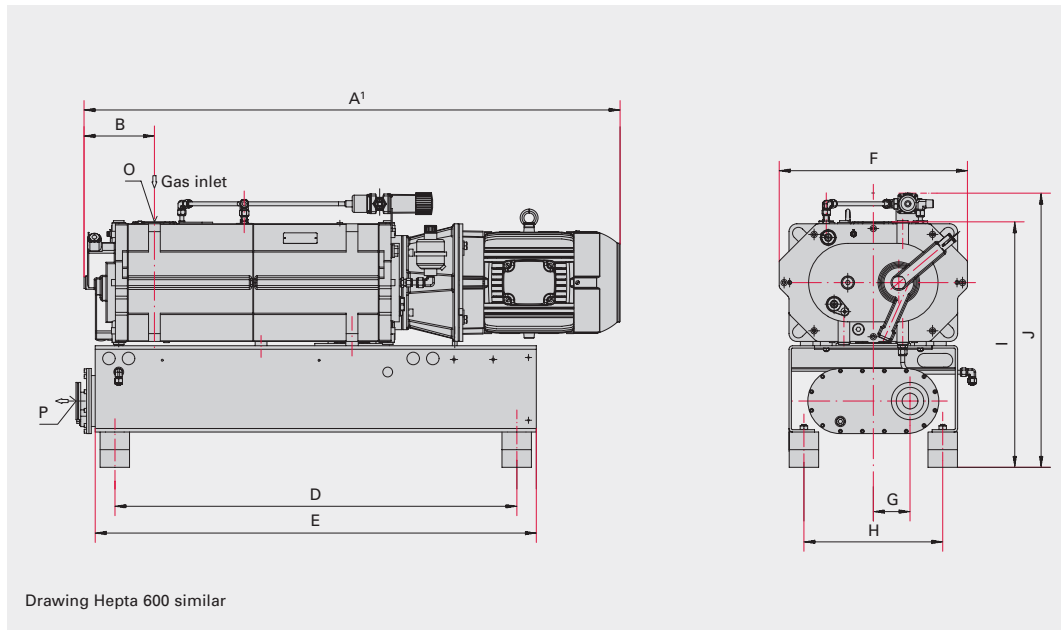
Can be used ideally either as stand-alone pumps or in combination with our OktaLine Roots pumps

Dimensions

Hepta 100, 200, 300



Hepta 400, 600



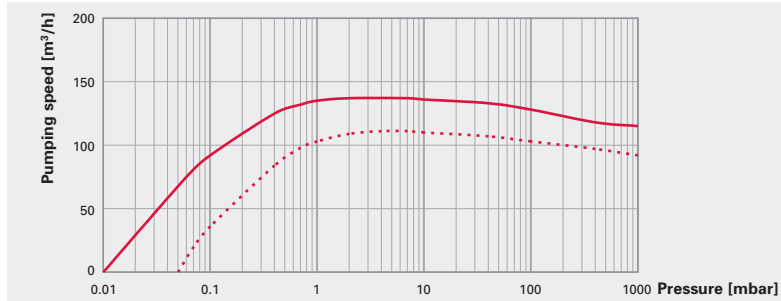
	A ¹	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Hepta 100	1,376	900	800	–	104	223	–	232	262	412	592	270	255	533	DN 63 ISO-K	DN 40-PN 16
Hepta 200	1,628	1,160	1,060	–	104	237	–	232	264	412	619	270	255	495	DN 63 ISO-K	DN 50-PN 16
Hepta 300	1,507	1,230	1,130	–	104	235	–	232	280	412	619	270	255	495	DN 63 ISO-K	DN 50-PN 16
Hepta 400	1,393	180	–	1,025	1,125	480	94	354	630	700	–	–	–	–	DN 63 ISO-K	DN 80-PN 16
Hepta 600	1,537	326	–	800	1,000	558	94	400	620	685	–	–	–	–	DN 100 ISO-K	DN 80-PN 16

¹ Depends on motor dimensions

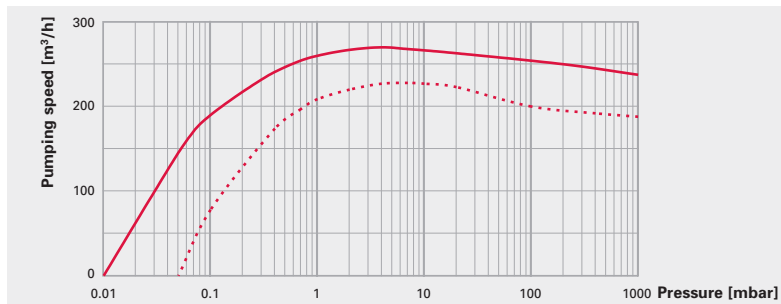
Dimensions in mm

Pumping speed

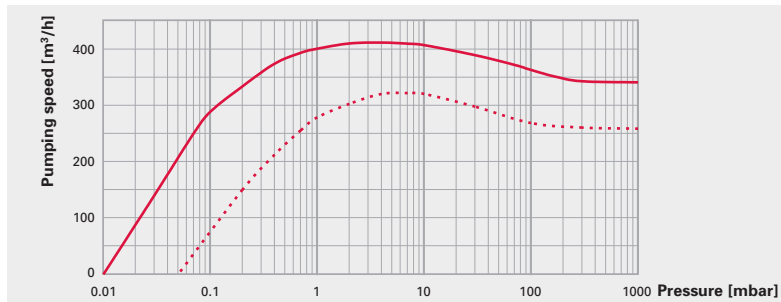
Hepta 100



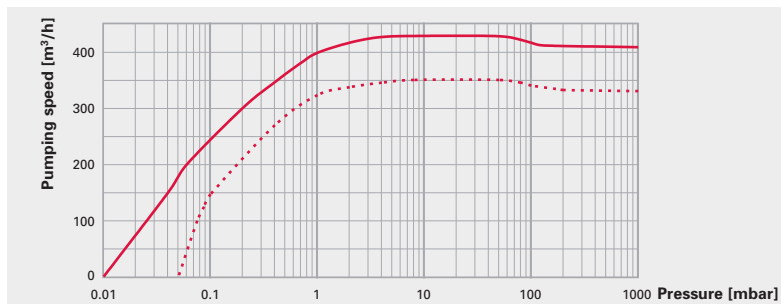
Hepta 200



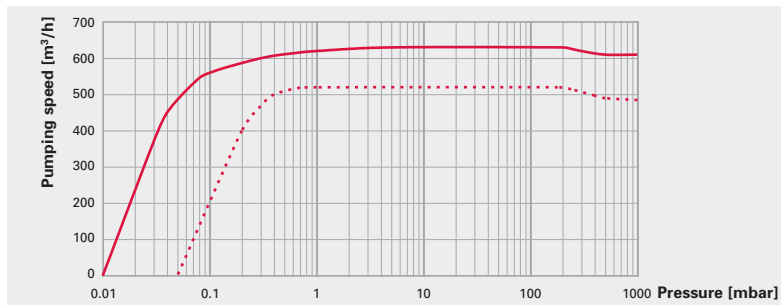
Hepta 300



Hepta 400



Hepta 600



50 Hz - - - -
60 Hz ————

Technical data

Pump model	Unit	Hepta 100
Connection flange: Inlet		DN 63 ISO-K
Connection flange: Outlet		DN 40-PN 16
Ultimate pressure at 50 Hz	mbar	< 0.05
Ultimate pressure at 60 Hz	mbar	< 0.01
Input voltage (range): 50 Hz, 3-phase motor	V	230 / 400
Input voltage (range): 60 Hz, 3-phase motor	V	220 – 280 / 380 – 480
Rated power at 50 Hz	kW	3
Rated power at 60 Hz	kW	4
Nominal rotation speed at 50 Hz	RPM	3,000
Nominal rotation speed at 60 Hz	RPM	3,600
Pumping speed at 50 Hz	m³/h	110
Pumping speed at 60 Hz	m³/h	130
Noise level at 50 Hz	dB (A)	70
Noise level at 60 Hz	dB (A)	74
Lubricant volume	l	1.6
Weight	kg	250
Ambient temperature	°C	0 – 50

Scope of delivery

Pump model	Hepta 100
Intake strainer	✓
Non-return valve, outlet side	✓
Water cooling with thermostatic valve	✓
Temperature switch in housing	✓
Cooling liquid	–
Silencer	✓
Oil charge, D1	✓

Order numbers – Pumps

Pump model	Hepta 100	
Frequency	50 Hz	60 Hz
Order number – Pump	PU V10 120	PU V10 122

Process-adapted designs and differing voltages upon request

Optional accessories

Pump model	Hepta 100
Dust filter, DN 63 ISO-K	PU Z00 001
Dust filter, DN 100 ISO-K	–

Hepta 200		Hepta 300		Hepta 400		Hepta 600	
DN 63 ISO-K		DN 63 ISO-K		DN 63 ISO-K		DN 100 ISO-K	
DN 50-PN 16		DN 50-PN 16		DN 80-PN 16		DN 80-PN 16	
< 0.05		< 0.05		< 0.05		< 0.05	
< 0.01		< 0.01		< 0.01		< 0.01	
230/400		400/690		400/690		400/690	
220–260/380–460		460		460		460	
5.5		7.5		7.5		15	
7.5		9.2		9.2		17	
3,000		3,000		3,000		3,000	
3,600		3,600		3,600		3,600	
220		320		350		525	
265		410		420		630	
71		72		66		70	
76		77		69		75	
1.6		1.6		1.6		1.3	
305		330		490		690	
0–50		0–50		0–50		0–50	

Hepta 200		Hepta 300		Hepta 400		Hepta 600	
✓		✓		✓		✓	
✓		✓		✓		✓	
✓		✓		✓		✓	
✓		✓		✓		✓	
–		–		✓		✓	
✓		✓		✓		✓	
✓		✓		✓		✓	

Hepta 200		Hepta 300		Hepta 400		Hepta 600	
50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz
PU V20 120	PU V20 122	PU V30 120	PU V30 122	PU V40 120	PU V40 122	PU V60 120	PU V60 122

Hepta 200		Hepta 300		Hepta 400		Hepta 600	
PU Z00 001		PU Z00 001		PU Z00 002		–	
–		–		–		PU Z00 003	

Leading innovations. Too fast to be copied.

Pfeiffer Vacuum – A name that stands for reliable high-tech products and innovative solutions that support our customers in their applications and pave the way to their success.

Our vacuum technology developments always keep us a step ahead!



All data subject to change without prior notice. PU 0056 PE (January 2009/5)

Sales, service and consulting

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



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