



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^{-7} Torr

Scope of application

	VDP-250	VDP-400	VDP-500	VDP-630	VDP-800	VDP-1000
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						

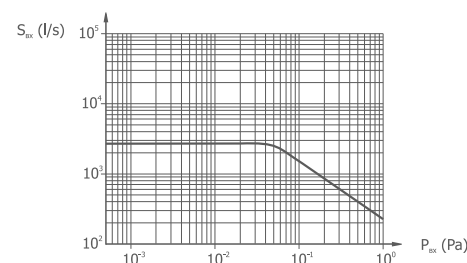
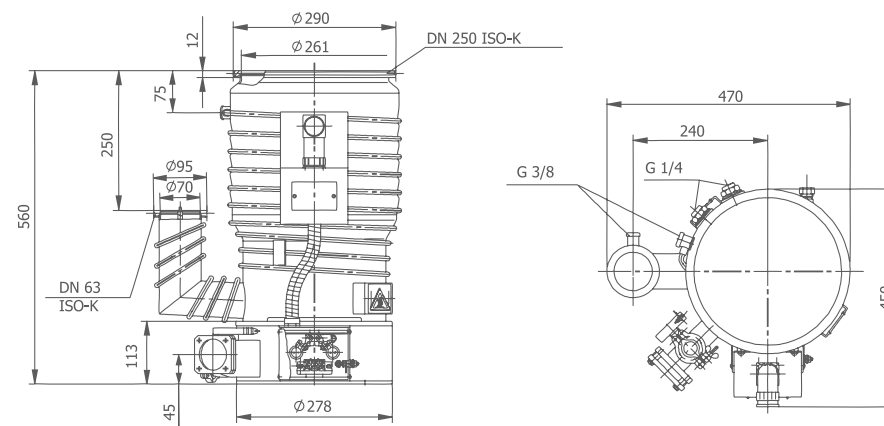
Oil Diffusion Pumps



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
- ◆ 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



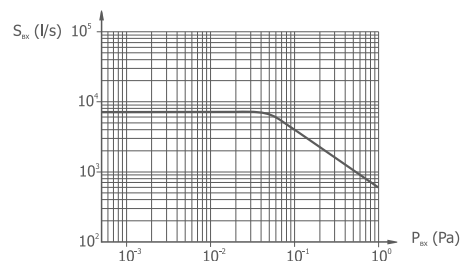
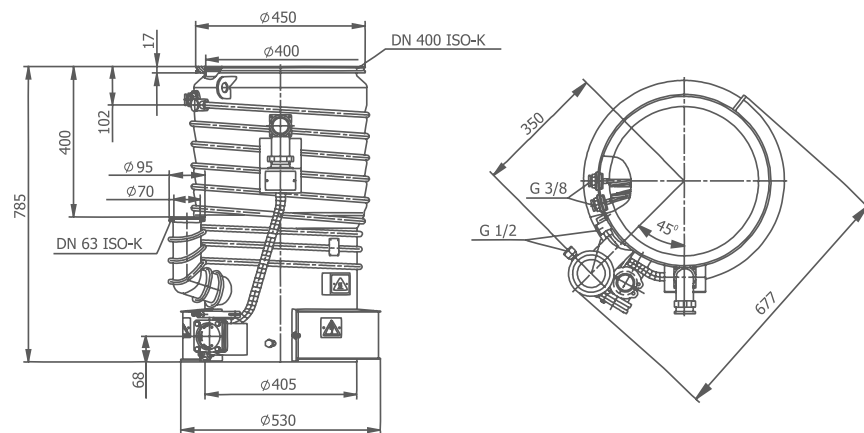
Graph of the dependence of the speed of action from the pressure at the pump inlet



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
- ◆ 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



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

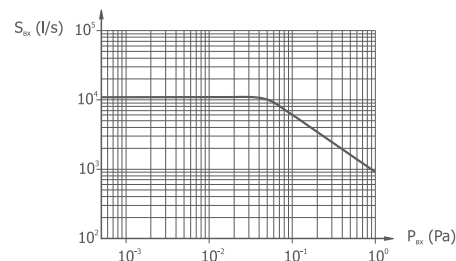
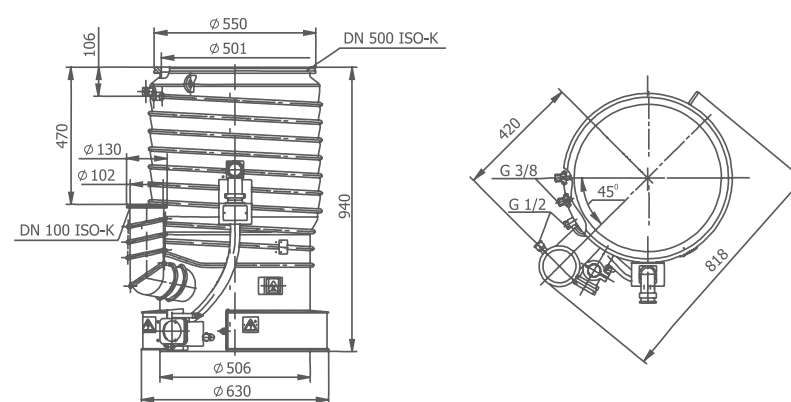
Oil Diffusion Pumps



VDP-500 Oil Diffusion Pump

Type: Oil
Pressure range: high vacuum
Speed of action: 10800 l/s

- ◆ High vacuum connection DN 500 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 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



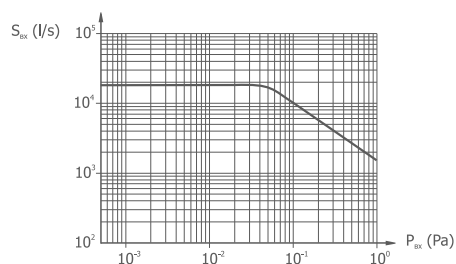
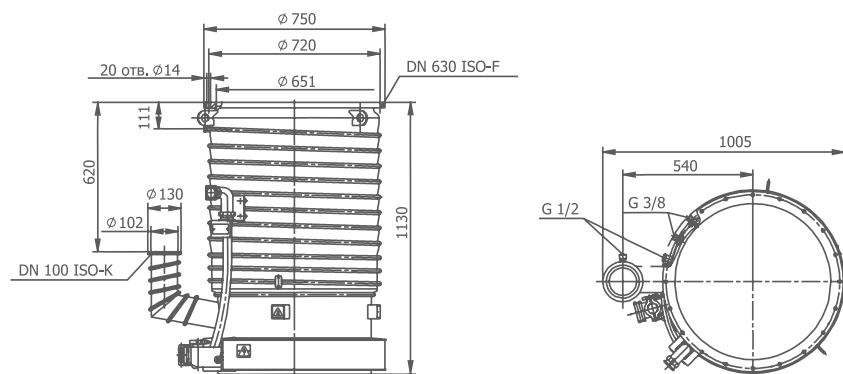
Graph of the dependence of the speed of action from the pressure at the pump inlet



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
- ◆ 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



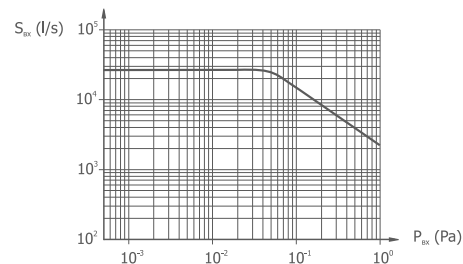
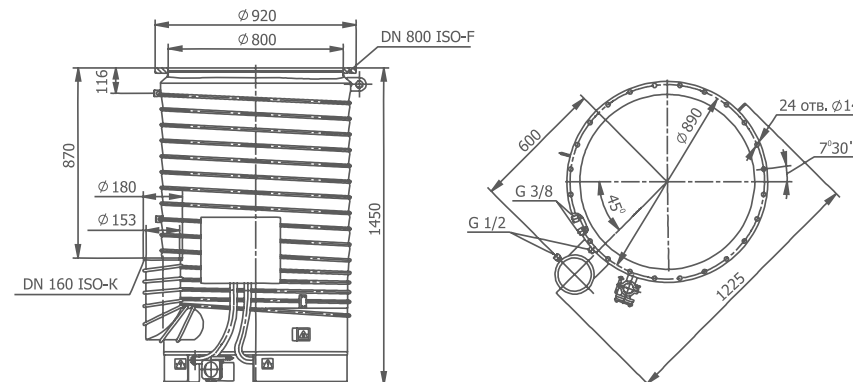
Graph of the dependence of the speed of action from the pressure at the pump inlet



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
- ◆ 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



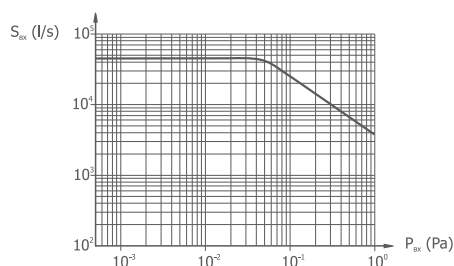
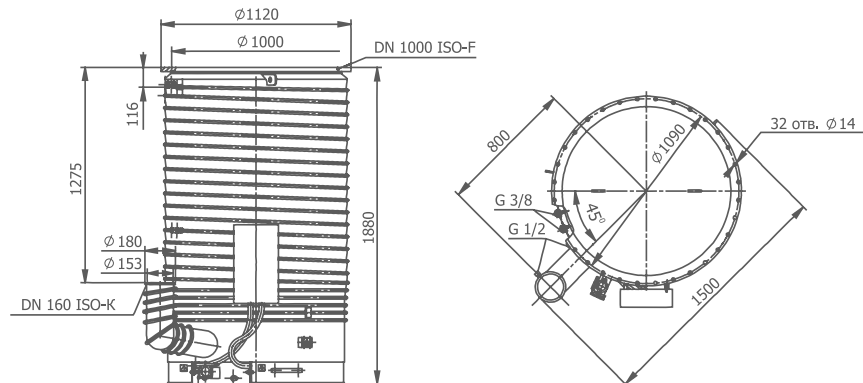
Graph of the dependence of the speed of action from the pressure at the pump inlet



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
- ◆ 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

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 ⁻³ mm Hg.)	225	600	900	1500	2250	3500
- 1x10 ⁻¹ Pa (7.5x10 ⁻⁴ mm Hg.)	1500	4000	6000	10000	15000	23000
- 1x10 ⁻² Pa (7.5x10 ⁻⁵ mm Hg.)	2700	7200	10800	18000	27000	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 ⁻⁴ (2,25x10 ⁻⁶)					
Supply voltage, V	230	230/400				
Power consumption, kW	2,4	4,8	7,2	12	18	24
Amount of working fluid, l:						
- max	2,4	5,6	9,4	12	14,6	24
- min	2,0	4,5	8,0	9,5	12,4	19
Cooling water consumption, l/h:						
- on the body	160	250	500	600	900	1500
- on the oil reflector	20	40	50	80	120	150
Weight, kg, no more *	28	58	92	180	300	410
Overall dimensions, mm, no more **						
- height	560	785	940	1130	1450	1880
- length	470	677	818	1005	1225	1500
- width	420	530	630	750	920	1120

NOTE:

* Without plugs, parts of their fastening and working fluid.

** Without plugs and parts of their fastening.