

Depending on material of inner flowing part designed for pumping (creation of vacuum) of air, inert or aggressive gases, insoluble in water, to produce or maintain vacuum. Operating medium is water.

Application: chemical, ore mining and smelting industry, food industry, pulp and paper industry, agriculture, construction and medicine.

Main advantage of pumps - easy operation and maintenance. Pumps consist of small quantity of parts. They have no special system for lubrication and oil pumps. All clearances between rotor and static casing are sealed with operating medium. Simplicity of construction, no friction pairs in inner flowing part provide reliability and service life of pump operation.

Technical Data

Designation	Capacity as per initial conditions, m ³ /min.	Pressure		Temperature, °C		Water nominal consumption, l/min	Consumed power, kW	Rotational speed (synchr.) rpm	Weight of pump without drive, kg
		suction, MPa	discharge, MPa	supplied water	gas, nominal				
VVN1-12/0.4	12±1.2	0.04	0.1013	15±3	20±5	27	1000	19	390
VVN1-12TM	12±1.2	0.04	0.1013	15±3	20±5	27	1000	19	300
VVN-25/0.4	25±2.5	0.04	0.1013	15±3	20±5	48	750	35	720
VVN-50/0.2N	45±4.5	0.02	0.1013	15±3	20±5	78	600	63	930
VVN2-50N	45±4.5	0.02	0.1013	15±3	20±5	78	600	63	1100
VVN2-50Kh	45±4.5	0.02	0.1013	15±3	20±5	78	600	63	1100
VVN1-50TM	50±0.5	0.04	0.1013	15±3	20±5	78	600	70	920
VVN2-50M	52±5	0.02	0.1013	15±3	20±5	73	600	71	1350
VVN2-150M*	150 ⁺¹⁵ _{-7.5}	0.02	0.1013	15±3	20±5	370	300	180	5850
VVN2-300	340 ⁺³⁴ ₋₁₇	0.02	0.1013	15±3	20±5	800	250	410	12500
DVVN-150B	150	0.04	0.1013	15±3	20±5	705	186	187.5	8200

* Weight of pump VVN2-150M with gear is 11090 kg.

The example of pump designation

"Pump VVN1-12TM U3 20-057447991-047-99",

where VVN – liquid-packed ring-type vacuum pump;

1 and 2 – nominal suction pressure: 1 – 0.04 MPa or 2 – 0.02 MPa;

12 – standard capacity, m³/min;

T- inner flowing part material:

T - titanium alloy BT1-0;

N - stainless steel;

- 06XH28MДТ for VVN2-50N;

- 12X18H10T for VVN-50/0.2N;

Kh - alloy XH65MB;

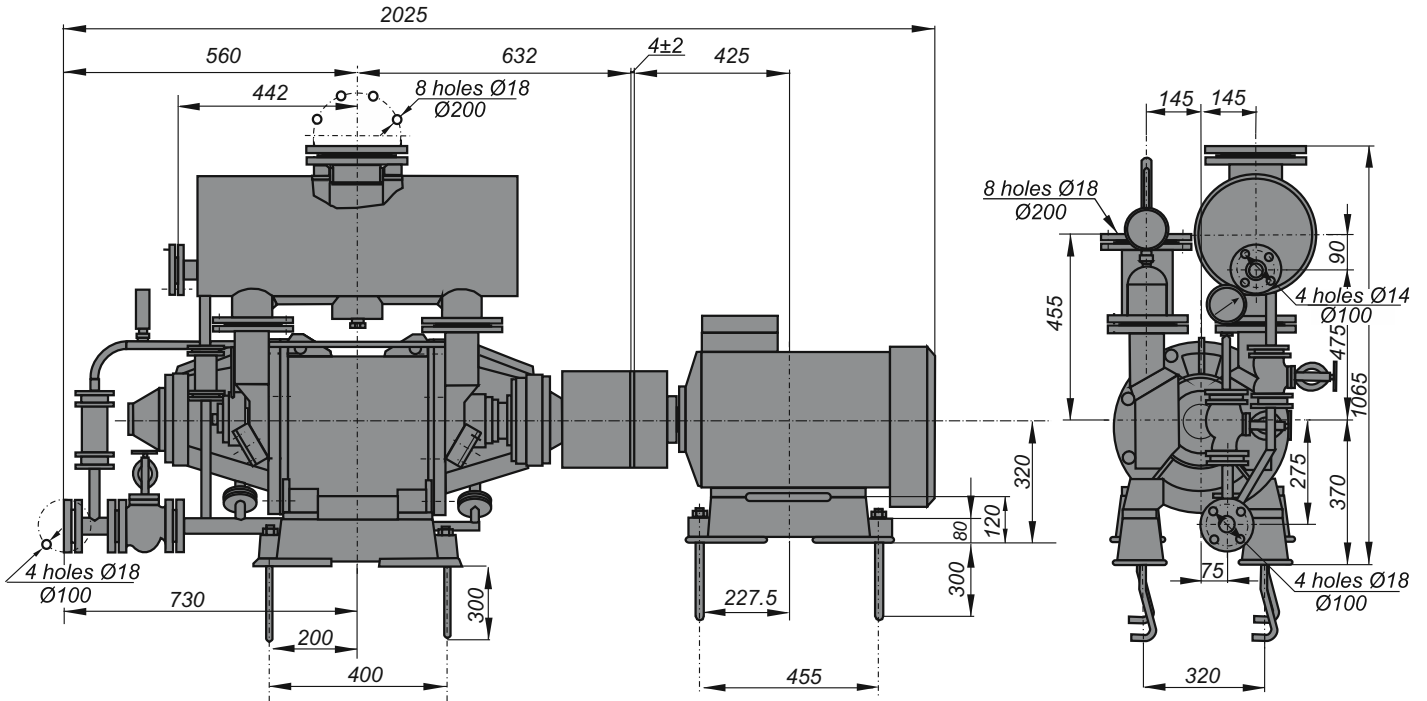
Without letter - carbon steel or gray cast iron;

M - modernized;

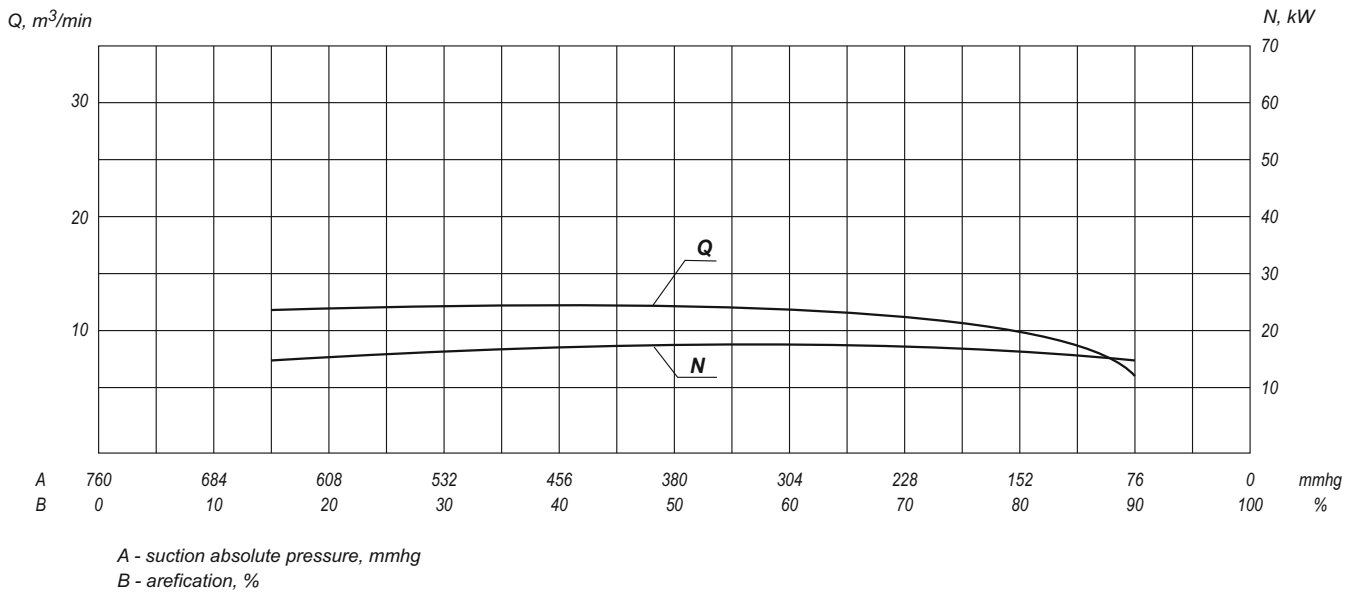
TU - Specifications according to which the pumps are manufactured.

The Company improves the pumping equipment and equips pumping units with the motors of different manufactures. Thereby when ordering, please specify overall and mounting dimensions and required parameters according to the recommended form of Data Sheet.

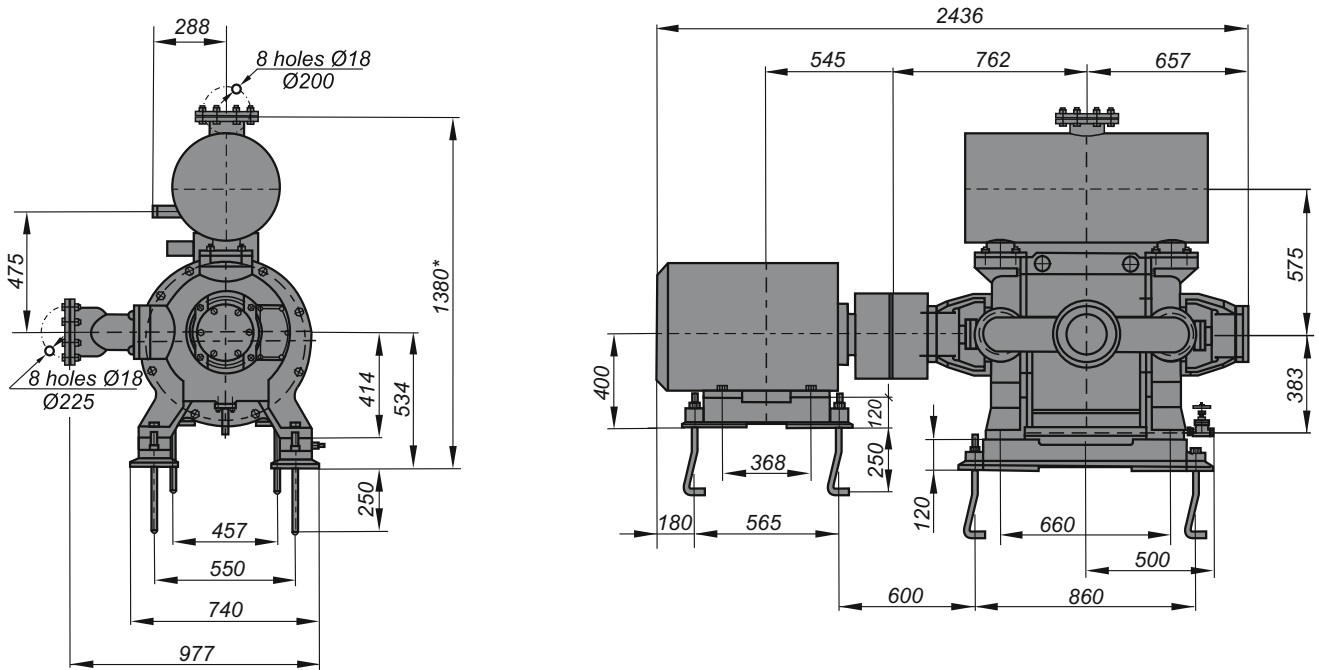
Dimensional drawing of VVN1-12TM pump



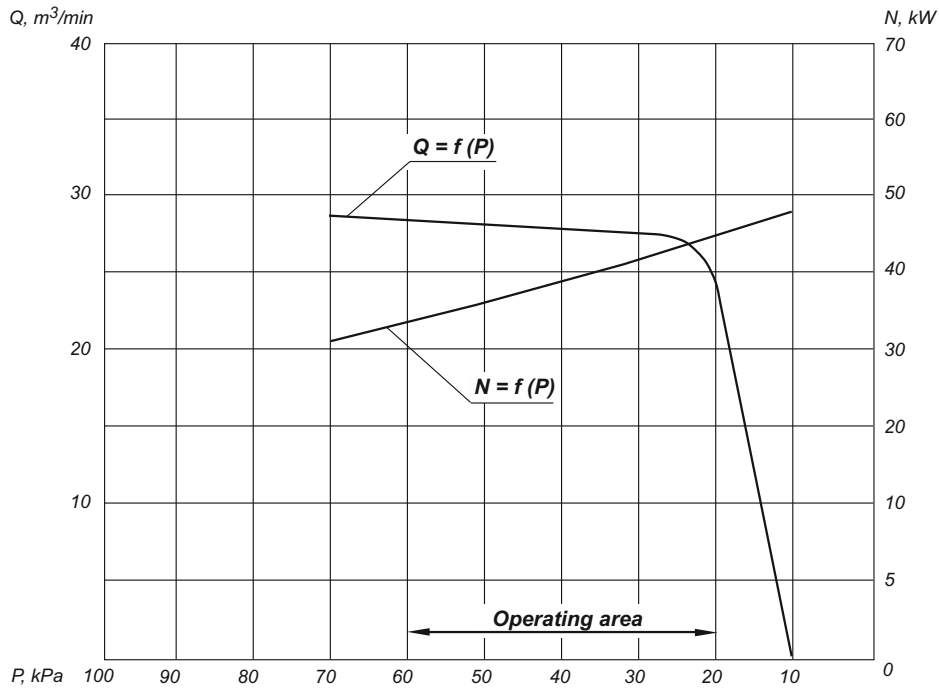
Performances and curves of VVN1-12TM pump



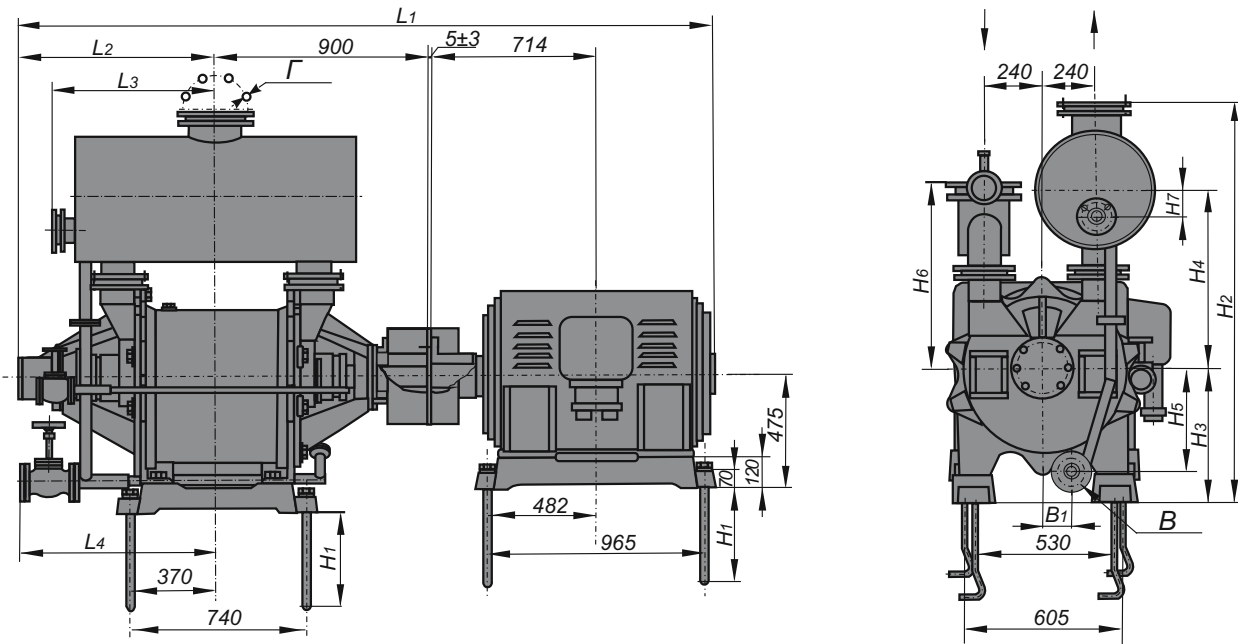
Dimensional drawing of VVN-25/0.4 pump



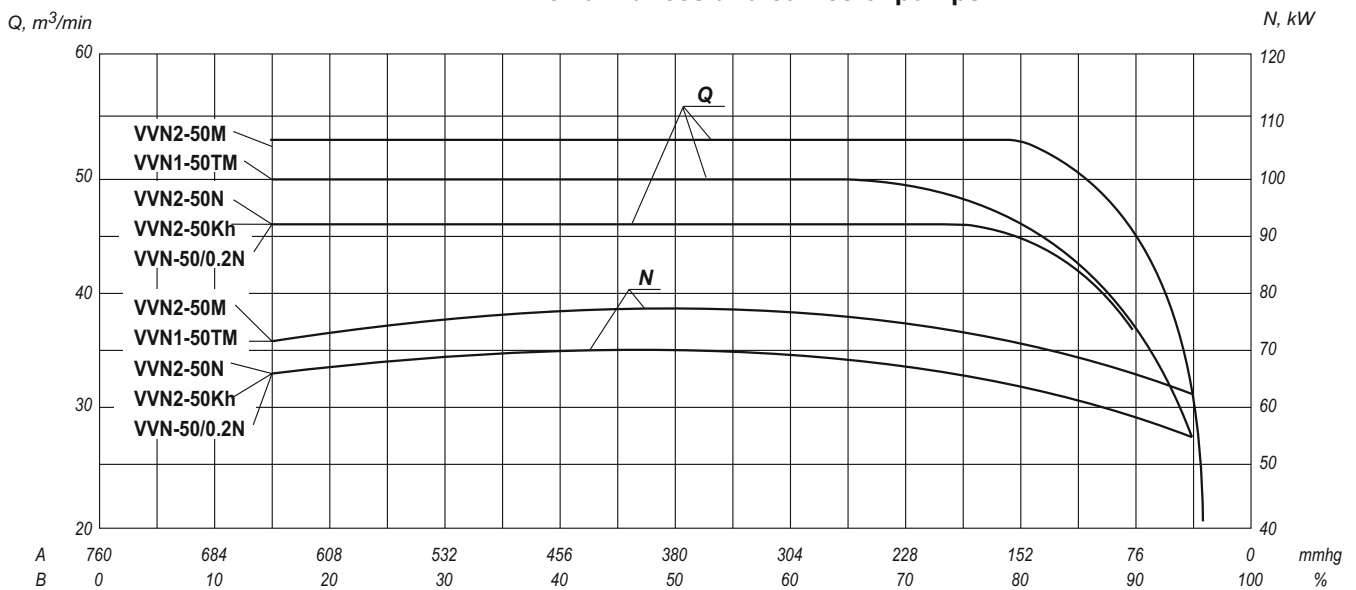
Performances and curves of VVN-25/0.4 pump



$N = 12,5 \text{ c}^{-1}$ (750 rpm); $f = 50 \text{ Hz}$

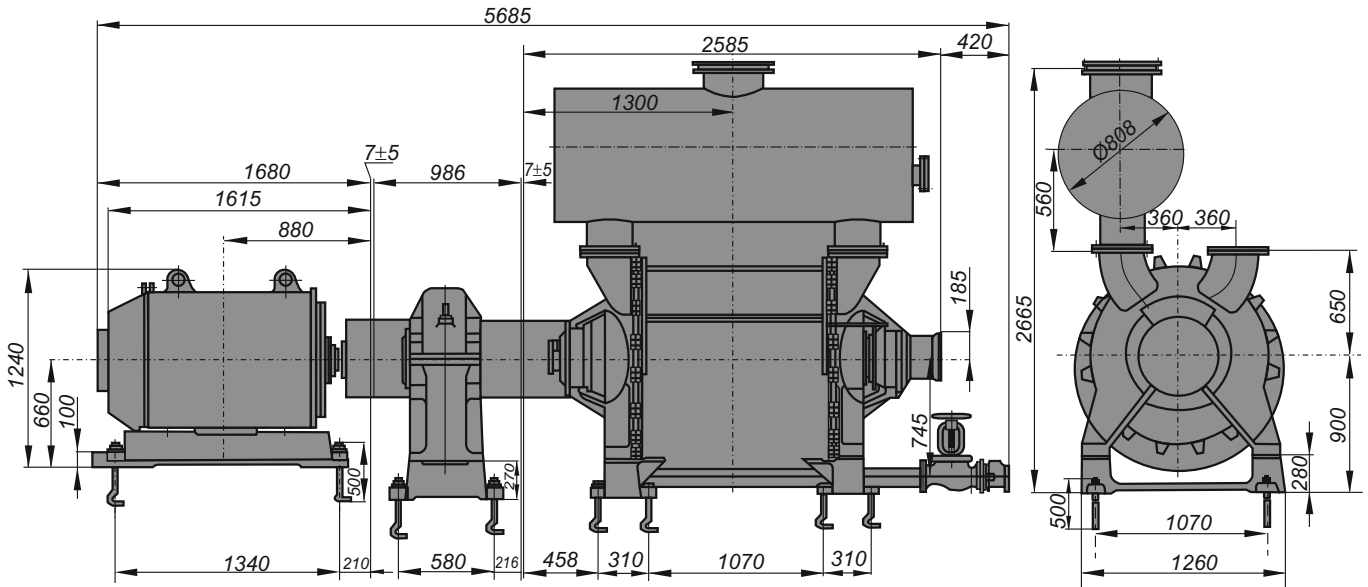
Dimensional drawing of pumps

Pumps overall and connecting dimensions, weight

Designation	Dimensions, mm												B, mm		G, mm		Weight, kg
	L1	L2	L3	L4	B1	H1	H2	H3	H4	H5	H6	H7	Ø	n holes Ø	Ø	n holes Ø	
VVN1-50TM	2910	800	680	800	120	400	1675	595	682	485	685	150	110	4 отв. Ø18	280	8 отв. Ø18	2348
VVN-50/0,2N	2920	800	680	810	120	400	1675	595	682	583	685	140	100	4 отв. Ø18	280	8 отв. Ø18	2650
VVN2-50M	2826	810	725	775	70	335	1665	595	717	455	717	170	80	2 отв. Ø18	280	8 отв. Ø18	2760
VVN2-50N	3015	805	675	800	55	400	1610	595	680	470	685	140	110	4 отв. Ø18	280	8 отв. Ø18	2900
VVN2-50Kh	2920	805	695	800	116	400	1585	570	680	485	685	140	100	4 отв. Ø18	280	8 отв. Ø18	2535

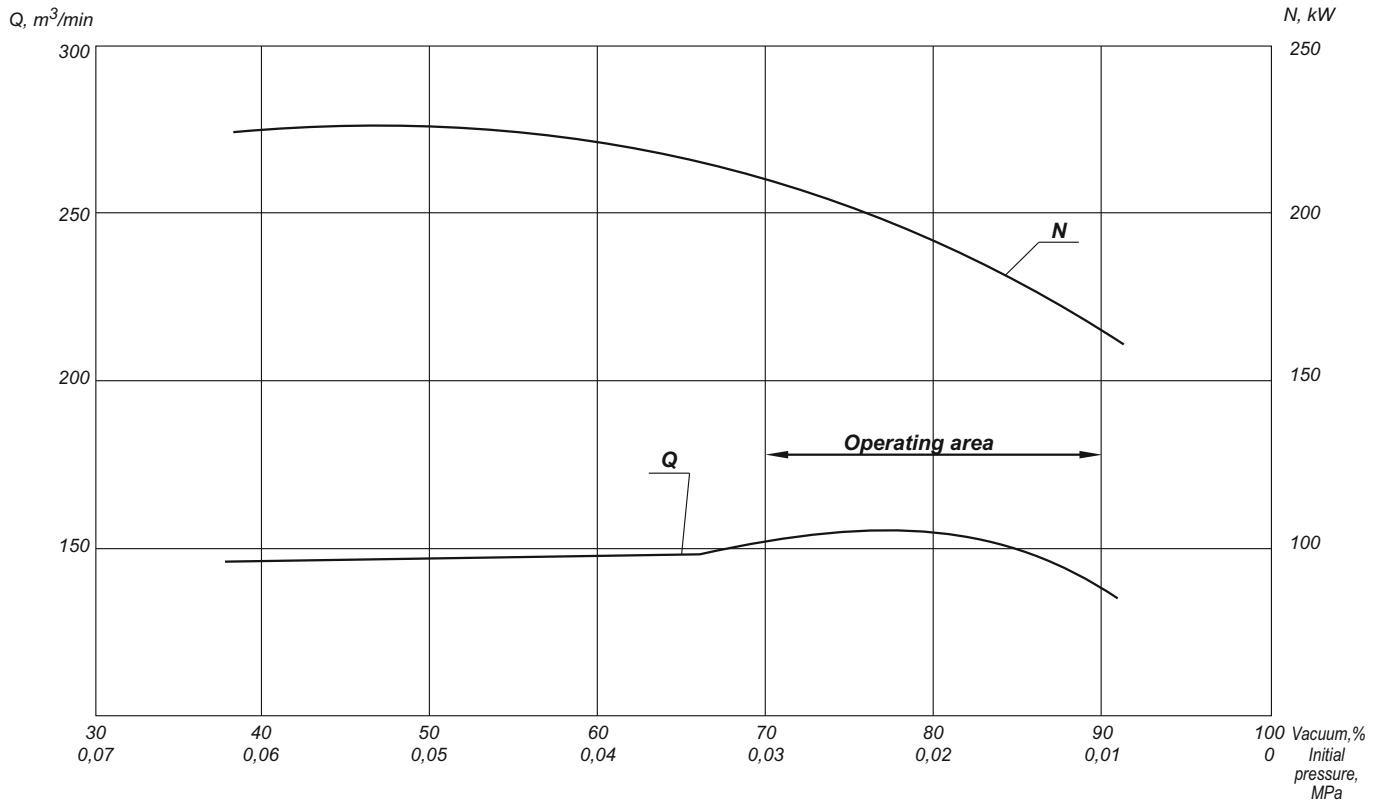
Performances and curves of pumps


A - suction absolute pressure, mmHg
 B - aeration, %

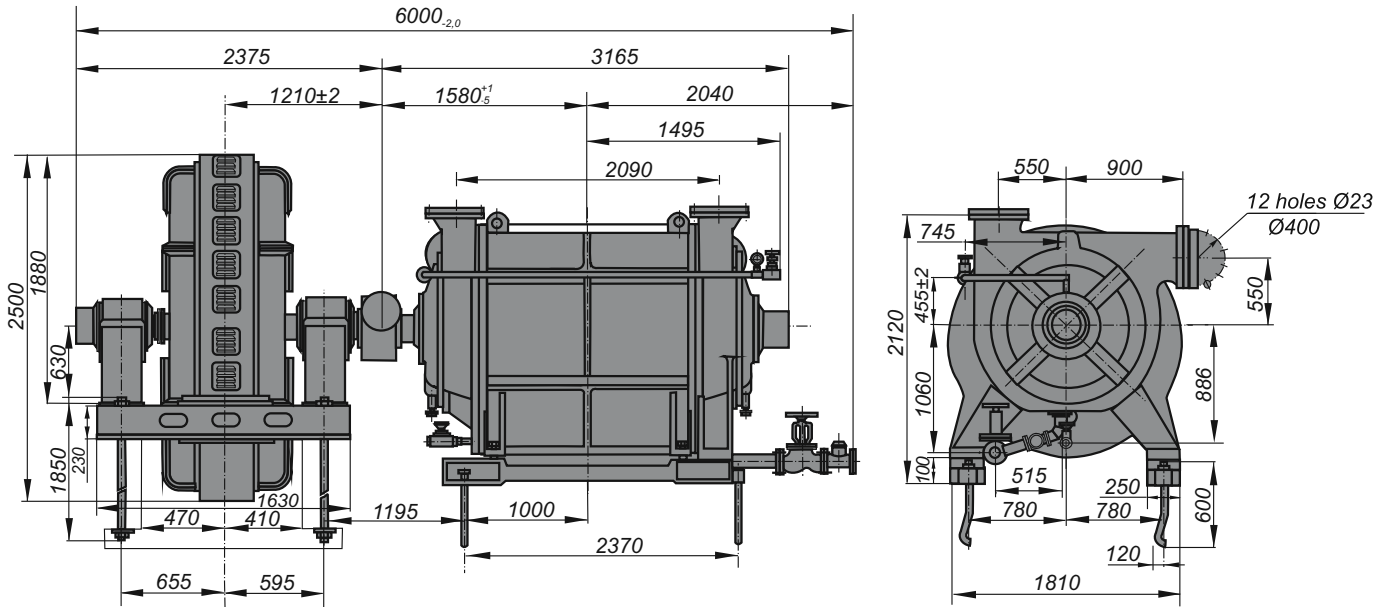
Dimensional drawing of VVN2-150M pump with gearbox



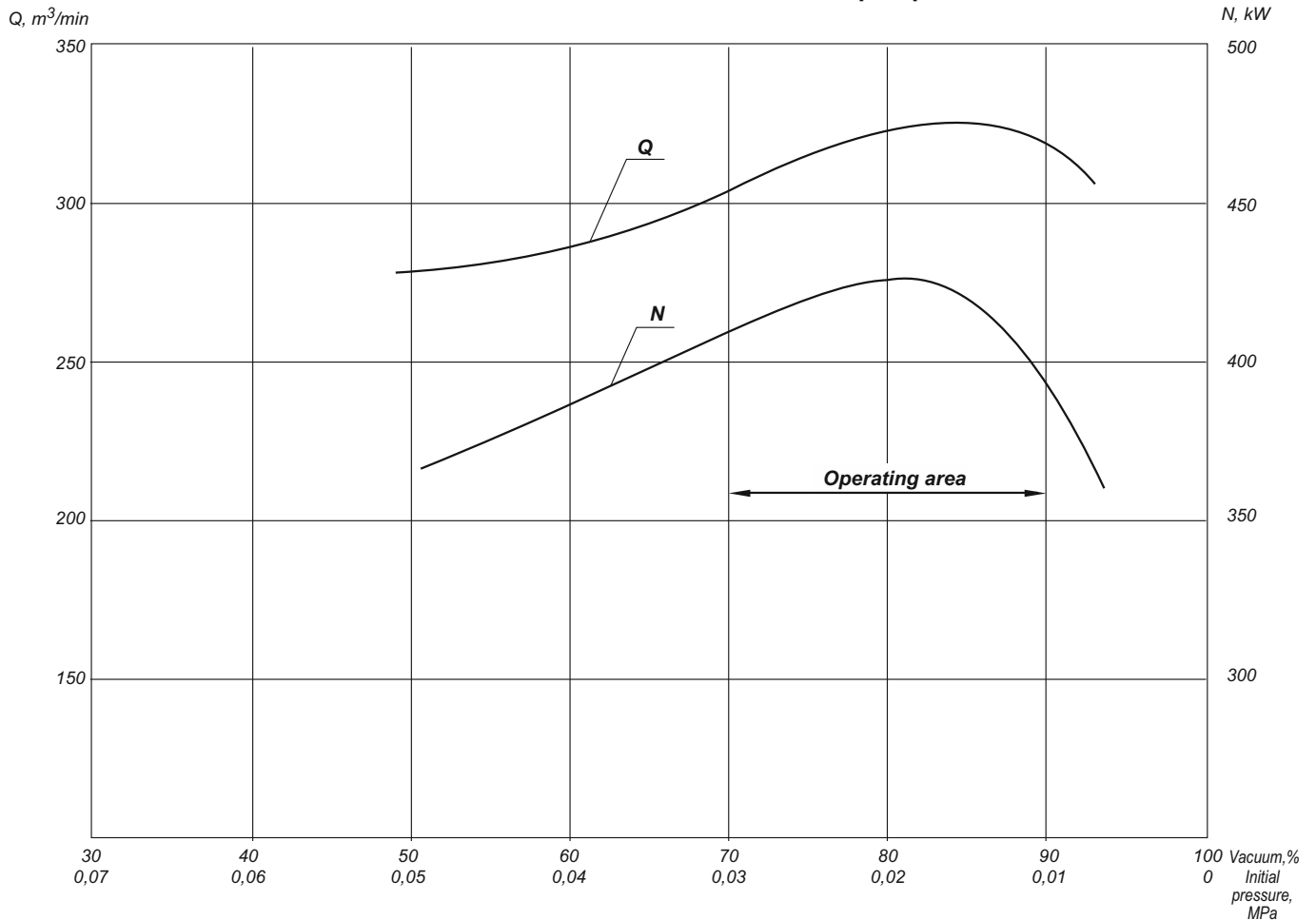
Performances and curves of VVN2-150M pump with gearbox



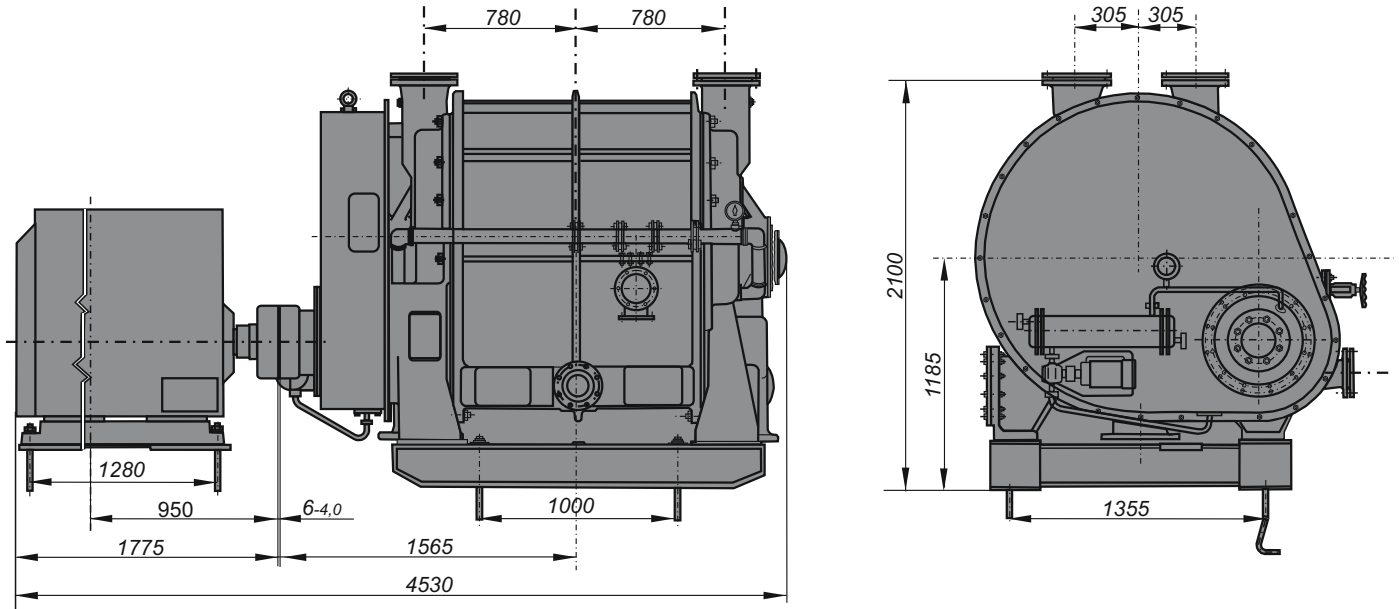
Dimensional drawing of VVN2-300 pump



Performances and curves of VVN2-300 pump



Dimensional drawing of DVVN-150B pump



Performances and curves of DVVN-150B pump

