

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.

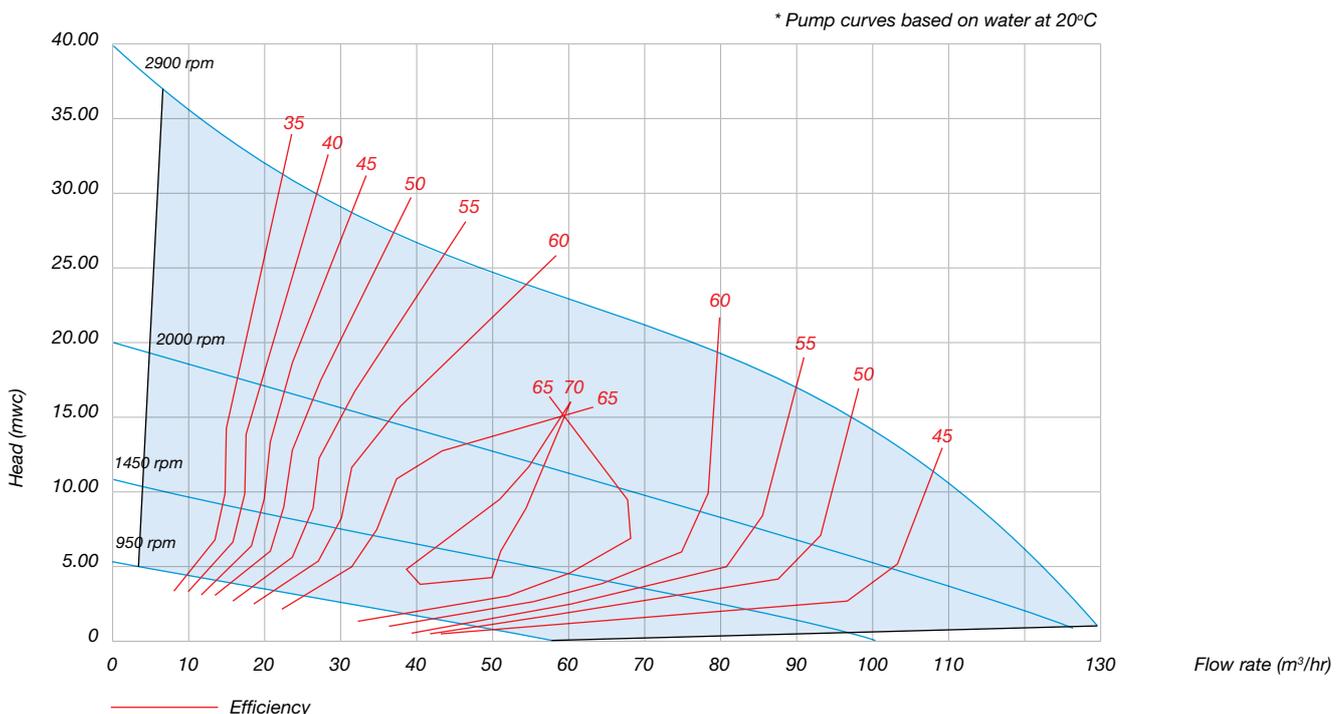
Features and benefits

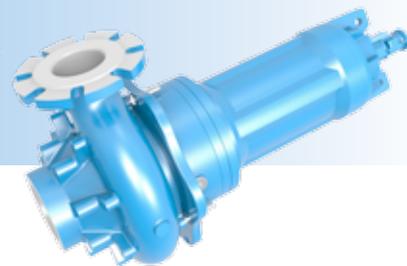
- Large solid handling with <10% sludge, <30% slurry
- Gentle low shear pumping action
- Reduced energy use compared to other technologies
- Low abrasive wear meaning reduced maintenance costs

Technical data

Ambient operating temperature	-20, 40 °C	Maximum viscosity	3000 cP
Maximum pump noise	up to 70 dB	Maximum solid size	64 mm
Maximum flow	130 m ³ /h	Solid content percentage	Sludge: 10% - Slurry: 30%
Motor - 4 pole option	1.5 kW, 2.2 kW, 3.0 kW, 4.0 kW, 5.5 kW, 7.5 kW	Maximum head	37 mwc
		Motor - 2 pole option	7.5 kW
		Minimum submergence	680,5 mm for 1.5 kW, 2.2 kW, 3.0 kW (2 and 4 pole) 815,5 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	DN80 PN10
Motor options and overall pump weight	76 kg (1.5 kW / 2.2 kW / 3.0 kW), 102 kg (4.0 kW / 5.5 kW / 7.5 kW)
O-rings material	Nitrile (NBR)
Paint (pump-motor)	Two Pack Epoxy Paint Blue RAL5012

Spares



Standard impeller kit



Standard Seal kit

Accessories



Standard suction stand



Standard auto-coupling

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

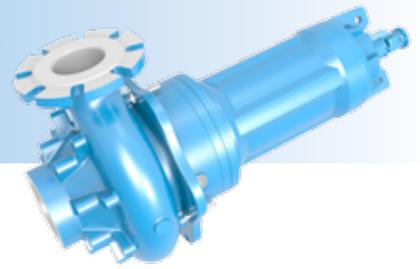
Ordering Spares and Accessories

Pump model	Part number			
	Standard impeller kit	Standard seal kit	Standard suction stand	Standard auto-coupling
HSTA 100-80-B For motor upto 3 kW	381.000054	381.000044	381.000060	381.000063
HSTA 100-80-B For motor 4 kW up to 7.5 kW	381.000054	381.000045	381.000060	381.000063



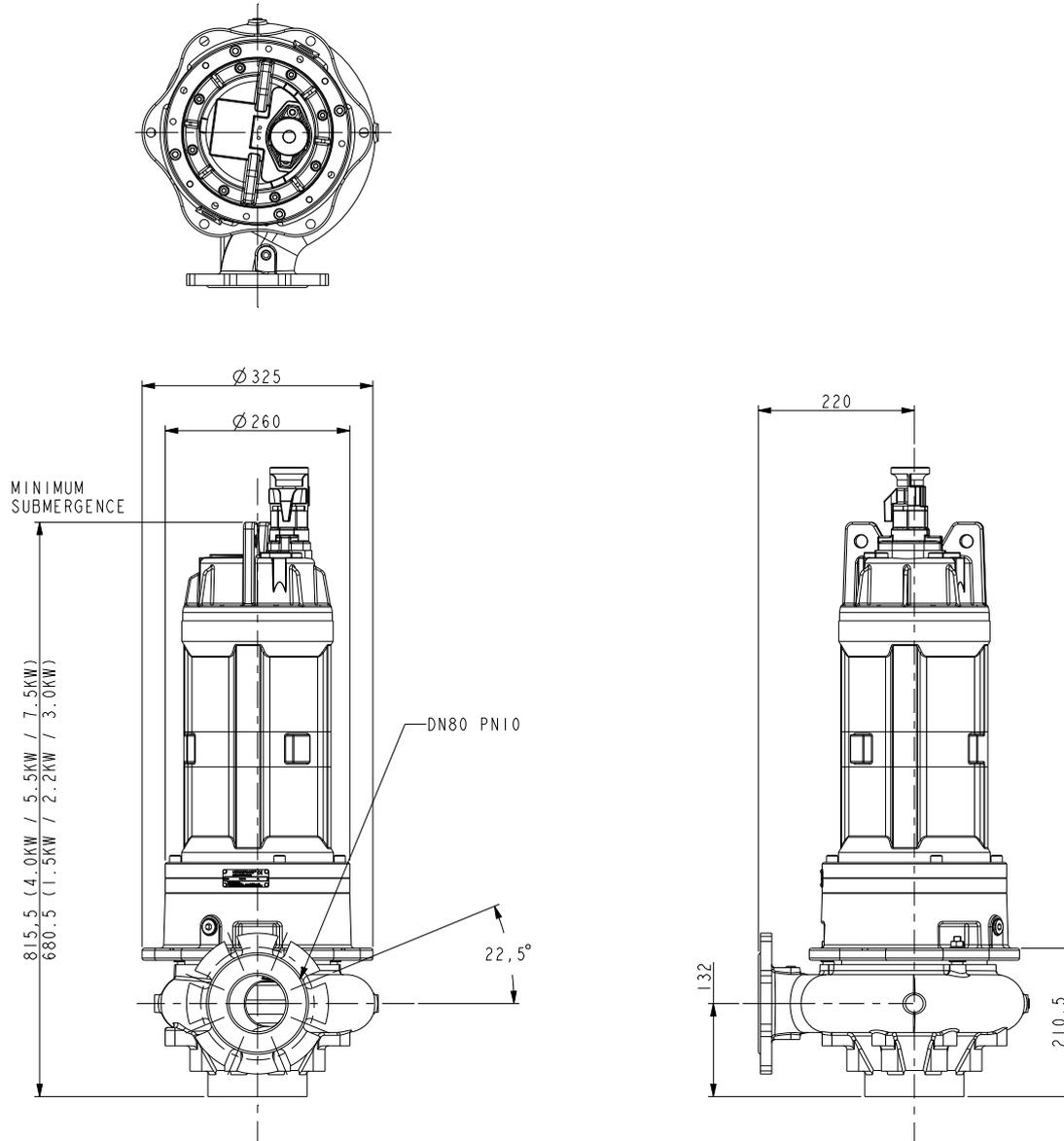
Verderhus

HSTA-100-80 B submersible screw channel pump



VERDERHUS®

Dimensions



All dimensions are in mm.

All dimensions are for guidance only.

VH_HSTA_100_80_B_Technosheet_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