Verderhus

HSTA-100-80-A submersible screw channel pump



Description

Verderhus submersible screw centrifugal pumps combine the best features of centrifugal and submersible positive displacement pumps. They define a new standard for low-head, high-flow pumps. These pumps have a large clearance screw impeller, which gently feeds product into the pump chamber efficiently transferring into the discharge line allowing large solids to be easily pumped. The screw design impeller is ideal for high solid contents and viscous liquids. It produces a high efficiency low NPSHr pump, lowering both energy usage and operational costs, generating a lower overall cost of ownership.

Features and benefits

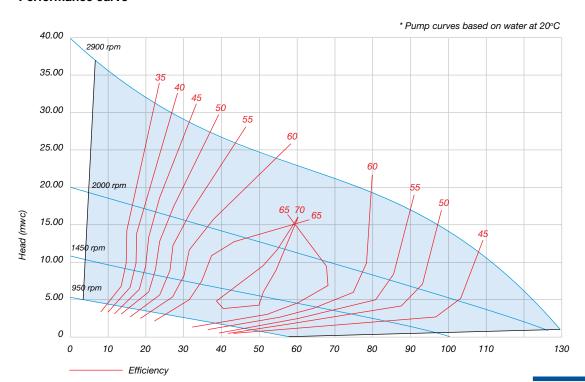
- → Large solid handling with <10% sludge, <30% slurry
- → Gentle low shear pumping action
- Reduced energy use compared to other technologies
- Low abrasive wear meaning reduced maintainance costs

Technical data

Ambient operating temperature	-20, 40 °C	
Maximum pump noise	up to 80 dB	
Maximum flow	130 m³/h	
Motor - 4 pole option	1.5 kW, 2.2 kW, 3 kW	
Minimum submergence 4 pole option (for 1.5kW and 2.2 kW, 3.0 kW)	680.5 mm	

Maximum viscosity	3000 cP
Maximum solid size	64 mm
Solid content percentage	Sludge: 10% - Slurry: 30%
Maximum head	34 mwc
Motor - 2 pole option	7.5 kW
Minimum submergence 2 pole option (for 7.5kW)	815.5 mm

Performance curve



Flow rate (m3/hr)

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Materials

Description	Material
Impeller housing/Cone	Cast Iron GG25
Impeller	Ductile Cast Iron GGG50 Hardened
Mechanical seal-product side	Silicone Carbide / Silicone Carbide/ Viton
Mechanical seal-motor side	Graphite / Ceramic / Viton
Suction Stand	Steel S275 JR
Suction Flange	DN100 PN10
Discharge flange	DN80 PN10
Motor options and overall pump weight	71 Kg for 1.5 kW, 2.2 kW, 3 kW and 107 kg for 7.5 kW
O-rings material	Nitrile (NBR)
Paint (pump-motor)	Two Pack Epoxy Paint Blue RAL 5012
Overall Pump Weight	81.5 kg for pump with 1.5 kW and 2.2 kW motor 107 kg for pump with 7.5 kW motor

Spares



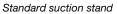
Standard impeller kit



Standard Seal kit

Accessories







Standard auto-coupling

Ordering Spares and Accessories

Pump model	Part number			
	Standard impeller kit	Standard seal kit	Standard suction stand	Standard auto-coupling
HSTA 100-80-A (for up to 3 kW motor options)	381.000053	381.000042	381.000060	381.000063
HSTA 100-80-A (for motor option with 7 kW and over)	381.000053	381.000043	381.000060	381.000063

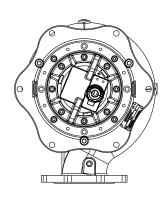
^{**}Please note above images are for illustration purposes only

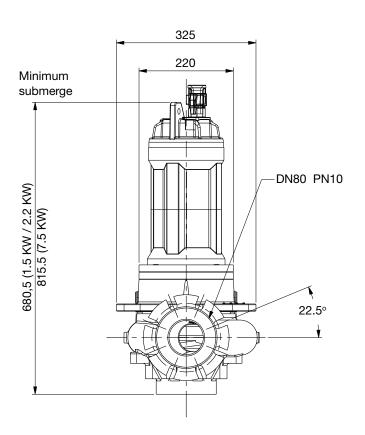
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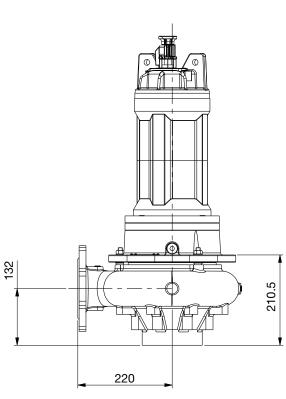
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Dimensions







All dimensions are in mm.

All dimensions are for guidance only.





