



## "Vacuummash" JSC is the largest manufacturer in Russian Federation that produces vacuum equipment.

We carry out a full cycle of work - from the development to the manufacture and maintenance of vacuum equipment. Modern production, equipped with the most modern machines, allows us to produce high-quality and reliable vacuum equipment, which are known and appreciated by thousands of customers around the world.

We offer you the world's best oil diffusion and booster vacuum pumps **VDP - Vacma Diffusion Pumps**, **VDP Jet - Vacma Diffusion Pumps with Ejector stage** and **VBP - Vacma Oil Booster Pumps**, which have been supplied to Leybold Gmbh, Germany for more than 30 years, including Leybold Tianjin under the brand DIP, DIJ and OB. For 30 years we have supplied more than 20,000 pumps of various capacities and occupy a leading position in the world in their development and production. Our production facilities allow us to produce more than 1000 pumps of various capacities per year.

JSC "Vacuummash" offers you cooperation in the supply of diffusion and booster vacuum pumps of Russian production to the People 's Republic of China and Asian market. The best combination of price and quality and world-famous pumps allow us to achieve success.

Diffusion vacuum pumps work in conjunction with a pre-vacuum pump. The fore-vacuum pump is necessary for pre-pumping and for removing the pumped gas from the outlet pipe of the booster vacuum pump. As a rule, diffusion pumps are used with vacuum baffles that reduce the reverse flow of working fluid vapors into the pumped volume. Mineral or synthetic vacuum oil is used as the working fluid in the pump. VDP, VDP Jet diffusion pumps, VPD Booster pumps have several heaters, which increases the reliability of the pump and the stability of the technological process, since in the event of a possible failure of one of the heaters, the pump will retain its operability. The design of the heaters provides a quick pump output to the operating mode and easy replacement in case of failure without de-mounting the pump from the vacuum installation. An oil reflector is provided in the outlet pipe of the diffusion pump, which reduces the migration of vacuum oil into the forevacuum pump.

To control the operating parameters of the pump and ensure protection, all series of pumps are equipped with:

- ✓ A contact pad for installing a temperature relay on the water cooling circuit;
- Socket for installing a temperature sensor (temperature control of the working fluid);
- ✓ Sight glass for monitoring the level of the working fluid.









## **VDP Series Oil Diffusion Pumps**



Diffusion vacuum pumps of the VDP series are high vacuum pumps with a speed of action from 3000 l/s to 50,000 l/s and a ultimate pressure of up to 10<sup>-7</sup> Torr

Scope of application	108.25°	JOP. AS	NO NO S	10p.62	JOP.8	o vor too
Food industry						
Sugar production						
Woodworking						
Pulp and paper production	İ					
Petrochemical industry	ĺ					
Chemical industry						
Manufacture of rubber products						
Crystal production						
Metallurgy						
Mechanical engineering						
Production of electrical equipment						
Electricity generation						
Construction						
Research activities						
Medicine						
Agricultural industry						
Mining						
Waste treatment						



## **Oil Diffusion Pumps**

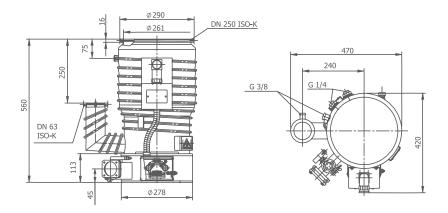


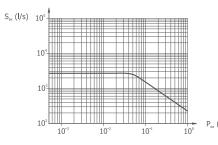
#### **VDP-250 Oil Diffusion Pump**

Type: Oil

Pressure range: high vacuum Speed of action: 2700 l/s

- → High vacuum connection DN 250 ISO-K
- Forevacuum connection DN 63 ISO-K
   Carbon steel housing material, stainless steel bottom
- ◆ Water cooling
- Water cooling
   Works only with the pre-vacuum pump
   The speed of action of the forevacuum pump is not less than 40 m3/h
   Type of electrical connection directly through the connector or a block of electric switches
- ◆ Supply voltage 220V
- ◆ Power 2.4kW
- ◆ Pump fluid filling, min / max, 1.0/1.4 l







## **Oil Diffusion Pumps**



## **Oil Diffusion Pumps**



## **VDP-400 Oil Diffusion Pump**

Type: Oil

Pressure range: high vacuum Speed of action: 7200 l/s

- ♦ High vacuum connection DN 400 ISO-K
- ◆ Forevacuum connection DN 63 ISO-K
- ◆ Carbon steel housing material, stainless steel bottom
- ♦ Water cooling
- Works only with the pre-vacuum pump
   The speed of action of the forevacuum pump is not less than 101 m3/h
- ◆ Type of electrical connection directly through the connector or a block of electric switches
- ◆ Supply voltage 220/380V ◆ Power 4.8kW
- ◆ Pump fluid filling, min / max, 1.7/3.4 l



## **VDP-500 Oil Diffusion Pump**

Type: Oil

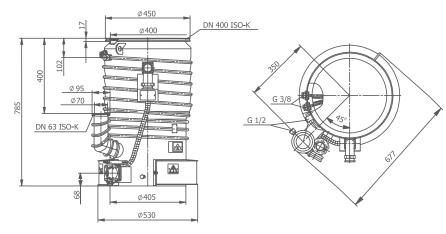
Pressure range: high vacuum Speed of action: 10800 I/s

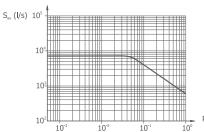
- ♦ High vacuum connection DN 500 ISO-K
- ◆ Forevacuum connection DN 100 ISO-K
- ◆ Carbon steel housing material, stainless steel bottom

- Water cooling

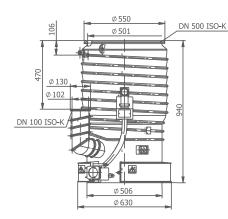
  Works only with the pre-vacuum pump

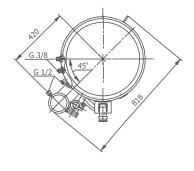
  The speed of action of the forevacuum pump is not less than 153 m3/h
- ◆ Type of electrical connection directly through the connector or a block of electric switches
- ◆ Supply voltage 220/380V
- ◆ Power 7.2kW
- → Pump fluid filling, min / max, 2.4/5.3 l

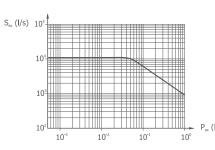




Graph of the dependence of the speed of action from the pressure at the pump inlet









## **Oil Diffusion Pumps**



## **Oil Diffusion Pumps**



## **VDP-630 Oil Diffusion Pump**

Type: Oil

Pressure range: high vacuum Speed of action: 18000 l/s

- ♦ High vacuum connection DN 630 ISO-F
- ◆ Forevacuum connection DN 100 ISO-K
- ◆ Carbon steel housing material, stainless steel bottom
- ◆ Water cooling
- ◆ Works only with the pre-vacuum pump
   ◆ The speed of action of the forevacuum pump is not less than 253 m3/h
- ◆ Type of electrical connection directly through the connector or a block of electric switches
- ◆ Supply voltage 220/380V
- ♦ Power 12 kW
- ◆ Pump fluid filling, min / max, 7.0/11.00 l

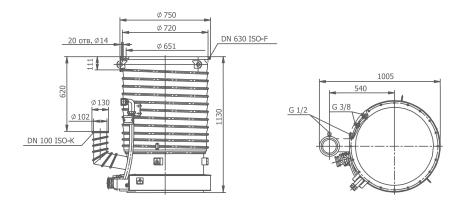


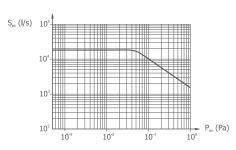
## **VDP-800 Oil Diffusion Pump**

Type: Oil

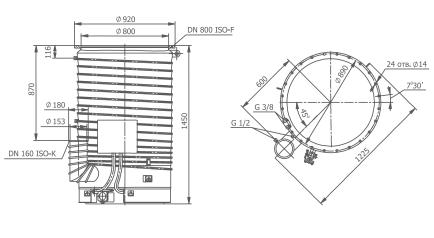
Pressure range: high vacuum Speed of action: 27000 l/s

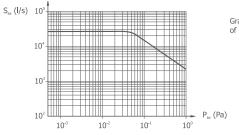
- ◆ High vacuum connection DN 800 ISO-F
- ◆ Forevacuum connection DN 160 ISO-K
- ◆ Carbon steel housing material, stainless steel bottom
- ◆ Water cooling
- ◆ Works only with the pre-vacuum pump
   ◆ The speed of action of the forevacuum pump is not less than 378 m3/h
- ◆ Type of electrical connection directly through the connector or a block of electric switches
- ◆ Supply voltage 220/380V
- ♦ Power 18 kW
- ◆ Pump fluid filling, min / max, 10.0/15.0 l





Graph of the dependence of the speed of action from the pressure at the pump inlet





Graph of the dependence of the speed of action from the pressure at the pump inlet



## **Oil Diffusion Pumps**



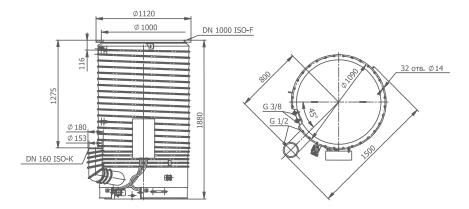
## **VDP-1000 Oil Diffusion Pump**

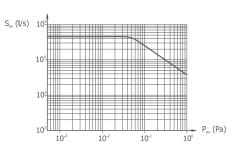
Type: Oil

Pressure range: high vacuum **Speed of action:** 45000 l/s

- ♦ High vacuum connection DN 1000 ISO-F
- ◆ Forevacuum connection DN 160 ISO-K
- ◆ Carbon steel housing material, stainless steel bottom

- Water cooling
  Works only with the pre-vacuum pump
  The speed of action of the forevacuum pump is not less than 590 m3/h
- ◆ Type of electrical connection directly through the connector or a block of electric switches
- ◆ Supply voltage 220/380V ◆ Power 24 kW
- ◆ Pump fluid filling, min / max, 15.0/25.00 l





Graph of the dependence of the speed of action from the pressure at the pump inlet



## **Oil Diffusion Pumps**

#### **TECHNICAL SPECIFICATIONS**

NAME OF THE PARAMETER	VDP-250	VDP-400	VDP-500	VDP-630	VDP-800	VDP-1000
Speed of action by air,l/s, not less, at pressure: - 1 Pa (7.5x10 <sup>-3</sup> mm Hg.) - 1x10 <sup>-1</sup> Po (7.5x10 <sup>-4</sup> mm Hg.) - 1x10 <sup>-2</sup> Pa (7.5x10 <sup>-5</sup> mm Hg.)	225 1500 2700	600 4000 7200	900 6000 10800	1500 10000 18000	2250 15000 27000	3500 23000 45000
Maximum exhaust pressure, Pa (mm Hg),not less	26,6 (0,2)					
Maximum residual pressure at ambient temperature from +10 °C to +35 °C, Pa (mm Hg),no more	3x10 <sup>-4</sup> (2,25x10 <sup>-6</sup> )					
Supply voltage, V	220 <u>+</u> 10 %		220/380	) <u>+</u> 10 %		
Power consumption, kW	2,4	4,8	7,2	12	18	24
Amount of working fluid, I: - max - min	2,4 2,0	5,6 4,5	9,4 8,0	12 9,5	14,6 12,4	24 19
Cooling water consumption, I/h: - on the body - on the oil reflector	160 20	250 40	500 50	600 80	900 120	1500 150
Weight, kg, no more *	28	58	92	180	300	410
Overall dimensions, mm, no more ** - height - length - width	560 470 420	785 677 530	940 818 630	1130 1005 750	1450 1225 920	1880 1500 1120

#### NOTE:

<sup>\*</sup> Without plugs, parts of their fastening and working fluid.

<sup>\*\*</sup> Without plugs and parts of their fastening.





## **VDP Jet Series Oil Diffusion Pumps with Ejector stage**



Diffusion vacuum pumps of the VDP Jet series are high-vacuum pumps with a speed of action from 2800 l/s to 28000 l/s and ultimate pressure up to  $5x10^{-7}$  Torr. Thanks to the additional ejector stage, the VDP Jet pump starts working from a pressure of 10° Torr and is capable of pumping large gas flows up to 371\*torr/s in the case of using silicone vacuum oil.

Scope of application	JOP Jes	370 408 7e*	,500 JOP 76	JOR 7et.	No seriou
Food industry					
Sugar production					
Woodworking					
Pulp and paper production					
Petrochemical industry					
Chemical industry					
Manufacture of rubber products					
Crystal production					
Metallurgy					
Mechanical engineering					
Production of electrical equipment					
Electricity generation					
Construction					
Research activities					
Medicine					
Agricultural industry					
Mining					
Waste treatment					



## **Oil Diffusion Pumps with Ejector stage**

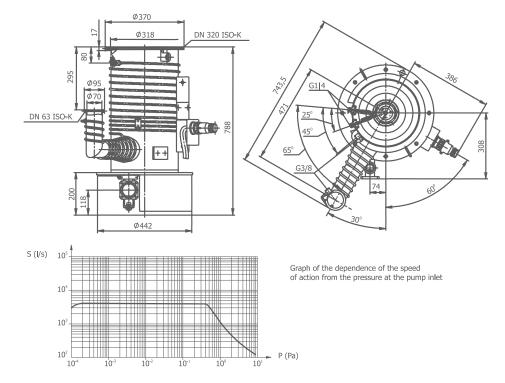


## VDP Jet-320 **Oil Diffusion Pump with Ejector stage**

Type: Oil

Pressure range: high vacuum Speed of action: 3000 l/s

- ♦ High vacuum connection DN 320 ISO-K ◆ Forevacuum connection DN 63 ISO-K
- ◆ The case is made of carbon steel
- ♦ Water cooling
- ♦ Works only with the pre-vacuum pump
   ♦ The speed of action of the forevacuum pump is not less than 324 m3/h
- Type of electrical connection directly through the connector or a block of electric switches
- ◆ Supply voltage 380V
- ♦ Power 2,4 kW
- ◆ Pump fluid filling, min / max, 1.0/1.4 l





## **Oil Diffusion Pumps with Ejector stage**



## **Oil Diffusion Pumps with Ejector stage**



#### VDP Jet-500 Oil Diffusion Pump with Ejector stage

Type: Oil

Pressure range: high vacuum Speed of action: 6000 l/s

- ♦ High vacuum connection DN 500 ISO-K
- ◆ Forevacuum connection DN 100 ISO-K
- ◆ The body is made of carbon steel
- ♦ Water cooling
- ◆ Works only with the pre-vacuum pump
   ◆ The speed of action of the forevacuum pump is not less than 396 m3/h
- ◆ Type of electrical connection directly through the connector or a block of electric switches
- ◆ Supply voltage 380V
- ◆ Power 7.2kW
- ◆ Pump fluid filling, min / max, 1.7/3.4 l

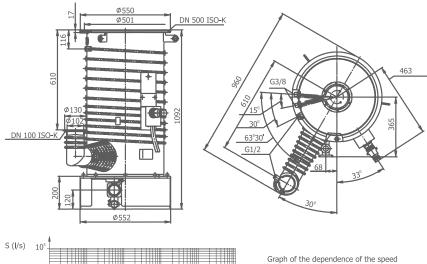


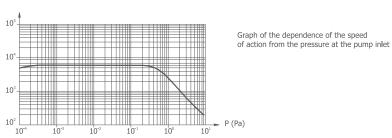
## VDP Jet-630 **Oil Diffusion Pump with Ejector stage**

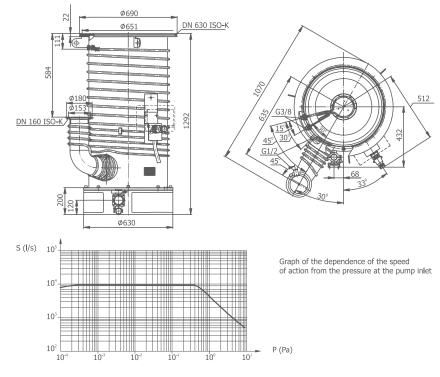
Type: Oil

Pressure range: high vacuum Speed of action: 9200 l/s

- ♦ High vacuum connection DN 630 ISO-K
- ◆ Forevacuum connection DN 160 ISO-K
- ◆ The body is made of carbon steel
- ♦ Water cooling
- Works only with the pre-vacuum pump
  The speed of action of the forevacuum pump is not less than 540 m3/h
- ◆ Type of electrical connection directly through the connector or a block of electric switches
- ◆ Supply voltage 380V
- ◆ Power 10.8kW
- ◆ Pump fluid filling, min / max, 5.0/7.0 l









## **Oil Diffusion Pumps with Ejector stage**



## **Oil Diffusion Pumps with Ejector stage**



#### VDP Jet-800 Oil Diffusion Pump with Ejector stage

Type: Oil

Pressure range: high vacuum Speed of action: 20000 l/s

- ♦ High vacuum connection DN 800 ISO-F
- ◆ Forevacuum connection DN 200 ISO-K
- ◆ The body is made of carbon steel
- ♦ Water cooling
- ◆ Works only with the pre-vacuum pump
   ◆ The speed of action of the forevacuum pump is not less than 1332 m3/h
- ◆ Type of electrical connection directly through the connector or a block of electric switches
- ◆ Supply voltage 380V
- ♦ Power 18 kW
- ◆ Pump fluid filling, min / max, 10.0/15.0 l

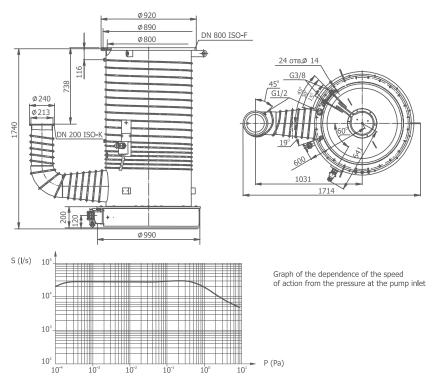


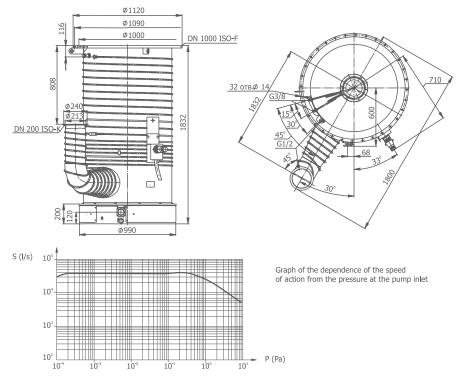
## **VDP Jet-1000 Oil Diffusion Pump with Ejector stage**

Type: Oil

Pressure range: high vacuum Speed of action: 28000 l/s

- → High vacuum connection DN 1000 ISO-F
- ◆ Forevacuum connection DN 200 ISO-K
- ◆ The body is made of carbon steel
- ♦ Water cooling
- ♦ Works only with the pre-vacuum pump
- ◆ The speed of action of the forevacuum pump is not less than 1332 m3/h
- ◆ Type of electrical connection directly through the connector or a block of electric switches
- ◆ Supply voltage 380V
- ◆ Power 21.6kW
- → Pump fluid filling, min / max, 12.0/18.0 I







## **Oil Diffusion Pumps with Ejector stage**

## **Oil Diffusion Pumps with Ejector stage**

## **TECHNICAL SPECIFICATIONS**

NAME OF THE PARAMETER	VDP Jet- 320	VDP Jet- 500	VDP Jet- 630	VDP Jet- 800	VDP Jet- 1000
Speed of action by air at a pressure of m³/h (I/s),not less than:					
1.0 Mpa (7.5 x 10 <sup>-3</sup> mm Hg),	2880 (800)	5400 (1500)	6480 (1800)	14040 (3900)	12600 (3500)
2.6x10 <sup>-1</sup> Pa (2x10 <sup>-3</sup> mm Hg),	10800 (3000)	18000 (5000)	-	-	-
2.3x10 <sup>-1</sup> Pa (1.7x10 <sup>-3</sup> mm Hg)	-	-	_	53280 (14800)	-
1.7x10 <sup>-1</sup> Pa (1.3x10 <sup>-3</sup> mm Hg)	-	-	33120 (9200)	-	-
11.2x10 <sup>-1</sup> Pa (9.0x10 <sup>-4</sup> mmHg)	-	-	_	-	99000 (27500)
11.0x10 <sup>-1</sup> Pa (7.5x10 <sup>-1</sup> mm Hg)	9000 (2500)	21600 6000)	29880 (8300)	72000 (20000)	100800 (28000)
11.0x10 <sup>-2</sup> Pa (7.5x10 <sup>-5</sup> mm Hg)	8100 (2250)	18360 (5100)	25560 (7100)	68400 (19000)	93600 (26000)
Maximum exhaust pressure, Pa (mm Hg), not less	53 (0,40)	47 (0,35)	60 (0,45)	40 (0	),30)
Maximum residual pressure, Pa (mm Hg), no more			2,5x10 <sup>-4</sup> (1,9x	10 <sup>-6</sup> )	
The rate of tightness, Pa · m³/c, (I *mm Hg/c), no more	1,0x10 <sup>-10</sup> (7,5x10 <sup>-7</sup> )				
Supply voltage, V	400 ± 40 *				
Weight, kg, no more**	95	152	230	570	610
Overall dimensions, mm, no more*** - height - length - width	788 744 422	1092 960 552	1292 1070 630	1740 1714 990	1832 1800 990

#### NOTE:

<sup>\*</sup> At the request of the customer, a supply voltage of 380  $\pm$  38 V can be provided.

<sup>\*\*</sup> Without plugs, their fastening parts and working fluid.

<sup>\*\*\*</sup> Without plugs and their fastening parts.





## **VBP Series Oil Booster Pumps**



Oil Booster vacuum pumps VBP are medium vacuum pumps with a speed of action from 880 l/s to 18600 l/s and a maximum pumping speed at a pressure of 5x10<sup>-1</sup>-10<sup>-3</sup> Torr

Booster vacuum pumps VBP have a modular design, which makes it possible to produce a compact high-performance pump. Thanks to the increased boiler and the increased power of the heaters, it is possible to obtain an increased vapor density, which allows pumping large gas flows at pressures up to 10<sup>-1</sup> Torr.

## Scope of application

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		•	•	•
Food industry				
Sugar production				
Woodworking				
Pulp and paper production				
Petrochemical industry				
Chemical industry				
Manufacture of rubber products				
Crystal production				
Metallurgy				
Mechanical engineering				
Production of electrical equipment				
Electricity generation				
Construction				
Research activities				
Medicine				
Agricultural industry				
Mining				
Waste treatment				



## **Oil Booster Pumps**

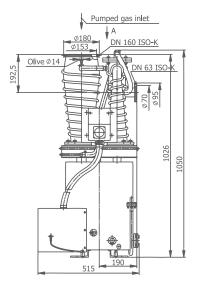


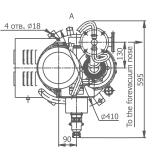
#### **VBP-160/1000 Oil Booster Pump**

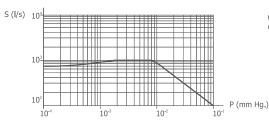
Type: Oil

Pressure range: high vacuum **Speed of action:** 880 l/s

- ♦ High vacuum connection DN 160 ISO-K
- ◆ Forevacuum connection DN 63 ISO-K
- ◆ Carbon steel housing material
- ◆ Water cooling
- ♦ Works only with the pre-vacuum pump
- ◆ The speed of action of the forevacuum pump is not less than 54 m3/h
- ◆ Type of electrical connection directly through the connector
- ◆ Supply voltage 380V
- ◆ Power 2 kW
- ◆ Pump fluid filling, min / max, 1.0/1.4 l









## **Oil Booster Pumps**



## **Oil Booster Pumps**



#### VBP-250/3000 **Oil Booster Pump**

Type: Oil

Pressure range: high vacuum Speed of action: 2800 l/s

- ♦ High vacuum connection DN 250 ISO-K
- ◆ Forevacuum connection DN 100 ISO-K
- ◆ Carbon steel housing material
- ♦ Water cooling
- ◆ Works only with the pre-vacuum pump
   ◆ The speed of action of the forevacuum pump is not less than 90 m3/h
- ◆ Type of electrical connection directly through the connector
- ◆ Supply voltage 380V
- ◆ Power 6 kW
- ◆ Pump fluid filling, min / max, 1.0/1.4 I

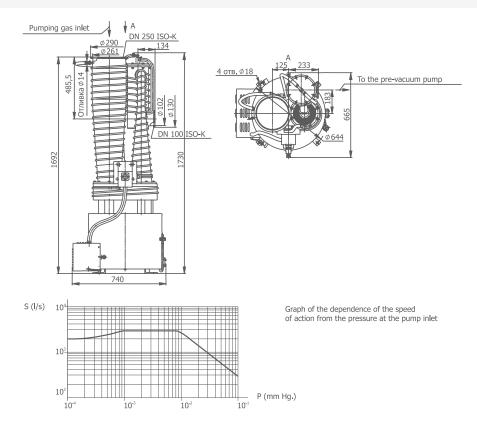


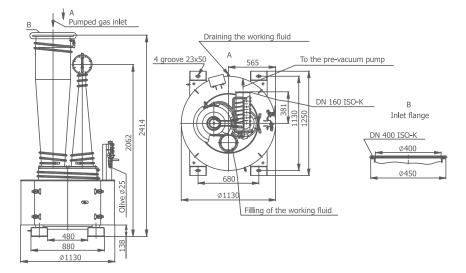
## VBP-400/6000 **Oil Booster Pump**

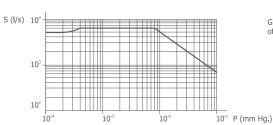
Type: Oil

Pressure range: high vacuum **Speed of action:** 6200 l/s

- ♦ High vacuum connection DN 400 ISO-K
- ◆ Forevacuum connection DN 160 ISO-K
- ◆ Carbon steel housing material
- ◆ Water cooling
- ★ Works only with the pre-vacuum pump
   ★ The speed of action of the forevacuum pump is not less than 180 m3/h
- Type of electrical connection directly through the connector or a block of electric switches
- ◆ Supply voltage 380V
- ♦ Power 12 kW
- ◆ Pump fluid filling, min / max, 1.0/1.4 l









## **Oil Booster Pumps**



## **Oil Booster Pumps**

Inlet flange

20 отв. Ø 14

DN 630 ISO-F



#### VBP-500/12000 **Oil Booster Pump**

Type: Oil

Pressure range: high vacuum Speed of action: 10000 l/s

- ♦ High vacuum connection DN 500 ISO-K
- ◆ Forevacuum connection DN 160 ISO-K
- ◆ Carbon steel housing material
- ♦ Water cooling
- ◆ Works only with the pre-vacuum pump
- ◆ The speed of action of the forevacuum pump is not less than 288 m3/h
- ◆ Type of electrical connection directly through the connector or a block of electric switches
- ◆ Supply voltage 380V
- ♦ Power 24 kW
- ◆ Pump fluid filling, min / max, 1.0/1.4 I



Pumped gas inlet

DN 160 ISO-

Filling of the working fluid

#### **VBP-630/12000 Oil Booster Pump**

Type: Oil

Pressure range: high vacuum Speed of action: 12000 l/s

- ◆ High vacuum connection DN 630 ISO-F
- ◆ Forevacuum connection DN 160 ISO-K
- ◆ Carbon steel housing material
- ◆ Water cooling
- ♦ Works only with the pre-vacuum pump
- ◆ The speed of action of the forevacuum pump is not less than 360 m3/h
- ◆ Type of electrical connection directly through the connector or a block of electric switches

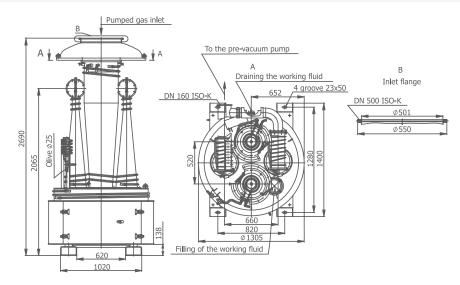
4 groove 23x50

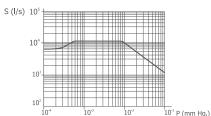
- ◆ Supply voltage 380V
- ♦ Power 24 kW

To the pre-vacuum pump

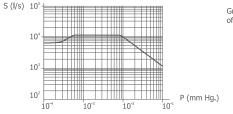
◆ Pump fluid filling, min / max, 1.0/1.4 l

Draining the working fluid





Graph of the dependence of the speed of action from the pressure at the pump inlet





## **Oil Booster Pumps**

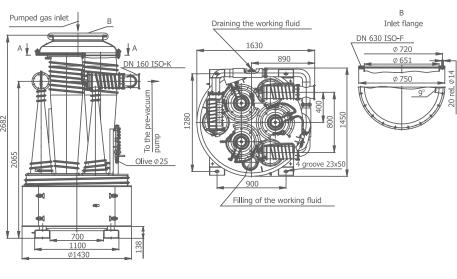


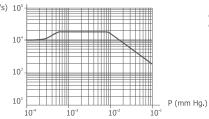
#### VBP-630/18000 **Oil Booster Pump**

Type: Oil

Pressure range: high vacuum Speed of action: 18600 l/s

- ♦ High vacuum connection DN 630 ISO-F
- ◆ Forevacuum connection DN 160 ISO-K
- ◆ Carbon steel housing material
- ◆ Water cooling
- ♦ Works only with the pre-vacuum pump
- ◆ The speed of action of the forevacuum pump is not less than 540 m3/h
- ◆ Type of electrical connection directly through the connector or a block of electric switches
- ◆ Supply voltage 380V
- ◆ Power 36 kW
- ◆ Pump fluid filling, min / max, 1.0/1.4 l





Graph of the dependence of the speed of action from the pressure at the pump inlet



## **Oil Booster Pumps**

#### **TECHNICAL SPECIFICATIONS**

NAME OF THE PARAMETER	VBP- 160/ 1000	VBP- 250/ 3000	VBP- 400/ 6000	VBP- 500/ 12000	VBP- 630/ 12000	VBP- 630/ 18000
Speed of action in the range of operating pressures from 1.33 to1.33 x $10^{1}$ Pa (from 1 x $10^{2}$ to $1x10^{3}$ mm Hg), I/s*	880 -120	2800-520	6200-570	10000-1000	12000-1500	18600 <sup>+2800</sup> -2100
The highest exhaust pressure, atan inlet pressure of 1.33 Pa (1x10 <sup>-2</sup> mm Hg),Pa (mm Hg), not less*	93,3 (0,7)	200 (1,5)				
Power consumption at rated voltage 380 V for a three-phase network current, W	2000 +100	6000 +300	12000-1200	2400	24000 <sup>+1200</sup> <sub>-2400</sub>	
Recommended speed of action of the forevacuum pump, l/s, not less	15	25	50	80	100	150
Cooling water consumption temperature from +10°C to +20°C I/h, not less	145	360	600	1200		1800
Volume of the filled working fluid, I <sup>3)</sup>	5	17	47	65		90
Weight, kg, no more **	60	160	550	1100		1400
Overall dimensions, mm, no more *** - height - width - length	1050 515 595	1730 740 665	2414 1130 1250	2690 1305 1400	2682 1305 1400	2682 1450 1630

#### NOTE:

<sup>\*</sup> When the heater power is from nominal to maximum. At the power of the heaters from nominal to minimum, it is possible to reduce the value of the parameters by 30%.

<sup>\*\*</sup> Without plugs, their fastening parts and working fluid.

<sup>\*\*\*</sup> Without plugs and their fastening parts.





# JSC "VACUUMMASH» 80 Vears

## **Vacuum Baffles**

## **Vacuum Baffles**



Oil vapor vacuum pumps are additionally used with vacuum baffles that reduce the reverse flow of working fluid vapors into the pumped volume

#### Extended Cold Gap Ballies 4. | Extended Gold Go Bantie Integrated Battle 1000 Integrated Balle 630 Integrated Baffie 800 Integrated Battle 500 Threepaked Baffle 400 Water Baffle Joo Water Baffle 800 **APPLICATION** Water Baffle 500 Water Baffle 630 **OF VACUUM BAFFLES** VBP-160/1000 VBP-250/3000 VBP-400/6000 VBP-500/12000 VBP-630/12000 VBP-630/18000 VDP-250 VDP-400 VDP-500 VDP-630 VDP-800 VDP-1000 VDP Jet-320 VDP Jet-500 VDP Jet-630 VDP Jet-1000



#### **Water Baffles**

Water flow baffles are designed to reduce the flow of working fluid vapors into the pumped volume by condensing them on the cooled elements of the freezing



#### **Multi Baffles**

Multi baffles are designed to reduce the flow of working fluid vapors into the pumped volume by condensing them on the cooled elements of the freezing device. It can be cooled with water, freon and liquid nitrogen. In the case of using a coolant with t<0 °C, it provides an additional pumping



## **Integrated Baffles**

Integrated baffles performs the function of an oil reflector, is installed instead of a standard oil reflector in pumps, has an additional number of cooled screens to capture oil return flow vapors (more than the Extended Cold Cap Baffles), covers the entire area of the input high vacuum flange



## **Extended Cold Cap Baffles**

Extended Cold Cap Baffles performs the function of an oil reflector, is installed instead of a standard oil reflector in VDP pumps, has an additional number of cooled screens for trapping oil reverse flow vapors (less than Integrated baffles).



## Vacuum equipment from Russia

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## Vacuum equipment from Russia





## VACUUM EQUIPMENT FROM RUSSIA

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