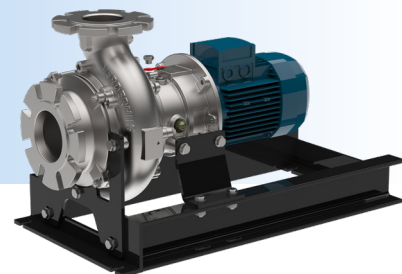


# Verderhus Stainless Steel

## HSB-100-80-B



VERDERHUS®

### Description

Verderhus stainless steel 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.

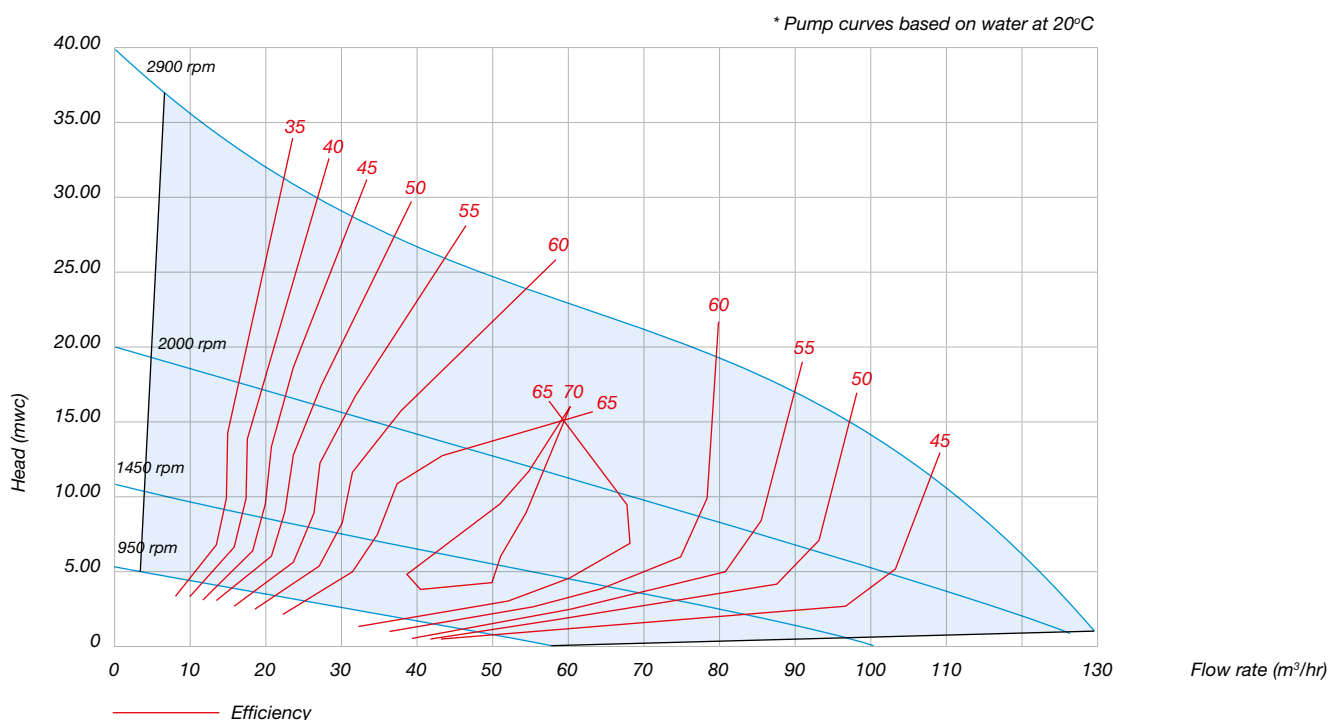
### Features and benefits

- 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
- Corrosion resistant stainless steel for aggressive chemical handling

### Technical data

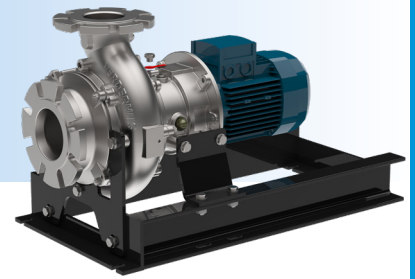
|                               |                       |                          |                           |
|-------------------------------|-----------------------|--------------------------|---------------------------|
| Ambient operating temperature | -5, 40 °C             | Max viscosity            | 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                    | 130 m <sup>3</sup> /h | Max. head                | 37 mwc                    |

### Performance curve



# Verderhus Stainless Steel

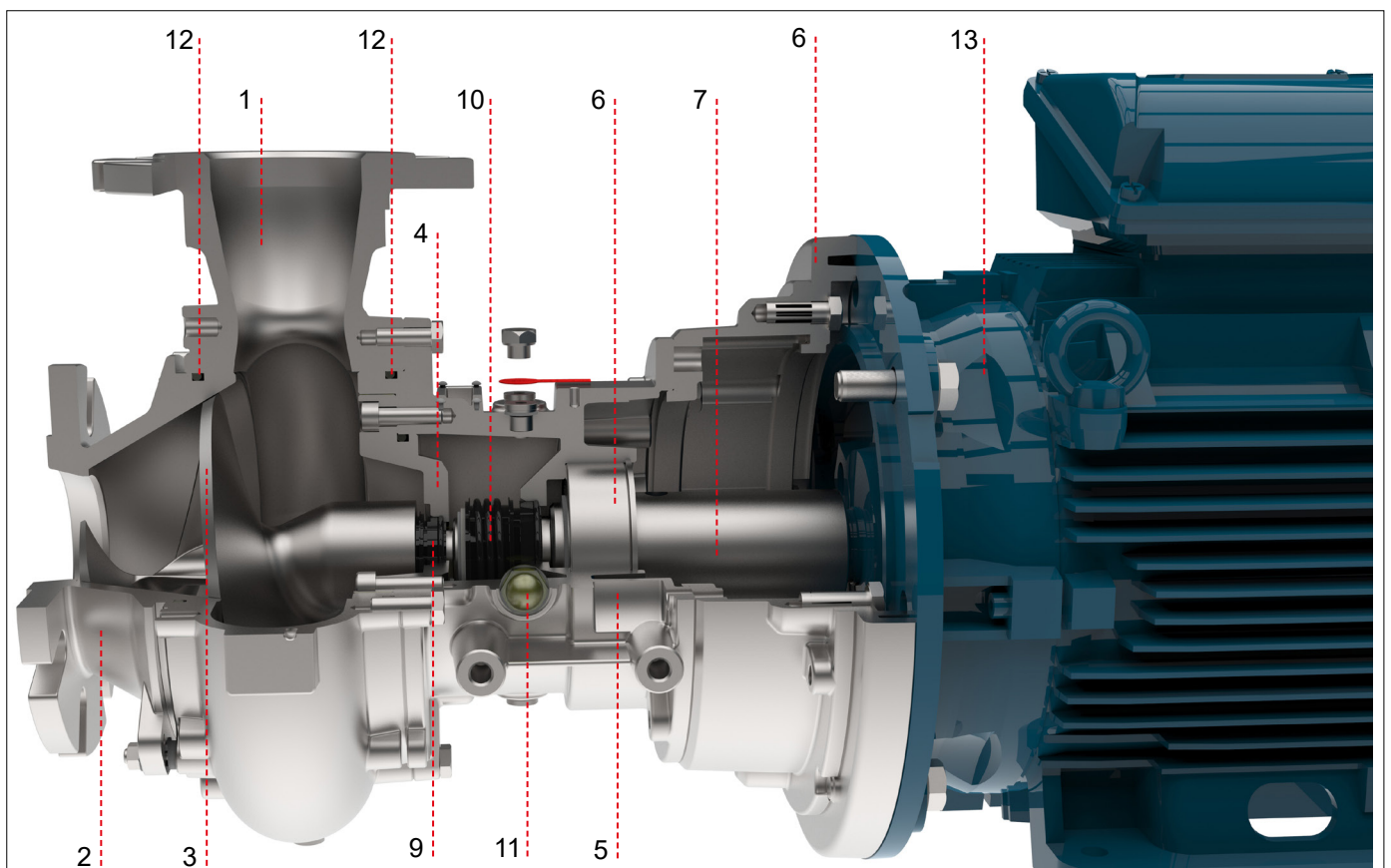
## HSB-100-80-B



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| Item No. | Description  | Standard Materials / Dimensions  |
|----------|--|--|
| 1        | Impeller housing/Cone*                                     | Stainless Steel 1.4408 (316) (Nitrided)  |
|          | Suction flange   | DN100 PN10   |
|          | Discharge flange   | DN80 PN10  |
| 2        | Intake Socket*   | Stainless Steel 1.4408 (316) (Nitrided)  |
| 3        | Impeller*  | Stainless Steel 1.4408 (316) (Nitrided)  |
| 4        | Cooling Flange*  | Stainless Steel 1.4408 (316) (Nitrided)  |
| 5        | Bearing housing*   | Stainless Steel 1.4408 (316) (Nitrided)  |
| 6        | Transition flange  | Stainless Steel 1.4408 (316)   |
| 7        | Drive shaft  | Stainless Steel 1.4435 (AISI 316L)   |
| 8        | Bearing  | Single Row Deep Groove Ball Race-Sealed for Life   |
| 9        | Mechanical seal-product side                               | Silicon Carbide/Silicon Carbide/VITON  |
| 10       | Mechanical seal-motor side                                 | Carbon/Ceramic/NBR   |
| 11       | Oil Chamber  | Industrial gear oil 150  |
| 12       | O-rings material   | FPM  |
| 13       | Motor options and overall pump weight (WEG W22 IE3 motors) | With IEC100 Motor: 122 Kg    With IEC112 Motor: 127 Kg<br>With IEC132 Motor: 170 Kg    With IEC160 Motor: 220 Kg |
|          | Mounting frame   | Steel S275 JR  |

\* Impeller housing, Intake socket, Impellers, Bearing housing and Cooling flange will now be Nitrided as standard to increase wear resistance and surface hardness.

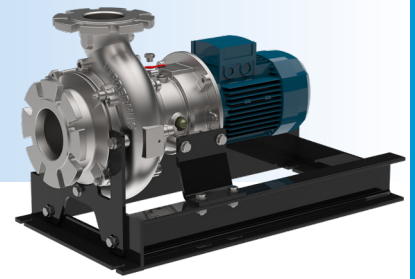


Sectional view of Impeller Housing Assembly



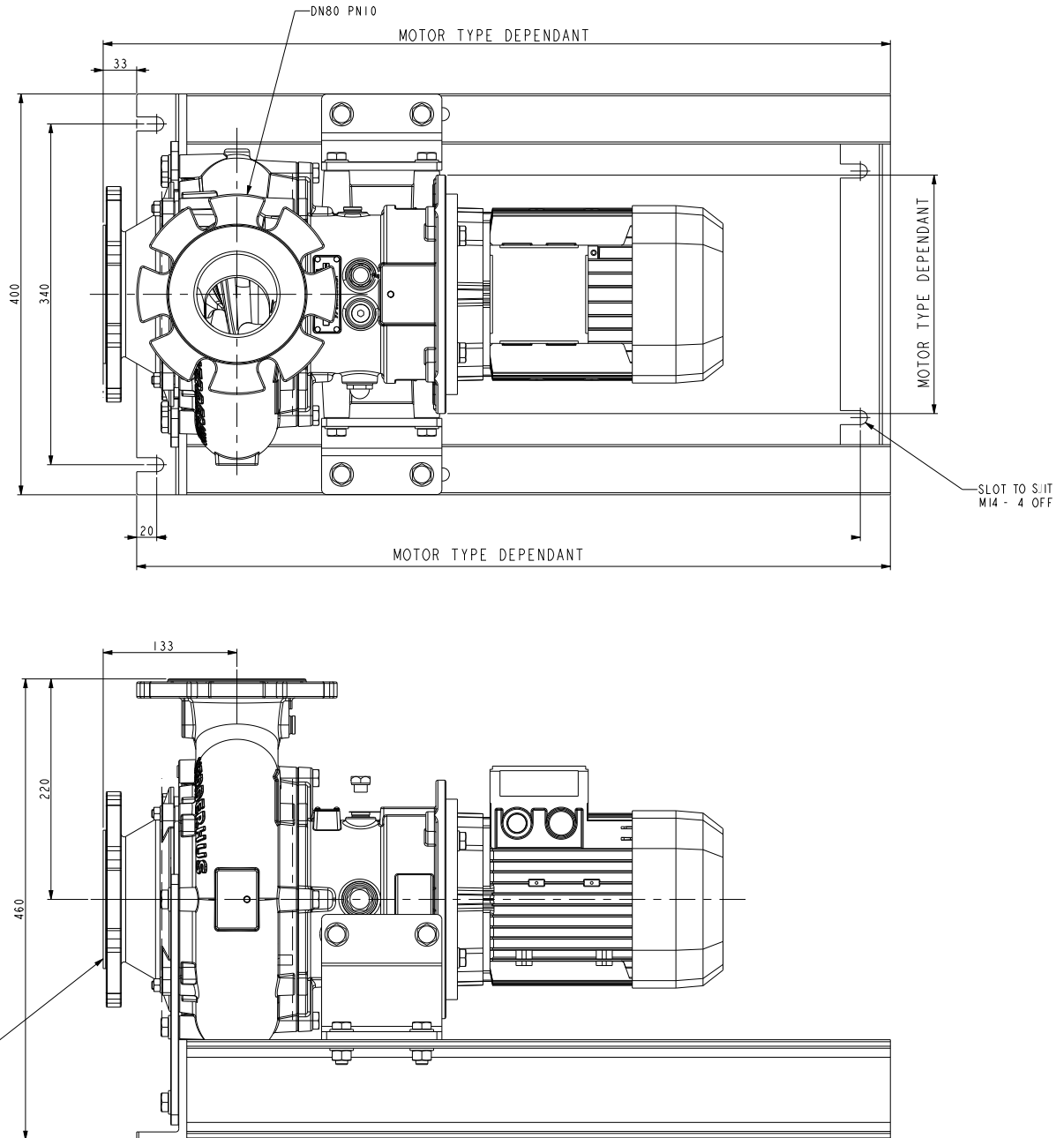
# Verderhus Stainless Steel

## HSB-100-80-B



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### Dimensions



All dimensions are in mm.

All dimensions and weights are for guidance only.

Your local supplier:

# Lobe

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DK 6580 Vamdrup  
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**Norge**  
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