

60 Hz

New Grundfos NK & NKE
Long-Coupled End-Suction Pumps

Primed for the future

The world-class new range of long-coupled
end-suction pumps from Grundfos.
Refined and expanded for the efficiency
demands of tomorrow.

Meet the new Grundfos NK+NKE at
[grundfos.com](https://www.grundfos.com)

GRUNDFOS 

Possibility in every drop

Meet tomorrow's efficiency demands today

Easy choice, easy operation from a reliable, high-efficiency new range of long-coupled end-suction pumps

The new NK and NKE long-coupled end-suction pumps are non-self-priming, single-stage, centrifugal volute pumps with axial-suction port, radial-discharge port and horizontal shaft.

The refined, dependable Grundfos quality is fully updated for premium performance and the applications and efficiency demands of the future.



FIRST CLASS UPGRADE

Grundfos' renowned end-suction pumps are refined and upgraded in an expansive new range of long-coupled end-suction pumps. The improved reliability and long-lasting build can withstand the most demanding environments, and is optimised for easy operation and maintenance.



WORLD-CLASS EFFICIENCY

Variable speed operation and differential pressure control options boost efficiency to surpass all current efficiency regulations and leaving you well prepared for future regulatory demands. The intelligent, robust and energy-efficient E-range is designed to be a perfect fit for a number of applications within heating, cooling, ventilation and industrial processes, with seamless integration into smart systems for further outstanding IE5 efficiency.



UNRIVALLED VERSATILITY

The wide assortment of variants in the new range meets the demands of many applications in areas such as cooling & heating in commercial buildings, district energy, water utility, process water and light industrial.

Perfect for Asia-Pacific

The new offering is optimised for your region with fast delivery, easy installation, startup and commissioning, along with the dedicated service you expect from Grundfos.

To consult with a Grundfos specialist or find a distributor close to you, visit www.grundfos.com/contact



Grundfos NK Range

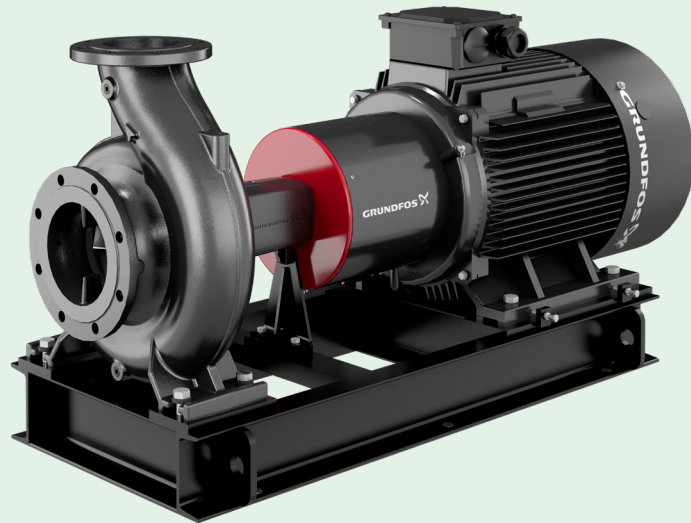
Improved reliability, robust design, long-lasting build

Industry-leading efficiency as standard

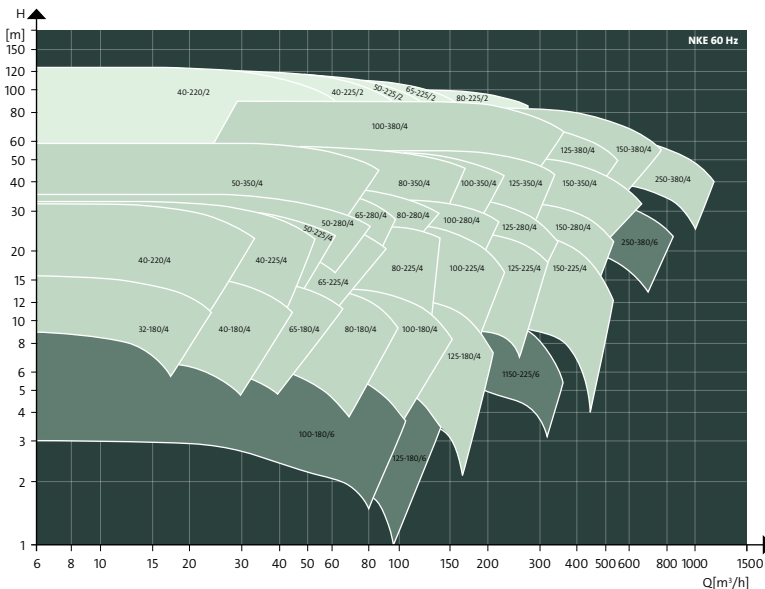
All pumps are built to IE3 as a minimum. This reduces energy consumption, prepares you for future regulations and gives you an overall more sustainable and cost-effective operation. Optional upgrades to IE4 and IE5 provide even further efficiency benefits.

NK Facts

- Improved long lasting Silicon Carbide/Silicon Carbide shaft seal (BQQX)
- Long lasting bearings
- Increased temperature range
- Improved lifespan
- Quiet operation
- Manufactured to ensure safe alignment
- Optimised hydraulics
- Back pull-out design for easy service



Performance data



Technical data

Flow, Q	MAX. 1000 m ³ /h
Head, H	MAX. 120 m
Liquid temperature	-25 to +140°C
Working pressure	PN10, PN16, PN25
kW range	Up to 315 kW
Speed	3600, 1800, 1100 RPM
Discharge sizes	DN32 to DN250 Centerline: DN32 - DN200 Tangential: DN250

Applications

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



Explore the full NK range in the [Grundfos Product Center](#)

Grundfos NKE Range

Extreme efficiency,
electronic speed control



Sensor

The premium NKE range with world-class IE5 efficiency is the ultimate all-in-one pump for the future.

The built-in permanent magnet MGE motor with Variable Frequency Drive intelligently controls flow according to demand with the possibility to use the pump for proportional differential pressure control.

Intelligent system integration

There's no need for complex, costly external controllers, frequency-converters and sensors – it's all built in, seamlessly integrating NKE with smart, dynamic solutions for many industrial and commercial building applications.

- Save energy
- Increase comfort
- Control & monitor performance
- Communicate with the pump

Built-in E-motor

The integrated high-efficiency permanent magnet MGE motor with built-in variable frequency drive is available up to 11 kW with efficiency ratings surpassing the IE5 definition.

The frequency converter adapts to predefined intelligent control modes, such as constant pressure and constant temperature, making it easy to fit the pump into any application.

Built-in sensor

For even greater control and efficiency, the NKE Series 2000 includes an integrated pressure sensor to enable proportional differential pressure control.

NKE FACTS

- End suction construction
- PN 10, 16 and 25 bar
- For temperatures up to 140°C
- Low NPSH values means great suction ability
- Plug and pump solution
- Low energy consumption
- Low noise levels
- Back pull-out design
- Highly customizable (your choice of i.e. bearing design, material, shaft seal, impeller trimming, and much more)
- Robust design
- Universal BQQE shaft seal for both water and glycol based media

New functions, advanced solutions

Real time clock

Allows for calendar function for e.g. automatic system stop during weekends.

Two analogue inputs

Get Δp and ΔT -control with two sensors.

Manual speed operation mode

Even while under external signal control, you can switch to manual speed operation mode to test the pump's operation.

Timer functions on digital inputs

For each digital input you can activate and set a delay time and a duration time.

Adjustable proportional pressure control curve

You can select the shape and steepness of the control curve – choose between a linear or quadratic curve.

One analogue output

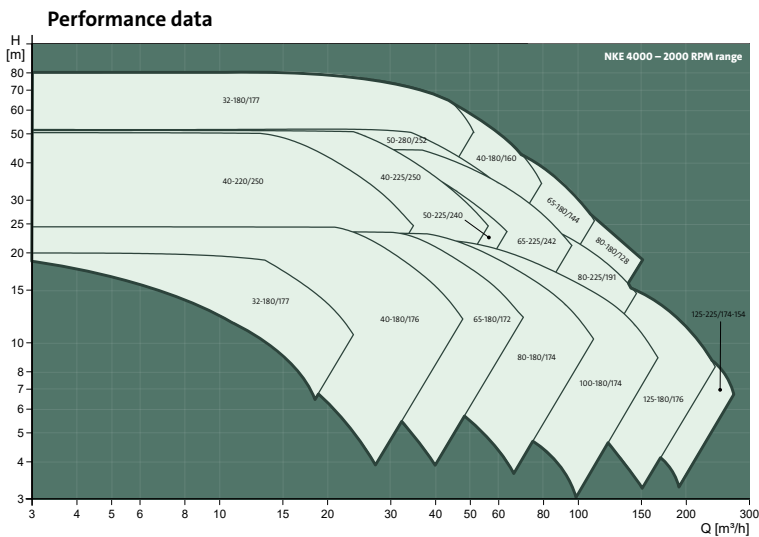
Get relevant parameter information in real time.

Predefined set-point

Get dynamic response to different operation profiles.

Pt100/1000 input

Get temperature and differential temperature control at a low cost.



Technical data

Flow, Q	MAX. 270 m ³ /h
Head, H	MAX. 80 m
Liquid temperature	-25 to +140°C
Working pressure	PN10, PN16, PN25
Power range	0,55 - 11 kW
Speed	2000, 2200, 4000 RPM
Discharge sizes	Centerline: DN32 - DN125

Applications

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



Explore the full NKE range in the [Grundfos Product Center](#)

Stay in control

Monitoring and system integration for tomorrow's buildings

Modern buildings depend highly on interconnected systems to transport water efficiently and precisely. Grundfos offers completely integrated solutions for both building automation and building management systems. The long-term benefit is obvious: optimised energy efficiency and pre-emptive maintenance.

Solutions for stand-alone pumps

Grundfos E-pumps enable you to read data straight from pump HMI or through Grundfos GO remote control solution.

Solutions for building automation systems

Monitor and control your pumps and pump systems from anywhere in the world. Access your systems directly from your laptop, tablet or smartphone and see trend graphs, or stay updated on system performance.

Solutions for BMS systems

A strong fieldbus solution is the cornerstone of any building management system. It guarantees flexible and cost-

effective integration of pump data into management systems, and severely reduces the time spent on reporting and collecting data.

The number of maintenance visits and emergency situations are also reduced because of the high level of information. Grundfos offers open and interoperable protocols for all our data bus networks.

DATA POINTS	GO APP / PUMP HMI	REMOTE MONITORING	BMS INTEGRATION
Operating mode	●	●	●
Setpoint	●		●
Control mode	●	●	●
Relay control	●		●
Alarm/warning information	●	●	●
Bearing Service information	●		●
Power/energy consumption	●	●	●
Current consumption	●		●
Speed and frequency	●	●	●
Motor Current	●	●	●
Motor voltage			●
Motor temperature		●	●
Digital I/O	●		●
Sensor feedback (P/d P, T, d T, feedback or monitoring)	●	●	●
Operation time	●	●	●
Total on time		●	●
Number of starts	●	●	●

Feature overview

DESCRIPTION		NKE SERIES 2000 IE5 MGE motor up to 11 kW
System intelligence	ΔT control with 2 sensors	2 external sensors
	ΔP control with 2 sensors	2 external sensors
Control modes	Proportional pressure	•
	Constant flow	•
	Constant pressure	•
	Constant differential pressure	•
	Constant temperature	•
Other	Multipump	•
	Standstill heating	•
	Setpoint influence	3 possibilities
	Limit exceed	•
	Operating log	•
	Display	•

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