

Dry Pit Submersible Pump

(Amphibian Type) CWT·CNT Series



Employing newly developed air-cooled type submersible motor

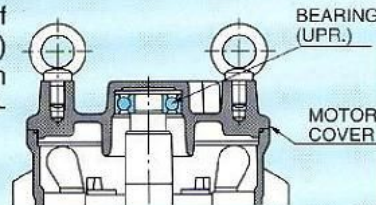
DRY PIT SUBMERSIBLE PUMP (AMPHIBIAN TYPE) CWT · CNT series

OUTPUT: 1.5~22kW



●Improved lift time of bearing and seal components

To prevent overheat, upper bearing is installed at upper side of motor cover. (Patent pending) Also by reducing heat effect from motor, degradation of grease, O-ring, are remarkably reduce.



●Employing newly developed air-cooled type submersible motor

By employing non-water jacket type air-cooled motor, this pump can be used in various kinds of liquid application. Therefore, it can be used even for sludge. Also by reducing heat effect, continuous in the air operation with class E insulation can be realized.

●Submersible application is also possible

By employing submersible motor, CWT, CNT series can be operated even though they would be submerged. Therefore, submersible application is possible.

●Employing high-quality 4 faces SiC Mechanical-Seal

This pump has wear-proof double type mechanical seal, therefore, high reliability and long-life can be realized.

●Abundant series for various application

This pump offers Screw type impeller (CWT) or Non-clogging type impeller. Output variation is 1.5 to 22kW. Suitable model can be selected according to application.



(CWT)



(CNT)

Intended Uses

*For transfer and discharge of sewage and sludge at waste water treatment plants, etc.

*For relaying sewage at the junctions in the sewage work.

*For use in waste water treatment processes at combination treatment plants, etc.

*For discharging various industrial waste water.

Main specifications

Applicable condition	Ambient temperature	-20 to 40°C
	Ambient humidity	0 to 100%
	Ambient Fluid type	Waste water, Sewage
	Liquid temperature	0 to 60°C
Materials	Motor shaft	SUS420J2
	Pump casing	FC250
	Impeller	FC250(22kW:FCD500)
Structure	Impeller	CWT Screw type
		CNT Non-clogging type
	Shaft seal	Double mechanical seal 4-faces SiC
Motor	Name	submersible induction motor
	Insulation class	E
	Phase	3-phase
	Starting Method	Direct on line(over 11kW:Star-Delta)

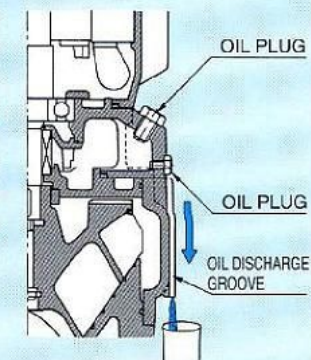
Special specifications

Cable extension	15, 20m
Material change	Impeller : SCS13 or High-chrome alloyed iron casting Base Cover : SCS13
Protector	Leakage detector

For custom specifications other than the above, please consult with us

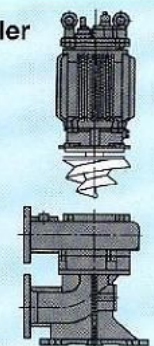
●Easy oil change

Oil discharge can be fully done at vertical position. By full pouring of oil at pouring port, adequate volume of oil can be filled. No need to inclining pump body for oil change.



●Easy maintenance for impeller

Maintenance of impeller can be execute by suspending pump after loosening 4 places of tightening nuts. Also, cleaning inside of casing can be easily to done.

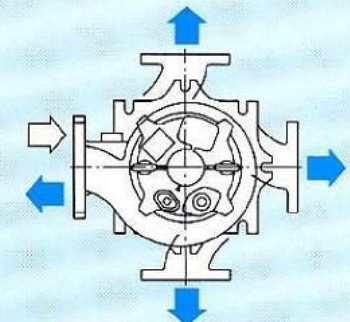


●Easy debris removal inside of suction pipe

Clogged debris inside of suction pipe can be executed from inspection port.

●Easy selection of discharge direction

Discharge direction can be selected 4 direction (by 90°).



Screw action is particularly powerful for sludge transfer.

Passage particle diameter : At least 50% of discharge bore

Screw type

CWT Series



Standard specifications

Discharge bore mm	Intake bore mm	Model	Output kW	Phase	Capacity - Total head m ³ /min-m		Poles P	Weight kg
					50Hz	60Hz		
65	80	CWT65	1.5	Three	0.65 - 7.3	0.57 - 8.9	4	130
80	100	CWT80	2.2	Three	0.79 - 8.3	0.75 - 9.6	4	205
			3.7		1.11 - 11.4	1.10 - 11.7		230
100	125	CWT100	5.5	Three	1.40 - 13.4	1.36 - 14.4	4	275
			7.5		1.70 - 15.0	1.50 - 17.2		300
150	200	CWT150	11	Three	3.0 - 11.5	2.9 - 12.3	4	550
			15		3.7 - 14.0	3.3 - 14.3		610
			22		4.0 - 16.9	3.7 - 18.1		680

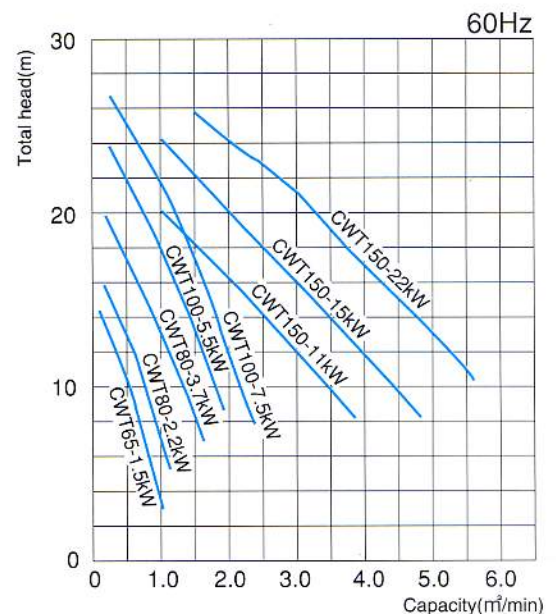
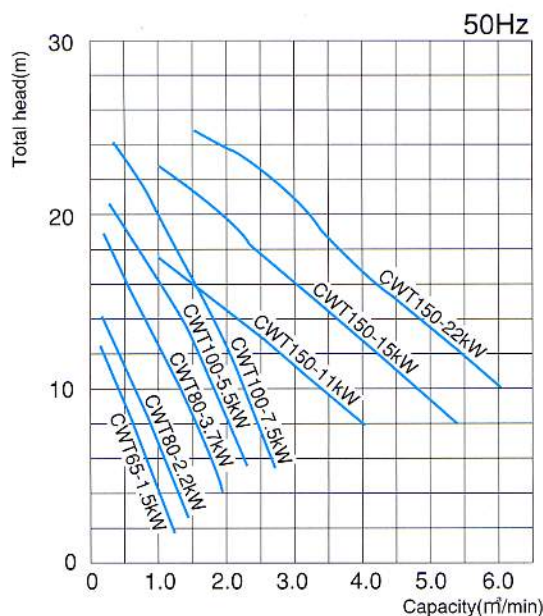
Standard accessorise

- Cable (8m) under 7.5kW 2pcs.
- Cable (8m) over 11kW 3pcs.
- Stand 1pc.
- Spare nameplate 1pc.

Cable specifications

For power supply	1.5-2.2kW	VCT	1.25mm ²	4-cores	φ 11.5
	3.7kW	VCT	2.0mm ²	4-cores	φ 12.0
	5.5kW	VCT	3.5mm ²	4-cores	φ 14.0
	7.5kW	VCT	5.5mm ²	4-cores	φ 16.5
	11kW	(2RNCT)	5.5mm ²	4-cores	φ 17.5
		(2RNCT)	5.5mm ²	4-cores	φ 16.0
	15kW	(2RNCT)	8.0mm ²	4-cores	φ 19.5
		(2RNCT)	8.0mm ²	4-cores	φ 17.5
	22kW	(2RNCT)	14.0mm ²	4-cores	φ 24.0
		(2RNCT)	14.0mm ²	4-cores	φ 24.0
For protector		2RNCT	1.25mm ²	2-cores	φ 11.5

Performance curves



Performs extremely well with sewage and soil containing foreign matter of fixed shape.

Passage particle diameter : At least 70% of discharge bore

Non-clogging type

CNT Series



Standard specifications

Discharge bore mm	Intake bore mm	Model	Output kW	Phase	Capacity - Total head m ³ /min-m		Poles P	Weight kg
					50Hz	60Hz		
65	80	CNT651	1.5	Three	0.75 - 6.5	0.65 - 7.0	4	130
80	100	CNT801	2.2	Three	0.90 - 6.7	0.84 - 7.1	4	205
			3.7		1.18 - 10.1	1.14 - 9.9		230
100	125	CNT1001	5.5	Three	1.50 - 11.6	1.49 - 11.6	4	275
			7.5		1.79 - 14.0	1.70 - 14.5		300
150	200	CNT1501	11	Three	2.5 - 15.0	2.5 - 15.2	4	550
			15		2.9 - 17.0	2.9 - 16.8		610
			22		3.5 - 21.2	3.4 - 22.7		680

Standard accessorise

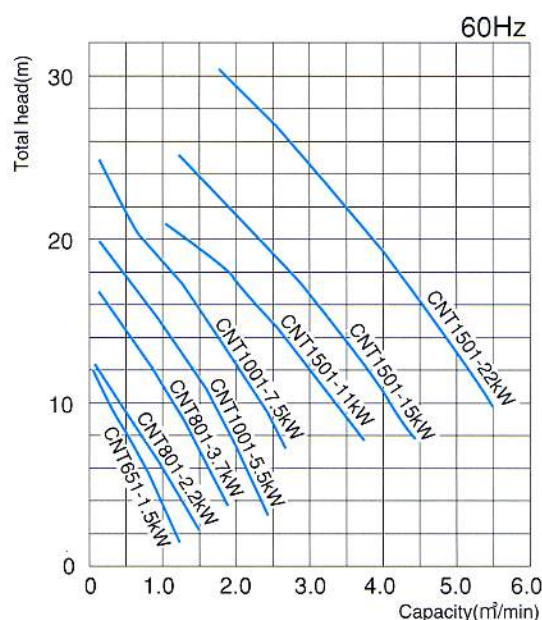
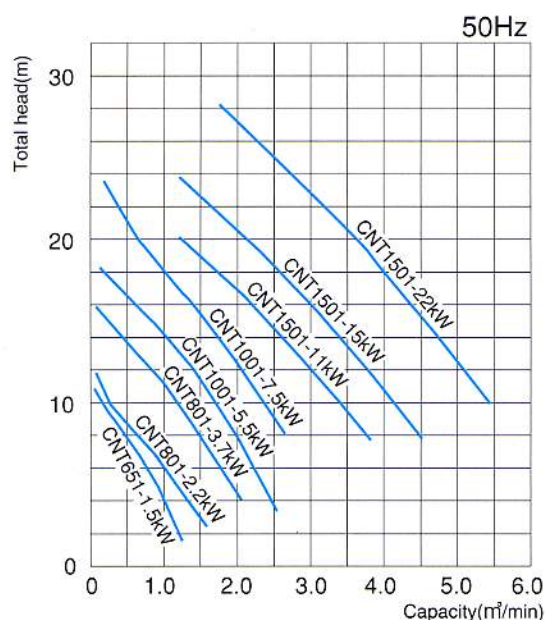
- Cable (8m) under 7.5kW 2pcs.
- Cable (8m) over 11kW 3pcs.
- Stand 1pc.
- Spare nameplate 1pc.

Cable specifications

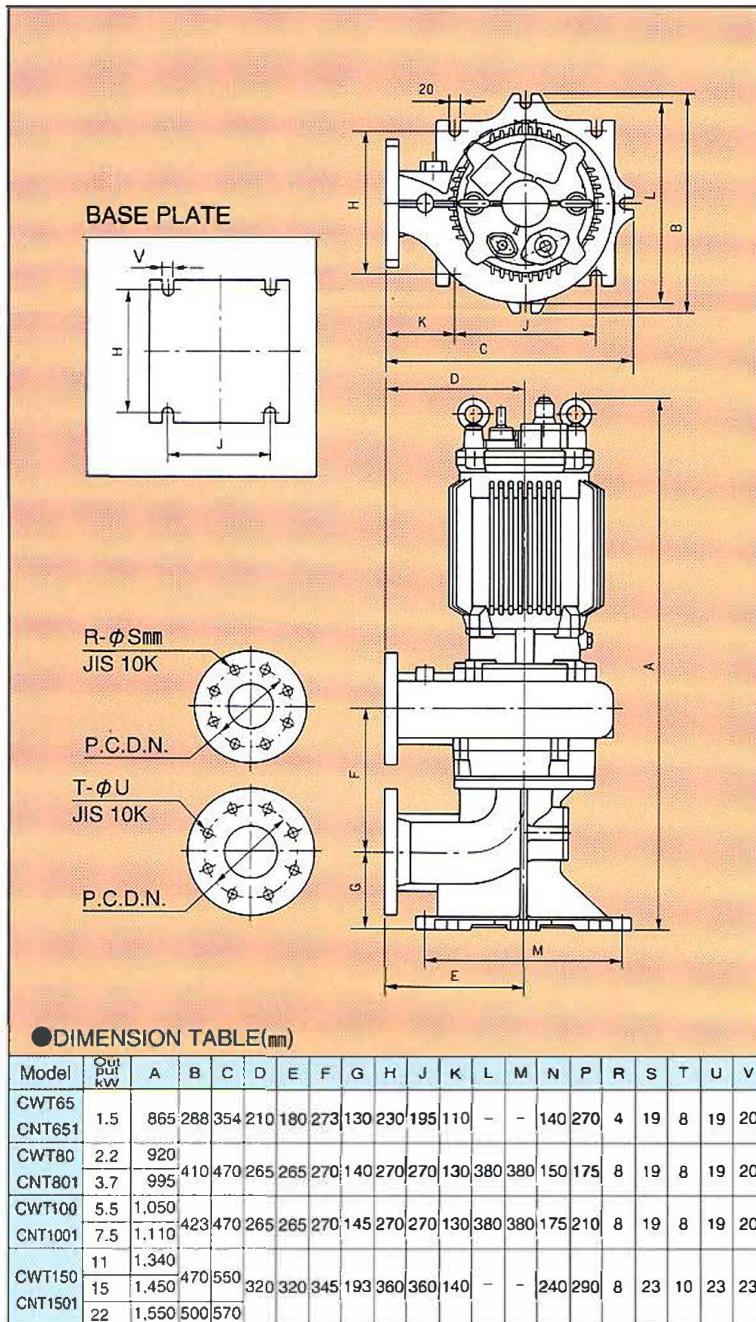
For power supply	1.5-2.2kW	VCT	1.25mm ²	4-cores	φ 11.5
	3.7kW	VCT	2.0mm ²	4-cores	φ 12.0
	5.5kW	VCT	3.5mm ²	4-cores	φ 14.0
	7.5kW	VCT	5.5mm ²	4-cores	φ 16.5
	11kW	(2RNCT	5.5mm ²	4-cores	φ 17.5
		(2RNCT	5.5mm ²	4-cores	φ 16.0
	15kW	(2RNCT	8.0mm ²	4-cores	φ 19.5
		(2RNCT	8.0mm ²	4-cores	φ 17.5
	22kW	(2RNCT	14.0mm ²	4-cores	φ 24.0
		(2RNCT	14.0mm ²	4-cores	φ 24.0

For protector 2RNCT 1.25mm² 2-cores φ 11.5

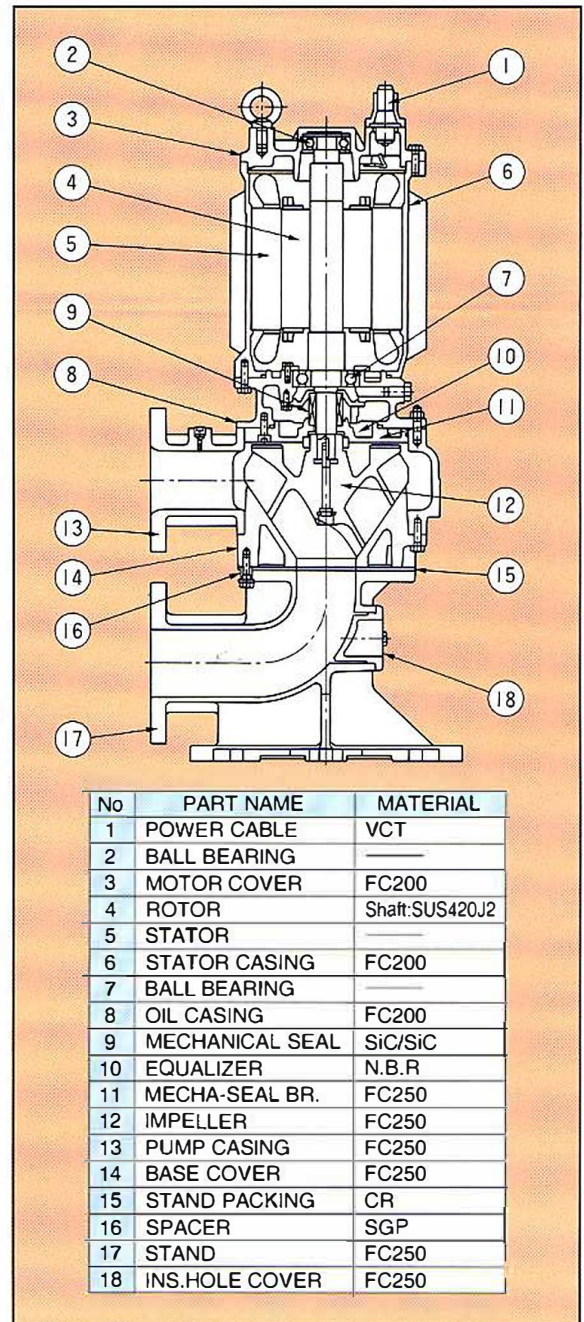
Performance curves



Dimension



Sectional View



Specifications and dimensions are subject to change without notice.

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ShinMaywa ONO PLANT

ISO 9001 (No. 966445) / ISO 14001 (No. 771886)

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