Pioneering for You

Information for technical building equipment specialist consultants

Pumps with already integrated future

Wilo-SiBoost Helix EXCELWilo-Stratos GIGA, Wilo-Stratos and Wilo-Yonos MAXO

ErP READY
APPLIES TO EUROPEAN DIRECTIVE FOR ENERGY RELATED PRODUCTS

Save energy costs
with Wilo.

More about ErP:
www.wilo.de/planer

Since 2013 new legal limit values have applied for glandless circulation pumps and the motor efficiency of glanded pumps in heating, air-conditioning and cooling technology as well as in the areas of water supply, pressure boosting and sewage disposal.

In 2001, Wilo developed the first-ever high-efficiency pump for heating, air-conditioning and cooling. This pump is considered a benchmark for the new regulations. Wilo has been your number 1 partner for a guaranteed future ever since. Not only do we support you with sophisticated high-efficiency technology, but we also provide extensive service offerings for all aspects of your planning. All in line with our guiding principle “Pioneering for You”.

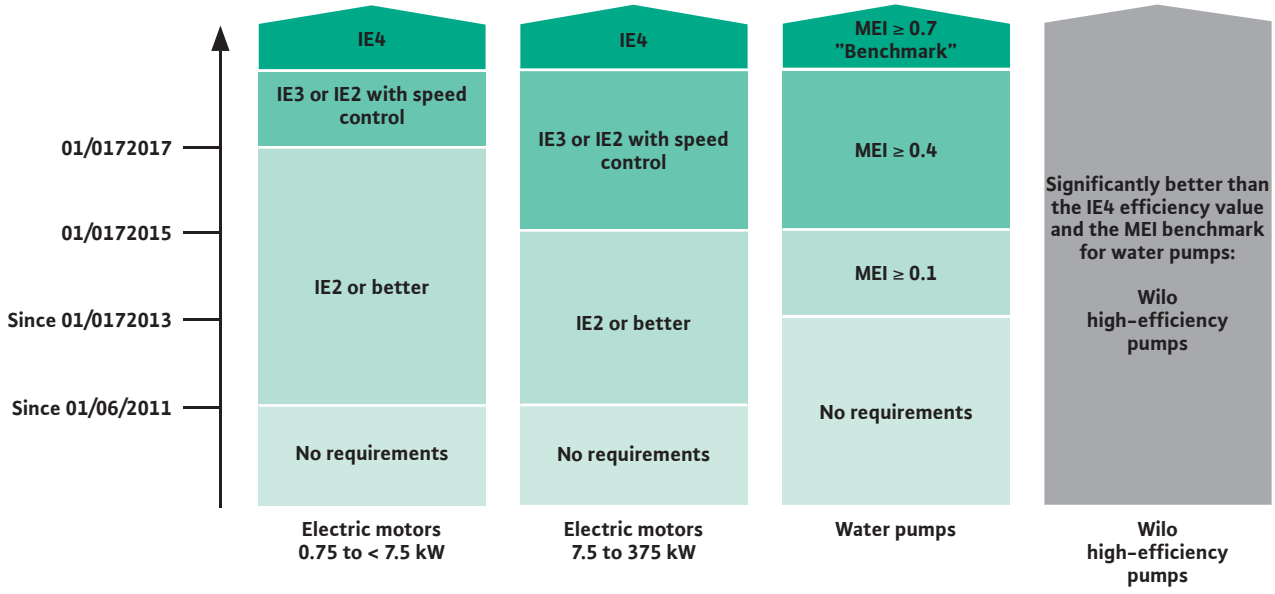
Saving energy is worth it: for the environment, your client and yourself.
The saving potential for glandless pumps in Europe alone amounts to 23 TWh of electricity, equivalent to €4 bn in electricity costs and 11 million tonnes of CO_2. The global saving potential for glanded pumps is even greater: up to 246 TWh electricity. This corresponds to as much as €14 bn in energy costs and the output from 24 atomic power stations.

Since energy costs account for up to 85% of a pump's life cycle costs, even the slightly higher investment costs for high-efficiency pumps pay off and the significantly lower electricity requirements lead to quicker amortisation.

The statutory ErP Directive at a glance:

- → ErP denotes the European Ecodesign Directive for “energy-related products”.
- → For glandless pumps the ErP came into force in 2013 and will be implemented in three stages until 2020. This means: 95% of all uncontrolled heating circulation pumps that were still available for purchase have been banned from the market as of 2013.
- → In the case of glanded pumps, all newly sold electric motors have already had to meet motor class IE2 since 2011. Motors with a rated power of 7.5 to 375 kW will have to meet the even stricter motor class IE3 as of 2015. This requirement will be extended in 2017 to include smaller motors.
- → Furthermore the permitted hydraulic efficiency level for glanded pumps will be adjusted in the coming years. The Wilo-Stratos GIGA already reaches the reference value for water pumps, a MEI (Minimum Efficiency Index) of ≥ 0.7.

The ErP Directive for electric motors (Regulation (EC) 640/2009) and the ErP Directive on hydraulic efficiency (Regulation (EU) 547/2012) are setting increasingly stricter efficiency limit values. With Wilo you meet all of them in one go.



IE2, IE3 = motor efficiency classes in accordance with IEC 60034-30, compulsory from the specified deadlines in accordance with regulation (EC) 640/2009 of the EU Commission

IE4 = future motor efficiency class, which at such time will be the highest efficiency class (as per IEC/TS 60034-31 Ed. 1)

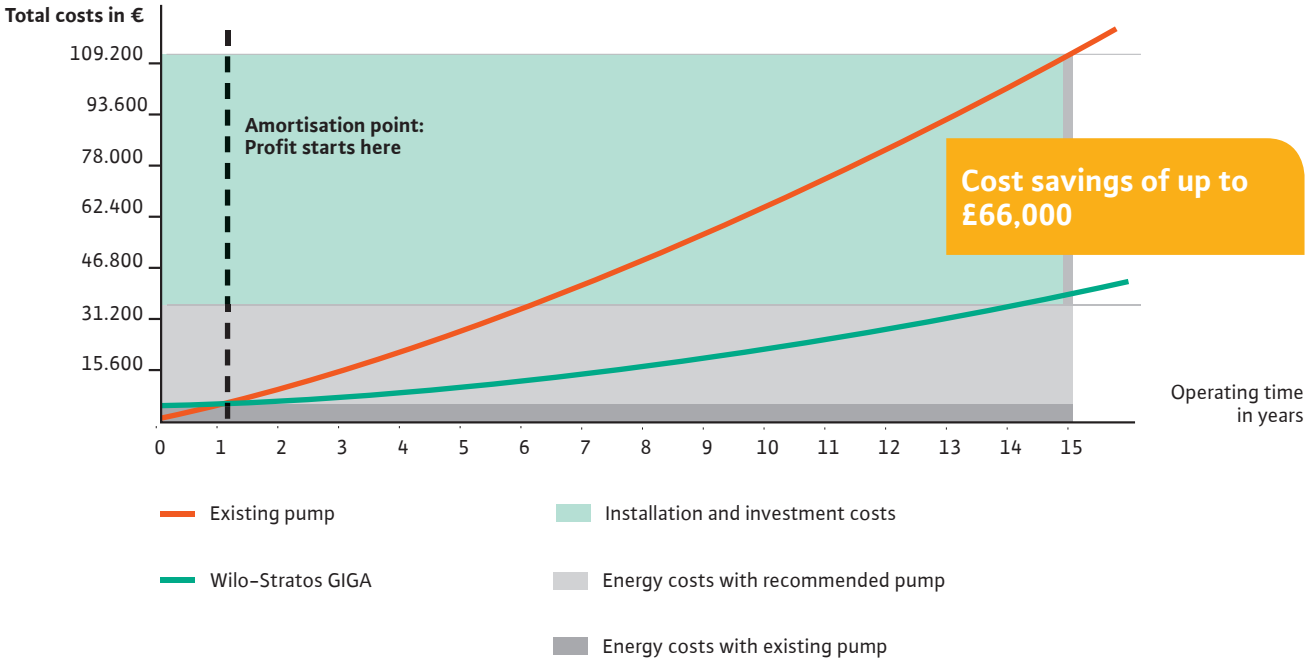
Sustainability – not just trend, but also a necessity

Planning responsibly and sensibly
For professional building management sustainability is no longer just a catchphrase. Instead, it is a defined goal. For both ecological and economic reasons. One example: over a running time of 15 years, a Wilo-Stratos GIGA saves up to 85,000 euros in energy costs.* This represents a reduction in emissions of up to 8,000 kg CO_2 per year and per pump.**

The investment pays off: With up to 70% lower energy consumption than a conventional uncontrolled pump, a replacement pump is amortised in just two years.

Wilo high-efficiency pumps are highly reliable and durable and their maintenance fast and simple, which additionally contributes to cost efficiency.

Calculation example: economic calculation* over 15 years



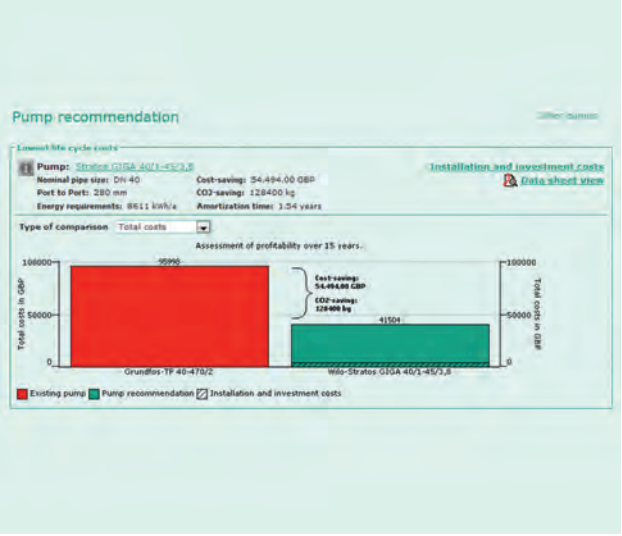
* Compared to conventional uncontrolled pumps, based on the "Blue Angel" load profile (RAL-UZ 105) and an energy price of £0.17/kWh.
** Based on EU energy mix.

The best support for your planning

Wilo knows exactly what's important for you as a consultant. This is why we support you with targeted tools. At productfinder.wilo.com our planning software Wilo-Select and our product catalogue, tendering documents, service information, CAD drawings and pump dimensioning data are combined into one.

The Wilo-LCC-Check can be called up at lcc-check.wilo.com. This gives you concrete economic assessments for both initial investments and preventive pump replacements.

More on the topic of energy saving: www.wilo.de/planer



The Wilo-LCC-Check provides property-specific economic assessments, giving you the best arguments for use in customer discussions.

Wilo-Select, the planning software with various functions combined in one place

Wilo-SiBoost Smart Helix Series
the intelligent one

Equipment/function
- 2-4 pumps per system of the Helix EXCEL 4 to Helix EXCEL 52 series, with high-efficiency EC motor and variable speed control via integrated frequency converter on each pump
- Automatic pump control via Smart Controller SCe
- Parts that come in contact with the fluid are corrosion-resistant
- Base frame made of galvanised steel, with height-adjustable vibration absorbers for insulation against structure-borne noise
- Shut-off valve on the suction and pressure sides of each pump
- Non-return valve on the pressure side of each pump
- Diaphragm pressure vessel 8 l, PN16, pressure side
- Pressure sensor, pressure side
- Pressure gauge, pressure side
- Removable cover for protection of system components (not for Helix EXCEL 52 series)
- Optional low-water cut-out switchgear with pressure gauge, suction side

Design
Highly efficient water-supply unit (non self-priming) ready for connection with 2 to 4 vertically arranged Helix EXCEL stainless steel high-pressure centrifugal pumps switched in parallel; each pump is equipped with an integrated air-cooled, high-efficiency frequency converter and an EC motor, including Smart Controller SCe. Valves and sensors are protected for safe and reliable installation

Application
Fully automatic water supply and pressure boosting in residential, commercial and public buildings, hotels, hospitals, department stores and for industrial systems.
Pumping of drinking water, process water, cooling water, fire water (apart from fire-extinguishing systems in accordance with DIN14462) or other water mixtures that do not attack the materials used chemically or mechanically and do not contain abrasive or long-fibre constituents

User friendly HMI
One button technology
Standard symbols

Example – | SiBoost | Smart | 4 | Helix VE | 10 | 04

- System for pressure boosting
- Control device Smart Controller
- Number of Pumps
- Pump Series
- Electronic (Motor Mounted Variable Speed Drives)
- Rated Volume flow {m³/h} of the single pump
- Number of single pump stages

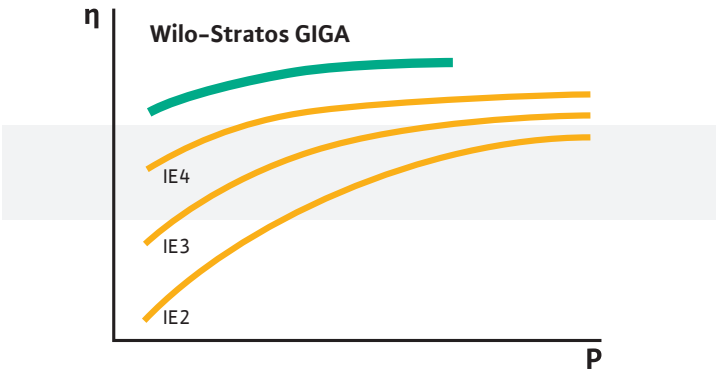
Highly efficient pressure boosting system with 2 to 4 stainless steel non-self priming high pressure multistage centrifugal pumps (Helix V, VE or Excel) switched in parallel, including Smart Controller SC (available with and without frequency converter FC).

Advantages

- → Wras approved product.
- → New space saving design.
- → Helix high-efficiency pumps.
- → Cartridge type seals for ease of maintenance.
- → BACnet, Modbus, LON connectivity as an option.
- → SC controller with clear menu and simple navigation.

For further information on this and other pressure boosting equipment please contact Technical Sales:
+44 (0) 1283 523000 or,
sales@wilo.co.uk

Wilo-Stratos GIGA,
the powerful one



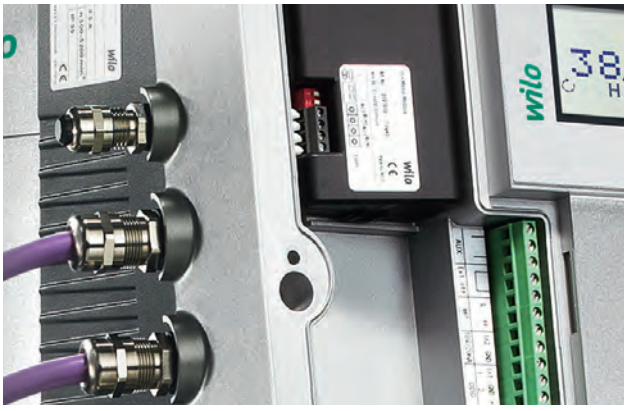
The Wilo-Stratos GIGA is totally ErP-compliant and already exceeds the highest efficiency class in terms of motor efficiency.

High Efficiency Drive, the drive of the future

Field of application:
As a premium high-efficiency pump for heating, air-conditioning and cooling systems in commercial and industrial building services.

Special features:
The Wilo-Stratos GIGA impresses with a newly developed efficiency concept. Innovative use of materials, the motor technology High Efficiency Drive (HED), optimally adapted hydraulics and integrated power control all ensure the best possible overall efficiency levels, particularly in partial load mode. The Wilo-Stratos GIGA sets new efficiency standards in this way.

The benefit for your installation partners:
The proven “red-button technology” makes commissioning fast and simple.



Flexible incorporation into building automation using optionally integrable interface modules

Thanks to innovative materials and methods, all components are optimised for maximum efficiency.

Product advantages:
- → Premium high-efficiency pump
- → For use in heating, cooling and air-conditioning systems
- → Highly efficient EC motor
- → Very high overall efficiency
- → Communication-capable for building automation in all system environments thanks to optionally integrable interface modules
- → And needless to say: ErP-compliant

The Wilo-Stratos GIGA in figures:
- → Up to 70% lower energy consumption compared to conventional uncontrolled pumps
- → Up to 40% lower energy consumption compared to conventional controlled pumps
- → Up to 8,000 kg less CO_2 per year with each Wilo-Stratos GIGA

More on
Wilo-Stratos GIGA:
www.wilo.de/planer

Wilo-Stratos,
the diverse one

More on Wilo-Stratos:
www.wilo.de/planer

Powerful and suitable for universal use

Field of application:
As a premium high-efficiency pump for hot-water heating systems of all kinds, air-conditioning systems, closed cooling circuits and industrial circulation systems. Ideal for professional building management.

Special features:
It impresses with its universal application possibilities, for instance in cooling and air-conditioning systems with temperatures down to -10 °C. Retrofittable interface modules can be used to integrate the Wilo-Stratos into all building-automation system environments.

A perfect team: the Wilo-Stratos and Wilo-IR-Stick
Extend the Wilo-Stratos with additional functions provided by wireless data exchange via USB stick, e.g. remote control, statistics, analysis, settings and data storage.

The plastic can prevents eddy-current losses.

Universal modular bus connection concept

The “red-button technology” display that can be adjusted regardless of position

Product advantages:

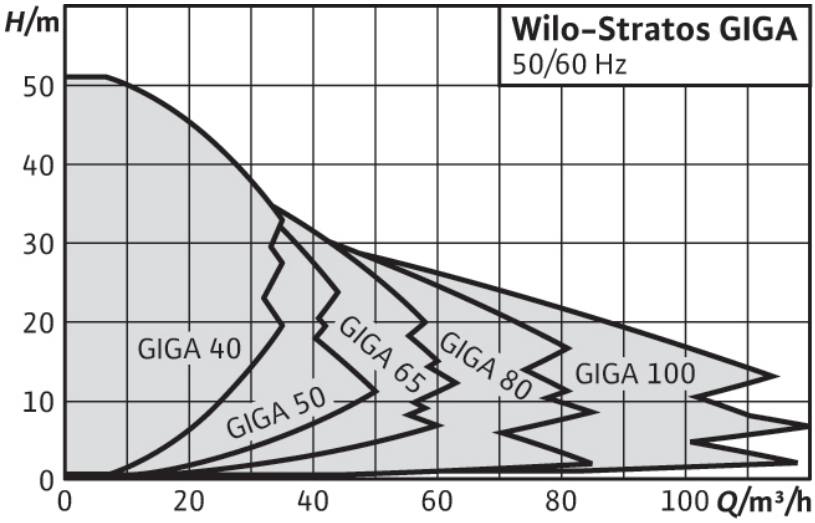
- → Premium high-efficiency pump
- → Can be used in heating, cooling and air-conditioning systems from -10 °C to +110 °C
- → Ideal for commercial properties
- → Communication-capable for building automation in all system environments thanks to retrofittable interface modules
- → Maximum reliability and flexibility
- → Available as a single or double pump
- → And needless to say: ErP-compliant

Technical data
Wilo-Stratos GIGA and Wilo-Stratos

Features	Wilo-Stratos GIGA	Wilo-Stratos
Drive system	Blocking-current proof EC motor	Blocking-current proof EC motor
Hydraulic performance range	Delivery head H max. = 52 m Volume flow Q max. = 120 m^3/h	Delivery head H max. = 17 m Volume flow Q max. = 62 m^3/h
Control	Differential pressure, constant: Δp-c Differential pressure, variable: Δp-v PID control Manual control mode (n = constant)	Differential pressure, constant: Δp-c Differential pressure, variable: Δp-v Differential pressure, temperature-controlled: Δp-t Manual control mode (n = constant)
Display	LC display	LC display
Electrical connection	3~440 V, 50/60 Hz 3~400 V, 50/60 Hz 3~380 V, 50/60 Hz	1~230 V, 50/60 Hz
Protection class	IP55	IPX4 D
Fluid temperature range	-20 °C to +140 °C	-10 °C to +110 °C
Consumption indication	Can be read off via LC display on pump's electronic module	Read-out of the data via Wilo-IR-Stick/ bus module
Power consumption min./max.	1.9 kW/6.3 kW	9 W/1,550 W

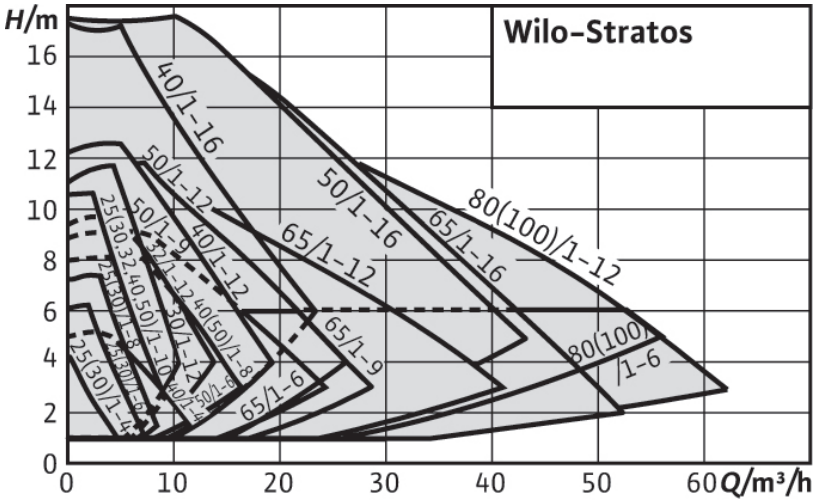
More on the products:
www.wilo.de/planer

Duty charts
Wilo-Stratos GIGA and Wilo-Stratos



More on the replacement guide: www.wilo.de/planer

Wilo-Stratos GIGA in versions DN80 and DN100: availability on request



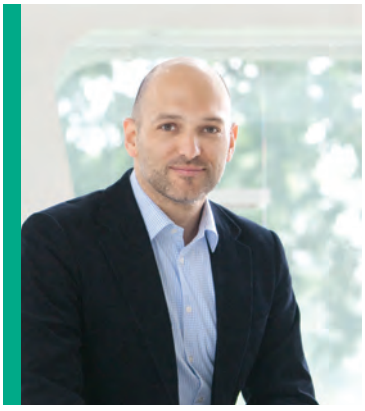
Wilo-Yonos MAXO,
the practical one

High efficiency in standard applications

Field of application:
Standard high-efficiency pump for heating, cooling and air-conditioning systems from -20 °C to +110 °C. For use in commercial properties.

Special features:
The Wilo-Yonos MAXO is the standard high-efficiency pump whose functionality and extremely high efficiency make a great impression. The pump output is automatically adjusted to the constantly changing operating status of the hydraulic system. The integrated collective fault signal ensures high operational reliability.

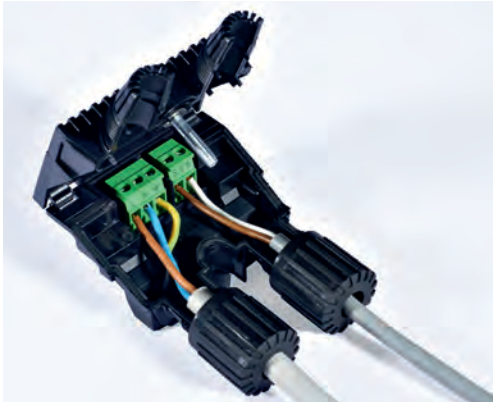
The ideal combination
The Wilo-Yonos MAXO combines functionality and high efficiency. Ideal for all those who demand quality even in standard applications.



More on the products:
www.wilo.de/planer

The LED display for infinitely variable delivery head setpoint

Best possible operational control thanks to fault signal function



Quick and easy: electrical connection via the Wilo plug

Product advantages:

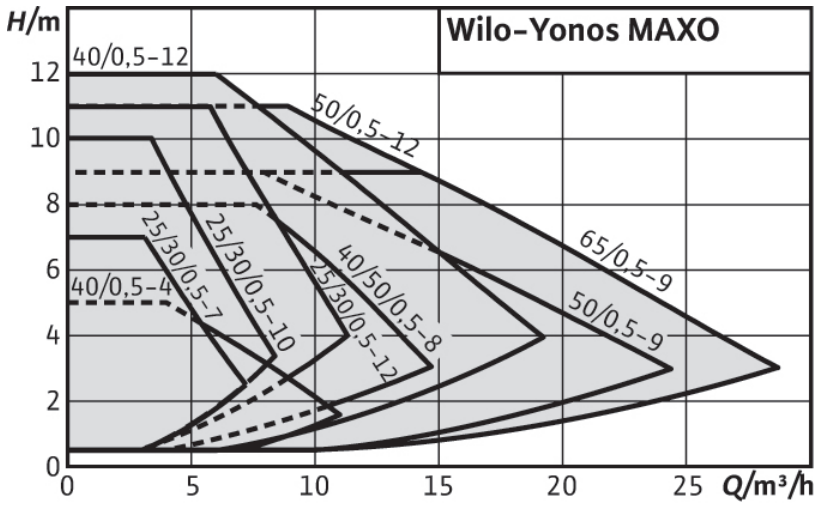
→ Maximum efficiency thanks to ECM technology
→ LED display of set delivery head and fault codes
→ Control range from 0.5m set delivery head
→ Quick and convenient electrical connection with the Wilo plug
→ Simplest commissioning and operation
→ Collective fault signal for assuring system availability

Technical data
Wilo-Yonos MAXO

Features	Wilo-Yonos MAXO
Drive system	Blocking-current proof EC motor
Hydraulic performance range	Delivery head H max. = 12 m Volume flow Q max. = 28 m^3/h
Control	Differential pressure, constant: Δp-c Differential pressure, variable: Δp-v
Display	LED display
Electrical connection	1~230 V, 50/60 Hz
Protection class	IP X4D
Fluid temperature range	-20 °C to +110 °C
Power consumption min./max.	5 W/600 W

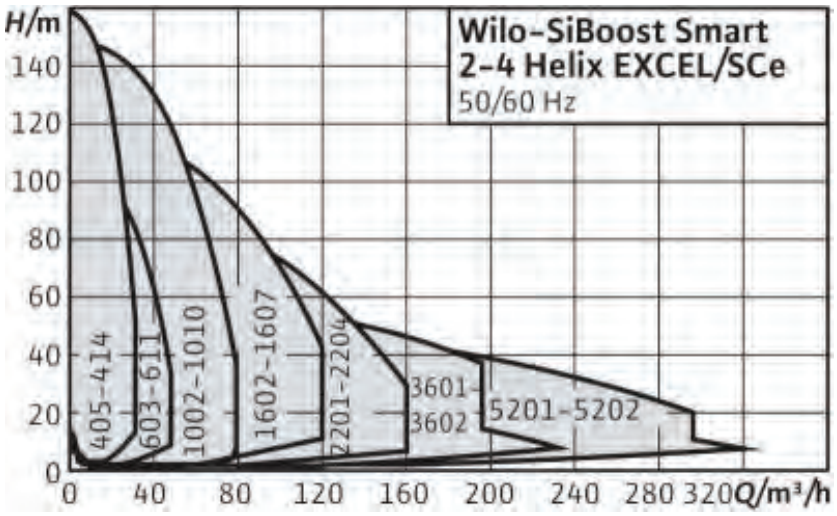
More on the products:
www.wilo.de/planer

Duty charts
Wilo-Yonos MAXO



More on the replacement guide: www.wilo.de/planer

Duty charts
Wilo-Siboost Smart Helix EXCEL



More on the
replacement guide:
www.wilo.de/planer

Pioneering for You

Just scan the code and walk into the world of Wilo!

“Do you keep losing screws during installation? Wilo has taken care of this!”

The Wilo plug with integrated screw loss prevention for the Wilo-Yonos MAXO makes all the difference – everything stays where it should during installation. Do you want to discover how a plug can save precious time? **Wilo makes it easy!**

Go to www.wilo.co.uk/installer for the full story.

ErP READY APPLIES TO EUROPEAN DIRECTIVE FOR ENERGY RELATED PRODUCTS

Wilo-Yonos MAXO, the practical one:

- → LED display of set delivery head and fault codes
- → Control range from 0.5m set delivery head
- → Quick and convenient electrical connection with the Wilo plug
- → Collective fault signal for assuring system availability

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Pioneering for You

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