

# NHS SERIES

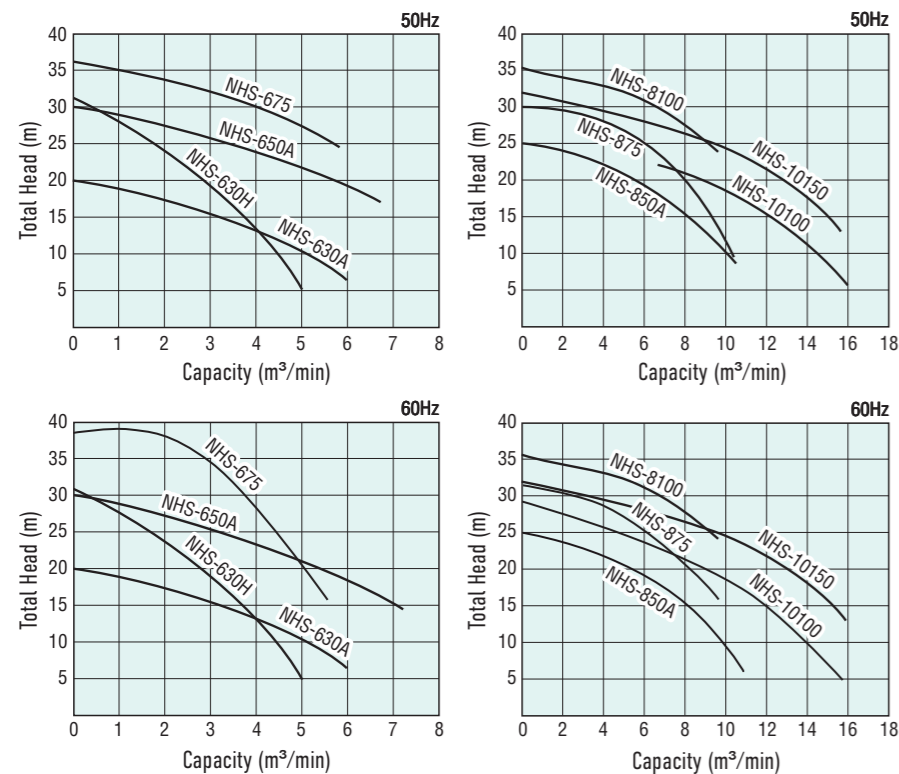
- This series is equipped with an agitator or a jet flow device as the standard. Sands in water are smoothly transferred as the agitator effectively stirs sands in water.
- High-torque multipole motor guarantees efficient drainage.
- The motor cooling jacket enables the pumps to operate continuously with the motor in the air (only for sub code -C/-AC/-JC type). \*For more information, refer to page 9.
- Infiltrative water detector and miniature thermal protector are adopted as a motor protector to prevent motor burnout. \*For more information, refer to page 9.
- The structure is highly wear resistant:
  - The impeller and agitator are made of high chromium cast iron (about 25% chromium) known for its wear resistance.
  - The suction cover liner is equipped as a standard feature. It protects the impeller and the suction cover from wear, thereby reducing the replacement frequency of these components.
  - Wear resistant material is applied to main assembly parts.
  - The pumps maintain stable performance during long-term operation in tough conditions.

**Option**

Cable Extension	Material Change	Heat Resistant	Seawater Resistant	Painting Change	Sacrificial Anode	Lubricant Oil Change

The available options vary depending on the model. For more information, refer to "Option" page 53.

## Performance Curve

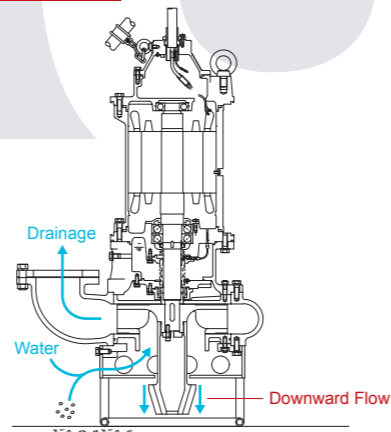


## Submersible Powerful Agitator Pumps



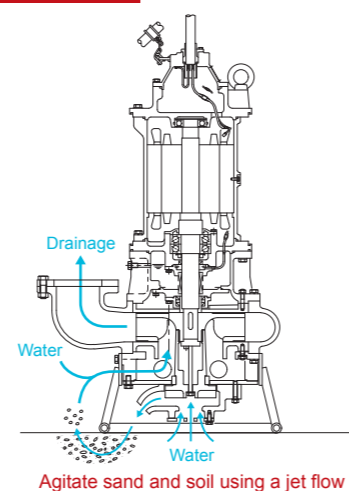
NHS-650A-JC

### Agitator Type



Prevent sand and soil from settling and depositing

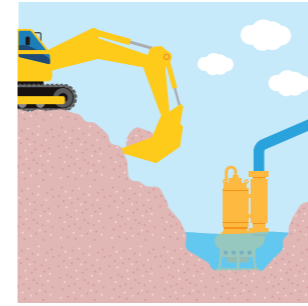
### Jet Flow Type



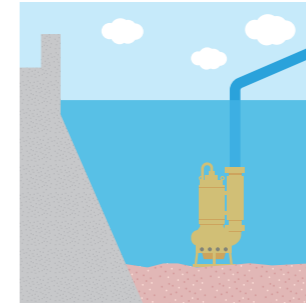
Agitate sand and soil using a jet flow

Wider stirring range than what an agitator can achieve

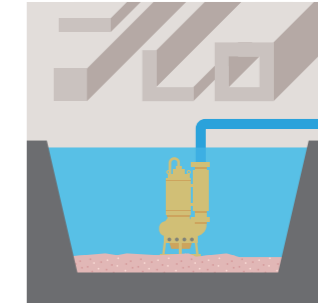
## Applications



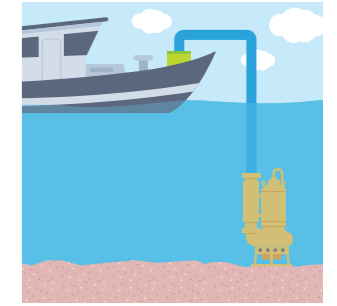
Transfer and agitation of mud and soil at construction sites



Transport of sediments from tanks, ponds, rivers, and dams



Remove the scale at Steelworks



Transporting sand and sediments from ports

## Main Specifications

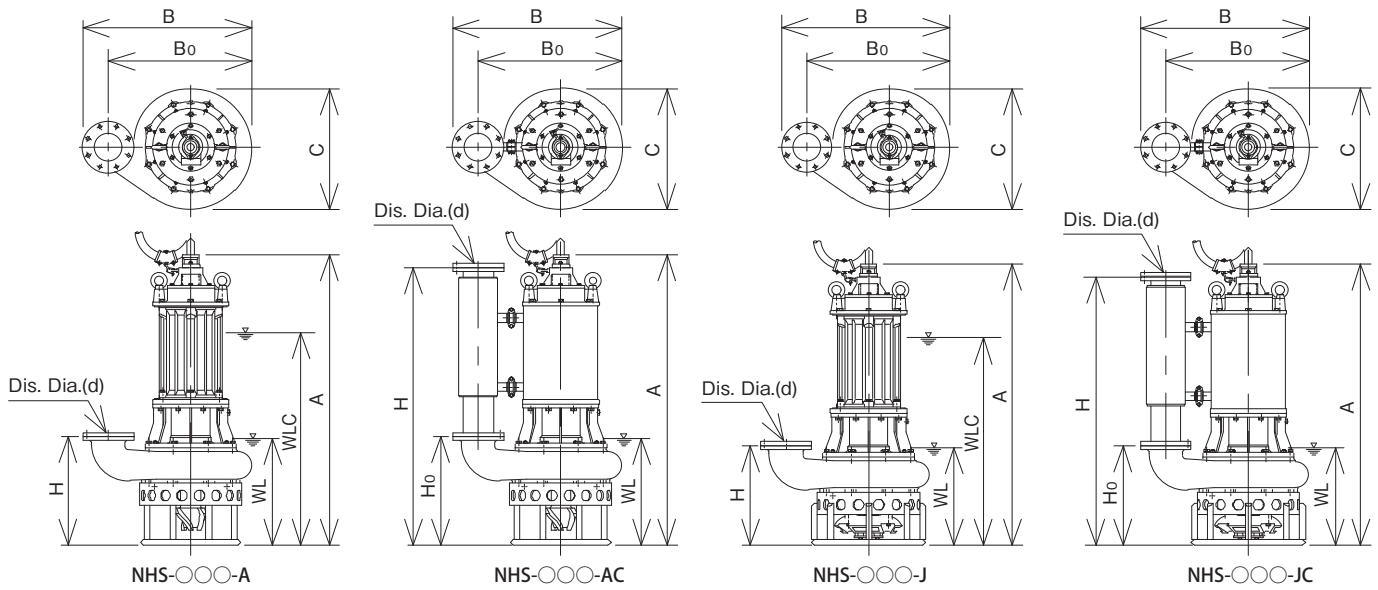
Discharge Diameter (mm)	150	150	150	200	150	200	200	250	250
Pump Models	NHS-630H	NHS-630A	NHS-650A	NHS-850A	NHS-675	NHS-875	NHS-8100	NHS-10100	NHS-10150
Motor Output (kW)	22	22	37	37	55	55	75	75	110
Medium	Spring Water / Muddy Water								
Temperature	Max 40 Degrees Celsius								
Shaft Seal	Double Type Mechanical Seal								
Shaft Bearing	Sealed Ball Bearing			Duplex Ball Bearing					
Impeller	High Chrome								
Casing	Closed								
	*FCD500								
Type/Pole	Dry Type Induction Motor / 4pole		Dry Type Induction Motor / 6pole			Dry Type Induction Motor / 6pole(50HZ) 8pole(60HZ)			
Insulation Class	F								
Protector	Miniature Thermal Protector + Infiltrative Water Detector								
Frame	*FC200								
Shaft	Stainless Steel								
Discharge Type	Flange								
Agitator	•	•	•	•	•	•	•	•	•
Jet Flow	•	•	•	•	•	•	•	•	•
Cooling Jacket	•	•	•	•	•	•	•	•	•

\*FCD : Ductile Cast Iron / FC : Cast Iron

## Specifications

Discharge Diameter mm (in)	Pump Models	Motor Output		Total Head		Capacity			Starting	Max Solid Through		Weight (without cable)		Cable Length		
		kW	HP	m	ft	m³/min	m³/hr	USGPM		mm	in	kg	lb	m	ft	
150 (6)	NHS-630H	-C	22	30	18	59.1	3.2	192	845	DOL	40	1.6	430	946	10	32.8
		-A											535	1,177		
		-AC											435	957		
150 (6)	NHS-630A	-A	22	30	15	49.2	3.2	192	845	DOL	60	2.4	540	1,188	10	32.8
		-AC											590	1,298		
		-J											680	1,496		
150 (6)	NHS-650A	-J	37	50	25	82.0	3.2	192	845	Star-Delta	60	2.4	620	1,364	10	32.8
		-JC											710	1,562		
		-A											740	1,628		
150 (6)	NHS-850A	-AC	37	50	19	62.3	6	360	1,585	Star-Delta	60	2.4	855	1,881	10	32.8
		-J											785	1,727		
		-JC											930	2,046		
200 (8)	NHS-850	-A	37	50	19	62.3	6	360	1,585	Star-Delta	60	2.4	785	1,727	10	32.8
		-AC											945	2,079		
		-JC											815	1,793		
150 (6)	NHS-675	-J	55	75	31	101.7	3.2	192	845	Star-Delta	60	2.4	975	2,145	10	32.8
		-JC											870	1,914		
		-A											985	2,167		
200 (8)	NHS-875	-J	55	55	25	82.0	6	360	1,585	Star-Delta	60	2.4	915	2,013	10	32.8
		-JC											1,075	2,365		
		-A											2,200	4,840		
200 (8)	NHS-8100	-J	75	75	31	101.7	6	360	1,585	Star-Delta	60	2.4	2,360	5,192	10	32.8
		-JC											2,700	5,940		
		-A											2,900	6,380		
250 (10)	NHS-10100	-J	75	75	15	49.2	12	720	3,170	Star-Delta	80	3.2	3,500	7,700	10	32.8
		-JC											2,900	6,380		
		-A											3,700	8,140		
250 (10)	NHS-10150	-J	110	150	22	72.2	12	720	3,170	Star-Delta	80	3.2	3,700	8,140	10	32.8
		-JC											3,700	8,140		
		-A											3,700	8,140		

-A Agitator -AC Agitator+Cooling Jacket -C Cooling Jacket -JC Jet Flow+Cooling Jacket -J Jet Flow



## External Diagrams (mm)

Pump Models	d	H	H <sub>0</sub>	A	B	B <sub>0</sub>	C	WL	WLC
NHS-630H		150	410	—	1,095	764	624	525	800
	-C	150	1,040	410	1,095	764	525	350	—
	-A	150	410	—	1,095	764	525	350	800
	-AC	150	1,040	410	1,095	764	525	350	—
NHS-630A	-A	150	507	—	1,373	839	618	500	1,000
	-AC	150	1,308	507	1,373	839	618	500	—
	-J	150	507	—	1,373	845	640	500	1,000
	-JC	150	1,308	507	1,373	845	640	500	—
NHS-650A	-A	150	600	—	1,644	931	669	590	1,100
	-AC	150	1,531	600	1,644	931	669	590	—
	-J	150	550	—	1,594	931	669	540	1,050
	-JC	150	1,481	550	1,594	931	669	540	—
NHS-850A	-A	200	600	—	1,644	1,052	788	590	1,100
	-AC	200	1,531	600	1,644	1,052	788	590	—
	-J	200	550	—	1,594	1,052	788	540	1,050
	-JC	200	1,481	550	1,594	1,052	788	540	—
NHS-675	J	150	550	—	1,767	931	669	540	1,240
	JC	150	1,701	550	1,767	931	669	540	—
NHS-875	J	200	550	—	1,767	1,052	788	540	1,240
	JC	200	1,701	1,541	1,767	1,052	788	540	—
NHS-8100	J	200	655	—	1,972	1,192	913	645	1,370
	JC	200	1,886	655	1,972	1,192	913	645	—
NHS-10100	J	250	760	—	2,062	1,241	941	730	1,505
	JC	250	1,976	760	2,062	1,241	941	730	—
NHS-10150	J	250	760	—	1,965	1,241	941	750	1,600
	JC	250	1,978	760	1,965	1,241	941	750	—

WL: Pump Starting Level  
WLC: Lowest Level at Continuous Running