

# Verderhus

## HSB-100-80-A



### 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 viscuous liquids. It produces a high efficiency, low NPSHr pump, lowering both energy usage and operational costs, generating a lower overall cost of ownership.

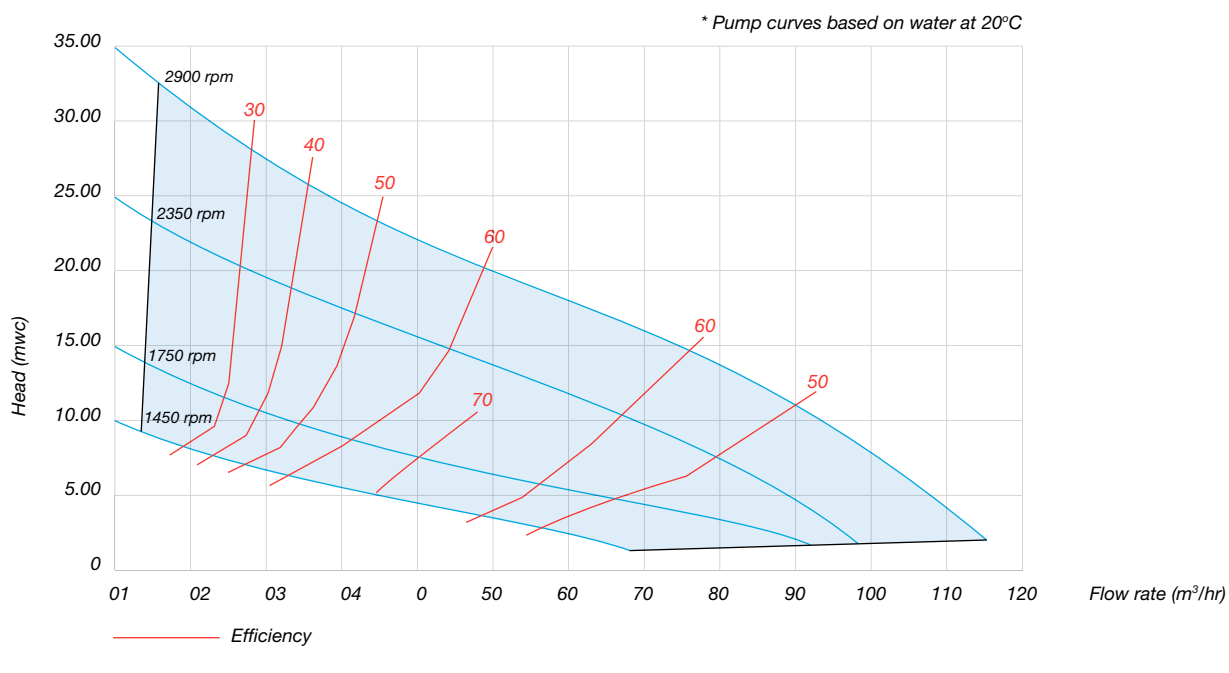
### Features and benefits

- 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	64 mm
Maximum pump noise	up to 70 dB	Solid content percentage	Sludge: 10% - Slurry: 30%
Max. flows	115 m <sup>3</sup> /h	Max. head	34 mwc

### Performance curve



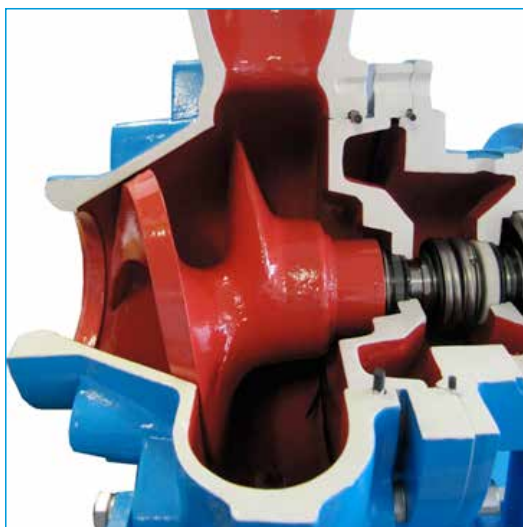
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### Materials

Description	Material
Impeller housing/Cone	Standard: Cast Iron GG25 Options: <i>Stainless Steel 1.4408/Tufftride Hardened</i>
Impeller	Standard: Ductile Cast Iron GGG50 Options: <i>Stainless Steel 1.4408 Tufftride Hardened</i>
Bearing housing	Standard: Cast Iron GG25
Transition flange	Standard: Cast Iron GG25
Drive shaft	Standard: Stainless Steel 1.4021 (AISI 420) Options: <i>Stainless Steel 1.4435 (AISI 316L)</i>
Bearing	Standard: Double Row Angular Contact Ball-Sealed for Life
Mechanical seal-product side	Standard: MG1-G4-Silicon Carbide/Silicone Carbide/VITON
Mechanical seal-motor side	Standard: MG1-G4-Carbon/Ceramic/NBR
Mounting frame	Standard: Steel S275 JR
Suction flange	DN100 PN10
Discharge flange	DN80 PN10
Lubrication options	Standard: RENOLIN CLP GEAL OIL 150
Motor options and overall pump weight	With IEC90 Motor: 77 Kg, With IEC100 Motor: 94 Kg, With IEC112 Motor: 118 Kg, With IEC132 Motor: 168 Kg, With IEC160 Motor: 202 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



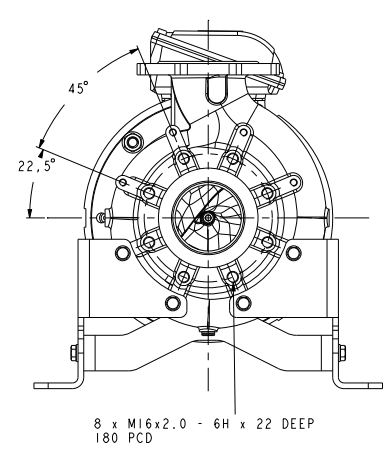
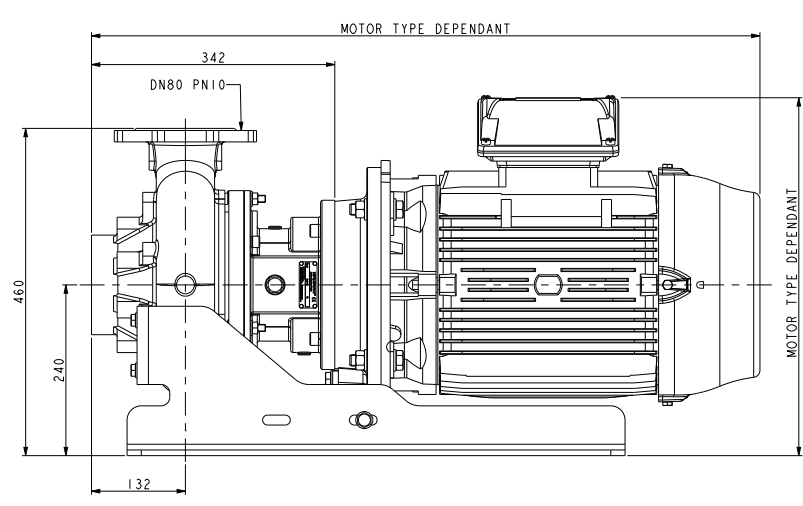
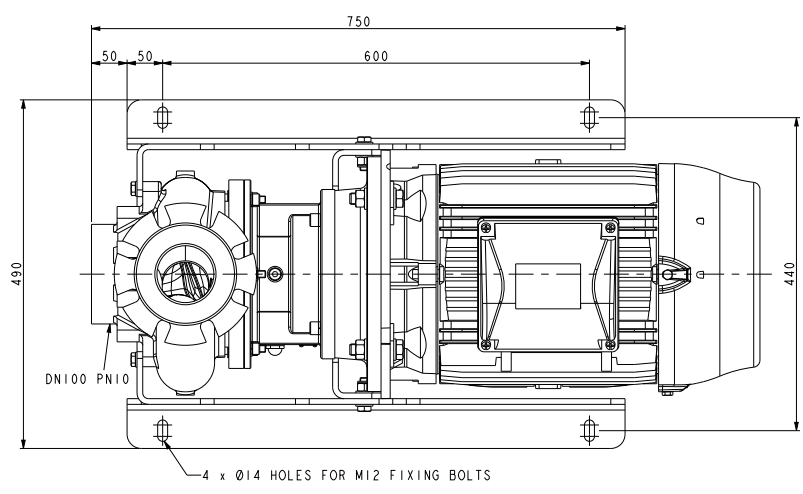
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VERDERHUS®

### 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](http://www.verderhus.com)

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

**VERDER**  
passion for pumps