

HVS SUBMERSIBLE SLUDGE PUMP

The HVS submersible sludge pump is specifically designed for pumping in harsh environments containing silts and other abrasive materials. Each component fully reflects the design concepts of high durability, reliability and ease of maintenance.

HVS submersible sludge pump adopts H-class motor, high wear-resistant mechanical seal, high wear-resistant alloy impeller and pump body, high wear-resistant PU inlet plate.

The vortex impeller allows large solids to pass.

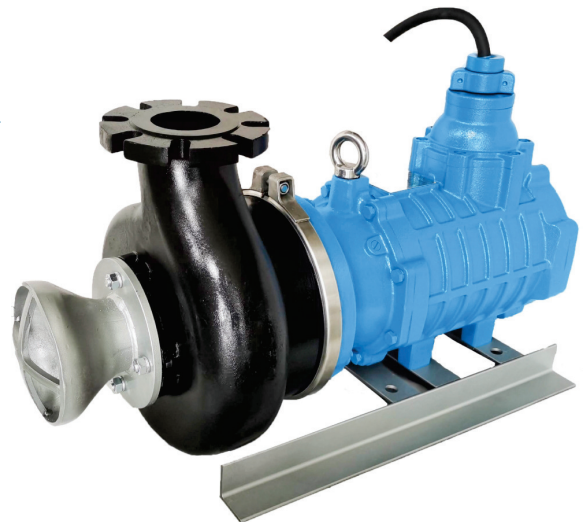
Application

- Mining industry: specialized in handling solids and slurries from coal, gold, platinum and diamond mining process
- Sewage and wastewater transport: capable of transporting raw sewage reliably
- Power generation industry: discharge water containing fly ash and coal efficiently
- Construction industry: drainage of construction silt water, pumping of underwater sand and cleaning of sedimentation tank
- Chemical industries: designed for applications involving handling of abrasive raw materials

Application	Max.recommended concentration of weight	Min.recommended velocity(m/s)
Gravel and ore	15%	4.0
Sand and clay	30%	3.5
Ash	40%	1.5

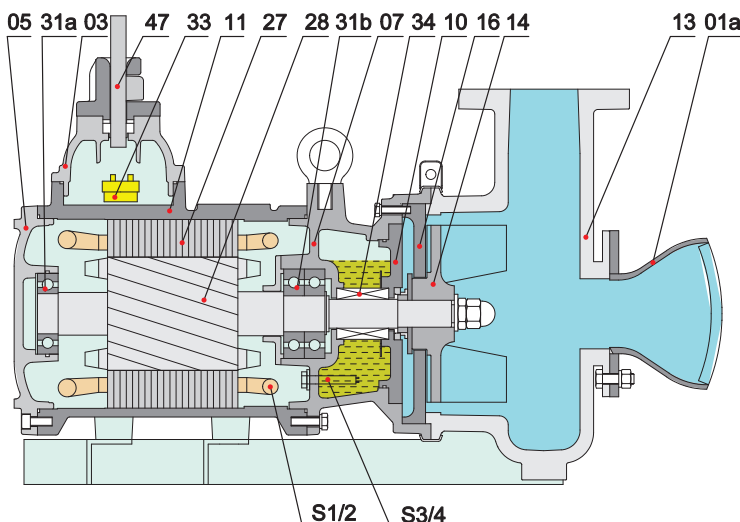
Specification

- Capacity : up to 235m³/h
- Head : up to 28m
- Density of liquid : up to 1.3g/cm³
- Power : 4kW(5.5HP) to 22kW(30HP)
- Power supply : three phase 380V ± 10%, 50Hz
three phase 380V ± 10%, 60Hz
- Insulation class : H
- Protection class : IP68
- Cable length : 10m
- Water temperature : up to 60°C
- PH : 6 to 10
- Maximum immersion depth : 15m



Special features on request

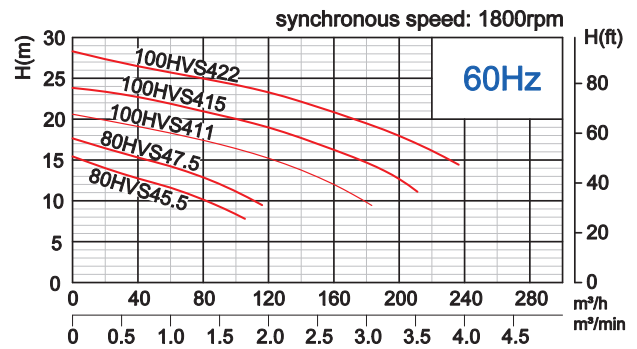
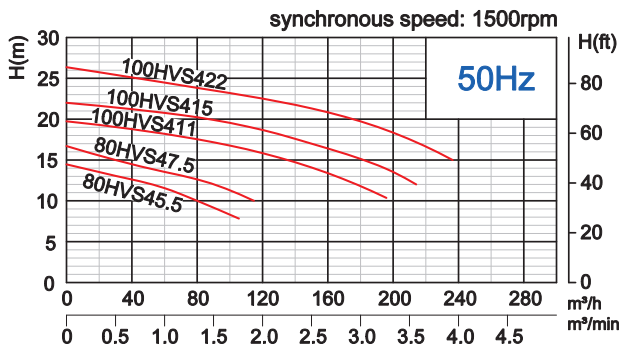
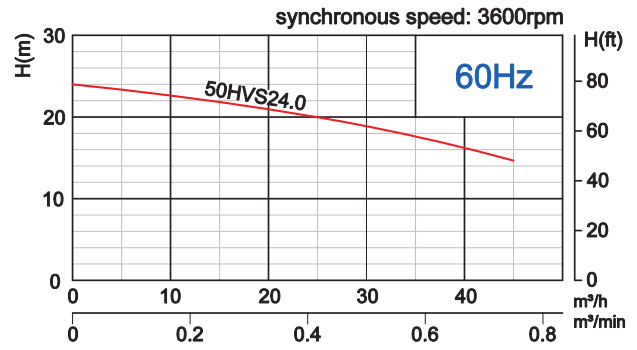
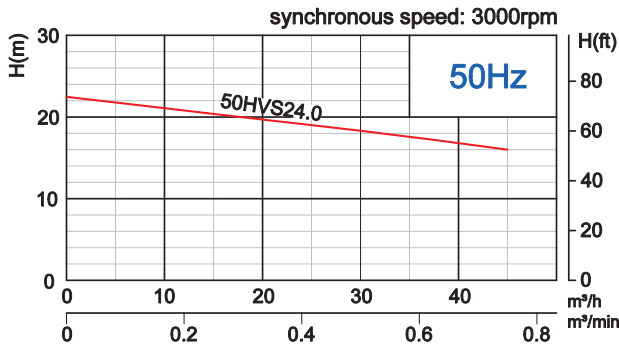
- Other voltages
- The length of cable is optional



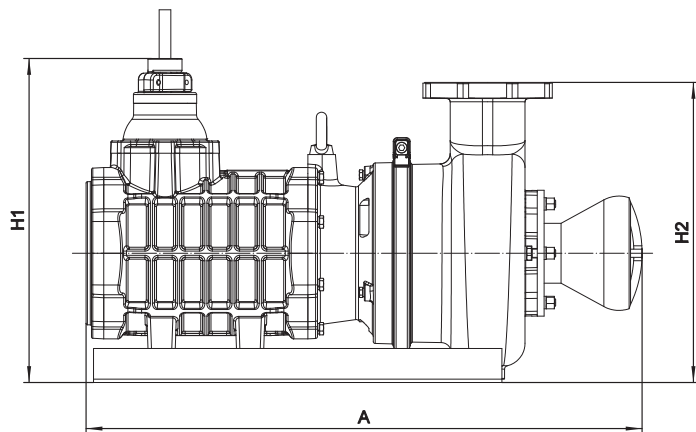
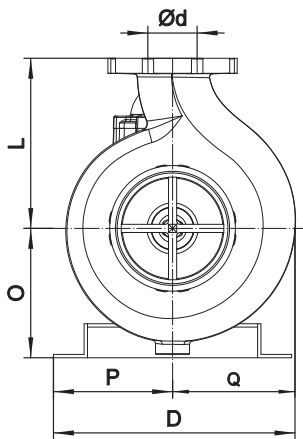
Materials of components

Item No.	Part name	Material
01a	Water inlet	Steel
03	Terminal box	Cast iron
05	Upper cover	Cast iron
07	Bearing house	Cast iron
10	Seal bracket	Cast iron
11	Motor body	Cast iron
13	Pump body	High chrome alloy
14	Impeller	High chrome alloy
16	Inlet plate	Cast iron and PU
27	Stator	
28	Rotor	Shaft : AISI420SS
31a	Bearing	Ball bearing
31b	Bearing	Ball bearing
33	Motor protector	≤15kW
34	Mechanical seal	Sic-Sic/Sic-Sic
47	Cable	
S1/2	Overheat protector : 22kW (11~15kW: on option)	
S3/4	Overheat protector : on option (Only for pumps ≥ 11kW)	

Performance curves & table



Model 50Hz/60Hz	Voltage	Current	Motor power		Outlet		Rated capacity	Rated head	Max capacity	Max head	Impeller passage
	V	A	kW	HP	in	mm	m³/h	m	m³/h	m	mm
50HVS24.0	380	8.9	4	5.5	2	50	30	18	45	22/24	42
80HVS45.5	380	11.7	5.5	7.5	3	80	80	10	105	15	70
80HVS47.5	380	15.7	7.5	10	3	80	80	13	115	17	70
100HVS411	380	22	11	15	4	100	110	16	195/180	20	90
100HVS415	380	30.1	15	20	4	100	130	18	215	22/24	90
100HVS422	380	45	22	30	4	100	150	21	235	26/28	95



Dimension & Weights

Model 50Hz/60Hz	Ød	O	P	Q	L	D	A	H1	H2	N.W	G.W	Packing dimension
	mm	mm	mm	mm	mm	mm	mm	mm	mm	kg	kg	mm
50HVS24.0	50	110	126	150	140	276	542	240	250	67	73	646X315X352
80HVS45.5	75	190	175	180	250	355	817	480	440	161	174	855X395X667
80HVS47.5	75	190	175	180	250	355	817	480	440	170	183	855X395X667
100HVS411	100	220	188	215	290	403	940	476	510	257	284	1075x520X735
100HVS415	100	220	188	215	290	403	940	476	510	276	303	1075x520X735
100HVS422	100	235	200	232	300	432	990	506	535	341	368	1075x520X735