



# HEPTADRY™

Dry screw pumps.  
Optimum ultimate pressure. Absolutely oil-free. Cool-running.

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Optimum ultimate pressure. Absolutely oil-free. Cool-running.**

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?

This line of dry screw pumps is optimally suited for applications in low and medium vacuum. It is designed not only for industrial use but also for coating applications. HeptaDry is the ideal solution for all areas which require oil-free vacuum. Pumping speeds ranging from 100 to 600 m<sup>3</sup>/h are achieved by this product series.

One special advantage lies in their one-piece variable-pitch rotors. They provide the internal compression that is necessary for reducing energy costs in HeptaDry pumps. It also enables thermally sensitive gases to be pumped. The dynamic wear-free seal between the bearing and the pump chamber increases operational reliability. The pump's innovative design and low speed result in minimal stress on the bearings and seals.

Our screw pumps in the HeptaDry series are ideal for use as standalone pumps or in combination with our OktaLine Roots pumps.

## Customer benefits

- Complete pump range with pumping speeds from 100 to 600 m<sup>3</sup>/h
- Optimum ultimate pressure and wide-ranging applications
- Absolutely dry and oil-free
- High pumping speed at atmospheric pressure reduces pump-down time
- Temperature monitored water cooling
- Energy savings through internal compression
- High-quality axial face seals
- Minimal deposits due to direct gas flow and optimized temperature profile
- Low energy consumption, low noise level
- Extensive accessories



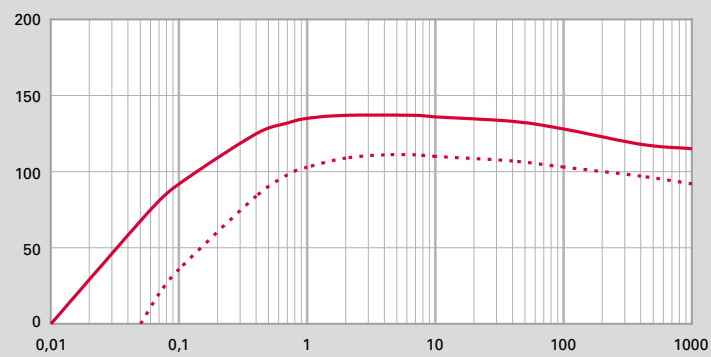
## Applications

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

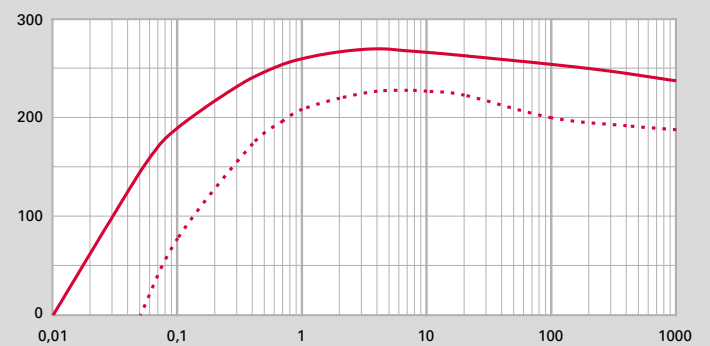
## Pumping speed and dimensions

### Pumping speed

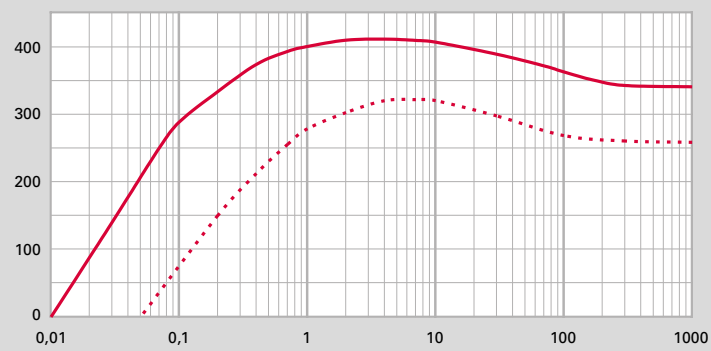
Hepta 100 P



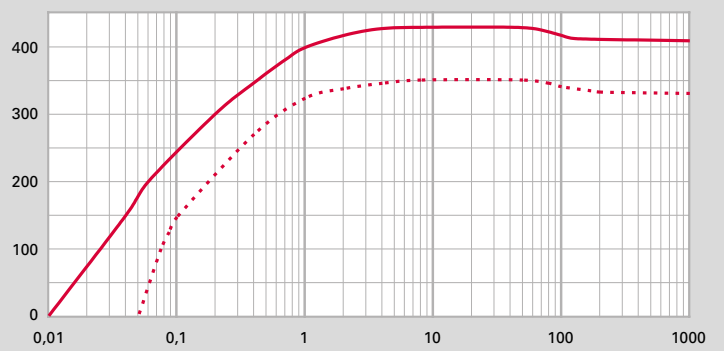
Hepta 200 P



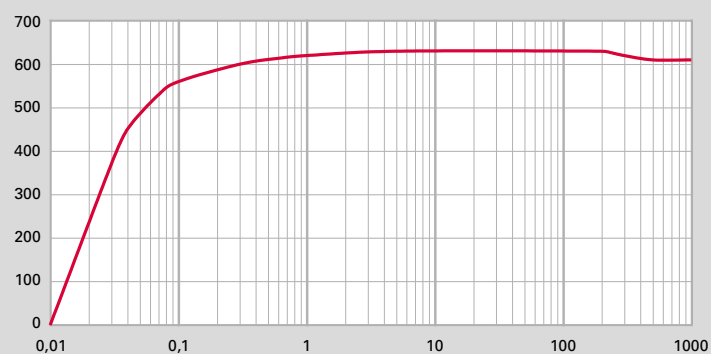
Hepta 300 P



Hepta 400 P



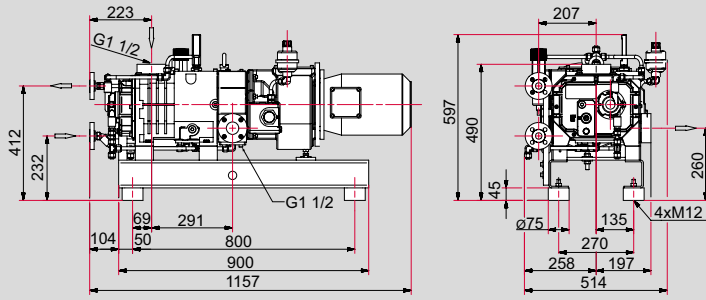
Hepta 630 P (50/60 Hz)



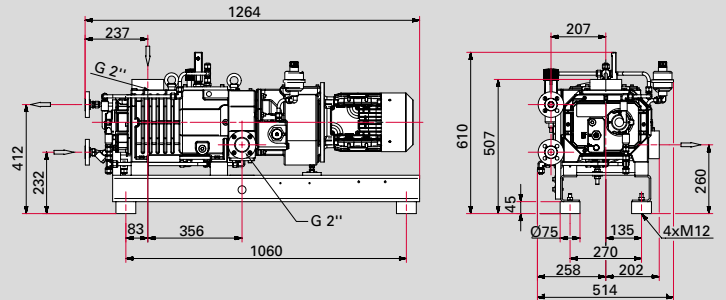
— 60 Hz  
 - - - 50 Hz

## Dimensions

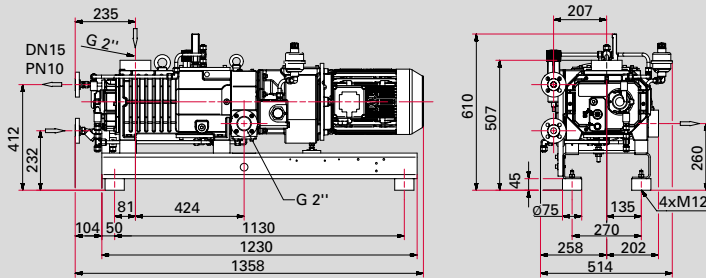
### Hepta 100 P



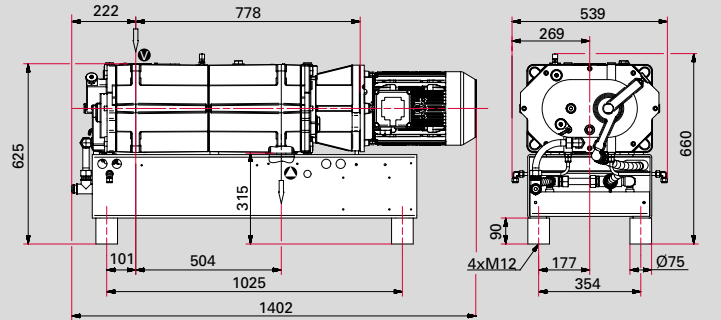
### Hepta 200 P



### Hepta 300 P



### Hepta 400 P

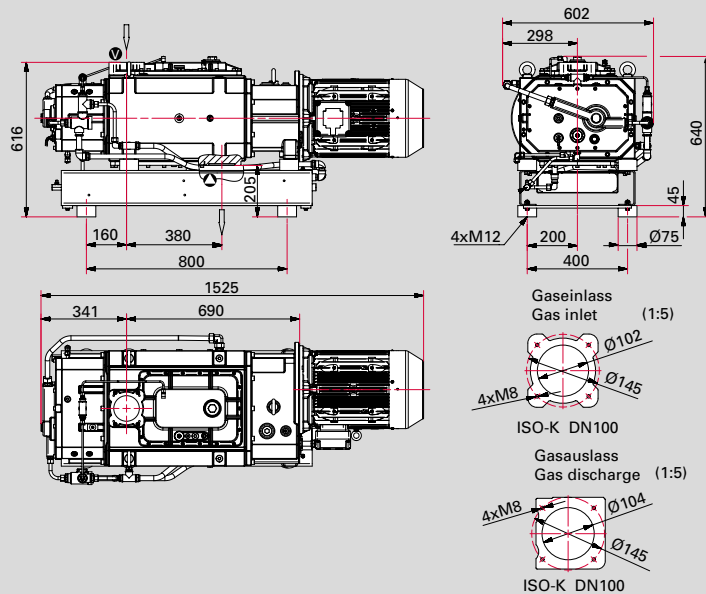


Gaseinlass / Gas inlet  
 Gasauslass / Gas discharge

Ø110 Ø150 (1:5)  
 4xM16 4xM8

DN 80 PN6  
 DN 63 ISO-K

### Hepta 630 P



Dimensions in mm

## Technical data, order numbers and accessories

### Technical data

		Hepta 100 P	Hepta 200 P	Hepta 300 P	Hepta 400 P	Hepta 630 P
Flange (out)		G 1 1/2"	G 2"	G 2"	DN 80 PN 16	DN 100 ISO-K
Flange (in)		G 1 1/2"	G 2"	G 2"	DN 63 ISO-K	DN 100 ISO-K
Operating fluid		D1, synthetic diester based oil	D1, synthetic diester based oil	D1, synthetic diester based oil	D1, synthetic diester based oil	D1, synthetic diester based oil
Operating fluid filling	l	1.55	1.55	1.55	1.6	2
Ultimate pressure at 50 Hz	hPa	< 0.05	< 0.05	< 0.05	< 0.05	< 0.01
Ultimate pressure at bei 60 Hz	hPa	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Weight	kg	264	319	344	460	550
Cooling water pressure	hPa	3,000–6,000	3,000–6,000	3,000–6,000	3,000–6,000	1,000–6,000
Cooling water temperature	°C	10–25	10–25	10–25	5–30	10–30
Cooling water consumption	l/h	2–6	2–6	2–6	2–6	12
Motor rating 50 Hz	kW	3.5	6	7.5	7.5	15
Motor rating 60 Hz	kW	4.8	7.6	9.5	9.2	17
Nominal rotation speed at 50 Hz	min <sup>-1</sup>	3,000	3,000	3,000	3,000	3,000
Nominal rotation speed at 60 Hz	min <sup>-1</sup>	3,600	3,600	3,600	3,600	3,600
Nominal pumping speed at 50 Hz	m <sup>3</sup> /h	110	220	320	350	630
Nominal pumping speed at 60 Hz	m <sup>3</sup> /h	130	265	385	420	630
Mains requirement: voltage 50 Hz	V	190–208/ 380–415	190–208/ 380–415	190–208/ 380–415	190–208/ 440–460	190–208/ 220–240/ 380–415
Mains requirement: voltage 60 Hz	V	220–230/ 416–460	220–230/ 416–460	220–230/ 416–460	220–230/ 416–460	220–230/ 416–460
Sound pressure level 50 Hz	dB (A)	70	71	72	66	70
Sound pressure level 60 Hz	dB (A)	74	76	77	69	75
Protection category		IP55	IP55	IP55	IP55	IP55
Ambient temperature	°C	0–50	0–50	0–50	0–50	5–50

### Order numbers

	Hepta 100 P	Hepta 200 P	Hepta 300 P	Hepta 400 P	Hepta 630 P
190–208/380–415 V, 50 Hz	PU V12 420	PU V22 420	PU V32 420	PU V42 420	PU V62 430
220–230/416–460 V, 60 Hz	PU V12 422	PU V22 422	PU V32 422	PU V42 422	PU V42 432
230/400 V, 60 Hz	PU V12 423	PU V22 423	PU V32 423	PU V42 423	PU V62 433

## Scope of delivery

	Hepta 100 P	Hepta 200 P	Hepta 300 P	Hepta 400 P	Hepta 630 P
Water cooling with temperature monitoring	■	■	■	■	■
Temperature switch in housing	■	■	■	■	■
Cooling liquid				■	■
Oil charge, D1	■	■	■	■	■

## Optional accessories

	Hepta 100 P	Hepta 200 P	Hepta 300 P	Hepta 400 P	Hepta 630 P
<b>Dust filter</b>					
SAS 140, DN 1 1/2"	PU Z00 010				
SAS 300, DN 2"external thread		PU Z00 011	PU Z00 011		
SAS 63, DN 63 ISO-K				PK Z60 511	
SAS 100, DN 100 ISO-K					PK Z60 512
<b>Operating fluid</b>					
D1, synthetic diester based oil, 20 l	PK 005 877 -T	PK 005 877 -T	PK 005 877 -T	PK 005 877 -T	PK 005 877 -T
D1, synthetic diester based oil, 5 l	PK 005 876 -T	PK 005 876 -T	PK 005 876 -T	PK 005 876 -T	PK 005 876 -T
D1, synthetic diester based oil, 1 l	PK 005 875 -T	PK 005 875 -T	PK 005 875 -T	PK 005 875 -T	PK 005 875 -T
D1, synthetic diester based oil, 0.5 l	PK 005 881 -T	PK 005 881 -T	PK 005 881 -T	PK 005 881 -T	PK 005 881 -T
D1, synthetic diester based oil, 0.25 l	PK 005 880 -T	PK 005 880 -T	PK 005 880 -T	PK 005 880 -T	PK 005 880 -T
<b>Exhaust silencer</b>					
Exhaust silencer DN 40, PN 16	PU Z00 100				
Exhaust silencer DN 50, PN 16		PU Z00 101	PU Z00 101		
Exhaust silencer DN 80, PN 16				PU Z00 102	
Exhaust silencer DN 80, PN 16					PU Z00 103
<b>Check valve</b>					
Check valve Hepta 100 P	PU Z00 200				
Check valve Hepta 200 P/300 P		PU Z00 201	PU Z00 201		
Check valve Hepta 400 P/630 P				PU Z00 202	PU Z00 202
<b>Others</b>					
PTC-resistor tripping device	P 4768 051 FQ	P 4768 051 FQ	P 4768 051 FQ	P 4768 051 FQ	P 4768 051 FQ

## **VACUUM SOLUTIONS FROM A SINGLE SOURCE**

Pfeiffer Vacuum stands for innovative and custom vacuum solutions worldwide, technological perfection, competent advice and reliable service.

## **COMPLETE RANGE OF PRODUCTS**

From a single component to complex systems:

We are the only supplier of vacuum technology that provides a complete product portfolio.

## **COMPETENCE IN THEORY AND PRACTICE**

Benefit from our know-how and our portfolio of training opportunities!

We support you with your plant layout and provide first-class on-site service worldwide.

Are you looking for a  
perfect vacuum solution?  
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