

**Innovative
coolant pump
for rail and
wind power**

speck | 

SR032125-01

Coolant pump with canned motor

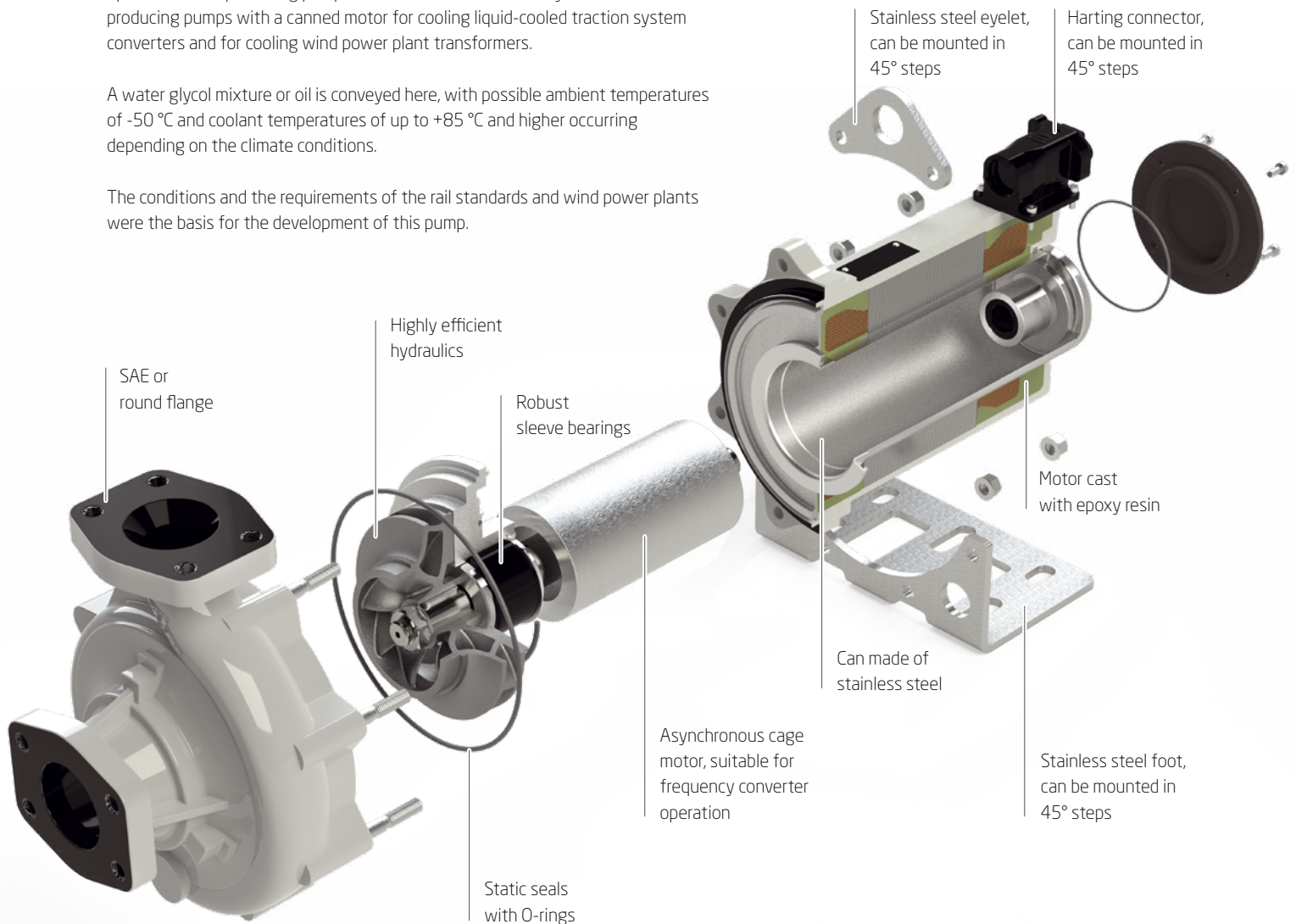
Cooling of
traction system
converters



Speck has been producing pumps for rail vehicles for over 40 years and is now also producing pumps with a canned motor for cooling liquid-cooled traction system converters and for cooling wind power plant transformers.

A water glycol mixture or oil is conveyed here, with possible ambient temperatures of -50 °C and coolant temperatures of up to +85 °C and higher occurring depending on the climate conditions.

The conditions and the requirements of the rail standards and wind power plants were the basis for the development of this pump.





Design

- » No shaft seal, leak-free
- » No alignment of the pump and drive required
- » Motor casing in lightweight design, aluminium die casting
- » Asynchronous cage motor
- » Separation of the liquid-loaded rotor from the dry stator package via a statically sealed stainless steel can
- » Suction/pressure connections:
 - » SAE flange 2" in accordance with ISO 6162-1
 - » Optional round flange with drilling pattern in accordance with DIN EN 1092-2
- » Pressure class PN 10
- » High MTBF value and long service cycles
- » Low service life costs

Drive

- » 3-phase cage motor DIN EN 600034-1
 - » P2: 2.2 kW, 380-400 V, 50 Hz, 2850 rpm
 - » P2: 2.6 kW, 460-480 V, 60 Hz, 3400 rpm
 - » Other voltages on request
- » Partial discharge-free up to 4 kV
- » UL-listed insulation materials on request
- » Heat insulation class H
- » Frequency converter operation suitable
- » Motor cast with epoxy resin
 - » No condensate formation
 - » Improved heat transfer
 - » Protection from vibrations and oscillations
- » Increased balance quality
- » Electrical connection via Harting connector
- » Protection class IP 67 in locked state

Approvals, tests and standards

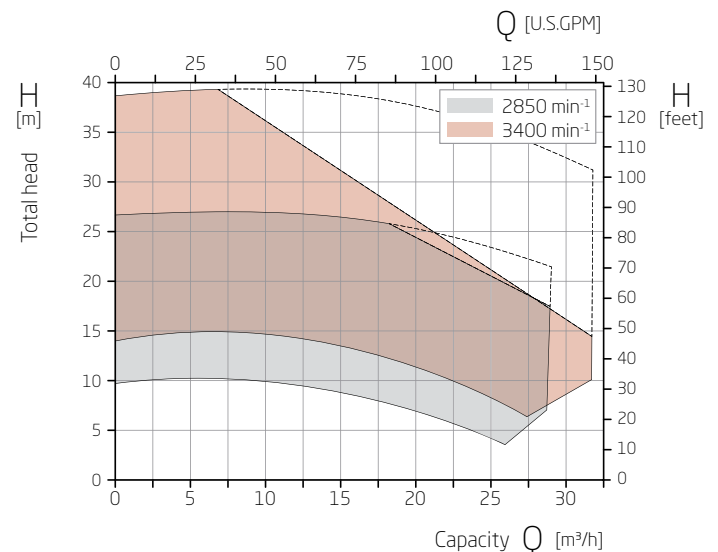
- » Railway standard EN-60349-2
- » Shock and shaking test DIN-IEC 61373
- » Fire protection certification EN-45545
- » Salt spray fog test
DIN EN ISO 6227 SS

Characteristic Curves

Measurements according to EN ISO 9906 class II. The characteristic curves apply for pumping water with a temperature of 20 °C at nominal speed. If the media to be pumped have different properties, different characteristic curves apply.

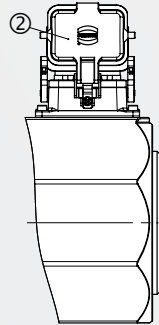
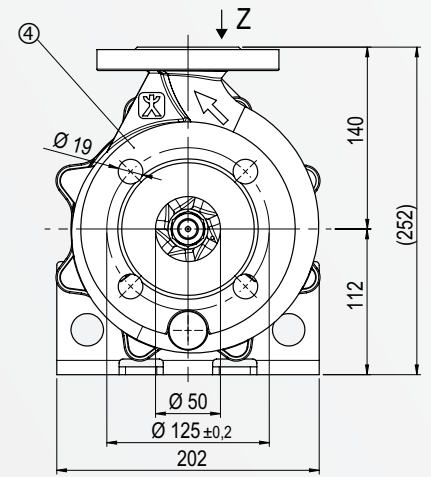
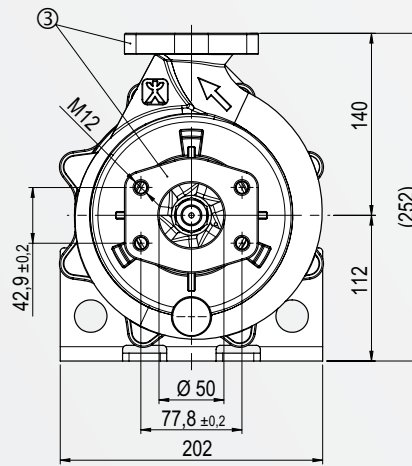
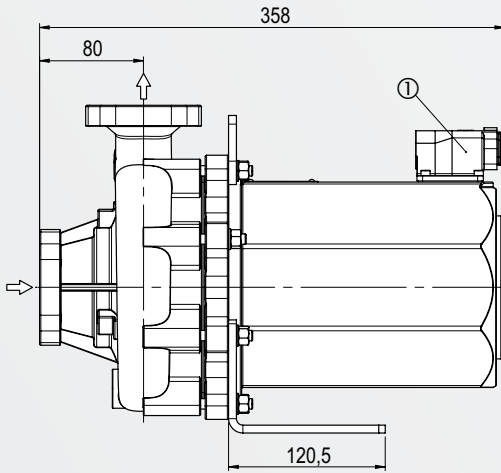
Materials

Volute casing	Cast steel (1.6220), spheroidal graphite cast iron available as an option (EN-GJL-400.3)
Radial impeller	Cast steel (1.0619), grey cast iron available as an option (EN-GJL-250)
Can	Stainless steel (1.4571)
Shaft	Steel (1.4122), bearing areas rolled
Motor casing	ADC-12 aluminium die casting or GD-ALSi9Cu3
Static seal	O-rings EPDM/FKM
Axial/radial sleeve bearings	Antimony carbon
Foot / transport eyelets	6 or 10 mm / 6 mm stainless steel (1.4301)
Casing screws	Stainless steel (1.4301)
Coating	Pump and motor KTL-coated, additional coating optional



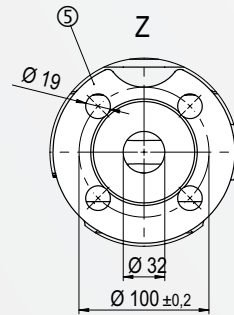
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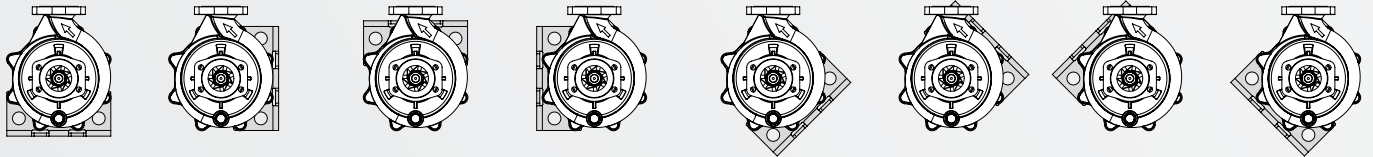


- ① Harting connector
TYPE HAN 3 HPR
- ② Harting connector
TYPE HAN 10

- ③ Suction and discharge flange 2"
SAE flanges in accordance with ISO 6162-1
- ④ Suction flange DN 50
Round flange with drilling pattern
in accordance with DIN EN 1092-2
- ⑤ Discharge flange DN 32
Round flange with drilling pattern
in accordance with DIN EN 1092-2



Foot can be mounted in 45° steps



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