

Long Coupled-End Suction Pump

# **Grundfos NKE**

The Grundfos NKE end-suction pump with integrated permanent magnet motor, drive and control serves as the leading standard in performance, quality and durability. These pumps allow for dynamic and intelligent solutions to many commercial building and industrial applications. With a wide range of selections available, the NKE provides all the benefits of a NK pump, enhanced by a high-efficiency permanent magnet motor and variable frequency drive, manufactured by Grundfos.

The Grundfos MGE permanent magnet motor with integrated variable frequency drive exceeds efficiency levels set by the International Electrotechnical Commission (IEC), currently the highest efficiency standard worldwide for electrical motors. The MGE IE5 motors are therefore outperforming the IE3 and IE4 efficiency motors that are commonly used in the pump industry, even when counting the (inside the motor) integrated frequency drive. NKE is the sustainable pump choice of the future.

#### **KEY FEATURES AND BENEFITS**

#### Installation

Seamless integration with Grundfos MGE integrated motor, drive and control for an all-in-one solution that speeds installation, startup and commissioning. Intelligent control options, including constant differential pressure and proportional differential pressure control that optimises the system based on actual demand. Large, graphical display control interface (HMI) on MGE motor provides control of all settings, without need of separate interface device (Grundfos Go) and user-friendly operation. The sturdy base frame design ensures long-lasting alignment of the pump and the motor. Loose flange design for inlet/outlet of PN16/PN25 versions improves installation time and safety and prevents leakages at flanges. Top centerline discharge design allows for self-venting and more compact piping installations.

#### **Efficiency & Reliability**

Advanced Computational Fluid Dynamics (CFD) provide reliable industry-leading efficiencies, reduce vibration and noise, providing for prolonged seal and bearing life and quiet operation. New robust design of Silicon Carbide (SiC)/Silicon Carbide (SiC) hard-faced seals offers increased temperature range, better abrasives handling and longer lifespan. No worries about undue wear and tear on the mechanical seal and bearings or energy losses due to misalignment since the

NKE bearing bracket design allows it to be produced within a single manufacturing process, eliminating the usual reasons for misalignment within a long-coupled pump.

Optimised stainless-steel impeller design increases efficiency and reduces required NPSH.

## Serviceability

Foot-mounted volute for increased pump stability.
Long-coupled pump design allows for pump service without removing the pump housing from the pipework.
Optional spacer-coupling design allows for back pull-out and easy access to the mechanical seal without removing the motor or disturbing the piping.

# **Applications**

- Hot water systems
- Chilled water systems
- Condenser water
- District heating/cooling
- Water utility
- Process water and light industrial



Possibility in every drop

## **TECHNICAL DATA**

NK	
FLOW, Q	MAX. 270 m <sup>3</sup> /h
HEAD, H	MAX. 100 m
LIQUID TEMPERATURE	-25 to +140°C
WORKING PRESSURE	PN10, PN16, PN25
POWER RANGE	0.55 - 22 kW
SPEED	2000, 2200, 4000 RPM
DISCHARGE SIZES	Centerline: DN32 - DN125



#### **PERFORMANCE DATA**

