

# HenaLine™



## The HenaLine™ Innovation

**A Complete Line of Single-Stage Rotary Vane Pumps  
for Low and Medium Vacuum Applications.  
Safe. Reliable. Powerful.**

**PFEIFFER**  **VACUUM**

## The HenaLine™ innovation

With its HenaLine pumps, Pfeiffer Vacuum has brought to market further first-class products whose dependable, robust engineering, in particular, is convincing. We now offer you a complete line of new single-stage rotary vane pumps for all low and medium vacuum applications.

### What is HenaLine?

HenaLine is a complete line of oil-sealed rotary vane pumps that are suitable for both industrial applications as well as research & development environments. These pumps offer pumping speeds of between 25 and 1,000 m<sup>3</sup>/h.

### Where are the advantages?

Whether as a stand-alone pump or as a backing pump for our OktaLine in connection with medium vacuum applications: HenaLine means top quality at all times. Used as backing pumps in our CombiLine Roots pumping stations, these pumps are the ideal solution for your applications in metallurgy, helium leak detection or vacuum drying and degassing.

## Reliability in any number of fields



*General process technology*



*Cleanroom transfer chambers*



*Fluorescent tube manufacturing*

### Are there additional advantages?

Their reliability, performance and compact size round out the outstanding features of the HenaLine pumps. Moreover, the principle of operation of the HenaLine pumps assures low operating temperatures. This increases the service life of the oil while eliminating the need for additional water cooling for the pump in most applications.

### And last but not least!

Oil mist separator, oil return and safety valves are integrated as standard equipment in this line of pumps. They prevent contamination of the ambient air and safeguard both the pump as well as your system. Moreover, the gas ballast valve assures pump-down of steam and other process vapors. In every respect, HenaLine simply shines!

**The HenaLine innovation – Safe. Reliable. Powerful.**

## Advantages at a glance

- ▶ A complete line of pumps with pumping speeds of between 25 and 1,000 m<sup>3</sup>/h
- ▶ Integrated oil mist separator for clean exhaust air
- ▶ Low ultimate pressure (up to 0.1 mbar)
- ▶ Compact, reliable and powerful
- ▶ Simple to service
- ▶ Operating and process reliability
- ▶ Connection flanges in DN ISO-KF/K, easily adaptable
- ▶ Quiet, low-vibration operation



*Hena 25*



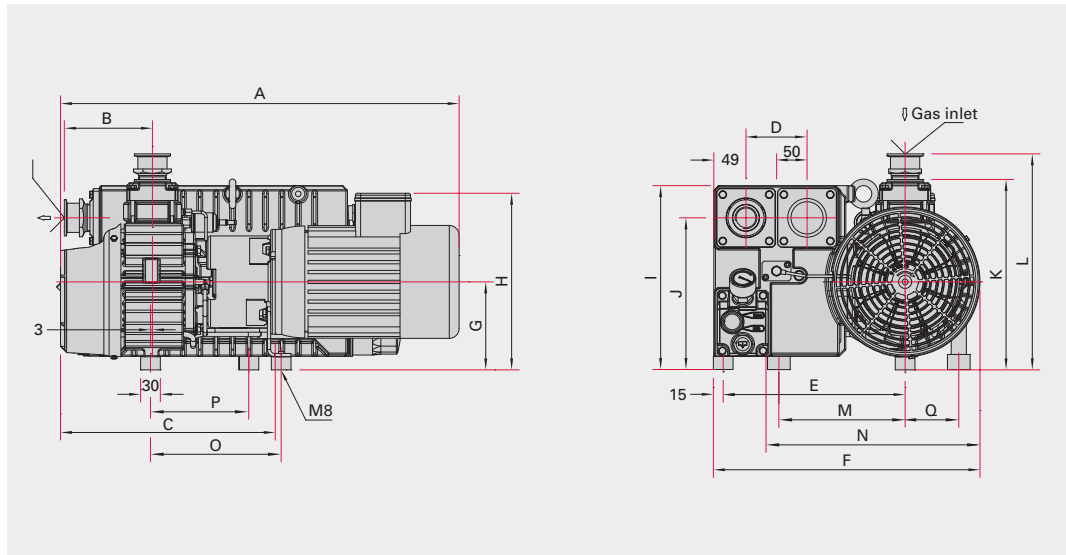
*Hena 1000*

## Applications

- ▶ **Industrial**
    - Electron beam welding
    - Lamp manufacturing
    - Surface coating
    - Vacuum drying and degassing
    - Leak detection
    - Metallurgy
    - Gas recovery
    - Load locks/transfer chambers
    - General process technology
  - ▶ **Research & development**
    - Simulation chambers (Air conditioning, aerospace)
- Ideal for use as a stand-alone pump, a backing pump or in combination with our CombiLine™ Roots pumping stations

## Dimensions

### Hena 25, 60, 100

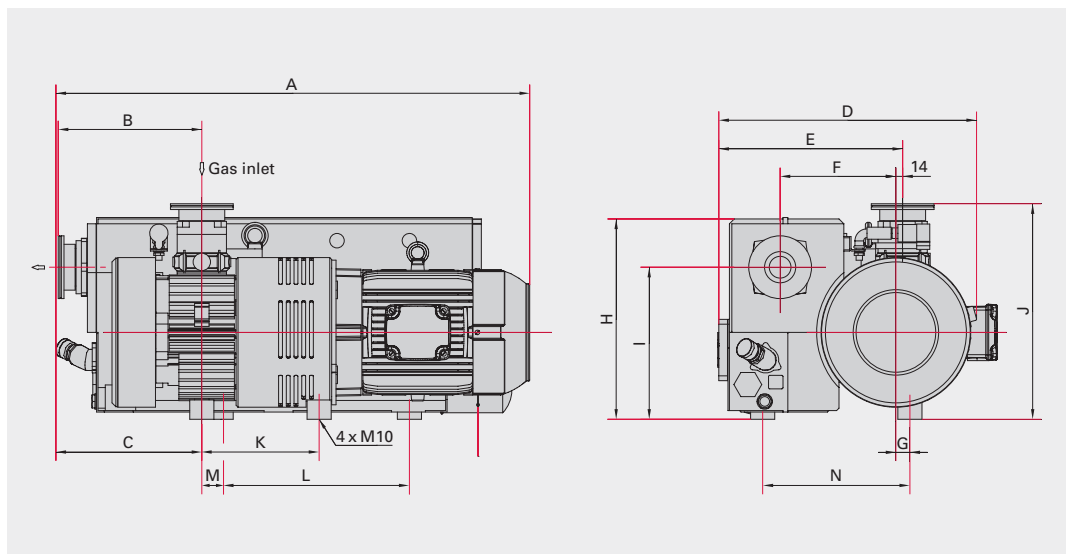


	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
<b>Hena 25</b> 50 Hz	564	129	318	–	–	–	123	240	260	210	263	302	171	284	159	120	67
<b>Hena 25</b> 60 Hz	604	129	318	–	–	–	123	265	260	210	263	302	171	284	159	120	67
<b>Hena 25</b> 50/60 Hz	599	129	318	–	–	–	123	251	260	210	263	302	171	284	159	120	67
<b>Hena 60</b> 50/60 Hz	640	134	327	93	277	406	134	294	280	231	290	329	–	–	199	–	–
<b>Hena 100</b> 50/60 Hz	699	131	387	93	277	406	134	294	280	231	290	329	–	–	226	–	–

Length (A) depends on motor dimensions

Dimensions in mm

### Hena 200, 300

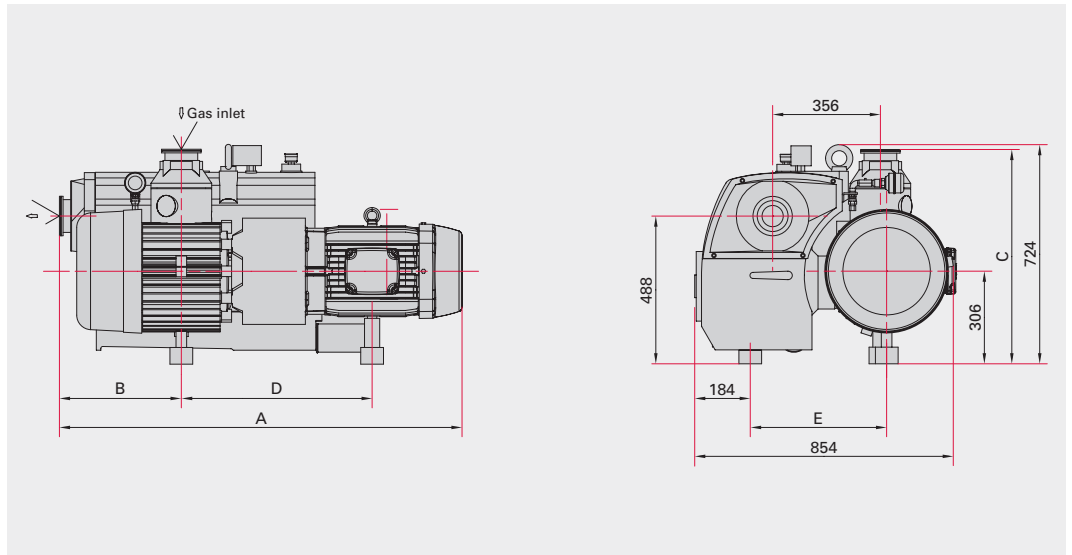


	A	B	C	D	E	F	G	H	I	J	K	L	M	N
<b>Hena 200</b> 50/60 Hz	981	298	302	534	381	240	29	415	315	446	243	390	40	305
<b>Hena 300</b> 50/60 Hz	1,081	337	342	536	383	240	29	408	305	437	243	390	–	350

Length (A) depends on motor dimensions

Dimensions in mm

## Hena 400, 630

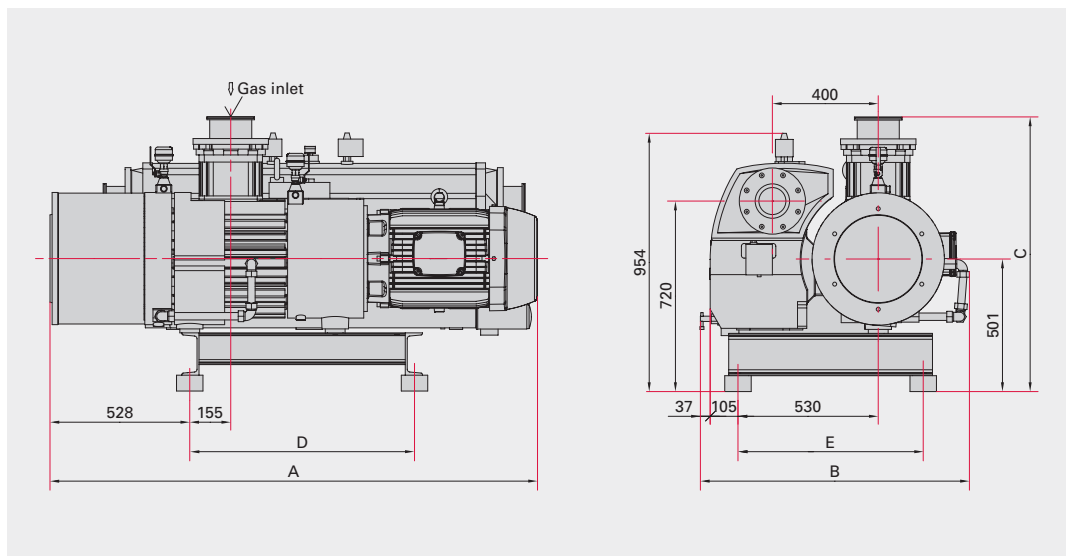


	A	B	C	D	E
<b>Hena 400</b> 50/60 Hz	1,392	402	708	657	451
<b>Hena 630</b> 50/60 Hz	1,774	556	711	846	451

Length (A) depends on motor dimensions

Dimensions in mm

## Hena 1000



	A	B	C	D	E
<b>Hena 1000</b> 50/60 Hz	1,844	1,010	1,038	850	700

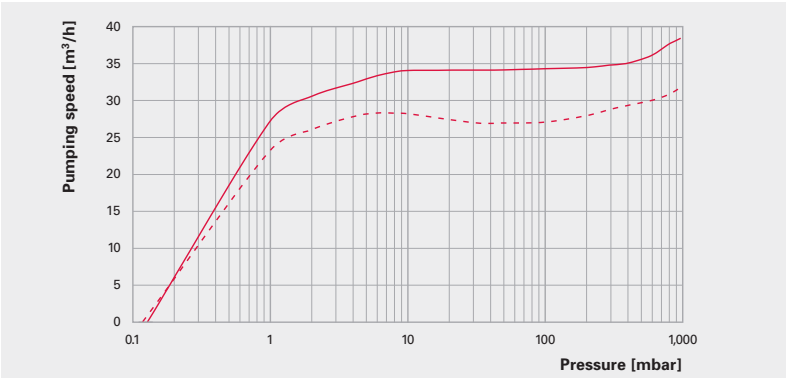
Length (A) depends on motor dimensions

Dimensions in mm

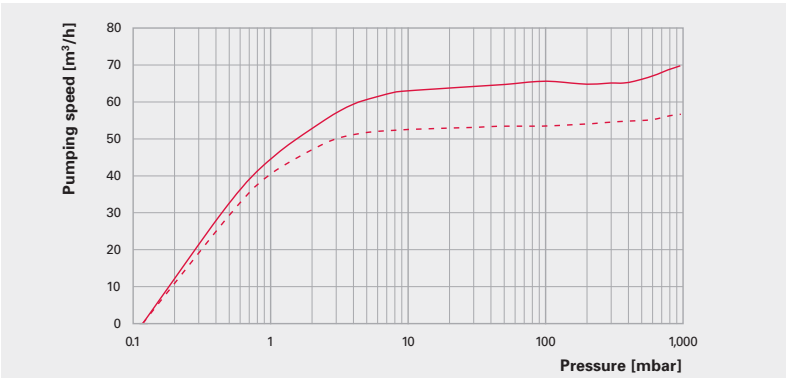


## Pumping speed

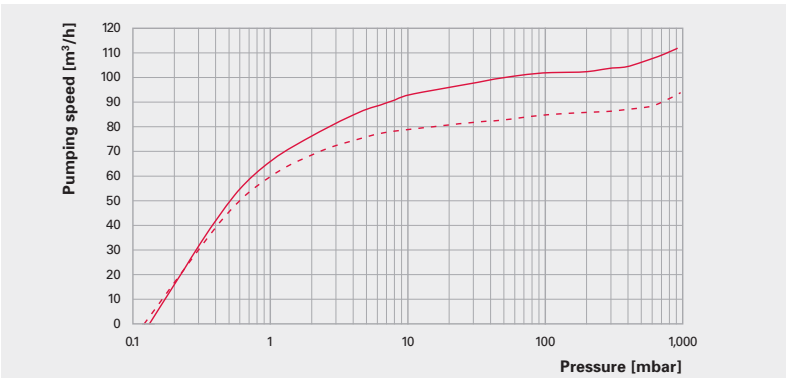
### Hena 25



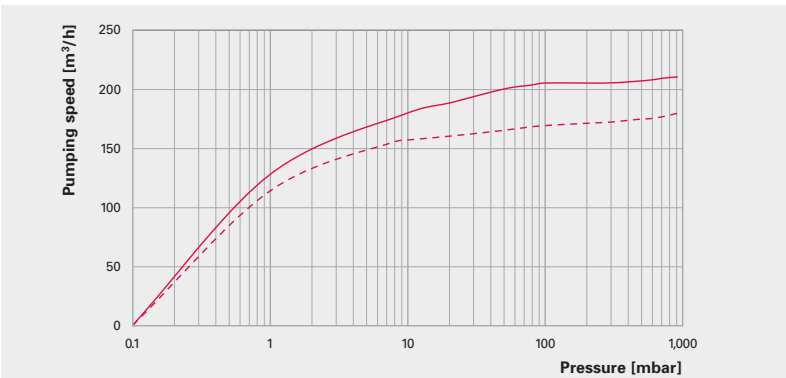
### Hena 60



### Hena 100



### Hena 200



50 Hz -----  
 60 Hz -----  
 without gas ballast

## Technical data

Pump Model	Unit	Hena 25	Hena 25	Hena 25	Hena 25
Power supply: Voltage (range): 50 Hz	V	190–210/380–420	220–240	–	–
Power supply: Voltage (range): 60 Hz	V	190–240/380–480	–	220–240	100–120
Connection flange (inlet)		DN 40 ISO-KF	DN 40 ISO-KF	DN 40 ISO-KF	DN 40 ISO-KF
Connection flange (outlet)		DN 40 ISO-KF	DN 40 ISO-KF	DN 40 ISO-KF	DN 40 ISO-KF
Ultimate pressure: With gas ballast	mbar	1.5	1.5	1.5	1.5
Ultimate pressure: Without gas ballast	mbar	0.2	0.2	0.2	0.2
Rated power at 50 Hz	kW	0.9	1.1	–	–
Rated power at 60 Hz	kW	1.1	–	2.0	2.0
Rated speed at 50 Hz	RPM	1,500	1,500	–	–
Rated speed at 60 Hz	RPM	1,800	–	1,800	1,800
Pumping speed at 50 Hz	m <sup>3</sup> /h	25	25	–	–
Pumping speed at 60 Hz	m <sup>3</sup> /h	30	–	30	30
Water vapor tolerance at 50 Hz	mbar	40	40	–	–
Water vapor tolerance at 60 Hz	mbar	40	–	40	40
Water vapor capacity at 50 Hz	g/h	900	900	–	–
Water vapor capacity at 60 Hz	g/h	900	–	900	900
Noise level without gas ballast at 50 Hz	dB (A)	60	60	–	–
Noise level without gas ballast at 60 Hz	dB (A)	63	–	63	63
Operating fluid charge	l	1	1	1	1
Weight*	kg	35	42	42	42

\* depending on motor dimensions

## Scope of delivery

Pump Model	Hena 25	Hena 25	Hena 25	Hena 25
Oil return suction via float switch	✓	✓	✓	✓
Filter resistance pressure gauge	✓	✓	✓	✓
3 TF motor protection with 3-phase motor	✓			
D1 oil charge	✓	✓	✓	✓
Gas ballast valve	✓	✓	✓	✓
Exhaust air temperature monitoring in separator				
Operating fluid level monitoring				
Operating fluid temperature switch				

## Order numbers – Pumps

Pump Model	Hena 25	Hena 25	Hena 25	Hena 25
Motor	3-phase	Single-phase	Single-phase	Single-phase
Frequency	50/60 Hz	50 Hz	60 Hz	60 Hz
Order number – Pump	<b>PK D02 200</b>	<b>PK D02 212</b>	<b>PK D02 222</b>	<b>PK D02 207</b>

Process-adapted versions and other voltages upon request

## Optional accessories

Pump Model	Hena 25	Hena 25	Hena 25	Hena 25
Dust separator	<b>PK Z60 510</b>	<b>PK Z60 510</b>	<b>PK Z60 510</b>	<b>PK Z60 510</b>
Operating fluid level monitoring	–	–	–	–
Operating fluid temperature switch	–	–	–	–

Hena 60	Hena 100	Hena 200	Hena 300	Hena 400	Hena 630	Hena 1000
190–210/380–420	190–210/380–420	380–420/660–720	380–420/660–720	380–420/660–720	380–420/660–720	380–420/660–720
190–240/380–480	190–240/380–480	380–480/660–830	380–480/660–830	380–480/660–830	380–480/660–830	380–480/660–830
DN 40 ISO-KF	DN 40 ISO-KF	DN 100 ISO-K	DN 100 ISO-K	DN 100 ISO-K	DN 100 ISO-K	DN 160 ISO-K
DN 40 ISO-KF	DN 40 ISO-KF	DN 100 ISO-K	DN 100 ISO-K	DN 100 ISO-K	DN 100 ISO-K	DN 100 ISO-K
1.5	1.5	1.5	1.5	1.5	1.5	3
0.2	0.2	0.2	0.2	0.2	0.2	0.4
1.8	2.5	5.5	7.5	11	15	22
2.2	3	5.5	7.5	15	18.5	30
1,500	1,500	1,500	1,500	1,000	1,000	1,000
1,800	1,800	1,800	1,800	1,200	1,200	1,200
63	100	200	300	400	630	1,000
76	120	240	360	480	760	1,200
40	40	40	40	40	40	30
40	40	40	40	40	40	30
1,800	2,800	4,000	5,000	9,000	18,000	19,000
1,800	2,800	4,600	5,800	11,000	22,000	19,000
64	65	72	74	77	77	82
66	68	74	76	79	79	82
2	2	6,5	6,5	12	15	30
62	74	170	215	465	620	1,080

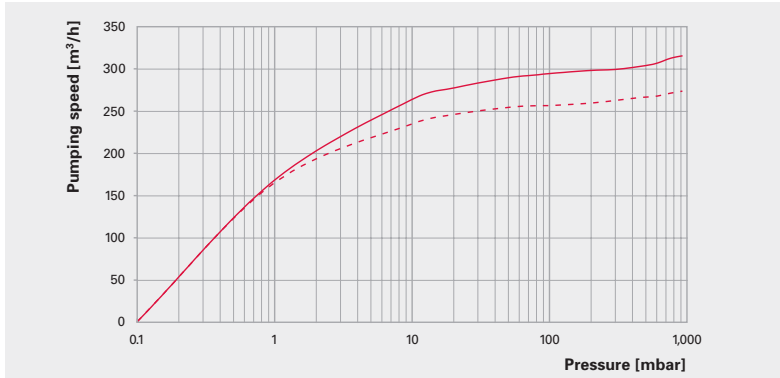
Hena 60	Hena 100	Hena 200	Hena 300	Hena 400	Hena 630	Hena 1000
✓	✓	✓	✓	✓	✓	✓
✓	✓	✓	✓	✓	✓	✓
✓	✓	✓	✓	✓	✓	✓
✓	✓	✓	✓	✓	✓	✓
✓	✓	✓	✓	✓	✓	✓
				✓	✓	✓
						✓
						✓

Hena 60	Hena 100	Hena 200	Hena 300	Hena 400	Hena 630	Hena 1000
3-phase	3-phase	3-phase	3-phase	3-phase	3-phase	3-phase
50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
PK D02 300	PK D02 350	PK D02 400	PK D02 450	PK D02 500	PK D02 600	PK D02 700

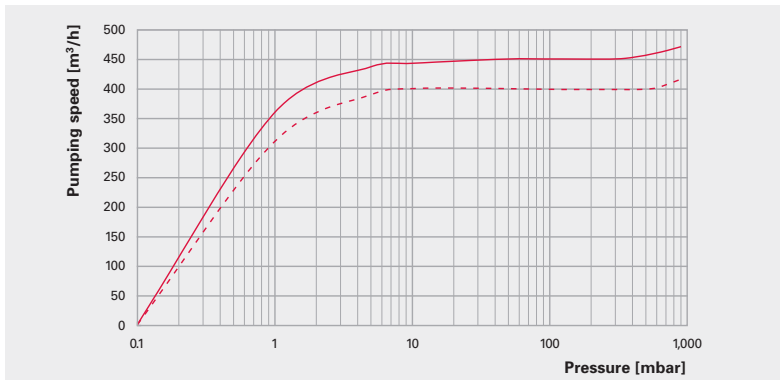
Hena 60	Hena 100	Hena 200	Hena 300	Hena 400	Hena 630	Hena 1000
PK Z60 510	PK Z60 510	PK Z60 512	PK Z60 512	PK Z60 512	PK Z60 512	PK Z60 514
–	–	PK 100 116	PK 100 116	PK 100 116	PK 100 116	–
–	–	PK 100 125	PK 100 125	PK 100 125	PK 100 125	–



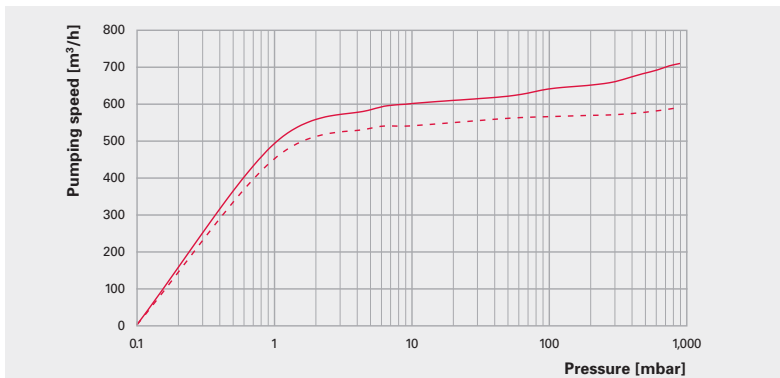
## Hena 300



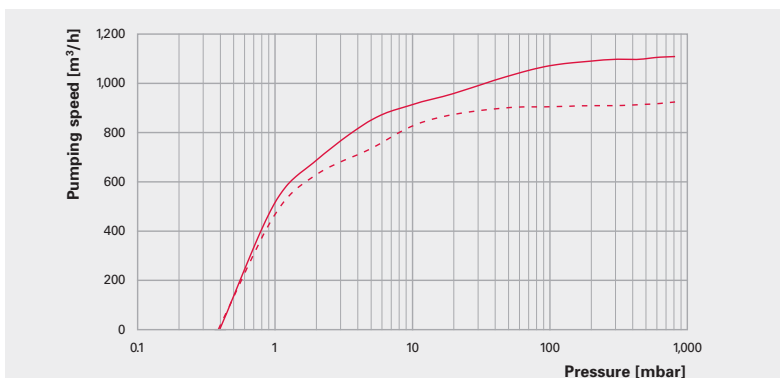
## Hena 400



## Hena 630



## Hena 1000



50 Hz - - - - -  
60 Hz ————  
without gas ballast

## 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. PD 0043 PE (July 2008/10)

## 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

**PFEIFFER**  **VACUUM**