



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.

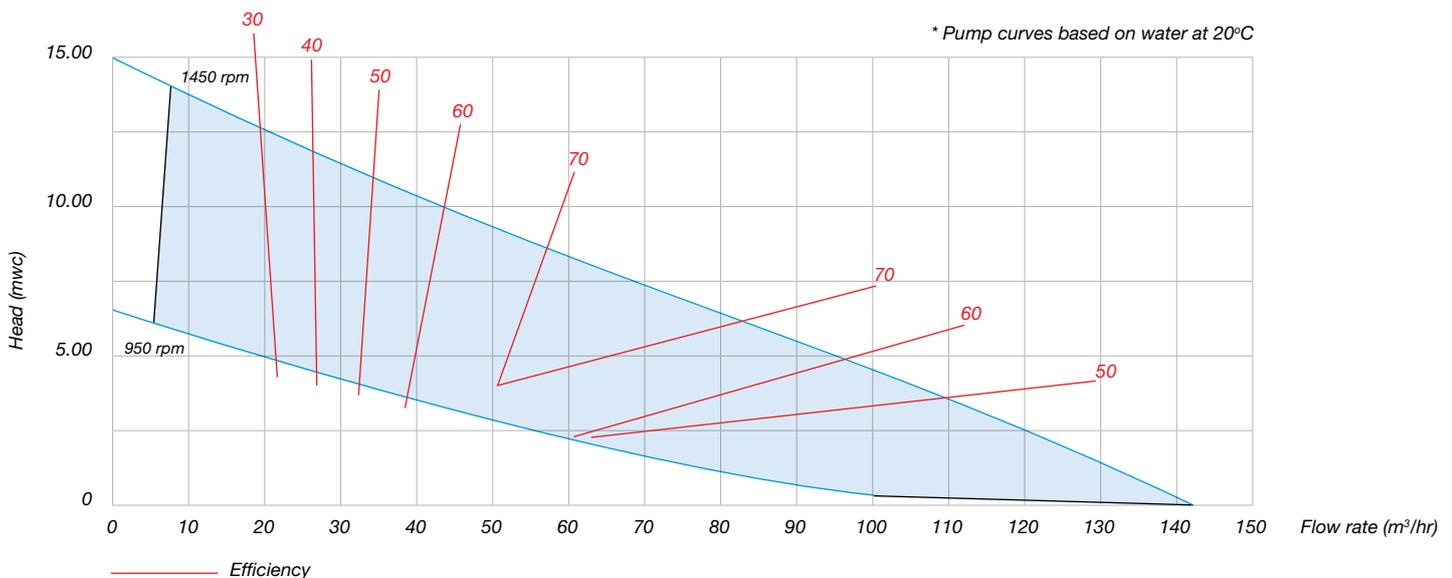
Features and benefits

- 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 viscosity	3000 cP
Maximum pump noise	up to 75 dB	Maximum solid size	80 mm
Maximum flow	140m ³ /h	Solid content percentage	Sludge: 10% - Slurry: 30%
Motor - 4 pole option	3.0 kW, 4.0 kW, 5.5 kW, 7.5 kW	Maximum head	13 mwc
		Minimum submergence	784 mm for 3.0 kW, 869 mm for 4.0 kW, 5.5 kW, 7.5 kW

Performance curve





Materials

Description	Material
Impeller housing/Cone	Cast Iron GG25
Impeller	Ductile Cast Iron GGG50 Hardened
Mechanical seal-product side	Silicone Carbide / Viton
Mechanical seal-motor side	Carbon / Ceramic / Viton
Suction Flange	DN100 PN10
Discharge flange	DN100 PN10
O-rings material	Nitrile
Motor options and overall pump weight	82 kg (3.0 kW), 109 kg (4.0 kW, 5.5 kW, 7.5 kW)
Paint (pump-motor)	Two Pack Epoxy Paint Blue RAL 5012

Spares



Standard impeller kit



Standard Seal kit



Standard suction stand



Standard auto-coupling

***Please note above images are for illustration purposes only*

Accessories

Ordering Spares and Accessories

Pump model	Part number			
	Standard impeller kit	Standard seal kit	Standard suction stand	Standard auto-coupling
HSTA 100-100 A for 3.0 kW motor	381.000055	381.000046	381.000060	381.000064
HSTA 100-100 A for 4.0 kW, 5.5 kW, 7.5 kW motor	381.000055	381.000047	381.000060	381.000064



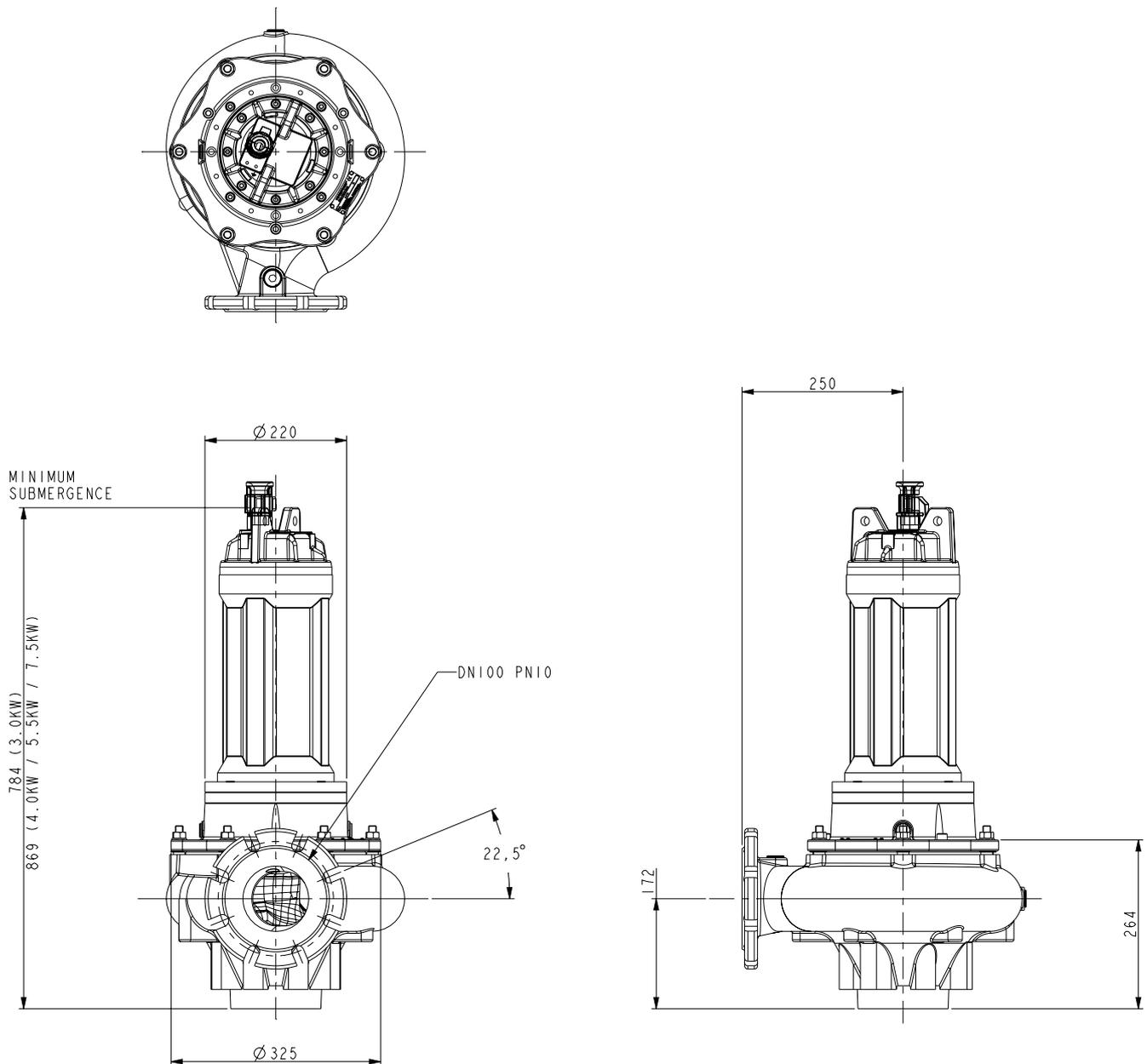
Verderhus

HSTA-100-100 A submersible screw channel pump



VERDERHUS®

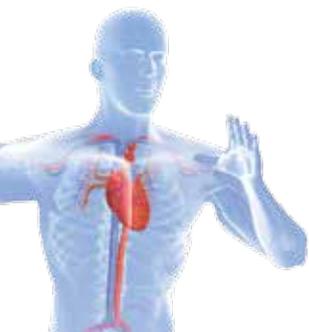
Dimensions



All dimensions are in mm.

All dimensions and weights are for guidance only.

VH_HSB_100_100_A_Techmosheet_rev01_2017_(eu)



Find your local supplier at www.verderhus.com

For construction, installation and floor mounting drawings please contact your local authorised Verderhus® distributor.

VERDER
passion for pumps