

Section 3. Semisubmersible chemical pumps АХПН

Electrically driven pumps АХПН Q/H.1

Pumps АХПН Q/H.1 – are vertical semisubmersible centrifugal pumps. They allow presence in the pumped fluid of solid particles no greater than 2.0 mm with bulk concentration up to 0.5 %. To avoid steam-out single mechanical seals and mechanical seals with additional seal are installed above support plate.

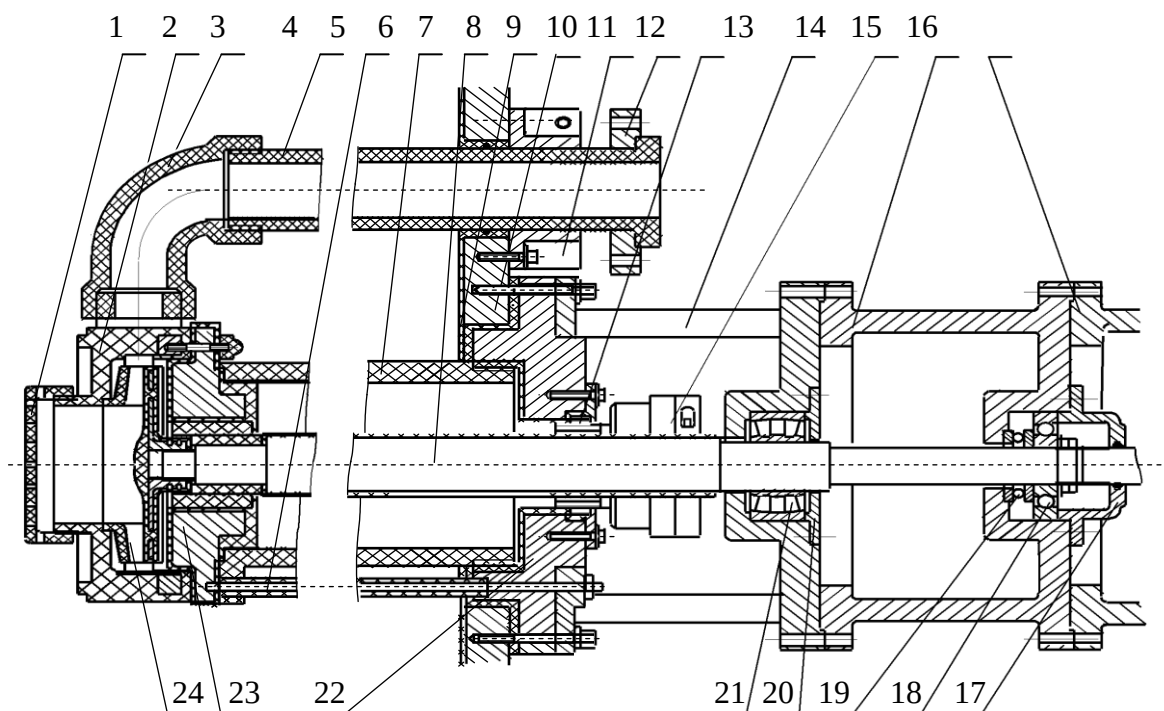
Flow tube of the pumps is made of fluoroplastic Φ -50. Range of flow rates is 1,5-50 m³/hour and range of heads is 10-50 m. Density of the pumped fluid is up to 1800 kg/m³. Minimal temperature of the pumped fluid is up to -85°C, maximum temperature is up to 120°C. Immersion depth is up to 2 m. Filter length is up to 0,5 m.

By special order it is possible to manufacture pumps with other specification (immersion depth, plate size – according to customer's drawings, temperature range).

Specification

Model	Pump parametrs					
	Liquid consumption (Q), m ³ /hour	Head H m	D _{in}	D _{out}	N kW	Rate speed, r/min
АХПН 1,5/10.1	1,5	10	25	20	4	2900
АХПН 3,6/18.1	3,6	18	25	20	4	
АХПН 15/20.1	15	20	50	40	5,5	
АХПН 15/25.1	15	25	50	40	5,5	
АХПН 10/40.1	10	40	50	32	11	
АХПН 12,5/50.1	12,5	50	50	32	15	
АХПН 40/20.1	40	20	80	65	11	
АХПН 50/30.1	50	30	80	65	11	
АХПН 40/40.1	40	40	80	50	15	
АХПН 50/50.1	50	50	80	50	18,5	

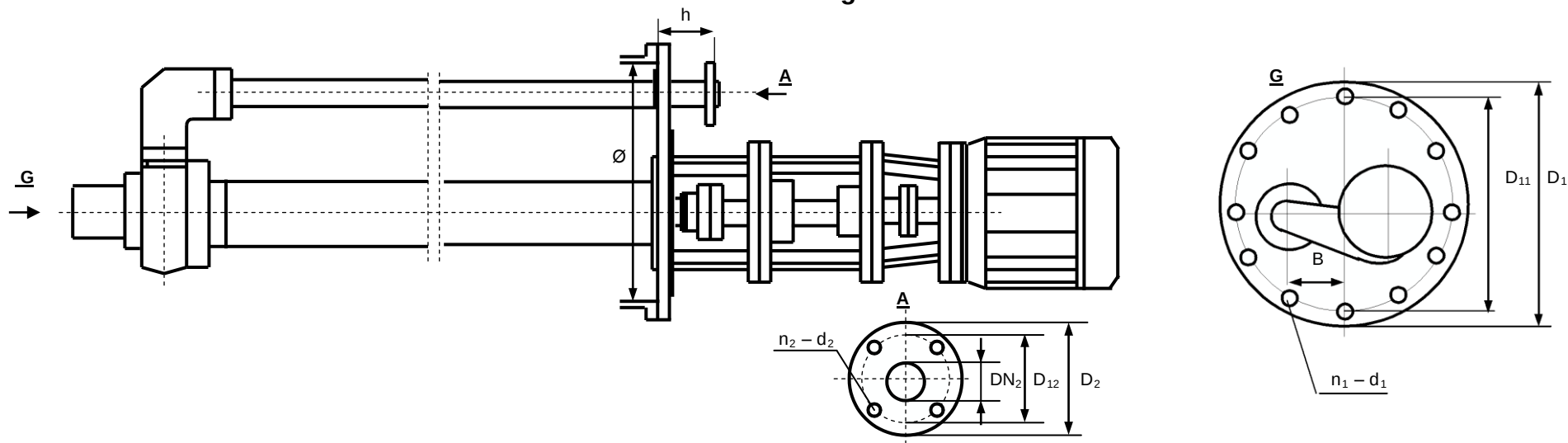
Pump structure



Specification of pump details

No.	Name	Q-ty
1	Filter	1
2	Pump casing	1
3	Tapered pipe	1
4	Discharge pipe	1
5	Stud	4
6	Dipper tube	1
7	Shaft	1
8	Polymeric coating of support plate	1
9	Support plate	1
10	Clamp	1
11	Cap flange	1
12	Immovable ring of mechanical seal	1
13	Lower casing	1
14	Moving part of mechanical seal	1
15	Undercarriage casing	1
16	Electric motor base	1
17	Top bearing lid	1
18	Top bearing	1
19	Thrust bearing	1
20	Low bearing lid	1
21	Low bearing	1
22	Seal casing	1
23	Wall	1
24	Working wheel (impeller)	1

Overall and connecting dimensions



Model	Overall and connecting dimensions, mm								
	DN_2	D_2	D_{12}	D_1	D_{11}	$\emptyset$	h	$n_2 - d_2$	$n_1 - d_1$
АХПН 1,5/10.1	20	100	75	530	490	440	120	04.дек	12 – 18
АХПН 3,6/18.1	20	100	75	530	490		120	04.дек	12 – 18
АХПН 15/20.1	40	128	100	530	490		120	апр.14	12 – 18
АХПН 15/25.1	40	128	100	530	490		120	апр.14	12 – 18
АХПН 10/40.1	32	128	100	700	650	590	120	апр.14	16 – 18
АХПН 12,5/50.1	32	128	100	700	650		120	апр.14	16 – 18
АХПН 40/20.1	65	160	135	700	650		120	апр.14	16 – 18
АХПН 50/30.1	65	160	135	700	650		120	апр.14	16 – 18
АХПН 40/40.1	50	160	135	700	650		120	апр.14	16 – 18
АХПН 50/50.1	50	160	135	700	650		120	апр.14	16 – 18