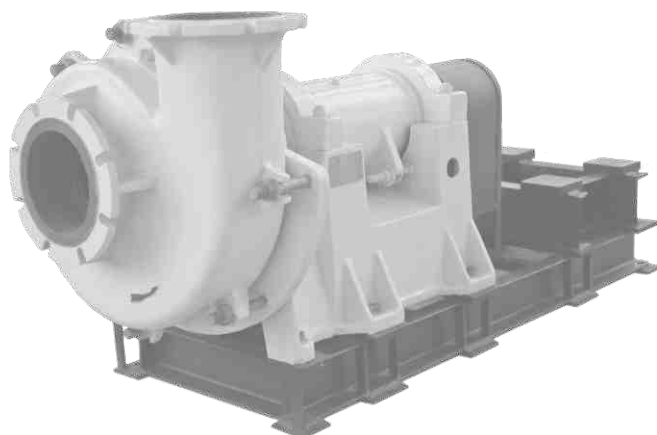


18 CN Centrifugal Cradle-mounted Pumps



Electric pumping unit of CN type are designed for pumping of storm sewage and soils, household sewage and other contaminated liquids with density to 1300 kg/m³, pH index of sewage systems.

Centrifugal pump is of horizontal, single stage, one-casing type. Pump inner flowing part consists of pump casing, armor-plated disk and impeller.

Application: systems for industrial and public water supply.

Pumping of combustible liquids and installation of pumping units in areas containing explosive mixtures are not allowed.

Technical data

Designation	Impeller external diameter, mm	Capacity, m ³ /hour (m ³ /s)	Head, m	Rotational speed, s ⁻¹ (rpm)	NPSH, m not more	Consumed power, kW		Efficiency, %		Weight, kg	
						pump	unit	pump	unit	pump	unit
CN 225-70	425	225	70	24.2	6.3	77	83*	58	54	1042	-
CN 225-70a	396	(0.0625)	60	(1450)		65	70*	57	53	1037	-
CN 225-706	361		50			52	56*	56	52	1032	-
CN 540-95	560	540	107	1500	8	250	265	68	64	1080	3060
CN 540-95a	540	540	103	1500	8	230	243	68	64	1080	2810
CN 540-956	516	540	88	1500	8	200	211	67	63	1080	2810
CN 540-95B	470	540	72	1500	8	165	174	66	62	1080	2810
CN 540-95-1	-	360	50	1000	8	77	82	68	63	1080	2600
CN 540-95a-1	-	360	45	1000	8	68	71	68	64	1080	2250
CN 540-956-1	-	360	40	1000	8	62	65	67	63	1080	2250
CN 540-95B-1	-	360	35	1000	8	45	49	66	62	1080	2250
CN 800-50	427	800	50	1450	6	175	190	62	57	1250	2300
CN 800-45	408	(0.22)	45	(24.2)		150	162				
CN 800-32	370		32			120	130				

* at density up to $\rho=1000$ kg/m³

Material of inner flowing part

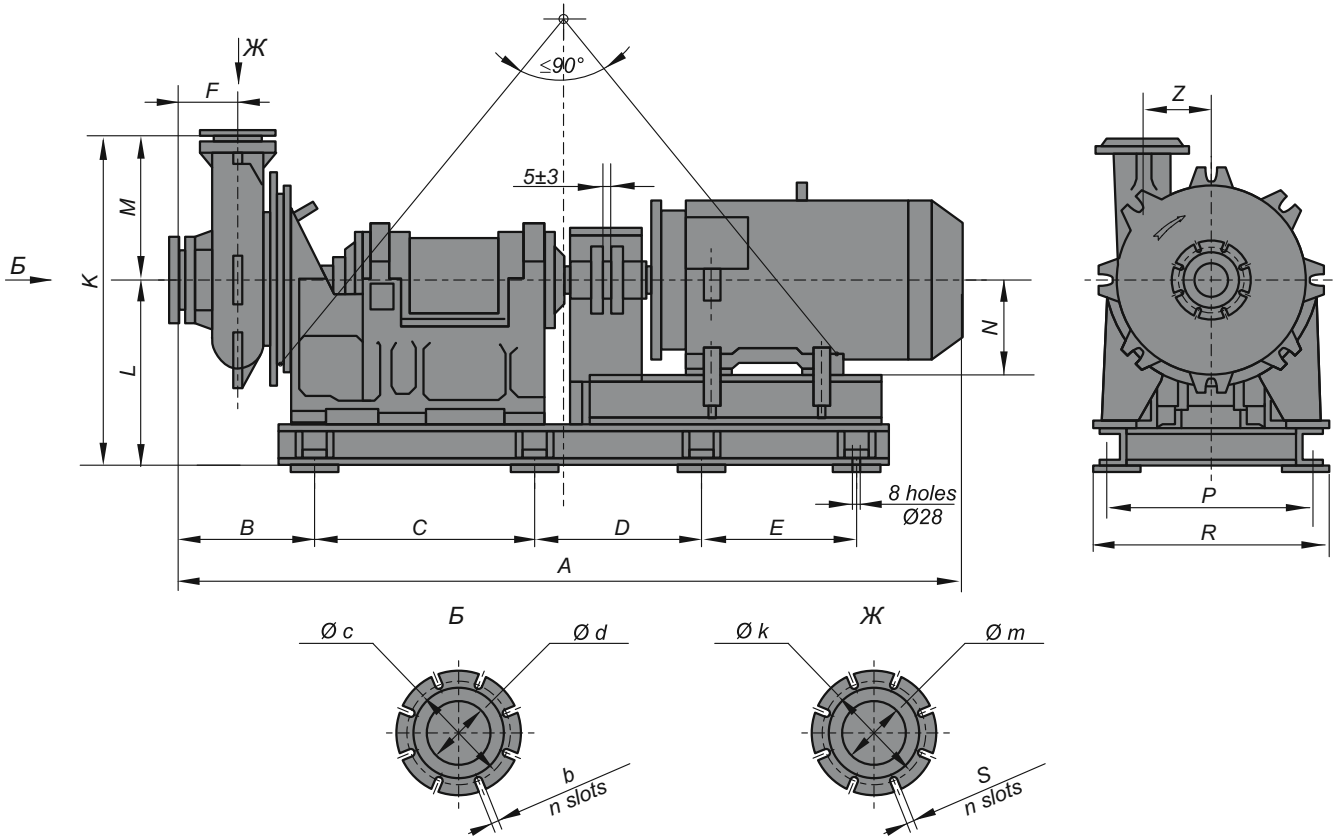
Pumps of CN type - grey iron C4 25, alloyed with chromium and nickel.

The example of pump designation

"Pump CN 800-50 UKhL", "Pumping unit CN 800-50 UKhL",
 where CN - centrifugal pump;
 800 - capacity, m³/hour;
 50 - head, m;
 UKhL - climatic version (for areas with temperate and cold climate);
 4 - placement category.

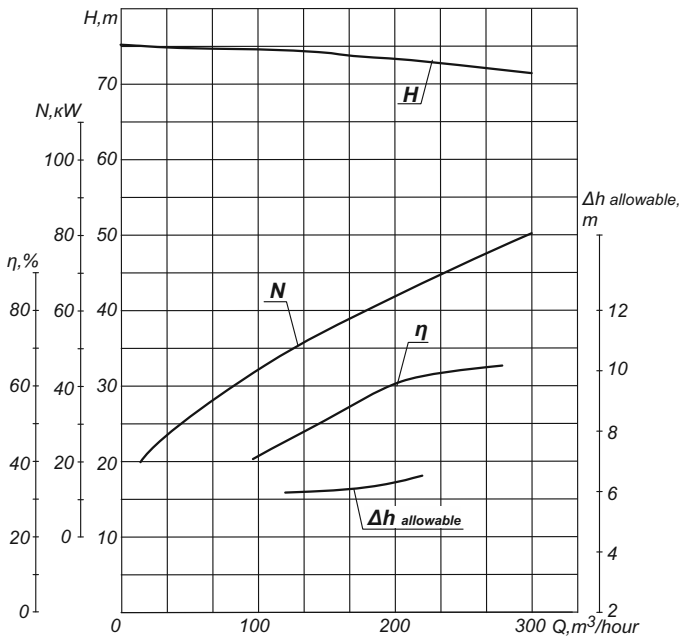
The Company improves the pumping equipment and equips pumping units with the motors of different manufactures. Thereby when ordering, please specify overall and mounting dimensions and required parameters according to the recommended form of Data Sheet.

Dimensional drawing of CN 225-70 and CNH 540-95 pumping units

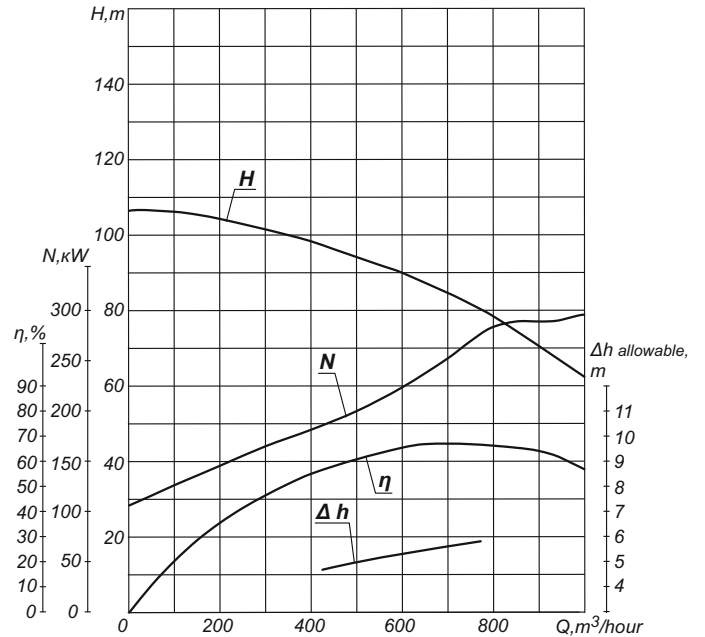


Designation	A	B	C	D	E	K	L	M	N	P	R	F	Z	b	n	c	d	k	m	S
CN 225-70	2455	435	780	585	550	1150	690	460	250	660	750	170	220	25	8	240	150	210	125	21
CN 540-95	2900	500	780	585	755	1190	690	500	315	660	834	230	330	24	12	350	250	295	195	24

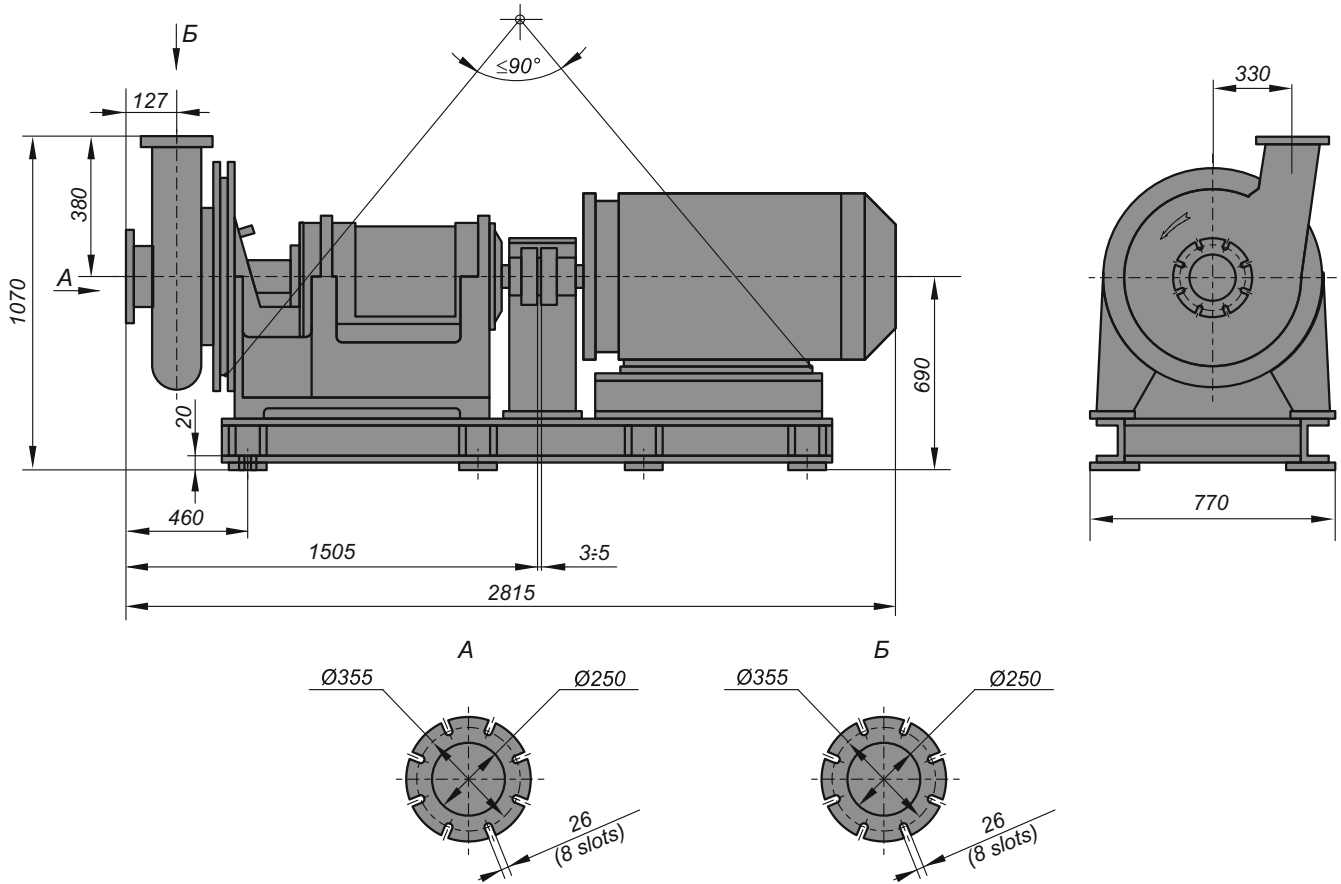
Performances and curves of CN 225-70 pumping units at the rotational speed $n=1480$ rpm with water of density $\rho = 998$ kg/m³



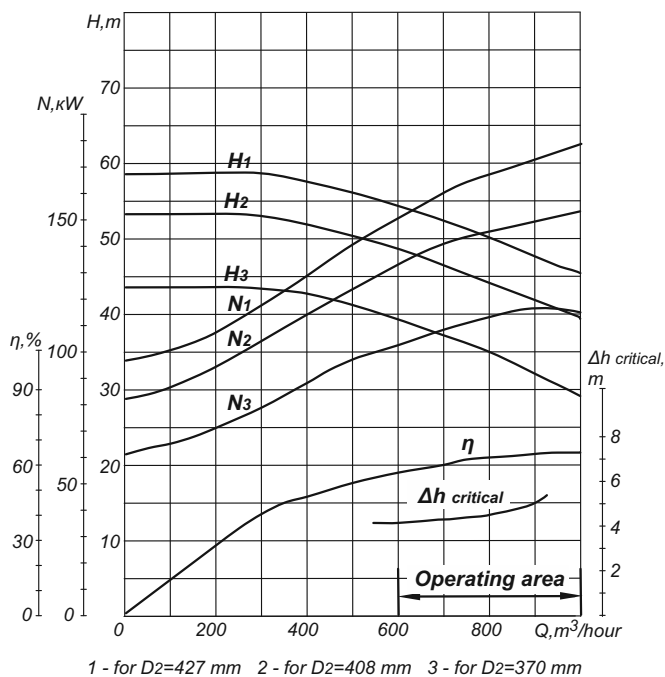
Performances and curves of CN 540-95 pumping units at the rotational speed $n=1480$ rpm with water of density $\rho = 998$ kg/m³



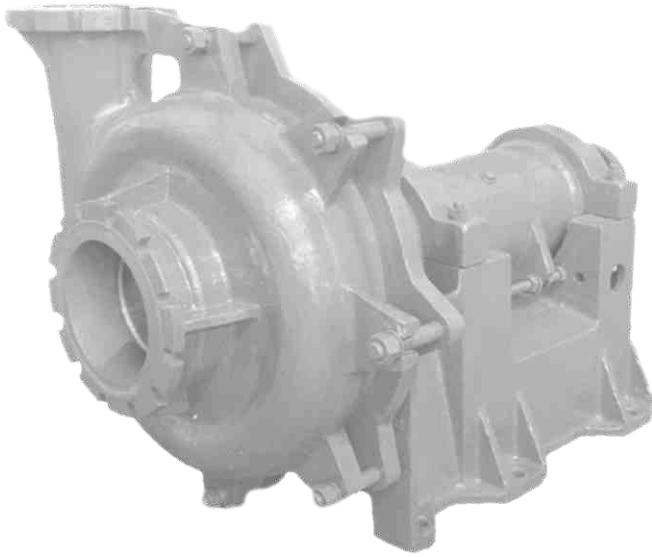
Dimensional drawing of CN 800-50 pumping units



Performances and curves of CN 800-50 pumping units at the rotational speed $n=1480$ rpm with water of density $\rho = 998$ kg/m³



CPN Centrifugal Cradle-mounted Pumps for Liquids with Foreign Impurities



Electric pumping unit of CPN type are designed for pumping of abrasive hydraulic fluids with the following properties:

- density up to 1300 kg/m³;
- pH index from 6 to 12;
- temperature from 5 to 70°C;
- volume concentration of solid impurities up to 30%;
- micro-hardness of particles up to 11000 MPa.

Centrifugal pump is of horizontal, single stage, one-casing type. Pump inner flowing part consists of pump casing, armor-plated disk and impeller made of wear-resistant alloy.

Applied for pumping of products of rocks processing, ash, slag, ferrous and nonferrous metal ores tails, argillo-arenaceous rocks, grained sands, sand and gravel rocks, gravel and spoiling rocks.

Application: ferrous and nonferrous industry, coal and metal mining industry, melioration and irrigation, industrial and public water supply.

Pumping of combustible liquids and installation of pumping units in areas containing explosive mixtures are not allowed.

Technical data

Designation	Impeller external diameter, mm	Capacity, m ³ /hour (m ³ /s)	Head, m	Rotational speed, s ⁻¹ (rpm)	NPSH, m not more	Consumed power, kW		Efficiency, %		Weight, kg	
						pump	unit	pump	unit	pump	unit
CPN 225-70	425	225	70	24.2	6.3	77	83*	58	54	1042	-
CPN 225-70a	396	(0.0625)	60	(1450)		65	70*	57	53	1037	-
CPN 225-70b	361		50			52	56*	56	52	1032	-
CPN 540-95	560	540	107	1500	8	250	265	68	64	1080	3060
CPN 540-95a	540	540	103	1500	8	230	243	68	64	1080	2810
CPN 540-95b	516	540	88	1500	8	200	211	67	63	1080	2810
CPN 540-95v	470	540	72	1500	8	165	174	66	62	1080	2810
CPN 540-95-1	-	360	50	1000	8	77	82	68	63	1080	2600
CPN 540-95a-1	-	360	45	1000	8	68	71	68	64	1080	2250
CPN 540-95b-1	-	360	40	1000	8	62	65	67	63	1080	2250
CPN 540-95v-1	-	360	35	1000	8	45	49	66	62	1080	2250
CPN 800-50	427	800	50	1450	6	175	190	62	57	1250	2300
CPN 800-45	408	(0.22)	45	(24.2)		150	162				
CPN 800-32	370		32			120	130				

* at density up to $\rho=1000$ kg/m³

Material of inner flowing part

Pumps of CPN type - chromic iron ИЧХ-28Н2.

The example of pump designation

"Pump CPN 540-96 UKhL4", "Pumping unit CPN 540-95 UKhL4";

where CPN - centrifugal sand pump;

500 - capacity, m³/hour;

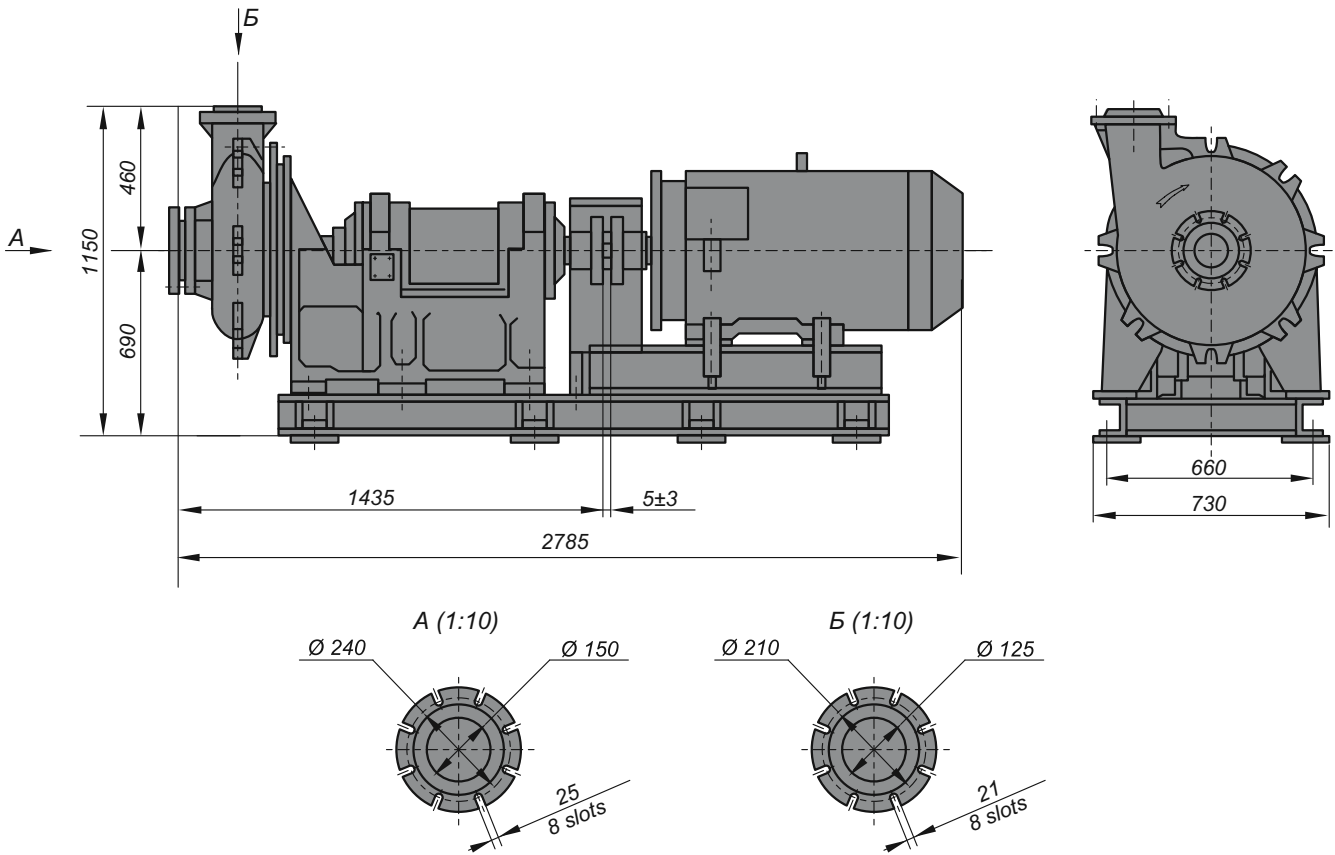
95 - head, m;

UKhL - climatic version (for areas with temperate and cold climate);

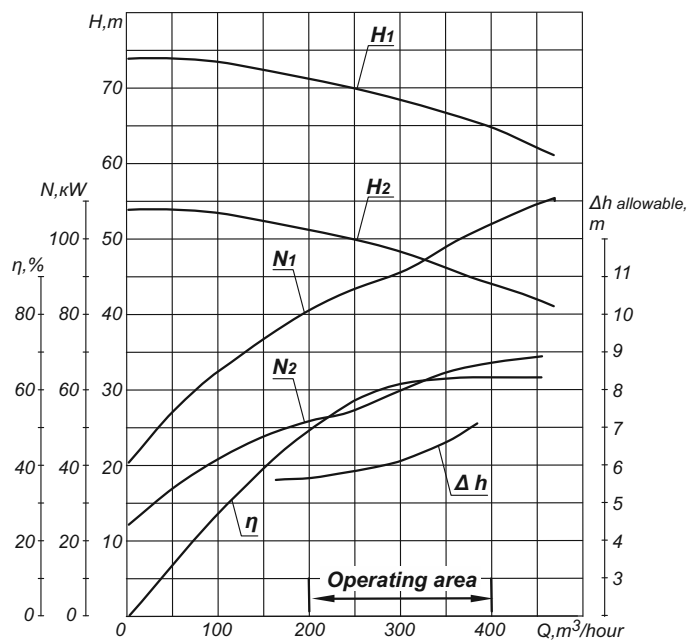
4 - placement category according to GOST 15150-69.

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 CPN 225-70 pumping units

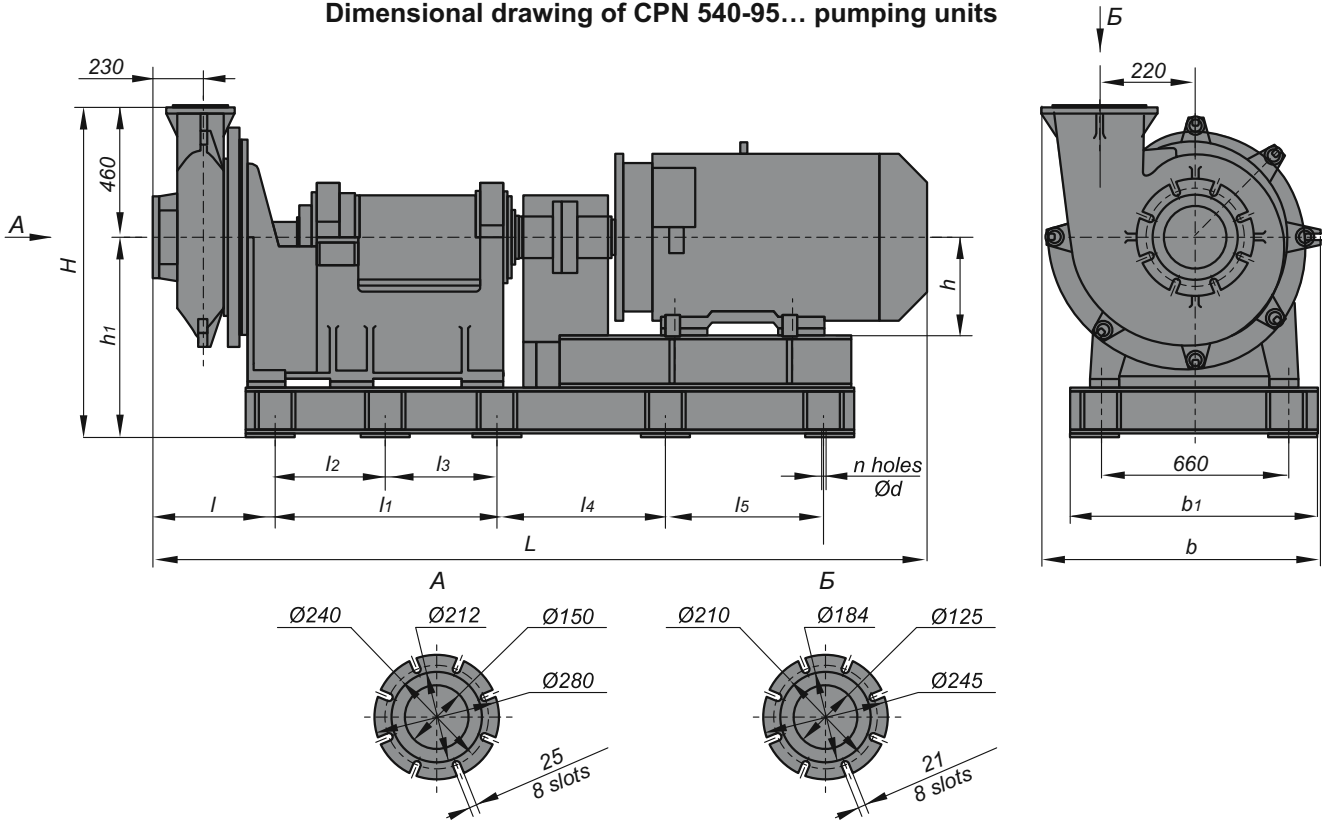


Performances and curves of CPN 225-70 pumping units at the rotational speed $n=1480$ rpm with water of density $\rho = 998$ kg/m³



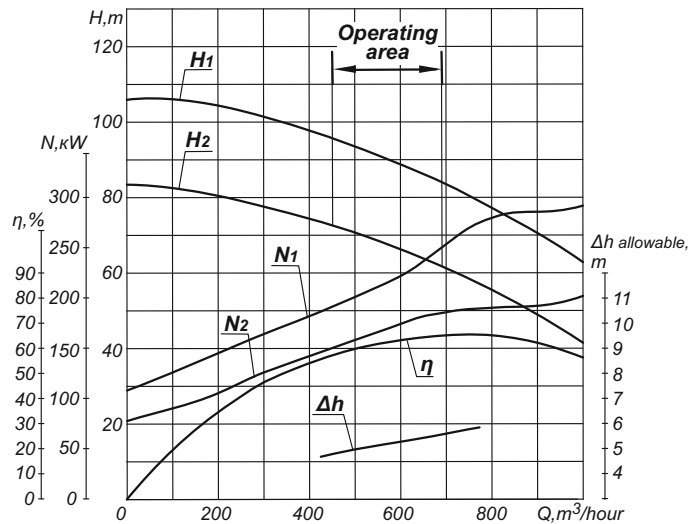
1 - for D₂=425 mm 2 - for D₂=361 mm

Dimensional drawing of CPN 540-95... pumping units



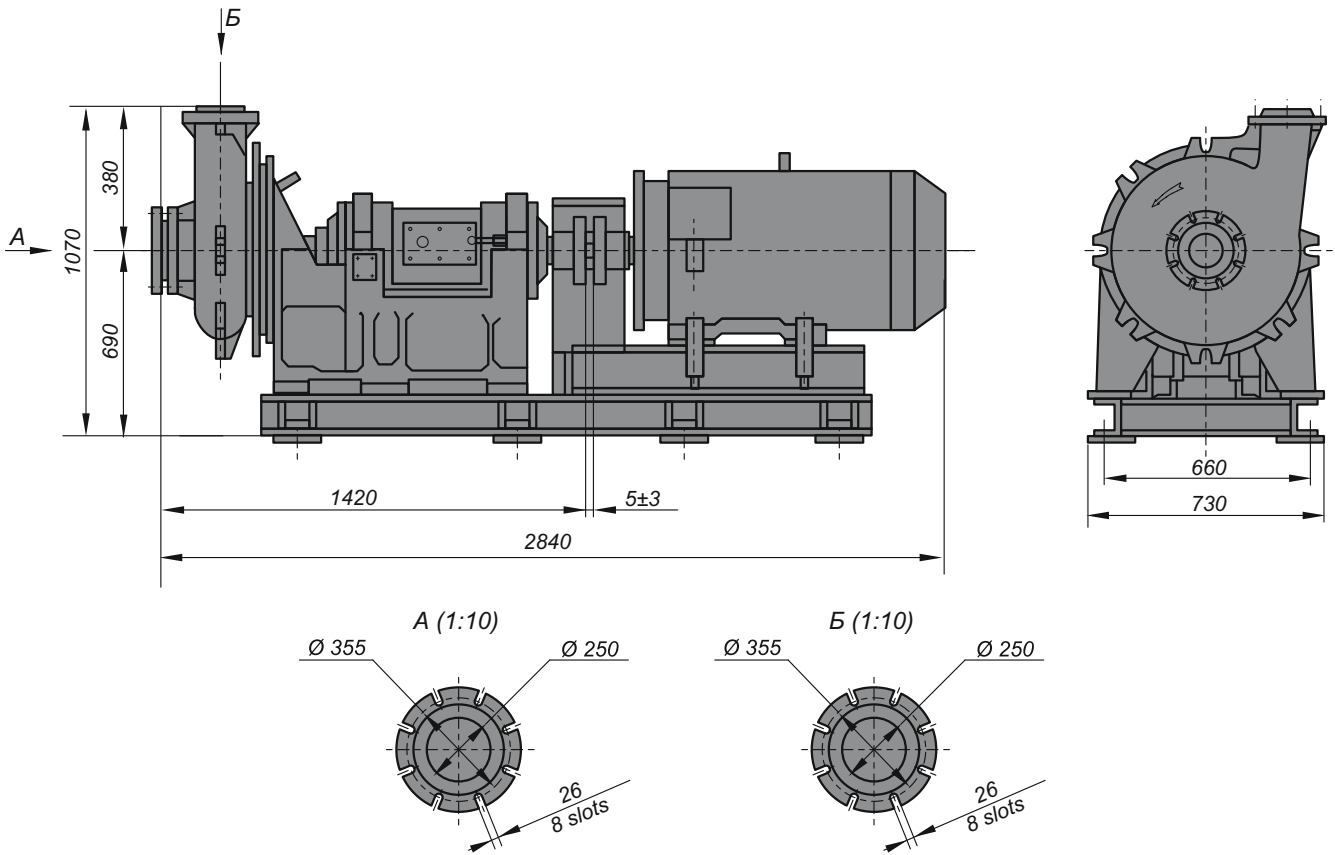
Designation	Overall dimensions, mm													
	L	l	l ₁	l ₂	l ₃	l ₄	l ₅	H	h	h ₁	b	b ₁	n	d
CPN 540-95	3085	500	780	-	-	585	755	1190	355	690	973	834	8	28
CPN 540-95a	2925	500	780	-	-	585	755	1190	355	690	973	834	8	28
CPN 540-95b	2925	500	780	-	-	585	755	1190	355	690	973	834	8	28
CPN 540-95v	2925	500	780	-	-	585	755	1190	355	690	973	834	8	28
CPN 540-95-1	2830	512	-	520	500	500	500	1230	280	730	973	772	10	28
CPN 540-95a-1	2605	512	-	520	500	500	500	1230	280	730	973	772	10	28
CPN 540-95b-1	2605	512	-	520	500	500	500	1230	280	730	973	772	10	28
CPN 540-95v-1	2605	512	-	520	500	500	500	1230	280	730	973	772	10	28

Performances and curves of CPN 540-95 pumping units at the rotational speed n=1480 rpm with water of density ρ = 998 kg/m³

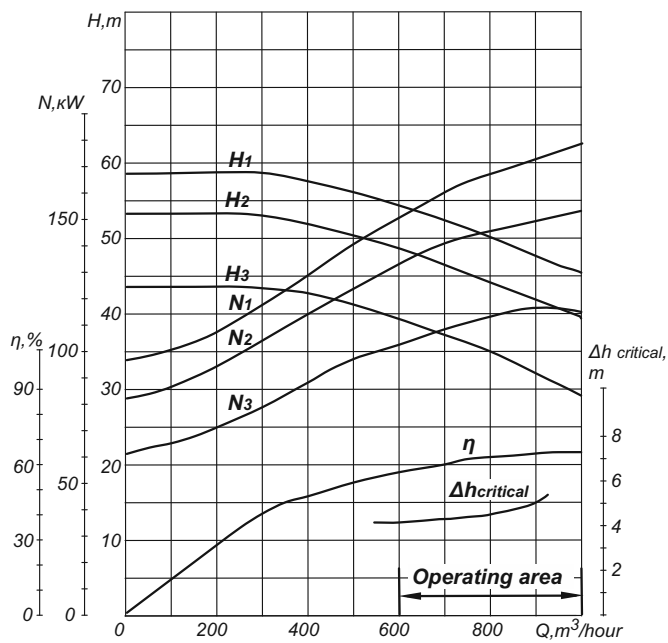


1 - for D₂=540 mm
2 - for D₂=476 mm

Dimensional drawing of CPN 800-50 pumping units



Performances and curves of CPN 800-50 pumping units at the rotational speed $n=1480$ rpm with water of density $\rho = 998$ kg/m³



1 - for D₂=427 mm 2 - for D₂=408 mm 3 - for D₂=370 mm