



Description

Verderhus screw centrifugal pumps combine the best features of centrifugal and positive displacement pumps. They define a new standard for low head, high flow pumps. The Verderhus pumps have a large clearance screw impeller, which gently feeds product into the pump chamber. This allows the product to be efficiently transferred into the discharge line and allows for 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.

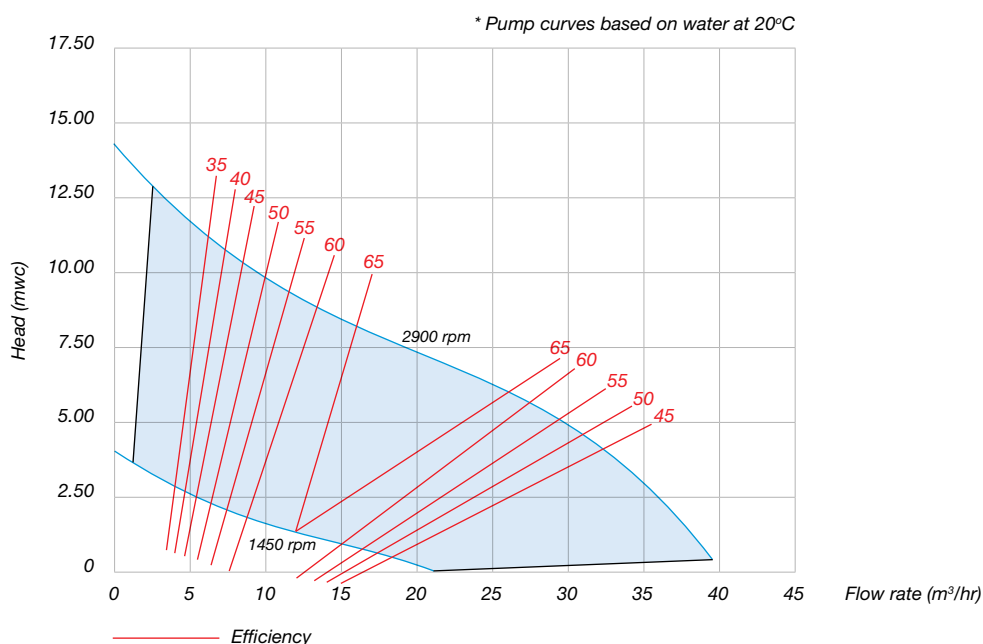
Features and benefits

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

Technical data

Ambient operating temperature	-5, 40 °C	Max viscosity	3000 cP
Fluid temperature	-20, 100 °C	Maximum solid size (pump specific)	40 mm
Maximum pump noise	up to 68 dB	Solid content percentage	sludge: 10% - slurry: 30%
Max. flows	40 m ³ /h	Max. head (Range specific)	13 mwc

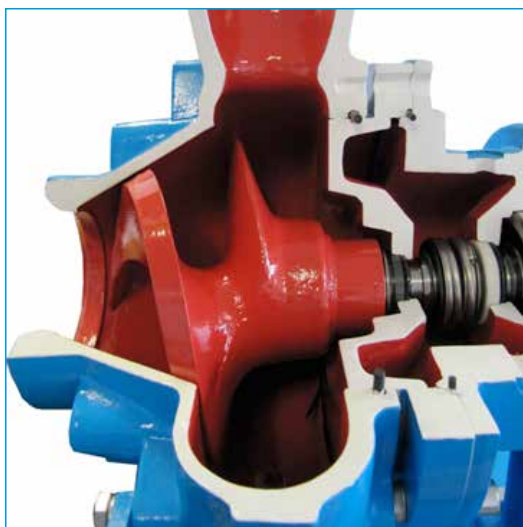
Performance curve





Materials

Description	Material
Impeller housing/Cone	Standard: Cast Iron GG25 Options: Stainless Steel 1.4408/Tufftride Hardened
Impeller	Standard: Ductile Cast Iron GGG50 Options: Stainless Steel 1.4408/Tufftride Hardened
Bearing housing	Standard: Cast Iron GG25
Transition flange	Standard: Cast Iron GG25
Drive shaft	Standard: Stainless Steel 1.4021 (AISI 420) Options: Stainless Steel 1.4435 (AISI 316L)
Bearing	Standard: Single Row Deep Groove Ball Race-Sealed for Life
Mechanical seal-product side	Standard: MG1-G4-Silicon Carbide/Silicon Carbide/VITON
Mechanical seal-motor side	Standard: MG1-G4-Carbon/Ceramic/NBR
Mounting frame	Standard: Steel S275 JR
Suction flange	DN50 PN10
Discharge flange	2" BSP,F
Lubrication options	Standard: RENOLIN CLP GEAR OIL 150
Motor options and overall pump weight (WEG W22 IE3 motors)	With IEC80 Motor: 38 Kg With IEC90 Motor: 43 Kg With IEC100 Motor: 64 Kg With IEC112 Motor: 71 Kg
O-rings material	Standard: Nitrile (NBR)
Paint (pump-motor)	Standard: Two Pack Epoxy Paint-Blue RAL 5012
Paint (mounting frames)	Standard: Powder Coated-Black RAL 7021



Sectional view of Impeller Housing Assembly



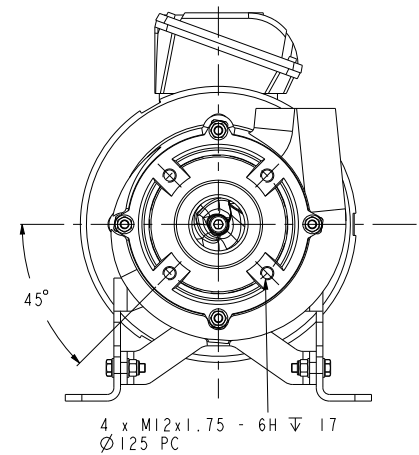
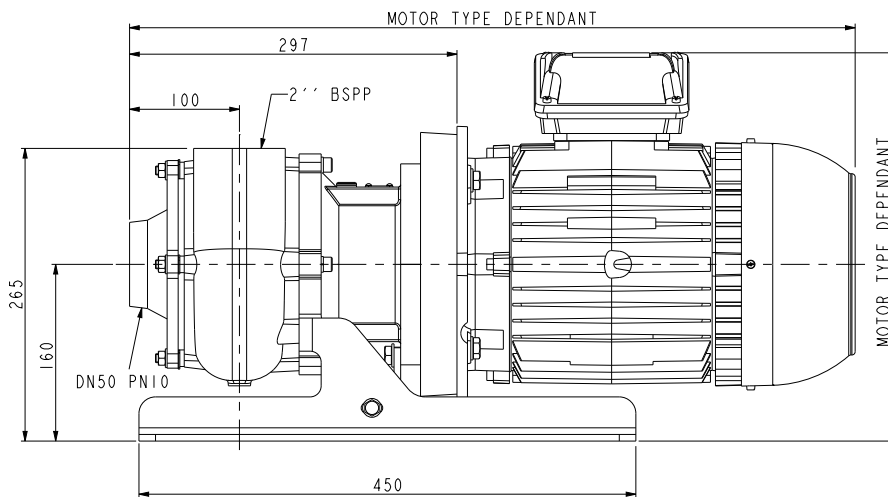
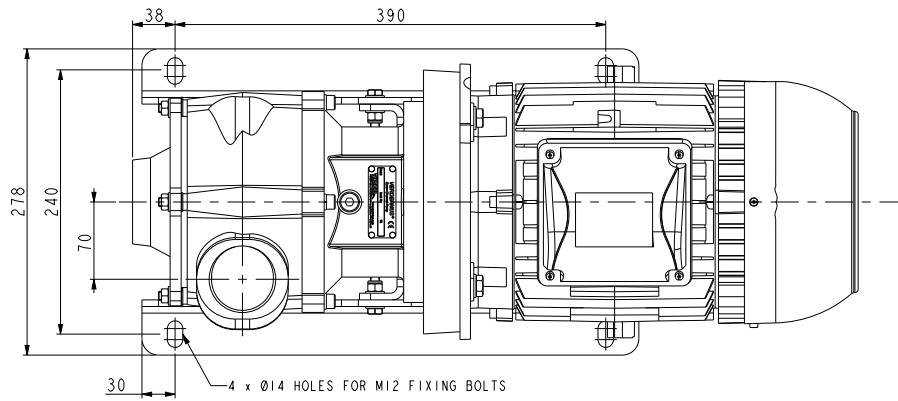
Verderhus

HSB-50-50-A



VERDERHUS®

Dimensions



All dimensions are in mm.

All dimensions and weights are for guidance only.

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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