

Pioneering for You

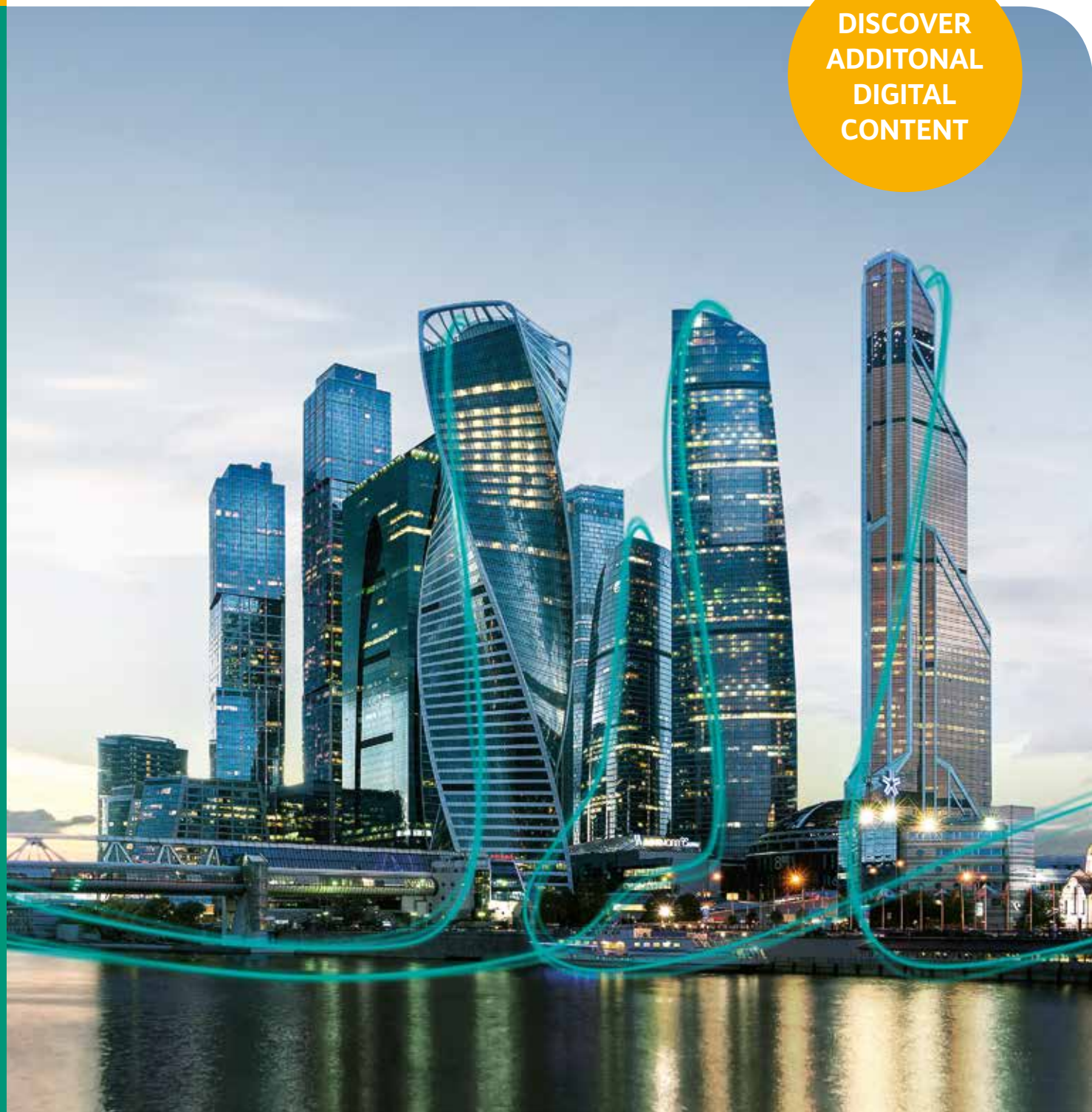
**wilo**

*Efficient solutions – 50 Hz*

# Highly Efficient Pumping Solutions for Building Services

Our product and system solutions for Heating, Air conditioning, Cooling, Fire fighting  
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.







### 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.







# THE FUTURE IS CONNECTED.

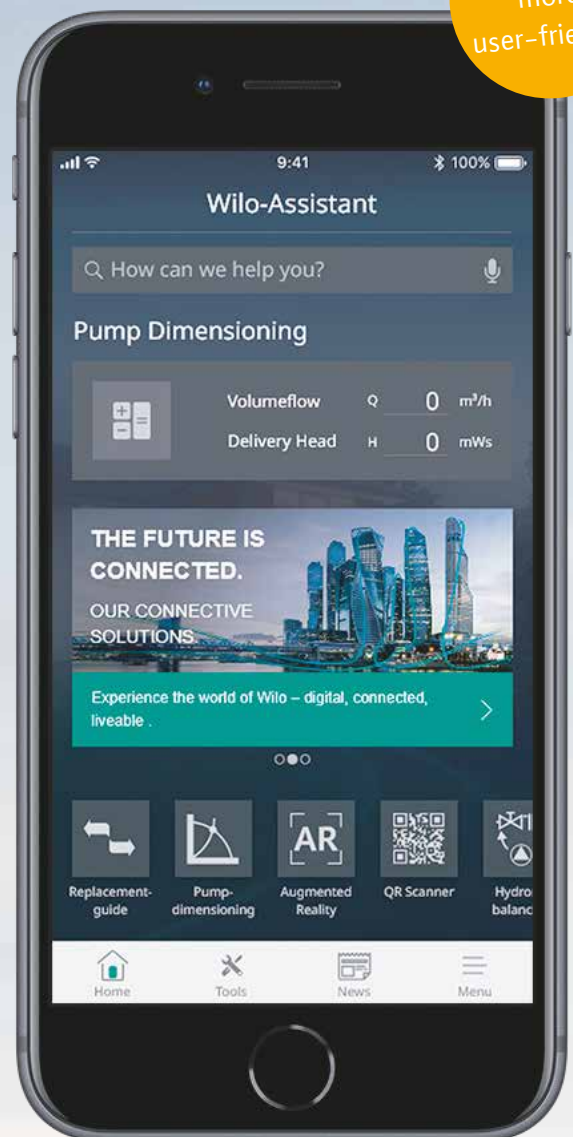
“The future is connected” – Along with network-compatible products, such as the Wilo-Stratos MAXO and modules which can be retrofitted to other Wilo pumps, the Wilo-Assistant App is Wilo’s connectivity centrepiece. Wilo pumps are delivered equipped with a suitable digital interface, or can alternatively 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



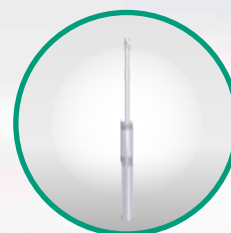
Wilo-Care Connect



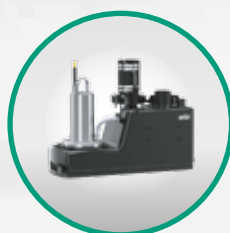
Wilo-Smart Balance



Sync-Function Assistant



Wilo-Solar Connect



wibutler App

# 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




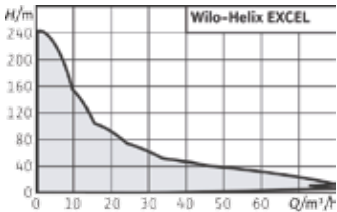

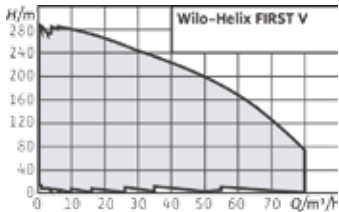
Completed in 2017, Federation Tower, “Baschnja Federazija” as it is called in Russian, is the tallest building in Europe with a height of 374 meters replacing “The Shard” in London (306 meters). The monumental complex consists of two towers with different sizes: the more than 370-meter tower with almost 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.

	Vertical, Multistage Centrifugal Pumps	Vertical, Multistage Centrifugal Pumps	Vertical, Multistage Centrifugal Pumps
	 <b>IE5</b>	 <b>IE4</b>	 <b>IE3</b>
Series	Wilo-Helix EXCEL	Wilo-Helix VE	Wilo-Helix FIRST V* Wilo-Helix V**
Field of application	Pressure boosting Water Supply Irrigation	Pressure boosting Water Supply Irrigation	Pressure boosting Water Supply Irrigation
Duty chart			
Construction	Non self-priming, highly efficient, fully stainless steel high-pressure multistage centrifugal pump with EC motor and integrated high-efficiency drive	Non self-priming multistage pump with integrated frequency converter	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 m³/h	80 m³/h	80 m³/h
Delivery head $H_{max}$	240 m	240 m	280 m
Special features	<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>	<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, 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>→ Protection class IP55</li> <li>→ Minimum efficiency index MEI ≥0.7 (Helix EXCEL 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 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: -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 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>	<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>→ 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> <li>→ Pump material code: <ul style="list-style-type: none"> <li>** Pump housing SS 1.4301 (AISI 304)</li> <li>Hydraulics SS 1.4307 (AISI 304)</li> <li>** Pump housing SS 1.4404 (AISI 316L)</li> <li>Hydraulics SS 1.4404 (AISI 316L)</li> <li>* Pump housing Cast Iron EN-GJL-250 (standard coating)</li> <li>Hydraulics SS 1.4307 (AISI 304)</li> </ul> </li> </ul>



Wilo-Multivert MVI 70, 95



Wilo-Medana CH1-L



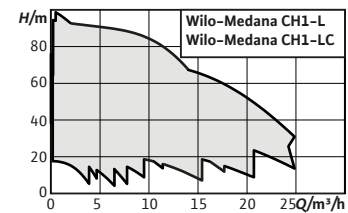
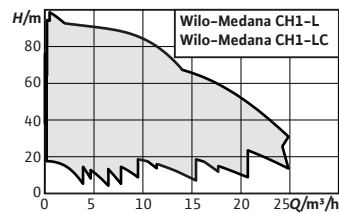
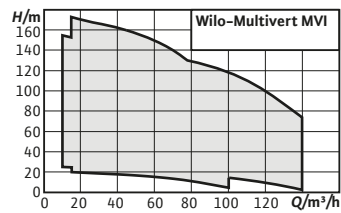
Wilo-Medana CH1-LC



Series

Field of application

Duty chart



Construction

Non-self-priming multistage pump

Non-self-priming Multistage horizontal centrifugal pumps

Non-self-priming Multistage horizontal centrifugal pumps

Application

Water supply and pressure boosting, industrial circulation systems, process water, closed cooling circuits, washing systems, irrigation

Pumping of process water and drinking water for: irrigation, pressure boosting, industrial applications (e. g. cooling circuits, car wash)

Pumping of process water for: irrigation, pressure boosting, industrial applications (e.g. cooling circuits, car wash)

Volume flow  $Q_{max}$ 140 m<sup>3</sup>/h24 m<sup>3</sup>/h18 m<sup>3</sup>/hDelivery head  $H_{max}$ 

172 m

69 m

78 m

Special features

→ MVI 70...-95.. in stainless steel with pump housing made of cataphoretic-coated cast iron

→ Captive nuts on connections (option)  
→ Cataphoretic-coated lantern  
→ Oblong hole for fixation  
→ Compact design  
→ ACS approval

→ Cataphoretic-coated lantern  
→ New closed hole fixation for vertical position

Technical data

→ Fluid temperature -15 to +120 °C  
→ Max. operating pressure 16/25 bar  
→ Max. inlet pressure 10 bar  
→ Protection class IP55  
→ Minimum efficiency index MEI ≥ 0.4

→ Mains connection: 1~230 V, 50/60 Hz - 3~380/400/460 V, 50/60 Hz  
→ Rated pressure: 10 bar  
→ Fluid temperature: -20 °C to 120 °C  
→ Ambient temperature: -15 °C to 50 °C  
→ Protection class: IP55




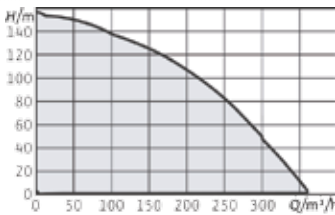
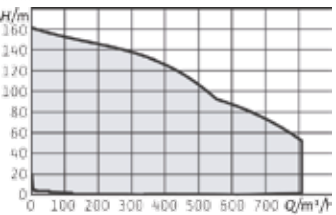
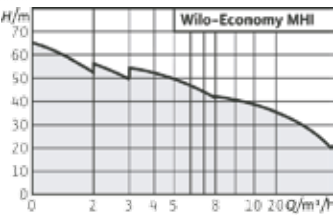
→ Mains connection: 1~230 V, 50/60 Hz - 3~380/440 V, 50/60 Hz TN, TT, IT  
→ Rated pressure: 10 bar  
→ Fluid temperature: -20 °C to 90 °C  
→ Ambient temperature: -15 °C to 50 °C  
→ Protection class: IP55

Equipment/function


→ MVI 70 ... to 95 ... PN16/PN25 with round flange  
→ IEC standard motor, 2-pole



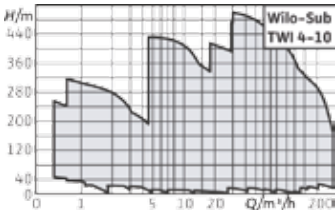
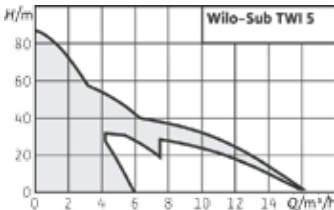
→ Pump housing and impellers made of stainless steel  
→ AC motor: 3~ > 0.75 AC IE3, 3~ < 0.75 AC IE2  
→ AC motor: 1~ AC IE1/IE2  
→ Threaded connection

→ Pump housing made of cast iron and impellers made of stainless steel  
→ AC motor: 3~ > 0.75 AC IE3, 3~ < 0.75 AC IE2  
→ AC motor: 1~ AC IE1/IE2

	Multi-pump Pressure Boosting Systems With Speed-controlled Pumps	Multi-pump Pressure Boosting Systems With Speed-controlled Pumps	Multi-pump Pressure Boosting Systems
	 IE5	 Series extension with IE4	
Series	Wilo-SiBoost Smart MVEE SiBoost Smart (FC) Helix V, ..VE, ..EXCEL *WMP Boost – Helix Excel/VE PC MV	Wilo-Comfort-(N)-COR..MVI(S)..CC Comfort-COR..Helix V(E)..CC(e) *WMP Boost Helix First V/MVI PC SV/MV	Wilo – CO MHI/MHIL BC/EC Wilo – CO Helix First/MVI BC/EC *WMP Boost Helix First MHI/MHIL/MVI PC C
Field of application	Pressure boosting	Water supply and pressure boosting	Water supply and 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, MVEE) 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	Non self-priming multistage pump
Application	Full automatic water supply in residential/office buildings & industrial systems For pumping drinking/process water, cooling water. *Available with Pilot/Jockey pump	Full automatic water supply in residential/office buildings & industrial systems For pumping drinking/process water, cooling water, water for firefighting *Available with Pilot/Jockey pump	Water supply and pressure boosting Commerce and industry Cooling water circulation systems Washing and sprinkling systems
Volume flow $Q_{max}$	360 m³/h	800 m³/h	25 m³/h
Delivery head $H_{max}$	158 m	160 m	70 m
Special features	<ul style="list-style-type: none"> <li>→ High-efficiency pump hydraulics</li> <li>→ 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> </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 and IE-4 motors</li> <li>→ Helix V with IE-3 standard motors</li> <li>→ Series with external single/multiple frequency converter</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>
Technical data	<ul style="list-style-type: none"> <li>→ Mains connection <ul style="list-style-type: none"> <li>– Helix V: 3~415 V, 50 Hz</li> <li>– Helix VE and EXCEL: 3~415 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 3~415 V, 50 Hz</li> <li>→ Max. fluid temperature 70 °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>→ 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>
Equipment/function	<ul style="list-style-type: none"> <li>→ Automatic pump control via Smart Controller SC/MV</li> <li>→ Innovative pressure-variable control for Helix VE, EXCEL, MVEE</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 on pressure side</li> <li>→ Low-water sensor standard for VE, EXCEL, MVEE</li> </ul>	<ul style="list-style-type: none"> <li>→ Base-load pump continuous auto controlled via frequency converter in the CC/PC SV/MV controller</li> <li>→ Components with fluid contact are corrosion-resistant</li> <li>→ Pipework in GI (Optional in SS)</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 on pressure side</li> <li>→ Pressure sensor, on the discharge side</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>



	Multistage SS Impeller Pressure Booster System	Monoblock Pumpset	Horizontal Open Well Submersible Pumpset
		 5 Star Rating*	
Series	Wilo – HMHIL / FMHIL	Wilo – MPM	Wilo – MPO
Field of application	Water transfer	Water transfer	Water transfer
Duty chart			
Construction	Single Pump booster	Non Self priming End Suction monoblock pumpsets	Horizontal Open well Submersible pumpset
Application	Residential Booster System,	Water supply Firefighting Cooling tower HVAC Irrigation	Water supply Sprinkler Irrigation Agriculture
Volume flow $Q_{max}$	8 m <sup>3</sup> /hr	138 m <sup>3</sup> /hr	135 m <sup>3</sup> /hr
Delivery head $H_{max}$	62 m	78 m	78 m
Special features	<ul style="list-style-type: none"> <li>→ Wetted parts made up of stainless steel</li> <li>→ High efficient motor suitable for wide voltage fluctuations</li> <li>→ Silent in operation</li> <li>→ Factory assembled system</li> </ul>	<ul style="list-style-type: none"> <li>→ Dynamically balanced rotating parts to ensure min. vibration, noise free operation &amp; long bearing life</li> <li>→ Designed for wide Voltage fluctuations</li> </ul>	<ul style="list-style-type: none"> <li>→ No need of foundation and foot wall as installed under water</li> <li>→ SS shaft for long and trouble free life</li> <li>→ Motor designed to operate in wide voltage range</li> <li>→ Motor filled with anti corrosive liquid to increase life of internal parts</li> <li>→ Strong carbon v/s stainless steel thrust bearing for longer life</li> </ul>
Technical data	<ul style="list-style-type: none"> <li>→ Mains connection: 1~230V/3~415 V, 50 Hz</li> <li>→ Protection class IP54</li> </ul>	<ul style="list-style-type: none"> <li>→ Mains connection: 3~415 V, 50 Hz</li> <li>→ Pump housing : Cast Iron</li> <li>→ Impeller: Cast Iron</li> <li>→ Sealing : Gland Packed / Mechanical Seal</li> <li>*5HP &amp; 7.5HP available in 5 star rating</li> </ul>	<ul style="list-style-type: none"> <li>→ Mains connection: 3~415 V, 50 Hz</li> <li>→ Pump housing : Cast Iron</li> <li>→ Impeller: Cast Iron</li> <li>→ Protection class IP68</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>→ Shut-off device, on the pressure side</li> <li>→ Non-return valve, on the pressure side</li> <li>→ Diaphragm pressure vessel 8 l, 24l, PN 10</li> </ul>	Optional features : → IP55/IP56 protection	

	Submersible Pumps	Cistern Pumps
		
Series	Wilo-Sub TWI 4/6/8/10 ...	Wilo-Sub TWI 5/TWI 5-SE Wilo-Sub TWI 5-SE PnP
Field of application	Distribution and boosting / Clean water treatment / Raw water intake	Rainwater / Pressure boosting / Raw water intake
Duty chart		
Construction	Submersible pump, multistage	Submersible pumps
Application	Pumping of (drinking) water from boreholes, wells, rainwater storage for water supply, sprinkling, irrigation, lowering ground water level	For domestic water supply from wells, rainwater storage tanks, and reservoirs. For irrigation, sprinkling, rainwater utilisation or for pumping out water
Volume flow $Q_{max}$	165 m³/h	16 m³/h
Delivery head $H_{max}$	500 m	88 m
Special features	<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>	<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>
Technical data	<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/m³</li> <li>→ Max. immersion depth: 100~350 m</li> <li>→ Protection class IP68</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>→ 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>
Equipment/function	<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>	<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>






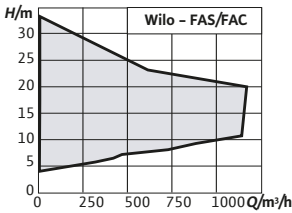
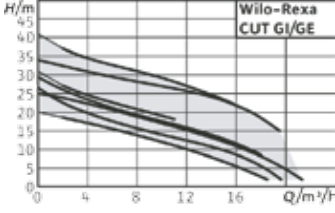
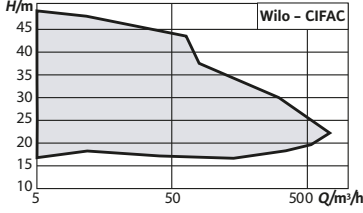






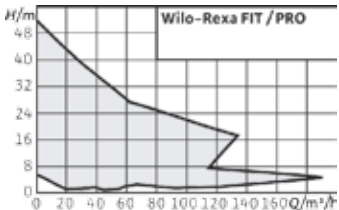
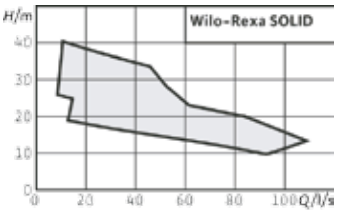
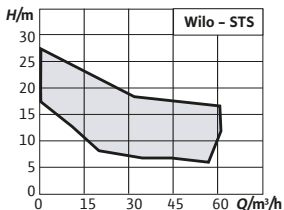
### Using digital technologies efficiently

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.




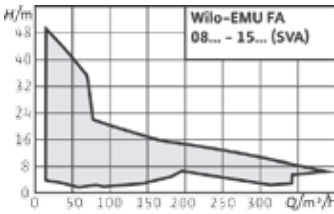
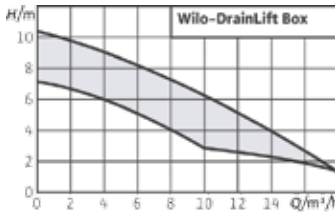
### More efficiency and reliability through Nexos Intelligence




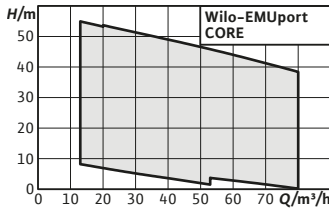

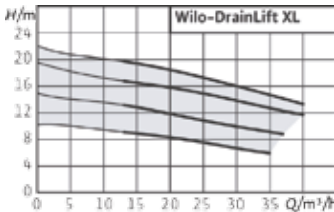
This is also highlighted by the small community of Tczów in Poland. Wilo installed a pressure drainage system here ten years ago. Only once it was in use did it become obvious that one pipe was particularly susceptible to the build-up of deposits or even clogging due to irregular flow rates – which the 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.


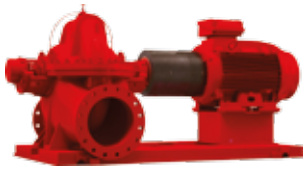

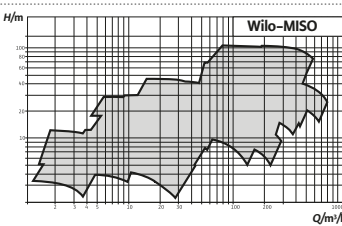
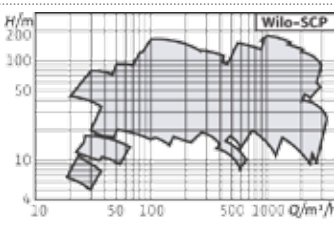
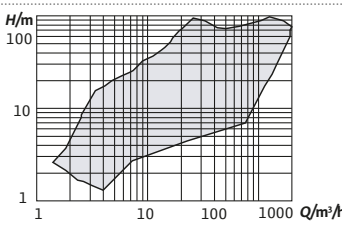
	Submersible Pumpset	Submersible Sewage Pumps	Submersible Pumpset
			
Series	Wilofas – FAS/FAC	Wilorexa CUT GI Wilorexa CUT GE	Wilofac – CIFAC – With Alloy Tip Cutter
Field of application	Dewatering /Wastewater collection and transport	Wastewater collection and transport	Dewatering /Wastewater/Sewage collection and transport
Duty chart			
Construction	Submersible drainage pump	Submersible sewage pump with macerator	Submersible drainage/sewage pump
Application	Pumping of Rainwater Wastewater	Pumping of → Sewage containing faeces → Wastewater	Pumping of Sewage containing faeces Wastewater Untreated Sewage
Volume flow $Q_{max}$	102 m <sup>3</sup> /hr	21 m <sup>3</sup> /h	700 m <sup>3</sup> /hr
Delivery head $H_{max}$	30 M	41 m	48 m
Special features	<ul style="list-style-type: none"> <li>→ High operational reliability</li> <li>→ Integrated pump support foot for easy installation</li> <li>→ Single phase pumps with Float switch (A-model)</li> <li>→ Motor body with IP 68 protection</li> <li>→ Thermal protection</li> <li>→ Motor body in SS upto 2.2kW; CI body above 2.2kW</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> <li>→ Protection class IP68</li> </ul>	<ul style="list-style-type: none"> <li>→ IE3 motor self-cooling motors for use in wet well.</li> <li>→ Protection class IP68</li> <li>→ Reliable semi-open single-vane with alloy cutter at impeller tip.</li> <li>→ Integrated pump support foot for easy installation</li> <li>→ Motor overload protection and leakage in oil chamber protection</li> <li>→ Large free ball passage upto 100 mm</li> </ul>
Technical data	<ul style="list-style-type: none"> <li>→ Mains connection: 1~230V/3~400 V, 50 Hz</li> <li>→ Pump housing : Cast Iron</li> <li>→ Impeller: Cast Iron</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>	<ul style="list-style-type: none"> <li>→ Mains connection: 3~415 V, 50 Hz</li> <li>→ Pump housing : Cast Iron</li> <li>→ Impeller: Cast Iron / Stainless steel</li> </ul>
Equipment/function	<ul style="list-style-type: none"> <li>→ Optional features</li> <li>→ Stationary wet sump installation</li> <li>→ Auto-coupler (Suspension device)</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>	<ul style="list-style-type: none"> <li>Optional features :</li> <li>→ H class insulation</li> <li>→ Stationary wet sump installation</li> <li>→ Auto-coupler (Suspension device)</li> </ul>

	Submersible Sewage Pumps	Submersible Sewage Pumps	Submersible Pumpset
		 	
Series	Wilo-Rexa FIT Wilo-Rexa PRO	Wilo-Rexa SOLID	Wilo - STS
Field of application	Dewatering and flood control / Waste-water collection and transport / Waste-water treatment	Dewatering and flood control / Waste-water collection and transport / Waste-water treatment / Industrial Process	Dewatering / Wastewater / Sewage collection and transport
Duty chart			
Construction	Submersible sewage pump	Submersible sewage pump	Submersible drainage/sewage pump
Application	Pumping of → Sewage containing faeces → Wastewater	Pumping of → Untreated sewage → Sewage containing faeces → Wastewater → Process water	Pumping of - Sewage containing faeces - Wastewater - Untreated Sewage
Volume flow $Q_{max}$	186 m³/h	426 m³/h	54 m³/hr
Delivery head $H_{max}$	52 m	38 m	20 M
Special features	<ul style="list-style-type: none"> <li>→ Low-weight version with stainless steel motor or sturdy version in cast iron</li> <li>→ Also with IE3 motor technology (according to IEC 60034-30)</li> <li>→ Motors with S1 operation mode for dry installation available</li> <li>→ Protection class IP68</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> <li>→ Protection class IP68</li> </ul>	<ul style="list-style-type: none"> <li>→ High operational reliability</li> <li>→ Integrated pump support foot for easy installation</li> <li>→ Single phase pumps with Float switch (A-model)</li> <li>→ Stainless steel motor body with IP 68 protection</li> <li>→ Thermal protection</li> <li>→ Free ball passage upto 35 mm</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: S3</li> <li>→ Max. immersion depth: 7 m (FIT) or 20 m (PRO)</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: 1~230V/3~400 V, 50 Hz</li> <li>→ Pump housing : Cast Iron</li> <li>→ Impeller: Cast Iron</li> </ul>
Equipment/function	<ul style="list-style-type: none"> <li>→ Thermal motor monitoring</li> <li>→ Motor chamber monitoring (Rexa PRO)</li> <li>→ Sealing chamber with optional external monitoring</li> <li>→ ATEX approval (Rexa PRO)</li> </ul>	<p>Optional Nexos Intelligence:</p> <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>	<p>Optional features for</p> <ul style="list-style-type: none"> <li>→ Stationary wet sump installation</li> <li>→ Auto-coupler (Suspension device)</li> </ul>




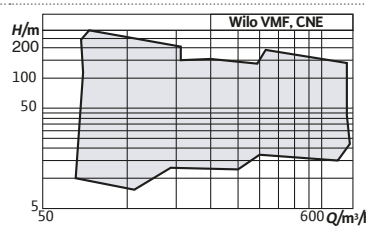
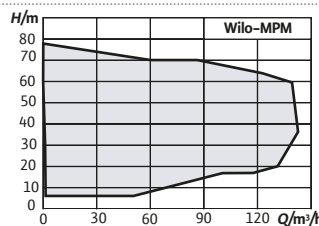
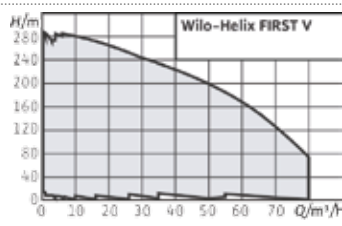



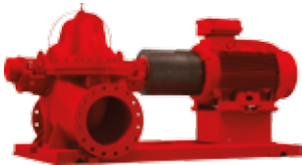

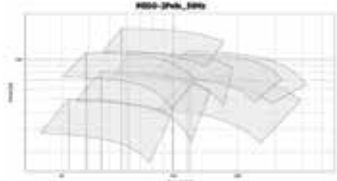
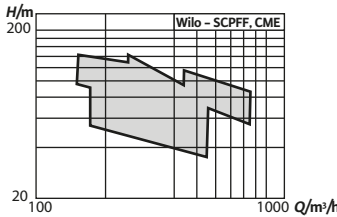
	Submersible Sewage Pumps	Twin Pump Control Panel Drain Systems	Sewage Lifting Unit
			
Series	Wilo-EMU FA 08 to FA 15 (standard pumps)	Wilo - Drain Control Panel	Wilo-DrainLift Box... D Wilo-DrainLift Box... DS
Field of application	Dewatering and flood control / Waste-water collection and transport / Waste-water treatment	Plumbing	Wastewater collection and transport
Duty chart			
Construction	Submersible sewage pump		Sewage lifting unit for concealed floor installation
Application	Pumping of → Sewage containing faeces → Wastewater	Drain controller for Dewatering (Rainwater and flood) Sewage	Pumping of sewage without faeces that cannot be piped to the sewer system through the use of natural falls.
Volume flow $Q_{max}$	380 m³/h		18 m³/h
Delivery head $H_{max}$	51 m		10.5 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> <li>→ Protection class IP68</li> </ul>	<ul style="list-style-type: none"> <li>→ Alteration &amp; cascading features</li> <li>→ Microprocessor based pump controller with auto-manual operation facility</li> <li>→ Protection from single phase, phase reversal, overload etc</li> <li>→ Electronic display of current and voltage</li> <li>→ Potential free contacts for status monitoring (ON/OFF/Trip)</li> <li>→ IP 44 enclosure.</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>
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: 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>
Equipment/function	→ Optional external sealing chamber monitoring	→ Optional IP55 enclosures	<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>

	Wilo-EMUport CORE	Sewage Lifting Unit	Sewage Lifting Unit
			
Series		Wilo-HiSewlift 3	Wilo-DrainLift XL
Field of application	Pumping of sewage containing faeces	Wastewater collection and transport	Wastewater collection and transport
Duty chart			
Construction	Sewage lifting unit with solids separation for floor-mounted and underground installation (in a chamber)	Sewage lifting unit	Sewage lifting unit Double-pump system
Application	Pumping of sewage containing faeces	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.
Volume flow $Q_{max}$	80 m³/h	5 m³/h	40 m³/h
Delivery head $H_{max}$	55 m	8 m	22 m
Special features	<ul style="list-style-type: none"> <li>→ Maximum operational safety with separation of solids from the sewage: Large solids do not have to pass through the pump - no clogging</li> <li>→ Durable and corrosion-free due to the use of PE and PUR material</li> <li>→ Easy maintenance, even during operation – thanks to hygienic dry well in stallation and easy access from outside and individual blocking</li> <li>→ Future-proof even with increasing solid content in sewage</li> </ul>	<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>→ 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>
Technical data	<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>	<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: 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>
Equipment/function	<ul style="list-style-type: none"> <li>→ Sewage lifting unit with solids 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>	<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>→ 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>

	End Suction Pumps as per ISO 2858	Axially Split Case Pumps	Vertical and Horizontal, Multistage Centrifugal Pumps
			
Series	Wilo – MISO	Wilo-SCP	Wilo – RN,IPB,HS,PJ,PLURO,FG/FH
Field of application	Fire fighting, performance as per NFPA 20	Fire fighting, performance as per NFPA 20	Fire fighting, performance as per NFPA 20
Duty chart			
Construction	Single-stage low-pressure centrifugal pump with axial suction, according to ISO 2858, mounted on a baseplate	Low-pressure centrifugal pump with axially split housing mounted on a baseplate	Multistage high-pressure multistage centrifugal pump in sectional construction, mounted on baseplate
Application	Motor/Engine driven pumps suitable for : → Hydrant → Sprinkler → Jockey → Water curtain → Terrace booster	Motor/Engine driven pumps suitable for : → Hydrant → Sprinkler → Jockey → Water curtain	Motor/Engine driven pumps suitable for : → Hydrant → Sprinkler → Jockey
Volume flow $Q_{max}$	750 m³/hr	3,400 m³/h	1000 m³/hr
Delivery head $H_{max}$	170 m	245 m	1500 m
Special features	<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>→ Greased grooved ball bearings for bearing of pump shaft</li> <li>→ Suitable for temperatures up to 120 °C</li> <li>→ Back pull-out version</li> <li>→ Available in vertical execution</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>→ Modular design ensures pump 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> <li>→ Available in vertical execution.</li> <li>→ Design facilitates multiple duty points/outlets in single pump</li> </ul>
Technical data	<ul style="list-style-type: none"> <li>→ Fluid temperature: Upto +120 °C</li> <li>→ Prime mover : Motor/Engine</li> <li>→ Nominal diameters: DN 32 to DN 200</li> <li>→ Operating pressure: 16 bar</li> </ul>	<ul style="list-style-type: none"> <li>→ Fluid temperature –8 °C to +120 °C</li> <li>→ Mains connection 3~415 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>→ Fluid temperature: Upto 120 °C</li> <li>→ Prime mover : Motor/Engine</li> <li>→ Nominal diameters: DN 32 to DN 250</li> <li>→ Operating pressure: 150 bar</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>→ Optional Features for Engine set : <ul style="list-style-type: none"> <li>– Can be supplied with RC/HE cooling options.</li> <li>– Lose supply – Battery, battery cable, Auto Engine (ADEP), Residential silencer</li> </ul> </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 with out 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: <ul style="list-style-type: none"> <li>→ Pump housing: Cast Iron</li> <li>→ Impeller: Bronze</li> <li>→ Shaft: Stainless steel</li> </ul> </li> <li>→ Optional Features for Engine set : <ul style="list-style-type: none"> <li>– Can be supplied with RC/HE cooling options.</li> <li>– Lose supply – Battery, battery cable, Auto Engine (ADEP), Residential silencer</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <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> <li>→ Optional Features for Engine set : <ul style="list-style-type: none"> <li>– Can be supplied with RC/HE cooling options.</li> <li>– Lose supply – Battery, battery cable, Auto Engine (ADEP), Residential silencer</li> </ul> </li> </ul>



	Vertical Turbine Pumps	Monoblock Pumpset	Vertical, Multistage Centrifugal Pumps
			
Series	Wilo VMF, CNE	Wilo - MPM	Wilo-Helix FIRST V
Field of application	Fire fighting, performance as per NFPA 20	Fire fighting	Fire fighting
Duty chart			
Construction	Vertical turbine pumps for dry well installation with submerged axial or semi-axial hydraulics	Non Self priming End Suction monoblock pumpsets	Non self-priming multistage pump
Application	Motor/Engine driven pumps suitable for : Hydrant Sprinkler Jockey	Water supply Firefighting (Terrace Booster)	Water distribution and pressure boosting, Industrial circulation systems, Process water, Closed cooling circuits, Washing systems, Irrigation
Volume flow $Q_{max}$	40000 m <sup>3</sup> /hr	138 m <sup>3</sup> /hr	80 m <sup>3</sup> /h
Delivery head $H_{max}$	450 m	78 m	280 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>→ Dynamically balanced rotating parts to ensure min. vibration, noise free operation &amp; long bearing life</li> <li>→ Designed for wide Voltage fluctuations</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>→ 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> <li>→ Prime mover : Motor/Engine</li> </ul>	<ul style="list-style-type: none"> <li>→ Mains connection: 3~415 V, 50 Hz</li> <li>→ Pump housing : Cast Iron</li> <li>→ Impeller: Cast Iron</li> <li>→ Sealing : Gland Packed / Mechanical Seal</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>→ For types of installation with pressure port, for concealed floor, floormounted 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> <li>→ Optional Features for Engine set :</li> <li>→ Can be supplied with RC/HE cooling options.</li> <li>→ Lose supply - Battery, battery cable, Auto Engine (ADEP), Residential silencer</li> </ul>	<ul style="list-style-type: none"> <li>→ Optional features : IP55/IP56 protection</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>

	Wilo – Atmos ISOFF	UL/FM Certified Pumps	Main Control Center for Fire Fighting Pumps.
			
Series	UL Certified Pumps	Wilo – SCPFF, CME	Wilo – MCC Panel
Field of application	Fire fighting	Fire fighting	Fire fighting
Duty chart			
Construction	Horizontal – End suction back pull out type pump mounted on a baseplate.	Low-pressure centrifugal pump with axially split housing mounted on a baseplate	Auto manual control panel
Application	Motor/Engine driven pumps suitable for : → Hydrant → Sprinkler → Water Curtain → Terrace Booster pumps	Motor/Engine driven pumps suitable for : Hydrant Sprinkler	Common Control Panel for the purpose of starting all the pumps in Auto as well as Manual mode.
Volume flow $Q_{max}$	227 m <sup>3</sup> /hr	568 m <sup>3</sup> /hr	138 m <sup>3</sup> /hr
Delivery head $H_{max}$	160 m	140 m	78 m
Special features	→ UL certified components	→ Pump designed in accordance with US → NFPA standards with UL/FM-certified components. → Complete set with ULFM approved mandatory accessories.	
Technical data	→ Fluid temperature: Upto +105 °C → Prime mover : Motor/Engine → Operating pressure: 16 bar	→ Fluid temperature: Upto +105 °C → Prime mover : Motor/Engine → Nominal diameters: DN 125 to DN 200 → Operating pressure: 16 bar	→ Input Voltage: 3 Phase, 415 VAC → Control Supply: 230 VAC → Starting: Manual by start push button or automatic when pressure drops below set pressure → Indications: Visual – LED Lamps → Panel Finish: Post office Red → Cable Entry: Bottom → Panel Mounting: Floor mounting
Equipment/function	→ Optional Features for Engine set : → Can be supplied with RC/HE cooling options. → Lose supply – Battery, battery cable → Auto Engine (ADEP), Residential silencer	→ Optional Features for Engine set : → Lose supply – Battery, battery cable, → Auto Engine (ADEP), Residential silencer	→ Optional features : 1. IP55 enclosure 2. BMS through potential free contacts

# 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



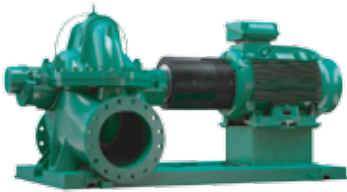
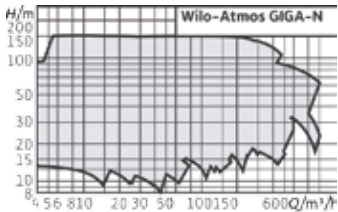
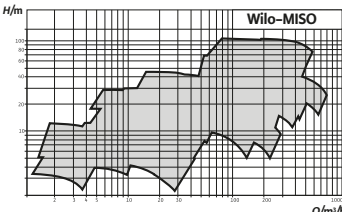
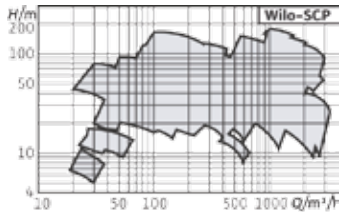
An energy efficiency evaluation and a CE conformity declaration (CE mark) do no longer exist for these products.




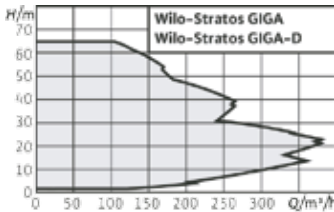
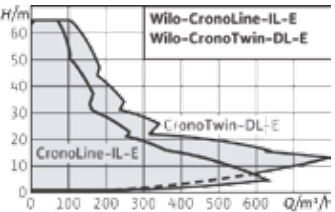
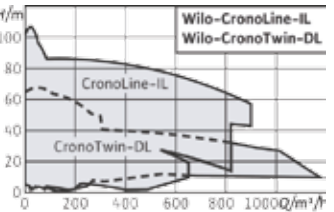
\*Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxemburg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Great Britain




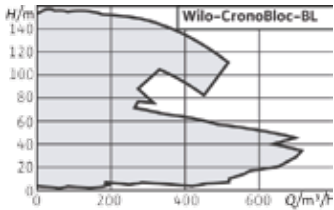
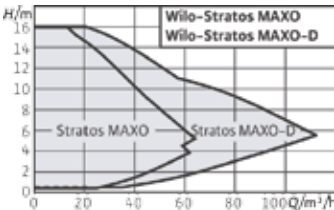
+ Croatia (EU member from 2013 on), + Turkey (candidate country), + Serbia (candidate country)

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



	Standard Glanded Pumps	End Suction Pumps As Per ISO 2858 Wilo-SCP	Axially split case pumps
			
Series	Wilo-Atmos GIGA-N	Wilo - MISO	Wilo-SCP
Field of application	Heating / Air conditioning / Industrial Process / Clean water treatment / Distribution and boosting / Irrigation	Heating / Air conditioning / Industrial Process / Clean water treatment / Distribution and boosting / Irrigation	Heating / Air conditioning / Industrial Process / Clean water treatment / Distribution and boosting / Irrigation
Duty chart			
Construction	Single-stage, low-pressure centrifugal pump with axial suction, mounted on a baseplate.	Single-stage low-pressure centrifugal pump with axial suction, according to ISO 2858, mounted on a baseplate	Low-pressure centrifugal pump with axially split housing mounted on a baseplate
Application	Pumping of heating water (in accordance with VDI 2035), cold water, water-glycol mixtures in heating, cold water and cooling systems.	Primary chilled water pumps Secondary chilled water pumps Tertiary chilled water pumps condenser water pumps	Pumping of heating water (acc. VDI 2035), cold water, process water, water-glycol mixtures in heating, cold water and cooling systems.
Volume flow $Q_{max}$	1000 m <sup>3</sup> /h	750 m <sup>3</sup> /hr	3,400 m <sup>3</sup> /h
Delivery head $H_{max}$	150 m	170 m	245 m
Special features	<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>→ Cathaphoretic 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</li> <li>→ Mechanical seal independent of the direction of rotation</li> <li>→ Interchangeable casing wear ring</li> <li>→ Greased grooved ball bearings for bearing of pump shaft</li> <li>→ Suitable for temperatures up to 120 °C</li> <li>→ Back pull-out version</li> <li>→ Available in vertical execution</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>→ 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: Up to +120 °C</li> <li>→ Prime mover : Motor/Engine</li> <li>→ Nominal diameters: DN 32 to DN 200</li> <li>→ Operating pressure: 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	→ Single-stage low-pressure centrifugal pump with coupling, coupling guard, motor and baseplate	→ Single-stage horizontal spiral housing pump with bearing bracket and exchangeable casing wear rings in process design.	<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: Cast Iron</li> <li>→ Impeller: Bronze</li> <li>→ Shaft: Stainless steel</li> </ul>

	Glanded High-Efficiency Pumps in In-Line Design	Glanded Energy-saving Pumps In In-line Design	Glanded Standard Pumps In In-line Design
	 <div>IE5</div> <div>Series extension</div>	 <div>IE4</div>	 <div>IE3</div>
Series	Wilo-Stratos GIGA Wilo-Stratos GIGA-D	Wilo-CronoLine-IL-E Wilo-CronoTwin-DL-E	Wilo-CronoLine-IL Wilo-CronoTwin-DL
Field of application	Heating / Air conditioning / Industrial Process	Heating / Air conditioning / Industrial Process	Heating / Air conditioning / Industrial Process
Duty chart			
Construction	High-efficiency in-line pump (as single or double pump) with EC motor, electronically controlled, in glanded design 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	Glanded pump/double 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	Pumping of heating water, cold water and water-glycol mixtures without abrasive substances in heating, cold water and cooling systems
Volume flow $Q_{max}$	380 m³/h	800 m³/h	1,170 m³/h
Delivery head $H_{max}$	65 m	65 m	108 m
Special features	<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>→ 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>→ 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> <li>→ Motors with efficiency class IE3 for motors <math>\geq 0.75</math> kW</li> </ul>
Technical data	<ul style="list-style-type: none"> <li>→ Fluid temperature <math>-20^{\circ}\text{C}</math> to <math>+140^{\circ}\text{C}</math></li> <li>→ Mains connection: 3~380 V ~3~480 V (<math>\pm 10\%</math>), 50/60 Hz</li> <li>→ Minimum efficiency index (MEI): up to 6.0 kW MEI <math>\geq 0.7</math>, from 11 kW MEI <math>\geq 0.4</math></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 <math>-20^{\circ}\text{C}</math> to <math>+140^{\circ}\text{C}</math></li> <li>→ Mains connection: 3~440 V <math>\pm 10\%</math>, 50/60 Hz, 3~400 V <math>\pm 10\%</math>, 50/60 Hz, 3~380 V <math>-5\%/+10\%</math>, 50/60 Hz</li> <li>→ Minimum efficiency index (MEI) <math>\geq 0.4</math></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 <math>-20^{\circ}\text{C}</math> to <math>+140^{\circ}\text{C}</math></li> <li>→ Mains connection 3~400 V, 50 Hz</li> <li>→ Minimum efficiency index (MEI) <math>\geq 0.4</math></li> <li>→ Nominal diameter DN 32 to DN 250</li> <li>→ Max. operating pressure 16 bar (25 bar on request)</li> </ul>
Equipment/function	<ul style="list-style-type: none"> <li>→ Control modes: <math>\Delta p</math>-c, <math>\Delta p</math>-v, PID control, <math>n</math>=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: <math>\Delta p</math>-c, <math>\Delta p</math>-v, PID control, <math>n</math>=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>→ Single-stage, low-pressure centrifugal pump in in-line design with</li> <li>→ Mechanical seal</li> <li>→ Flange connection with pressure measuring connection R 1/8</li> <li>→ Lantern</li> <li>→ Coupling</li> <li>→ IEC standard motor</li> <li>→ DL with switchover valve</li> </ul>

	Glanded Monobloc Pumps	Glandless Premium Smart Pumps	Variable Speed Pump Control Unit for HVAC System
	 <p>Series extension</p>		
Series	Wilo-CronoBloc-BL	Wilo-Stratos MAXO Wilo-Stratos MAXO-D	Wilo - CCS/CCP HVAC System
Field of application	Heating / Air conditioning / Industrial Process	Heating / Air conditioning	Variable speed Pump Control unit for HVAC System
Duty chart			
Construction	Glanded pump in monobloc design with flange connection	Smart glandless circulator with screwed connection or flange connection, EC motor with integrated power adjustment	
Application	Pumping of heating water, cold water and water-glycol mixtures without abrasive substances in heating, cold water and cooling systems	Hot-water heating systems of all kinds, air-conditioning systems, closed cooling circuits, industrial circulation systems	CCS (Comfort controller secondary) suitable for secondary variable chilled water systems CCP (Comfort controller primary) suitable for primary variable chilled water systems
Volume flow $Q_{max}$	767 m³/h	110 m³/h	
Delivery head $H_{max}$	150 m	16 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>→ 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>→ Suitable upto 8 Pumps with single/multiple DPTs.</li> <li>→ Microprocessor based logic controller with builtin PID, auto/manual operation facility.</li> <li>→ Embedded logic to prevent pump hunting, pump flow surges and motor overheating.</li> <li>→ Multi color, wide screen (5.6"), High resolution HMI with 24VDC power supply.</li> <li>→ Multi level user password security.</li> <li>→ Alpha Numerical Alarm and Fault data login.</li> <li>→ End of curve protection (flow meter required).</li> <li>→ Set value v/s process value graph.</li> <li>→ BMS control Via Modbus RTU Protocol with Communication port RS 485/RS 232/USB.</li> <li>→ Each VFD data read out on screen.</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 -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>	
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 1/8</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>→ 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>→ Optional Fetures</li> <li>→ IP55 enclosre</li> <li>→ Top cable entry panel</li> <li>→ With bypass starter</li> <li>→ Other communication protocol like BACNET, Ethernet TCP/IP</li> </ul>



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Pioneering for You

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