

Pioneering for You

wilo

*Efficient solutions – 50 Hz*

## General Overview 2019

Our product and system solutions for Heating, Air conditioning, Cooling, Water supply as well as Drainage and sewage.

DISCOVER  
ADDITIONAL  
DIGITAL  
CONTENT



# WILO BRINGS THE FUTURE.

Wilo develops networked systems and solutions that build on sustainable concepts and smart technology. With its pioneering spirit, Wilo creates products and service solutions that provide today's market with answers to the complex tasks of tomorrow's building services. As an innovation leader, Wilo sets the bar and offers customers around the globe tailored products with high system efficiency and maximum energy conservation.



|   |                |
|---|----------------|
| <b>Wilo – Technology of the future</b> .....        | <b>4 – 9</b>   |
| The future is connected                             |                |
| <b>Heating, air conditioning, cooling</b> .....     | <b>10 – 27</b> |
| Networked solutions for an optimal indoor climate.  |                |
| <b>Water supply</b> .....                           | <b>28 – 49</b> |
| Intelligent technologies to combat water shortages. |                |
| <b>Drainage and sewage</b> .....                    | <b>50 – 67</b> |
| Reliable waste water systems for growing cities.    |                |
| <b>Service and support</b> .....                    | <b>68 – 71</b> |
| Practical support for your daily work.              |                |



**More is more: in-depth digital content**

**Our extra for you:** wherever you see this logo you can call up additional information we prepared for you. Simply scan the area with your smartphone and find out more about selected topics.

1



Download the Wilo-Assistant App for free in the Google Play Store for Android or in the App Store for iOS.

2



Tap the AR logo to start the Wilo-Assistant App and scan the content with your smartphone.



# Pioneering for You.

## Our promise to you.

WILO SE is one of the world's leading premium suppliers of pumps and pump systems for building services, water management, and the industrial sector. With over 7800 employees in more than 60 subsidiaries around the world, we develop smart solutions that connect people, products and services to effectively support you in your daily work. "Pioneering for You" is our lasting commitment to clear customer focus, unrelenting pursuit of quality and our special passion for technology.

As the digital pioneer of the pumps industry, we understand the challenges that will shape the future. As an innovation and technology leader, we provide holistic solutions to address them. We know that these issues play a major role in your daily work and, in turn, ours too.

## Sustainably better.

One of the most pressing tasks in times of limited natural resources is the responsible consumption of water, a resource that is becoming increasingly scarce. Efficiency, connectivity and safety will become increasingly important in the future. We aspire to offer you sustainable, user-friendly and high-performance solutions for building services and water management that are ahead of their time. We work closely with our customers to create innovative products and systems that perfectly match their requirements and are rounded off with convenient services. The result is integrated solutions you can rely on at all times.





wilo

wilo

wilo

wilo

# THE FUTURE IS CONNECTED.

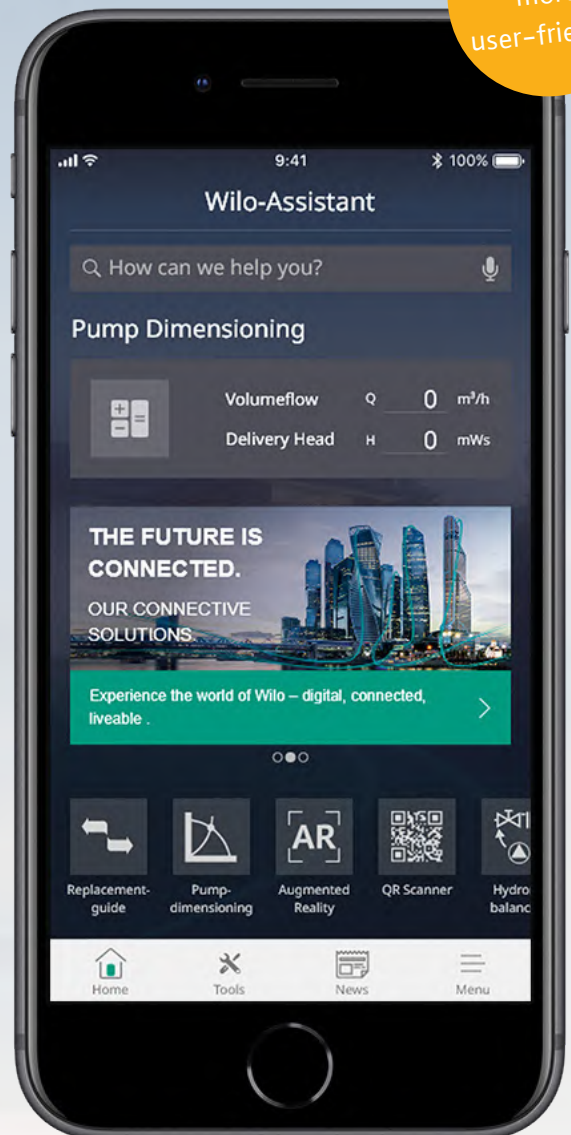
“The future is connected” – Along with network-compatible products, such as the Wilo-Stratos MAXO and modules which can be retrofitted to other Wilo pumps, the Wilo-Assistant App is Wilo’s connectivity centrepiece. Wilo pumps are delivered equipped with a suitable digital interface, or can alternatively be upgraded using an IF module. The Wilo-Assistant App acts as a central starting point and is now optimised to provide customer guidance. The app makes the whole digital world of Wilo products and services available to customers. Tutorials make it easy to get started, and the comprehensive search function helps users find information on any topic across the whole app. The Smart Connect function can be used both to install products and to call up data on their operating status. In addition to this, there are functions such as the basic device configuration and direct communication with the product – to document its maintenance, fault and settings history, for example. Furthermore, the Solar Connect func-

tion in the app enables the Wilo-Actun OPTI-MS to be controlled using remote access. The customer also has access to Wilo’s expanded range of services through Care Connect. The data for these processes is only available in the Wilo Cloud and cannot be accessed externally. For the highest levels of data security.

now even  
more  
user-friendly



The new Wilo-Assistant.  
Available for free download now.



# The new Wilo-Assistant

## The app for everyone.

The redesigned Wilo-Assistant app makes the entire world of high-efficiency pump technology available on smartphones and tablets for HVAC installers, technical building equipment consultants and pump operators.

The new design and the intuitive user experience provide even better support for your day-to-day work. New functions and connective solutions add to the range of features already offered by the previous Wilo-Assistant. That way, users can find what they need even faster, and get support with

- Consultation and selection
- Customer consultation
- Installation and commissioning
- Remote control and maintenance



Wilo-Smart Connect



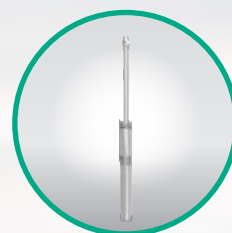
Wilo-Care Connect



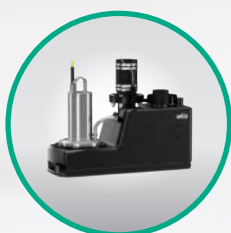
Wilo-Smart Balance



Sync-Function Assistant



Wilo-Solar Connect



wibutler App

# DISCOVER WILO SOLUTIONS.

WILO offers a wide variety of intelligent pumps and systems to make our users' everyday lives simply more pleasant. Our energy-efficient solutions are suitable for residential, public and commercial properties. Wilo products are used in heating, air conditioning, cooling and water supply applications as well as for drainage and sewage..



## HEATING, AIR CONDITIONING, COOLING

Wilo delivers individual solutions and highly efficient technology for applications in heating, air conditioning, cooling and domestic hot water.

## WATER SUPPLY

Innovative products and systems from Wilo support applications in rainwater utilisation, water supply and pressure boosting, firefighting and raw water intake.

## DRAINAGE AND SEWAGE

Wilo pumps and lifting units ensure safe and reliable operation in wastewater and sewage disposal.



# PLAYMAKER IN THE ARENA.

Just as successful teams impress on the field, Wilo products impress thanks to their perfect synergy and high performance. Stadium operators around the world rely on Wilo for dependable water supply and disposal, and as a service partner that guarantees long-term energy-efficient and connected system solutions.

**THE FUTURE IS CONNECTED.**

[www.wilo.co.uk](http://www.wilo.co.uk)



# SMART PUMPS FOR DORTMUND'S FOOTBALL TEMPLE.

**“An atmosphere that only a true football arena can achieve”. This is how the SIGNAL IDUNA PARK was described on 2 April 1974 on its christening with a friendly match against FC Schalke 04. Since the third expansion stage was completed, the Dortmund stadium is among the largest stadiums in Europe. For its smooth operation, the sports venue in the Ruhr area relies on the smart pump technology provided by the Wilo-Stratos MAXO.**

At 62 metres high, the eight yellow floodlight towers on the SIGNAL IDUNA PARK are a distinctive feature of the Dortmund skyline. With space for 81,365 fans, Dortmund's stadium is the biggest in Germany – the legendary south stand, known as the “Yellow Wall”, is Europe's largest standing-only terrace. If you had told the people of

Dortmund fans over fifty years ago about a venue on this scale with a glass facade and undersoil heating you probably would have caused nothing but a disbelieving head shaking. Today, the modern stadium on Strobellee has long since become a reality. Borussia Dortmund and the venue also recognise their environmental responsibility: “In times of increasingly scarce resources and increasing environmental pollution, it is of course essential for us to take up and deal with ecological consequences as well”, states Carsten Cramer, BVB-CEO. “We consider responsible energy use and the associated reduction of harmful emissions to be our fundamental and essential economic goals. This includes increasing energy efficiency.” The challenge: reliability and performance cannot be allowed to suffer under the efficiency guidelines. In terms of water supply



and disposal in general, football stadiums have a very heterogeneous performance profile. During the game water use drops significantly, however, it increases dramatically at half-time, not least because of the heavy use of sanitary facilities at this point. For many years the home of Borussia Dortmund has counted on the energy efficient, reliable and high-performance products of Dortmund technology company Wilo. From the water supply for the VIP areas, to the changing room heating and the underfloor heating system: Wilo product solutions create a green environment. Since 2019, new Wilo-Stratos MAXO models have been providing the supply for the south stand.




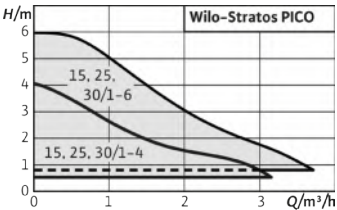
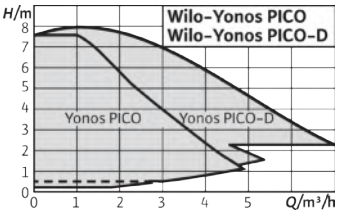
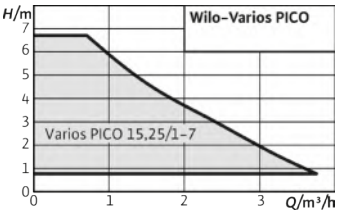
### THE “LA SCALA OF GERMAN FOOTBALL”

The history of the stadium begins in the mid 1960s when the decision was made to build a second stadium alongside the outdated “Rote Erde” arena in time for the 1974 football World Cup. Just in time for the 76th Ruhr derby in 1974, everything was ready: the stadium, then known as the Westfalenstadion, opened its doors to 54,000 standing spectators for the friendly match featuring home team Borussia Dortmund against FC Schalke 04. Until the start of the 1990s the Dortmund venue remained largely in its original condition. A total of three expansion stages have turned the SIGNAL IDUNA PARK into the “La Scala of German football” – through the proximity to the pitch, the acoustics and the unique enthusiasm of the black and yellow football fans. Even the home of football acknowledges its character: the well-known English newspaper The Times named the SIGNAL IDUNA PARK as the world’s best stadium thanks to its atmosphere and facilities.

### SMART TECHNOLOGY – COMPREHENSIVE COMMUNICATION

The new Wilo-Stratos MAXO for HVAC and drinking water applications in large buildings sets new standards in energy efficiency – extensive studies and customer interviews enabled Wilo to design a pump which is completely tailored to the customer’s needs, even from the earliest development stage. “Our Stratos MAXO is the first smart-pump in the world. Thanks to fully optimised and innovative energy-saving functions like Multi-Flow Adaptation and No-Flow Stop, in addition to a very good EEI of  $\leq 0.19$  to  $\leq 0.17$  depending on the model, it also sets new standards for system efficiency in the market”, says Michael Dieckmann, product manager at Wilo. With its high connectivity, the Wilo-Stratos MAXO can be more flexibly integrated into a wide variety of applications. From integration in building automation to control via app, Wilo uses intelligent and smart technologies to ensure a comprehensive communication capability – naturally, this also applies to the Wilo-Stratos MAXO. With the help of the most recent version of the Wilo-Assistant app, Wilo delivers the entire world of high-efficiency pump technology directly to smartphones and tablets. The new design and the intuitive user guidance are even more useful for tradespeople, consultants and operators in their daily work. New functions and connective solutions add to the range of features already offered by the previous Wilo-Assistant. Sites and central operating statuses can be called up and monitored in real time. But the app, with its remote control and remote maintenance functions, also provides advance support, e.g. during planning and pump selection, during installation and commissioning and during operation.






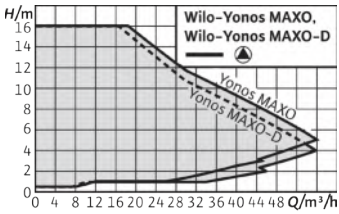
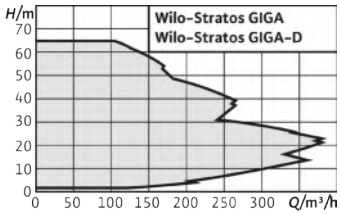
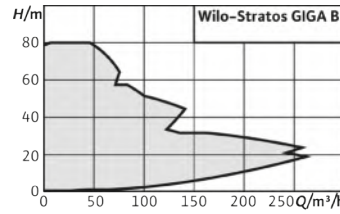
|                         | Glandless premium high-efficiency pumps   | Glandless standard high-efficiency pumps   | Glandless standard high-efficiency pumps  |
|-------------------------|---|--|---|
|                         |    |    |    |
| Series                  | Wilo-Stratos PICO   | Wilo-Yonos PICO<br>Wilo-Yonos PICO-D   | Wilo-Varios PICO  |
| Field of application    | Heating / Air conditioning  | Heating / Air conditioning   | Heating / Air conditioning  |
| Duty chart              |    |    |    |
| Construction            | Glandless circulator with screwed connection, EC motor and automatic power adjustment   | Glandless circulator with screwed connection, EC motor and automatic power adjustment  | Glandless circulator with screwed connection, EC motor and automatic power adjustment   |
| Application             | Hot-water heating systems of all kinds, air-conditioning applications, industrial circulation systems   | Hot-water heating systems of all kinds, air-conditioning applications, industrial circulation systems  | Hot-water heating systems of all kinds, air-conditioning applications, industrial circulation systems   |
| Volume flow $Q_{max}$   | 4 m <sup>3</sup> /h   | 4.5 m <sup>3</sup> /h  | 3.5 m <sup>3</sup> /h   |
| Delivery head $H_{max}$ | 6 m   | 8 m  | 7 m   |
| Special features        | <ul style="list-style-type: none"> <li>→ Maximum energy efficiency thanks to the combination of the EC motor, Dynamic Adapt and precise settings</li> <li>→ High reliability through self-protecting automatic routines</li> <li>→ Intuitive setting by activating functions and modes shown on LC display</li> </ul>   | <ul style="list-style-type: none"> <li>→ Maximum set-up comfort with new smart settings, self-explanatory interface and new functions</li> <li>→ Optimised energy efficiency thanks to EC motor technology, precise settings by 0.1m</li> <li>→ Quick installation/replacement thanks to the improved compact design</li> <li>→ Easier maintenance due to automatically and manually activated restart or air venting function</li> </ul>  | <ul style="list-style-type: none"> <li>→ A highly compatible replacement solution for all applications thanks to compact dimensions, new control modes e.g. iPWM and the new Sync function</li> <li>→ Highest comfort in handling with one push button for control mode and one for preset curves and the LED display</li> <li>→ Easy installation through adaptable connections and maintenance functions like air venting</li> </ul>                  |
| Technical data          | <ul style="list-style-type: none"> <li>→ Fluid temperature +2 °C to +110 °C</li> <li>→ Mains connection 1~230 V, 50 Hz</li> <li>→ Energy Efficiency Index (EEI) ≤ 0.20</li> <li>→ Screwed connection Rp ½, Rp 1, Rp 1¼</li> <li>→ Max. operating pressure 10 bar</li> </ul>   | <ul style="list-style-type: none"> <li>→ Fluid temperature -10 °C to +95 °C</li> <li>→ Mains connection 1~230 V, 50 Hz</li> <li>→ Energy Efficiency Index (EEI) ≤ 0.20</li> <li>→ Screwed connection Rp ½, Rp 1, Rp 1¼</li> <li>→ Max. operating pressure 10 bar</li> </ul>  | <ul style="list-style-type: none"> <li>→ Fluid temperature -10 °C to +95 °C</li> <li>→ Mains connection 1~230 V, 50 Hz</li> <li>→ Energy Efficiency Index (EEI) ≤ 0.20</li> <li>→ Screwed connection Rp ½, Rp 1</li> <li>→ Max. operating pressure 10 bar</li> </ul>  |
| Equipment/function      | <ul style="list-style-type: none"> <li>→ Control mode: Δp-c and Δp-v (Dynamic Adapt)</li> <li>→ Automatic setback operation; venting routine; restart and dry running detection</li> <li>→ Display of the current power consumption or flow and cumulative kWh</li> <li>→ Reset function for the electricity meter or to factory settings</li> <li>→ Hold function (Key lock)</li> <li>→ Wilo-Connector</li> <li>→ Options: stainless steel pump housing</li> </ul> | <ul style="list-style-type: none"> <li>→ Control mode: Δp-c, Δp-v and constant speed (3 curves)</li> <li>→ Setting the operating mode by application, delivery head or constant speed</li> <li>→ Automatic deblocking function</li> <li>→ Manual restart and venting function</li> <li>→ LED display for setting the setpoint and displaying actual consumption</li> <li>→ Wilo-Connector</li> <li>→ Double pump for individual (Δp-c, Δp-v, 3 speeds) or parallel operation (Δp-c, 3 speeds)</li> </ul> | <ul style="list-style-type: none"> <li>→ Control mode: Δp-c, Δp-v and constant speed</li> <li>→ External control (PWM and iPWM)</li> <li>→ Sync function (manual manual programming mode)</li> <li>→ Air venting function</li> <li>→ Manual restart</li> <li>→ LED display and 2 push buttons for settings and functions activation</li> <li>→ Dual electrical connection (Molex and Wilo-Connector)</li> <li>→ Front access to motor screws</li> </ul> |

**Glandless standard high-efficiency pumps**

**Glandless premium smart pumps**




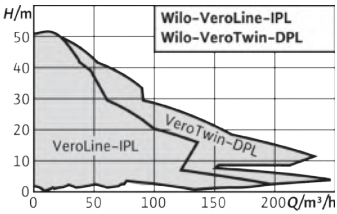
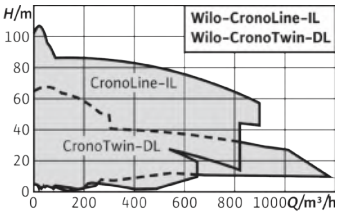
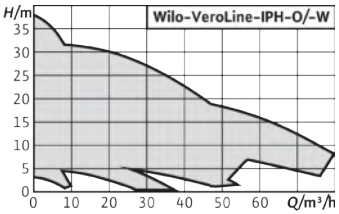
**Glandless premium high-efficiency pumps**


|                         |  |   |  |
|-------------------------|--|---|--|
| Series                  | Wilo-Yonos ECO...-BMS  | Wilo-Stratos MAXO<br>Wilo-Stratos MAXO-D  | Wilo-Stratos<br>Wilo-Stratos-D   |
| Field of application    | Heating / Air conditioning   | Heating / Air conditioning  | Heating / Air conditioning   |
| Duty chart              |  |   |  |
| Construction            | Glandless circulation pump with screwed connection, EC motor and automatic power adjustment  | Smart glandless circulator with screwed connection or flange connection, EC motor with integrated power adjustment  | Glandless circulator with screwed connection or flange connection, EC motor and automatic power adjustment   |
| Application             | Hot-water heating systems of all kinds, air-conditioning systems, closed cooling circuits, industrial circulation systems  | Hot-water heating systems of all kinds, air-conditioning systems, closed cooling circuits, industrial circulation systems   | Hot-water heating systems of all kinds, air-conditioning systems, closed cooling circuits, industrial circulation systems  |
| Volume flow $Q_{max}$   | 3 m <sup>3</sup> /h  | 110 m <sup>3</sup> /h   | 109 m <sup>3</sup> /h  |
| Delivery head $H_{max}$ | 5 m  | 16 m  | 17 m   |
| Special features        | <ul style="list-style-type: none"> <li>→ Potential-free collective fault signal (SSM) for connection to external monitoring unit (e.g. building automation) and control input 0-10 V</li> <li>→ Control cable (4-core, 1.5 m) for connecting SSM and 0-10 V</li> <li>→ Wilo-Connector</li> <li>→ Thermal insulation as standard</li> <li>→ Pump housing with cathaphoretic coating protects against corrosion due to condensation formation</li> </ul> | <ul style="list-style-type: none"> <li>→ Intuitive operation by guided application settings with the Setup Guide</li> <li>→ Energy-saving functions such as No-Flow Stop</li> <li>→ Innovative controlling functions such as Dynamic Adapt plus and Multi-Flow Adaption</li> <li>→ Direct pump networking for multiple pump control via Wilo Net</li> <li>→ Installation comfort by the optimised Wilo-Connector</li> </ul> | <ul style="list-style-type: none"> <li>→ Energy savings through greater system efficiency with the Q-Limit function</li> <li>→ Improved Energy Efficiency Index (EEI) ≤ 0.20 for all single pumps.</li> <li>→ Space-saving installation due to compact design and location-dependent LC display</li> <li>→ Retrofittable interface modules for communication (e.g. Modbus, BACnet, CAN, LON and PLR)</li> </ul>  |
| Technical data          | <ul style="list-style-type: none"> <li>→ Fluid temperature -10 °C to +110 °C</li> <li>→ Mains connection: 1~230 V, 50 Hz</li> <li>→ Energy Efficiency Index (EEI) ≤ 0.20</li> <li>→ Screwed connection Rp 1, Rp 1¼</li> <li>→ Max. operating pressure 10 bar</li> </ul>  | <ul style="list-style-type: none"> <li>→ Fluid temperature -10 °C to +110 °C</li> <li>→ Mains connection: 1~230 V, 50 Hz</li> <li>→ Nominal diameter Rp 1 to DN 100</li> <li>→ Max. operating pressure 10 bar (special version: 16 bar)</li> </ul>  | <ul style="list-style-type: none"> <li>→ Fluid temperature -10 °C to +110 °C</li> <li>→ Mains connection 1~230 V, 50 Hz</li> <li>→ Energy Efficiency Index (EEI) ≤ 0.20 (EEI ≤ 0.23 for double pumps)</li> <li>→ Nominal diameter Rp 1 to DN 100</li> <li>→ Max. operating pressure 10 (16) bar</li> </ul>   |
| Equipment/function      | <ul style="list-style-type: none"> <li>→ Control modes: Δp-c, Δp-v and manual control mode (n = constant)</li> <li>→ Control input "Analog In 0 - 10 V" (remote speed control)</li> <li>→ Collective fault signal (potential-free NC contact)</li> <li>→ Control cable (4-core, 1.5 m) for connecting SSM and 0-10 V</li> <li>→ Wilo-Connector</li> <li>→ Deblocking function</li> </ul>   | <ul style="list-style-type: none"> <li>→ Control mode: Dynamic Adapt plus, Δp-c, Δp-v, n-const, T-const, ΔT-const and Q-const</li> <li>→ Multi-Flow Adaptation</li> <li>→ Remote control via Bluetooth interface</li> <li>→ Selection of application range with Setup Guide</li> <li>→ Heat and cold metering</li> <li>→ Dual pump management</li> <li>→ Retrofittable interface modules for communication</li> </ul>       | <ul style="list-style-type: none"> <li>→ Control modes: Δp-c, Δp-v, Δp-T</li> <li>→ Volume flow limitation with Q-Limit function (via IR-Stick)</li> <li>→ Automatic setback operation</li> <li>→ Dual pump management</li> <li>→ Graphical pump display</li> <li>→ Remote control via infrared interface (IR-Stick/IR-Monitor)</li> <li>→ Retrofittable interface modules for communication</li> <li>→ Combination flanges PN 6/PN 10 (DN 32 to DN 65)</li> </ul> |

|                         | Glandless standard high-efficiency pumps  | Glanded high-efficiency pumps in in-line design   | Glanded high-efficiency pumps in monobloc design  |
|-------------------------|---|---|---|
|                         |    |  <span style="background-color: #008080; color: white; padding: 2px 5px; font-weight: bold;">IE5</span><br><span style="background-color: #FFA500; padding: 2px 5px; font-weight: bold;">Series extension</span>   |  <span style="background-color: #008080; color: white; padding: 2px 5px; font-weight: bold;">IE5</span><br><span style="background-color: #FFA500; padding: 2px 5px; font-weight: bold;">Series modification</span>  |
| Series                  | Wilo-Yonos MAXO<br>Wilo-Yonos MAXO-D  | Wilo-Stratos GIGA<br>Wilo-Stratos GIGA-D  | Wilo-Stratos GIGA B   |
| Field of application    | Heating / Air conditioning  | Heating / Air conditioning / Industrial Process   | Heating / Air conditioning / Industrial Process   |
| Duty chart              |    |   |    |
| Construction            | Glandless circulator with screwed connection or flange connection, EC motor and automatic power adjustment  | High-efficiency in-line pump (as single or double pump) with EC motor, electronically controlled, in glanded design with flange connection and mechanical seal  | High-efficiency monobloc pump with EC motor and electronic power adjustment in glanded pump design, with flange connection and mechanical seal  |
| Application             | Hot-water heating systems of all kinds, air-conditioning systems, closed cooling circuits, industrial circulation systems   | Pumping of heating water, cold water and water-glycol mixtures without abrasive substances in heating, cold water and cooling systems   | Pumping of heating water, cold water and water-glycol mixtures without abrasive substances in heating, cold water and cooling systems   |
| Volume flow $Q_{max}$   | 55 m <sup>3</sup> /h  | 380 m <sup>3</sup> /h   | 270 m <sup>3</sup> /h   |
| Delivery head $H_{max}$ | 16 m  | 65 m  | 80 m  |
| Special features        | <ul style="list-style-type: none"> <li>→ LED display for indication of set delivery head and fault codes</li> <li>→ Quick setting when replacing an uncontrolled standard pump with pre-set speed stages, e.g. TOP-S</li> <li>→ Electrical connection with Wilo plug</li> <li>→ Collective fault signal ensures system availability</li> <li>→ Pump housing with cataphoretic (KTL) coating protects against corrosion due to condensation</li> </ul> | <ul style="list-style-type: none"> <li>→ Innovative high-efficiency pump for maximum overall efficiency</li> <li>→ High-efficiency EC motor with efficiency class IE5 acc. IEC 60034-30-2</li> <li>→ Optional IF module interfaces for bus communication with building automation</li> </ul>  | <ul style="list-style-type: none"> <li>→ Innovative high-efficiency pump for maximum total-system efficiency, with principal dimensions in accordance with EN 733</li> <li>→ High-efficiency EC motor (efficiency class IE5 acc. IEC 60034-30-2)</li> <li>→ Optional IF module interfaces for bus communication with building automation</li> </ul>   |
| Technical data          | <ul style="list-style-type: none"> <li>→ Fluid temperature -20 °C to +110 °C</li> <li>→ Mains connection 1~230 V, 50 Hz</li> <li>→ Energy Efficiency Index (EEI) ≤ 0.20 (EEI ≤ 0.23 for double pumps)</li> <li>→ Nominal diameter Rp 1 to DN 100</li> <li>→ Max. operating pressure 10 bar</li> </ul>   | <ul style="list-style-type: none"> <li>→ Fluid temperature -20 °C to +140 °C</li> <li>→ Mains connection: 3~380 V -3~480 V (±10 %), 50/60 Hz</li> <li>→ Minimum efficiency index (MEI): up to 6,0 kW MEI ≥ 0,7, from 11 kW MEI ≥ 0,4</li> <li>→ Nominal diameter DN 40 up to DN 100</li> <li>→ Max. operating pressure 16 bar</li> </ul>  | <ul style="list-style-type: none"> <li>→ Fluid temperature -20 °C to +140 °C</li> <li>→ Mains connection: 3~380 V -3~480 V (±10 %), 50/60 Hz</li> <li>→ Minimum efficiency index (MEI): up to 6,0 kW MEI ≥ 0,7, from 11 kW MEI ≥ 0,4</li> <li>→ Nominal diameter DN 32 to DN 80</li> <li>→ Max. operating pressure 16 bar</li> </ul>  |
| Equipment/function      | <ul style="list-style-type: none"> <li>→ Control modes: Δp-c, Δp-v, 3 speed stages</li> <li>→ LED display for setting the required delivery head</li> <li>→ Quick electrical connection with Wilo plug</li> <li>→ Motor protection, fault signal light and contact for collective fault signal</li> <li>→ Combination flanges PN 6/PN 10 (for DN 40 to DN 65)</li> </ul>  | <ul style="list-style-type: none"> <li>→ Control modes: Δp-c, Δp-v, PID control, n=constant</li> <li>→ Manual functions: E.g. differential pressure setpoint setting, manual control mode, error acknowledgement</li> <li>→ External control functions: E.g. Overriding Off, external pump cycling (double pump operation), analogue input 0-10 V/0-20 mA for constant speed (DDC)</li> <li>→ Remote control via infrared interface (IR-Stick/IR-Monitor), plug-in position for IF modules for connection to building automation</li> </ul> | <ul style="list-style-type: none"> <li>→ Control modes: Δp-c, Δp-v, PID control, n=constant</li> <li>→ Manual functions: E.g. differential pressure setpoint setting, manual control mode, error acknowledgement</li> <li>→ External control functions: E.g. Overriding Off, External pump cycling, analogue input 0-10 V/0-20 mA for constant speed (DDC)</li> <li>→ Remote control via infrared interface (IR-Stick/IR-Monitor), plug-in position for IF modules for connection to building automation</li> </ul> |

**Glanded energy-saving pumps in in-line design**
**Glanded energy-saving pumps in in-line design**
**Glanded energy-saving pumps in monobloc design**


|                         |   |   |  |
|-------------------------|---|---|--|
| Series                  | Wilo-VeroLine-IP-E<br>Wilo-VeroTwin-DP-E  | Wilo-CronoLine-IL-E<br>Wilo-CronoTwin-DL-E  | Wilo-CronoBloc-BL-E  |
| Field of application    | Heating / Air conditioning / Industrial Process   | Heating / Air conditioning / Industrial Process   | Heating / Air conditioning / Industrial Process  |
| Duty chart              |   |   |  |
| Construction            | Energy-saving in-line pump/in-line double pump in glanded construction. Version as single-stage low-pressure centrifugal pump with flange connection and mechanical seal  | Energy-saving in-line pump/in-line double pump in glanded construction. Version as single-stage low-pressure centrifugal pump with flange connection and mechanical seal  | Energy-saving pump in monobloc design in glanded construction. Version as single-stage low-pressure centrifugal pump with flange connection and mechanical seal  |
| Application             | Pumping of heating water, cold water and water-glycol mixtures without abrasive substances in heating, cold water and cooling systems   | Pumping of heating water, cold water and water-glycol mixtures without abrasive substances in heating, cold water and cooling systems   | Pumping of heating water, cold water and water-glycol mixtures without abrasive substances in heating, cold water and cooling systems  |
| Volume flow $Q_{max}$   | 170 m <sup>3</sup> /h   | 800 m <sup>3</sup> /h   | 380 m <sup>3</sup> /h  |
| Delivery head $H_{max}$ | 30 m  | 65 m  | 84 m   |
| Special features        | <ul style="list-style-type: none"> <li>→ Optional interfaces for bus communication using plug-in IF modules</li> <li>→ Simple operation with Green Button Technology and display</li> <li>→ Integrated dual pump management</li> <li>→ Integrated full motor protection with trip electronics</li> <li>→ Motors with efficiency class IE4</li> </ul>  | <ul style="list-style-type: none"> <li>→ Optional interfaces for bus communication using plug-in IF modules</li> <li>→ Simple operation with Green Button Technology and display</li> <li>→ Integrated dual pump management</li> <li>→ Integrated full motor protection with trip electronics</li> <li>→ Motors with efficiency class IE4</li> </ul>  | <ul style="list-style-type: none"> <li>→ Optional interfaces for bus communication using plug-in IF modules</li> <li>→ Simple operation with Green Button Technology and display</li> <li>→ Integrated full motor protection with trip electronics</li> <li>→ Meets user requirements due to performance and main dimensions in accordance with EN 733</li> <li>→ Motors with efficiency class IE4</li> </ul>  |
| Technical data          | <ul style="list-style-type: none"> <li>→ Fluid temperature -20 °C to +120 °C</li> <li>→ Mains connection: 3~440 V ±10 %, 50/60 Hz 3~400 V ±10 %, 50/60 Hz 3~380 V -5 %/+10 %, 50/60 Hz</li> <li>→ Minimum efficiency index (MEI) ≥ 0.4</li> <li>→ Nominal diameter DN 32 to DN 80</li> <li>→ Max. operating pressure 10 (16) bar</li> </ul>   | <ul style="list-style-type: none"> <li>→ Fluid temperature -20 °C to +140 °C</li> <li>→ Mains connection: 3~440 V ±10 %, 50/60 Hz, 3~400 V ±10 %, 50/60 Hz, 3~380 V -5 %/+10 %, 50/60 Hz</li> <li>→ Minimum efficiency index (MEI) ≥ 0.4</li> <li>→ Nominal diameter DN 40 to DN 80</li> <li>→ Max. operating pressure 16 bar</li> </ul>  | <ul style="list-style-type: none"> <li>→ Fluid temperature -20 °C to +140 °C</li> <li>→ Mains connection: 3~440 V ±10 %, 50/60 Hz, 3~400 V ±10 %, 50/60 Hz, 3~380 V -5 %/+10 %, 50/60 Hz</li> <li>→ Minimum efficiency index (MEI) ≥ 0.4</li> <li>→ Nominal diameter DN 32 to DN 125</li> <li>→ Max. operating pressure 16 bar (120 °C)</li> </ul>   |
| Equipment/function      | <ul style="list-style-type: none"> <li>→ Control modes: Δp-c, Δp-v, PID control, n=constant</li> <li>→ Manual functions: E.g. differential pressure setpoint setting, manual control mode, error acknowledgement</li> <li>→ External control functions: E.g. Overriding Off, external pump cycling (double pump operation), analogue input 0-10 V/0-20 mA for constant speed (DDC)</li> <li>→ Remote control via infrared interface (IR-Stick/IR-Monitor), plug-in position for IF modules for connection to building automation</li> </ul> | <ul style="list-style-type: none"> <li>→ Control modes: Δp-c, Δp-v, PID control, n=constant</li> <li>→ Manual functions: E.g. differential pressure setpoint setting, manual control mode, error acknowledgement</li> <li>→ External control functions: E.g. Overriding Off, external pump cycling (double pump operation), analogue input 0-10 V/0-20 mA for constant speed (DDC)</li> <li>→ Remote control via infrared interface (IR-Stick/IR-Monitor), plug-in position for IF modules for connection to building automation</li> </ul> | <ul style="list-style-type: none"> <li>→ Control modes: Δp-c, Δp-v, PID control, n=constant</li> <li>→ Manual functions: E.g. differential pressure setpoint setting, manual control mode, error acknowledgement</li> <li>→ External control functions: E.g. Overriding Off, analogue input 0-10 V/0-20 mA for constant speed (DDC)</li> <li>→ Remote control via infrared interface (IR-Stick/IR-Monitor), plug-in position for IF modules for connection to building automation</li> </ul> |

|                         | Glanded standard pumps in in-line design  | Glanded standard pumps in in-line design  | Special glanded pumps in in-line design   |
|-------------------------|---|---|---|
|                         |    |    |    |
| Series                  | Wilo-VeroLine-IPL<br>Wilo-VeroTwin-DPL  | Wilo-CronoLine-IL<br>Wilo-CronoTwin-DL  | Wilo-VeroLine-IPH-W<br>Wilo-VeroLine-IPH-O  |
| Field of application    | Heating / Air conditioning / Industrial Process   | Heating / Air conditioning / Industrial Process   | Heating / Air conditioning / Industrial Process   |
| Duty chart              |    |   |    |
| Construction            | Glanded pump/double pump in in-line design with screwed connection or flange connection   | Glanded pump/double pump in in-line design with flange connection   | Glanded pump in in-line design with flange connection   |
| Application             | Pumping of heating water, cold water and water-glycol mixtures without abrasive substances in heating, cold water and cooling systems   | Pumping of heating water, cold water and water-glycol mixtures without abrasive substances in heating, cold water and cooling systems   | IPH-W: For hot water in closed industrial circulation systems, district heating, closed heating systems<br>IPH-O: For heat transfer oil in closed industrial circulation systems  |
| Volume flow $Q_{max}$   | 245 m <sup>3</sup> /h   | 1,170 m <sup>3</sup> /h   | 80 m <sup>3</sup> /h  |
| Delivery head $H_{max}$ | 52 m  | 108 m   | 38 m  |
| Special features        | <ul style="list-style-type: none"> <li>→ High standard of corrosion protection</li> <li>→ Standard condensate drainage holes in motor housings and lanterns</li> <li>→ Series design: motor with one-piece shaft</li> <li>→ Version N: Standard motor B5 or V1 with stainless steel plug shaft</li> <li>→ Bidirectional, force-flushed mechanical seal</li> <li>→ DPL: Main-/standby operation or peak-load operation (via additional external device)</li> </ul> | <ul style="list-style-type: none"> <li>→ Can be used flexibly in air-conditioning and cooling systems, with application benefits due to direct draining of condensate</li> <li>→ High standard of corrosion protection</li> <li>→ Worldwide availability of standard motors (according to Wilo specifications) and standard mechanical seals</li> <li>→ Main/standby mode or peak-load operation (by means of external auxiliary device)</li> </ul> | <ul style="list-style-type: none"> <li>→ Self-cooled mechanical seal, independent of direction of rotation</li> <li>→ Great variety of applications due to a wide fluid temperature range without additional wearing parts</li> </ul>                                       |
| Technical data          | <ul style="list-style-type: none"> <li>→ Fluid temperature -20 °C to +120 °C</li> <li>→ Mains connection 3~400 V, 50 Hz</li> <li>→ Minimum efficiency index (MEI) ≥ 0.4</li> <li>→ Nominal diameter Rp 1 to DN 100</li> <li>→ Max. operating pressure 10 bar (special version: 16 bar)</li> </ul>   | <ul style="list-style-type: none"> <li>→ Fluid temperature -20 °C to +140 °C</li> <li>→ Mains connection 3~400 V, 50 Hz</li> <li>→ Minimum efficiency index (MEI) ≥ 0.4</li> <li>→ Nominal diameter DN 32 to DN 250</li> <li>→ Max. operating pressure 16 bar (25 bar on request)</li> </ul>  | <ul style="list-style-type: none"> <li>→ Fluid temperature IPH-W: -10 °C to +210 °C (at max. 23 bar)</li> <li>→ Fluid temperature IPH-O: -10 °C to +350 °C (at max. 9 bar)</li> <li>→ Mains connection 3~400 V, 50 Hz</li> <li>→ Nominal diameter DN 20 to DN 80</li> </ul> |
| Equipment/function      | <ul style="list-style-type: none"> <li>→ Single-stage, low-pressure centrifugal pump in in-line design with</li> <li>→ Mechanical seal</li> <li>→ Flange connection with pressure measuring connection R ½</li> <li>→ Motor with one-piece shaft</li> <li>→ DPL with switchover valve</li> <li>→ Motors with efficiency class IE3 for motors ≥ 0.75 kW</li> </ul>   | <ul style="list-style-type: none"> <li>→ Single-stage, low-pressure centrifugal pump in in-line design with</li> <li>→ Mechanical seal</li> <li>→ Flange connection with pressure measuring connection R ½</li> <li>→ Lantern</li> <li>→ Coupling</li> <li>→ IEC standard motor</li> <li>→ DL with switchover valve</li> <li>→ Motors with efficiency class IE3 for motors ≥ 0.75 kW</li> </ul>   | <ul style="list-style-type: none"> <li>→ Single-stage, low-pressure centrifugal pump in in-line design with</li> <li>→ Mechanical seal</li> <li>→ Flange connection</li> <li>→ Lantern</li> <li>→ Motor with special shaft</li> </ul>                                       |



## Glanded monobloc pumps

## Glanded monobloc pumps

## Standard glanded pumps




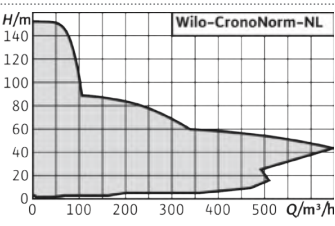
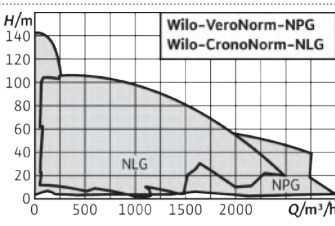
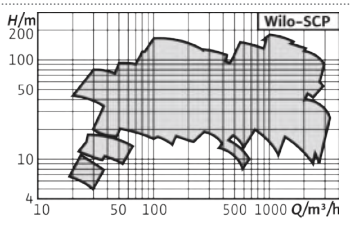


Series extension



NEW

|                         |  |   |   |
|-------------------------|--|---|---|
| Series                  | Wilo-CronoBloc-BL  | Wilo-BAC  | Wilo-Atmos GIGA-N   |
| Field of application    | Heating / Air conditioning / Industrial Process  | Heating / Air conditioning / Industrial Process   | Heating / Air conditioning / Industrial Process / Clean water treatment / Distribution and boosting / Irrigation  |
| Duty chart              |  |   |   |
| Construction            | Glanded pump in monobloc design with flange connection   | Glanded pump in monobloc design with screwed connection or Victaulic connection   | Single-stage, low-pressure centrifugal pump with axial suction, mounted on a baseplate.   |
| Application             | Pumping of heating water, cold water and water-glycol mixtures without abrasive substances in heating, cold water and cooling systems  | For pumping of cooling water, cold water, water-glycol mixtures and other fluids without abrasive substances  | Pumping of heating water (in accordance with VDI 2035), cold water, water-glycol mixtures in heating, cold water and cooling systems.   |
| Volume flow $Q_{max}$   | 767 m <sup>3</sup> /h  | 87 m <sup>3</sup> /h  | 1000 m <sup>3</sup> /h  |
| Delivery head $H_{max}$ | 150 m  | 26 m  | 150 m   |
| Special features        | <ul style="list-style-type: none"> <li>→ High corrosion protection through cathaphoresis coating of the cast iron components</li> <li>→ Standard condensate drainage holes in the motor housings</li> <li>→ High worldwide availability of standard motors (according to Wilo specifications) and mechanical seals</li> <li>→ Performance and main dimensions in accordance with EN 733</li> </ul> | <ul style="list-style-type: none"> <li>→ Pump housing in plastic design</li> <li>→ Version with Victaulic or threaded connection (BAC 70/135... only with Victaulic connection)</li> </ul>  | <ul style="list-style-type: none"> <li>→ Energy-saving thanks to increased overall efficiency through improved hydraulics and the use of IE3 motors</li> <li>→ Cataphoretic coating of all cast components for high corrosion resistance and long service life</li> <li>→ Universally usable thanks to standardised dimensions, a range of motor options and impellers made of different materials</li> </ul> |
| Technical data          | <ul style="list-style-type: none"> <li>→ Fluid temperature -20 °C to +140 °C</li> <li>→ Mains connection 3~400 V, 50 Hz</li> <li>→ Minimum efficiency index (MEI) ≥ 0.4</li> <li>→ Nominal diameter DN 32 to DN 150</li> <li>→ Max. operating pressure 16 bar (25 bar on request)</li> </ul>   | <ul style="list-style-type: none"> <li>→ Fluid temperature -15 °C to +60 °C</li> <li>→ Mains connection 3~400 V, 50 Hz</li> <li>→ Minimum efficiency index (MEI) ≥ 0.4</li> <li>→ Nominal diameter G2/G 1½ (only BAC 40.../S) or Victaulic connection Ø 60.3/48.3 mm (BAC 40.../R) Ø 76.1/76.1 mm (BAC 70.../R)</li> <li>→ Max. operating pressure 6.5 bar</li> </ul> | <ul style="list-style-type: none"> <li>→ Permissible temperature range of -20 °C to +140 °C</li> <li>→ Mains connection 3~400 V, 50 Hz</li> <li>→ Protection class IP55</li> <li>→ Nominal diameter DN 32 to DN 150</li> <li>→ Max. operating pressure 16 bar</li> </ul>  |
| Equipment/function      | <ul style="list-style-type: none"> <li>→ Single-stage low-pressure centrifugal pump in monobloc design, with axial suction port and radially arranged pressure port with</li> <li>→ Mechanical seal</li> <li>→ Flange connection with pressure measuring connection R ½</li> <li>→ Lantern</li> <li>→ Coupling</li> <li>→ Motors with efficiency class IE3 for motors ≥ 0.75 kW</li> </ul>         | <ul style="list-style-type: none"> <li>→ Single-stage low-pressure centrifugal pump in monobloc design, with axial suction port and radially arranged pressure port</li> <li>→ Motors with efficiency class IE3</li> </ul>  | <ul style="list-style-type: none"> <li>→ Single-stage low-pressure centrifugal pump in monobloc design with coupling, coupling guard, motor and baseplate</li> </ul>  |

|                         | Standard glanded pumps   | Standard glanded pumps  | Axially split case pumps   |
|-------------------------|--|---|--|
|                         | <br><b>Discontinued line</b>  |   |   |
| Series                  | Wilco-CronoNorm-NL   | Wilco-CronoNorm-NLG<br>Wilco-VeroNorm-NPG   | Wilco-SCP  |
| Field of application    | Heating / Air conditioning / Clean water treatment   | Heating / Air conditioning / Clean water treatment  | Distribution and boosting / Clean water treatment / Irrigation   |
| Duty chart              |   |   |   |
| Construction            | Single-stage low-pressure centrifugal pump with axial suction, according to EN 733 and ISO 5199, mounted on a baseplate  | Single-stage low-pressure centrifugal pump with axial suction, according to ISO 5199, mounted on a baseplate  | Low-pressure centrifugal pump with axially split housing mounted on a baseplate  |
| Application             | Pumping of heating water, cold water, water-glycol mixtures in municipal water supply, general industry, power stations etc.   | Pumping of heating water, cold water, water-glycol mixtures in municipal water supply, general industry, power stations etc.  | Pumping of heating water (acc. VDI 2035), cold water, process water, water-glycol mixtures in heating, cold water and cooling systems.   |
| Volume flow $Q_{max}$   | 650 m <sup>3</sup> /h  | 2,800 m <sup>3</sup> /h   | 3,400 m <sup>3</sup> /h  |
| Delivery head $H_{max}$ | 150 m  | 140 m   | 245 m  |
| Special features        | <ul style="list-style-type: none"> <li>→ Reduced life cycle costs through optimised efficiency levels</li> <li>→ Bidirectional, force-flushed mechanical seal</li> <li>→ Low NPSH values, best cavitation properties</li> <li>→ Shaft coupling with or without spacer coupling</li> </ul>  | <p>NLG:</p> <ul style="list-style-type: none"> <li>→ Reduced life cycle costs through optimised efficiency</li> <li>→ Mechanical seal independent of the direction of rotation</li> <li>→ Interchangeable casing wear ring</li> <li>→ Permanently lubricated, generously dimensioned roller bearings</li> </ul> <p>NPG:</p> <ul style="list-style-type: none"> <li>→ Suitable for temperatures up to 140 °C</li> <li>→ Back pull-out version</li> </ul> | <ul style="list-style-type: none"> <li>→ Higher volume flows up to 17,000 m<sup>3</sup>/h on request</li> <li>→ Special motors and other materials on request</li> </ul>   |
| Technical data          | <ul style="list-style-type: none"> <li>→ Fluid temperature -20 °C to +120 °C</li> <li>→ Mains connection 3~400 V, 50 Hz</li> <li>→ Nominal diameter: DN 50 to DN 500 (suction side), DN 32 to DN 500 (pressure side)</li> <li>→ Operating pressure: depending on type and application – up to 16 bar</li> </ul>  | <ul style="list-style-type: none"> <li>→ Fluid temperature -20 °C to +120 °C (depending on type)</li> <li>→ Mains connection 3~400 V, 50 Hz</li> <li>→ Nominal diameters: DN 150 to DN 500 (depending on type)</li> <li>→ Operating pressure: depending on type and application – up to 16 bar</li> </ul>   | <ul style="list-style-type: none"> <li>→ Fluid temperature -8 °C to +120 °C</li> <li>→ Mains connection 3~400 V, 50 Hz</li> <li>→ Nominal diameters – Suction side: DN 65 to DN 500</li> <li>→ Pressure side: DN 50 to DN 400</li> <li>→ Max. operating pressure: 16 or 25 bar, depending on type</li> </ul>   |
| Equipment/function      | <ul style="list-style-type: none"> <li>→ Single-stage horizontal spiral housing pump with bearing bracket and exchangeable casing wear rings in process design</li> <li>→ Shaft sealing: mechanical seals in accordance with EN 12756 or stuffing box packing</li> <li>→ Spiral housing with cast pump support feet</li> <li>→ Shaft coupling with spacer coupling</li> <li>→ Motors ≥ 0.75 kW: IE3</li> </ul> | <ul style="list-style-type: none"> <li>→ Single-stage horizontal spiral housing pump with bearing bracket and exchangeable casing wear rings (NLG only) in process design</li> <li>→ Shaft sealing with mechanical seals in accordance with EN 12756 or stuffing box packing</li> <li>→ Spiral housing with cast pump bases</li> <li>→ Greased grooved ball bearings for bearing of pump shaft</li> <li>→ Motors with efficiency class IE3</li> </ul>   | <ul style="list-style-type: none"> <li>→ 1- or 2-stage, low-pressure centrifugal pump in monobloc design</li> <li>→ Deliverable as complete unit or without motor or only pump hydraulics</li> <li>→ Shaft sealing with mechanical seal or stuffing box packing</li> <li>→ 4-pole and 6-pole motors</li> <li>→ Materials:</li> <li>→ Pump housing: EN-GJL-250</li> <li>→ Impeller: G-CuSn5 ZnPb</li> <li>→ Shaft: X12Cr13</li> </ul> |

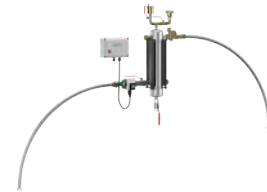
### Glanded energy-saving pumps Multi-pump systems






### Condensate lifting units




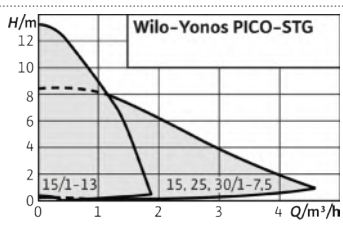
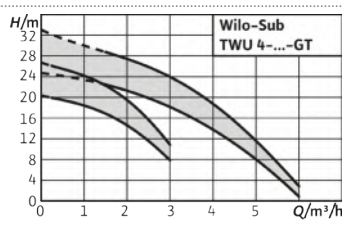





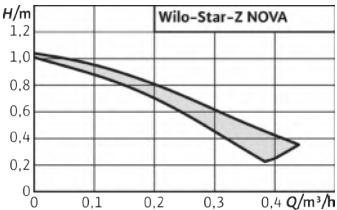
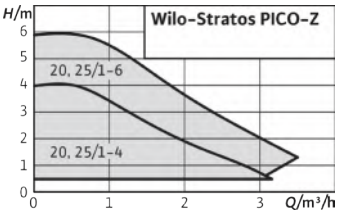
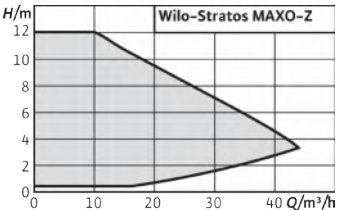
### Particle separator systems for closed HVAC loops



|                         |   |  |   |
|-------------------------|---|--|---|
| Series                  | Wilo-SiFlux   | Wilo-Plavis ...-C  | Wilo-SiClean  |
| Field of application    | Heating / Air conditioning  | Heating / Air conditioning   | Heating / Air conditioning  |
| Duty chart              |   |  |   |
| Construction            | Fully automatic, ready for connection multi-pump system for high volume flows in heating, cold water and cooling water systems. 3 to 4 electronically controlled in-line pumps switched in parallel   | Automatic condensate lifting unit  | Compact particle separator kit, consisting of mechanical and hydraulic components. Manual emptying of the system  |
| Application             | For pumping heating water, water-glycol mixtures and cooling and cold water without abrasive substances in heating, cold water and cooling water systems  | For pumping condensate out of heat generators with condensing boiler technology, Air-conditioning and cooling systems  | Removes particles from heating systems using natural physical phenomena in commercial properties and for district heating.  |
| Volume flow $Q_{max}$   | 490 m <sup>3</sup> /h   | 330 l/h  | 4 m <sup>3</sup> /h   |
| Delivery head $H_{max}$ | 55 m  | 4 m  | –   |
| Special features        | <ul style="list-style-type: none"> <li>→ Number of pumps: 2+1 or 3+1 (2 or 3 pumps in operation, 1 standby pump each)</li> <li>→ Quick and easy installation</li> <li>→ Energy-saving: Operation in partial load area according to current needs</li> <li>→ Reliable system thanks to optimally matched components</li> <li>→ Compact design, good accessibility to all components</li> </ul>   | <ul style="list-style-type: none"> <li>→ Reliable level measurement via electrode level switching</li> <li>→ Easy installation thanks to Plug &amp; Pump with adjustable inlet</li> <li>→ Quick and easy maintenance thanks to removable service cap and integrated non-return ball valve</li> <li>→ Energy savings due to low electricity consumption (<math>\leq 20</math> W)</li> <li>→ Compact, modern construction and quiet operation (<math>\leq 40</math> dBA)</li> </ul>                          | <ul style="list-style-type: none"> <li>→ Removal of magnetic and non-magnetic particles from the medium, venting of micro bubbles</li> <li>→ High cleaning efficiency due to physical effects (gravity, filtration...)</li> <li>→ Easy to use due to ease of installation, maintenance, and simplified settings</li> <li>→ Corrosion-resistant thanks to stainless steel particle separator</li> </ul>  |
| Technical data          | <ul style="list-style-type: none"> <li>→ VeroLine-IP-E or CronoLine-IL-E</li> <li>→ 3~230/400 V, 50 Hz <math>\pm 10</math> %</li> <li>→ Fluid temperature: 0 °C to +120 °C</li> <li>→ Pipe connections: DN 125 to DN 300</li> <li>→ Max. permissible operating pressure: 10 bar (IP-E), 16 bar (IL-E)</li> </ul>  | <ul style="list-style-type: none"> <li>→ Mains connection 1~ 100-240 V, 50/60 Hz</li> <li>→ Max. fluid temperature 60 °C</li> <li>→ Protection class IPX4</li> <li>→ Inlet connections 18/40 mm</li> <li>→ Tank volume 0.7 l to 1.6 l</li> </ul>   | <ul style="list-style-type: none"> <li>→ Fluid temperature: 0 °C to +95 °C</li> <li>→ Mains connection: 1~230 V, 50 Hz</li> </ul>   |
| Equipment/function      | <ul style="list-style-type: none"> <li>→ Automatic pump control via Wilo-SCE</li> <li>→ Parts that come in contact with the fluid are corrosion-resistant</li> <li>→ Base frame made of galvanised steel, with height-adjustable vibration absorbers for insulation against structure-borne noise</li> <li>→ Distributor steel, with corrosion-resistant coating</li> <li>→ Shut-off valves, non-return valve, pressure gauge and premounted seals</li> <li>→ Differential pressure sensor</li> </ul> | <ul style="list-style-type: none"> <li>→ Electric connecting cable with plug (1.5 m)</li> <li>→ Detachable service cap; integrated non-return ball valve</li> <li>→ 013-C and 015-C: Pressure hose (5 m, <math>\varnothing 8</math>); Alarm cable (1.5 m); Alarm contact (NC/NO contact); Adjustable rubber guide, <math>\varnothing 2</math> to <math>\varnothing 32</math>; Fixation material for wall mounting</li> <li>→ 015-C: granulate chamber including granulate for pH-neutralization</li> </ul> | <ul style="list-style-type: none"> <li>→ Anti-corrosive, hydraulic components</li> <li>→ Pre-assembled fabric-reinforced connecting hoses</li> <li>→ Pre-assembled venting unit for expulsion of micro bubbles</li> <li>→ Movable magnetic rods for separation of iron oxide particles</li> <li>→ Volume flow limiter</li> <li>→ Manual purge valve for draining of collected particles</li> <li>→ Switchbox for monitoring the circulator</li> </ul> |

|                         | Particle separator systems for closed HVAC loops   | Control devices(Comfort controller CC..., Vario controller VR..., Smart controller SC...)  | External Frequency Converter  |
|-------------------------|--|--|---|
|                         |   |    |    |
| Series                  | Wilo-SiClean Comfort   | Wilo-CC/CC-FC/CCe-HVAC system<br>Wilo-SC/SC-FC/SCe-HVAC system   | Wilo-EFC  |
| Field of application    | Heating / Air conditioning   | Heating / Air conditioning   | Heating / Air conditioning / Cooling / Water Supply / Drainage and Sewage   |
| Duty chart              |  |  |   |
| Construction            | Fully-automatic, compact particle separator consisting of mechanical and hydraulic components. The system is drained automatically.  | –  | Frequency converter   |
| Application             | Removes particles from heating systems using natural physical phenomena in commercial properties and for district heating  | Switchgear for controlling 1 to 6 pumps  | Wall-mounted frequency converter for fixed-speed pumps equipped with asynchronous or permanent magnet motors  |
| Volume flow $Q_{max}$   | 47 m <sup>3</sup> /h   | –  | –   |
| Delivery head $H_{max}$ | –  | –  | –   |
| Special features        | <ul style="list-style-type: none"> <li>→ High efficiency via combination of physical effects</li> <li>→ "Plug &amp; Play" design; fully automated operation</li> <li>→ Fully automated and adjustable disposal of collected particles in the desludging tank</li> <li>→ Highly functional thanks to removal of all magnetic and non-magnetic particles, free air and micro bubbles in the fluid, support for the degasification process</li> </ul> | → Special versions on request  | <ul style="list-style-type: none"> <li>→ Flexible and safe application</li> <li>→ Compact design with energy-saving cooling concept to reduce temperature losses</li> <li>→ Integrated energy-efficient harmonic reduction</li> <li>→ Additional energy-saving function in the partial load range of the pump</li> <li>→ Versatile use in pump applications thanks to several connection options and different control modes</li> </ul> |
| Technical data          | <ul style="list-style-type: none"> <li>→ Fluid temperature 0 °C to +95 °C</li> <li>→ Mains connection: 3~400 V, 50 Hz</li> </ul>   | –  | <ul style="list-style-type: none"> <li>→ Max. ambient temperature: 55°C (50°C without derating) up to 90 kW, 50°C (45°C without derating) from 110 kW</li> <li>→ Environment protection class: IP55 up to 90 kW, IP54 from 110 kW</li> </ul>  |
| Equipment/function      | <ul style="list-style-type: none"> <li>→ Corrosion-resistant, hydraulic components</li> <li>→ Fabric-reinforced hoses connected to inlet and outlet of the particle separator</li> <li>→ Pre-assembled flushing device including electronic drain valve and additional safety valve</li> <li>→ Automatic draining of the particle collection chamber</li> <li>→ SC switchgear</li> </ul>   | <ul style="list-style-type: none"> <li>→ CC-HVAC: Control system for 1 to 6 pumps with fixed speed</li> <li>→ CCe-HVAC: Control system for 1 to 6 pumps with integrated speed control or external frequency converter control</li> <li>→ SC-HVAC: Controller for 1 to 4 pumps</li> <li>→ SC and SC-FC for standard pumps with fixed speed</li> <li>→ SCe for electronically controlled pumps or pumps with integrated frequency converter</li> </ul> | → IF modules as an option: Profibus, Ethernet, DeviceNet, Profinet, Modbus  |

|                         | Pump control   | Glandless high-efficiency pumps  | Submersible pumps  |
|-------------------------|--|--|--|
|                         |   |   |   |
| Series                  | 1. Wilo-IR-Stick, IR-Monitor<br>2. Wilo-IF-Modules, Wilo-CIF-Modules   | Wilo-Yonos PICO-STG  | Wilo-Sub TWU 4 ...-GT  |
| Field of application    | Heating / Air conditioning   | Heating  | Raw water intake   |
| Duty chart              |  |    |   |
| Construction            | –  | Glandless circulator with screwed connection, EC motor and automatic power adjustment  | Submersible pump, multistage   |
| Application             | 1. Remote control with infrared interface for electronically controlled Wilo pumps<br>2. Wilo-Control products for connecting pumps to building automation   | Circulation in solar thermal and geothermal energy systems   | Water supply from boreholes, wells and rainwater storage for geothermal applications   |
| Volume flow $Q_{max}$   | –  | 4,5 m <sup>3</sup> /h  | 6 m <sup>3</sup> /h  |
| Delivery head $H_{max}$ | –  | 13 m   | 33 m   |
| Special features        | –  | <ul style="list-style-type: none"> <li>→ Green button for setting the control mode <math>\Delta p-v</math> or the fixed speed</li> <li>→ External speed control via integrated interface PWM 1 (geothermal) and PWM 2 (solar)</li> <li>→ Pump housing with cataphoretic coating protects against corrosion due to condensation formation</li> <li>→ Operation and fault display via ring LED</li> </ul>  | <ul style="list-style-type: none"> <li>→ Performance-optimised motors for geothermal applications</li> <li>→ Parts in contact with the fluid are corrosion-resistant</li> <li>→ Integrated non-return valve</li> <li>→ Low wear due to floating impellers</li> </ul> |
| Technical data          | –  | <ul style="list-style-type: none"> <li>→ Fluid temperature 0 °C to +110 °C</li> <li>→ Mains connection 1~230 V, 50 Hz</li> <li>→ Energy Efficiency Index (EEI) ≤ 0.23</li> <li>→ Screwed connection Rp ½, Rp 1, Rp 1¼</li> <li>→ Max. operating pressure 10 bar</li> </ul>   | <ul style="list-style-type: none"> <li>→ Mains connection: 3~400 V, 50 Hz</li> <li>→ Fluid temperature: 3-30 °C</li> <li>→ Max. sand content: 50 g/m<sup>3</sup></li> <li>→ Max. immersion depth: 200 m</li> </ul>   |
| Equipment/function      | Wilo-IR-Stick/IR-Monitor<br>→ Remote control with infrared interface for electronically controlled Wilo pumps<br>Wilo IF modules Stratos/IF modules<br>→ Plug-in modules for BA connection of Stratos, Stratos GIGA/-D/-B, IP-E, DP-E, IL-E/DL-E, BL-E, MHIE, MVIE, Helix VE...<br>Wilo-CIF modules<br>→ Plug-in modules for BA connection of Stratos MAXO | <ul style="list-style-type: none"> <li>→ Control modes: <math>\Delta p-v</math>, manual control mode (<math>n = \text{constant}</math>), external speed control with PWM 1 or PWM 2 signal</li> <li>→ Interface for PWM 1 or PWM 2 signal</li> <li>→ Flexible connection cable with Wilo-Connector</li> <li>→ Automatic deblocking function</li> <li>→ Pump housing with cataphoretic coating</li> </ul> | <ul style="list-style-type: none"> <li>→ Multistage submersible pump with radial or semi-axial impellers</li> <li>→ Integrated non-return valve</li> <li>→ NEMA coupling</li> <li>→ Three-phase motor</li> <li>→ Hermetically sealed motors</li> </ul>               |

|                         | Glandless high-efficiency pumps  | Glandless premium high-efficiency pumps  | Glandless premium smart pumps  |
|-------------------------|--|--|--|
|                         |   |    |   |
| Series                  | Wilostar-Z NOVA  | Wilostros PICO-Z   | Wilostros MAXO-Z   |
| Field of application    | Domestic hot water   | Domestic hot water   | Domestic hot water   |
| Duty chart              |   |    |   |
| Construction            | Glandless circulator with screwed connection and blocking-current proof synchronous motor  | Glandless circulator with screwed connection, EC motor and automatic power adjustment  | Smart glandless circulator with screwed connection or flange connection, EC motor with integrated power adjustment   |
| Application             | Domestic hot water circulation systems in industry and in building services  | Domestic hot water circulation systems in industry and in building services  | Domestic hot water circulation systems and similar systems in industry and in building services  |
| Volume flow $Q_{max}$   | 0.4 m <sup>3</sup> /h  | 3.5 m <sup>3</sup> /h  | 43 m <sup>3</sup> /h   |
| Delivery head $H_{max}$ | 1.1 m  | 6 m  | 12 m   |
| Special features        | <ul style="list-style-type: none"> <li>→ Hygienically safe thanks to proven technology</li> <li>→ Improved energy efficiency due to synchronous motor with power consumption of only 3–6 watts and thermal insulation shell as standard</li> <li>→ Quick, easy installation and replacement of common pump types thanks to flexible service motor and Wilo-Connector</li> </ul>                  | <ul style="list-style-type: none"> <li>→ Manual and temperature-controlled mode for optimum operation</li> <li>→ Identification of the thermal disinfection of the drinking water tank</li> <li>→ Display of the current consumption in Watts and the cumulative kilowatt hours or of the current flow and the temperature</li> <li>→ Stainless steel pump housing protects against bacteria and corrosion</li> </ul>                | <ul style="list-style-type: none"> <li>→ Operation by guided application settings with the Setup Guide</li> <li>→ Maximum drinking water hygiene and energy efficiency by the new control function T-const.</li> <li>→ Optimum hygiene support thanks to thermal disinfection.</li> <li>→ Installation comfort by the Wilo-Connector</li> <li>→ Corrosion-resistant pump housing in stainless steel</li> </ul>                                 |
| Technical data          | <ul style="list-style-type: none"> <li>→ Fluid temperature: potable water, max. +95 °C</li> <li>→ Mains connection 1~230 V, 50 Hz</li> <li>→ Screwed connection Rp ½</li> <li>→ Max. operating pressure 10 bar</li> </ul>  | <ul style="list-style-type: none"> <li>→ Fluid temperature: drinking water up to water hardness 3.57 mmol/l (20 °dH) max. +70 °C</li> <li>→ Mains connection 1~230 V, 50 Hz</li> <li>→ Screw connection Rp ¾, Rp 1</li> <li>→ Max. operating pressure 10 bar</li> </ul>  | <ul style="list-style-type: none"> <li>→ Fluid temperature: drinking water max. +80 °C</li> <li>→ Heating water -10 °C to +110 °C</li> <li>→ Mains connection 1~230 V, 50 Hz</li> <li>→ Nominal diameter Rp 1 to DN 65</li> <li>→ Max. operating pressure 10 bar</li> </ul>  |
| Equipment/function      | <ul style="list-style-type: none"> <li>→ Wilo-Connector</li> <li>→ Ball shut-off valve on suction side and non-return valve on pressure side (Star-Z NOVA A, C, T)</li> <li>→ Including plug-in time switch, 1.8 m connection cable (Star-Z NOVA C)</li> <li>→ Star-Z NOVA T incl. timer, thermostatic valve and detection of thermal disinfection, LC display with symbolic language</li> </ul> | <ul style="list-style-type: none"> <li>→ Control mode: Δp-c, temperature-controlled mode</li> <li>→ Temperature control for constant return temperature in drinking water circulation systems</li> <li>→ Thermal disinfection routine</li> <li>→ Reset function for the electricity meter or to factory settings</li> <li>→ "Hold" function (key lock)</li> <li>→ Automatic deblocking function</li> <li>→ Wilo-Connector</li> </ul> | <ul style="list-style-type: none"> <li>→ Control mode: Dynamic Adapt plus, Δp-c, Δp-v, n-const, T-const, ΔT-const and Q-const</li> <li>→ Multi-Flow Adaptation</li> <li>→ Remote control via Bluetooth interface</li> <li>→ Selection of application range with Setup Guide</li> <li>→ Heat metering</li> <li>→ Disinfection detection</li> <li>→ Air-venting function</li> <li>→ Retrofittable interface modules for communication</li> </ul> |

## Glandless high-efficiency pumps

## Glandless standard high-efficiency pumps

## Standard glandless pumps



Discontinued line



|                         |  |  |   |
|-------------------------|--|--|---|
| Series                  | Wilo-Stratos-Z<br>Wilo-Stratos-ZD  | Wilo-Yonos MAXO-Z  | Wilo-Star-Z<br>Wilo-Star-ZD   |
| Field of application    | Domestic hot water   | Domestic hot water   | Domestic hot water  |
| Duty chart              |  |  |   |
| Construction            | Glandless circulator with screwed connection or flange connection, EC motor with automatic power adjustment  | Glandless circulator with screwed connection or flange connection, EC motor with automatic power adjustment  | Glandless circulator with screwed connection  |
| Application             | Domestic hot water circulation systems and similar systems in industry and in building services  | Domestic hot water circulation systems in industry and in building services  | Domestic hot water circulation systems in industry and in building services   |
| Volume flow $Q_{max}$   | 41 m <sup>3</sup> /h   | 39 m <sup>3</sup> /h   | 8.5 m <sup>3</sup> /h   |
| Delivery head $H_{max}$ | 12 m   | 12 m   | 6.0 m   |
| Special features        | <ul style="list-style-type: none"> <li>→ Energy savings through greater system efficiency with the Q-Limit function</li> <li>→ Space-saving installation due to compact design and location-dependent LC display</li> <li>→ Retrofittable interface modules for communication (e.g. Modbus, BACnet, CAN, LON and PLR)</li> <li>→ Corrosion-resistant pump housing in red brass for systems where oxygen entry is possible</li> </ul>   | <ul style="list-style-type: none"> <li>→ Indication of set delivery head and fault codes</li> <li>→ Quick setting when replacing an uncontrolled standard pump with pre-set speed stages, e.g. TOP-Z</li> <li>→ Electrical connection with Wilo plug</li> <li>→ Collective fault signal ensures system availability</li> <li>→ Corrosion-resistant pump housing in red brass for systems where oxygen entry is possible</li> </ul> | <ul style="list-style-type: none"> <li>→ All plastic parts that come into contact with the fluid fulfil KTW recommendations</li> </ul>  |
| Technical data          | <ul style="list-style-type: none"> <li>→ Fluid temperature: drinking water max. +80 °C</li> <li>→ Heating water -10 °C to +110 °C</li> <li>→ Mains connection 1~230 V, 50 Hz</li> <li>→ Energy Efficiency Index (EEI) ≤ 0.20 (EEI ≥ 0.23 for double pumps)</li> <li>→ Nominal diameter Rp 1 to DN 65</li> <li>→ Max. operating pressure 10 bar</li> </ul>  | <ul style="list-style-type: none"> <li>→ Permissible temperature range drinking water up to a water hardness of 3.57 mmol/l (20 °dH) max. +80 °C</li> <li>→ Mains connection 1~230 V, 50 Hz</li> <li>→ Nominal diameter Rp 1 to DN 65</li> <li>→ Max. operating pressure 10 bar</li> </ul>   | <ul style="list-style-type: none"> <li>→ Fluid temperature: drinking water up to water hardness 3.2 mmol/l (18 °dH) max. +65 °C</li> <li>→ Mains connection 1~230 V, 50 Hz,</li> <li>→ Screwed connection Rp ½ (¾), Rp 1</li> <li>→ Max. operating pressure 10 bar</li> </ul> |
| Equipment/function      | <ul style="list-style-type: none"> <li>→ Control modes: Δp-c, Δp-v, Δp-T</li> <li>→ Volume flow limitation with Q-Limit function (via IR-Stick)</li> <li>→ Pre-selectable speed for constant operation</li> <li>→ Automatic setback operation</li> <li>→ Graphical pump display</li> <li>→ Remote control via infrared interface (IR-Stick/IR-Monitor)</li> <li>→ Retrofittable interface modules for communication</li> <li>→ Combination flanges PN 6/PN 10 (for DN 40 and DN 65)</li> </ul> | <ul style="list-style-type: none"> <li>→ Control modes: Δp-c, Δp-v, 3 speed stages</li> <li>→ LED display for setting the required delivery head</li> <li>→ Quick electrical connection with Wilo plug</li> <li>→ Motor protection, fault signal light and contact for collective fault signal</li> <li>→ Corrosion-resistant pump housing in red brass</li> <li>→ Combination flanges PN 6/PN 10 (for DN 40 to DN 65)</li> </ul>  | <ul style="list-style-type: none"> <li>→ Constant speed or 3 selectable speed stages (Star-Z...-3),</li> <li>→ Quick electrical connection with spring clips</li> <li>→ Star-ZD version as double pump</li> </ul>   |

Standard glandless pumps

Glanded special pumps



|                         |   |   |
|-------------------------|---|---|
| Series                  | Wilo-TOP-Z  | Wilo-VeroLine-IP-Z  |
| Field of application    | Domestic hot water  | Domestic hot water  |
| Duty chart              |   |   |
| Construction            | Glandless circulator with screwed connection or flange connection   | Glanded circulator in in-line design with screwed connection  |
| Application             | Domestic hot water circulation systems in industry and in building services   | For pumping drinking water, cold and hot water without abrasive substances, in heating, cold water and cooling water systems  |
| Volume flow $Q_{max}$   | 65 m <sup>3</sup> /h  | 5 m <sup>3</sup> /h   |
| Delivery head $H_{max}$ | 9 m   | 4.5 m   |
| Special features        | <ul style="list-style-type: none"> <li>→ Thermal winding contact (WSK) as potential-free contact (depending on type)</li> <li>→ Rotation control lamp indicates the correct direction of rotation (only for 3~)</li> <li>→ Thermal insulation as standard</li> </ul>                    | <ul style="list-style-type: none"> <li>→ High resistance to corrosive fluids due to stainless steel housing and Noryl impeller</li> <li>→ Wide range of applications due to suitability for water hardness up to 5 mmol/l (28 °dH)</li> <li>→ All plastic parts that come into contact with the fluid fulfil KTW recommendations</li> </ul> |
| Technical data          | <ul style="list-style-type: none"> <li>→ Fluid temperature: drinking water max. +80 °C (+65 °C for TOP-Z 20/4 and TOP-Z 25/6)</li> <li>→ Mains connection 1~230 V, 50 Hz; 3~400 V, 50 Hz</li> <li>→ Nominal diameter Rp 1 to DN 65</li> <li>→ Max. operating pressure 10 bar</li> </ul> | <ul style="list-style-type: none"> <li>→ Fluid temperature: drinking water up to a water hardness of 4.99 mmol/l (28 °dH) max. +65 °C</li> <li>→ Heating water -8 °C to +110 °C</li> <li>→ Mains connection 1~230 V, 50 Hz, 3~400 V, 50 Hz</li> <li>→ Nominal diameter Rp 1</li> <li>→ Max. operating pressure 10 bar</li> </ul>            |
| Equipment/function      | <ul style="list-style-type: none"> <li>→ Pre-selectable speed stages</li> <li>→ Thermal insulation as standard</li> <li>→ All plastic parts that come into contact with the fluid fulfil KTW recommendations</li> <li>→ Combination flange PN 6/PN 10 (DN 40 to DN 65)</li> </ul>       | <ul style="list-style-type: none"> <li>→ Single-stage, low-pressure centrifugal pump in in-line design with</li> <li>→ Mechanical seal</li> <li>→ Screwed connection</li> <li>→ Motor with one-piece shaft</li> </ul>   |



## Standard glandless circulators for non-EU markets

### Inside the EU\*

According to the ErP Directive (2009/125/EG) with ordinances (EG) 641/2009 and (EG) 622/2012, uncontrolled standard glandless circulators are no longer allowed to be sold in the EU from 1 January 2013 on.

Exceptions to this rule are products, like for example, glandless circulators which are integrated in heat generators. These exceptions apply until the Directive prescribes also the replacement of newly installed heat generators or solar stations from August 2015 on.

### Outside the EU

Pumps of the following series are allowed to be further distributed outside the EU, however in compliance with the legislation in force in these countries.

Star-RS/RSD  
TOP-S/SD  
TOP-RL  
Star-STG






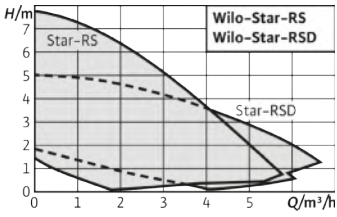
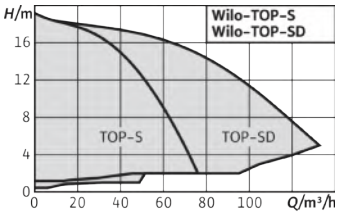
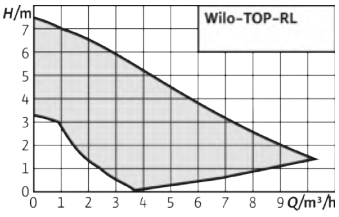
### Note

An energy efficiency evaluation and a CE conformity declaration (CE mark) do no longer exist for these products.

\*Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxemburg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Great Britain

+ Croatia (EU member from 2013 on), + Turkey (candidate country), + Serbia (candidate country)

+ 4 countries of the EFTA (European Free Trade Association) Iceland, Norway, Liechtenstein, Switzerland

|                         | Standard glandless pumps   | Standard glandless pumps  | Standard glandless pumps   |
|-------------------------|--|---|--|
|                         |   |   |   |
| Series                  | Wilo-Star-RS<br>Wilo-Star-RSD  | Wilo-TOP-S<br>Wilo-TOP-SD   | Wilo-TOP-RL  |
| Field of application    | Heating / Air conditioning   | Heating / Air conditioning  | Heating / Air conditioning   |
| Duty chart              |   |   |   |
| Construction            | Glandless circulator with screwed connection   | Glandless circulator with screwed or flanged connection   | Glandless circulator with screwed or flanged connection  |
| Application             | Hot-water heating systems of all kinds, industrial circulation systems, cold water and air-conditioning systems  | Hot-water heating systems of all kinds, industrial circulation systems, cold water and air-conditioning systems   | Hot-water heating systems of all kinds, industrial circulation systems, cold water and air-conditioning systems  |
| Volume flow $Q_{max}$   | 6.0 m <sup>3</sup> /h  | 77.0 m <sup>3</sup> /h  | 10.0 m <sup>3</sup> /h   |
| Delivery head $H_{max}$ | 8.0 m  | 19.0 m  | 7.0 m  |
| Special features        | <ul style="list-style-type: none"> <li>→ Suitable for any installation position with horizontal shaft; terminal box in 3-6-9-12 o'clock position</li> <li>→ Three pre-selectable speed stages for load adaptation</li> <li>→ Easy and safe installation with practical wrench attachment point on the pump housing</li> <li>→ Simplified electrical connection to the terminal box with changeable threaded cable connection used from both sides; quick connection with spring clips</li> </ul> | <ul style="list-style-type: none"> <li>→ Rotation control lamp indicates the correct direction of rotation (only for 3~)</li> <li>→ Manual power adjustment with 3 speed stages</li> <li>→ Pump housing with cataphoretic (KTL) coating protects against corrosion due to condensation formation</li> </ul>                 | <ul style="list-style-type: none"> <li>→ Collective fault signal as potential-free contact (depending on type)</li> <li>→ Pump housing with cataphoretic (KTL) coating protects against corrosion due to condensation formation</li> </ul>               |
| Technical data          | <ul style="list-style-type: none"> <li>→ Fluid temperature -10 °C to +110 °C</li> <li>→ Mains connection 1~230 V, 50 Hz</li> <li>→ Screw connection Rp ½, Rp 1, Rp 1½</li> <li>→ Max. operating pressure 10 bar</li> </ul>   | <ul style="list-style-type: none"> <li>→ Fluid temperature -20 °C to +130 °C</li> <li>→ Mains connection 1~230 V, 50 Hz (depending on type); 3~400 V, 50 Hz</li> <li>→ Nominal diameter Rp 1 to DN 100</li> <li>→ Max operating pressure 10 bar (optional: 16 bar)</li> </ul>   | <ul style="list-style-type: none"> <li>→ Fluid temperature -20 °C to +130 °C</li> <li>→ Mains connection 1~230 V, 50 Hz, 3~400 V, 50 Hz</li> <li>→ Nominal diameter Rp 1 to DN 40</li> <li>→ Max operating pressure 10 bar (optional: 16 bar)</li> </ul> |
| Equipment/function      | <ul style="list-style-type: none"> <li>→ 3 manually selectable speed stages</li> <li>→ Wrench attachment point on pump body</li> <li>→ Cable inlet possible from both sides - for easy installation</li> <li>→ Quick electrical connection with spring clips</li> <li>→ RSD version as double pump</li> </ul>  | <ul style="list-style-type: none"> <li>→ Preselectable speed stages for performance adaptation</li> <li>→ Combination flanges PN 6/PN 10 (DN 40 to DN 65)</li> <li>→ Pump housing is KTL-coated</li> <li>→ Thermal insulation shells for heating applications as standard</li> <li>→ Extendable motor protection</li> </ul> | <ul style="list-style-type: none"> <li>→ Preselectable speed stages for performance adaptation</li> <li>→ Pump housing is KTL-coated</li> <li>→ Combination flange PN 6/PN 10 (DN 40)</li> </ul>   |

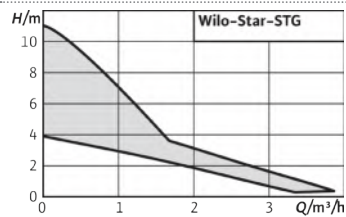
## Standard glandless pumps



Series Wilo-Star-STG

Field of application Heating

Duty chart



Construction Glandless circulator with screwed connection

Application Circulation in solar thermal and geothermal energy systems

Volume flow  $Q_{max}$  3.8 m<sup>3</sup>/h

Delivery head  $H_{max}$  11.0 m

Special features

- Special hydraulics for use in solar thermal and geothermal energy systems
- Pump housing with wrench attachment point
- Pump housing with cataphoretic (KTL) coating protects against corrosion due to condensate formation

Technical data

- Fluid temperature -10 °C to +110 °C, in short-term duty (2 h) +120 °C
- Mains connection 1~230 V, 50 Hz
- Screwed connection Rp ½, Rp 1
- Max. operating pressure 10 bar

Equipment/function

- 3 manually selectable speed stages
- Wrench attachment point on pump housing
- Blocking-current proof motor, motor protection not required
- Cable inlet on both sides for simple installation
- Quick electrical connection with spring clips
- Pump housing with cataphoretic coating

# WILO PUMPS FOR EUROPE'S HIGHEST BUILDING.

**ONE THOUSAND PUMPS OPERATE IN MOSCOW'S FEDERATION TOWER.**

Rising into the sky like two gigantic mirrors: the crystalline skyscrapers on the north bank of Moskva River. The commercial district Moscow City forms a new silhouette and an impressive contrast to the historic bulbous spires of St. Basil's Cathedral. The twelve-billion-dollar project "Moscow International Business Center" is to become the

new flagship of the megacity. Among the skyscrapers, that form the city's new skyline is the Federation Tower. Currently the tallest building in Europe. The symbol of a new era, the modern Moscow. About one thousand Wilo pumps ensure a smooth supply of heating, air conditioning, ventilation and water.





Modern state-of-the-art skyscrapers line up about five kilometres beeline from the Kremlin: over the past decade, a completely new district was built on a former harbour area. A financial district that is growing steadily. „Moscow City“ is the first project of its kind in the Russian capital – it combines trade, apartments as well as leisure facilities. Offices, shops and hotels emerge on four million square meters – space for more than 300,000 people. Fifty kilometres away from Domodedovo airport, the district can be reached easily via three underground stations or a fast line. For tourists, Moscow has become a more and more popular destination: The observation decks of some of Europe’s tallest buildings, such as the Mercury City Tower or the Federation Tower, offer breath taking views over the city.

### FEDERATION TOWER




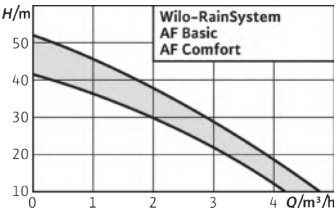
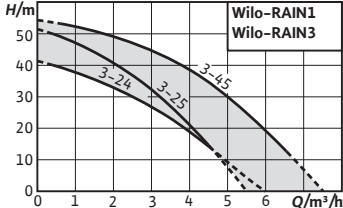
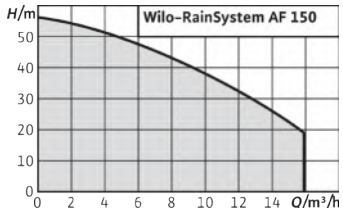
Completed in 2017, Federation Tower, “Baschnja Federazija “ as it is called in Russian, is the tallest building in Europe with a height of 374 meters replacing “The Shard“ in London (306 meters). The monumental complex consists of two towers with different sizes: the more than 370-meter tower with almost 100 floors is called “Vostok“ (East-Tower), Orient, whereas the smaller one with over 60 floors and a height of 243 meters is called “Zapad“ (West-Tower), Occident. Beneath the surface, the glass giants share a ten-story foundation. Wilo-Stratos pumps provided by Wilo Russia, ensure efficient and reliable heating, air conditioning and cooling at the same time. Consistently designed for high efficiency, it was the origin of the energy label for pumps with up to 80 per cent energy savings.

### HIGH-EFFICIENCY FOR THE HEART OF MOSCOW’S BUSINESS CENTER

As part of a pilot project to test the pumps in operation, Wilo Russia installed 367 models during the construction phase of the West-Tower. Due to its high performance and efficiency, the order for the West-Tower followed in



2007. One year later, the pump expert supplied nearly 600 different product types for all existing building systems: heating, water supply, pressure boosting, sewage, air-conditioning, cooling. The pumps are issued on a total of five different technical floors with an area of 15 000 square meters each. The entire control of the pumps and pump systems is purely electronically controlled via an internal centre – in case of a possible malfunction, a message is sent directly to the smart phone or computer of the building’s Facilities Manager.

|                         | Rainwater utilisation systems  | Rainwater utilisation systems  | Rainwater utilisation systems  |
|-------------------------|--|--|--|
|                         |  <b>Discontinued line</b>   |  <b>NEW</b>  |   |
| Series                  | Wilco-RainSystem AF Basic<br>Wilco-RainSystem AF Comfort   | Wilco-RAIN1<br>Wilco-RAIN3   | Wilco-RainSystem AF 150  |
| Field of application    | Rainwater  | Rainwater  | Rainwater  |
| Duty chart              |   |    |   |
| Construction            | Ready-to-plug rainwater utilisation system with 1 MultiCargo MC self-priming centrifugal pump  | Ready-to-plug rainwater utilisation system with 1 HiMulti3 P self-priming centrifugal pump   | Automatic rainwater utilisation system with 2 MultiCargo MC self-priming centrifugal pumps   |
| Application             | Rainwater utilisation for saving drinking water in conjunction with rainwater storage tanks or reservoirs  | Rainwater utilisation for saving drinking water in conjunction with rainwater storage tanks or reservoirs  | Rainwater utilisation in multi-family houses and small businesses for saving drinking water in conjunction with rainwater storage tanks or reservoirs  |
| Volume flow $Q_{max}$   | 5 m <sup>3</sup> /h  | 6 m <sup>3</sup> /h  | 16 m <sup>3</sup> /h   |
| Delivery head $H_{max}$ | 52 m   | 55 m   | 55 m   |
| Special features        | <ul style="list-style-type: none"> <li>→ Low-noise, due to encapsulated system (Comfort) and multistage pump</li> <li>→ System fulfils DIN 1989 and EN 1717</li> <li>→ Demand-oriented, flow- and noise-optimised fresh water replenishment</li> <li>→ Media-touched components are corrosion-free</li> <li>→ Automatic support function for evacuation of air (Comfort)</li> </ul>          | <ul style="list-style-type: none"> <li>→ Backflow prevention according to DIN1989 and EN1717</li> <li>→ Low noise, encapsulated multistage centrifugal pump</li> <li>→ Ready to plug with variety of hydraulic connections</li> <li>→ Compact modular construction</li> <li>→ Touch screen (RAIN3), user friendly designed interface</li> <li>→ Integrated features: dry-running protection, automatic water periodic refresh, adjustable starting pressure</li> </ul> | <ul style="list-style-type: none"> <li>→ Low-noise due to multistage pumps</li> <li>→ Media-touched components are corrosion-free</li> <li>→ Maximum operational reliability due to fully electronic controller (RCP)</li> <li>→ Demand-oriented fresh water replenishment</li> <li>→ High reliability due to flow-optimised and noise-optimised replenishment reservoir</li> </ul>  |
| Technical data          | <ul style="list-style-type: none"> <li>→ Mains connection 1~230 V, 50 Hz</li> <li>→ Suction head max. 8 m</li> <li>→ Fluid temperature +5 °C to +35 °C</li> <li>→ Max. operating pressure 8 bar</li> <li>→ Replenishment reservoir 11 l</li> <li>→ Protection class IP42/IP54</li> </ul>   | <ul style="list-style-type: none"> <li>→ Mains connection 1~230 V, 50 Hz</li> <li>→ Suction head max. 8 m</li> <li>→ Fluid temperature +5 °C to +35 °C</li> <li>→ Max. operating pressure 8 bar</li> <li>→ Replenishment reservoir 11 l</li> <li>→ Protection class IP X4</li> </ul>   | <ul style="list-style-type: none"> <li>→ Mains connection 1~230 V, 50 Hz</li> <li>→ Suction head max. 8 m</li> <li>→ Fluid temp. +5 °C to +35 °C</li> <li>→ Max. operating pressure 8 bar</li> <li>→ Replenishment reservoir 150 l</li> <li>→ Protection class IP41</li> </ul>   |
| Equipment/function      | <ul style="list-style-type: none"> <li>→ Connection-ready module mounted on a non-corroding base frame</li> <li>→ Pressure-side pipework Rp 1</li> <li>→ 1.8/3.0 m connection cable and mains plug</li> <li>→ Switchgear Rain Control Basic RCB/Economy RCE with control electronics</li> <li>→ Monitoring of rainwater storage levels</li> <li>→ Connection for overflow warning</li> </ul> | <ul style="list-style-type: none"> <li>→ Connection-ready module on vibration-insulated base frame</li> <li>→ Pressure-side pipework Rp 1</li> <li>→ 1.5 m power supply cable and mains plug</li> <li>→ Menu-prompted operation and display</li> <li>→ Monitoring of rainwater storage levels</li> <li>→ Connection for external failure reporting</li> <li>→ Integrated overflow warning sensor (RAIN3)</li> </ul>  | <ul style="list-style-type: none"> <li>→ Connection-ready module on vibration-insulated tubular frame</li> <li>→ Pressure sided tubing R 1½, pressure vessel, shut-off device</li> <li>→ Pressure gauge 0-10 bar</li> <li>→ Central switchgear (RCP)</li> <li>→ Menu-prompted operation and display</li> <li>→ Pump cycling/test run</li> <li>→ Automatic fault-actuated switchover, peak-load operation, water exchange in replenishment reservoir</li> </ul> |




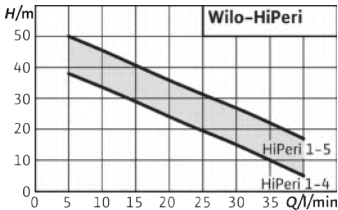
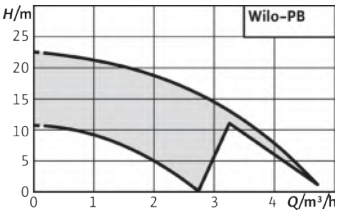
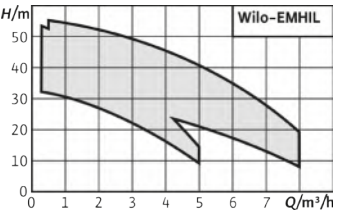
## Rainwater utilisation systems

## Self priming pumps, self-priming multi-stage pumps and pump systems




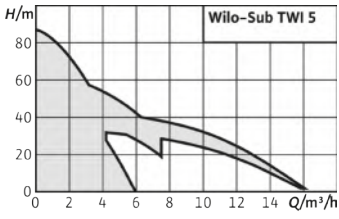
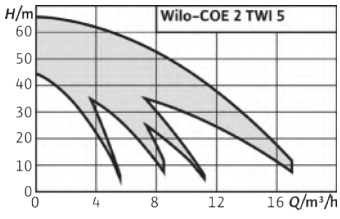
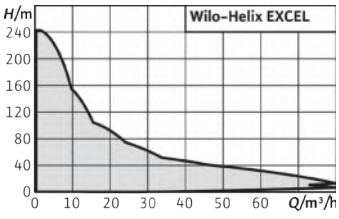
## Self- and non self-priming multistage pumps and pump systems




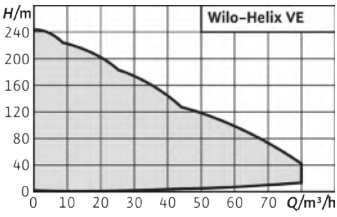
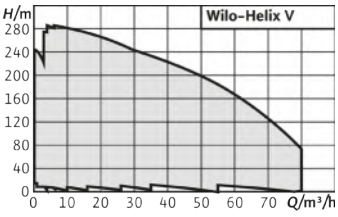
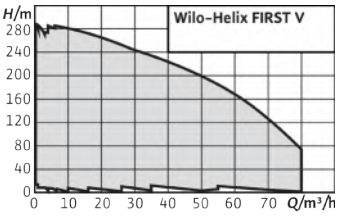


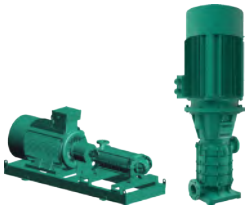


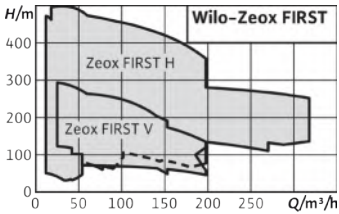
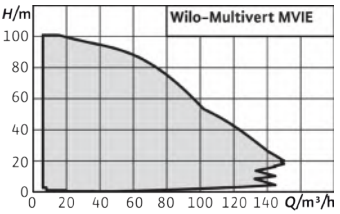
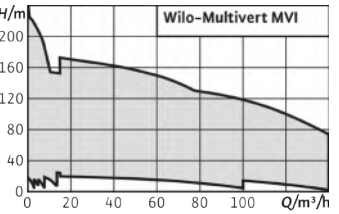
|                         |   |  |  |
|-------------------------|---|--|--|
| Series                  | Wilo-RainSystem AF 400  | Wilo-Jet WJ<br>Wilo-Jet HWJ  | Wilo-HiMulti 3 (P)<br>Wilo-HiMulti 3 C (P) / HiMulti 3 H (P)   |
| Field of application    | Rainwater   | Rainwater / Pressure boosting / Raw water intake   | Rainwater / Pressure boosting / Raw water intake   |
| Duty chart              |   |  |  |
| Construction            | Automatic rainwater utilisation system with run-down tank and 2 MultiPress MP non self-priming centrifugal pumps  | Self-priming single-stage centrifugal pumps  | Self-priming (version P) and non self-priming multistage pumps and pump systems  |
| Application             | Hybrid system for commercial and industrial rainwater utilisation for saving drinking water in conjunction with rainwater storage tanks or reservoirs   | For pumping water from wells for filling, pumping empty, transferring by pumping, irrigation and sprinkling<br>As emergency pump for overflows   | For domestic potable water supply, sprinkling, irrigation, spraying and rainwater utilisation  |
| Volume flow $Q_{max}$   | 16 m <sup>3</sup> /h  | 5 m <sup>3</sup> /h  | 7 m <sup>3</sup> /h  |
| Delivery head $H_{max}$ | 55 m  | 50 m   | 55 m   |
| Special features        | <ul style="list-style-type: none"> <li>→ Low-noise due to multistage pumps</li> <li>→ Media-touched components are corrosion-free</li> <li>→ Maximum operational reliability due to a fully electronic controller (RCH)</li> <li>→ Demand-oriented fresh water replenishment</li> <li>→ Automatic feeding pump control</li> <li>→ System/level control in the low-voltage range</li> </ul>  | <ul style="list-style-type: none"> <li>→ Ideal for portable outdoor applications (hobby, garden)</li> <li>→ HWJ version with diaphragm pressure vessel and pressure switch</li> <li>→ FWJ version with fluid control for system control</li> </ul> | <ul style="list-style-type: none"> <li>→ Easy: Electrical Wilo-connector, on/off switch, enlarged foot fastening</li> <li>→ Efficient and economical: highly efficient hydraulics, extremely compact</li> <li>→ HiMulti 3 C (P): Dry-running protection and automation rotatable by 360° for easier installation</li> <li>→ HiMulti 3 H (P): Automation and fluid hammer protection</li> </ul> |
| Technical data          | <ul style="list-style-type: none"> <li>→ Mains connection 3~400 V, 50 Hz</li> <li>→ Fluid temp. +5 °C to +35 °C</li> <li>→ Max. operating pressure 10 bar</li> <li>→ Replenishment reservoir 400 l</li> <li>→ Protection class IP54</li> </ul>  | <ul style="list-style-type: none"> <li>→ Mains connection 1~230 V, 50 Hz</li> <li>→ Inlet pressure max. 1 bar</li> <li>→ Fluid temperature +5 °C to +35 °C</li> <li>→ Max. operating pressure 6 bar</li> <li>→ Protection class IP44</li> </ul>    | <ul style="list-style-type: none"> <li>→ Mains connection 1~230 V, 50 Hz</li> <li>→ Inlet pressure max. 3 bar</li> <li>→ Fluid temperature 0 °C to +40 °C (+55 °C for max. 10 minutes)</li> <li>→ Operating pressure max. 8 bar</li> <li>→ Protection class IPX4, IP54</li> </ul>  |
| Equipment/function      | <ul style="list-style-type: none"> <li>→ Connection-ready module on vibration-insulated baseplate</li> <li>→ Pressure sided tubing R 1½, pressure vessel, shut-off device</li> <li>→ Pressure gauge 0-10 bar</li> <li>→ Hybrid tank with all connections, calmed inlets and overflow with siphon</li> <li>→ Central switchgear (RCH)</li> <li>→ Pump cycling/test run</li> <li>→ Automatic fault-actuated switchover, peak-load operation, water exchange in replenishment reservoir</li> </ul> | <ul style="list-style-type: none"> <li>→ With or without carrying frame, depending on the version (WJ, FWJ)</li> <li>→ Connection cable with plug</li> <li>→ On/Off switch</li> <li>→ Thermal motor protection switch</li> </ul>                   | <ul style="list-style-type: none"> <li>→ Directly flanged motor</li> <li>→ Thermal motor protection switch for 1~230 V version</li> <li>→ HiMulti 3 C (P): Automatic pump control, low-water cut-out switch</li> <li>→ HiMulti 3 H (P): Pressure switch, diaphragm pressure vessel 50 l/100 l</li> </ul>   |

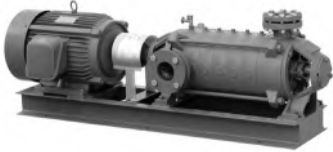


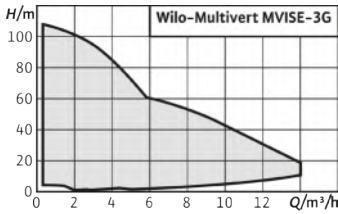
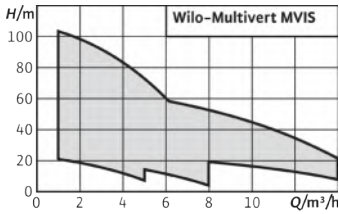
|                         | Non self-priming peripheral pump   | Hot-water pressure-boosting pumps  | Non self-priming water-supply unit with frequency converter  |
|-------------------------|--|--|--|
|                         |   |    |   |
| Series                  | Wilo-HiPeri 1  | Wilo-PB  | Wilo-EMHIL   |
| Field of application    | Rainwater / Pressure boosting / Raw water intake   | Pressure boosting  | Rainwater / Pressure boosting / Raw water intake   |
| Duty chart              |   |    |   |
| Construction            | Non self-priming peripheral pump   | Non self-priming single-stage centrifugal pump of in-line design   | Non self-priming water-supply unit with frequency converter  |
| Application             | For water supply/pressure boosting, raw water intake, sprinkling and spraying, rainwater utilisation   | → Automatic water supply/pressure boosting for residential properties from a tank feeding extraction points located beneath  | Water supply<br>Rainwater utilisation<br>Irrigation and spraying   |
| Volume flow $Q_{max}$   | 50 m <sup>3</sup> /h   | 4.8 m <sup>3</sup> /h  | 8 m <sup>3</sup> /h  |
| Delivery head $H_{max}$ | 3 m  | 22 m   | 55 m   |
| Special features        | <ul style="list-style-type: none"> <li>→ Simple handling thanks to low weight, perfectly suited for permanent operation</li> <li>→ Brass impeller for fluids up to 60 °C</li> <li>→ Efficient thanks to low power consumption at maximum delivery head and volume flow</li> <li>→ Expandable with the electronic pump control Wilo-FluidControl/HiControl 1</li> </ul> | <ul style="list-style-type: none"> <li>→ Stable water pressure due to automatic operation</li> <li>→ High operational reliability and dry-running protection due to the integrated flow switch</li> <li>→ Integrated thermal motor protection as standard</li> <li>→ Extremely low-noise operation</li> <li>→ Corrosion protection through coated pump hydraulics</li> </ul> | <ul style="list-style-type: none"> <li>→ Heavy-duty multistage pump with stainless steel hydraulics</li> <li>→ Easy operation and adjustment: Large display screen; LEDs for status display</li> <li>→ Plug &amp; Pump</li> <li>→ Functions: PID, frost protection, restart after a fault</li> <li>→ Float switch can be connected as an option</li> </ul> |
| Technical data          | <ul style="list-style-type: none"> <li>→ Mains connection 1~230 V, 50 Hz</li> <li>→ Inlet pressure max. 1.5 bar</li> <li>→ Fluid temperature +5 °C to +60 °C</li> <li>→ Max. operating pressure 6.5 bar</li> <li>→ Suction/pressure side connections: Rp1</li> </ul>   | <ul style="list-style-type: none"> <li>→ Mains connection 1~230 V, 50 Hz</li> <li>→ Suction/pressure side connections: G¾, Rp1, Rp1¼</li> <li>→ Fluid temperature +5 °C to +80 °C</li> <li>→ Max. inlet pressure: 3.0 bar</li> <li>→ Max. operating pressure: 5.0 bar</li> </ul>   | <ul style="list-style-type: none"> <li>→ Mains connection: 1~230 V, 50/60 Hz</li> <li>→ Max. operating pressure: 10 bar</li> <li>→ Fluid temperature: 0 °C to +40 °C</li> <li>→ Max. ambient temperature: 50 °C</li> </ul>   |
| Equipment/function      | <ul style="list-style-type: none"> <li>→ Single-stage circulating pump with a radial impeller</li> <li>→ Can be supplemented by the Wilo-FluidControl resp. HiControl 1</li> </ul>   | <ul style="list-style-type: none"> <li>→ Directly flanged dry motor</li> <li>→ Shaft sealing with mechanical seal</li> <li>→ Thermal motor protection</li> <li>→ Flow switch, on the pressure side for automatic operation and dry-running protection</li> <li>→ Operating options Auto / Off / Manual</li> </ul>  | <ul style="list-style-type: none"> <li>→ Including 1.4 m mains connection cable and plug</li> <li>→ Including EMC filter</li> <li>→ With built-in pressure and flow controllers</li> </ul>   |



|                         | Cistern pumps  | Non self-priming water-supply unit  | Vertical, multistage centrifugal pumps   |
|-------------------------|--|---|--|
|                         |   |    |   |
| Series                  | Wilo-Sub TWI 5/TWI 5-SE<br>Wilo-Sub TWI 5-SE PnP   | Wilo-Economy COE-2 TWI 5  | Wilo-Helix EXCEL   |
| Field of application    | Rainwater / Pressure boosting / Raw water intake   | Pressure boosting   | Pressure boosting  |
| Duty chart              |   |   |   |
| Construction            | Submersible pumps  | Pressure boosting system with two parallel submersible pumps  | Non self-priming, highly efficient, fully stainless steel high-pressure multistage centrifugal pump with EC motor and integrated high-efficiency drive   |
| Application             | For domestic water supply from wells, rainwater storage tanks, and reservoirs. For irrigation, sprinkling, rainwater utilisation or for pumping out water  | Pressure boosting and water supply in residential applications and for small commercial installations that require compact construction and a low noise level   | Water supply and pressure boosting, Industrial circulation systems, Process water, Closed cooling circuits, Washing systems, Irrigation  |
| Volume flow $Q_{max}$   | 16 m <sup>3</sup> /h   | 17 m <sup>3</sup> /h  | 80 m <sup>3</sup> /h   |
| Delivery head $H_{max}$ | 88 m   | 68 m  | 240 m  |
| Special features        | <ul style="list-style-type: none"> <li>→ Ready-to-plug in EM version (1~230 V)</li> <li>→ Pump (housing, stages, impellers) made entirely of stainless steel 1.4301 (AISI 304)</li> <li>→ Self-cooling motor enables installation outside water</li> </ul>   | <ul style="list-style-type: none"> <li>→ Pumps in the TWI 5 series with low noise due to water-cooled motor, between 51 dB (A) and 61 dB (A)</li> <li>→ 2-pump pressure boosting system in compact design due to vertical pump layout</li> <li>→ Economical system, based on the basic functions of the BC switchgear</li> <li>→ Long service life due to the stainless steel construction of the pumps and the piping</li> </ul> | <ul style="list-style-type: none"> <li>→ High-efficiency EC motor (energy efficiency class IE5 acc. to IEC 60034-30-2)</li> <li>→ Integrated electronic control "High-Efficiency Drive"</li> <li>→ Easy operation thanks to proven Green Button Technology and clear display</li> <li>→ User-friendly cartridge mechanical seal "X-Seal" and spacer coupling (from 5.5 kW)</li> <li>→ Drinking water approval</li> </ul> |
| Technical data          | <ul style="list-style-type: none"> <li>→ Mains 3~400 V or 1~230 V ±10% 50 Hz</li> <li>→ Fluid temperature max. +40 °C</li> <li>→ Max. operating pressure 10 bar</li> <li>→ Protection class IP68</li> <li>→ Pressure-side Rp 1¼</li> <li>→ Suction-side (SE version) Rp 1¼</li> </ul>                            | <ul style="list-style-type: none"> <li>→ Mains 3~400 V or 1~230 V ±10% 50 Hz</li> <li>→ Fluid temperature max: +40 °C</li> <li>→ Operating pressure max: 10 bar</li> <li>→ Nominal connection diameters G 2"™</li> </ul>  | <ul style="list-style-type: none"> <li>→ Fluid temperature -30 to +120 °C with EPDM (-10 to +90 °C with FKM)</li> <li>→ Max. operating pressure 16/25 bar</li> <li>→ Protection class IP55</li> <li>→ Minimum efficiency index MEI ≥0.7 (Helix EXCEL 16: MEI ≥0.5)</li> </ul>  |
| Equipment/function      | <ul style="list-style-type: none"> <li>→ Connection cable, 20 m</li> <li>→ TWI 5 version with standard intake strainer</li> <li>→ Variants:</li> <li>→ SE: with lateral inlet connecting piece</li> <li>→ FS: with built-in float switch</li> <li>→ Thermal motor protection for EM version (1~230 V)</li> </ul> | <ul style="list-style-type: none"> <li>→ Intake and outflow collector pipes</li> <li>→ Ball shut-off valves on the suction side and pressure side</li> <li>→ Non-return valve on the pressure side</li> <li>→ 1 manometer</li> <li>→ 2 pressure switches</li> <li>→ BC switchgear</li> </ul>  | <ul style="list-style-type: none"> <li>→ Impellers, stage chambers and pump housing made of stainless steel 1.4301/1.4404 (AISI 304L/AISI 316L)</li> <li>→ Helix EXCEL 2 - 16, PN 16 with oval flanges, PN25 with round flanges</li> <li>→ Helix EXCEL 22 - 36, with round flanges</li> <li>→ EC IE5 motor</li> <li>→ Integrated electronic control</li> </ul>   |

|                         | Vertical, multistage centrifugal pumps  | Vertical, multistage centrifugal pumps   | Vertical, multistage centrifugal pumps  |
|-------------------------|---|--|---|
|                         |    |   |    |
| Series                  | Wilo-Helix VE   | Wilo-Helix V   | Wilo-Helix FIRST V  |
| Field of application    | Pressure boosting   | Pressure boosting  | Pressure boosting   |
| Duty chart              |    |    |    |
| Construction            | Non self-priming multistage pump with integrated frequency converter  | Non self-priming multistage pump   | Non self-priming multistage pump  |
| Application             | Water supply and pressure boosting, Industrial circulation systems, Process water, Closed cooling circuits, Washing systems, Irrigation   | Water supply and pressure boosting, Industrial circulation systems, Process water, Closed cooling circuits, Washing systems, Irrigation  | Water distribution and pressure boosting, Industrial circulation systems, Process water, Closed cooling circuits, Washing systems, Irrigation   |
| Volume flow $Q_{max}$   | 80 m <sup>3</sup> /h  | 80 m <sup>3</sup> /h   | 80 m <sup>3</sup> /h  |
| Delivery head $H_{max}$ | 240 m   | 280 m  | 280 m   |
| Special features        | <ul style="list-style-type: none"> <li>→ Multistage, speed-configurable stainless steel high-efficiency pump with 2D/3D hydraulics</li> <li>→ Optimised design for easy operation, transportation and installation with handles, lantern adjustment and rotatable free flanges</li> <li>→ User-friendly display with Green Button Technology and full text menu</li> <li>→ IF plug-in module for quick communication with the BMS</li> <li>→ Drinking water approval</li> </ul> | <ul style="list-style-type: none"> <li>→ Efficiency-optimised, laser-welded 2D/3D hydraulics, flow and degassing optimised</li> <li>→ Corrosion-resistant impellers, guide vanes and stage housings</li> <li>→ Maintenance-friendly design with particularly robust coupling guard</li> <li>→ Drinking water approval</li> </ul> | <ul style="list-style-type: none"> <li>→ Efficiency-optimised, laser-welded, optimised 2D/3D hydraulics</li> <li>→ Corrosion-resistant impellers, guide vanes and stage housings</li> <li>→ Flow and degassing-optimised hydraulic parts</li> <li>→ Reinforced pump housing, flow and NPSH-optimised</li> <li>→ Space-saving and easy maintenance thanks to compact design</li> </ul> |
| Technical data          | <ul style="list-style-type: none"> <li>→ Fluid temperature -30 to +120 °C with EPDM (-10 to +90 °C with FKM)</li> <li>→ Max. operating pressure 16/25 bar</li> <li>→ Max. inlet pressure 10 bar</li> <li>→ Protection class IP55</li> <li>→ Minimum efficiency index MEI ≥0.7 (Helix VE 16: MEI ≥0.5)</li> </ul>  | <ul style="list-style-type: none"> <li>→ Fluid temperature -30 to +120 °C with EPDM (-10 to +90 °C with FKM)</li> <li>→ Max. operating pressure 16/25/30 bar</li> <li>→ Max. inlet pressure 10 bar</li> <li>→ Protection class IP55</li> <li>→ Minimum efficiency index MEI ≥0.7 (Helix V 16: MEI ≥0.5)</li> </ul>               | <ul style="list-style-type: none"> <li>→ Fluid temperature: -20 to +120 °C</li> <li>→ Max. operating pressure: 16/25/30 bar</li> <li>→ Protection class: IP55</li> <li>→ Minimum efficiency index MEI ≥0.7 (Helix FIRST V 16: MEI ≥0.5)</li> </ul>  |
| Equipment/function      | <ul style="list-style-type: none"> <li>→ Impellers, stage chambers and pump housing made of stainless steel 1.4301/1.4404 (AISI 304L/AISI 316L)</li> <li>→ Helix VE 2 - 16, PN 16 with oval flanges, PN25 with round flanges</li> <li>→ Helix VE 22 - 36, with round flanges</li> <li>→ IEC standard motor</li> <li>→ Integrated frequency converter</li> </ul>   | <ul style="list-style-type: none"> <li>→ Impellers, stage chambers and pump housing made of stainless steel 1.4301/1.4404 (AISI 304L/AISI 316L)</li> <li>→ Helix V 2 - 16, PN 16 with oval flanges, PN25 with round flanges</li> <li>→ Helix V 22 - 36, with round flanges</li> <li>→ IEC standard motor</li> </ul>              | <ul style="list-style-type: none"> <li>→ Corrosion-resistant impellers, guide vanes and stage housings</li> <li>→ Helix FIRST V 2 - 16, PN 16 with oval flanges, PN25 with round flanges</li> <li>→ Helix FIRST V 22 - 36, with round flanges</li> <li>→ IEC standard motor</li> </ul>  |

|                         | Vertical and horizontal, multistage centrifugal pumps  | Vertical, multistage centrifugal pumps  | Vertical, multistage centrifugal pumps  |
|-------------------------|--|---|---|
|                         |   |    |    |
| Series                  | Wilo-Zeox FIRST H<br>Wilo-Zeox FIRST V   | Wilo-Multivert MVIE   | Wilo-Multivert MVI  |
| Field of application    | Rainwater / Pressure boosting / Raw water intake   | Pressure boosting   | Pressure boosting   |
| Duty chart              |   |   |    |
| Construction            | Non-self-priming, high-efficiency multistage high-pressure centrifugal pump in vertical or horizontal design with off-line connections   | Non self-priming multistage pump with integrated frequency converter  | Non self-priming multistage pump  |
| Application             | Professional irrigation/agriculture<br>Water supply/pressure boosting<br>Firefighting<br>Heating, air conditioning, cooling  | Water supply and pressure boosting,<br>Industrial circulation systems, Process water, Closed cooling circuits, Washing systems, Irrigation  | Water supply and pressure boosting,<br>Industrial circulation systems, Process water, Closed cooling circuits, Washing systems, Irrigation  |
| Volume flow $Q_{max}$   | 280 m <sup>3</sup> /h  | 145 m <sup>3</sup> /h   | 155 m <sup>3</sup> /h   |
| Delivery head $H_{max}$ | 495 m  | 100 m   | 240 m   |
| Special features        | <ul style="list-style-type: none"> <li>→ High-efficiency hydraulics and high-efficiency IE3 motor</li> <li>→ Standard rinsing device for the sealing system</li> <li>→ Additional flange alignments and stuffing box packing on request</li> <li>→ Bronze impeller on request</li> </ul>                       | <ul style="list-style-type: none"> <li>→ Easy commissioning</li> <li>→ Integrated frequency converter with large control range</li> <li>→ Full motor protection</li> </ul>  | <ul style="list-style-type: none"> <li>→ MVI 70..-95.. in stainless steel with pump housing made of cataphoretic-coated cast iron</li> </ul>  |
| Technical data          | <ul style="list-style-type: none"> <li>→ Fluid temperature: -5 °C to +90 °C</li> <li>→ Max. suction pressure: Zeox FIRST .. V/.. H: 6/16 bar Max. operating pressure: Zeox FIRST V: 27 bar Zeox FIRST H (DN 65 to DN 1 00): 50 bar; Zeox FIRST H (DN 150): 40 bar</li> <li>→ Protection class: IP55</li> </ul> | <ul style="list-style-type: none"> <li>→ Fluid temperature -15 to +120 °C</li> <li>→ Max. operating pressure 16 bar/25 bar</li> <li>→ Max. inlet pressure 10 bar</li> <li>→ Protection class IP55</li> <li>→ Minimum efficiency index MEI ≥0.4</li> </ul>   | <ul style="list-style-type: none"> <li>→ Fluid temperature -15 to +120 °C</li> <li>→ Max. operating pressure 16/25 bar</li> <li>→ Max. inlet pressure 10 bar</li> <li>→ Protection class IP55</li> <li>→ Minimum efficiency index MEI ≥0.4</li> </ul> |
| Equipment/function      | <ul style="list-style-type: none"> <li>→ IE3 high-efficiency motor as standard</li> <li>→ Flushing by-pass device to ensure a long service life</li> <li>→ Packing gland on request, exchangeable without disassembling the pump</li> </ul>  | <ul style="list-style-type: none"> <li>→ Stainless steel hydraulics with pump housing made of cast iron</li> <li>→ MVIE 70.. to 95.. PN 16/25 with round flange</li> <li>→ IEC standard motor</li> <li>→ Integrated frequency converter with Green Button Technology and LCD display for status indication</li> </ul> | <ul style="list-style-type: none"> <li>→ MVI 70.. to 95.. PN 16/PN 25 with round flange</li> <li>→ IEC standard motor, 2-pole</li> </ul>  |




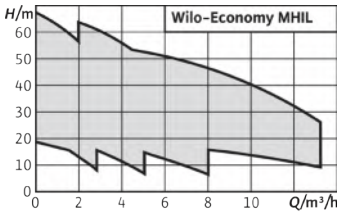
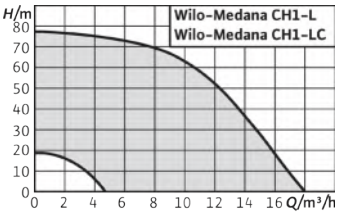
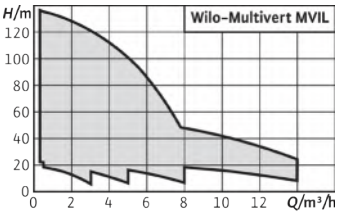
|                         | Sectional pumps  | Vertical, multistage centrifugal pumps   | Vertical, multistage centrifugal pumps   |
|-------------------------|--|--|--|
|                         |   |   |   |
| Series                  | RN, HS, IPB, PJ, STD PLURO, FG/FH  | Wilo-Multivert MVISE   | Wilo-Multivert MVIS  |
| Field of application    | Industrial Process   | Pressure boosting  | Pressure boosting  |
| Duty chart              |  |    |   |
| Construction            | Multistage high-pressure multistage centrifugal pump in sectional construction, mounted on baseplate   | Non self-priming multistage pump with glandless pump motor and integrated frequency converter  | Non self-priming multistage pump with glandless pump motor   |
| Application             | Metal industry, mine dewatering, desalination plants, boiler supply, firefighting, high-pressure cleaning, water supply  | Water supply and pressure boosting   | Water supply and pressure boosting   |
| Volume flow $Q_{max}$   | 1,000 m <sup>3</sup> /h  | 14 m <sup>3</sup> /h   | 14 m <sup>3</sup> /h   |
| Delivery head $H_{max}$ | 1800 m   | 110 m  | 110 m  |
| Special features        | <ul style="list-style-type: none"> <li>→ Modular design ensures pump versions in a variety of materials and versions which can be adapted to meet customer demands precisely</li> <li>→ Hydraulic pressure compensation relieves load on bearings and ensures a longer service life</li> <li>→ Multiple optional pressure connections allow different pressures to be supplied from a single pump</li> </ul>   | <ul style="list-style-type: none"> <li>→ Glandless pump technology</li> <li>→ Virtually noiseless operation (up to 20 dB [A] quieter than conventional pumps)</li> <li>→ Space-saving, compact design</li> <li>→ Virtually maintenance-free thanks to a design which does not feature any mechanical seals</li> <li>→ Drinking water approval for all components that come in contact with the fluid (EPDM version)</li> </ul> | <ul style="list-style-type: none"> <li>→ Glandless pump technology</li> <li>→ Virtually noiseless operation (up to 20 dB [A] quieter than conventional pumps)</li> <li>→ Space-saving, compact design</li> <li>→ Virtually maintenance-free thanks to a design which does not feature any mechanical seals</li> <li>→ Drinking water approval for all components that come in contact with the fluid (EPDM version)</li> </ul> |
| Technical data          | <ul style="list-style-type: none"> <li>→ Permitted temperature range up to +80 °C, or up to +160 °C on request</li> <li>→ Max. operating pressure 180 bar</li> <li>→ Nominal diameter on pressure side DN 32 to DN 250</li> <li>→ 2- or 4-pole 50 Hz motors, 60 Hz on request</li> </ul>   | <ul style="list-style-type: none"> <li>→ Fluid temperature -15 to +50 °C</li> <li>→ Max. operating pressure 16 bar</li> <li>→ Max. inlet pressure 16 bar</li> <li>→ Protection class IP44</li> </ul>   | <ul style="list-style-type: none"> <li>→ Fluid temperature -15 to +50 °C</li> <li>→ Max. operating pressure 16 bar</li> <li>→ Max. inlet pressure 10 bar</li> <li>→ Protection class IP44</li> </ul>   |
| Equipment/function      | <ul style="list-style-type: none"> <li>→ 2 to 15-stage industrial version</li> <li>→ Screwed segments</li> <li>→ Hydraulic axial compensation</li> <li>→ Shaft sealing with mechanical seal or stuffing box packing</li> <li>→ Optionally with multiple pressure outlets for e.g. fire extinguishing applications</li> <li>→ Supplied as a complete unit: with pump, coupling, motor mounted on baseplate or without motor or as pump only, with free shaft end</li> </ul> | <ul style="list-style-type: none"> <li>→ Multistage, non self-priming, vertical high-pressure centrifugal pump in in-line design</li> <li>→ Glandless three-phase motor with integral water-cooled frequency converter</li> <li>→ Hydraulic connection with oval flanges PN 16. Counter flanges made of stainless steel with female thread, screws and gaskets (scope of delivery)</li> </ul>                                  | <ul style="list-style-type: none"> <li>→ Multistage, non self-priming, vertical high-pressure centrifugal pump in in-line design</li> <li>→ Glandless three-phase motor</li> <li>→ Hydraulic connection with oval flanges PN 16, counter flanges made of stainless steel with female thread, screws and gaskets (scope of delivery)</li> </ul>   |

**Horizontal, multistage centrifugal pumps**

**Horizontal, multistage centrifugal pumps**

**Multistage, horizontal centrifugal pumps**


|                         |  |   |  |
|-------------------------|--|---|--|
| Series                  | Wilo-Economy MHIE  | Wilo-Economy MHI  | Wilo-Medana CH1-L  |
| Field of application    | Pressure boosting  | Pressure boosting   | Pressure boosting  |
| Duty chart              |  |   |  |
| Construction            | Non self-priming multistage pump with integrated frequency converter   | Non self-priming multistage pump  | Multistage, horizontal centrifugal pumps   |
| Application             | Water supply and pressure boosting, Industrial circulation systems, Cooling water circulation systems, Washing and sprinkling systems  | Water supply and pressure boosting<br>Commerce and industry<br>Cooling water circulation systems<br>Washing and sprinkling systems  | Pumping of process water and drinking water for:<br>irrigation, pressure boosting, industrial applications (e. g. cooling circuits, car wash)  |
| Volume flow $Q_{max}$   | 32 m <sup>3</sup> /h   | 25 m <sup>3</sup> /h  | 18 m <sup>3</sup> /h   |
| Delivery head $H_{max}$ | 88 m   | 70 m  | 78 m   |
| Special features        | <ul style="list-style-type: none"> <li>→ Easy commissioning</li> <li>→ All parts that come in contact with the fluid are made of stainless steel</li> <li>→ Compact design</li> <li>→ Integrated frequency converter</li> <li>→ Full motor protection</li> <li>→ WRAS/KTW/ACS approval for all parts that come in contact with the fluid (EPDM version)</li> </ul> | <ul style="list-style-type: none"> <li>→ All parts that come in contact with the fluid are made of stainless steel</li> <li>→ Compact design</li> <li>→ WRAS/KTW/ACS approval for all parts that come in contact with the fluid (EPDM version)</li> </ul> | <ul style="list-style-type: none"> <li>→ Captive nuts on connections (option)</li> <li>→ Cathaphoretic-coated lantern</li> <li>→ Oblong hole for fixation</li> </ul>   |
| Technical data          | <ul style="list-style-type: none"> <li>→ Fluid temperature -15 to +110 °C</li> <li>→ Max. operating pressure 10 bar</li> <li>→ Inlet pressure max. 6 bar</li> <li>→ Protection class IP54</li> </ul>   | <ul style="list-style-type: none"> <li>→ Fluid temperature -15 to +110 °C</li> <li>→ Max. operating pressure 10 bar</li> <li>→ Inlet pressure max. 6 bar</li> <li>→ Protection class IP54</li> </ul>  | <ul style="list-style-type: none"> <li>→ Mains connection: 1~230 V, 50/60 Hz</li> <li>→ 3~380/400/460 V, 50/60 Hz</li> <li>→ Rated pressure: 10 bar</li> <li>→ Fluid temperature: -20 °C to 120 °C</li> <li>→ Ambient temperature: -15 °C to 50 °C</li> </ul>            |
| Equipment/function      | <ul style="list-style-type: none"> <li>→ Stainless steel in monobloc design</li> <li>→ Threaded connection</li> <li>→ Integrated frequency converter</li> <li>→ Single-phase or three-phase AC motor</li> <li>→ Three-phase version with LCD</li> <li>→ display for status indication</li> <li>→ Integrated thermal motor protection</li> </ul>                    | <ul style="list-style-type: none"> <li>→ Stainless steel pump in monobloc design</li> <li>→ Threaded connection</li> <li>→ Single-phase or three-phase AC motor</li> <li>→ Single-phase AC motor with integrated thermal motor protection</li> </ul>      | <ul style="list-style-type: none"> <li>→ Pump housing and impellers made of stainless steel</li> <li>→ AC motor: 3~ &gt; 0.75 AC IE3, 3~ &lt; 0.75 AC IE2</li> <li>→ AC motor: 1~ AC IE1/IE2</li> <li>→ Protection class: IP55</li> <li>→ Threaded connection</li> </ul> |

|                         | Horizontal, multistage centrifugal pumps   | Multistage, horizontal centrifugal pumps  | Vertical, multistage centrifugal pumps   |
|-------------------------|--|---|--|
|                         |   |   |   |
| Series                  | Wilco-Economy MHIL   | Wilco-Medana CH1-LC   | Wilco-Multivert MVIL   |
| Field of application    | Pressure boosting  | Pressure boosting   | Pressure boosting  |
| Duty chart              |   |   |   |
| Construction            | Non self-priming multistage pump   | Multistage, horizontal centrifugal pumps  | Non self-priming multistage pump   |
| Application             | Water supply and pressure boosting, Commerce and industry, Washing and spraying systems, Rainwater utilisation, Cooling and cold water circulation systems   | Pumping of process water for: irrigation, pressure boosting, industrial applications (e.g. cooling circuits, car wash)  | Water supply and pressure boosting, Commerce and industry, Washing and spraying systems, Rainwater utilisation, Cooling and cold water circuits  |
| Volume flow $Q_{max}$   | 13 m <sup>3</sup> /h   | 18 m <sup>3</sup> /h  | 13 m <sup>3</sup> /h   |
| Delivery head $H_{max}$ | 68 m   | 78 m  | 135 m  |
| Special features        | <ul style="list-style-type: none"> <li>→ Impellers and stage chambers made of 1.4301 stainless steel (AISI 304)</li> <li>→ Pump housing made of grey cast iron EN-GJL-250, with cataphoretic coating</li> </ul>                      | <ul style="list-style-type: none"> <li>→ Cataphoretic-coated lantern</li> <li>→ New drilled hole for fixation</li> </ul>  | <ul style="list-style-type: none"> <li>→ Space-saving, compact block design</li> </ul>   |
| Technical data          | <ul style="list-style-type: none"> <li>→ Fluid temperature -15 to +90 °C</li> <li>→ Max. operating pressure 10 bar</li> <li>→ Inlet pressure max. 6 bar</li> <li>→ Protection class IP54</li> </ul>                                  | <ul style="list-style-type: none"> <li>→ Mains connection: 1~230 V, 50/60 Hz - 3~380/400/460 V, 50/60 Hz</li> <li>→ Rated pressure: 10 bar</li> <li>→ Fluid temperature: -20 °C to 90 °C</li> <li>→ Ambient temperature: -15 °C to 50 °C</li> </ul>         | <ul style="list-style-type: none"> <li>→ Fluid temperature -15 to +90 °C</li> <li>→ Max. operating pressure or max. 10 or 16 bar, depending on type</li> <li>→ Max. inlet pressure 6 or 10 bar, depending on type</li> <li>→ Protection class IP54</li> <li>→ Minimum efficiency index MEI ≥0.4</li> </ul> |
| Equipment/function      | <ul style="list-style-type: none"> <li>→ Pump in monobloc design</li> <li>→ Threaded connection</li> <li>→ Single-phase or three-phase AC motor</li> <li>→ Single-phase AC motor with integrated thermal motor protection</li> </ul> | <ul style="list-style-type: none"> <li>→ Pump housing made of cast iron and impellers made of stainless steel</li> <li>→ AC motor: 3~ &gt; 0.75 AC IE3, 3~ &lt; 0.75 AC IE2</li> <li>→ AC motor: 1~ AC IE1/IE2</li> <li>→ Protection class: IP55</li> </ul> | <ul style="list-style-type: none"> <li>→ Pump in in-line design</li> <li>→ Hydraulics in 1.4301, pump housing in EN-GJL-250</li> <li>→ Oval flange</li> <li>→ Single-phase or three-phase AC motor</li> </ul>  |

**Single-pump pressure boosting systems with speed-controlled pump**
**Single-pump pressure boosting systems**
**Single-pump pressure boosting systems with system separation**


Series extension



|                         |  |  |   |
|-------------------------|--|--|---|
| Series                  | Wilo-SiBoost Smart 1 Helix VE...<br>SiBoost Smart 1 MVISE...   | Wilo-Economy CO-1 MVI(S) .../ER<br>Economy CO-1 Helix V .../CE+  | Wilo-Economy CO/T-1 Helix V .../CE<br>Comfort-Vario COR/T-1 Helix VE ...-GE   |
| Field of application    | Pressure boosting  | Pressure boosting  | Pressure boosting   |
| Duty chart              |  |  |   |
| Construction            | Water-supply units with a non self-priming, high-pressure multistage centrifugal pump with integrated speed control of the series Helix VE or MVISE  | Water supply systems with a non self-priming, high-pressure multistage centrifugal pump of the series MVIS, MVI or Helix V   | Water supply systems with system separation and a non self-priming, high-pressure multistage centrifugal pump of the Helix V or VE series   |
| Application             | Full automatic water supply from public water supply network or reservoir<br>For pumping drinking/process water, cooling water, water for firefighting   | Full automatic water supply from public water supply network or reservoir<br>For pumping drinking/process water, cooling water, water for firefighting   | Full automatic water supply from the public water supply network<br>For pumping drinking/process water, cooling water, water for firefighting   |
| Volume flow $Q_{max}$   | 90 m <sup>3</sup> /h   | 135 m <sup>3</sup> /h  | 10 m <sup>3</sup> /h  |
| Delivery head $H_{max}$ | 142 m  | 160 m  | 120 m   |
| Special features        | <ul style="list-style-type: none"> <li>→ For systems with MVISE pump applies: Up to 20 dB(A) quieter than comparable systems</li> <li>→ For systems with Helix VE pump</li> <li>→ Optimised hydraulics</li> <li>→ Cartridge mechanical seal</li> <li>→ IE4 standard motor</li> </ul>   | <ul style="list-style-type: none"> <li>→ For systems with MVI(S) pump applies: Up to 20 dB(A) quieter than comparable systems</li> <li>→ For systems with Helix V pump</li> <li>→ Optimised hydraulics</li> <li>→ Cartridge mechanical seal</li> <li>→ IE3 standard motors for Helix V</li> </ul>  | <ul style="list-style-type: none"> <li>→ Compact system, ready for connection, for all applications that require system separation</li> <li>→ High-efficiency pump hydraulics</li> <li>→ Helix V with IE3 standard motors</li> <li>→ Helix VE with IE4 standard motors</li> </ul>   |
| Technical data          | <ul style="list-style-type: none"> <li>→ Mains connection 3~400 V, 50 Hz</li> <li>→ Max. fluid temperature 50 °C</li> <li>→ Operating pressure 16 bar</li> <li>→ Inlet pressure 6/10 bar</li> <li>→ Protection class IP44/IP54</li> </ul>  | <ul style="list-style-type: none"> <li>→ Mains connection 3~230 V / 400 V, 50 Hz</li> <li>→ Max. fluid temperature 50 °C</li> <li>→ Operating pressure 10/16 bar</li> <li>→ Inlet pressure 6/10 bar</li> <li>→ Switching stage 6/10/16 bar</li> <li>→ Protection class IP41/IP54</li> </ul>  | <ul style="list-style-type: none"> <li>→ Mains connection 3~230 V / 400 V, 50 Hz (other versions on request)</li> <li>→ Max. fluid temperature 40 °C</li> <li>→ Operating pressure 16 bar</li> <li>→ Inlet pressure 6 bar</li> <li>→ Protection class CO/T=IP54, COR/T=IP55</li> </ul>  |
| Equipment/function      | <ul style="list-style-type: none"> <li>→ New innovative pressure-variable control</li> <li>→ Components with fluid contact are corrosion-resistant</li> <li>→ Pipework made of stainless steel</li> <li>→ Shut-off device, on the pressure side</li> <li>→ Non-return valve, on the pressure side</li> <li>→ Diaphragm pressure vessel 8 l, PN 16</li> </ul> | <ul style="list-style-type: none"> <li>→ Components with fluid contact are corrosion-resistant</li> <li>→ Base frame with height-adjustable vibration absorbers for insulation against structure-borne noise</li> <li>→ Pipework stainless steel</li> <li>→ Shut-off device, on the pressure side</li> <li>→ Non-return valve, on the pressure side</li> <li>→ Diaphragm pressure vessel 8 l, PN 16, on pressure side</li> </ul> | <ul style="list-style-type: none"> <li>→ PE break tank, atmospherically ventilated (150 l)</li> <li>→ Components with fluid contact are corrosion-resistant</li> <li>→ Pipework stainless steel</li> <li>→ Shut-off device, on the pressure side</li> <li>→ Non-return valve, on the pressure side</li> <li>→ Break tank with float-valve, -switch</li> <li>→ Diaphragm pressure vessel 8 l, PN 16, on pressure side</li> <li>→ Low-water cut-out switchgear</li> </ul> |

**Multi-pump pressure boosting systems with speed-controlled pumps**

**Multi-pump pressure boosting systems with speed-controlled pumps**

**Multi-pump pressure boosting systems**



|                         |   |   |   |
|-------------------------|---|---|---|
| Series                  | Wilo-SiBoost Smart MVISE<br>SiBoost Smart (FC) Helix V, ..VE, ..EXCEL   | Wilo-Comfort-(N)-COR..MVI(S)..CC<br>Comfort-COR..Helix V(E)..CC(e)  | Wilo-Economy CO..MHI (Helix)..ER (CE)<br>Comfort-(N)-CO..MVI(S) or Helix V..CC  |
| Field of application    | Pressure boosting   | Pressure boosting   | Pressure boosting   |
| Duty chart              |   |   |   |
| Construction            | Highly efficient system with 2 to 4 stainless steel, non self-priming, high-pressure multistage centrifugal pumps (Helix V, VE, EXCEL, MVISE) switched in cascade or synchronous motor speed  | Pressure boosting system with speed control and 2 to 6 non self-priming, stainless steel, high-pressure, multistage centrifugal pumps switched in cascade   | Pressure boosting system with Economy 2 to 4 respectively Comfort 2 to 6 non self-priming, stainless steel, high-pressure, multistage centrifugal pumps switched in cascade   |
| Application             | Full automatic water supply in residential/office buildings & industrial systems<br>For pumping drinking/process water, cooling water, water for firefighting   | Full automatic water supply in residential/office buildings & industrial systems<br>For pumping drinking/process water, cooling water, water for firefighting   | Full automatic water supply in residential/office buildings & industrial systems<br>For pumping drinking/process water, cooling water, water for firefighting   |
| Volume flow $Q_{max}$   | 360 m³/h  | 800 m³/h  | 800 m³/h  |
| Delivery head $H_{max}$ | 158 m   | 160 m   | 160 m   |
| Special features        | <ul style="list-style-type: none"> <li>→ High-efficiency pump hydraulics</li> <li>→ Helix V with IE3 standard motors, Helix VE with IE4, Helix EXCEL with High-efficiency EC motor (IE5 acc. to IEC 60034-30-2)</li> <li>→ Hydraulics of entire system are pressure-loss optimised</li> <li>→ Integrated dry-running detection and low water cut-out switch</li> <li>→ Systems with MVISE: Up to 20 dB(A) quieter than comparable systems</li> </ul>                                | <ul style="list-style-type: none"> <li>→ Compact system in accordance of DIN 1988 (EN 806)</li> <li>→ Series with Helix VE integrated frequency converter</li> <li>→ For systems with MVI pumps: Up to 20 dB(A) quieter than comparable systems</li> </ul>  | <ul style="list-style-type: none"> <li>→ Compact system in accordance of DIN 1988 (EN 806)</li> <li>→ For systems with MVI pumps: Up to 20 dB(A) quieter than comparable systems</li> </ul>   |
| Technical data          | <ul style="list-style-type: none"> <li>→ Mains connection                             <ul style="list-style-type: none"> <li>- Helix V: 3~230 V/400 V, 50 Hz</li> <li>- Helix VE and EXCEL: 3~400 V, 50 Hz</li> </ul> </li> <li>→ Max. fluid temperature 70 °C</li> <li>→ Operating pressure 16/25 bar</li> <li>→ Inlet pressure 10 bar</li> <li>→ Protection class IP54</li> </ul>   | <ul style="list-style-type: none"> <li>→ Mains connection 3~230 / 400 V, 50 Hz</li> <li>→ Max. fluid temperature 50 °C</li> <li>→ Operating pressure 10/16 bar</li> <li>→ Inlet pressure 6/10 bar</li> <li>→ Protection class IP54</li> </ul>   | <ul style="list-style-type: none"> <li>→ Mains connection 3~230 V / 400 V, 50 Hz</li> <li>→ Max. fluid temperature 50 °C</li> <li>→ Operating pressure 10/16 bar</li> <li>→ Inlet pressure 6/10 bar</li> <li>→ Protection class IP54</li> </ul>   |
| Equipment/function      | <ul style="list-style-type: none"> <li>→ Automatic pump control via Smart Controller SC</li> <li>→ Innovative pressure-variable control for Helix VE, EXCEL, MVISE</li> <li>→ Components with fluid contact are corrosion-resistant</li> <li>→ Shut-off device on suction and pressure sides of each pump</li> <li>→ Non-return valve, pressure sensor, diaphragm pressure vessel 8 l, PN 16, on pressure side</li> <li>→ Low-water sensor standard for VE, EXCEL, MVISE</li> </ul> | <ul style="list-style-type: none"> <li>→ Base-load pump continuous auto controlled via frequency converter in the CC controller</li> <li>→ Components with fluid contact are corrosion-resistant</li> <li>→ Pipework stainless steel 1.4571</li> <li>→ Shut-off device at each pump, on the suction and pressure sides</li> <li>→ Non-return valve, on the pressure side</li> <li>→ Diaphragm pressure vessel 8 l, PN 16, on pressure side</li> <li>→ Pressure sensor, on the discharge side</li> </ul> | <ul style="list-style-type: none"> <li>→ Components with fluid contact are corrosion-resistant</li> <li>→ Pipework made of stainless steel 1.4571</li> <li>→ Shut-off device at each pump, on the suction and pressure sides</li> <li>→ Non-return valve, on the pressure side</li> <li>→ Diaphragm pressure vessel 8 l, PN 16, on pressure side</li> <li>→ Pressure sensor, on the discharge side</li> </ul> |



### Fire-extinguishing systems for wall hydrant installations according to DIN 14462

### Fire-extinguishing systems for wall hydrant installations according to DIN 14462

### Fire-extinguishing systems for sprinkler systems according to EN 12845



| Series                  | Wilo-FLA  | Wilo-FLA Compact   | Wilo-SiFire EN<br>SiFire Easy  |
|-------------------------|---|--|--|
| Field of application    | Firefighting  | Firefighting   | Firefighting   |
| Duty chart              |   |  |  |
| Construction            | Pressure boosting system for firefighting applications with 1 to 2 autonomously operating, non self-priming, stainless steel, high-pressure, multistage centrifugal pumps   | Pressure boosting system for firefighting, 1 to 2 autonomously operating, non self-priming, stainless steel, high-pressure, multistage centrifugal pumps with break tank   | Pressure boosting system for firefighting, 1 or 2 pumps on horizontal base frame – EN 733 – spacer coupling, electro- or diesel motor and multistage, electrical, vertical jockey pump   |
| Application             | For supply of firefighting water from fire hose reels in accordance with DIN 14462  | For supply of firefighting water from fire hose reels in accordance with DIN 14462   | Full automatic water supply of fire-extinguishing systems with sprinkler system in accordance with EN 12845  |
| Volume flow $Q_{max}$   | 100 m <sup>3</sup> /h   | 18 m <sup>3</sup> /h   | 750 m <sup>3</sup> /h  |
| Delivery head $H_{max}$ | 159 m   | 142 m  | 128 m  |
| Special features        | <ul style="list-style-type: none"> <li>→ Compact system in accordance of DIN 14462</li> <li>→ Variants</li> <li>→ Single-pump system</li> <li>→ Double-pump system with redundant single-pump systems in a base frame</li> <li>→ Comes as standard with pump protection by means of minimum volume discharge via bypass circuit without auxiliary energy</li> </ul>   | <ul style="list-style-type: none"> <li>→ Compact system with break tank in accordance with DIN 14462</li> <li>→ Variants</li> <li>→ Single-pump system</li> <li>→ Double-pump system with two redundant single-pump systems on a base frame</li> <li>→ Comes as standard with pump protection by means of minimum volume discharge via bypass circuit without auxiliary energy</li> </ul>  | <ul style="list-style-type: none"> <li>→ Compact system (just one base frame) in accordance with EN 12845</li> <li>→ Jockey pump for maintaining the required pressure in the system; with automatic start/stop function</li> <li>→ Sized diaphragm at the pump outlet for a minimum bypass line so that the pump is protected at a low volume flow</li> <li>→ The cables are hidden in the construction and are thus protected from shocks or cuts</li> </ul>   |
| Technical data          | <ul style="list-style-type: none"> <li>→ Mains connection 3~400 V, 50 Hz</li> <li>→ Max. fluid temperature 50 °C</li> <li>→ Max. operating pressure 16 bar</li> <li>→ Inlet pressure 6 bar</li> <li>→ Protection class IP54</li> </ul>  | <ul style="list-style-type: none"> <li>→ Mains connection 3~400 V, 50 Hz</li> <li>→ Fluid temperature max. 50 °C</li> <li>→ Operating pressure up to 16 bar</li> <li>→ Inlet pressure from break tank &lt; 1 bar</li> <li>→ Protection class of operating device IP54</li> <li>→ Round break tank (540 l)</li> </ul>   | <ul style="list-style-type: none"> <li>→ Mains connection 3~400 V, 50 Hz (1~230 V, 50 Hz panel diesel pump)</li> <li>→ Fluid temperature max. +40 °C</li> <li>→ Max. operating pressure 10/16 bar</li> <li>→ Max. inlet pressure 6 bar</li> <li>→ Protection class of the switch cabinet IP54</li> </ul>   |
| Equipment/function      | <ul style="list-style-type: none"> <li>→ Components that come in contact with fluid are corrosion-resistant</li> <li>→ Pipework made of stainless steel</li> <li>→ Shut-off device at each pump, on the suction and pressure sides</li> <li>→ Non-return valve, on the pressure side</li> <li>→ Diaphragm pressure vessel 8 l, PN 16, on pressure side</li> <li>→ Pressure switch, on the discharge side</li> </ul> | <ul style="list-style-type: none"> <li>→ Components with fluid contact are corrosion-resistant</li> <li>→ Pipework stainless steel</li> <li>→ Ball shut-off valve on pressure side</li> <li>→ Gate valve between pump and break tank with free outlet according to EN 13077, type AB according to DIN EN 1717</li> <li>→ Non-return valve, on pressure side</li> <li>→ Diaphragm pressure vessel 8 l, PN16, on pressure side</li> <li>→ Pressure switch, on pressure side</li> </ul> | <ul style="list-style-type: none"> <li>→ A circuit with double pressure switch, pressure gauge, non-return valve, valve for the main and standby pump for an automatic start</li> <li>→ Pipework in steel; painted with epoxy resin. Distributor with flanges</li> <li>→ Shutting gate with safety lock on the pressure side of the pump</li> <li>→ Non-return valve on the pressure side of every pump</li> <li>→ DN2" connection for the priming tank of the pumps</li> <li>→ Pressure measuring on pressure side</li> </ul> |




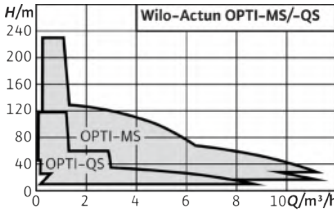
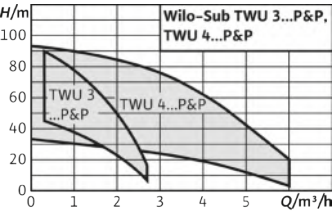
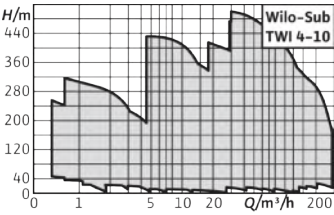
**Certified fire-extinguishing systems for hydrant and sprinkler systems according to DIN 14462 or EN 12845**




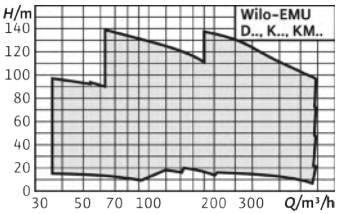
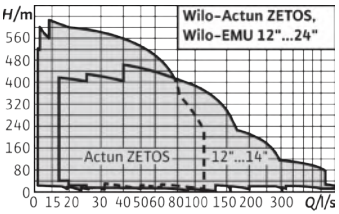
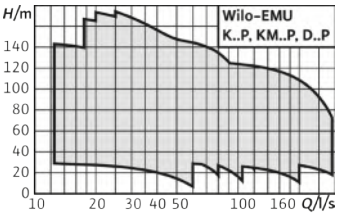
**Submersible pumps**




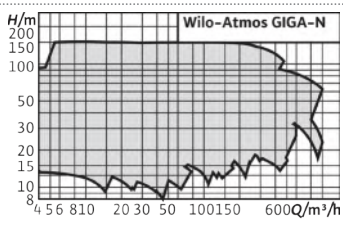
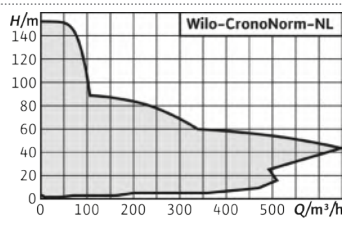
**Submersible pumps**




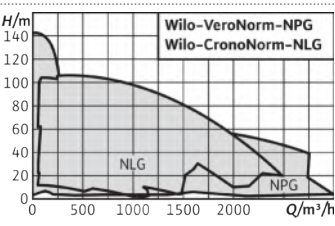
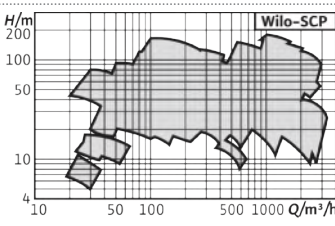
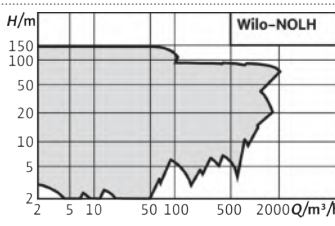


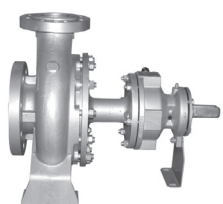
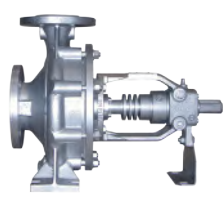

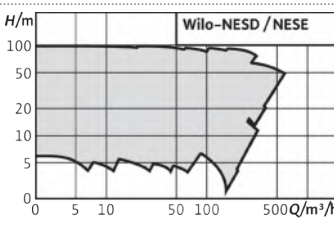
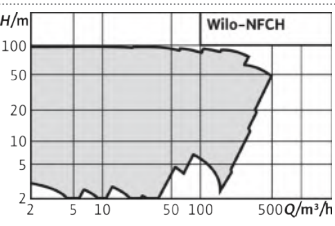
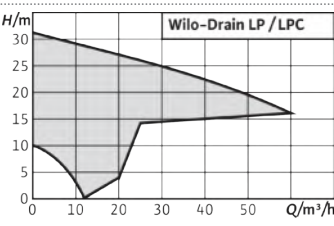
|                         |   |  |   |
|-------------------------|---|--|---|
| Series                  | Wilo-GEP Fire   | Wilo-Sub TWU 3<br>Wilo-Sub TWU 3-...-HS  | Wilo-Sub TWU 4 ..., ...-QC, ...-GT  |
| Field of application    | Firefighting  | Raw water intake / Rainwater / Air conditioning  | Raw water intake / Rainwater / Irrigation   |
| Duty chart              |   |  |   |
| Construction            | Pressure boosting system for firefighting applications with 1 to 12 multistage centrifugal pumps with/without break tank, with/without housing  | Submersible pump, multistage   | Submersible pump, multistage  |
| Application             | Fire water supply of exterior-/wall hydrants for high-rise buildings & large properties-no valves for pressure reduction-plus sprinkler/water spray systems   | For water supply, sprinkling, irrigation with water without long-fibre or abrasive components from boreholes, wells, rainwater storage   | Pumping of water from boreholes, wells, rainwater storage for water supply, sprinkling, irrigation, lowering ground water level   |
| Volume flow $Q_{max}$   | certified up to 1000 m <sup>3</sup> /h  | 6.5 m <sup>3</sup> /h  | 22 m <sup>3</sup> /h  |
| Delivery head $H_{max}$ | 250 m, up to 450 m on request   | 130 m  | 322 m   |
| Special features        | <ul style="list-style-type: none"> <li>→ Room air cooling, full fairing</li> <li>→ Split version for installation/transport</li> <li>→ Pressure-maintaining pump or pilot pump as an option</li> <li>→ Combination with industrial water system</li> <li>→ Real pressure method and VR controller for high-rise buildings and large properties</li> <li>→ Monitoring of switchgear and ambient temperature</li> </ul> | <ul style="list-style-type: none"> <li>→ Parts in contact with the fluid are corrosion-resistant</li> <li>→ Integrated non-return valve</li> <li>→ Supply security with constant pressure thanks to extended pump performance due to a higher speed of up to 8,400 rpm (TWU 3/HS)</li> <li>→ Frequency converter with integrated and menu-guided control (TWU 3/HS)</li> </ul> | <ul style="list-style-type: none"> <li>→ Parts in contact with the fluid are corrosion-resistant</li> <li>→ Integrated non-return valve</li> <li>→ Low wear due to floating impellers</li> <li>→ Maintenance-friendly motor</li> </ul>  |
| Technical data          | <ul style="list-style-type: none"> <li>→ TÜV, DEKRA, DVGW, SVGW certified</li> <li>→ Hygienic safety by free outlet (EN 1717)</li> <li>→ Stainless steel run-down tank</li> <li>→ Automatic function test up to redundancy stage 3</li> <li>→ Small installation surface min. 0.64 m<sup>2</sup></li> </ul>   | <ul style="list-style-type: none"> <li>→ Mains connection: 1~230 V, 50 Hz or 3~400 V, 50 Hz</li> <li>→ Fluid temperature: 3-35 °C</li> <li>→ Max. sand content: 50 g/m<sup>3</sup></li> <li>→ Max. immersion depth: 150 m</li> </ul>   | <ul style="list-style-type: none"> <li>→ Mains connection: 1~230 V, 50 Hz or 3~400 V, 50 Hz</li> <li>→ Fluid temperature: 3-30 °C</li> <li>→ Max. sand content: 50 g/m<sup>3</sup></li> <li>→ Max. immersion depth: 200 m</li> </ul>  |
| Equipment/function      | <ul style="list-style-type: none"> <li>→ Drainage or pump emergency drainage (EN12056) for total volume flow</li> <li>→ Installation possible below backflow level</li> <li>→ No valves for reducing pressure in the main flow of the fire-extinguishing system</li> <li>→ Effective maintenance management and permanent information on the operation via smartphone, tablet or PC</li> </ul>                        | <ul style="list-style-type: none"> <li>→ Multistage submersible pump with radial impellers</li> <li>→ Integrated non-return valve</li> <li>→ NEMA coupling</li> <li>→ Single-phase or three-phase AC motor</li> <li>→ Thermal motor protection for single-phase motor</li> <li>→ HS variant including external or internal frequency converter</li> </ul>                      | <ul style="list-style-type: none"> <li>→ Multistage submersible pump with radial or semi-axial impellers</li> <li>→ Integrated non-return valve</li> <li>→ NEMA coupling</li> <li>→ Single-phase or three-phase AC motor</li> <li>→ Integrated thermal motor protection for single-phase motor</li> <li>→ Hermetically sealed motors</li> </ul> |

|                         | Submersible pumps  | Submersible pump system  | Submersible pumps   |
|-------------------------|--|--|---|
|                         |   |    |    |
| Series                  | Wilo-Actun OPTI-MS<br>Wilo-Actun OPTI-QS   | Wilo-Sub TWU 3 ... Plug & Pump<br>Wilo-Sub TWU 4 ... Plug & Pump   | Wilo-Sub TWI 4/6/8/10 ...   |
| Field of application    | Raw water intake / Rainwater / Irrigation  | Raw water intake / Rainwater / Air conditioning  | Distribution and boosting / Clean water treatment / Raw water intake  |
| Duty chart              |   |    |    |
| Construction            | Submersible pump, multistage; in tie strap version (MSI, QSI) or as a progressive cavity pump (MSH, QSH)   | Water-supply unit with submersible pump, control and complete accessories  | Submersible pump, multistage  |
| Application             | Pumping of water from boreholes, wells, rainwater tanks for water supply, sprinkling, irrigation; For operation with photovoltaic modules  | For water supply, sprinkling, irrigation with water without long-fibre or abrasive components from boreholes, wells, rainwater storage   | Pumping of (drinking) water from boreholes, wells, rainwater storage for water supply, sprinkling, irrigation, lowering ground water level  |
| Volume flow $Q_{max}$   | 11 m <sup>3</sup> /h   | 6 m <sup>3</sup> /h  | 165 m <sup>3</sup> /h   |
| Delivery head $H_{max}$ | 230 m  | 88 m   | 500 m   |
| Special features        | <ul style="list-style-type: none"> <li>→ All parts in contact with the fluid are made of stainless steel</li> <li>→ Integrated non-return valve</li> <li>→ Low wear due to floating impellers</li> <li>→ Types with helical rotor for high head at low speed</li> <li>→ Permanent magnet motor</li> <li>→ Built-in frequency inverter with MPPT function</li> </ul>                    | <ul style="list-style-type: none"> <li>→ Easy installation thanks to pre-mounted and pre-wired components</li> <li>→ Parts in contact with the fluid are corrosion-resistant</li> <li>→ Integrated non-return valve</li> </ul>   | <ul style="list-style-type: none"> <li>→ Corrosion-resistant thanks to stainless steel version</li> <li>→ Flexible installation thanks to vertical and horizontal installation</li> <li>→ Easy installation due to integrated non-return valve</li> <li>→ Large performance range</li> <li>→ ACS approval for TWI 4 for drinking water application</li> </ul> |
| Technical data          | <ul style="list-style-type: none"> <li>→ Operating voltage: <ul style="list-style-type: none"> <li>- MSI/MSH: 90-400 VDC or 90-265 VAC</li> <li>- QSI/QSH: 70-190 VDC</li> </ul> </li> <li>→ Fluid temperature max.: 35 °C</li> <li>→ Max. sand content: 50 g/m<sup>3</sup></li> <li>→ Max. immersion depth: 150 m</li> </ul>  | <ul style="list-style-type: none"> <li>→ Mains connection: 1~230 V, 50 Hz</li> <li>→ Fluid temperature: 3-30 °C</li> <li>→ Max. sand content: 50 g/m<sup>3</sup></li> <li>→ Max. immersion depth TWU 3/TWU 4: 150/200 m</li> </ul>   | <ul style="list-style-type: none"> <li>→ Mains: 1~230 V, 50 Hz (only TWI 4 ...)</li> <li>or 3~400 V, 50 Hz</li> <li>→ Fluid temperature: 3-20 °C or 3-30 °C</li> <li>→ Max. sand content: 50 g/m<sup>3</sup></li> <li>→ Max. immersion depth: 100-350 m</li> </ul>  |
| Equipment/function      | <ul style="list-style-type: none"> <li>→ Type MSI/QSI: Multistage submersible pump with radial impellers in jacket design</li> <li>→ Type MSH/QSH: Hydraulics with helical rotor within double helix rubber stator</li> <li>→ Integrated non-return valve</li> <li>→ Permanent magnet motor, capsulated with water-glycol-filling</li> <li>→ Integrated frequency converter</li> </ul> | <ul style="list-style-type: none"> <li>→ Multistage submersible pump with radial impellers</li> <li>→ Integrated non-return valve</li> <li>→ NEMA coupling</li> <li>→ Single-phase AC motor</li> <li>→ Integrated thermal motor protection</li> <li>→ Dry-running protection (only for TWU 4- ... -P&amp;P with Wilo-Sub-I package)</li> </ul> | <ul style="list-style-type: none"> <li>→ Multistage submersible pump with radial or semi-axial impellers</li> <li>→ Integrated non-return valve</li> <li>→ NEMA coupling</li> <li>→ Single-phase or three-phase AC motor</li> </ul>   |

|                         | Sprinkler pumps with VdS approval  | Submersible pumps   | Submersible pumps   |
|-------------------------|--|---|---|
|                         |   |    |    |
| Series                  | Wilo-EMU sprinkler pumps   | Wilo-EMU 12"…24"<br>Wilo-Actun ZETOS-K  | Wilo-EMU polder pumps   |
| Field of application    | Firefighting   | Clean water treatment / Raw water intake / Irrigation   | Clean water treatment / Raw water intake / Industrial Process   |
| Duty chart              |   |   |    |
| Construction            | Submersible pump with sectional construction   | Submersible pump with sectional construction  | Polder pump   |
| Application             | Supplying sprinkler systems  | (Drinking) water supply from boreholes, rainwater tanks; for sprinkling/irrigation/pressure boosting; municipal/industrial/geothermal/offshore use  | Drinking/process water from boreholes, rainwater tanks; sprinkling/irrigation/groundwater lowering; municipal/industrial/geothermal/offshore use  |
| Volume flow $Q_{max}$   | 580 m <sup>3</sup> /h  | 2,400 m <sup>3</sup> /h   | 1,200 m <sup>3</sup> /h   |
| Delivery head $H_{max}$ | 140 m  | 640 m   | 160 m   |
| Special features        | <ul style="list-style-type: none"> <li>→ VdS certification</li> <li>→ Sturdy version in cast iron or bronze</li> <li>→ Pressure shroud in corrosion-resistant and hygienic stainless steel version with rubber bearing for minimising noise and vibrations</li> <li>→ VdS certified non-return valve is available as an accessory</li> </ul> | <ul style="list-style-type: none"> <li>→ Pressure shroud in corrosion-resistant and hygienic stainless steel version</li> <li>→ Hydraulic in stainless steel precision casting (Actun ZETOS-K)</li> <li>→ Maintenance-friendly, rewindable motors</li> <li>→ Optionally with Ceram CT coating for increasing the efficiency</li> <li>→ Optionally with ACS approval for drinking water application</li> </ul> | <ul style="list-style-type: none"> <li>→ Deep water lowering thanks to self-cooling motors</li> <li>→ Sturdy version in cast iron or bronze</li> <li>→ Compact construction</li> <li>→ Maintenance-friendly, rewindable motors</li> <li>→ Optionally with Ceram CT coating for increasing the efficiency</li> </ul> |
| Technical data          | <ul style="list-style-type: none"> <li>→ Mains connection: 3~400 V/50 Hz</li> <li>→ Max. fluid temperature: 25 °C or on request</li> <li>→ Max. sand content: 35 g/m<sup>3</sup></li> <li>→ Max. immersion depth: 100 m or 300 m</li> </ul>  | <ul style="list-style-type: none"> <li>→ Mains connection: 3~400 V, 50 Hz</li> <li>→ Max. fluid temperature: 20 ... 30 °C</li> <li>→ Max. sand content: 35 g/m<sup>3</sup> or 150 g/m<sup>3</sup></li> <li>→ Max. immersion depth: 100/300/350 m</li> </ul>   | <ul style="list-style-type: none"> <li>→ Mains connection: 3~400 V, 50 Hz</li> <li>→ Max. fluid temperature: 20 °C</li> <li>→ Minimum flow across outside shroud: not necessary</li> <li>→ Max. sand content: 35 g/m<sup>3</sup></li> <li>→ Max. immersion depth: 300 m</li> </ul>                                  |
| Equipment/function      | <ul style="list-style-type: none"> <li>→ Multistage submersible pump</li> <li>→ Radial or semi-axial impellers</li> <li>→ NEMA coupling (depending on type)</li> <li>→ Three-phase motor for direct or star-delta start</li> <li>→ Rewindable motors</li> </ul>  | <ul style="list-style-type: none"> <li>→ Multistage submersible pump</li> <li>→ Radial or semi-axial impellers</li> <li>→ Hydraulics and motor freely configurable according to power requirements</li> <li>→ Integrated non-return valve (depending on type)</li> <li>→ NEMA coupling or standardised connection</li> <li>→ Three-phase motor for direct or star-delta start</li> </ul>                      | <ul style="list-style-type: none"> <li>→ Multistage submersible pump</li> <li>→ Semi-axial impellers</li> <li>→ Hydraulics and motor freely configurable according to power requirements</li> <li>→ Three-phase motor for direct or star-delta start</li> <li>→ Motors rewindable as standard</li> </ul>            |

|                         | Vertical turbine pumps   | Standard glanded pumps  | Standard glanded pumps   |
|-------------------------|--|---|--|
|                         |   |   |   |
| Series                  | Series VMF, CNE, VAF   | Wilo-Atmos GIGA-N   | Wilo-CronoNorm-NL  |
| Field of application    | Raw water intake / Firefighting / Industrial Process   | Heating / Air conditioning / Industrial Process / Clean water treatment / Distribution and boosting / Irrigation  | Heating / Air conditioning / Clean water treatment   |
| Duty chart              |  |   |   |
| Construction            | Vertical turbine pumps for dry well installation with submerged axial or semi-axial hydraulics   | Single-stage, low-pressure centrifugal pump with axial suction, mounted on a baseplate.   | Single-stage low-pressure centrifugal pump with axial suction, according to EN 733 and ISO 5199, mounted on a baseplate  |
| Application             | Industrial or municipal water supply<br>irrigation, firefighting<br>Cooling water supply<br>Dewatering, flood control  | Pumping of heating water (in accordance with VDI 2035), cold water, water-glycol mixtures in heating, cold water and cooling systems.   | Pumping of heating water, cold water, water-glycol mixtures in municipal water supply, general industry, power stations etc.   |
| Volume flow $Q_{max}$   | 40,000 m³/h  | 1000 m³/h   | 650 m³/h   |
| Delivery head $H_{max}$ | 450 m  | 150 m   | 150 m  |
| Special features        | <ul style="list-style-type: none"> <li>→ Minimum surface area needed</li> <li>→ High hydraulic efficiency</li> <li>→ Submerged pump hydraulics</li> <li>→ Design to order as per customer specifications</li> </ul>  | <ul style="list-style-type: none"> <li>→ Energy-saving thanks to increased overall efficiency through improved hydraulics and the use of IE3 motors</li> <li>→ Cataphoretic coating of all cast components for high corrosion resistance and long service life</li> <li>→ Universally usable thanks to standardised dimensions, a range of motor options and impellers made of different materials</li> </ul> | <ul style="list-style-type: none"> <li>→ Reduced life-cycle costs through optimised efficiency levels</li> <li>→ Bidirectional, force-flushed mechanical seal</li> <li>→ Low NPSH values, best cavitation properties</li> <li>→ Shaft coupling with or without spacer coupling</li> </ul>  |
| Technical data          | <ul style="list-style-type: none"> <li>→ Permitted temperature range up to 80 °C, or up to 105 °C on request</li> <li>→ Nominal diameter on pressure side DN 100 to DN 2000</li> </ul>   | <ul style="list-style-type: none"> <li>→ Permissible temperature range of -20 °C to +140 °C</li> <li>→ Mains connection 3~400 V, 50 Hz</li> <li>→ Protection class IP55</li> <li>→ Nominal diameter DN 32 to DN 150</li> <li>→ Max. operating pressure 16 bar</li> </ul>  | <ul style="list-style-type: none"> <li>→ Fluid temperature -20 °C to +120 °C</li> <li>→ Mains connection 3~400 V, 50 Hz</li> <li>→ Nominal diameter: DN 50 to DN 500 (suction side), DN 32 to DN 500 (pressure side)</li> <li>→ Operating pressure: depending on type and application – up to 16 bar</li> </ul>  |
| Equipment/function      | <ul style="list-style-type: none"> <li>→ For types of installation with pressure port, for concealed floor, floor-mounted or twin-ceiling installation</li> <li>→ Design: As removable or permanent installation</li> <li>→ With axial or semi-axial, single or multistage hydraulics</li> <li>→ Open shaft for bearing lubrication with the fluid, or with shaft trim for separate bearing lubrication</li> <li>→ Drive options: Electric motor, diesel motor or steam turbine</li> </ul> | Single-stage low-pressure centrifugal pump in monobloc design with coupling, coupling guard, motor and baseplate  | <ul style="list-style-type: none"> <li>→ Single-stage horizontal spiral housing pump with bearing bracket and exchangeable casing wear rings in process design</li> <li>→ Shaft sealing: mechanical seals in accordance with EN 12756 or stuffing box packing</li> <li>→ Spiral housing with cast pump support feet</li> <li>→ Shaft coupling with spacer coupling</li> <li>→ Motors ≥ 0.75 kW: IE3</li> </ul> |

|                         | Standard glanded pumps  | Axially split case pumps   | Standard pumps in accordance with EN 733  |
|-------------------------|---|--|---|
|                         |    |    |    |
| Series                  | Wilo-CronoNorm-NLG<br>Wilo-VeroNorm-NPG   | Wilo-SCP   | NOLH  |
| Field of application    | Heating / Air conditioning / Clean water treatment  | Distribution and boosting / Clean water treatment / Irrigation   | Industrial Process  |
| Duty chart              |    |    |    |
| Construction            | Single-stage low-pressure centrifugal pump with axial suction, according to ISO 5199, mounted on a baseplate  | Low-pressure centrifugal pump with axially split housing mounted on a baseplate  | Single-stage low-pressure centrifugal pump with axial suction connection and radial, upwards-facing pressure connection, mounted on a baseplate   |
| Application             | Pumping of heating water, cold water, water-glycol mixtures in municipal water supply, general industry, power stations etc.  | Pumping of heating water (acc. VDI 2035), cold water, process water, water-glycol mixtures in heating, cold water and cooling systems.   |   |
| Volume flow $Q_{max}$   | 2,800 m³/h  | 3,400 m³/h   | 1,800 m³/h  |
| Delivery head $H_{max}$ | 140 m   | 245 m  | 140 m   |
| Special features        | <p>NLG:</p> <ul style="list-style-type: none"> <li>→ Reduced life cycle costs through optimised efficiency</li> <li>→ Mechanical seal independent of the direction of rotation</li> <li>→ Interchangeable casing wear ring</li> <li>→ Permanently lubricated, generously dimensioned roller bearings</li> </ul> <p>NPG:</p> <ul style="list-style-type: none"> <li>→ Suitable for temperatures up to 140 °C</li> <li>→ Back pull-out version</li> </ul> | <ul style="list-style-type: none"> <li>→ Higher volume flows up to 17,000 m³/h on request</li> <li>→ Special motors and other materials on request</li> </ul>  | <ul style="list-style-type: none"> <li>→ Impeller diameter is adjusted to the desired duty point</li> <li>→ Many version options for the shaft seal</li> <li>→ 60 Hz or ATEX version on request</li> <li>→ Pumping of clean or slightly muddy fluids without solid material</li> </ul>  |
| Technical data          | <ul style="list-style-type: none"> <li>→ Fluid temperature -20 °C to +120 °C (depending on type)</li> <li>→ Mains connection 3~400 V, 50 Hz</li> <li>→ Nominal diameters: DN 150 to DN 500 (depending on type)</li> <li>→ Operating pressure: depending on type and application – up to 16 bar</li> </ul>   | <ul style="list-style-type: none"> <li>→ Fluid temperature -8 °C to +120 °C</li> <li>→ Mains connection 3~400 V, 50 Hz</li> <li>→ Nominal diameters – Suction side: DN 65 to DN 500</li> <li>→ Pressure side: DN 50 to DN 400</li> <li>→ Max. operating pressure: 16 or 25 bar, depending on type</li> </ul>   | <ul style="list-style-type: none"> <li>→ Permitted temperature range -20 °C to +120 °C</li> <li>→ Mains connection 3~400 V, 50 Hz</li> <li>→ Nominal diameter on pressure side DN 32 to DN 125</li> <li>→ Max. operating pressure PN 16</li> </ul>  |
| Equipment/function      | <ul style="list-style-type: none"> <li>→ Single-stage horizontal spiral housing pump with bearing bracket and exchangeable casing wear rings (NLG only) in process design</li> <li>→ Shaft sealing with mechanical seals in accordance with EN 12756 or stuffing box packing</li> <li>→ Spiral housing with cast pump bases</li> <li>→ Greased grooved ball bearings for bearing of pump shaft</li> <li>→ Motors with efficiency class IE3</li> </ul>   | <ul style="list-style-type: none"> <li>→ 1- or 2-stage, low-pressure centrifugal pump in monobloc design</li> <li>→ Deliverable as complete unit or without motor or only pump hydraulics</li> <li>→ Shaft sealing with mechanical seal or stuffing box packing</li> <li>→ 4-pole and 6-pole motors</li> <li>→ Materials:</li> <li>→ Pump housing: EN-GJL-250</li> <li>→ Impeller: G-CuSn5 ZnPb</li> <li>→ Shaft: X12Cr13</li> </ul> | <ul style="list-style-type: none"> <li>→ Dimensions and hydraulic output as per EN 733</li> <li>→ Hydraulics: cast iron (ML) or stainless steel (MX) depending on version</li> <li>→ Sealed by uncooled mechanical seal</li> <li>→ With or without spacer coupling</li> <li>→ 2 or 4-pole IEC standard motor</li> <li>→ Baseplate: steel or cast iron</li> <li>→ Supplied as complete unit with pump, coupling, coupling guard, motor and baseplate or without motor or pump only, with free shaft end</li> </ul> |

|                         | Standard pumps in accordance with EN 733 and EN 22858   | Standard pumps in accordance with EN 733  | Self-priming drainage pumps   |
|-------------------------|---|---|---|
|                         |    |    |    |
| Series                  | Series NESD<br>Series NESE  | Series NFCH   | Wilo-Drain LP<br>Wilo-Drain LPC   |
| Field of application    | Industrial Process  | Industrial Process  | Dewatering and flood control / Industrial Process / Irrigation  |
| Duty chart              |    |   |    |
| Construction            | Single-stage low-pressure centrifugal pump with axial suction connection and radial, upwards-facing pressure connection mounted on a baseplate  | Single-stage low-pressure centrifugal pump with axial suction connection and radial, upwards-facing pressure connection, mounted on a baseplate   | Non-submersible self-priming drainage pump  |
| Application             | For heat transfer or circulating hot water in industrial processes, for power generation or in building services  | For pumping mineral or synthetic heat-carrier fluids up to 350 °C, e.g.: in industrial processes or power generation  | Pumping of<br>→ Wastewater<br>→ Process water   |
| Volume flow $Q_{max}$   | 600 m <sup>3</sup> /h   | 1,000 m <sup>3</sup> /h   | 60 m <sup>3</sup> /h  |
| Delivery head $H_{max}$ | 90 m  | 90 m  | 29 m  |
| Special features        | <ul style="list-style-type: none"> <li>→ Impeller diameter is adjusted to the desired duty point</li> <li>→ 60 Hz or ATEX version on request</li> <li>→ Special self-cooling design allows use of an uncooled shaft seal. Additional or external cooling devices are not required</li> </ul>  | <ul style="list-style-type: none"> <li>→ Impeller diameter is adjusted to the desired duty point</li> <li>→ 60 Hz or ATEX version on request</li> <li>→ Self-cooling design with double temperature barrier allows the use of an uncooled shaft seal and reduces heat loss</li> </ul>   | <ul style="list-style-type: none"> <li>→ Long service life</li> <li>→ Sturdy construction</li> <li>→ Easy operation</li> <li>→ Flexible use</li> </ul>                        |
| Technical data          | <ul style="list-style-type: none"> <li>→ Max. permitted fluid temperature</li> <li>→ NESD: 120 °C ... 207 °C; NESE: 0 °C ... 120 °C (40 bar), 120 °C ... 200 °C (35 bar), 200 °C ... 230 °C (32 bar)</li> <li>→ Pressure side-<math>\phi</math>: DN 32 – 125</li> <li>→ Max. operating pressure</li> <li>→ NESD: PN 25; NESE: PN 40</li> </ul>  | <ul style="list-style-type: none"> <li>→ Permitted temperature range: 0 °C ... 120 °C (16 bar), 120 °C ... 300 °C (13 bar), 300 °C ... 350 °C (16 bar)</li> <li>→ Nominal diameter on pressure side DN 32 to DN 125</li> <li>→ Max. operating pressure PN 16</li> </ul>   | <ul style="list-style-type: none"> <li>→ Mains connection: 1~230 V, 50 Hz or 3~400 V, 50 Hz</li> <li>→ Operation mode: S1</li> <li>→ Fluid temperature: max. 35 °C</li> </ul> |
| Equipment/function      | <ul style="list-style-type: none"> <li>→ Dimensions and hydraulic output as per EN 22858</li> <li>→ Hydraulics in spheroidal cast iron EN-GS400 (MG version)</li> <li>→ Flange according to EN 1092-1</li> <li>→ With or without spacer coupling</li> <li>→ 2 or 4-pole IEC standard motor</li> <li>→ Baseplate: steel or cast iron</li> <li>→ Supplied as complete unit with pump, coupling, coupling guard, motor and baseplate or without motor or pump only, with free shaft end</li> </ul> | <ul style="list-style-type: none"> <li>→ Dimensions and hydraulic output as per EN 733</li> <li>→ Standard mechanical seal corresponding to the heat-carrier fluid</li> <li>→ Version with or without spacer coupling</li> <li>→ 2 or 4-pole IEC standard motor</li> <li>→ Supplied as a complete unit with pump, coupling, coupling guard, motor and baseplate or without motor or pump only, with free shaft end</li> </ul> | <ul style="list-style-type: none"> <li>→ Self-priming</li> </ul>  |

Submersible sewage pumps



|                         |   |
|-------------------------|---|
| Series                  | Wilo-EMU KPR  |
| Field of application    | Raw water intake / Dewatering and flood control / Wastewater treatment  |
| Duty chart              |   |
| Construction            | Axial submersible pump for use in pipe chambers   |
| Application             | Pumping of<br>→ Sewage without faeces<br>→ Wastewater<br>→ Process water  |
| Volume flow $Q_{max}$   | 4,360 m <sup>3</sup> /h   |
| Delivery head $H_{max}$ | 8 m   |
| Special features        | → Installation directly in the pressure pipe<br>→ Angle of propeller blades adjustable<br>→ Process security thanks to extensive monitoring devices<br>→ Customised versions are possible |
| Technical data          | → Mains connection: 3~400 V, 50 Hz<br>→ Immersed operating mode: S1<br>→ Max. immersion depth: 20 m<br>→ Fluid temperature: max. 40 °C  |
| Equipment/function      | → Heavy-duty version made of cast iron  |



# ALL-ROUNDER FOR THE HOME.

Wilco offers tailored products and systems that make life easier and more comfortable in a variety of ways. As a full-line provider for hot and cold water applications, Wilco is perfectly equipped to meet diverse customer requirements – with solutions that ensure maximum reliability, flexibility and connectivity.

**THE FUTURE IS CONNECTED.**

[www.wilo.co.uk](http://www.wilo.co.uk)



# PRESSURE DRAINAGE SYSTEMS WITH NEXOS INTELLIGENCE.

SMART NETWORKING FOR THE POLISH COMMUNITY OF TCZÓW.






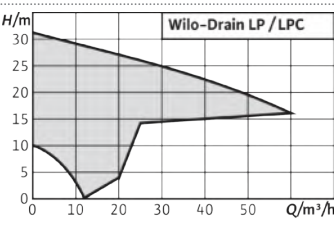
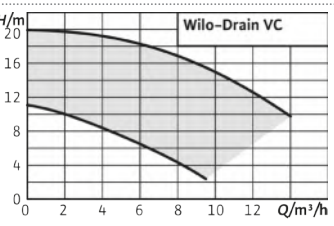
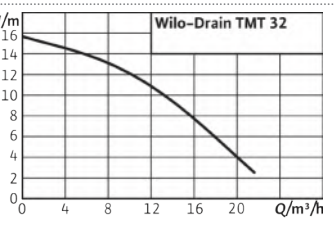





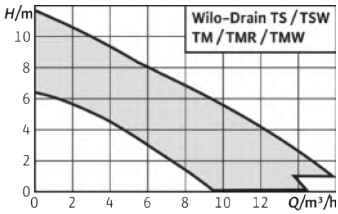
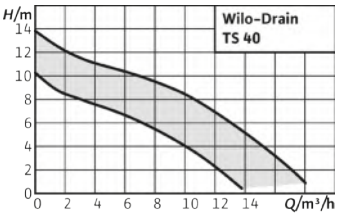
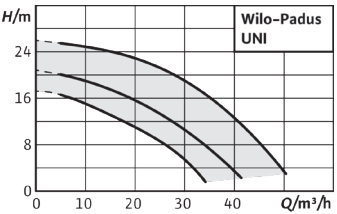
### Using digital technologies efficiently





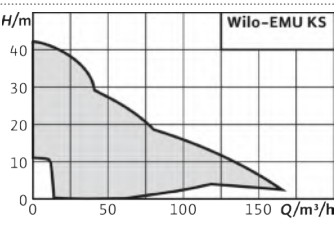
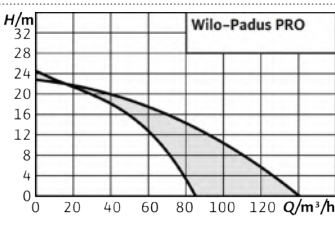
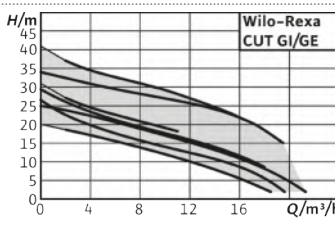
The consistent use of the latest digital technologies and the comprehensive networking of the supply and disposal systems are the key to greater sustainability and efficiency. At the same time, the challenges facing our water systems are increasing: Pumping stations that are in daily use are subject to high loads. High solids content, abrasive or fibrous materials in the water can cause clogging. The intelligent networking of pumps and pump systems is becoming ever more relevant.




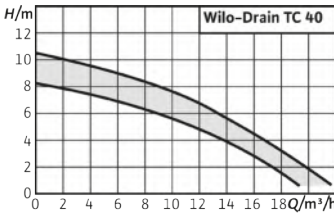
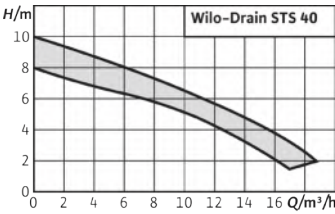
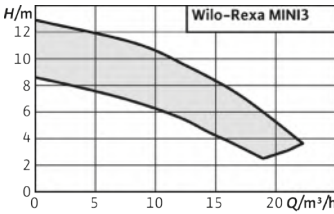
### More efficiency and reliability through Nexos Intelligence




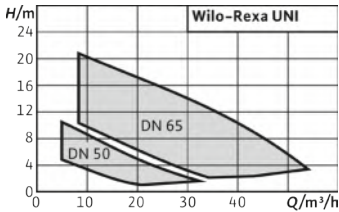
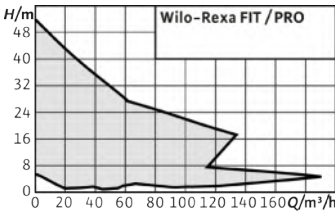
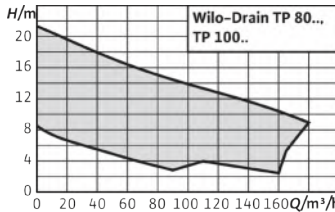
This is also highlighted by the small community of Tczów in Poland. Wilo installed a pressure drainage system here ten years ago. Only once it was in use did it become obvious that one pipe was particularly susceptible to the build-up of deposits or even clogging due to irregular flow rates – which the operator had to rectify at high cost. For this reason, Tczów became the first community to test the pressure drainage system with Nexos Intelligence. Using a piece of software, 185 of the 750 local pumping stations have been digitally connected in an intelligent network. The use of this new control system facilitates a distribution of the peak inflows on days when the system is under heavy load, such as on public holidays. At times when the system is not subject to such heavy loading, the pressure drainage system with Nexos Intelligence ensures that the minimum flow rate of 0.7 m/s is also achieved in the collector pipes to avoid the risk of clogging due to the build-up of deposits. Faults that occur can be detected automatically using the fault patterns and thus the reason for the problem can be identified. This process reduces the response time of the community's maintenance personnel and, as a result, lowers maintenance costs. Smart networking also delivers benefits such as an energy saving of up to 30 % and means that the system can provide daily, monthly or annual statistics for the whole system.

|                         | Self-priming drainage pumps   | Pedestal pumps  | Submersible drainage pumps  |
|-------------------------|---|---|---|
|                         |                                |    |    |
| Series                  | Wilco-Drain LP<br>Wilco-Drain LPC   | Wilco-Drain VC  | Wilco-Drain TMT   |
| Field of application    | Dewatering and flood control / Industrial Process / Irrigation  | Dewatering and flood control  | Dewatering and flood control  |
| Duty chart              |                                |   |    |
| Construction            | Non-submersible self-priming drainage pump  | Non-submersible pedestal pump with standard motor   | Submersible drainage pump   |
| Application             | Pumping of<br>→ Wastewater<br>→ Process water   | Pumping of<br>→ Wastewater<br>→ Industrial wastewater   | Pumping of<br>→ Wastewater<br>→ Industrial wastewater   |
| Volume flow $Q_{max}$   | 60 m <sup>3</sup> /h  | 14 m <sup>3</sup> /h  | 22 m <sup>3</sup> /h  |
| Delivery head $H_{max}$ | 31 m  | 20 m  | 15.5 m  |
| Special features        | → Long service life<br>→ Sturdy construction<br>→ Easy operation<br>→ Flexible use                              | → For fluids up to 95 °C<br>→ Long service life<br>→ Easy operation thanks to attached float switch<br>→ Long standstill times possible<br>→ Integrated motor protection with thermal relay | → For fluids up to 95 °C<br>→ Sealed cable inlet  |
| Technical data          | → Mains connection: 1~230 V, 50 Hz or 3~400 V, 50 Hz<br>→ Operation mode: S1<br>→ Fluid temperature: max. 35 °C | → Mains connection: 1~230 V, 50 Hz or 3~400 V, 50 Hz<br>→ Operation mode: S1<br>→ Fluid temperature: max. 95 °C   | → Mains connection: 3~400 V, 50 Hz<br>→ Immersed operating mode: S1<br>→ Non-immersed operating mode: S3 25 %<br>→ Max. immersion depth: 7 m<br>→ Fluid temperature: max. 95 °C |
| Equipment/function      | → Self-priming  | → Attached float switch   | → Housing and impeller made of grey cast iron<br>→ Thermal motor monitoring   |




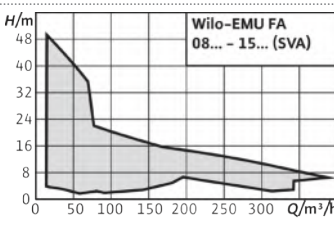
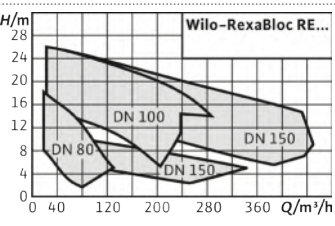
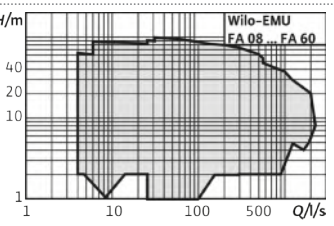
|                         | Submersible drainage pumps  | Submersible drainage pumps  | Submersible drainage pumps   |
|-------------------------|---|---|--|
|                         |    |    |  <span style="background-color: orange; color: white; padding: 2px;">Series modification</span>   |
| Series                  | Wilco-Drain TM/TMW/TMR 32<br>Wilco-Drain TS/TSW 32  | Wilco-Drain TS 40   | Wilco-Padus UNI  |
| Field of application    | Dewatering and flood control /Waste-water collection and transport  | Dewatering and flood control /Waste-water collection and transport  | Dewatering and flood control   |
| Duty chart              |    |   |   |
| Construction            | Submersible drainage pump   | Submersible drainage pump   | Submersible drainage pump  |
| Application             | Pumping of<br>→ Sewage without faeces and long-fibre components<br>→ Wastewater   | Pumping of<br>→ Sewage without faeces and long-fibre components<br>→ Wastewater   | Pumping of<br>→ Sewage without faeces<br>→ Wastewater<br>→ Aggressive fluids (pH >3.5)   |
| Volume flow $Q_{max}$   | 16 m <sup>3</sup> /h  | 18 m <sup>3</sup> /h  | 50 m <sup>3</sup> /h   |
| Delivery head $H_{max}$ | 12 m  | 14 m  | 26 m   |
| Special features        | → TMW, TSW with turbulator for<br>→ constantly clean pump chamber<br>→ No generation of fluid-related odours<br>→ Easy installation<br>→ High operational reliability<br>→ Easy operation   | → Low weight<br>→ Sealing chamber<br>→ Easy operation thanks to attached float switch and plug (A version)  | → Reliability, thanks to corrosion-free hydraulics for various fluids<br>→ Easy installation due to its low weight, integrated capacitor and threaded flange<br>→ Quick maintenance facilitated by direct access to the sealing chamber and pump housing<br>→ Long maintenance intervals thanks to the double mechanical seal and large-volume sealing chamber |
| Technical data          | → Mains connection: 1~230 V, 50 Hz<br>→ Immersed operating mode: S1<br>→ Non-immersed operating mode: S3 25 %<br>→ Max. immersion depth: TM/TMW/TMR = 1 m, TS/TSW = 7 m<br>→ Fluid temperature: max. 35 °C, for short periods up to 3 min. max. 90 °C | → Mains connection: 1~230 V, 50 Hz or 3~400 V, 50 Hz<br>→ Immersed operating mode: S1<br>→ Non-immersed operating mode: S3 25 %<br>→ Max. immersion depth: 5 m<br>→ Fluid temperature: max. 35 °C | → Mains connection: 1~230 V, 50 Hz or 3~400 V, 50 Hz<br>→ Immersed operating mode: S1<br>→ Non-immersed operating mode: S3 10 %<br>→ Max. immersion depth: 7 m<br>→ Fluid temperature: max. 40 °C  |
| Equipment/function      | → Motor monitoring via temperature<br>→ Sheath flow cooling<br>→ Hose connection<br>→ Turbulator (TMW, TSW)<br>→ Float switch (depending on type)   | → Ready-to-plug versions also with float switch<br>→ Thermal motor monitoring<br>→ Integrated non-return valve<br>→ Hose connection   | → single-phase variant with internal capacitor<br>→ A-model with plug and float switch<br>→ VA-model with plug and vertical float switch<br>→ P-model with plug<br>→ Material version "B" for aggressive fluids, e.g. lake/sea water, condensate, distilled water<br>→ Thermal motor monitoring  |




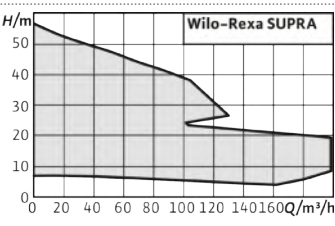
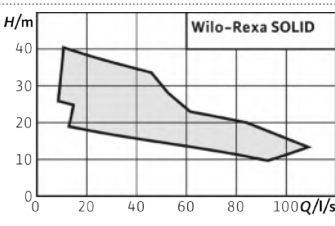
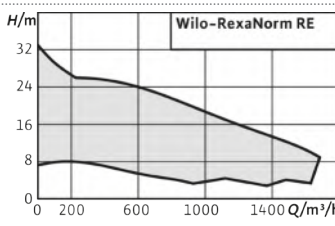
|                         | Submersible drainage pumps  | Submersible drainage pumps   | Submersible sewage pumps   |
|-------------------------|---|--|--|
|                         |    |     |   |
| Series                  | Wilco-EMU KS  | Wilco-Padus PRO  | Wilco-Rexa CUT GI<br>Wilco-Rexa CUT GE   |
| Field of application    | Dewatering and flood control  | Dewatering and flood control   | Wastewater collection and transport  |
| Duty chart              |    |    |   |
| Construction            | Submersible drainage pump   | Submersible drainage pump  | Submersible sewage pump with macerator   |
| Application             | Pumping of<br>→ Wastewater  | Pumping of<br>→ Wastewater   | Pumping of<br>→ Sewage containing faeces<br>→ Wastewater   |
| Volume flow $Q_{max}$   | 165 m <sup>3</sup> /h   | 140 m <sup>3</sup> /h  | 21 m <sup>3</sup> /h   |
| Delivery head $H_{max}$ | 42 m  | 24 m   | 41 m   |
| Special features        | <ul style="list-style-type: none"> <li>→ Long service life</li> <li>→ Sturdy construction</li> <li>→ Slurping operation possible</li> <li>→ Suitable for continuous duty (S1)</li> <li>→ Ready-to-plug</li> </ul>   | <ul style="list-style-type: none"> <li>→ High reliability in abrasive media thanks to rubber-coated hydraulics and impeller made of hardened chrome steel</li> <li>→ Easy installation thanks to low weight and flexible pressure connection (vertical/horizontal)</li> <li>→ Active cooling for reliable continuous duty, particularly in slurping operation</li> <li>→ Easy maintenance thanks to quick access to wearing parts</li> </ul> | <ul style="list-style-type: none"> <li>→ Low-weight version with stainless steel motor</li> <li>→ Sturdy version in cast iron</li> <li>→ Sealing with two mechanical seals</li> <li>→ Longitudinal watertight cable inlet</li> </ul>   |
| Technical data          | <ul style="list-style-type: none"> <li>→ Mains connection: 1~230 V, 50 Hz or 3~400 V, 50 Hz</li> <li>→ Immersed operating mode: S1</li> <li>→ Non-immersed operating mode: S1</li> <li>→ Max. immersion depth: 20 m</li> <li>→ Fluid temperature: max. 40 °C</li> </ul> | <ul style="list-style-type: none"> <li>→ Mains connection: 1~230 V, 50 Hz or 3~400 V, 50 Hz</li> <li>→ Immersed operating mode: S1</li> <li>→ Non-immersed operating mode: S1</li> <li>→ Max. immersion depth: 20 m</li> <li>→ Fluid temperature: max. 40 °C</li> </ul>  | <ul style="list-style-type: none"> <li>→ Mains connection: 1~230 V, 50 Hz or 3~400 V, 50 Hz</li> <li>→ Immersed operating mode: S1</li> <li>→ Non-immersed operating mode: S3</li> <li>→ Max. immersion depth: 7 m (CUT GI) or 20 m (CUT GE)</li> <li>→ Fluid temperature: max. 40 °C</li> </ul> |
| Equipment/function      | <ul style="list-style-type: none"> <li>→ Heavy-duty design</li> <li>→ Slurping operation</li> </ul>   | <ul style="list-style-type: none"> <li>→ Sheath flow cooling</li> <li>→ Slurping operation</li> </ul>  | <ul style="list-style-type: none"> <li>→ Internal or external macerator</li> <li>→ Unimpeded flow to the impeller</li> <li>→ Maceration of substances being conveyed</li> <li>→ Sealing chamber with optional external monitoring</li> <li>→ ATEX approval (Rexa CUT GE)</li> </ul>              |




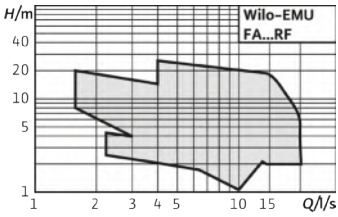
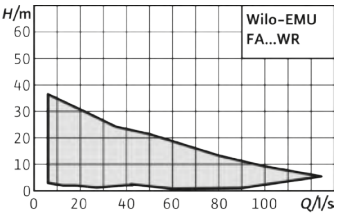
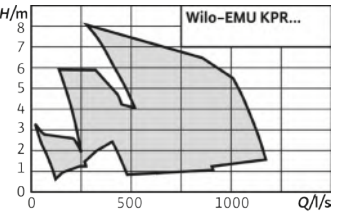
|                         | Submersible sewage pumps  | Submersible sewage pumps  | Submersible sewage pumps   |
|-------------------------|---|---|--|
|                         |  <b>Discontinued line</b>  |  <b>Discontinued line</b>  |  <b>NEW</b>   |
| Series                  | Wilco-Drain TC 40   | Wilco-Drain STS 40  | Wilco-Rexa MINI3   |
| Field of application    | Dewatering and flood control /Waste-water collection and transport  | Dewatering and flood control /Waste-water collection and transport  | Dewatering and flood control   |
| Duty chart              |    |   |   |
| Construction            | Submersible sewage pump   | Submersible sewage pump   | Submersible sewage pump  |
| Application             | Pumping of<br>→ Sewage without faeces<br>→ Wastewater   | Pumping of<br>→ Sewage without faeces<br>→ Wastewater   | Pumping of<br>→ Sewage without faeces<br>→ Wastewater  |
| Volume flow $Q_{max}$   | 22 m <sup>3</sup> /h  | 19 m <sup>3</sup> /h  | 23 m <sup>3</sup> /h   |
| Delivery head $H_{max}$ | 10 m  | 10 m  | 13 m   |
| Special features        | <ul style="list-style-type: none"> <li>→ Heavy-duty hydraulic housing made of cast iron</li> <li>→ Easy operation due to the attached float switch</li> <li>→ Integrated stainless steel pump support foot for easy installation</li> </ul>               | <ul style="list-style-type: none"> <li>→ Stainless steel surface-cooled motor</li> <li>→ Attached float switch (A-model) enables easy operation</li> <li>→ Integrated pump support foot for easy installation</li> <li>→ No switchgear required for thermal fuse protection</li> <li>→ Integrated thermal motor protection (1~/3~) and phase failure protection (3~)</li> </ul> | <ul style="list-style-type: none"> <li>→ Best efficiency and high operational reliability thanks to optimized hydraulics</li> <li>→ Easy installation thanks to compact design with integrated condenser, light weight and threaded flange</li> <li>→ Long maintenance intervals thanks to large sealing chamber and double sealing</li> </ul> |
| Technical data          | <ul style="list-style-type: none"> <li>→ Mains connection: 1~230 V, 50 Hz</li> <li>→ Immersed operating mode: S1</li> <li>→ Non-immersed operating mode: S3 25 %</li> <li>→ Max. immersion depth: 2 m</li> <li>→ Fluid temperature: max. 40 °C</li> </ul> | <ul style="list-style-type: none"> <li>→ Mains connection: 1~230 V, 50 Hz or 3~400 V, 50 Hz</li> <li>→ Immersed operating mode: S1</li> <li>→ Non-immersed operating mode: S3 25 %</li> <li>→ Max. immersion depth: 7 m</li> <li>→ Fluid temperature: max. 35 °C</li> </ul>   | <ul style="list-style-type: none"> <li>→ Mains connection: 1~230 V, 50 Hz or 3~400 V, 50 Hz</li> <li>→ Immersed operating mode: S1</li> <li>→ Non-immersed operating mode: S2-15 min, S3 10 %</li> <li>→ Max. immersion depth: 7 m</li> <li>→ Fluid temperature: max. 40 °C</li> </ul>   |
| Equipment/function      | <ul style="list-style-type: none"> <li>→ Ready-to-plug</li> <li>→ Including float switch</li> <li>→ Thermal motor monitoring</li> </ul>   | <ul style="list-style-type: none"> <li>→ AC variant ready-to-plug</li> <li>→ A-model including float switch</li> <li>→ Thermal motor monitoring</li> </ul>  | <ul style="list-style-type: none"> <li>→ AC variant ready-to-plug and with internal capacitor</li> <li>→ A-model including float switch</li> <li>→ Thermal motor monitoring</li> </ul>   |




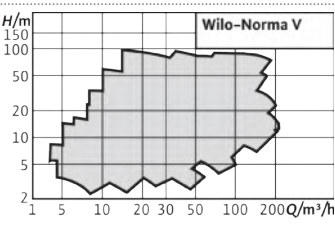
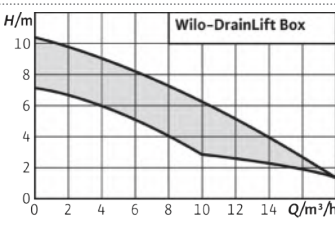
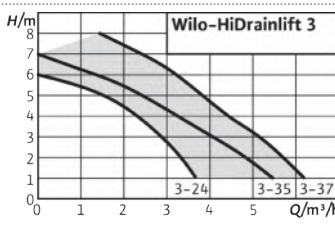
|                         | Submersible sewage pumps  | Submersible sewage pumps   | Submersible sewage pumps  |
|-------------------------|---|--|---|
|                         | <br>Series modification  |   |    |
| Series                  | Wilo-Rexa UNI   | Wilo-Rexa FIT<br>Wilo-Rexa PRO   | Wilo-Drain TP 80<br>Wilo-Drain TP 100   |
| Field of application    | Dewatering and flood control  | Dewatering and flood control / Waste-water collection and transport / Waste-water treatment  | Dewatering and flood control  |
| Duty chart              |    |    |    |
| Construction            | Submersible sewage pump   | Submersible sewage pump  | Submersible sewage pump   |
| Application             | Pumping of<br>→ Sewage containing faeces<br>→ Wastewater<br>→ Aggressive fluids (pH >3,5)   | Pumping of<br>→ Sewage containing faeces<br>→ Wastewater   | Pumping of<br>→ Sewage containing faeces<br>→ Wastewater<br>→ Process water   |
| Volume flow $Q_{max}$   | 54 m <sup>3</sup> /h  | 186 m <sup>3</sup> /h  | 180 m <sup>3</sup> /h   |
| Delivery head $H_{max}$ | 21 m  | 52 m   | 21 m  |
| Special features        | → High reliability due to corrosion-free hydraulics for various fluids<br>→ Easy installation thanks to low weight of composite, integrated capacitor and integrated fixations in flanges<br>→ Larger inspection interval thanks to double sealing with large sealing chamber   | → Low-weight version with stainless steel motor or sturdy version in cast iron<br>→ Also with IE3 motor technology (according to IEC 60034-30)<br>→ Motors with S1 operation mode for dry installation available | → Self-cooling motor for the use in wet well and dry well installations<br>→ Corrosion-resistant stainless steel motor housing in 1.4404<br>→ Patented non-clogging hydraulics<br>→ Longitudinal watertight cable inlet<br>→ Low weight |
| Technical data          | → Mains connection: 1~230 V, 50 Hz or 3~400 V, 50 Hz<br>→ Immersed operating mode: S1<br>→ Non-immersed operating mode: S3 10 %<br>→ Max. immersion depth: 7 m<br>→ Fluid temperature: max. 40 °C   | → Mains connection: 1~230 V, 50 Hz or 3~400 V, 50 Hz<br>→ Immersed operating mode: S1<br>→ Non-immersed operating mode: S3<br>→ Max. immersion depth: 7 m (FIT) or 20 m (PRO)<br>→ Fluid temperature: max. 40 °C | → Mains connection: 3~400 V, 50 Hz<br>→ Immersed operating mode: S1<br>→ Non-immersed operating mode: S1<br>→ Max. immersion depth: 20 m<br>→ Fluid temperature: max. 40 °C   |
| Equipment/function      | → AC variant with internal capacitor<br>→ Material version "B" for aggressive fluids, e.g. lake/sea water, condensate, distilled water<br>→ A-model with plug and float switch<br>→ P-model with plug<br>→ Material version "B" for aggressive fluids, e.g. lake/sea water, condensate, distilled water<br>→ Thermal motor monitoring | → Thermal motor monitoring<br>→ Motor chamber monitoring (Rexa PRO)<br>→ Sealing chamber with optional external monitoring<br>→ ATEX approval (Rexa PRO)   | → Thermal motor monitoring<br>→ Motor chamber monitoring<br>→ ATEX approval<br>→ Sheath flow cooling  |



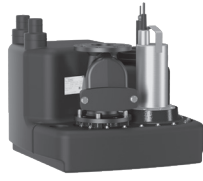
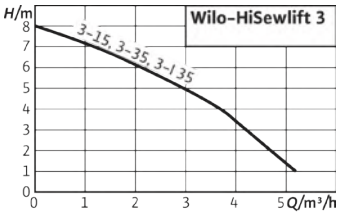
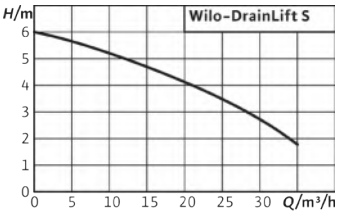
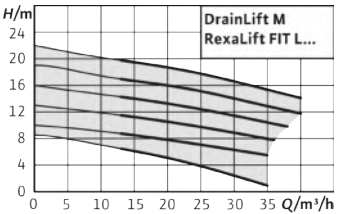





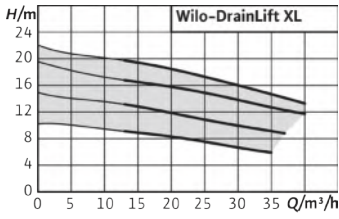
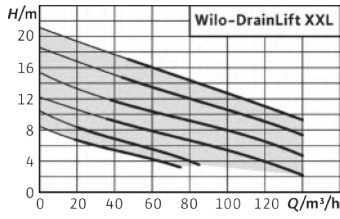
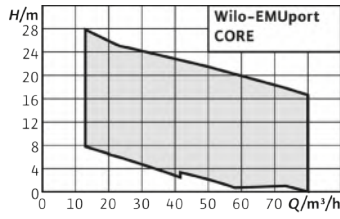
|                         | Submersible sewage pumps  | Sewage pumps   | Submersible sewage pumps   |
|-------------------------|---|--|--|
|                         |    |   |   |
| Series                  | Wilo-EMU FA 08 to FA 15 (standard pumps)  | Wilo-RexaBloc RE   | Wilo-EMU FA 08 to FA 60  |
| Field of application    | Dewatering and flood control / Wastewater collection and transport / Wastewater treatment   | Wastewater collection and transport / Wastewater treatment   | Dewatering and flood control / Wastewater collection and transport / Wastewater treatment / Industrial Process   |
| Duty chart              |    |    |   |
| Construction            | Submersible sewage pump   | Non submersible sewage pump in monobloc design   | Submersible sewage pump  |
| Application             | <ul style="list-style-type: none"> <li>Pumping of</li> <li>→ Sewage containing faeces</li> <li>→ Wastewater</li> </ul>  | <ul style="list-style-type: none"> <li>Pumping of</li> <li>→ Sewage containing faeces</li> <li>→ Wastewater</li> </ul>   | <ul style="list-style-type: none"> <li>Pumping of</li> <li>→ Untreated sewage</li> <li>→ Sewage containing faeces</li> <li>→ Wastewater</li> <li>→ Process water</li> </ul>  |
| Volume flow $Q_{max}$   | 380 m³/h  | 445 m³/h   | 8,679 m³/h   |
| Delivery head $H_{max}$ | 51 m  | 26 m   | 124 m  |
| Special features        | <ul style="list-style-type: none"> <li>→ Operationally reliable thanks to Vortex hydraulics and single-channel hydraulics with large, free ball passage</li> <li>→ Process reliability thanks to optional monitoring for the sealing chamber</li> </ul> | <ul style="list-style-type: none"> <li>→ High reliability due to oil-filled sealing chamber and additional leakage chamber</li> <li>→ Easy impeller replacement due to "back pull-out" design. This means the motor and the impeller can be removed without needing to dismantle the hydraulics</li> <li>→ Closed bearing bracket design. This means that no oil needs to be drained during dismantling</li> </ul> | <ul style="list-style-type: none"> <li>→ Self-cooling motors for the use in wet well and dry well installation</li> <li>→ Process security thanks to extensive monitoring devices</li> <li>→ Enhanced corrosion protection with the optional Ceram coating for a longer lifetime</li> <li>→ Special versions for abrasive and corrosive fluids</li> <li>→ Customised versions are possible</li> </ul>  |
| Technical data          | <ul style="list-style-type: none"> <li>→ Mains connection: 3~400 V, 50 Hz</li> <li>→ Immersed operating mode: S1</li> <li>→ Non-immersed operating mode: S2</li> <li>→ Max. immersion depth: 20 m</li> <li>→ Fluid temperature: max. 40 °C</li> </ul>   | <ul style="list-style-type: none"> <li>→ Mains connection: 3~400 V, 50 Hz</li> <li>→ Operating mode: S1</li> <li>→ Fluid temperature: max. 70 °C</li> <li>→ Ambient temperature: max. 40 °C</li> <li>→ Motor efficiency class: IE3, IE4</li> </ul>   | <ul style="list-style-type: none"> <li>→ Mains connection: 3~400 V, 50 Hz</li> <li>→ Immersed operating mode: S1</li> <li>→ Non-immersed operating mode:                             <ul style="list-style-type: none"> <li>- S1 with self-cooling motor</li> <li>- S2 with surface-cooled motor</li> </ul> </li> <li>→ Max. immersion depth: 20 m</li> <li>→ Fluid temperature: max. 40 °C</li> </ul> |
| Equipment/function      | → Optional external sealing chamber monitoring  | → Optional external sealing chamber monitoring   | <ul style="list-style-type: none"> <li>→ Heavy-duty version made of cast iron</li> <li>→ Optional monitoring for                             <ul style="list-style-type: none"> <li>- motor bearing temperature</li> <li>- motor winding temperature</li> <li>- tightness of motor, terminals and sealing chamber</li> </ul> </li> </ul>   |




|                         | Submersible sewage pumps   | Submersible sewage pumps  | Sewage pumps   |
|-------------------------|--|---|--|
|                         |   |   |   |
| Series                  | Wilox-Rexa SUPRA   | Wilox-Rexa SOLID  | Wilox-RexaNorm RE  |
| Field of application    | Dewatering and flood control / Wastewater collection and transport / Wastewater treatment / Industrial Process   | Dewatering and flood control / Wastewater collection and transport / Wastewater treatment / Industrial Process  | Dewatering and flood control / Wastewater collection and transport / Wastewater treatment / Industrial Process   |
| Duty chart              |   |   |   |
| Construction            | Submersible sewage pump  | Submersible sewage pump   | Non submersible sewage pump with standard motor, fully mounted on baseplate  |
| Application             | <ul style="list-style-type: none"> <li>→ Pumping of</li> <li>→ Untreated sewage</li> <li>→ Sewage containing faeces</li> <li>→ Wastewater</li> <li>→ Process water</li> </ul>  | <ul style="list-style-type: none"> <li>→ Pumping of</li> <li>→ Untreated sewage</li> <li>→ Sewage containing faeces</li> <li>→ Wastewater</li> <li>→ Process water</li> </ul>   | <ul style="list-style-type: none"> <li>→ Pumping of</li> <li>→ Untreated sewage</li> <li>→ Sewage containing faeces</li> <li>→ Wastewater</li> <li>→ Process water</li> </ul>  |
| Volume flow $Q_{max}$   | 200 m <sup>3</sup> /h  | 426 m <sup>3</sup> /h   | 1,760 m <sup>3</sup> /h  |
| Delivery head $H_{max}$ | 57 m   | 38 m  | 32 m   |
| Special features        | <ul style="list-style-type: none"> <li>→ Self-cooling motors for the use in wet well and dry well installation</li> <li>→ Process security thanks to extensive monitoring devices</li> <li>→ Enhanced corrosion protection with the optional Ceram coating for a longer lifetime</li> <li>→ Customised versions are possible</li> </ul>  | <ul style="list-style-type: none"> <li>→ Highest operational reliability and reduced service costs, especially for pumping untreated sewage thanks to the self-cleaning characteristics</li> <li>→ Enhanced corrosion protection with the optional Ceram coating for a longer lifetime</li> <li>→ Optional Digital Data Interface (DDI) with integrated vibration monitor, data logger and web server for convenient system monitoring</li> <li>→ Integration of Nexos Intelligence</li> </ul>  | <ul style="list-style-type: none"> <li>→ Easy impeller replacement due to "back pull-out" design and spacer coupling as standard. Removal of the impeller without dismantling the hydraulics from the pipeline and the motor from the baseplate</li> <li>→ Shut "back pull-out" unit: Dismantling without draining the oil in the sealing chamber</li> </ul> |
| Technical data          | <ul style="list-style-type: none"> <li>→ Mains connection: 3~400 V, 50 Hz</li> <li>→ Immersed operating mode: S1</li> <li>→ Non-immersed operating mode:                             <ul style="list-style-type: none"> <li>– S1 with self-cooling motor</li> <li>– S2 with surface-cooled motor</li> </ul> </li> <li>→ Max. immersion depth: 20 m</li> <li>→ Fluid temperature: max. 40 °C</li> </ul> | <ul style="list-style-type: none"> <li>→ Mains connection: 3~400 V, 50 Hz</li> <li>→ Immersed operating mode: S1</li> <li>→ Non-immersed operating mode:                             <ul style="list-style-type: none"> <li>– S1 with self-cooling motor</li> <li>– S2 with surface-cooled motor</li> </ul> </li> <li>→ Max. immersion depth: 20 m</li> <li>→ Fluid temperature: max. 40 °C</li> </ul>  | <ul style="list-style-type: none"> <li>→ Mains connection: 3~400 V, 50 Hz</li> <li>→ Operating mode: S1</li> <li>→ Fluid temperature: max. 70 °C</li> <li>→ Ambient temperature: max. 40 °C</li> <li>→ Motor efficiency class: IE3, IE4</li> </ul>   |
| Equipment/function      | <ul style="list-style-type: none"> <li>→ Heavy-duty version made of cast iron</li> <li>→ Optional monitoring for                             <ul style="list-style-type: none"> <li>– motor bearing temperature</li> <li>– motor winding temperature</li> <li>– tightness of motor, terminals and sealing chamber</li> </ul> </li> </ul>   | <ul style="list-style-type: none"> <li>Optional Nexos Intelligence:                             <ul style="list-style-type: none"> <li>→ Reduced downtime and service call-outs thanks to automatic detection and removal of clogging</li> <li>→ Lower energy costs due to the integrated automatic control for the optimal operating mode of the specific system</li> <li>→ Convenient control and connectivity with the local network via the integrated web server and Ethernet interface with established protocols in the pump</li> <li>→ Increased operational reliability in the event of a failure thanks to the integrated pump control in multiple execution</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>→ Optional thermal motor monitoring</li> <li>→ Optional external sealing chamber monitoring</li> </ul>  |




|                         | Submersible sewage pumps  | Submersible sewage pumps  | Submersible sewage pumps  |
|-------------------------|---|---|---|
|                         |    |    |    |
| Series                  | Wilco-EMU FA...RF   | Wilco-EMU FA...WR   | Wilco-EMU KPR   |
| Field of application    | Wastewater collection and transport / Industrial Process  | Wastewater collection and transport / Wastewater treatment  | Raw water intake / Dewatering and flood control / Wastewater treatment  |
| Duty chart              |    |   |    |
| Construction            | Submersible sewage pump made of cast stainless steel  | Submersible sewage pump with mechanical stirring apparatus  | Axial submersible pump for use in pipe chambers   |
| Application             | <ul style="list-style-type: none"> <li>Pumping of</li> <li>→ Highly abrasive sewage without long-fibre components</li> <li>→ Sewage containing faeces</li> </ul>  | <ul style="list-style-type: none"> <li>Pumping of</li> <li>→ Highly abrasive sewage without long-fibre components</li> <li>→ Sewage containing faeces</li> </ul>  | <ul style="list-style-type: none"> <li>Pumping of</li> <li>→ Sewage without faeces</li> <li>→ Wastewater</li> <li>→ Process water</li> </ul>  |
| Volume flow $Q_{max}$   | 72 m <sup>3</sup> /h  | 450 m <sup>3</sup> /h   | 4,360 m <sup>3</sup> /h   |
| Delivery head $H_{max}$ | 27 m  | 36 m  | 8 m   |
| Special features        | <ul style="list-style-type: none"> <li>→ Sturdy version completely in stainless steel casting 1.4581 for the use in corrosive fluids</li> <li>→ Longitudinal watertight cable inlet</li> </ul>  | <ul style="list-style-type: none"> <li>→ Mechanical mixing device made of Abrasit material to avoid deposits in the pump chamber</li> <li>→ Longitudinal watertight cable inlet</li> <li>→ Customised versions are possible</li> </ul>                | <ul style="list-style-type: none"> <li>→ Installation directly in the pressure pipe</li> <li>→ Angle of propeller blades adjustable</li> <li>→ Process security thanks to extensive monitoring devices</li> <li>→ Customised versions are possible</li> </ul> |
| Technical data          | <ul style="list-style-type: none"> <li>→ Mains connection: 3~400 V, 50 Hz</li> <li>→ Immersed operating mode: S1</li> <li>→ Non-immersed operating mode: S2</li> <li>→ Max. immersion depth: 20 m</li> <li>→ Fluid temperature: max. 40 °C</li> </ul> | <ul style="list-style-type: none"> <li>→ Mains connection: 3~400 V, 50 Hz</li> <li>→ Immersed operating mode: S1</li> <li>→ Non-immersed operating mode: S2</li> <li>→ Max. immersion depth: 20 m</li> <li>→ Fluid temperature: max. 40 °C</li> </ul> | <ul style="list-style-type: none"> <li>→ Mains connection: 3~400 V, 50 Hz</li> <li>→ Immersed operating mode: S1</li> <li>→ Max. immersion depth: 20 m</li> <li>→ Fluid temperature: max. 40 °C</li> </ul>  |
| Equipment/function      | <ul style="list-style-type: none"> <li>→ Heavy-duty version made of cast stainless steel</li> <li>→ Optional external sealing chamber monitoring</li> </ul>   | <ul style="list-style-type: none"> <li>→ Mechanical stirring apparatus is fastened directly to the impeller</li> <li>→ Mixer head made of Abrasit (chilled cast iron)</li> <li>→ Optional external sealing chamber monitoring</li> </ul>              | <ul style="list-style-type: none"> <li>→ Heavy-duty version made of cast iron</li> </ul>  |

|                         | Pedestal pumps  | Sewage lifting unit   | Sewage lifting unit  |
|-------------------------|---|---|--|
|                         |    |    |   |
| Series                  | Norma V   | Wilo-DrainLift Box... D<br>Wilo-DrainLift Box... DS   | Wilo-HiDrainlift 3   |
| Field of application    | Industrial Process  | Wastewater collection and transport   | Wastewater collection and transport  |
| Duty chart              |    |   |   |
| Construction            | Non-submersible pedestal pump with standard motor   | Sewage lifting unit for concealed floor installation  | Sewage lifting unit  |
| Application             | Pumping of<br>→ Wastewater<br>→ Industrial wastewater   | Pumping of sewage without faeces that cannot be piped to the sewer system through the use of natural falls.   | Pumping of sewage without faeces that cannot be piped to the sewer system through the use of natural falls.  |
| Volume flow $Q_{max}$   | 200 m <sup>3</sup> /h   | 18 m <sup>3</sup> /h  | 6 m <sup>3</sup> /h  |
| Delivery head $H_{max}$ | 100 m   | 10.5 m  | 8 m  |
| Special features        | <ul style="list-style-type: none"> <li>→ Low maintenance</li> <li>→ No shaft sealing</li> <li>→ Noise-free suction</li> <li>→ Replaceable IEC standard motor</li> <li>→ Semi-elastic coupling with the VTM version</li> </ul>   | <ul style="list-style-type: none"> <li>→ Easy to install due to integrated pump and non-return valve</li> <li>→ Large tank volume</li> <li>→ Easy maintenance</li> <li>→ Pumps with pressure pipe removable</li> <li>→ Stainless steel tile frame with trap</li> </ul>  | <ul style="list-style-type: none"> <li>→ Compact design for the installation into a wet cell or under a shower tray</li> <li>→ Low-noise operation and integrated active carbon filter for a high user comfort</li> <li>→ Reliable performance and low power consumption for an efficient wastewater disposal</li> <li>→ Easy installation with flexible connection possibilities</li> <li>→ Ready for connection</li> </ul> |
| Technical data          | <ul style="list-style-type: none"> <li>→ Fluid temperature: max 120 °C</li> <li>→ Pressure connection: DN 32 to DN 100</li> <li>→ Max. operating pressure: 16 bar</li> <li>→ Max. viscosity: 150 cSt</li> </ul>   | <ul style="list-style-type: none"> <li>→ Mains connection: 1~230 V, 50 Hz</li> <li>→ Operation mode: S3</li> <li>→ Fluid temperature: max. 35/40 °C</li> <li>→ Pressure port: Ø40 mm</li> <li>→ Gross volume: 113 l</li> <li>→ Switching volume: 22...31 l</li> </ul>   | <ul style="list-style-type: none"> <li>→ Mains connection: 1~230 V, 50 Hz</li> <li>→ Operation mode: S3</li> <li>→ Fluid temperature: 35 °C, for short periods (5 min) up to 60/75 °C</li> <li>→ Pressure port: Ø32 mm</li> <li>→ Tank volume: 3.9 ... 16 l</li> <li>→ Switching Volume: 0.7 ... 2 l</li> </ul>  |
| Equipment/function      | <ul style="list-style-type: none"> <li>→ Pressure connection above base plate in PN 10/16/25</li> <li>→ Different basic versions:                             <ul style="list-style-type: none"> <li>– VCS: adjustable baseplate/fixed coupling</li> <li>– VEM: cast iron support/fixed coupling</li> <li>– VTM: bearing block/semi-elastic coupling</li> </ul> </li> <li>→ Options:                             <ul style="list-style-type: none"> <li>– Explosion-proof float switch</li> <li>– External lubrication of bearing or lubrication provided by fluid (default)</li> <li>– Pressure connection below base plate</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>→ Single and double-pump system</li> <li>→ Lifting unit with ready-mounted pump, level control, pressure pipe and integrated non-return valve</li> <li>→ Ready-to-plug system (single-phase version)</li> <li>→ Thermal motor monitoring</li> <li>→ DS version: Double pump system with micro-processor controlled switchgear</li> </ul> | <ul style="list-style-type: none"> <li>→ Ready-to-plug</li> <li>→ Thermal motor monitoring</li> <li>→ Level control with pneumatic pressure transducer</li> <li>→ Integrated non-return valves</li> <li>→ Active carbon filter</li> </ul>  |




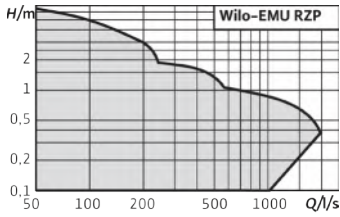
|                         | Sewage lifting unit  | Sewage lifting unit  | Sewage lifting unit   |
|-------------------------|--|--|---|
|                         |   |   |    |
| Series                  | Wilo-HiSewlift 3   | Wilo-DrainLift S   | Wilo-DrainLift M<br>Wilo-RexaLift FIT L   |
| Field of application    | Wastewater collection and transport  | Wastewater collection and transport  | Wastewater collection and transport   |
| Duty chart              |   |    |    |
| Construction            | Sewage lifting unit  | Sewage lifting unit<br>Single-pump system  | Sewage lifting unit<br>Single and double-pump system  |
| Application             | Pumping of sewage containing faeces that cannot be piped to the sewer system through the use of natural falls.   | Pumping of sewage containing faeces that cannot be returned to the sewer system using natural falls.   | Pumping of sewage containing faeces that cannot be returned to the sewer system using natural falls.  |
| Volume flow $Q_{max}$   | 5 m <sup>3</sup> /h  | 35 m <sup>3</sup> /h   | 40 m <sup>3</sup> /h  |
| Delivery head $H_{max}$ | 8 m  | 6 m  | 22 m  |
| Special features        | <ul style="list-style-type: none"> <li>→ Particularly narrow design for an easy front-wall installation</li> <li>→ Low-noise operation and integrated active carbon filter for a high user comfort</li> <li>→ Reliable performance and low power consumption for an efficient sewage disposal</li> <li>→ Easy installation with flexible connection possibilities</li> <li>→ Ready for connection</li> </ul> | <ul style="list-style-type: none"> <li>→ Space-saving installation</li> <li>→ Installation-friendly thanks to low weight and large scope of delivery incl. non-return valve</li> <li>→ Flexible thanks to freely selectable inlets</li> <li>→ Operational reliability thanks to integrated thermal motor protection and mains-independent alarm for SSM and high water</li> </ul>  | <ul style="list-style-type: none"> <li>→ Installation-friendly thanks to low weight</li> <li>→ Integrated non-return valve</li> <li>→ Flexible thanks to freely selectable inlets</li> <li>→ Operationally reliable thanks to integrated thermal motor protection and mains-independent alarm for SSM and high water</li> </ul>   |
| Technical data          | <ul style="list-style-type: none"> <li>→ Mains connection: 1~230 V, 50 Hz</li> <li>→ Operation mode: S3</li> <li>→ Fluid temperature: max. 35 °C</li> <li>→ Pressure port: Ø32 mm</li> <li>→ Gross volume: 14.4 l; 17.4 l</li> <li>→ Switching Volume: 1 l</li> </ul>  | <ul style="list-style-type: none"> <li>→ Mains connection: 1~230 V, 50 Hz or 3~400 V, 50 Hz</li> <li>→ Operation mode: S3</li> <li>→ Fluid temperature: max. 40 °C</li> <li>→ Pressure port: DN 80</li> <li>→ Gross volume: 45 l</li> <li>→ Switching volume: 21 l</li> </ul>  | <ul style="list-style-type: none"> <li>→ Mains connection: 1~230 V, 50 Hz or 3~400 V, 50 Hz</li> <li>→ Operation mode: S3</li> <li>→ Fluid temperature: max. 40 °C</li> <li>→ Pressure port: DN 80</li> <li>→ Gross volume: 62 ... 140 l</li> <li>→ Switching volume: 24 ... 50 l</li> </ul>  |
| Equipment/function      | <ul style="list-style-type: none"> <li>→ Ready-to-plug</li> <li>→ Thermal motor monitoring</li> <li>→ Level control with pneumatic pressure transducer</li> <li>→ Integrated non-return valves</li> <li>→ Active carbon filter</li> </ul>  | <ul style="list-style-type: none"> <li>→ Ready-to-plug</li> <li>→ Thermal motor monitoring</li> <li>→ Level control with float switch</li> <li>→ Switchgear with mains-independent alarm and potential-free contact</li> <li>→ Non-return valve</li> <li>→ Inlet seal</li> <li>→ Keyhole saw for inlet borehole</li> <li>→ Hose connection for venting</li> <li>→ Kit for pressure pipe connection</li> <li>→ Installation material</li> </ul> | <ul style="list-style-type: none"> <li>→ Thermal motor monitoring</li> <li>→ Level control with float switch</li> <li>→ Switchgear with mains-independent alarm and potential-free contact</li> <li>→ Non-return valve</li> <li>→ Inlet seal</li> <li>→ Keyhole saw for inlet borehole</li> <li>→ Hose connection for venting</li> <li>→ Kit for pressure pipe connection</li> <li>→ Installation material</li> </ul> |



|                         | Sewage lifting unit  | Sewage lifting unit   | Sewage lifting unit  |
|-------------------------|--|---|--|
|                         |   |   |   |
| Series                  | Wilco-DrainLift XL   | Wilco-DrainLift XXL   | Wilco-EMUport CORE<br>Wilco-EMUport FTS  |
| Field of application    | Wastewater collection and transport  | Wastewater collection and transport   | Wastewater collection and transport  |
| Duty chart              |   |   |   |
| Construction            | Sewage lifting unit<br>Double-pump system  | Sewage lifting unit<br>Double-pump system   | Sewage lifting unit with solid separation<br>for over-ground and underground installation<br>(in a chamber)  |
| Application             | Pumping of sewage containing faeces<br>that cannot be returned to the sewer<br>system using natural falls.   | Pumping of sewage containing faeces<br>that cannot be returned to the sewer<br>system using natural falls.  | Pumping of sewage containing faeces<br>that cannot be returned to the sewer<br>system using natural falls.   |
| Volume flow $Q_{max}$   | 40 m <sup>3</sup> /h   | 140 m <sup>3</sup> /h   | 80 m <sup>3</sup> /h   |
| Delivery head $H_{max}$ | 22 m   | 21 m  | 28 m   |
| Special features        | <ul style="list-style-type: none"> <li>→ Flexible thanks to height-adjustable and swivel-mounted inlet connection</li> <li>→ Easy operation due to menu-guided switchgear</li> <li>→ Integrated non-return valve</li> <li>→ Operationally reliable due to high switching volume and reliable level detection</li> <li>→ Continuous duty thanks to the use of self-cooling motors</li> </ul>                                      | <ul style="list-style-type: none"> <li>→ Flexible use thanks to one or two tanks</li> <li>→ Optimum tank drainage with deep suction function</li> <li>→ Operationally reliable thanks to large performance range and a reliable level detection</li> <li>→ Continuous duty thanks to the use of self-cooling motors</li> </ul>                      | <ul style="list-style-type: none"> <li>→ Long service life and corrosion resistance thanks to PE/PUR material</li> <li>→ Maintenance-friendly as all parts are accessible from outside</li> <li>→ High operational reliability thanks to a pre-filtering of solid matter, the pumps deliver only the cleaned sewage</li> <li>→ Retrofit system for the economic reconstruction of old pump stations</li> </ul> |
| Technical data          | <ul style="list-style-type: none"> <li>→ Mains connection: 3~400 V, 50 Hz</li> <li>→ Operating mode: S1</li> <li>→ Fluid temperature: max. 40 °C</li> <li>→ Pressure connection: DN 80</li> <li>→ Gross volume: 380 l</li> <li>→ Switching volume: 260 l</li> </ul>  | <ul style="list-style-type: none"> <li>→ Mains connection: 3~400 V, 50 Hz</li> <li>→ Operating mode: S1</li> <li>→ Fluid temperature: max. 40 °C</li> <li>→ Pressure port: DN 80, DN 100</li> <li>→ Gross volume: 400/800 l</li> <li>→ Switching volume: 305 ... 630 l</li> </ul>   | <ul style="list-style-type: none"> <li>→ Mains connection: 3~400 V, 50 Hz</li> <li>→ Operation mode: S1</li> <li>→ Fluid temperature: max. 40 °C</li> <li>→ Pressure port: DN 80, DN 100</li> <li>→ Gross volume: 440 l, 1200 l</li> <li>→ Switching volume: 295 l, 900 l</li> </ul>   |
| Equipment/function      | <ul style="list-style-type: none"> <li>→ Thermal motor monitoring</li> <li>→ Level control with level sensor</li> <li>→ Menu-guided switchgear with potential-free contact</li> <li>→ Inlet seal DN 150</li> <li>→ Keyhole saw for inlet seal</li> <li>→ Non-return valve</li> <li>→ Hose connection for venting and diaphragm hand pump</li> <li>→ Kit for pressure pipe connection</li> <li>→ Installation material</li> </ul> | <ul style="list-style-type: none"> <li>→ Thermal motor monitoring and leakage detection</li> <li>→ Level control with level sensor</li> <li>→ Menu-guided switchgear with potential-free contact</li> <li>→ Hose connection for venting diaphragm hand pump</li> <li>→ Kit for pressure pipe connection</li> <li>→ Installation material</li> </ul> | <ul style="list-style-type: none"> <li>→ Sewage lifting unit with solid separation system</li> <li>→ Collection reservoir</li> <li>→ 2x solids separation reservoirs</li> <li>→ 2x sewage pumps</li> <li>→ Complete pipework including inlet and pressure connection and non-return valve</li> </ul>   |

|                         | Pump chamber   | Pump chamber  | Pump chamber  |
|-------------------------|--|---|---|
|                         |   |    |    |
| Series                  | Wilco-DrainLift WS 40/50   | Wilco-Port 600<br>Wilco-Port 800  | Wilco-DrainLift WS 1100   |
| Field of application    | Wastewater collection and transport  | Wastewater collection and transport   | Wastewater collection and transport   |
| Duty chart              |  |   |   |
| Construction            | Pump chamber as concealed pumping station or floor-mounted lifting unit  | Pump chamber with synthetic tank, as single or double-pump system   | Pump chamber with synthetic tank, as single- or double-pump system  |
| Application             | Pumping of sewage containing faeces that cannot be returned to the sewer system using natural falls.   | Pumping of sewage containing faeces that cannot be returned to the sewer system using natural falls.  | Pumping of sewage containing faeces that cannot be returned to the sewer system using natural falls.  |
| Volume flow $Q_{max}$   |  |   |   |
| Delivery head $H_{max}$ |  |   |   |
| Special features        | <ul style="list-style-type: none"> <li>→ Pressure-tight pump chamber for floor-mounted or concealed floor installation</li> <li>→ Flexible thanks to freely selectable inlets</li> <li>→ Large tank volume</li> <li>→ WS ... Basic: including pipework, level control, switchgear and pump(s)</li> </ul> | <ul style="list-style-type: none"> <li>→ Universal use thanks to chamber extension up to 2.75 m</li> <li>→ Max. operational reliability: anti-buoyant without weights for ground water levels up to the surface of the ground</li> <li>→ Covers up to load class D 400</li> <li>→ Easy maintenance thanks to surface coupling</li> <li>→ Long service life thanks to chamber made of corrosion-free polyethylene</li> </ul> | <ul style="list-style-type: none"> <li>→ Flexible installation</li> <li>→ Anti-buoyant</li> <li>→ High stability</li> </ul>   |
| Technical data          | <ul style="list-style-type: none"> <li>→ Pressure port: Ø50/563 mm</li> <li>→ Inlet connection: DN 100, DN 150</li> <li>→ Discharge port pump: R 1½, R 2</li> <li>→ Gross volume: 255/400 l</li> </ul>   | <ul style="list-style-type: none"> <li>→ Pressure port: R1¼, R1½</li> <li>→ Inlet connection: DN 100, DN 150, DN 200</li> <li>→ Discharge port pump: R1¼, R1½</li> <li>→ Gross volume: 340 ... 900 l</li> </ul>   | <ul style="list-style-type: none"> <li>→ Pressure port: G2</li> <li>→ Inlet connection: DN 150</li> <li>→ Discharge port: Rp1½, Rp2, Rp2½, DN 80</li> <li>→ Gross volume: 1215 l</li> </ul>                       |
| Equipment/function      | Wilco sewage pumps which can be used: <ul style="list-style-type: none"> <li>→ Rexa UNI</li> <li>→ Rexa CUT</li> </ul>   | Wilco sewage pumps which can be used: <ul style="list-style-type: none"> <li>→ Drain TMW 32</li> <li>→ Drain TS 40</li> <li>→ Drain TC 40</li> <li>→ Drain STS 40</li> <li>→ Drain MTC</li> <li>→ Rexa CUT</li> </ul>   | Wilco sewage pumps which can be used: <ul style="list-style-type: none"> <li>→ Drain TS 40</li> <li>→ Rexa UNI</li> <li>→ Drain TP 80</li> <li>→ Rexa FIT/PRO</li> <li>→ Drain MTC</li> <li>→ Rexa CUT</li> </ul> |

|                         | Vertical mixer   | Submersible mixer   | Submersible mixer  |
|-------------------------|--|---|--|
|                         |   |   |   |
| Series                  | Wilo-Vardo WEEDLESS  | Wilo-Flumen OPTI-TR<br>Wilо-Flumen EXCEL-TRE  | Wilо-EMU TR/TRE 50-2 to TR 120-1   |
| Field of application    | Wastewater treatment   | Wastewater treatment  | Wastewater treatment   |
| Duty chart              |  |   |  |
| Construction            | Vertical mixer with standard gear motor  | Direct driven submersible mixer   | Submersible mixer with single-stage planetary gear   |
| Application             | Energetically optimised mixing and circulation   | Swirling of deposits and solids; destruction of floating sludge layers  | Flow generation, suspension of solids, homogenisation and prevention of floating sludge layers   |
| Volume flow $Q_{max}$   | Max. thrust: 6000 N  | Max. thrust: 200 – 920 N  | Max. thrust: 160 – 6620 N  |
| Delivery head $H_{max}$ | Max. circulation capacity: 7.5 m <sup>3</sup> /s   |   |  |
| Special features        | <ul style="list-style-type: none"> <li>→ Optimum agitation in basin with square or rectangular floor plan</li> <li>→ Operational reliability owing to wear-resistant propeller</li> <li>→ Easy installation for existing systems</li> <li>→ Floating version for basins with alternating water levels</li> </ul> | <ul style="list-style-type: none"> <li>→ Low clogging rate and reliable operation thanks to optimised hydraulics</li> <li>→ Low-wearing, due to the use of stainless steel precision-cast propellers with the lowest cavitation tendency</li> <li>→ A wide range of possible uses in diverse applications, even at high-interval running times</li> <li>→ Reduction of the energy and operating costs due to the standard use of IE3 motors (EXCEL-TRE) for the best possible thrust coefficient</li> </ul> | <ul style="list-style-type: none"> <li>→ Secures your processes. The large planetary gear ensures that the mixing forces are absorbed efficiently.</li> <li>→ Efficient energy usage. The innovative blade geometry and energy-efficient IE3 motors ensures the best possible specific thrust coefficient.</li> <li>→ Works reliably. Thanks to entwining-free operation with backward-curved incoming flow edge.</li> </ul> |
| Technical data          | <ul style="list-style-type: none"> <li>→ Propeller diameter: 2.50 m ... 1.50 m</li> <li>→ Diameter of mixer shaft: 70 ... 114 mm</li> <li>→ Shaft length: from 2 m</li> <li>→ Fluid temperature: 3 ... 40 °C</li> </ul>  | <ul style="list-style-type: none"> <li>→ Mains connection: 3~400 V, 50 Hz</li> <li>→ Immersed operating mode: S1</li> <li>→ Max. immersion depth: 20 m</li> <li>→ Fluid temperature: max. 40 °C</li> </ul>  | <ul style="list-style-type: none"> <li>→ Mains connection: 3~400 V, 50 Hz</li> <li>→ Immersed operating mode: S1</li> <li>→ Max. immersion depth: 20 m</li> <li>→ Fluid temperature: max. 40 °C</li> </ul>   |
| Equipment/function      | <ul style="list-style-type: none"> <li>Version with</li> <li>→ Float for floating installation</li> <li>→ Two propeller platforms</li> <li>→ Ex rating</li> <li>→ Integrated frequency converter</li> </ul>  | <ul style="list-style-type: none"> <li>→ Stationary installation on wall and floor</li> <li>→ Flexible installation through the use of lowering device or special pipe attachment</li> <li>→ Can be swivelled vertically and horizontally when installed with a lowering device</li> </ul>  | <ul style="list-style-type: none"> <li>→ Stationary installation on walls</li> <li>→ Flexible installation via lowering device</li> <li>→ Can be swivelled horizontally when installed with a lowering device</li> <li>→ Installation with stand allows free placement in basin</li> </ul>   |



|                         | Submersible mixer  | Recirculation pump  | Treatment process  |
|-------------------------|--|---|--|
|                         |   |    |   |
| Series                  | Wilo-EMU TR/TRE 212 to TR/TRE 326-3  | Wilo-EMU RZP 20 to RZP 80-2   | Wilo-Sevio ACT   |
| Field of application    | Wastewater treatment   | Wastewater treatment / Leisure  | Wastewater treatment   |
| Duty chart              |    |   |  |
| Construction            | Submersible mixer with two-stage planetary gear  | Submersible mixers with housing unit, directly driven or with single-stage planetary gear   | Solids diffuser  |
| Application             | Energetically optimised mixing and circulation of activated sludge; generation of flow rates   | <ul style="list-style-type: none"> <li>→ Pumping of large volume flows of wastewater and sewage</li> <li>→ Flow generation in water channels</li> </ul>   | Gentle process for mixing all kinds of biomass carrier particles in the pumped fluid   |
| Volume flow $Q_{max}$   | Max. thrust: 390 – 4310 N  | 6,800 m <sup>3</sup> /h   | Circulation capacity: 3,300 – 4,000 m <sup>3</sup> /h  |
| Delivery head $H_{max}$ |  | 1.1 m   |  |
| Special features        | <ul style="list-style-type: none"> <li>→ Efficient energy usage. The innovative blade geometry and energy-efficient IE3/IE4 motors ensure the best possible specific thrust coefficient.</li> <li>→ Consistently reliable. The low-wearing GFK/PA6 propeller is durable and scores with its self-cleaning effect.</li> <li>→ Smooth running thanks to the balanced propeller load, even in high thrust ranges and when incoming flow conditions are unfavourable.</li> </ul> | <ul style="list-style-type: none"> <li>→ Vertical or in-line installation possible</li> <li>→ Self-cleaning propeller to avoid clogging</li> <li>→ Propeller in steel or PUR</li> </ul>                         | <ul style="list-style-type: none"> <li>→ Gentle input of biomass carriers into the fluid</li> <li>→ Efficient due to increased volume of penetration for an optimised treatment process</li> <li>→ Reduced energy costs with improved treatment performance</li> <li>→ Also available with energy-efficient IE3 motor technology</li> <li>→ Retrofittable in existing systems</li> </ul> |
| Technical data          | <ul style="list-style-type: none"> <li>→ Mains connection: 3~400 V, 50 Hz</li> <li>→ Immersed operating mode: S1</li> <li>→ Max. immersion depth: 20 m</li> <li>→ Fluid temperature: max. 40 °C</li> </ul>   | <ul style="list-style-type: none"> <li>→ Mains connection: 3~400 V, 50 Hz</li> <li>→ Immersed operating mode: S1</li> <li>→ Max. immersion depth: 20 m</li> <li>→ Fluid temperature: max. 40 °C</li> </ul>      | <ul style="list-style-type: none"> <li>→ Max. basin depth: 3 ... 8 m</li> <li>→ Layer thickness of biomass particles: 1.6 ... 5.5 m</li> <li>→ Percent by volume of biomass particles: 40 ... 70 %</li> <li>→ Max. fluid temperature: 40 °C</li> </ul>   |
| Equipment/function      | <ul style="list-style-type: none"> <li>→ Installation with stand allows free placement in basin</li> <li>→ Flexible installation</li> </ul>  | <ul style="list-style-type: none"> <li>→ Stationary installation directly on the pipe work</li> <li>→ Flexible installation via lowering device</li> <li>→ Vertical or in-line installation possible</li> </ul> | <ul style="list-style-type: none"> <li>→ Height-adjustable suction pipe due to lowering device</li> <li>→ Suction pipe with telescopic extension</li> </ul>  |

|                         | Aeration  | Decanter   |
|-------------------------|---|--|
|                         |  <p>Series modification</p>  |    |
| Series                  | Wilo-Sevio AIR<br>Wilo-Sevio ELASTOX  | Wilo-Savus OPTI-DECA   |
| Field of application    | Wastewater treatment  | Wastewater treatment   |
| Duty chart              |   |  |
| Construction            | Aeration system consisting of pipe, plate, stripe or disc diffuser and pipe system to distribute the pressure   | A positive control discharge unit that is decoupled from the fluid   |
| Application             | For fine bubble aeration of various fluids such as wastewater and sewage or sludge  | Unit to effectively discharge clear water in SBR systems   |
| Volume flow $Q_{max}$   |   |  |
| Delivery head $H_{max}$ |   |  |
| Special features        | <ul style="list-style-type: none"> <li>→ High system efficiency with a high oxygen utilisation at a low pressure loss thanks to optimal membrane perforation</li> <li>→ High operational reliability thanks to non-clogging, automatically closing membrane perforation</li> <li>→ Long service life in municipal and industrial applications thanks to different membrane materials</li> </ul> | <ul style="list-style-type: none"> <li>→ Effective and safe clear water removal to ensure the sewage is cleaned to a high quality</li> <li>→ High process reliability owing to permanently installed system which is decoupled from the fluid</li> <li>→ No contamination thanks to process-related cycling of the decanting process</li> <li>→ Individually system-tailored design</li> </ul> |
| Technical data          | <ul style="list-style-type: none"> <li>→ Temperature, air intake: max. 80 °C</li> <li>→ Temperature, fluid: 5 ... 35 °C</li> </ul>  | <ul style="list-style-type: none"> <li>→ Drainage quantity: 200 ... 1000 m<sup>3</sup>/h</li> <li>→ Discharge pipe: DN 200 ... DN 300</li> <li>→ Drain pipe: DN 200 ... DN 400</li> </ul> Drainage quantities greater than 1000 m <sup>3</sup> /h upon request.  |
| Equipment/function      | <ul style="list-style-type: none"> <li>→ Downspout</li> <li>→ Main distribution line</li> <li>→ Aerator pipe</li> <li>→ End distribution line</li> <li>→ Diffuser</li> <li>→ Fixation elements</li> </ul>   | <ul style="list-style-type: none"> <li>→ Discharge and drainage unit, joint, wall bracket and supports</li> <li>→ Electric winch</li> </ul>  |



# PRACTICAL SUPPORT FOR YOUR DAILY WORK.

## ALWAYS AT YOUR SIDE: WILO SERVICES.

We work hard to make your life easier. That is why our range is not only limited to high-quality products and systems that you can count on at any time. We also provide intelligent services for all project phases, from design and configuration through to commissioning and maintenance. We keep you informed about the very latest technologies and trends and provide attractive options for project financing. We are always available – with personal, competent and local services in over 60 countries and more than 2,500 Wilo engineers worldwide.



## OUR SERVICE FOR YOU – FROM CONSULTING TO MAINTENANCE.

### Wilо-Energy Solutions

For greater economy and sustainability: Wilо-Energy Solutions helps customers be proactive in replacing uncontrolled pumps that are currently in operation with Wilо high-efficiency pumps. This allows you to reduce electricity costs for pumps in your buildings by up to 90 percent. We offer targeted consulting and analysis to give you an overview of potential savings, necessary investments and amortisation periods. And we provide comprehensive support during the transition to high-efficiency technology solutions.

### Try & Buy

Investments require a great deal of planning. Product reliability and efficient operation are always central considerations. But how do you make the right decision? Wilо's unique service can help. Try & Buy allows you to experience the quality of Wilо products for yourself before buying. Test our products\* in your own system, and invest reliably in the future. Please note that Try & Buy is not available in all subsidiaries. Enquire with your local Wilо partner about options for using this service.

### WilоCare

With WilоCare your cost security and operational reliability are ensured. The service package provides you with monthly reports on the current status of your system, energy consumption, possible optimisation measures and pending maintenance intervals. Individual options can be adjusted precisely to your requirements, all at a fixed monthly price. Choose the version that fits you best: Basic, Comfort or Premium.



\*Ask us what series available

## OUR TOOLS AND TRAINING: COMPREHENSIVE AND PRACTICE-ORIENTATED.

We are there for you worldwide, 365 days a year. With over 2,500 technicians, our teams assist you in over 60 countries – not just to meet your needs and requirements but to exceed them whenever possible. A phone call is all it takes and we'll initiate all the necessary steps – quickly, professionally and in direct coordination with you. Our service pledge holds for the entire life cycle of your Wilo products. Because you can always rely on Wilo.

### DESIGN AND SELECTION

We want you to find the perfect solution for your requirements. That's why we provide personal consulting before your purchase to help you find the best and most economical product solution.

#### Our services at a glance:

- On-site support
- Wilo-Select pump design software
- Installation drawings
- Convenient integration of our product data into the BIM model for optimal consulting support
- Efficiency checks to determine the economic efficiency of existing pumps and suitable replacement pumps



## SERVICE

Wilo has a long tradition of collaborating with installers and plant engineers. Service is an essential component of this partnership. We collaborate to develop a service concept tailored to your individual needs – with our expertise and personal consulting, we make sure that the operation of your systems is as energy-efficient, reliable and economical as possible. All the while, our competent Wilo service technicians are ready to assist you with fast, reliable and on-time support.

### Our services at a glance:

- Rapid repair service
- Commissioning
- Customised, reliable maintenance concepts
- Optimisation and replacement
- Fast spare parts solutions
- Service packages

## TRAINING AND SEMINARS

We want you to be able to use innovative technologies and products from Wilo optimally and integrate them perfectly into your working process. With this goal in mind, we offer expert-led seminars designed for the specific needs and applications of your industry. Expand your knowledge and put our expertise to work for you. Our seminars also give you the opportunity to exchange ideas with industry colleagues. We also develop company seminars for your particular requirements.

### Our services at a glance:

- Practically orientated product and system seminars
- Instructors with long-term practical experience
- Ideal space for meeting colleagues and exchanging ideas
- Dialogue-based training concepts for active learning
- Wilo-Brain qualification
- System consulting







**THE FUTURE IS  
CONNECTED.**





WILO SE  
Nortkirchenstraße 100  
D-44263 Dortmund  
Germany  
T +49 231 4102-0  
F +49 231 4102-7363  
wilo@wilo.com  
www.wilo.com

Pioneering for You

More contact details at [www.wilo.com](http://www.wilo.com)