HSB-150-100-A



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 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
- Corrosion resistant stainless steel for aggressive chemical handling

Technical data

| Ambient operating temperature | -5, 40 °C |
|-------------------------------|-------------|
| Fluid temperature | -20, 100 °C |
| Maximum pump noise | up to 75 dB |
| Max. flows | 300 m³/h |

| Max viscosity | 3000 cP |
|--------------------------|---------------------------|
| Maximum solid size | 80 mm |
| Solid content percentage | Sludge: 10% - Slurry: 30% |
| Max. head | 22 mwc |



HSB-150-100-A

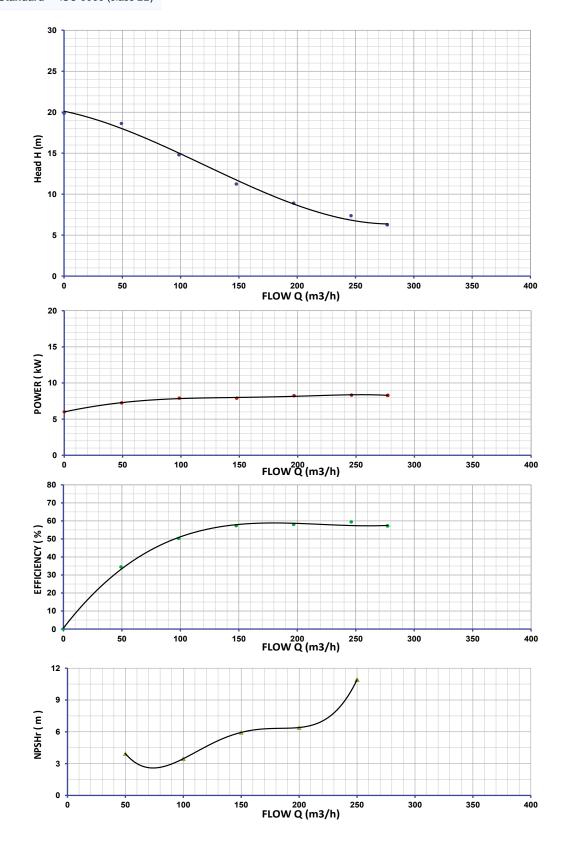
Performance curve

 Pump Type
 150-100 A

 Speed
 1450

Test Standard ISO 9906 (class 2B)



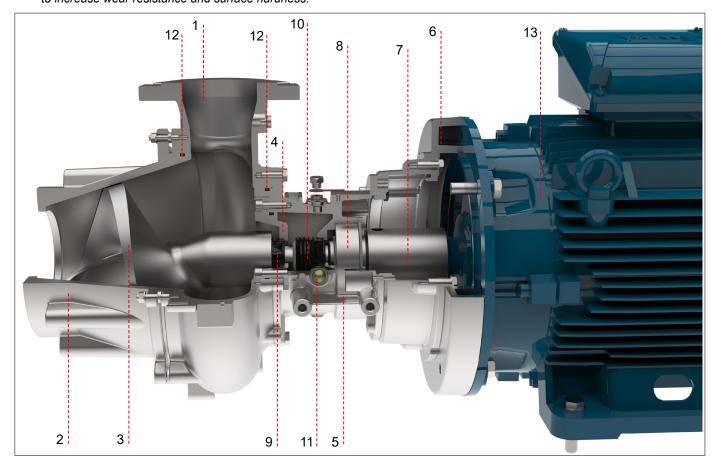


HSB-150-100-A



| Item No. | Description | Standard Materials / Dimensions |
|----------|--|---|
| 1 | Impeller housing/Cone* | Stainless Steel 1.4408 (316) (Nitrided) |
| | Suction flange | DN150 PN10 |
| | Discharge flange | DN100 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 IEC132 Motor: 248 Kg With IEC160 Motor: 387 Kg |
| | Mounting frame | Steel S275 JR |

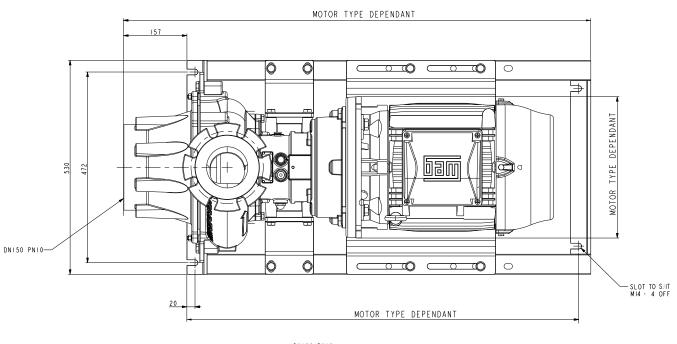
^{*} Impeller housing, Intake socket, Impellers, Bearing housing and Cooling flange will now be Nitrided as standard to increase wear resistance and surface hardness.

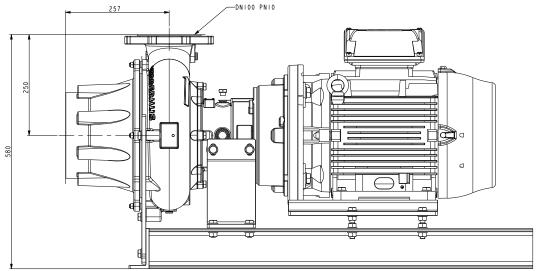


HSB-150-100-A



Dimensions

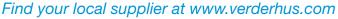




All dimensions are in mm.

All dimensions and weights are for guidance only.









HSB-150-100-B



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 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
- Corrosion resistant stainless steel for aggressive chemical handling

Technical data

| Ambient operating temperature | -5, 40 °C |
|-------------------------------|-------------|
| Fluid temperature | -20, 100 °C |
| Maximum pump noise | up to 75 dB |
| Max. flows | 360 m³/h |

| Max viscosity | 3000 cP |
|--------------------------|---------------------------|
| Maximum solid size | 80 mm |
| Solid content percentage | Sludge: 10% - Slurry: 30% |
| Max. head | 23 mwc |



HSB-150-100-B

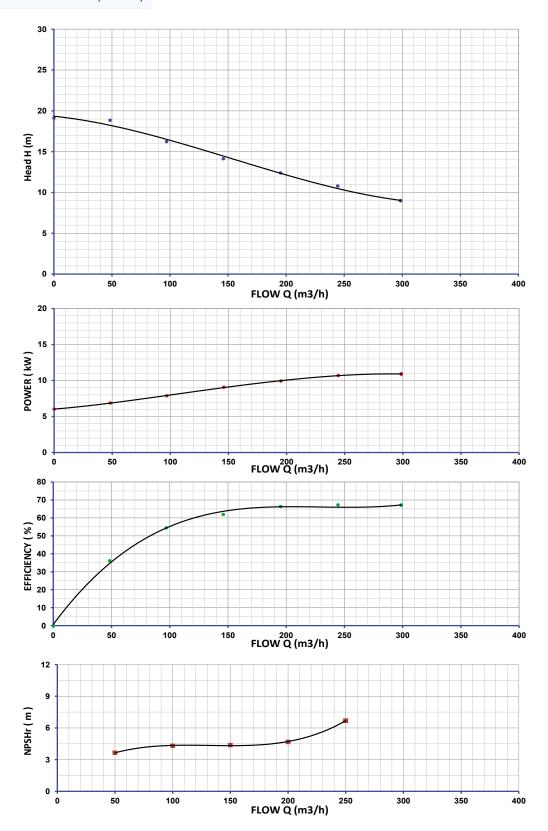
Performance curve

 Pump Type
 150-100 B

 Speed
 1450

Test Standard ISO 9906 (class 2B)



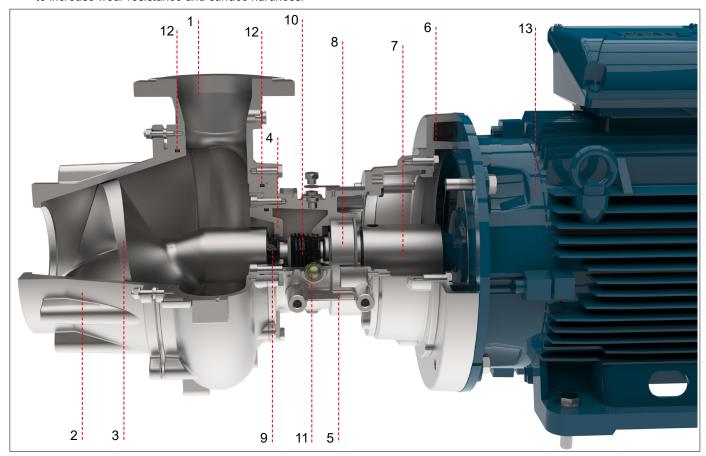


HSB-150-100-B



| Item No. | Description | Standard Materials / Dimensions |
|----------|--|---|
| 1 | Impeller housing/Cone* | Stainless Steel 1.4408 (316) (Nitrided) |
| | Suction flange | DN150 PN10 |
| | Discharge flange | DN100 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 IEC132 Motor: 248 Kg With IEC160 Motor: 387 Kg With IEC180 Motor: 450 Kg |
| | Mounting frame | Steel S275 JR |

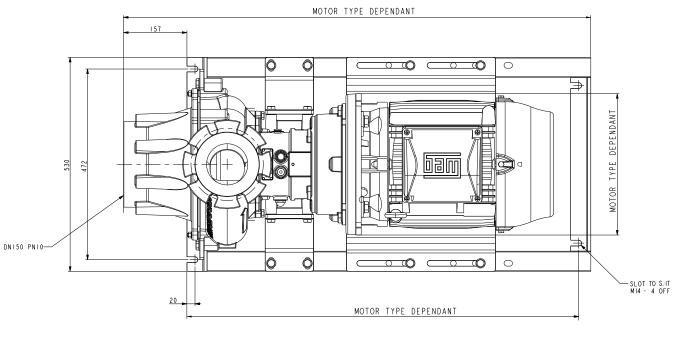
^{*} Impeller housing, Intake socket, Impellers, Bearing housing and Cooling flange will now be Nitrided as standard to increase wear resistance and surface hardness.

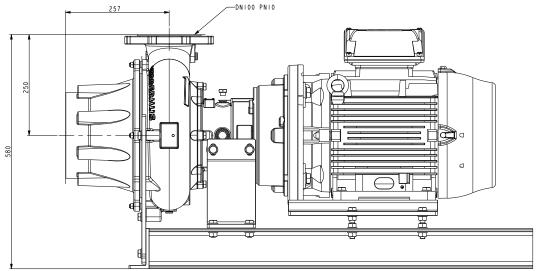


HSB-150-100-B



Dimensions



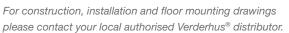


All dimensions are in mm.

All dimensions and weights are for guidance only.









HSB-150-100-C



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 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
- Corrosion resistant stainless steel for aggressive chemical handling

Technical data

| Ambient operating temperature | -5, 40 °C |
|-------------------------------|-------------|
| Fluid temperature | -20, 100 °C |
| Maximum pump noise | up to 75 dB |
| Max. flows | 360 m³/h |

| Max viscosity | 3000 cP |
|--------------------------|---------------------------|
| Maximum solid size | 80 mm |
| Solid content percentage | Sludge: 10% - Slurry: 30% |
| Max. head | 24 mwc |



HSB-150-100-C

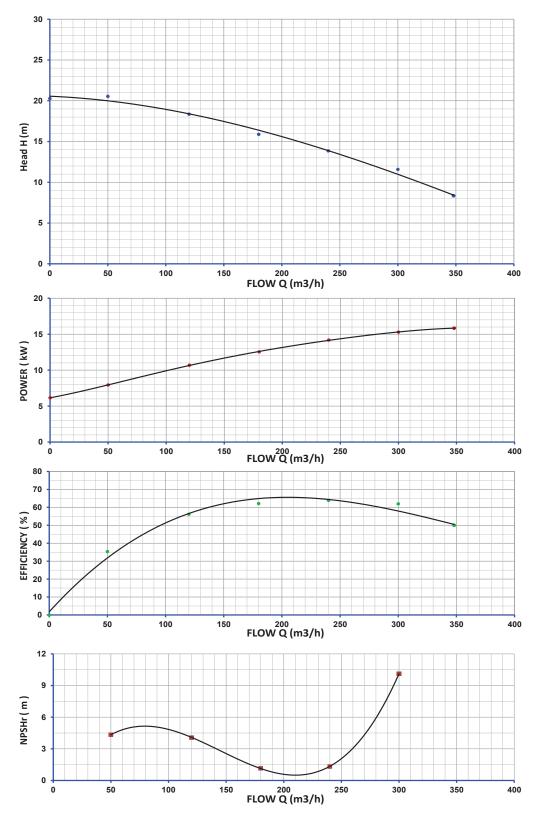
Performance curve

 Pump Type
 150-100 C

 Speed
 1450

Test Standard ISO 9906 (class 2B)



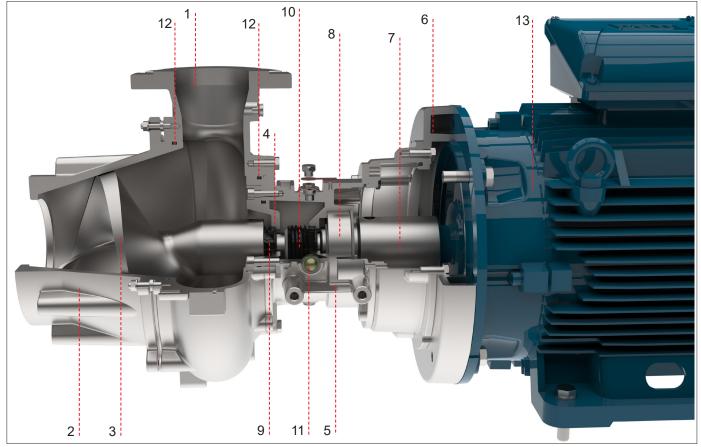


HSB-150-100-C



| Item No. | Description | Standard Materials / Dimensions |
|----------|--|---|
| 1 | Impeller housing/Cone* | Stainless Steel 1.4408 (316) (Nitrided) |
| | Suction flange | DN150 PN10 |
| | Discharge flange | DN100 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 IEC132 Motor: 248 Kg With IEC160 Motor: 387 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.



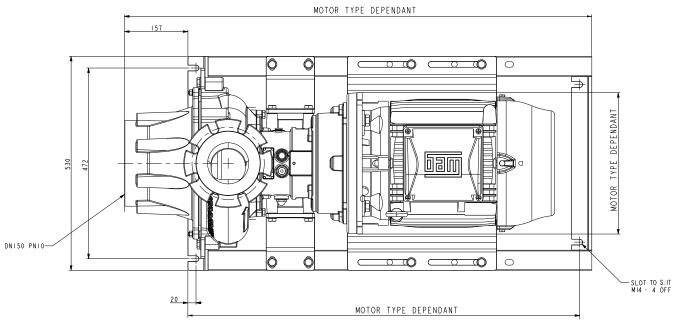
Sectional view of Impeller Housing Assembly

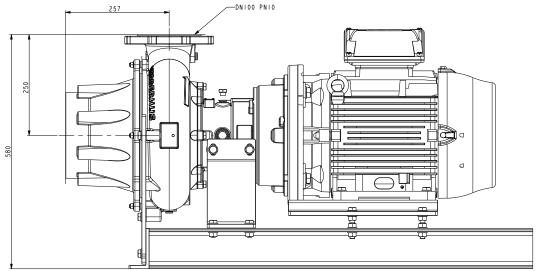


HSB-150-100-C



Dimensions





All dimensions are in mm.

All dimensions and weights are for guidance only.





