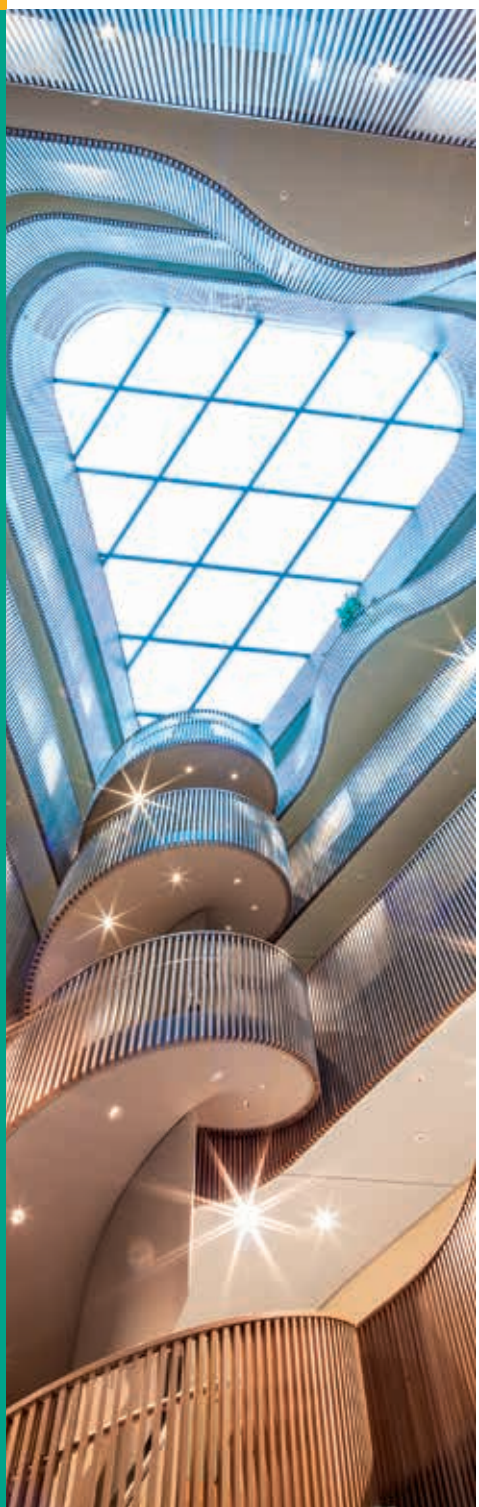
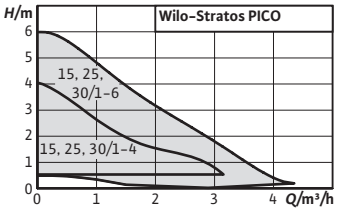
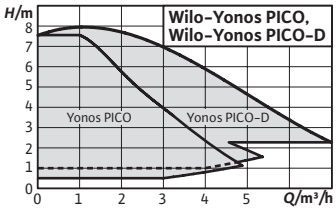
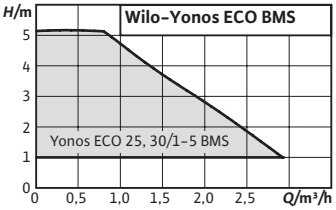
Pioneering for You

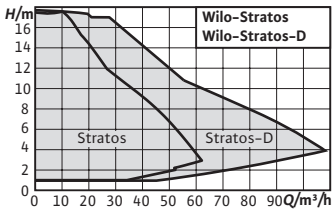
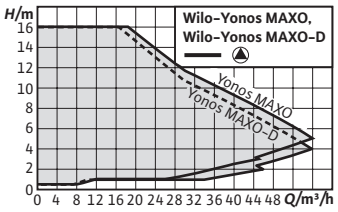
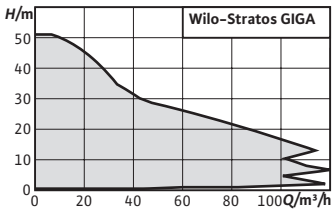
Delivery range – Edition 2016 – 50 Hz

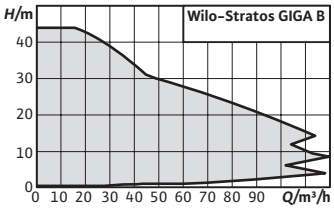
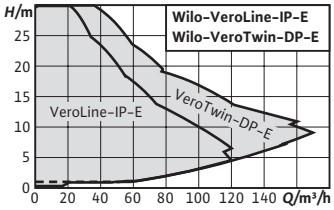
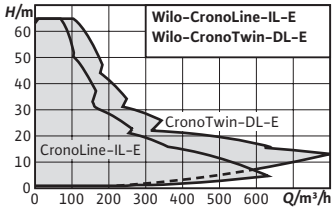
General overview

Our pumps and systems for heating, air-conditioning and cooling, water supply, special applications, drainage, sewage and industrial processes.



Product range	Glandless premium high-efficiency pumps	Glandless standard high-efficiency pumps	Glandless standard high-efficiency pumps
Series	Wilo-Stratos PICO	Wilo-Yonos PICO Wilo-Yonos PICO-D	Wilo-Yonos ECO...-BMS
Field of application	Heating, air-conditioning, cooling	Heating, air-conditioning, cooling	Heating, air-conditioning, cooling
Duty chart			
Design	Glandless circulation pump with screwed connection, EC motor and automatic power adjustment	Glandless circulation pump with screwed connection, EC motor and automatic power adjustment	Glandless circulation pump 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 systems, closed cooling circuits, industrial circulation systems
Volume flow Q max.	4 m³/h	5.5 m³/h	3 m³/h
Delivery head H max.	6 m	8 m	5 m
Technical data	→ Fluid temperature +2 °C to +110 °C → Mains connection 1~230 V, 50 Hz → Energy Efficiency Index (EEI) ≤ 0.20 (see also rating plate) → Protection class IP X4D → Screwed connection Rp ½, Rp 1 and Rp 1¼ → Max. operating pressure 10 bar	→ Fluid temperature -10 °C to +95 °C → Mains connection 1~230 V, 50 Hz → Energy Efficiency Index (EEI) ≤ 0.20 (see also rating plate) → Protection class IP X2D → Screwed connection Rp ½, Rp 1 and Rp 1¼ → Max. operating pressure 6 bar	→ Fluid temperature -10 °C to +110 °C → Mains connection 1~230 V, 50 Hz → Energy Efficiency Index (EEI) ≤ 0.20 (see also rating plate) → Protection class IP X4D → Screwed connection Rp 1 and Rp 1¼ → Max. operating pressure 10 bar
Equipment/function	→ Control mode: Δp-c and Δp-v (Dynamic Adapt) → Automatic setback operation → Automatic venting routine → Automatic deblocking function → Display of the current power consumption or current flow and cumulative kWh → Reset function for the electricity meter or to factory settings → Hold function (Key lock) → Blocking-current proof motor → Particle filter → Quick electrical connection with Wilo-Connector → Options: version with red brass pump housing; version with short port-to-port length 130 mm	→ Control mode: Δp-c and Δp-v → Setting of pump output (delivery head) → Automatic venting function → Automatic deblocking function → LED display for setting the setpoint and displaying actual consumption in watts → Blocking-current proof motor → Particle filter → Quick electrical connection with Wilo-Connector → Options: – Versions with short port-to-port length 130 mm	→ Control modes: Δp-c, Δp-v and manual control mode (n = constant) → Control input “Analog In 0 – 10 V” (remote speed control) → Collective fault signal (potential-free NC contact) → Control cable (4-core, 1.5 m) for connecting SSM and 0–10 V → Quick electrical connection with Wilo-Connector → Blocking-current proof motor → Deblocking function → Standard thermal insulation for heating applications
Special features	→ Use in heating and air-conditioning system from +2 °C to +110 °C → Only 3 watts min. power consumption → Display for showing the current power consumption or current flow and the cumulative kWh → Wilo-Connector → Additional functions: Dynamic Adapt, venting routine, night setback function, key lock and reset function	→ LED display for setting the setpoint in 0.1 m steps and for showing the current consumption → Electrical connection with the Wilo-Connector – no tools needed → Unique pump venting function → Easy set-up when replacing an uncontrolled standard pump with pre-selectable speed stages, e.g. Wilo-Star-RS → Very high starting torque for safe start-up	→ Potential-free collective fault signal (SSM) for connection to external monitoring unit (e.g. building automation) and control input 0–10 V → Control cable (4-core, 1.5 m) for connecting SSM and 0–10 V → Wilo-Connector → Thermal insulation as standard → Pump housing with cataphoretic coating protects against corrosion due to condensation formation
Information	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Heating, air-conditioning, cooling**	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Heating, air-conditioning, cooling**	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Heating, air-conditioning, cooling**

Product range	Glandless premium high-efficiency pumps	Glandless standard high-efficiency pumps	Glanded high-efficiency pumps in in-line design
Series	Wilo-Stratos Wilo-Stratos-D	Wilo-Yonos MAXO Wilo-Yonos MAXO-D	Wilo-Stratos GIGA
Field of application	Heating, air-conditioning, cooling	Heating, air-conditioning, cooling	Heating, air-conditioning, cooling, industrial process
Duty chart			
Design	Glandless circulation pump with screwed connection or flange connection, EC motor and automatic power adjustment	Glandless circulation pump with screwed connection or flange connection, EC motor and automatic power adjustment	High-efficiency in-line pump with EC motor, electronically controlled, with flange connection, in glanded design
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	Pumping of heating water (in accordance with VDI 2035), cold water and water-glycol mixtures without abrasive substances in heating, cold water and cooling systems
Volume flow Q max.	109 m³/h	55 m³/h	120 m³/h
Delivery head H max.	17 m	16 m	52 m
Technical data	→ Fluid temperature -10 °C to +110 °C → Mains connection 1~230 V, 50 Hz → Energy Efficiency Index (EEI) ≤ 0.20 (EEI ≤ 0.23 for double pumps) → Protection class IP X4D → Nominal diameter Rp 1 to DN 100 → Max. operating pressure Screw-end pumps 10 bar Flange-end pumps 6/10 bar or 6 bar (special version: 10 or 16 bar)	→ Fluid temperature -20 °C to +110 °C → Mains connection 1~230 V, 50 Hz → Energy Efficiency Index (EEI) ≤ 0.20 (EEI ≤ 0.23 for double pumps) → Protection class IP X4D → Nominal diameter Rp 1 to DN 100 → Max. operating pressure Screw-end pumps 10 bar Flange-end pumps 6/10 bar	→ Fluid temperature -20 °C to +140 °C → Mains connection: 3~380 V - 3~480 V (±10 %), 50/60 Hz → Minimum efficiency index (MEI) ≥ 0.7 → Protection class IP 55 → Max. operating pressure 16 bar up to +120 °C, 13 bar up to +140 °C
Equipment/function	→ EC motor → Control modes: Δp-c, Δp-v, Δp-T → Volume flow limitation with Q-Limit function (via IR-Stick) → Automatic setback operation → Dual pump management → Rotatable, graphical pump display → Remote control via infrared interface (IR-Stick/IR-Monitor) → Integrated motor protection → System expansion by means of retrofitable interface modules for communication: Modbus, BACnet, CAN, LON, PLR etc. → Pump housing with cataphoretic coating → Combination flanges PN 6/PN 10 (for DN 32 to DN 65)	→ Control modes: Δp-c, Δp-v, 3 speed stages → LED display for setting the required delivery head → Quick electrical connection with Wilo plug → Motor protection, fault signal light and contact for collective fault signal → Pump housing with cataphoretic coating for external corrosion protection → Combination flanges PN 6/PN 10 (for DN 40 to DN 65)	→ Operating modes: Δp-c, Δp-v, PID control, n=constant → Manual functions: E.g. differential pressure setpoint setting, manual control mode, error acknowledgement → External control functions: E.g Overriding Off, external pump cycling (effective only in double pump operation mode), analogue input 0-10 V/0-20 mA for manual control mode (DDC) → Infrared interface for wireless data exchange with IR-Monitor/IR-Stick, plug-in position for IF-Modules for connection to building automation → Safety functions: E.g. full motor protection, access disable → Dual pump management
Special features	→ Energy savings through greater system efficiency with the Q-Limit function → Improved Energy Efficiency Index (EEI) ≤0.20 for all single pumps. → Optimised display for better readability → Space-saving installation due to compact design and location-dependent LC display → Modular concept for connection of all conventional bus systems (e.g. Modbus, BACnet, CAN, LON and PLR) → Tried and tested quality and reliability	→ LED display for indication of set delivery head and fault codes → Quick setting when replacing an uncontrolled standard pump with pre-set speed stages, e.g. TOP-S → Electrical connection with Wilo plug → Collective fault signal ensures system availability → Pump housing with cataphoretic (KTL) coating protects against corrosion due to condensation	→ Innovative high-efficiency pump for maximum total-system efficiency → High-efficiency EC motor (efficiency above IE4 limit values → Highly efficient hydraulics, optimally adapted to the EC motor technology with optimised efficiency, minimum efficiency index (MEI) ≥ 0.7 according to ErP Directive 2009/125/EC → Control range is up to three times higher than that of conventional electronically controlled pumps
Information	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Heating, air-conditioning, cooling**	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Heating, air-conditioning, cooling**	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Heating, air-conditioning, cooling**

Product range	Glanded high-efficiency pumps in monobloc design.	Glanded energy-saving pumps in in-line design	Glanded energy-saving pumps in in-line design
Series	Wilo-Stratos GIGA B	Wilo-VeroLine-IP-E Wilo-VeroTwin-DP-E	Wilo-CronoLine-IL-E Wilo-CronoTwin-DL-E
Field of application	Heating, air-conditioning, cooling, industrial process	Heating, air-conditioning, cooling, industrial process	Heating, air-conditioning, cooling, industrial process
Duty chart			
Design	High-efficiency monobloc pump with EC motor and electronic power adjustment in glanded pump design, with flange connection and mechanical shaft seal.	Energy-saving in-line pump/in-line double pump with electronic duty adaptation 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 with electronic duty adaptation in glanded construction. Version as single-stage low-pressure centrifugal pump with flange connection and mechanical seal
Application	Pumping of heating water (in accordance with VDI 2035), cold water and water-glycol mixtures without abrasive substances in heating, cold water and cooling systems	Pumping of heating water (in accordance with VDI 2035), cold water and water-glycol mixtures without abrasive substances in heating, cold water and cooling systems	Pumping of heating water (in accordance with VDI 2035), cold water and water-glycol mixtures without abrasive substances in heating, cold water and cooling systems
Volume flow Q max.	120 m³/h	170 m³/h	800 m³/h
Delivery head H max.	52 m	30 m	65 m
Technical data	→ Fluid temperature -20 °C to +140 °C → Mains connection: 3~380 V -3~480 V (±10 %), 50/60 Hz → Minimum efficiency index (MEI) ≥ 0.7 → Protection class IP 55 → Max. operating pressure 16 bar up to +120 °C, 13 bar up to +140 °C	→ Fluid temperature -20 °C to +120 °C → Mains connection: 3~440 V ±10 %, 50/60 Hz 3~400 V ±10 %, 50/60 Hz 3~380 V -5 %/+10 %, 50/60 Hz → Minimum efficiency index (MEI) ≥ 0.4 → Protection class IP 55 → Nominal diameter DN 32 to DN 80 → Max. operating pressure 10 (16) bar	→ Fluid temperature -20 °C to +140 °C → Mains connection: 3~440 V ±10 %, 50/60 Hz 3~400 V ±10 %, 50/60 Hz 3~380 V -5 %/+10 %, 50/60 Hz → Minimum efficiency index (MEI) ≥ 0.4 → Protection class IP 55 → Nominal diameter DN 40 to DN 80 → Max. operating pressure 16 bar
Equipment/function	→ Operating modes: Δp-c, PID control, n=constant → Manual functions: E.g. differential pressure setpoint setting, manual control mode, error acknowledgement → External control functions: E.g. Overriding Off, External pump cycling, analogue input 0-10 V/0-20 mA for manual control mode (DDC) → Infrared interface for wireless data exchange with IR-Monitor/IR-Stick, Plug-in position for IF-Modules for connection to building automation → Safety functions: E.g. full motor protection, access disable	→ Operating modes: Δp-c, Δp-v, PID control, n=constant → Manual functions: E.g. differential pressure setpoint setting, manual control mode, error acknowledgement → External control functions: E.g. Overriding Off, external pump cycling (effective only in double pump operation mode), analogue input 0-10 V/0-20 mA for manual control mode (DDC) → Infrared interface for wireless data exchange with IR-Monitor/IR-Stick, plug-in position for IF-Modules for connection to building automation → Safety functions: E.g. full motor protection, access disable	→ Operating modes: Δp-c, Δp-v, PID control, n=constant → Manual functions: E.g. differential pressure setpoint setting, manual control mode, error acknowledgement → External control functions: E.g. Overriding Off, external pump cycling (effective only in double pump operation mode), analogue input 0-10 V/0-20 mA for manual control mode (DDC) → Infrared interface for wireless data exchange with IR-Monitor/IR-Stick, plug-in position for IF-Modules for connection to building automation → Safety functions: E.g. full motor protection, access disable
Special features	→ Innovative high-efficiency pump with principal dimensions in accordance with EN 733 → High-efficiency EC motor (efficiency above IE4 limit values) → Highly efficient hydraulics, optimally adapted to the EC motor technology, with optimised efficiency, minimum efficiency index (MEI) ≥ 0.7 according to ErP Directive 2009/125/EC → Control range is up to three times higher than that of conventional electronically controlled pumps	→ Energy savings due to integrated electronic control → Optional interfaces for bus communication using plug-in IF-Modules → Simple operation with red-button technology and display → Integrated dual pump management → Integrated full motor protection with trip electronics → Motors with efficiency class IE4	→ Energy savings due to integrated electronic control → Optional interfaces for bus communication using plug-in IF-Modules → Simple operation with red-button technology and display → Integrated dual pump management → Integrated full motor protection with trip electronics → 2-pole pumps: Motors with efficiency class IE4; 4-pole-pumps: Motors with efficiency class IE4 for motors from 11 kW up to 22 kW
Information	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Heating, air-conditioning, cooling**	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Heating, air-conditioning, cooling**	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Heating, air-conditioning, cooling**

ErP READY — APPLIES TO EUROPEAN DIRECTIVE FOR ENERGY RELATED PRODUCTS

Series modification

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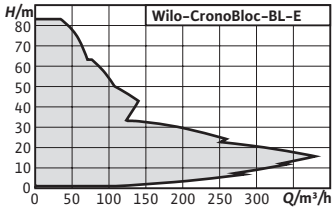
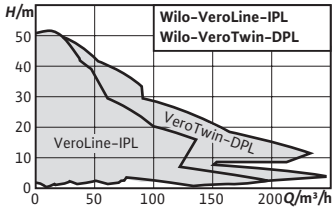
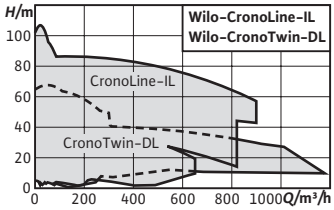
Series extension

Product range	Glanded energy-saving pumps in monobloc design	Glanded standard pumps in in-line design	Glanded standard pumps in in-line design
Series	Wilo-CronoBloc-BL-E	Wilo-VeroLine-IPL Wilo-VeroTwin-DPL	Wilo-CronoLine-IL Wilo-CronoTwin-DL
Field of application	Heating, air-conditioning, cooling, industrial process	Heating, air-conditioning, cooling, industrial process	Heating, air-conditioning, cooling, industrial process
Duty chart			
Design	Energy-saving pump in monobloc design with electronic duty adaptation 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 screwed connection or flange connection	Glanded pump/double pump in in-line design with flange connection
Application	Pumping of heating water (in accordance with VDI 2035), cold water and water-glycol mixtures without abrasive substances in heating, cold water and cooling systems	Pumping of heating water (in accordance with VDI 2035), cold water and water-glycol mixtures without abrasive substances in heating, cold water and cooling systems	Pumping of heating water (in accordance with VDI 2035), cold water and water-glycol mixtures without abrasive substances in heating, cold water and cooling systems
Volume flow Q max.	380 m³/h	245 m³/h	1,170 m³/h
Delivery head H max.	84 m	52 m	108 m
Technical data	→ Fluid temperature -20 °C to +140 °C → Mains connection: 3~440 V ±10 %, 50/60 Hz 3~400 V ±10 %, 50/60 Hz 3~380 V -5 %/+10 %, 50/60 Hz → Minimum efficiency index (MEI) ≥ 0.4 → Protection class IP 55 → Nominal diameter DN 32 to DN 125 → Max. operating pressure 16 bar (120 °C)	→ Fluid temperature -20 °C to +120 °C → Mains connection 3~400 V, 50 Hz → Minimum efficiency index (MEI) ≥ 0.4 → Protection class IP 55 → Nominal diameter Rp 1 to DN 100 → Max. operating pressure 10 bar (special version: 16 bar)	→ Fluid temperature -20 °C to +140 °C → Mains connection 3~400 V, 50 Hz → Minimum efficiency index (MEI) ≥ 0.4 → Protection class IP 55 → Nominal diameter DN 32 to DN 250 → Max. operating pressure 16 bar (25 bar on request)
Equipment/function	→ Operating modes: Δp-c (with external DDG), PID control, n=constant → Manual functions: E.g. differential pressure setpoint setting, manual control mode, error acknowledgement → External control functions: E.g. Overriding Off, analogue input 0-10 V/0-20 mA for manual control mode (DDC) → Infrared interface for wireless data exchange with IR-Monitor/IR-Stick, plug-in position for IF-Modules for connection to building automation → Safety functions: E.g. full motor protection, access disable	Single-stage, low-pressure centrifugal pump in in-line design with → Mechanical seal → Flange connection with pressure measuring connection R ⅛ → Motor with one-piece shaft → DPL with switchover valve → Motors with efficiency class IE3 for motors ≥ 7.5 kW	Single-stage, low-pressure centrifugal pump in in-line design with → Mechanical seal → Flange connection with pressure measuring connection R ⅛ → Lantern → Coupling → IEC standard motor → DL with switchover valve → Motors with efficiency class IE3 for motors ≥ 7.5 kW
Special features	→ Energy savings due to integrated electronic control → Optional interfaces for bus communication using plug-in IF-Modules → Simple operation due to tried-and-tested red-button technology and display → Integrated full motor protection with trip electronics → Meets user requirements due to performance and main dimensions in accordance with EN 733 (DIN for norm pumps) → Motors with efficiency class IE4 for motors from 11 kW up to 22 kW	→ High standard of corrosion protection thanks to cataphoretic coating → Standard condensate drainage holes in the motor housings and lanterns → Series design: motor with one-piece shaft → Version N: Standard motor B5 or V1 with stainless steel plug shaft → Bidirectional, force-flushed mechanical seal → DPL: Main-/standby operation or peak-load operation (via additional external device)	→ Reduced life cycle costs thanks to optimised efficiency → Standard condensate drainage holes in the motor housings → Can be used flexibly in air-conditioning and cooling systems, with application benefits due to direct draining of condensate → High standard of corrosion protection → Worldwide availability of standard motors (according to Wilo specifications) and standard mechanical seals → Main/standby mode or peak-load operation (by means of external auxiliary device)
Information	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Heating, air-conditioning, cooling**	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Heating, air-conditioning, cooling**	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Heating, air-conditioning, cooling**

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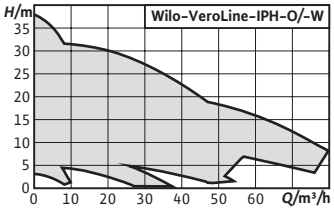
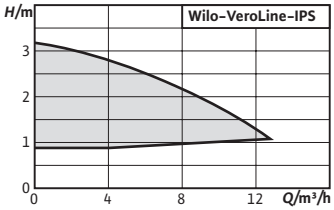
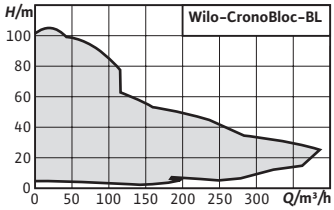
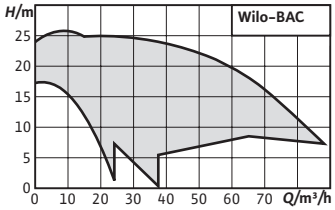
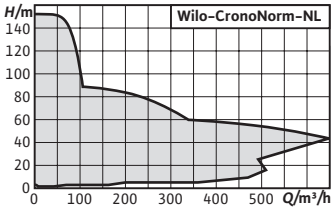
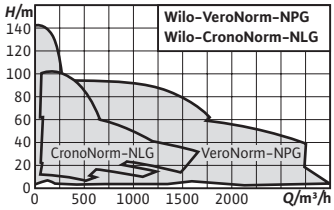
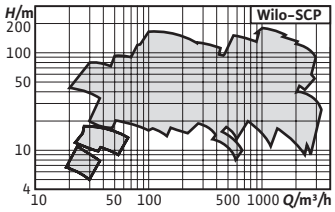
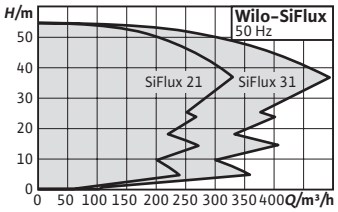
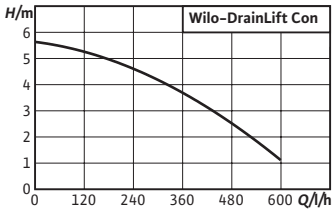
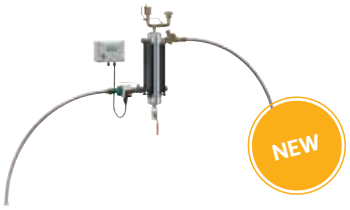
Product range	Special glanded pumps in in-line design	Special glanded pumps in in-line design	Glanded monobloc pumps
Series	Wilo-VeroLine-IPH-W Wilo-VeroLine-IPH-O	Wilo-VeroLine-IPS	Wilo-CronoBloc-BL
Field of application	Heating, air-conditioning, cooling, industrial process	Heating, air-conditioning, cooling, industrial process	Heating, air-conditioning, cooling, industrial process
Duty chart			
Design	Glanded pump in in-line design with flange connection	Glanded pump in in-line design with screwed connection or flange connection	Glanded pump in monobloc design with flange connection
Application	IPH-W: For pumping hot water without abrasive substances in closed industrial circulation systems, district heating, closed heating systems, etc. IPH-O: For pumping heat transfer oil in closed industrial circulation systems	→ For pumping cold and hot water (in accordance with VDI 2035) without abrasive substances in heating, cold water and cooling water systems	→ Pumping of heating water (in accordance with VDI 2035), cold water and water-glycol mixtures without abrasive substances in heating, cold water and cooling systems
Volume flow Q max.	80 m³/h	13 m³/h	377 m³/h
Delivery head H max.	38 m	3 m	105 m
Technical data	→ Fluid temperature IPH-W: -10 °C to +210 °C (at max. 23 bar) → Fluid temperature IPH-O: -10 °C to +350 °C (at max. 9 bar) → Mains connection 3~400 V, 50 Hz → Protection class IP 55 → Nominal diameter DN 20 to DN 80	→ Fluid temperature -10 °C to +140 °C → Mains connection 3~230 V, 3~400 V, 50 Hz → Minimum efficiency index (MEI) ≥ 0.4 → Protection class IP 55 → Nominal diameter Rp 1, DN 40 and DN 50 → Max. operating pressure 10 bar, or 6 bar for flange connection	→ Fluid temperature -20 °C to +140 °C → Mains connection 3~400 V, 50 Hz → Minimum efficiency index (MEI) ≥ 0.4 → Protection class IP 55 → Nominal diameter DN 32 to DN 150 → Max. operating pressure 16 bar (25 bar on request)
Equipment/function	Single-stage, low-pressure centrifugal pump in in-line design with → Mechanical seal → Flange connection → Lantern → Motor with special shaft	Single-stage, low-pressure centrifugal pump in in-line design with → Mechanical seal or stuffing box packing → Screwed or flange connection with pressure measuring connection R ⅛ → Standard motor	Single-stage low-pressure centrifugal pump in monobloc design, with axial suction port and radially arranged pressure port with → Mechanical seal → Flange connection with pressure measuring connection R ⅛ → Lantern → Coupling → Motors with efficiency class IE3 for motors ≥ 0.75 kW
Special features	→ Self-cooled mechanical seal, independent of direction of rotation → Great variety of applications due to a wide fluid temperature range without additional wearing parts	→ Worldwide availability of the standard motors used → Bidirectional force-flushed mechanical seal	→ Reduced life-cycle costs through optimised efficiency levels → High corrosion protection through cataphoresis coating of the cast iron components → Standard condensate drainage holes in the motor housings → High worldwide availability of standard motors (according to Wilo specifications) and mechanical seals → Meets user requirements due to performance and main dimensions in accordance with EN 733 (DIN for norm pumps)
Information	**Online catalogue: productfinder.wilo.com**	**Online catalogue: productfinder.wilo.com**	**Online catalogue: productfinder.wilo.com**

Product range	Glanded monobloc pumps	Standard glanded pumps	Standard glanded pumps
Series	Wilo-BAC	Wilo-CronoNorm-NL	Wilo-CronoNorm-NLG Wilo-VeroNorm-NPG
Field of application	Heating, air-conditioning, cooling, industrial process	Heating, air-conditioning, cooling, water supply, industrial process	Heating, air-conditioning, cooling, water supply, industrial process
Duty chart			
Design	Glanded pump in monobloc design with screwed connection or Victaulic connection	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
Application	→ 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 and water-glycol mixtures without abrasive substances in heating, cold water and cooling systems → Applications in municipal water supply, irrigation, building services, general industry, power stations, etc.	→ Pumping of heating water (in accordance with VDI 2035), cold water and water-glycol mixtures without abrasive substances in heating, cold water and cooling systems → Applications in municipal water supply, irrigation, building services, general industry, power stations, etc.
Volume flow Q max.	87 m³/h	650 m³/h	2,800 m³/h
Delivery head H max.	26 m	150 m	140 m
Technical data	→ Fluid temperature -15 °C to +60 °C → Mains connection 3~400 V, 50 Hz → Minimum efficiency index (MEI) ≥ 0.4 → Protection class IP 54 → 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) → Max. operating pressure 6.5 bar	→ Fluid temperature -20 °C to +120 °C → Mains connection 3~400 V, 50 Hz → Minimum efficiency index (MEI) ≥ 0.4 → Protection class IP 55 → Nominal diameter on suction side DN 50 to DN 500 → Nominal diameter on pressure side DN 32 to DN 500 → Max. operating pressure: varies according to type and application – up to 16 bar	→ Fluid temperature -20 °C to +120 °C (depending on type) → Mains connection 3~400 V, 50 Hz → Minimum efficiency index (MEI) ≥ 0.4 → Protection class IP 55 → Nominal diameters: DN 150 to DN 500 (depending on type) → Max. operating pressure: varies according to type and application – up to 16 bar
Equipment/function	Single-stage low-pressure centrifugal pump in monobloc design, with axial suction port and radially arranged pressure port → Motors with efficiency class IE3	→ Single-stage horizontal spiral housing pump with bearing bracket and exchangeable casing wear rings in process design → Shaft sealing with mechanical seals in accordance with EN 12756 or packing stuffing box → Spiral housing with cast pump bases → Shaft coupling with spacer coupling → Motors with efficiency class IE3 for motors ≥ 0.75 kW	→ Single-stage horizontal spiral housing pump with bearing bracket and exchangeable casing wear rings (NLG only) in process design → Shaft sealing with mechanical seals in accordance with EN 12756 or packing stuffing box → Spiral housing with cast pump bases → Greased grooved ball bearings for bearing of pump shaft → Motors with efficiency class IE3
Special features	→ Reduced life cycle costs through optimised efficiency levels → Pump housing in plastic design → Version with Victaulic or threaded connection (BAC 70/135... only with Victaulic connection)	→ Reduced life-cycle costs through optimised efficiency levels → Bidirectional, force-flushed mechanical seal → Low NPSH values, best cavitation properties → Shaft coupling with or without spacer coupling	NLG: → Reduced life cycle costs through optimised efficiency → Mechanical seal independent of the direction of rotation → Interchangeable casing wear ring → Permanently lubricated, generously dimensioned roller bearings NPG: → Suitable for temperatures up to 140 °C → Back-pull-out version → Extension of the DIN EN 733 product range
Information	**Online catalogue: productfinder.wilo.com**	**Online catalogue: productfinder.wilo.com**	**Online catalogue: productfinder.wilo.com**

Product range	Axially split case pumps	Glanded energy-saving pumps Multi-pump systems	Condensate lifting units
Series	Wilo-SCP	Wilo-SiFlux	Wilo-DrainLift Con
Field of application	Cooling, air-conditioning, water distribution/boosting, industrial process	Heating, air-conditioning, cooling, industrial process	Heating, air-conditioning, cooling
Duty chart			
Design	Low-pressure centrifugal pump with axially split housing mounted on a baseplate	Highly efficient, 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 glanded in-line pumps switched in parallel	Automatic condensate lifting unit
Application	→ Pumping heating water in accordance with VDI 2035, water-glycol mixtures, cooling/cold water and process water → Applications in municipal water supply, irrigation, building services, general industry, power stations, etc.	For pumping heating water (in accordance with VDI 2035), 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 (such as refrigerators, refrigerated display cases and evaporators)
Volume flow Q max.	3,400 m³/h	490 m³/h	0.6 m³/h
Delivery head H max.	245 m	55 m	5.4 m
Technical data	→ Fluid temperature -8 °C to +120 °C → Mains connection 3~400 V, 50 Hz → Protection class IP 55 → Nominal diameters - Suction side: DN 65 to DN 500 → Pressure side: DN 50 to DN 400 → Max. operating pressure: 16 or 25 bar, depending on type	→ Pump type: VeroLine-IP-E or CronoLine-IL-E → Mains connection: 3~230/400 V, 50 Hz ±10 % → Fluid temperature: 0 °C to +120 °C → Pipe connections: DN 125 to DN 300 → Flanges: PN 16, according EN 1092-2 → Max. permissible operating pressure: 10 bar (IP-E), 16 bar (IL-E)	→ Mains connection 1~230 V, 50 Hz → Operating mode S3 → Max. fluid temperature 50 °C → Protection class IP 20 → Pressure connection 10 mm → Inlet connections 19/30 mm → Gross tank volume 1.2 l
Equipment/function	1- or 2-stage, low-pressure centrifugal pump in monobloc design → Deliverable as complete unit or without motor or only pump hydraulics → Shaft sealing with mechanical seal or stuffing box packing → 4-pole and 6-pole motors Materials: → Pump housing: EN-GJL-250 → Impeller: G-CuSn5 ZnPb → Shaft: X12Cr13	→ Number of pumps: 2+1 or 3+1 (2 or 3 pumps in operation, 1 standby pump each) → Automatic pump control via Wilo-SCe → Parts that come in contact with the fluid are corrosion-resistant → Base frame made of galvanised steel, with height-adjustable vibration absorbers for insulation against structure-borne noise → Distributor steel, with corrosion-resistant coating → Shut-off valves, non-return valve, pressure gauge and premounted seals → Differential pressure sensor	→ Ready-to-plug system → Level control with float switch → Alarm signal via potential-free contact (NC/NO contact) → Integrated non-return valve → Fixation material → 5 m pressure hose
Special features	→ Higher capacities up to 17,000 m³/h on request → Special motors and other materials on request	→ Quick and easy installation → Energy-saving: Operation in partial load area according to current needs → Reliable system thanks to optimally matched components → Compact design, good accessibility to all components	→ Low-noise operation (≤ 43 dB[A]) → Standard alarm contact (NC/NO contact) → Motor unit reversible by 180° → Variable inlets/drains → Suitable for condensates with a pH value ≥ 2.4
Information	**Online catalogue: productfinder.wilo.com**	**Online catalogue: productfinder.wilo.com**	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Heating, air-conditioning, cooling**



Product range	Particle separator systems for closed HVAC loops	Particle separator systems for closed HVAC loops	Control devices
Series	Wilo-SiClean	Wilo-SiClean Comfort	Wilo-CC/CCe-HVAC system Wilo-SC/SC-FC/SCe-HVAC system Wilo-VR-HVAC system
Field of application	Heating, air-conditioning, cooling	Heating, air-conditioning, cooling	Heating, air-conditioning, cooling
Duty chart	no illustration	no illustration	no illustration
Design	Compact particle separator kit, consisting of mechanical and hydraulic components. Manual emptying of the system.	Fully-automatic, compact particle separator, provided as "Plug & Play" version, consisting of mechanical and hydraulic components. The system is drained automatically.	
Application	SiClean removes magnetic and non-magnetic particles from heating systems via natural physical phenomena. Installation in commercial properties and heating/air-conditioning systems for district heating.	SiClean Comfort removes particles from heating systems using natural physical phenomena. For installation in commercial properties and heating/air-conditioning systems for district heating.	Switchgear for controlling 1 to 6 pumps
Volume flow Q max.	4 m^3/h	47 m^3/h	–
Delivery head H max.	–	–	–
Technical data	→ Fluid temperature 0 °C to +95 °C → Mains connection: 1~230 V, 50 Hz	→ Fluid temperature 0 °C to +95 °C → Mains connection: 3~400 V, 50 Hz	–
Equipment/function	→ Anti-corrosive, hydraulic components → Fabric-reinforced hoses connected to inlet and outlet of the particle separator → Pre-assembled venting unit for expulsion of microbubbles → Movable magnetic rods for separation of iron oxide particles → Volume flow limiter → Manual purge valve for draining of collected particles → Switchbox for monitoring the circulation pump	→ Corrosion-resistant, hydraulic components → Fabric-reinforced hoses connected to inlet and outlet of the particle separator → Pre-assembled flushing device including electronic drain valve and additional safety valve → Automatic draining of the particle collection chamber → SC switchgear → Separator for removing magnetic and non-magnetic particles	Wilo-CC-HVAC system → Comfort control system for 1 to 6 pumps switched in parallel, with fixed speed Wilo-CCe-HVAC system → Comfort control system for 1 to 6 pumps with integrated electronics/speed control or external frequency converter control Wilo-VR-HVAC system → Vario controller for 1 to 4 pumps switched in parallel, with integrated speed control Wilo-SC-HVAC system → Smart controller for 1 to 4 pumps switched in parallel → SC and SC-FC versions for standard pumps with fixed speed → SCe version for infinitely variable, electronically controlled pumps or pumps with integrated frequency converter
Special features	→ Removal of magnetic and non-magnetic particles from the medium, venting of micro bubbles → High cleaning efficiency due to physical effects (gravity, filtration...) → Easy to use due to ease of installation, maintenance, and simplified settings → Corrosion-resistant thanks to stainless steel particle separator	→ High efficiency via combination of physical effects → fully automated operation → "Plug & Play" design → Fully automated and adjustable disposal of collected particles in the desludging tank → Highly functional thanks to removal of all magnetic and non-magnetic particles, free air and micro bubbles in the fluid and support for the degasification process	→ Special versions on request
Information	**Online catalogue: productfinder.wilo.com**	**Online catalogue: productfinder.wilo.com**	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Heating, air-conditioning, cooling**

ErP READY

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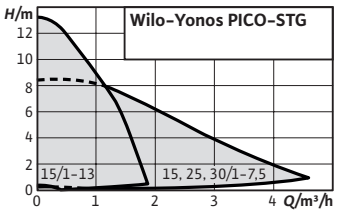
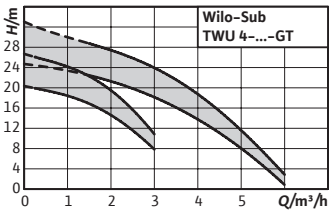
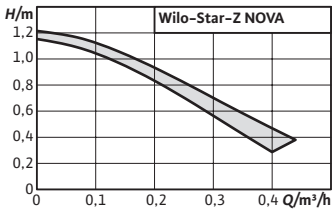
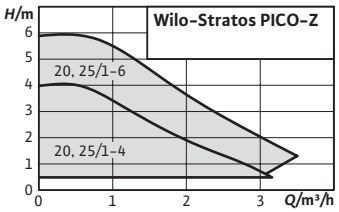
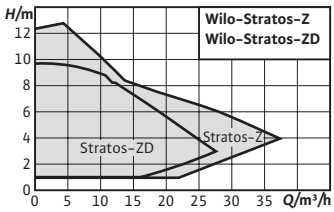
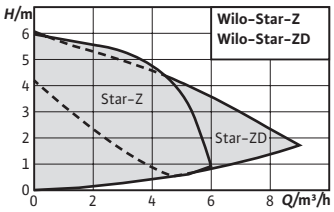
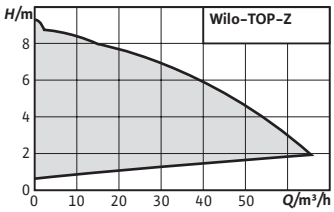
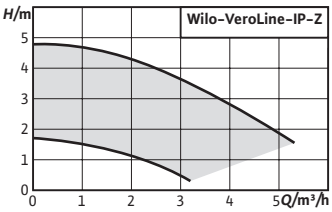
Series modification

Product range	Pump control	Glandless high-efficiency pumps	Submersible pumps
Series	Wilo-IR-Stick, IR-Monitor Wilo-IF-Module Stratos/Wilo-IF-Module Wilo-Protect-Module C	Wilo-Yonos PICO-STG	Wilo-Sub TWU 4 ...-GT
Field of application	Heating, air-conditioning, cooling	Solar thermal and geothermal energy	Geothermal energy systems
Duty chart	no illustration		
Design		Glandless circulation pump with screwed connection, EC motor and automatic power adjustment	Submersible pump, multistage
Application	Wilo-Control products for connecting pumps to building automation	Circulation in solar thermal and geo-thermal energy systems	Water supply from boreholes, wells and rainwater storage for geothermal applications
Volume flow Q max.	–	4.5 m³/h	6 m³/h
Delivery head H max.	–	13 m	33 m
Technical data	–	→ Fluid temperature 0 °C to +110 °C → Mains connection 1~230 V, 50 Hz → Energy Efficiency Index (EEI) ≤ 0.23 → Protection class IP X4D → Screwed connection Rp ½, Rp 1 and Rp 1¼ → Max. operating pressure 10 bar	→ Mains connection: 3~400 V, 50 Hz → Immersed operating mode: S1 → Fluid temperature: 3–30 °C → Minimum flow rate at motor: 0.08 m/s → Max. sand content: 50 g/m³ → Up to 20 starts per hour → Max. immersion depth: 200 m → Minimum efficiency index MEI: ≥ 0.7
Equipment/function	Wilo-IR-Stick/IR-Monitor → Remote control with infrared interface for electronically controlled Wilo pumps Wilo-IF-Modules Stratos/IF-Modules → Plug-in modules for BA connection of Stratos, Stratos GIGA, Stratos GIGA B, IP-E, DP-E, IL-E/DL-E, BL-E, MHIE, MVIE, Helix VE... Discontinued line: (applies to Protect-Module C) Wilo-Protect-Module C → Plug-in module for BA connection of uncontrolled TOP-Z pumps	→ Control modes: Δp-v, manual control mode (n = constant), external speed control with PWM 1 or PWM 2 signal → Interface for PWM 1 or PWM 2 signal → Quick electrical connection with Wilo-Connector → Blocking-current proof motor → Automatic deblocking function → Pump housing with cataphoretic coating	→ Multistage submersible pump with radial or semi-axial impellers → Integrated non-return valve → NEMA coupling → Three-phase motor → Hermetically sealed motors
Special features	–	→ Red button for setting the control mode Δp-v or the fixed speed → External speed control via integrated interface PWM 1 (geothermal) and PWM 2 (solar) → Flexible connection cable with Wilo-Connector → Pump housing with cataphoretic coating protects against corrosion due to condensation formation → Operation and fault display via ring LED	→ Performance-optimised motors for geothermal applications → Parts in contact with the fluid are corrosion-resistant → Integrated non-return valve → Low wear due to floating impellers
Information	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Heating, air-conditioning, cooling**	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Heating, air-conditioning, cooling**	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Water supply**

Series modification

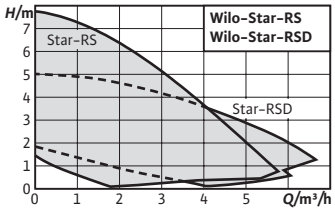
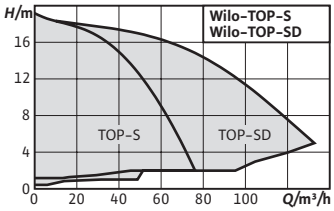
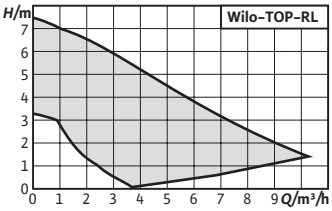
Product range	Glandless high-efficiency pumps	Glandless high-efficiency pumps	Glandless high-efficiency pumps
Series	Wilo-Star-Z NOVA	Wilo-Stratos PICO-Z	Wilo-Stratos-Z Wilo-Stratos-ZD
Field of application	Domestic hot water	Domestic hot water	Domestic hot water
Duty chart			
Design	Glandless circulation pump with screwed connection and blocking-current proof synchronous motor	Glandless circulation pump with screwed connection, EC motor and automatic power adjustment	Glandless circulation pump with screwed connection or flange connection, EC motor and automatic 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 m³/h	3.5 m³/h	41 m³/h
Delivery head H max.	1.2 m	6 m	12 m
Technical data	→ Fluid temperature: domestic hot water up to water hardness 3.56 mmol/l (20 °dH): max. +65 °C, in short-term duty (2 h) up to +70 °C → Mains connection 1~230 V, 50 Hz → Protection class IP 42 → Screwed connection Rp ½ → Max. operating pressure 10 bar	→ Fluid temperature: domestic hot water up to water hardness 3.57 mmol/l (20 °dH) max. +70 °C In short-term duty (2 h) up to +75 °C → Mains connection 1~230 V, 50 Hz → Protection class IP X4D → Screw connection Rp ¾, Rp 1 → Max. operating pressure 10 bar	→ Fluid temperature: domestic hot water up to a water hardness of 3.56 mmol/l (20 °dH) max. +80 °C → Heating water -10 °C to +110 °C → Mains connection 1~230 V, 50 Hz → Energy Efficiency Index (EEI) ≤ 0.20 (EEI ≤ 0.27 for double pumps) → Protection class IP X4D → Nominal diameter Rp 1 to DN 50 → Max. operating pressure Screw-end pumps 10 bar Flange-end pumps 6/10 bar
Equipment/function	→ Quick electrical connection with Wilo-Connector → Blocking-current proof motor → Integrated ball shut-off valve on the suction side (Star-Z NOVA A, Star-Z-NOVA C only) → Integrated non-return valve on the pressure side (Star-Z NOVA A, Star-Z-NOVA C only) → Including plug-in time switch (Star-Z NOVA C only) → Including 1.8 m connection cable with shockproof plug (Star-Z NOVA C only) → Including thermal insulation	→ Control mode: Δp-c, temperature-controlled mode → Temperature control for maintaining the return temperature constant in drinking water circulation systems → Thermal disinfection routine (detection and support of the thermal disinfection of the domestic hot water tank → Reset function for resetting the electricity counter or to factory settings → "Hold" function (key lock) for locking the settings → Quick electrical connection with Wilo-Connector → Blocking-current proof motor → Automatic deblocking function → Thermal insulation	→ EC motor → Control modes: Δp-c, Δp-v, Δp-T → Volume flow limitation with Q-Limit function (via IR-Stick) → Pre-selectable speed for constant operation → Automatic setback operation → Dual pump management → Rotatable, graphical pump display → Remote control via infrared interface (IR-Stick/IR-Monitor) → Integrated motor protection → System expansion with retrofit communication modules LON, CAN, PLR, etc. → Combination flanges PN 6/PN 10 (for DN 40 and DN 50)
Special features	→ Low power consumption of only 3 to 4.5 W thanks to synchronous motor → Extended field of application in calcareous water: up to 3,57 mmol/l (20 °dH) → Wilo-Connector → Safe protection against bacteria and corrosion due to the use of high-quality materials for a long service life → Flexible service motor: quick replacement of all conventional pump types	→ Manual and temperature-controlled mode for optimum operation → Identification of the thermal disinfection of the domestic hot water tank → Display of the current consumption in Watts and the cumulative kilowatt hours or of the current flow and the temperature → Stainless steel pump housing protects against bacteria and corrosion → Wilo-Connector	→ Energy savings through greater system efficiency with the Q-Limit function → Optimised display for better readability → Space-saving installation due to compact design and location-dependent LC display → Modular concept for connection of all conventional bus systems (e.g. Modbus, BACnet, CAN, LON and PLR) → Corrosion-resistant pump housing in red brass for systems where oxygen entry is possible → Tried and tested quality and reliability
Information	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Heating, air-conditioning, cooling**	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Heating, air-conditioning, cooling**	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Heating, air-conditioning, cooling**

Product range	Standard glandless pumps	Standard glandless pumps	Glanded special pumps
Series	Wilo-Star-Z Wilo-Star-ZD	Wilo-TOP-Z	Wilo-VeroLine-IP-Z
Field of application	Domestic hot water	Domestic hot water	Domestic hot water
Duty chart			
Design	Glandless circulation pump with screwed connection	Glandless circulation pump with screwed connection or flange connection	Glanded circulation pump in in-line design with screwed connection
Application	Domestic hot water circulation systems in industry and in building services	Domestic hot water circulation systems in industry and in building services	For pumping drinking water, cold and hot water (in accordance with VDI 2035) without abrasive substances, in heating, cold water and cooling water systems
Volume flow Q max.	4.8 m³/h	65 m³/h	5 m³/h
Delivery head H max.	6.0 m	9 m	4.5 m
Technical data	→ Fluid temperature: domestic hot water up to water hardness 3.2 mmol/l (18 °dH) max. +65 °C In short-term duty (2 h) up to +70 °C → Mains connection 1~230 V, 50 Hz, or for Star-Z 25/2 DM 3~400 V, 50 Hz → Protection class IP 44 (IP 42 for Star-Z 15 TT) → Screwed connection Rp ½, Rp 1 → Max. operating pressure 10 bar	→ Fluid temperature: domestic hot water up to a water hardness of 3.56 mmol/l (20 °dH) max. +80 °C → Mains connection: - 1~230 V, 50 Hz (depending on type) - 3~400 V, 50 Hz - 3~230 V, 50 Hz (with optional switching plug) → Protection class IP X4D → Nominal diameter Rp 1 to DN 50 → Max. operating pressure Screw-end pumps 10 bar Flange-end pumps 6/10 bar	→ Fluid temperature: domestic hot water up to a water hardness of 4.99 mmol/l (28 °dH) max. +65 °C → In short-term duty (2 h) up to +110 °C → Heating water -8 °C to +110 °C → Mains connection 1~230 V, 50 Hz, 3~400 V, 50 Hz → Protection class IP 44 → Nominal diameter Rp 1 → Max. operating pressure 10 bar
Equipment/function	→ Constant speed or, for Star-Z 25/6, three selectable speed stages → Blocking-current proof motor, motor protection not required → Quick connection with spring clips → Thermal insulation as standard for Star-Z 15 TT → Star-Z 15 TT with integrated timer and thermostat, LCD display with symbolic language and automatic detection of the thermal disinfection of the domestic hot water tank, as well as ball shut-off valve on the suction side and non-return valve on the pressure side → Star-ZD version as double pump	→ Pre-selectable speed stages → Thermal insulation as standard → All plastic parts that come into contact with the fluid fulfil KTW recommendations → Combination flange PN 6/PN 10 (DN 40 to DN 65) → Extendible motor protection, signal and display functions → Full motor protection → Cable inlet into terminal box possible on both sides (starting from P1 ≥ 250 W) with integrated strain relief	→ Single-stage, low-pressure centrifugal pump in in-line design with → Mechanical seal → Screwed connection → Motor with one-piece shaft
Special features	→ All plastic parts that come into contact with the fluid fulfil KTW recommendations	→ Collective fault signal as potential-free contact (depending on type) → Rotation control lamp indicates the correct direction of rotation (only for 3~) → Thermal insulation as standard	→ High resistance to corrosive fluids due to stainless steel housing and Noryl impeller → Wide range of applications due to suitability for water hardness up to 5 mmol/l (28 °dH) → All plastic parts that come into contact with the fluid fulfil KTW recommendations
Information	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Heating, air-conditioning, cooling**	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Heating, air-conditioning, cooling**	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Heating, air-conditioning, cooling**

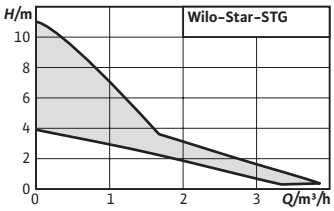
Non EU product

Non EU product

Non EU product

Product range	Standard glandless pumps	Standard glandless pumps	Standard glandless pumps
Series	Wilo-Star-RS Wilo-Star-RSD	Wilo-TOP-S Wilo-TOP-SD	Wilo-TOP-RL
Field of application	Heating, air-conditioning, cooling	Heating, air-conditioning, cooling	Heating, air-conditioning, cooling
Duty chart			
Design	Glandless circulation pump with screwed connection	Glandless circulation pump with screwed or flanged connection	Glandless circulation pump 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 m³/h	77 m³/h	10 m³/h
Delivery head H max.	8.0 m	19 m	7.0 m
Technical data	→ Fluid temperature -10 °C to +110 °C → Mains connection 1~230 V, 50 Hz → Protection class IP 44 → Screw connection Rp ½, Rp 1 or Rp 1½ → Max. operating pressure 10 bar	→ Fluid temperature -20 °C to +130 °C, briefly (2 h) to +140 °C → Mains connection: - 1~230 V, 50 Hz (depending on type) - 3~400 V, 50 Hz - 3~230 V, 50 Hz (with optional switching plug) → Protection class IP X4D → Nominal diameter Rp 1 to DN 100 → Max operating pressure Screw-end pumps 10 bar Flange-end pumps 6/10 bar or 6 bar (optional: 10 bar)	→ Fluid temperature -20 °C to +130 °C → Mains connection 1~230 V, 50 Hz, 3~400 V, 50 Hz → Protection class IP X4D → Nominal diameter Rp 1 to DN 40 → Max operating pressure Screw-end pumps 10 bar Flange-end pumps 6/10 bar or 6 bar (optional: 10 bar or 16 bar)
Equipment/function	→ 3 manually selectable speed stages → Wrench attachment point on pump body → Blocking-current proof motor, motor protection not needed → Cable inlet possible from both sides - for easy installation → Quick connection with spring clips → RSD version as double pump	→ Preselectable speed stages for performance adaptation → Combination flanges PN 6/PN 10 (DN 40 to DN 65) → Pump housing is KTL-coated → Thermal insulation shells for heating applications as standard → Extendable motor protection, signal and display functions → Cable inlet possible from both sides - for easy installation	→ Preselectable speed stages for performance adaptation → Pump housing is KTL-coated → Combination flange PN 6/PN 10 (DN 40)
Special features	→ Suitable for any installation position with horizontal shaft; terminal box in 3-6-9-12 o'clock position → Three pre-selectable speed stages for load adaptation → Easy and safe installation with practical wrench attachment point on the pump housing → Simplified electrical connection thanks to a terminal box where the threaded cable connection can be taken out and used from both sides; quick connection with spring clips	→ Rotation control lamp indicates the correct direction of rotation (only for 3~) → Manual power adjustment with 3 speed stages → Pump housing with cataphoretic (KTL) coating protects against corrosion due to condensation formation	→ Collective fault signal as potential-free contact (depending on type) → Pump housing with cataphoretic (KTL) coating protects against corrosion due to condensation formation
Information	**Online catalogue www.wilo.com** **Catalogue Building Services Heating, Air-Conditioning, Cooling**	**Online catalogue www.wilo.com** **Catalogue Building Services Heating, Air-Conditioning, Cooling**	**Online catalogue www.wilo.com** **Catalogue Building Services Heating, Air-Conditioning, Cooling**

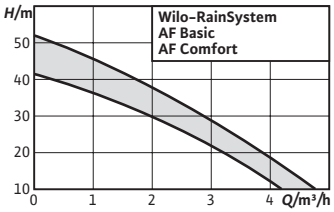
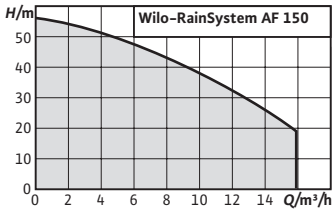
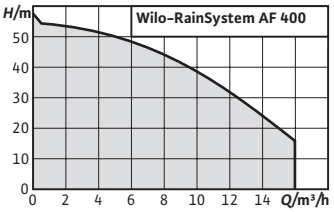
Non EU product

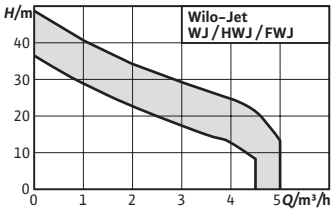
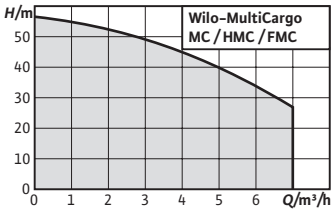
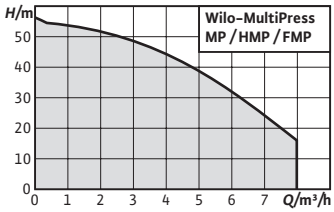
Product range	Standard glandless pumps
Series	Wilo-Star-STG
Field of application	Solar thermal and geothermal energy
Duty chart	
Design	Glandless circulation pump with screwed connection
Application	Circulation in solar thermal and geothermal energy systems
Volume flow Q max.	3.8 m³/h
Delivery head H max.	11 m
Technical data	→ Fluid temperature -10 °C to +110 °C, in short-term duty (2 h) +120 °C → Mains connection 1~230 V, 50 Hz → Protection class IP 44 → 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 connection with spring clips for easy electrical connection → Pump housing with cataphoretic coating for external corrosion protection
Special features	→ Special hydraulics for use in solar thermal and geothermal energy systems → Pump housing with wrench attach-ment point → Pump housing with cataphoretic (KTL) coating to avoid corrosion when condensate builds up
Information	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Heating, air-conditioning, cooling**

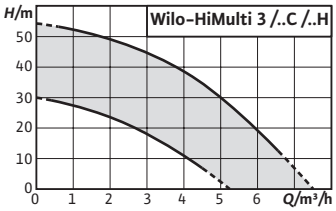
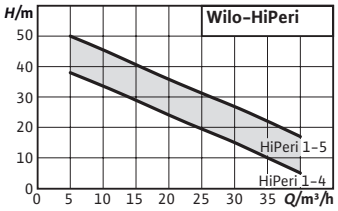
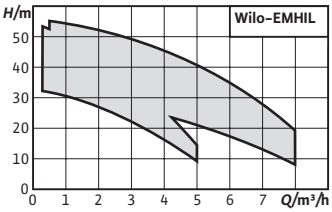
Water supply

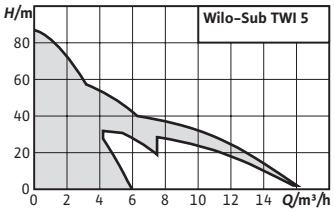
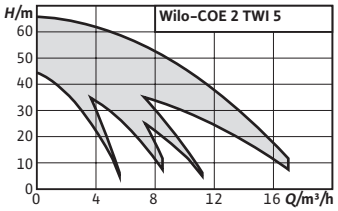
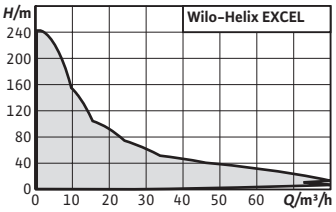
Pumps and systems for rainwater utilisation, water supply and pressure boosting, fire fighting, clean water treatment, raw water intake, desalination and professional irrigation/agriculture.

Wilo-SiBoost Smart Helix EXCEL,
the constant pressure one

Product range	Rainwater utilisation systems	Rainwater utilisation systems	Rainwater utilisation systems
Series	Wilo-RainSystem AF Basic Wilo-RainSystem AF Comfort	Wilo-RainSystem AF 150	Wilo-RainSystem AF 400
Field of application	Rainwater utilisation	Rainwater utilisation	Rainwater utilisation
Duty chart			
Design	Ready-to-plug rainwater utilisation system with 1 MultiCargo MC self-priming centrifugal pump	Automatic rainwater utilisation system with 2 MultiCargo MC self-priming centrifugal pumps	Automatic rainwater utilisation system with run-down tank and 2 MultiPress MP non self-priming centrifugal pumps
Application	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	Hybrid system for commercial and industrial rainwater utilisation for saving drinking water in conjunction with rainwater storage tanks or reservoirs
Volume flow Q max.	5 m³/h	16 m³/h	16 m³/h
Delivery head H max.	52 m	55 m	55 m
Technical data	→ Mains connection 1~230 V, 50 Hz → Suction head max. 8 m → Fluid temperature max. +5 °C to +35 °C → Max. operating pressure 8 bar → Replenishment reservoir 11 l with float valve → Protection class IP 42/IP 54	→ Mains connection 1~230 V, 50 Hz → Suction head max. 8 m → Fluid temperature max. +5 °C to +35 °C → Max. operating pressure 8 bar → Replenishment reservoir 150 l with float valve → Protection class IP 41	→ Mains connection 3~400 V, 50 Hz → Fluid temperature max. +5 °C to +35 °C → Max. operating pressure 10 bar → Replenishment reservoir 400 l → Protection class IP 54
Equipment/function	→ Connection-ready module mounted on a non-corroding base frame → Pressure-side pipework Rp 1 → 1.8/3.0 m connection cable and mains plug → Switchgear Rain Control Basic RCB/ Economy RCE with control electronics → Monitoring of rainwater storage levels → Connection for overflow warning	→ Connection-ready module mounted on vibration-insulated painted steel tubular frames → Joint tubing R 1 ½ on the pressure side, including transmitter unit, diaphragm pressure vessel, shut-off device → Pressure gauge 0–10 bar → Ball valve on suction and pressure sides → RainControl Professional central switchgear with control electronics, level sensor → Menu-prompted operation and display → Pump cycling and test run → Automatic fault-actuated switchover and peak-load operation → Automatic water exchange in the replenishment reservoir, prevents lime deposits	→ Connection-ready module mounted on vibration-insulated baseplate → Joint tubing R 1½ on the pressure side, including transmitter unit, diaphragm pressure vessel, shut-off device → Pressure gauge 0–10 bar → Ball valve on suction and pressure sides and non-return valve → Hybrid tank with all connections, calmed inlets and overflow with siphon → RainControl Hybrid central switchgear with control electronics → Pump cycling and test run → Automatic fault-actuated switchover and peak-load operation → Automatic water exchange in the replenishment reservoir
Special features	→ Low-noise, due to multistage pump and complete encapsulation of the system (AF Comfort) → Meets the requirements of DIN 1988 and EN 1717 → Demand-oriented fresh water replenishment → Flow- and noise-optimised replenishment reservoir → All parts that come in contact with the fluid are corrosion-free → For AF Comfort: automatic support function for evacuation of air from the suction line	→ Low-noise due to multistage pumps → All parts that come in contact with the fluid are corrosion-free → Maximum operational reliability due to fully electronic RainControl Professional controller → Demand-oriented fresh water replenishment → High reliability due to flow-optimised and noise-optimised replenishment reservoir	→ Low-noise due to multistage pumps → All parts that come in contact with the fluid are corrosion-free → Maximum operational reliability due to a trendsetting fully electronic RainControl Hybrid controller → Demand-oriented fresh water replenishment → High reliability due to flow-optimised and noise-optimised overall concept → Automatic control of the feeding pump → System/level control in the low-voltage range
Information	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Water supply**	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Water supply**	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Water supply**

Product range	Self-priming multistage pumps and pump systems	Self-priming multistage pumps and pump systems	Non self-priming multistage pumps and pump systems
Series	Wilo-Jet WJ Wilo-Jet HWJ Wilo-Jet FWJ	Wilo-MultiCargo MC Wilo-MultiCargo HMC Wilo-MultiCargo FMC	Wilo-MultiPress MP Wilo-MultiPress HMP Wilo-MultiPress FMP
Field of application	Rainwater utilisation, water distribution/boosting, raw water intake	Rainwater utilisation, water distribution/boosting, raw water intake	Rainwater utilisation, water distribution/boosting, raw water intake
Duty chart			
Design	Self-priming single-stage centrifugal pumps	Self-priming multistage centrifugal pumps	Non self-priming multistage centrifugal pumps
Application	For pumping water from wells for filling, pumping empty, transferring by pumping, irrigation and sprinkling. As emergency pump for overflows	For domestic water supply, sprinkling, irrigation, spraying and rainwater utilisation	For domestic water supply, sprinkling, irrigation, spraying and rainwater utilisation
Volume flow Q max.	5 m³/h	7 m³/h	8 m³/h
Delivery head H max.	50 m	57 m	57 m
Technical data	→ Mains connection 1~230 V, 50 Hz / 3~400 V, 50 Hz → Inlet pressure max. 1 bar → Fluid temperature max. +5 °C to +35 °C → Max. operating pressure 6 bar → Protection class IP 44 → Suction/pressure side connections: – WJ: G 1/G 1 – FWJ: G 1/R 1 – HWJ: G 1/Rp 1	→ Mains connection 1~230 V, 50 Hz / 3~400 V, 50 Hz → Inlet pressure max. 4 bar → Fluid temperature max. +5 °C to +35 °C → Ambient temperature max. +40 °C → Max. operating pressure 8 bar → Protection class IP 54 → Suction/pressure side connections: – MC: Rp 1/Rp 1 – FMC: Rp 1/R 1 – HMC: Rp 1/Rp 1	→ Mains connection 1~230 V, 50 Hz / 3~400 V, 50 Hz → Inlet pressure max. 6 bar → Fluid temperature max. +5 °C to +35 °C → Ambient temperature max. +40 °C → Max. operating pressure 10 bar → Protection class IP 54 → Suction/pressure side connections: – MP 3.. Rp 1/Rp 1; MP 6.. Rp 1¼/Rp 1 – FMP 3.. Rp 1/R 1; FMP6.. Rp 1¼/R 1 – HMP 3.. Rp 1/Rp 1; HMP 6.. Rp 1¼/Rp 1
Equipment/function	→ With or without carrying frame, depending on the version (WJ, FWJ) → For single-phase AC motor (1~230 V) – Connection cable with plug – On/Off switch → Thermal motor protection switch	→ Directly flanged motor → Thermal motor protection switch for single-phase AC motor (1~230 V)	→ Directly flanged motor → Thermal motor protection switch for 1~230 V version
Special features	→ Ideal for portable outdoor applications (hobby, garden) → HWJ version with diaphragm pressure vessel and pressure switch → FWJ version with fluid control for system control	→ Low-noise → Ideal as a base-load pump for rainwater utilisation → HMC version with diaphragm pressure vessel and pressure switch → FMC version with fluid control for system control	→ Low-noise → Ideal as a base-load pump for rainwater utilisation → HMP version with diaphragm pressure vessel and pressure switch → FMP version with fluid control for system control
Information	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Water supply**	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Water supply**	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Water supply**

Product range	Self- and non self-priming multistage pumps and pump systems	Non self-priming peripheral pump	Non self-priming water-supply unit with frequency converter
Series	Wilo-HiMulti 3 (P) Wilo-HiMulti 3 C (P) Wilo-HiMulti 3 H (P)	Wilo-HiPeri 1	Wilo-EMHIL
Field of application	Rainwater utilisation, water distribution/boosting, raw water intake	Water distribution/boosting, raw water intake, rainwater utilisation	Rainwater utilisation, water distribution/boosting, raw water intake
Duty chart			
Design	Self-priming (version P) and non self-priming multistage pumps and pump systems	Non self-priming peripheral pump	Non self-priming water-supply unit with frequency converter
Application	For domestic water supply, sprinkling, irrigation, spraying and rainwater utilisation	For water distribution/boosting, raw water intake, sprinkling and spraying, rainwater utilisation	→ Water supply → Rainwater utilisation → Irrigation and spraying
Volume flow Q max.	7 m³/h	3 m³/h	55 m³/h
Delivery head H max.	55 m	8 m	8 m
Technical data	→ Mains connection 1~230 V, 50 Hz → Inlet pressure max. 3 bar → Fluid temperature max. 0 °C to +40 °C (+55 °C for max. 10 minutes) → Operating pressure max. 8 bar → Protection class IP X4, IP 54 → Suction/pressure side connections: – HiMulti 3 (P): G1/G1 – HiMulti 3 C (P): G1/G1 – HiMulti 3 H (P): G1/Rp1 (adapter with male thread on both sides is enclosed)	→ Mains connection 1~230 V, 50 Hz → Inlet pressure max. 1.5 bar → Fluid temperature max. +5 °C to +60 °C → Max. operating pressure 6.5 bar → Protection class IP x4 → Suction/pressure side connections: Rp 1"	→ Max. operating pressure: 10 bar → Max. fluid temperature: 40 °C → Min. fluid temperature: 0 °C → Max. ambient temperature: 50 °C → Mains connection: 1~230 V, 50/60 Hz
Equipment/function	→ Directly flanged motor → Thermal motor protection switch for 1~230 V version → Version HiMulti 3 C (P): Automatic pump control, low-water level switch → Version HiMulti 3 H (P): Pressure switch, diaphragm pressure vessel 50 l/100 l	→ Single-stage displacement pump with a radial impeller → Can be supplemented by the Wilo-FluidControl resp. HiControl 1	→ Including 1.4 m mains connection and plug → Including EMC filter → With built-in pressure and flow controllers
Special features	→ Easy: Wilo-Connector (electrical quick connector), On/Off switch, cap for filling and draining, enlarged foot fastening → Efficient and economical: highly efficient hydraulics, low energy consumption, extremely compact due to optimised motor → Low-noise operation → Version HiMulti 3 (P): Version as pump for domestic water supply → Version HiMulti 3 C (P): Automation and dry-running protection, 360° rotatable automation for easier installation → Version HiMulti 3 H (P): Automation and water hammer protection due to pressure switch and diaphragm pressure vessel	→ Simple handling thanks to low weight, perfectly suited for permanent operation → Brass impeller for fluids up to 60 °C and ambient temperatures up to 40 °C → Efficient thanks to low power consumption at a high maximum delivery head and high maximum volume flow → Expandable with the electronic pump control Wilo-Fluidcontrol/ HiControl 1	→ Heavy-duty multistage pump with stainless steel hydraulics → Easy operation and adjustment: – Large display screen – LEDs for status display – Plug & Pump → Functions: PID, frost protection, restart after a fault → Float switch can be connected as an option
Information	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Water supply**	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Water supply**	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Water supply**

Product range	Cistern pumps	Non self-priming water-supply unit	Vertical, multistage centrifugal pumps
			
Series	Wilo-Sub TWI 5/TWI 5-SE Wilo-Sub TWI 5-SE PnP	Wilo-Economy COE-2 TWI 5	Wilo-Helix EXCEL
Field of application	Rainwater utilisation, water distribution/boosting, raw water intake	Water distribution/boosting	Water distribution/boosting
Duty chart			
Design	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 with 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 → Cooling water circulation systems → Washing systems → Irrigation
Volume flow Q max.	16 m³/h	14 m³/h	58 m³/h
Delivery head H max.	88 m	68 m	243 m
Technical data	→ Mains connection 1~230 V, 50 Hz / 3~400 V, 50 Hz → Fluid temperature max. +3 °C to +40 °C → Max. operating pressure 10 bar → Protection class IP 68 → Pressure-side connection Rp 1¼ → Suction-side connection for SE version Rp 1¼	→ Mains connection 3~400 V or 1~230 V ±10% 50 Hz → Fluid temperature max: +40°C → Operating pressure max: 10 bar → Nominal connection diameters G 2"	→ Fluid temperature: -20 to +120 °C with EPDM (-10 to +90 °C with FKM) → Max. operating pressure: 16/25 bar → Protection class IP 55 → Minimum efficiency index MEI ≥ 0.7
Equipment/function	→ Connection cable, 20 m → TWI 5 version with standard intake strainer → Variants: – SE: with lateral inlet connecting piece – FS: with built-in float switch → Thermal motor protection for EM version (1~230 V)	→ Intake and outflow collector pipes → Ball shut-off valves on the suction side and pressure side → Non-return valve on the pressure side → 1 manometer → 2 pressure switches → BC switchgear	→ Impellers, guide vane apparatuses and stage housings made of corrosion-resistant material → Versions in special stainless steel for aggressive media → Versions – Helix EXCEL 2 - 16, PN 16 with oval flanges, PN 25/Pmax: 30 bar with round flanges – Helix EXCEL 22 - 36, PN 16 and PN 25/Pmax: 30 bar with round flanges
Special features	→ Ready-to-plug in EM version (1~230 V) → Pump (housing, stages, impellers) made entirely of stainless steel 1.4301 (AISI 304) → Self-cooling motor enables installation outside water	→ Pumps in the TWI 5 series with low noise due to water-cooled motor, between 51 dB (A) and 61 dB (A) → 2-pump pressure boosting system in compact design due to vertical pump layout → Economical system, based on the basic functions of the BC switchgear → Long service life due to the stainless steel construction of the pumps and the piping	→ Highly efficient EC motor (better than IE4 efficiency value) → Integrated electronic control "High Efficiency Drive" → Easy operation thanks to proven red-button technology and clear display → User-friendly cartridge mechanical seal "X-Seal" and spacer coupling (from 5.5 kW) → Flexible connection to building automation → WRAS/KTW/ACS approval for all parts that come in contact with the fluid (EPDM version)
Information	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Water supply**	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Water supply**	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Water supply**

ErP READY — APPLIES TO EUROPEAN DIRECTIVE FOR ENERGY RELATED PRODUCTS

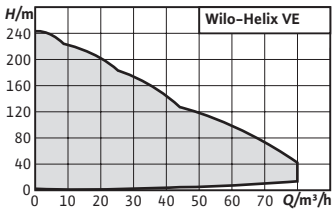
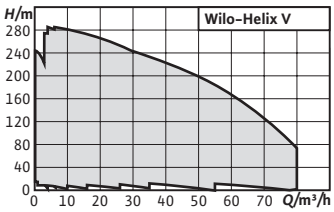
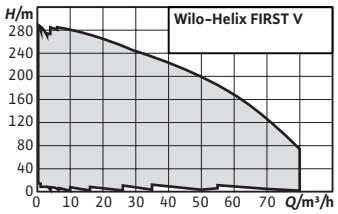
Series modification

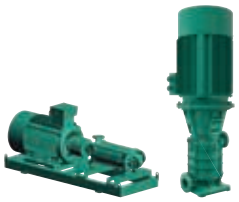
ErP READY — APPLIES TO EUROPEAN DIRECTIVE FOR ENERGY RELATED PRODUCTS

Series modification

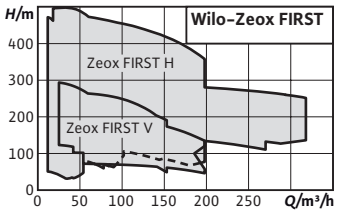
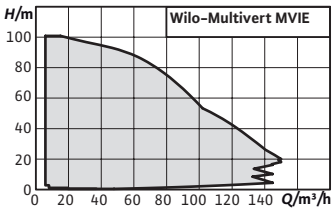
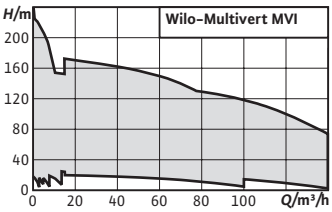
ErP READY — APPLIES TO EUROPEAN DIRECTIVE FOR ENERGY RELATED PRODUCTS

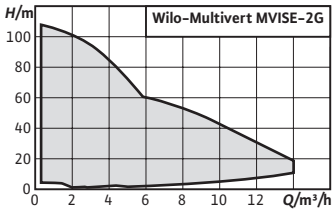
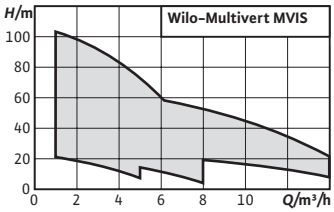
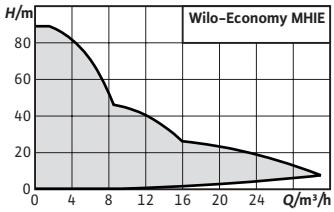
Series extension

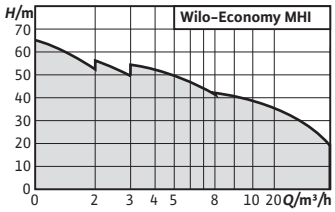
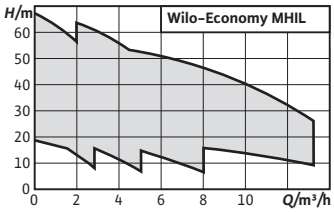
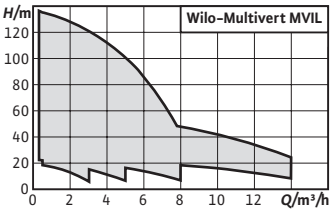
Product range	Vertical, multistage centrifugal pumps	Vertical, multistage centrifugal pumps	Vertical, multistage centrifugal pumps
Series	Wilo-Helix VE	Wilo-Helix V	Wilo-Helix FIRST V
Field of application	Water distribution/boosting	Water distribution/boosting, professional irrigation/agriculture	Water distribution/boosting, professional irrigation/agriculture
Duty chart			
Design	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 → Cooling water circulation systems → Washing systems → Irrigation	→ Water supply and pressure boosting → Industrial circulation systems → Process water → Cooling water circulation systems → Fire extinguishing systems → Washing systems → Irrigation	→ Water supply and pressure boosting → Industrial circulation systems → Process water → Cooling water circulation systems → Fire extinguishing systems → Washing systems → Irrigation
Volume flow Q max.	80 m³/h	80 m³/h	80 m³/h
Delivery head H max.	240 m	280 m	280 m
Technical data	→ Fluid temperature -30 to +120 °C → Max. operating pressure 16/25 bar → Max. inlet pressure 10 bar → Protection class IP 55 → Minimum efficiency index MEI ≥ 0.7	→ Fluid temperature -30 to +120 °C → Max. operating pressure 16/25 bar → Max. inlet pressure 10 bar → Protection class IP 55 → Minimum efficiency index MEI ≥ 0.7 (Helix V 16: MEI ≥ 0.5)	→ Fluid temperature range: -20 to 120 °C → Max. operating pressure: 16/25/30 bar → Protection class: IP 55 → Round flange in accordance with ISO 2531 and ISO 7005 → Minimum efficiency index MEI ≥ 0.7 (Helix FIRST V 16: MEI ≥ 0.5)
Equipment/function	→ Impellers, stage chambers and pump housing made of stainless steel 1.4301/1.4404 (AISI 304L/AISI 316L) → Versions in special stainless steel for aggressive media → PN 16 and PN 25/Pmax: 30 bar with round flanges in accordance with ISO 2531 and ISO 7005 → IEC standard three-phase AC motor → Integrated frequency converter	→ Impellers, stage chambers and pump housing made of stainless steel 1.4301/1.4404 (AISI 304L/AISI 316L) → Versions in special stainless steel for aggressive media → Versions - Helix V 2 - 16, PN 16 with oval flanges, PN 25 with round flanges - Helix V 22 - 52, PN 16 and PN 25 with round flanges → IEC standard three-phase AC motor	→ Corrosion-resistant impellers, guide vane apparatuses and stage housings
Special features	→ Easy pump replacement without pipe modification, thanks to the modular pump housing → WRAS/KTW/ACS approval for all parts that come in contact with the fluid (EPDM version)	→ Easy pump replacement without pipe modification, thanks to the modular pump housing → WRAS/KTW/ACS approval for all parts that come in contact with the fluid (EPDM version)	→ Efficiency-optimised, laser-welded, optimised 2D/3D hydraulics → Economic and low acquisition costs thanks to compact installation → Compatible connections allow installation into existing pipework with Helix V pumps → Special, firmly attached transport eyelets allow a safe pump transport
Information	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Water supply**	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Water supply**	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Water supply**



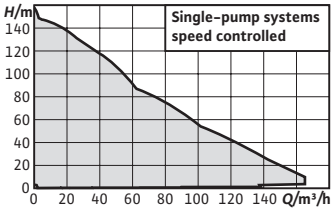
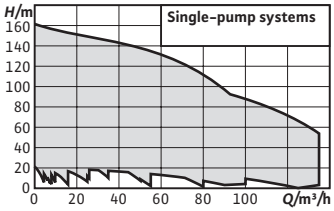
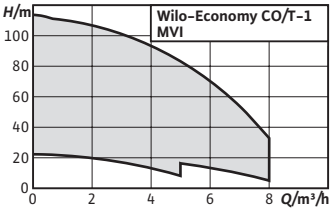
Series modification

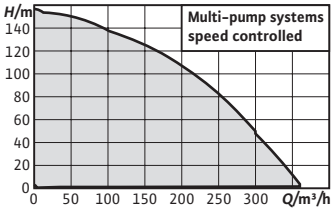
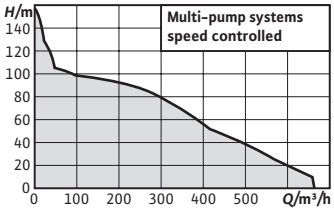
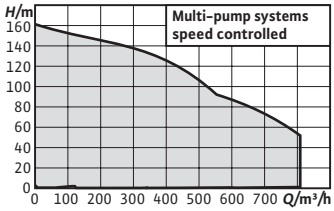
Product range	Vertical and horizontal, multistage centrifugal pumps	Vertical, multistage centrifugal pumps	Vertical, multistage centrifugal pumps
Series	Wilo-Zeox FIRST H Wilo-Zeox FIRST V	Wilo-Multivert MVIE	Wilo-Multivert MVI
Field of application	Rainwater utilisation, water distribution/boosting, raw water intake	Water distribution/boosting, professional irrigation/agriculture	Water distribution/boosting, professional irrigation/agriculture
Duty chart			
Design	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	For domestic water supply, sprinkling, irrigation, spraying and rainwater utilisation	→ Water supply and pressure boosting → Industrial circulation systems → Process engineering → Cooling water circulation systems → Washing and sprinkling systems	→ Water supply and pressure boosting → Fire extinguishing systems → Boiler feed → Industrial circulation systems → Process engineering → Cooling water circulation systems → Washing and sprinkling systems
Volume flow Q max.	280 m³/h	145 m³/h	155 m³/h
Delivery head H max.	495 m	100 m	240 m
Technical data	→ Permitted temperature range of the fluid: -5 °C to +90 °C → Max. suction pressure: - Zeox FIRST .. V/ .. H: 6/16 bar → Max. operating pressure: - Zeox FIRST V: 27 bar - Zeox FIRST H (DN65 to DN100): 50 bar; Zeox FIRST H (DN150): 40 bar → Protection class: IP 55 → Minimum efficiency index MEI ≥ 0.4 (for Zeox FIRST V up to 100 m³/h)	→ Fluid temperature -15 to +120 °C → Max. operating pressure 16 bar/25 bar → Max. inlet pressure 10 bar → Protection class IP 54 or IP 55 → Minimum efficiency index MEI ≥ 0.1 (for the series)	→ Fluid temperature -15 to +120 °C → Max. operating pressure 16/25 bar → Max. inlet pressure 10 bar → Protection class IP 55 → Minimum efficiency index MEI ≥ 0.1 (for the series)
Equipment/function	→ IE3 high-efficiency motor as standard → Flushing by-pass device to ensure a long service life → Packing gland on request, exchangeable without disassembling the pump	→ Stainless steel pump in in-line design → PN 16/25 with round flange → Integrated frequency converter → IEC standard motor, 2-pole, AC motor with thermal motor protection → Protection against low water level	→ Stainless steel pump in in-line design → Versions - MVI 1.. to 8.. PN 16 with oval flanges, PN 25 with round flange - MVI 70.. to 95.. PN 16/PN 25 with round flange - Victaulic connections (PN 25) depending on pump type → IEC standard motor, 2-pole
Special features	→ High-efficiency hydraulics and high-efficiency IE3 motor → Standard rinsing device for the sealing system → Additional flange alignments and stuffing box packing on request → Bronze impeller on request	→ Large control range → Stainless steel or with pump housing made of cataphoretic-coated cast iron → All relevant components have KTW and WRAS approval	→ MVI 1..-8.. all parts that come in contact with the fluid are made of stainless steel → MVI 70..-95.. in stainless steel or with pump housing made of cataphoretic-coated cast iron → All relevant components have KTW and WRAS approval
Information	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Water supply**	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Water supply**	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Water supply**

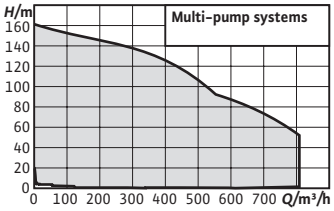
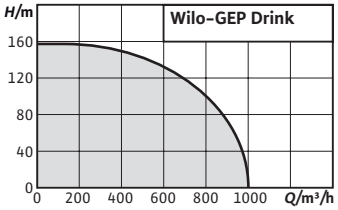
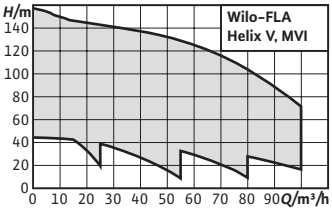
Product range	Vertical, multistage centrifugal pumps	Vertical, multistage centrifugal pumps	Horizontal, multistage centrifugal pumps
Series	Wilo-Multivert MVISE	Wilo-Multivert MVIS	Wilo-Economy MHIE
Field of application	Water distribution/boosting	Water distribution/boosting	Water distribution/boosting
Duty chart			
Design	Non self-priming multistage pump with glandless pump motor and integrated frequency converter	Non self-priming multistage pump with glandless pump motor	Non self-priming multistage pump with integrated frequency converter
Application	→ Water supply and pressure boosting	→ Water supply and pressure boosting	→ Water supply and pressure boosting → Industrial circulation systems → Process engineering → Cooling water circulation systems → Washing and sprinkling systems
Volume flow Q max.	14 m³/h	14 m³/h	32 m³/h
Delivery head H max.	110 m	110 m	88 m
Technical data	→ Fluid temperature -15 to +50 °C → Operating pressure 16 bar → Inlet pressure 6 bar → Protection class IP 44 → Compliant with EMC standards EN 61000-6-1 and EN 61000-6-2	→ Fluid temperature -15 to +50 °C → Operating pressure 16 bar → Inlet pressure 6 bar → Protection class IP 44	→ Fluid temperature -15 to +110 °C → Max. operating pressure 10 bar → Inlet pressure max. 6 bar → Protection class IP 54
Equipment/function	→ Stainless steel pump in in-line design → Glandless pump → Self-venting → Hydraulics in 1.4301 → Oval flange, round flange → Three-phase AC motor with integrated frequency converter and LC display → Integrated thermal motor protection → Protection against low water level	→ Stainless steel pump in in-line design → Three-phase AC motor in glandless pump design	→ Stainless steel in monobloc design → Threaded connection → Integrated frequency converter → Single-phase or three-phase AC motor → Three-phase version with LCD display for status indication → Integrated thermal motor protection
Special features	→ Easy commissioning → Glandless pump technology → Low-noise (up to 20 dB(A) quieter than conventional pumps) → Integrated frequency converter → All components that come in contact with the fluid are made of stainless steel → All relevant components have KTW and WRAS approval	→ Low-noise (up to 20 dB(A) quieter than conventional pumps) → All parts that come in contact with the fluid are corrosion-resistant → Glandless pump technology → All relevant components have KTW and WRAS approval	→ Easy commissioning → All parts that come in contact with the fluid are made of stainless steel → Compact design → Integrated frequency converter → Full motor protection → WRAS/KTW/ACS approval for all parts that come in contact with the fluid (EPDM version)
Information	**Online catalogue: productfinder.wilo.com**	**Online catalogue: productfinder.wilo.com**	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Water supply**

Product range	Horizontal, multistage centrifugal pumps	Horizontal, multistage centrifugal pumps	Vertical, multistage centrifugal pumps
Series	Wilo-Economy MHI	Wilo-Economy MHIL	Wilo-Multivert MVIL
Field of application	Water distribution/boosting	Water distribution/boosting	Water distribution/boosting
Duty chart			
Design	Non self-priming multistage pump	Non self-priming multistage pump	Non self-priming multistage pump
Application	→ Water supply and pressure boosting → Commerce and industry → Cooling water circulation systems → Washing and sprinkling systems	→ Water supply and pressure boosting → Commerce and industry → Washing and spraying systems → Rainwater utilisation → Cooling and cold water circulation systems	→ Water supply and pressure boosting → Commerce and industry → Washing and spraying systems → Rainwater utilisation → Cooling and cold water circulation systems
Volume flow Q max.	25 m³/h	13 m³/h	13 m³/h
Delivery head H max.	70 m	68 m	135 m
Technical data	→ Fluid temperature -15 to +110 °C → Max. operating pressure 10 bar → Inlet pressure max. 6 bar → Protection class IP 54	→ Fluid temperature -15 to +90 °C → Max. operating pressure 10 bar → Inlet pressure max. 6 bar → Protection class IP 54	→ Fluid temperature -15 to +90 °C → Max. operating pressure of 10 bar → Max. inlet pressure 6 bar → Protection class IP 54 → Minimum efficiency index MEI ≥ 0.1 (for the series)
Equipment/function	→ Stainless steel pump in monobloc design → Threaded connection → Single-phase or three-phase AC motor → Single-phase AC motor with integrated thermal motor protection	→ Pump in monobloc design → Threaded connection → Single-phase or three-phase AC motor → Single-phase AC motor with integrated thermal motor protection	→ Pump in in-line design → Oval flange → Single-phase or three-phase AC motor → Single-phase AC motor with integrated thermal motor protection
Special features	→ All parts that come in contact with the fluid are made of stainless steel → Compact design → WRAS/KTW/ACS approval for all parts that come in contact with the fluid (EPDM version)	→ Impellers and stage chambers made of 1.4301 stainless steel (AISI 304) → Pump housing made of grey cast iron EN-GJL-250, with cataphoretic coating	→ Impellers and stage chambers made of 1.4301 stainless steel (AISI 304) → Pump housing made of grey cast iron EN-GJL-250, with cataphoretic coating
Information	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Water supply**	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Water supply**	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Water supply**

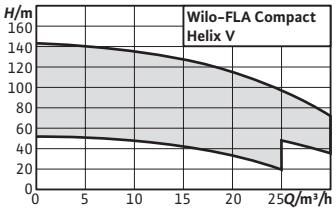
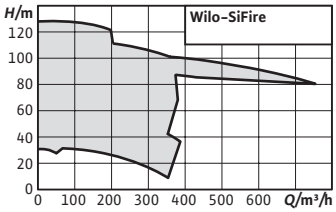
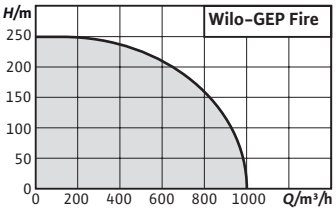
Series modification
Series extension

Product range	Single-pump pressure boosting systems with speed-controlled pump	Single-pump pressure boosting systems	Single-pump pressure boosting system with system separation
Series	Wilo-Comfort-N-Vario COR-1 MVISE ... Wilo-Comfort-Vario COR-1 MVIE ... Wilo-SiBoost Smart 1 Helix VE ... Wilo-Comfort-Vario COR-1 MHIE...	Wilo-Economy CO-1 MVIS ... /ER Wilo-Economy CO-1 MVI ... /ER Wilo-Economy CO-1 Helix V ... /CE+	Wilo-Economy CO/T-1 MVI ... /ER
Field of application	Water distribution/boosting	Water distribution/boosting	Water distribution/boosting
Duty chart			
Design	Water-supply units with a non self-priming, high-pressure multistage centrifugal pump with integrated speed control of the series MVISE, MVIE, Helix VE or MHIE	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 MVI series
Application	For fully automatic water supply in inlet mode from the public water supply network or from a reservoir → For pumping drinking water, process water, cooling water, water for fire-fighting or other service water	For fully automatic water supply in inlet mode from the public water supply network or from a reservoir → For pumping drinking water, process water, cooling water, water for fire-fighting or other service water	For fully automatic water supply in inlet mode from the public water supply network → For pumping drinking water and process water, cooling water, water for fire-fighting or other service water
Volume flow Q max.	165 m³/h	135 m³/h	8 m³/h
Delivery head H max.	160 m	160 m	110 m
Technical data	→ Mains connection 3~400 V, 50 Hz → Max. fluid temperature 50 °C → Operating pressure 10/16 bar → Inlet pressure 6/10 bar → Protection class IP 44/IP 54	→ Mains connection 3~230 V / 400 V, 50 Hz → Max. fluid temperature 50 °C → Operating pressure 10/16 bar → Inlet pressure 6/10 bar → Switching pressure stages 6 / 10 / 16 bar → Protection class IP 41/IP 54	→ Mains connection 3~230 V / 400 V, 50 Hz (other versions on request) → Max. fluid temperature 50 °C → Operating pressure 16 bar → Inlet pressure 6 bar → Protection class IP 41
Equipment/function	→ All parts that come in contact with the fluid are corrosion-resistant → Pipework made of stainless steel 1.4571 → Shut-off device, on the pressure side → Non-return valve, on the pressure side → Diaphragm pressure vessel 8 l, PN 16	→ Components that come in contact with fluid are corrosion-resistant → Base frame made of stainless steel 1.4301 with height-adjustable vibration absorbers for insulation against structure-borne noise → Pipework made of stainless steel 1.4571 → Shut-off device, on the pressure side → Non-return valve, on the pressure side → Diaphragm pressure vessel 8 l, PN 16, on pressure side	→ PE break tank, atmospherically ventilated (120 l) → Components that come in contact with fluid are corrosion-resistant → Pipework made of stainless steel 1.4571 → Shut-off device, on the pressure side → Non-return valve, on the pressure side → Break tank including float valve and float switch → Diaphragm pressure vessel 8 l, PN 16, on pressure side → Low-water cut-out switchgear
Special features	For systems with MVISE pump → Up to 20 dB(A) quieter than comparable systems For systems with Helix VE pump → Optimised hydraulics → Cartridge mechanical seal → IE4 standard motor	For systems with MVIS pump → Up to 20 dB(A) quieter than comparable systems For systems with Helix V pump → Optimised hydraulics → Cartridge mechanical seal	→ Compact system, ready for connection, for all applications that require system separation
Information	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Water supply**	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Water supply**	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Water supply**

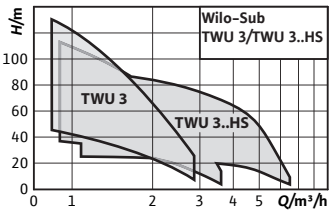
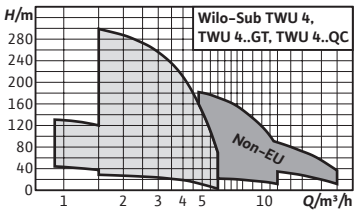
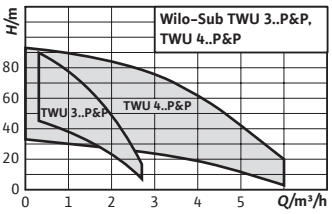
Product range	Multi-pump pressure boosting systems with speed-controlled pumps or base-load pump	Multi-pump pressure boosting systems with speed-controlled pumps	Multi-pump pressure boosting systems with speed-controlled pumps or base-load pump
Series	Wilo-SiBoost Smart Helix V Wilo-SiBoost Smart Helix VE Wilo-SiBoost Smart Helix EXCEL	Wilo-Comfort-Vario-COR 2-4 MHIE ... /VR Wilo-Comfort-N-Vario-COR 2-4 MVISE ... /VR Wilo-Comfort-Vario-COR 2-4 MVIE ... /VR	Wilo-Comfort-N-COR 2-6 MVIS ... /CC Wilo-Comfort-COR 2-6 MVI ... /CC Wilo-Comfort-COR 2-6 Helix V ... /CC Wilo-Comfort-COR 2-6 Helix VE ... /CCe
Field of application	Water distribution/boosting	Water distribution/boosting	Water distribution/boosting
Duty chart			
Design	Highly efficient pressure boosting system with 2 to 4 stainless steel, non self-priming, high-pressure multi-stage centrifugal pumps (Helix V, VE or EXCEL) switched in parallel	Pressure boosting system with 2 to 4 non self-priming, stainless steel, high-pressure, multistage centrifugal pumps switched in parallel, with integrated speed control	Pressure boosting system with speed control and 2 to 6 non self-priming, stainless steel, high-pressure, multi-stage centrifugal pumps switched in parallel
Application	For fully automatic water supply and pressure boosting in residential and office buildings and in industrial systems → For pumping drinking water and process water, cooling water, water for fire-fighting or other service water	For fully automatic water supply and pressure boosting in residential and office buildings and in industrial systems → For pumping drinking water and process water, cooling water, water for fire-fighting or other service water	For fully automatic water supply and pressure boosting in residential and office buildings and in industrial systems → For pumping drinking water and process water, cooling water, water for fire-fighting or other service water
Volume flow Q max.	360 m³/h	650 m³/h	800 m³/h
Delivery head H max.	158 m	159 m	160 m
Technical data	→ Mains connection with Helix V: 3~230 V/400 V, 50 Hz with Helix VE and EXCEL: 3~400 V, 50 Hz → Max. fluid temperature 50 °C (70 °C optional) → Operating pressure 16 bar (25 bar optional) → Inlet pressure 10 bar → Nominal connection diameters R 1½" – DN 100 → Protection class IP 54 (SC control device)	→ Mains connection 3~400 V, 50/60 Hz, depending on type also 1~230 V, 50/60 Hz → Max. fluid temperature 70 °C → Operating pressure 10/16 bar → Inlet pressure 6/10 bar → Protection class IP 54	→ Mains connection 3~230 / 400 V, 50 Hz → Max. fluid temperature 50 °C → Operating pressure 10/16 bar → Inlet pressure 6/10 bar → Protection class IP 54
Equipment/function	→ Automatic pump control via Smart Controller SC. Smart FC version also includes a frequency converter in the switchbox → Components that come in contact with fluid are corrosion-resistant → Shut-off device on the suction and pressure sides of each pump → Non-return valve, on the pressure side → Pressure sensor, pressure side → Pressure gauge, pressure side	→ Continuous auto control due to pumps with integrated frequency converters → Components that come in contact with fluid are corrosion-resistant → Pipework made of stainless steel 1.4571 → Shut-off device at each pump, on the suction and pressure sides → Non-return valve, on the pressure side → Diaphragm pressure vessel 8 l, PN 16, on pressure side → Pressure sensor, on the discharge side	→ Continuous auto control of the base-load pump via frequency converter integrated in the CC controller → Components that come in contact with fluid are corrosion-resistant → Pipework made of stainless steel 1.4571 → Shut-off device at each pump, on the suction and pressure sides → Non-return valve, on the pressure side → Diaphragm pressure vessel 8 l, PN 16, on pressure side → Pressure sensor, on the discharge side
Special features	→ High-efficiency pump hydraulics → IE2 standard motors (IE3 motors from 7.5 kW and higher, option for lower motor output), Helix VE with IE4, Helix EXCEL with high-efficiency EC motor (efficiencies > IE4 acc. to IEC TS 60034-31 Ed.1) → Hydraulics of entire system are pressure-loss optimised → Integrated dry-running detection and low water cut-out switch	→ Compact system due to high-pressure, multistage centrifugal pumps with integrated frequency converters → Integrated full motor protection via PTC → Integrated dry-running detection and low water cut-out switch For systems with MVISE pumps → Up to 20 dB(A) quieter than comparable systems	→ Compact system in accordance of DIN 1988 (EN 806) → Series with Helix VE integrated frequency converter For systems with MVIS pumps → Up to 20 dB(A) quieter than comparable systems
Information	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Water supply**	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Water supply**	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Water supply**

Product range	Multi-pump pressure boosting systems	Modular pressure boosting system according to EN1717, EN 806, DIN 1988-500	Fire-fighting systems for wall hydrant installations according to DIN 14462
Series	Wilo-Economy CO 2-4 MHI ... /ER Wilo-Comfort-N-CO 2-6 MVIS ... /CC Wilo-Comfort-CO 2-6 MVI ... /CC Wilo-Comfort-CO 2-6 Helix V ... /CC	Wilo-GEP Drink	Wilo-FLA
Field of application	Water distribution/boosting	Water distribution/boosting	Fire fighting
Duty chart			
Design	Pressure boosting system with 2 to 4 respectively 2 to 6 non self-priming, stainless steel, high-pressure, multi-stage centrifugal pumps switched in parallel	Pressure boosting system for drinking water supply applications with 1 to 12 multistage centrifugal pumps with/without break tank, with/without housing	Pressure boosting system for fire extinguishing applications with 1 to 2 autonomously operating, non self-priming, stainless steel, high-pressure, multistage centrifugal pumps
Application	For fully automatic water supply and pressure boosting in residential and office buildings and in industrial systems → For pumping drinking water and process water, cooling water, water for fire-fighting or other service water	For drinking water supply taking into account requirements according to the guidelines of the Council of the European Union, regulation for drinking water hygiene and hospital hygiene, EN 1717, EN 806, DIN 1988-500	For supply of fire extinguishing water from fire hose reels in accordance with DIN 14462 from 04/2009
Volume flow Q max.	800 m³/h	5 to 1,000 m³/h	100 m³/h
Delivery head H max.	160 m	160 m, up to 450 m on request	159 m
Technical data	→ Mains connection 3~230 V / 400 V, 50 Hz → Max. fluid temperature 50 °C → Operating pressure 10/16 bar → Inlet pressure 6/10 bar → Protection class IP 54	→ Modular compact system → Hygienic safety due to optional free outlet (EN 1717) → Optional stainless steel run-down tank → Automatic function test of all measurement and control devices up to redundancy stage 3 → Small installation surface - 0.64 m² or more	→ Mains connection 3~400 V, 50 Hz → Max. fluid temperature 50 °C → Max. operating pressure 16 bar → Inlet pressure 6 bar → Protection class IP 54
Equipment/function	→ Components that come in contact with fluid are corrosion-resistant → Pipework made of stainless steel 1.4571 → Shut-off device at each pump, on the suction and pressure sides → Non-return valve, on the pressure side → Diaphragm pressure vessel 8 l, PN 16, on pressure side → Pressure sensor, on the discharge side	→ Secure drinking water quality due to monitoring of water temperature and stagnation in the stainless steel run-down tank; water is changed out if necessary → Drainage or pump emergency drainage (EN12056) for total volume flow → Installation possible below backflow level → Effective maintenance management and permanent information on the operation via smartphone, tablet or PC	→ Components that come in contact with fluid are corrosion-resistant → Pipework made of stainless steel 1.4301 → Shut-off device at each pump, on the suction and pressure sides → Non-return valve, on the pressure side → Diaphragm pressure vessel 8 l, PN 16, on pressure side → Pressure switch, on the discharge side
Special features	→ Compact system in accordance of DIN 1988 (EN 806) For systems with MVIS pumps → Up to 20 dB(A) quieter than comparable systems	→ Isolation of the run-down tank in order to prevent formation of condensate and temperature loading → Split version for installation and transport → Pressure maintaining pump or pilot pump as an option → Complete unit casing → Monitoring of the switchgear and the equipment environment temperature → Automatic energy optimisation	→ Compact system in accordance of DIN 14462 → Variants - Single-pump system - Double-pump system with redundant single-pump systems in a base frame → Comes as standard with pump protection by means of minimum volume discharge via bypass circuit without auxiliary energy
Information	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Water supply**	**Documentation on request**	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Water supply**

NEW:
Wilo-SiFire Easy

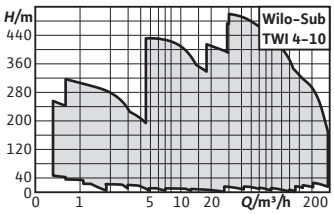
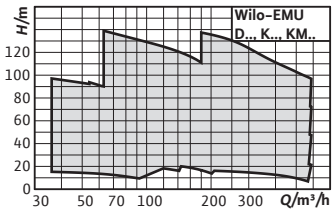
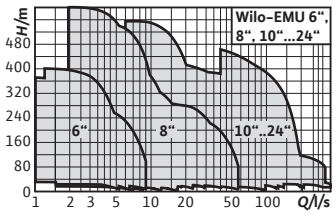
Product range	Fire fighting systems for wall hydrant installations according to DIN 14462	Fire fighting systems for sprinkler systems according to EN 12845	Certified fire fighting systems for hydrant and sprinkler systems according to EN 1717, EN 12056, DIN 14462 or EN 12845
Series	Wilo-FLA Compact	Wilo-SiFire EN Wilo-SiFire Easy	Wilo-GEP Fire
Field of application	Fire fighting	Fire fighting	Fire fighting
Duty chart			
Design	Pressure boosting system for fire fighting applications with 1 to 2 autonomously operating, non self-priming, stainless steel, high-pressure, multistage centrifugal pumps with break tank	Pressure boosting system for the supply of fire-fighting water with 1 or 2 pumps on horizontal base frame – EN 733 – with spacer coupling, electro- or diesel motor and a multistage, electrical, vertical jockey pump	Pressure boosting system for fire fighting applications with 1 to 12 multistage centrifugal pumps with/without break tank, with/without housing
Application	For supply of fire-fighting water from fire hose reels in accordance with DIN 14462 from 04/2009	Fully automatic water supply of fire-fighting systems with sprinkler system in accordance with EN 12845	For the supply of fire-fighting water with exterior hydrants and fire hose reels particularly for high-rise buildings and large properties - without using valves for pressure reduction - as well as for sprinkler and water spray systems
Volume flow Q max.	30 m³/h	750 m³/h	certified up to 1000 m³/h
Delivery head H max.	142 m	128 m	250 m, up to 450 m on request
Technical data	→ Mains connection 3~400 V, 50 Hz → Fluid temperature max. 50 °C → Operating pressure up to 16 bar → Inlet pressure from break tank< 1 bar → Nominal connection diameter R 2"/ DN 50 → Protection class of operating device IP 54 → Round break tank (540 l)	→ Mains connection 3~400 V, 50 Hz (1~230 V, 50 Hz panel diesel pump) → Fluid temperature max. +40 °C → Max. operating pressure 10 bar or 16 bar → Max. inlet pressure 6 bar → Nominal connection diameter on pressure side DN 65 to DN 250 → Nominal connection diameter on inlet side DN 50 to DN 200 → Protection class of the switch cabinet IP54	→ Certified, modular and compact system - TÜV, DEKRA, DVGW and SVGW → Hygienic safety due to optional free outlet (EN 1717) → Optional stainless steel run-down tank → Automatic function test of all measurement and control devices up to redundancy stage 3 → Small installation surface - from 0.64 m²
Equipment/function	→ Components in contact with the fluid are corrosion-resistant → Pipework made of stainless steel 1.4301 → Ball shut-off valve on pressure side → Gate valve between pump and break tank with free outlet according to EN 13077, type AB according to DIN EN 1717 → Non-return valve, on pressure side → Diaphragm pressure vessel 8L, PN16, arranged on the pressure side → Pressure switch, on pressure side	→ A circuit with double pressure switch, pressure gauge, non-return valve, valve for the main and standby pump for an automatic start → Pipework in steel; painted with epoxy resin. Distributor with flanges → Shutting gate with safety lock on the pressure side of the pump → Non-return valve on the pressure side of every pump → DN2" connection for the break tank of the pumps → Pressure measuring on pressure side	→ Drainage or pump emergency drainage (EN12056) for total volume flow → Installation possible below backflow level → No valves for reducing pressure in the main flow of the fire extinguishing system → Effective maintenance management and permanent information on the operation via smartphone, tablet or PC
Special features	→ Compact system with break tank in accordance with DIN 14462 → Variants - Single-pump system - Double-pump system with two redundant single-pump systems on a base frame → Comes as standard with pump protection by means of minimum volume discharge via bypass circuit without auxiliary energy	→ Compact system (just one base frame) in accordance with EN 12845 → Jockey pump for maintaining the required pressure in the system; with automatic start/stop function → Sized diaphragm at the pump outlet for a minimum bypass line so that the pump is protected at a low volume flow → The cables are hidden in the construction and are thus protected from shocks or cuts	→ Room air cooling → Split version for installation/transport → Pressure maintaining pump or pilot pump as an option → Combination with industrial water system → Real pressure method and VR controller for high-rise buildings and large properties → Monitoring of the switchgear and the equipment environment temperature → Complete unit casing
Information	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Water supply**	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Water supply**	**Documentation on request**

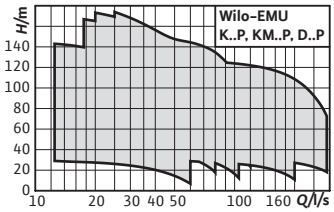
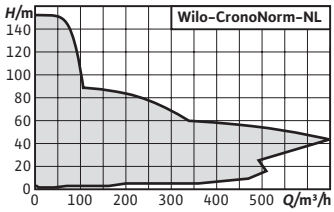
ErP READY — APPLIES TO EUROPEAN DIRECTIVE FOR ENERGY RELATED PRODUCTS

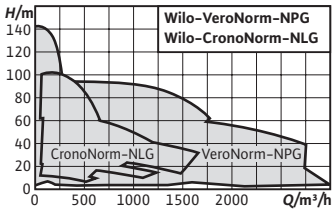
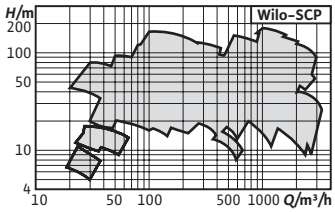
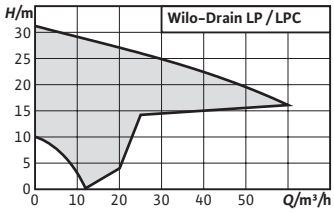
Product range	Submersible pumps	Submersible pumps	Submersible pump system
Series	Wilo-Sub TWU 3 Wilo-Sub TWU 3-...-HS	Wilo-Sub TWU 4 ... Wilo-Sub TWU 4 ...-QC Wilo-Sub TWU 4 ...-GT	Wilo-Sub TWU 3 ... Plug & Pump Wilo-Sub TWU 4 ... Plug & Pump
Field of application	Rainwater utilisation, raw water intake	Rainwater utilisation, raw water intake	Rainwater utilisation, raw water intake
Duty chart			
Design	Submersible pump, multistage	Submersible pump, multistage	Water-supply unit with submersible pump, control and complete accessories
Application	Water supply from boreholes, wells and rainwater storage tanks; domestic water supply, sprinkling and irrigation; pumping of water without long-fibre or abrasive components	Water supply from boreholes, wells and rainwater storage tanks; sprinkling, irrigation and pressure boosting; lowering the ground water level; pumping of water without long-fibre or abrasive components; geothermal applications	Water supply system for water supply from boreholes, wells and rainwater storage tanks; domestic water supply, sprinkling and irrigation; pumping of water without long-fibre or abrasive components
Volume flow Q max.	6.5 m³/h	22 m³/h	6 m³/h
Delivery head H max.	130 m	322 m	88 m
Technical data	→ Mains connection: 1~230 V, 50 Hz or 3~400 V, 50 Hz → Fluid temperature: 3–35 °C → Minimum flow rate at motor: 0.08 m/s → Max. sand content: 50 g/m³ → Max. number of starts: 30/h → Max. immersion depth: 150 m → Pressure connection: Rp 1	→ Mains connection: 1~230 V, 50 Hz or 3~400 V, 50 Hz → Fluid temperature: 3–30 °C → Minimum flow rate at motor: 0.08 m/s → Max. sand content: 50 g/m³ → Up to 20 starts per hour → Max. immersion depth: 200 m → Minimum efficiency index MEI: up to ≥ 0.7	→ Mains connection: 1~230 V, 50 Hz → Fluid temperature: 3–30 °C → Minimum flow rate at motor: 0.08 m/s → Max. sand content: 50 g/m³ → Up to 20 starts per hour → Max. immersion depth: - TWU 3- ... : 150 m - TWU 4- ... : 200 m → Minimum efficiency index MEI: ≥ 0.7 (for the series TWU 4)
Equipment/function	→ Multistage submersible pump with radial impellers → Integrated non-return valve → NEMA coupling → Single-phase or three-phase AC motor → Thermal motor protection for single-phase motor → HS variant including external or internal frequency converter	→ Multistage submersible pump with radial or semi-axial impellers → Integrated non-return valve → NEMA coupling → Single-phase or three-phase AC motor → Integrated thermal motor protection for single-phase motor → Hermetically sealed motors	→ Multistage submersible pump with radial impellers → Integrated non-return valve → NEMA coupling → Single-phase AC motor → Integrated thermal motor protection → Dry-running protection (only for TWU 4- ... -P&P with Wilo-Sub-I package)
Special features	→ Parts in contact with the fluid are corrosion-resistant → Integrated non-return valve → Supply security with constant pressure thanks to extended pump performance due to a higher speed of up to 8,400 rpm (TWU 3/HS) → Frequency converter with integrated and menu-guided control (TWU 3/HS)	→ Parts in contact with the fluid are corrosion-resistant → Integrated non-return valve → Low wear due to floating impellers → Maintenance-friendly motor	→ Easy installation thanks to pre-mounted and pre-wired components → Parts in contact with the fluid are corrosion-resistant → Integrated non-return valve
Information	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Water supply**	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Water supply**	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Water supply**

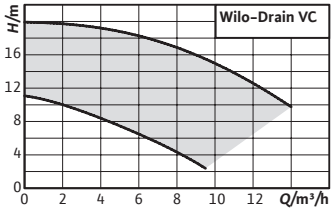
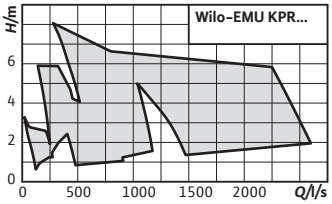
Series modification

Series extension

Product range	Submersible pumps	Sprinkler pumps with VdS approval	Submersible pumps
Series	Wilo-Sub TWI 4/6/8/10 ...	Wilo-EMU sprinkler pumps	Wilo-EMU 6" series Wilo-EMU 8" series Wilo-EMU 10"...24" series Wilo-Zetos K 8
Field of application	Rainwater utilisation, water distribution/boosting, clean water treatment, raw water intake, desalination, professional irrigation/agriculture	Fire fighting	Water distribution/boosting, clean water treatment, raw water intake, desalination, professional irrigation/agriculture
Duty chart			
Design	Submersible pump, multistage	Submersible pump with sectional construction	Submersible pump with sectional construction
Application	Water supply (including drinking water supply) from boreholes and rainwater storage tanks; municipal and industrial water supply; sprinkling and irrigation; pressure boosting; lowering the ground water level; pumping of water without long-fibre or abrasive components	Supplying sprinkler systems	Supply of potable and other water from boreholes and rainwater storage tanks; process water supply; municipal and industrial water supply; sprinkling and irrigation; pressure boosting; lowering the ground water level; utilisation of geothermal energy and in offshore applications
Volume flow Q max.	165 m³/h	580 m³/h	2,400 m³/h
Delivery head H max.	500 m	140 m	560 m
Technical data	→ Mains connection: 1~230 V, 50 Hz (only TWI 4 ...) or 3~400 V, 50 Hz → Immersed operating mode: S1 → Fluid temperature: 3–20 °C or 3–30 °C → Min. flow rate at motor: 0.08–0.5 m/s → Max. sand content: 50 g/m³ → Up to 10 or 20 starts per hour → Max. immersion depth: 100–350 m → Minimum efficiency index MEI: up to ≥ 0.7 (for the series TWI 4 and TWI 6)	→ Mains connection: 3~400 V/50 Hz → Max. fluid temperature: 25 °C; higher temperatures on request → Minimum flow rate at motor: 0.1 m/s → Max. sand content: 35 g/m³ → Up to 10 starts per hour → Max. immersion depth: – NU 611 = 100 m – Other motors = 300 m	→ Mains connection: 3~400 V, 50 Hz → Max. fluid temperature: 20 ... 30 °C → Minimum flow rate at motor: 0.1 ... 0.5 m/s → Max. sand content: 35 g/m³ (Zetos K 8: 150 g/m³) → Up to 10 starts per hour → Max. immersion depth: 100 or 300/350 m → Minimum efficiency index MEI: up to ≥ 0.7 (for the series NK 6...)
Equipment/function	→ Multistage submersible pump with radial or semi-axial impellers → Integrated non-return valve → NEMA coupling → Single-phase or three-phase AC motor	→ Multistage submersible pump → Radial or semi-axial impellers → NEMA coupling (depending on type) → Three-phase motor for direct or star-delta start → Rewindable motors	→ Multistage submersible pump → Radial or semi-axial impellers → Hydraulics and motor freely configurable according to power requirements → Integrated non-return valve (depending on type) → NEMA coupling or standardised connection → Three-phase motor for direct or star-delta start
Special features	→ Corrosion-resistant thanks to stainless steel version → Flexible installation thanks to vertical and horizontal installation → Easy installation due to integrated non-return valve → Large performance range → ACS approval for TWI 4 for drinking water application	→ VdS certification → Sturdy version in cast iron or bronze → Pressure shroud in corrosion-resistant and hygienic stainless steel version with rubber bearing for minimising noise and vibrations → VdS certified non-return valve is available as an accessory	→ Pressure shroud in corrosion-resistant and hygienic stainless steel version → Hydraulic in stainless steel precision casting (Zetos K 8) → Maintenance-friendly motors → Optionally with Ceram CT coating for increasing the efficiency → Optional with ACS approval for drinking water application
Information	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Water supply/Water Management catalogue: Water supply – Raw water intake**	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Water supply**	**Online catalogue: productfinder.wilo.com** **Water Management catalogue: Water supply – Raw water intake**

Product range	Submersible pumps	Vertical turbine pumps	Standard glanded pumps
Series	Wilo-EMU polder pumps	Series VMF, CNE, VAF	Wilo-CronoNorm-NL
Field of application	Water distribution/boosting, clean water treatment, raw water intake, desalination, dewatering, industrial process	Water distribution/boosting, industrial process	Heating, air-conditioning, cooling, water supply, industrial process
Duty chart		no illustration	
Design	Polder pump	Vertical turbine pumps for dry well installation with submerged axial or semi-axial hydraulics	Single-stage low-pressure centrifugal pump with axial suction, according to EN 733 and ISO 5199, mounted on a baseplate
Application	Potable and process water from tanks or shallow bodies of water; municipal and industrial water supply; sprinkling and irrigation; lowering the ground water level; utilisation of geothermal energy and in offshore applications	For industrial or municipal water supply and → Irrigation → Fire fighting → Cooling water supply → Dewatering and flood control	→ Pumping of heating water (in accordance with VDI 2035), cold water and water-glycol mixtures without abrasive substances in heating, cold water and cooling systems → Applications in municipal water supply, irrigation, building services, general industry, power stations, etc.
Volume flow Q max.	1,200 m³/h	40,000 m³/h	650 m³/h
Delivery head H max.	160 m	450 m	150 m
Technical data	→ Mains connection: 3~400 V, 50 Hz → Max. fluid temperature: 20 °C → Minimum flow across outside shroud: not necessary → Max. sand content: 35 g/m³ → Up to 10 starts per hour → Max. immersion depth: 300 m	→ Permitted temperature range up to 80 °C, or up to 105 °C on request → Nominal diameter on pressure side DN 100 to DN 2000	→ Fluid temperature -20 °C to +120 °C → Mains connection 3~400 V, 50 Hz → Minimum efficiency index (MEI) ≥ 0.4 → Protection class IP 55 → Nominal diameter on suction side DN 50 to DN 500 → Nominal diameter on pressure side DN 32 to DN 500 → Max. operating pressure: varies according to type and application – up to 16 bar
Equipment/function	→ Multistage submersible pump → Semi-axial impellers → Hydraulics and motor freely configurable according to power requirements → Three-phase motor for direct or star-delta start → Motors rewindable as standard	For types of installation with pressure port, for concealed floor, floor-mounted or twin-ceiling installation → Design: - As removable or permanent installation - With axial or semi-axial, single or multistage hydraulics - With open shaft for bearing lubrication with the fluid, or with shaft trim for separate bearing lubrication → Drive options: Electric motor, diesel motor or steam turbine	→ Single-stage horizontal spiral housing pump with bearing bracket and exchangeable casing wear rings in process design → Shaft sealing with mechanical seals in accordance with EN 12756 or packing stuffing box → Spiral housing with cast pump bases → Shaft coupling with spacer coupling → Motors with efficiency class IE3 for motors ≥ 0.75 kW
Special features	→ Deep water lowering thanks to self-cooling motors → Sturdy version in cast iron or bronze → Compact construction → Maintenance-friendly, rewindable motors → Optionally with Ceram CT coating for increasing the efficiency	→ Minimum surface area needed → High hydraulic efficiency → Submerged pump hydraulics → Design to order as per customer specifications	→ Reduced life-cycle costs through optimised efficiency levels → Bidirectional, force-flushed mechanical seal → Low NPSH values, best cavitation properties → Shaft coupling with or without spacer coupling
Information	**Online catalogue: productfinder.wilo.com** **Water Management catalogue: Water supply – Raw water intake**	**Documentation on request**	**Online catalogue: productfinder.wilo.com**

Product range	Standard glanded pumps	Axially split case pumps	Self-priming drainage pumps
Series	Wilo-CronoNorm-NLG Wilo-VeroNorm-NPG	Wilo-SCP	Wilo-Drain LP Wilo-Drain LPC
Field of application	Heating, air-conditioning, cooling, water supply, industrial process	Cooling, air-conditioning, water distribution/boosting, industrial process	Water distribution/boosting, professional irrigation/agriculture, dewatering/flood control
Duty chart			
Design	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	Self-priming drainage pumps for dry well installation
Application	→ Pumping of heating water (in accordance with VDI 2035), cold water and water-glycol mixtures without abrasive substances in heating, cold water and cooling systems → Applications in municipal water supply, irrigation, building services, general industry, power stations, etc.	→ Pumping heating water in accordance with VDI 2035, water-glycol mixtures, cooling/cold water and process water → Applications in municipal water supply, irrigation, building services, general industry, power stations, etc.	For pumping wastewater with small amounts of solid matter for → Excavation pits and ponds → Sprinkling/spraying of gardens and green areas → Drainage of seepage water → Mobile drainage
Volume flow Q max.	2,800 m³/h	3,400 m³/h	60 m³/h
Delivery head H max.	140 m	245 m	29 m
Technical data	→ Fluid temperature -20 °C to +120 °C (depending on type) → Mains connection 3~400 V, 50 Hz → Minimum efficiency index (MEI) ≥ 0.4 → Protection class IP 55 → Nominal diameters: DN 150 to DN 500 (depending on type) → Max. operating pressure: varies according to type and application – up to 16 bar	→ Fluid temperature -8 °C to +120 °C → Mains connection 3~400 V, 50 Hz → Protection class IP 55 → Nominal diameters - Suction side: DN 65 to DN 500 → Pressure side: DN 50 to DN 400 → Max. operating pressure: 16 or 25 bar, depending on type	→ Mains connection 1~230 V, 50 Hz, 3~400 V, 50 Hz → Fluid temperature 3 °C to 35 °C → Free ball passage 5 to 12 mm, depending on type → Connection Rp 1½ to G3
Equipment/function	→ Single-stage horizontal spiral housing pump with bearing bracket and exchangeable casing wear rings (NLG only) in process design → Shaft sealing with mechanical seals in accordance with EN 12756 or packing stuffing box → Spiral housing with cast pump bases → Greased grooved ball bearings for bearing of pump shaft → Motors with efficiency class IE3	1- or 2-stage, low-pressure centrifugal pump in monobloc design → Deliverable as complete unit or without motor or only pump hydraulics → Shaft sealing with mechanical seal or stuffing box packing → 4-pole and 6-pole motors Materials: → Pump housing: EN-GJL-250 → Impeller: G-CuSn5 ZnPb → Shaft: X12Cr13	→ Portable self-priming centrifugal pump
Special features	NLG: → Reduced life cycle costs through optimised efficiency → Mechanical seal independent of the direction of rotation → Interchangeable casing wear ring → Permanently lubricated, generously dimensioned roller bearings NPG: → Suitable for temperatures up to 140 °C → Back-pull-out version → Extension of the DIN EN 733 product range	→ Higher capacities up to 17,000 m³/h on request → Special motors and other materials on request	→ Long service life → Sturdy construction → Easy operation → Flexible use
Information	**Online catalogue: productfinder.wilo.com**	**Online catalogue: productfinder.wilo.com**	**Online catalogue: productfinder.wilo.com** **Water Management catalogue: Drainage and sewage – Wastewater transport and dewatering (pumps available ex stock)**

Product range	Pedestal pumps	Submersible sewage pumps
Series	Wilo-Drain VC	Wilo-EMU KPR ...
Field of application	Professional irrigation/agriculture, special applications, dewatering/flood control, industrial process	Raw water intake, professional irrigation/agriculture, special applications, wastewater treatment, dewatering/flood control
Duty chart		
Design	Vertical drainage pumps	Axial submersible pump with dry motor for use in pipe chambers
Application	Pumping of wastewater and condensate up to 95 °C from pump sumps and from cellars at risk of flooding	Pumping cooling or rainwater, cleaned sewage and for irrigation and pumping sludge
Volume flow Q max.	14 m³/h	9,500 m³/h
Delivery head H max.	20 m	8.4 m
Technical data	→ Mains connection 1~230 V, 50 Hz or 3~400 V, 50 Hz → Protection class IP 54 → Fluid temperature +5 °C to +95 °C → Free ball passage 5 or 7 mm, depending on type → Pressure port Rp 1 or Rp 1½ depending on type	→ Mains connection: 3~400 V, 50 Hz → Immersed operating mode: S1 → Protection class: IP 68 → Max. fluid temperature: 40 °C; higher temperatures on request → Sealing with two mechanical seals or one block seal cartridge, depending on motor → Free ball passage of 85 to 130 mm → Short common pump/motor shaft → Permanently lubricated roller bearings → Max. immersion depth: 20 m
Equipment/function	→ Attached float switch	→ Heavy-duty version made of cast iron
Special features	→ For fluids up to 95 °C → Long service life → Easy operation with attached float switch → Long standstill times possible → Integrated motor protection with thermal relay	→ Installation directly in the pressure pipe → Angle of propeller blades adjustable → Process security thanks to extensive monitoring devices → Low vibrations and long standstill times thanks to high-quality components
Information	**Online catalogue: productfinder.wilo.com** **Building services catalogue: Drainage and sewage** **Water Management catalogue: Drainage and sewage – Wastewater transport and dewatering**	**Online catalogue: productfinder.wilo.com** **Water Management catalogue: Drainage and sewage – Wastewater treatment**

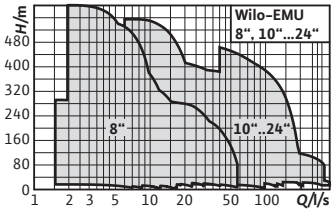
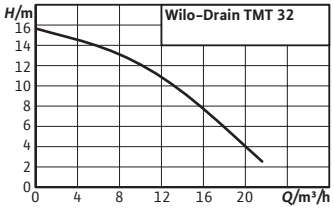
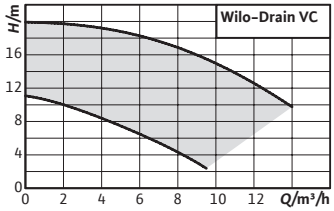
Special applications

Many applications make it necessary to move and transport water. With their high operational reliability and efficiency, Wilo products meet your needs even in non-standard applications.

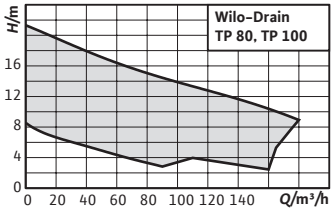
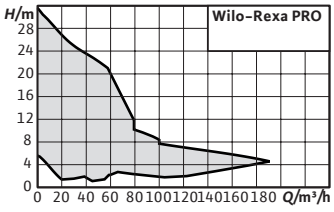
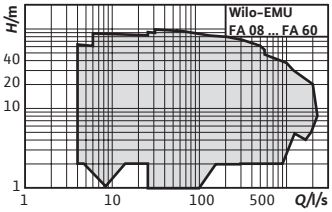
Wilo-Sevio ACT,
the process optimiser

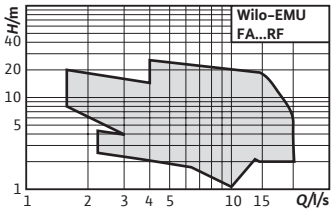
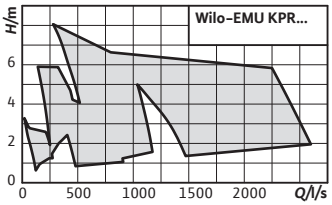
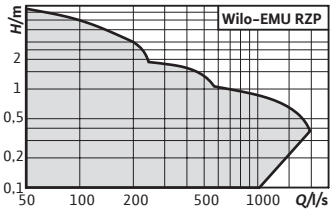
Series extension

Series modification

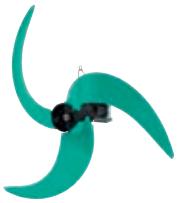
Product range	Submersible pumps	Submersible drainage pumps	Pedestal pumps
Series	Wilo-EMU 8" series Wilo-EMU 10"...24" series Wilo-Zetos K 8	Wilo-Drain TMT	Wilo-Drain VC
Field of application	Water distribution/boosting, clean water treatment, raw water intake, desalination, professional irrigation/ agriculture	Special applications, dewatering/flood control, industrial process	Professional irrigation/agriculture, special applications, dewatering/flood control, industrial process
Duty chart			
Design	Submersible pump with sectional construction	Submersible drainage pumps	Vertical drainage pumps
Application	Supply of potable and other water from boreholes and rainwater storage tanks; process water supply; municipal and industrial water supply; sprinkling and irrigation; pressure boosting; lowering the ground water level; utilisation of geothermal energy and in offshore applications	Pumping of condensate, hot water and aggressive media in industrial applica-tions	Pumping of wastewater and conden-sate up to 95 °C from pump sumps and from cellars at risk of flooding
Volume flow Q max.	2,400 m³/h	22 m³/h	14 m³/h
Delivery head H max.	560 m	15,5 m	20 m
Technical data	→ Mains connection: 3~400 V, 50 Hz → Max. fluid temperature: 20 ... 30 °C → Minimum flow rate at motor: 0.1 ... 0.5 m/s → Max. sand content: 35 g/m³ → Up to 10 starts per hour → Max. immersion depth: 100 or 300/350 m	→ Mains connection 3~400 V, 50 Hz → Immersed operating mode: S1 → Non-immersed operating mode: S3 25 % → Protection class IP 68 → Max. immersion depth 7 m → Fluid temperature max. 95 °C → Cable length 10 m → Free ball passage 9 mm → Pressure port G 1¼	→ Mains connection 1~230 V, 50 Hz or 3~400 V, 50 Hz → Protection class IP 54 → Fluid temperature +5 °C to +95 °C → Free ball passage 5 or 7 mm, depending on type → Pressure port Rp 1¼ or Rp 1½ depending on type
Equipment/function	→ Multistage submersible pump → Radial or semi-axial impellers → Hydraulics and motor freely configur-able according to power requirements → Integrated non-return valve (depending on type) → NEMA coupling or standardised con-nection → Three-phase motor for direct or star-delta start	→ Housing and impeller made of grey cast iron → Winding temperature monitoring with bimetal sensor	→ Attached float switch
Special features	→ Pressure shroud in corrosion-resistant and hygienic stainless steel version → Hydraulic in stainless steel precision casting (Zetos K 8) → Maintenance-friendly motors → Optionally with Ceram CT coating for increasing the efficiency → Optional with ACS approval for drinking water application	→ For fluids up to 95 °C → Sealed cable inlet	→ For fluids up to 95 °C → Long service life → Easy operation thanks to attached float switch → Long standstill times possible → Integrated motor protection with thermal relay
Information	**Online catalogue: productfinder.wilo.com** **Water Management catalogue: Water supply – Raw water intake**	**Online catalogue: productfinder.wilo.com** **Building services catalogue: Drainage and sewage** **Water Management catalogue: Drainage and sewage – Wastewater transport and dewatering**	**Online catalogue: productfinder.wilo.com** **Building services catalogue: Drainage and sewage** **Water Management catalogue: Drainage and sewage – Wastewater transport and dewatering**

Series extension

Product range	Submersible sewage pumps	Submersible sewage pump	Submersible sewage pumps
Series	Wilo-Drain TP 80 Wilo-Drain TP 100	Wilo-Rexa PRO	Wilo-EMU FA 08 ... to FA 60 ...
Field of application	Special applications, wastewater collection and transport, dewatering/ flood control, industrial process	Special applications, wastewater collection and transport, wastewater treatment, dewatering/flood control	Special applications, wastewater collection and transport, wastewater treatment, dewatering/flood control, industrial process
Duty chart			
Design	Submersible sewage pump for industrial applications	Submersible sewage pump	Submersible sewage pump with dry motors or self-cooling motors
Application	Pumping heavily contaminated fluids, for environmental and water treatment technology and industrial and process engineering	Pumping of drainage water and sewage, sewage containing faeces, and sludge up to max. 8% dry matter from chambers and tanks, and also for house and site drainage	Pumping sewage with solid content in wastewater treatment plants and pumping stations, local dewatering, water control and process water extraction; construction applications and industrial applications
Volume flow Q max.	180 m³/h	186 m³/h	7,950 m³/h
Delivery head H max.	22 m	32 m	87 m
Technical data	→ Mains connection: 3~400 V, 50 Hz → Immersed operating mode: S1 → Non-immersed operating mode: S1 → Protection class: IP 68 → Insulation class: F → Thermal winding monitoring → Sealing chamber control → Max. fluid temperature: 40 °C → Free ball passage: 80 or 100 mm → Max. immersion depth: 20 m	→ Mains connection: 1~230 V, 50 Hz or 3~400 V, 50 Hz → Immersed operating mode: S1 → Non-immersed operating mode: S2-30 min, S3 25 % → Protection class: IP 68 → Insulation class: F → Fluid temperature: 3-40 °C, max. 60 °C for 3 min → Free passage: 45...100 mm → Max. immersion depth: 20 m → Cable length: 10 m	→ Mains connection: 3~400 V, 50 Hz → Immersed operating mode: S1 → Non-immersed operating mode with self-cooling motor: S1 → Protection class: IP 68 → Max. fluid temperature: 40 °C; higher temperatures on request → Sealing with rotary shaft seal and mechanical seal, two mechanical seals or one block seal cartridge, depending on motor → Free ball passage of 45 to 170 mm → Permanently lubricated roller bearings → Max. immersion depth: 20 m
Equipment/function	→ Thermal motor monitoring → Sealing chamber monitoring → ATEX approval → Sheath current cooling	→ Winding temperature monitoring with bimetal sensor → Leakage detection for the motor compartment	→ Heavy-duty version made of cast iron → Self-cooling motors with 1- or 2-chamber system → Simple installation via suspension unit or pump base
Special features	→ Self-cooling motor for the use in wet well or dry well installations → Corrosion-resistant stainless steel motor housing made of 1.4404 → Patented non-clogging hydraulics → Longitudinal watertight cable inlet → Low weight	→ Sturdy version in cast iron → Oil separation chamber with optional external monitoring → Longitudinal watertight cable inlet → Also available with IE3 motor technology	→ Self-cooling motors for the use in wet well and dry well installations → Process security thanks to extensive monitoring devices → Special versions for abrasive and corrosive fluids → Low vibrations and long standstill times thanks to high-quality components
Information	**Online catalogue: productfinder.wilo.com** **Building services catalogue: Drainage and sewage** **Water Management catalogue: Drainage and sewage – Wastewater transport and dewatering**	**Online catalogue: productfinder.wilo.com** **Building services catalogue: Drainage and sewage** **Water Management catalogue: Drainage and sewage – Wastewater transport and dewatering**	**Online catalogue: productfinder.wilo.com** **Water Management catalogue: Drainage and sewage – Wastewater treatment**

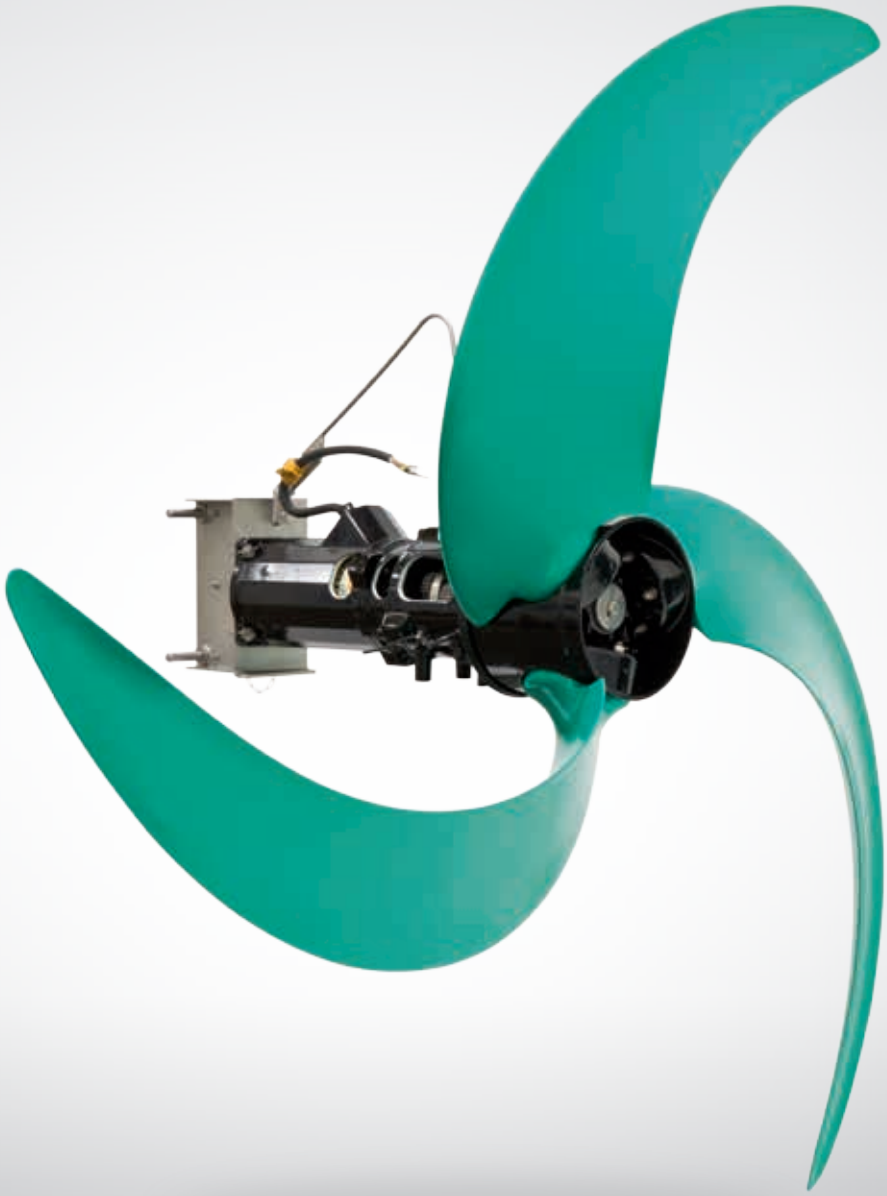
Product range	Submersible sewage pumps	Submersible sewage pumps	Recirculation pumps
Series	Wilo-EMU FA...RF	Wilo-EMU KPR ...	Wilo-EMU RZP 20 to RZP 80-2
Field of application	Special applications, wastewater collection and transport, industrial process	Raw water intake, professional irrigation/agriculture, special applications, wastewater treatment, dewatering/ flood control	Special applications, wastewater treatment
Duty chart			
Design	Submersible sewage pumps made of cast stainless steel	Axial submersible pump with dry motor for use in pipe chambers	Submersible mixers with housing unit, directly driven or with single-stage planetary gear
Application	Pumping sewage with solid content in water treatment systems and industrial applications	Pumping cooling or rainwater, cleaned sewage and for irrigation and pumping sludge	Pumping wastewater and sewage with low delivery heads and large volume flows, e.g. between equalising, nitrification and denitrification tanks; pumping process, raw, clean and cooling water e.g. in paint finishing systems or for clean water treatment; flow generation in water channels, e.g. amusement parks
Volume flow Q max.	70 m³/h	9,500 m³/h	6,800 m³/h
Delivery head H max.	30 m	8.4 m	1.1 m
Technical data	→ Mains connection: 3~400 V, 50 Hz → Immersed operating mode: S1 → Protection class: IP 68 → Max. fluid temperature: 40 °C; higher temperatures on request → Sealing with two mechanical seals or one block seal cartridge, depending on motor → Free ball passage of 35 to 45 mm → Permanently lubricated roller bearings → Max. immersion depth: 20 m	→ Mains connection: 3~400 V, 50 Hz → Immersed operating mode: S1 → Protection class: IP 68 → Max. fluid temperature: 40 °C; higher temperatures on request → Sealing with two mechanical seals or one block seal cartridge, depending on motor → Free ball passage of 85 to 130 mm → Short common pump/motor shaft → Permanently lubricated roller bearings → Max. immersion depth: 20 m	→ Mains connection: 3~400 V, 50 Hz → Immersed operating mode: S1 → Protection class: IP 68 → Max. fluid temperature: 40 °C → Units directly driven or with single-stage planetary gear → Mechanical seal with SiC/SiC pairing → Permanently lubricated roller bearings → Max. immersion depth: 20 m
Equipment/function	→ Heavy-duty version made of cast stainless steel (1.4581) → Simple installation via suspension unit or pump base	→ Heavy-duty version made of cast iron	→ Stationary installation directly on the flow pipe → Flexible installation via lowering device → Vertical or in-line installation possible
Special features	→ Sturdy version completely in stainless steel casting 1.4581 for the use in corrosive fluids → Process security thanks to extensive monitoring devices → Longitudinal watertight cable inlet → Low vibrations and long standstill times thanks to high-quality components	→ Installation directly in the pressure pipe → Angle of propeller blades adjustable → Process security thanks to extensive monitoring devices → Low vibrations and long standstill times thanks to high-quality components	→ Vertical or in-line installation possible → Self-cleaning propeller to avoid clogging → Propeller in steel or PUR
Information	**Online catalogue: productfinder.wilo.com** **Water Management catalogue: Drainage and sewage – Wastewater transport and dewatering (pumps available ex stock)**	**Online catalogue: productfinder.wilo.com** **Water Management catalogue: Drainage and sewage – Wastewater transport and dewatering (order-specific production) – Wastewater treatment**	**Online catalogue: productfinder.wilo.com** **Water Management catalogue: Drainage and sewage – Wastewater treatment**

Product range	Submersible mixer	Submersible mixer	Submersible mixer
Series	Wilo-EMU TR 14 to TR 28	Wilo-EMU TR 22 to TR 40	Wilo-EMU TR 50-2 to TR 120-1 Wilo-EMU TRE 90-2 with IE3 motor
Field of application	Special applications, wastewater treatment	Special applications, wastewater treatment	Special applications, wastewater treatment
Duty chart	no illustration	no illustration	no illustration
Design	Compact, directly driven submersible mixer	Directly driven submersible mixer	Submersible mixer with single-stage planetary gear
Application	Turbulation of deposits and solids in stormwater retention tank and pump sump; destruction of floating sludge layers; further applications in agriculture and water supply	Turbulation of deposits and solids in stormwater retention tank and pump sump; destruction of floating sludge layers; further applications in agriculture and water supply	Use in activated sludge tanks and sludge tanks for flow generation, suspension of solids, homogenisation and prevention of floating sludge layers; further applications in industry, agriculture and water supply
Volume flow Q max.	Thrust: 45 – 330 N	Thrust: 185 – 1100 N	Thrust: 160 – 6620 N
Delivery head H max.			
Technical data	→ Mains connection: 3~400 V, 50 Hz → Immersed operating mode: S1 → Protection class: IP 68 → Max. fluid temperature: 40 °C → Mechanical seal with SiC/SiC pairing → Permanently lubricated roller bearings → Max. immersion depth: 20 m	→ Mains connection: 3~400 V, 50 Hz → Immersed operating mode: S1 → Protection class: IP 68 → Max. fluid temperature: 40 °C → Mechanical seal with SiC/SiC pairing → Permanently lubricated roller bearings → Max. immersion depth: 20 m	→ Mains connection: 3~400 V, 50 Hz → Immersed operating mode: S1 → Protection class: IP 68 → Max. fluid temperature: 40 °C → Single-stage planetary gear → Mechanical seal with SiC/SiC pairing → Permanently lubricated roller bearings → Max. immersion depth: 20 m
Equipment/function	→ Stationary installation on wall and floor → Flexible installation through the use of lowering device or special pipe attachment → Can be swivelled vertically and horizontally when installed with a lowering device	→ Stationary installation on wall and floor → Flexible installation via lowering device → Can be swivelled vertically and horizontally when installed with a lowering device	→ Stationary installation on walls → Flexible installation via lowering device → Can be swivelled horizontally when installed with a lowering device → Installation with stand allows free placement in basin → Single-stage planetary gear
Special features	→ Low power consumption → Low weight → Self-cleaning propeller with Helix hub to avoid clogging → Propeller in steel or PUR	→ Self-cleaning propeller with Helix hub to avoid clogging → Propeller in cast iron, steel or PUR	→ Planetary gear allows transmission of high torques to the propeller with an aerodynamic construction → Exchangeable planetary stage for adaptation of the propeller speed → Self-cleaning propeller with backward-bent blades to avoid clogging → Also with IE3 motor technology (on the basis of IEC 60034-30) → Propeller in steel, PUR or PUR/GFK
Information	**Online catalogue: productfinder.wilo.com** **Water Management catalogue: Drainage and sewage – Wastewater treatment**	**Online catalogue: productfinder.wilo.com** **Water Management catalogue: Drainage and sewage – Wastewater treatment**	**Online catalogue: productfinder.wilo.com** **Water Management catalogue: Drainage and sewage – Wastewater treatment**



Product range	Submersible mixer	Submersible mixer
Series	Wilo-EMU TR 212 to TR 326 Wilo-EMU TRE with IE3 motor	Wilo-Sevio MIX DM 50-2
Field of application	Special applications, wastewater treatment	Special applications, industrial process
Duty chart	no illustration	no illustration
Design	Slow-running submersible mixer with two-stage planetary gear reduction	Submersible mixer with single-stage planetary gear
Application	Energetically optimised mixing and circulation of activated sludge; generation of flow rates in circulation channels; other applications in industry	Pumping of drilling mud on on-shore and off-shore installations
Volume flow Q max.	Thrust: 390 - 4250 N	Thrust: 1010 N
Delivery head H max.		
Technical data	→ Mains connection: 3~400 V, 50 Hz → Immersed operating mode: S1 → Protection class: IP 68 → Max. fluid temperature: 40 °C → Two-stage planetary gear with exchangeable second planetary gear speed → Mechanical seal with SiC/SiC pairing → Permanently lubricated roller bearings → Max. immersion depth: 20 m	→ Mains connection: 3~400 V, 50 Hz → Immersed operating mode: S1 → Protection class: IP 68 → Max. fluid temperature: 90 °C → Single-stage planetary gear → Mechanical seal with SiC/SiC pairing → Permanently lubricated roller bearings → Max. immersion depth: 20 m
Equipment/function	→ Installation with stand allows free placement in basin → Flexible installation → Two-stage planetary gear with exchangeable second planetary gear speed	→ Flexible installation via lowering device → Can be swivelled horizontally when installed with a lowering device → Single-stage planetary gear
Special features	→ Planetary gear allows transmission of high torques to the propeller with aerodynamic construction → Exchangeable planetary stage for adaptation of the propeller speed → Self-cleaning propeller with backward-bent blades to avoid clogging → Also with IE3 motor technology (on the basis of IEC 60034-30)	→ Sturdy construction for fluid temperatures of up to 90 °C → Exchangeable planetary stage for adaptation of the propeller speed → Stainless steel propeller with high wear resistance → Ex approval as standard
Information	**Online catalogue: productfinder.wilo.com** **Water Management catalogue: Drainage and sewage – Wastewater treatment**	**Documentation on request**

Wilo-EMU TRE,
the enduring one

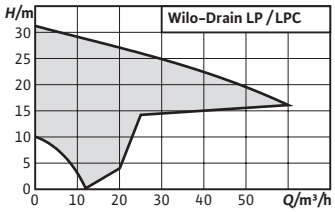
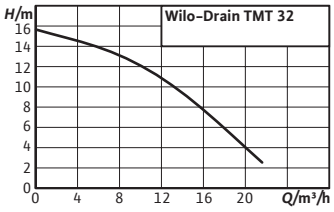
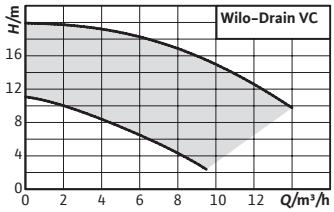


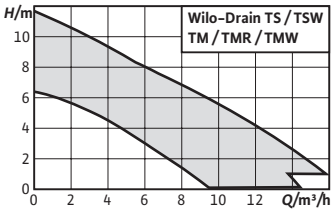
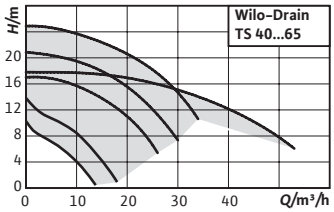
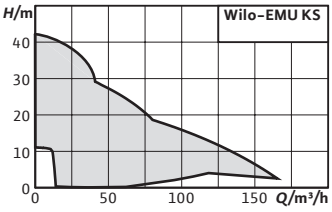
Drainage and sewage

Pumps and systems for wastewater collection and transport, wastewater treatment, dewatering and flood control.

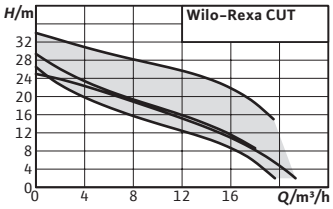
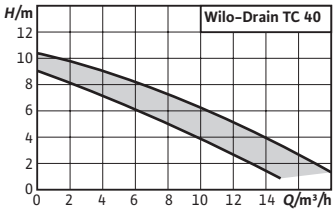
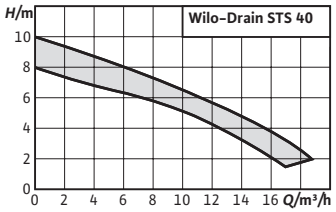
Wilo-Rexa PRO,
the reliable one

Series modification

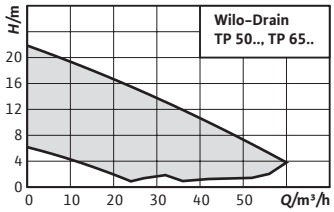
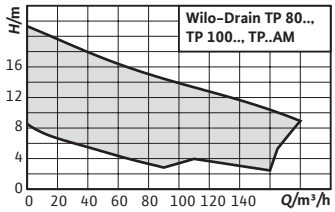
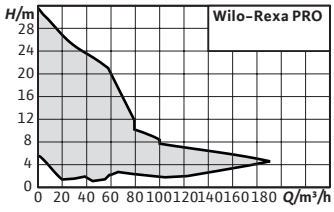
Product range	Self-priming drainage pumps	Submersible drainage pumps	Pedestal pumps
Series	Wilo-Drain LP Wilo-Drain LPC	Wilo-Drain TMT	Wilo-Drain VC
Field of application	Water distribution/boosting, professional irrigation/agriculture, dewatering/flood control	Special applications, dewatering/flood control, industrial process	Professional irrigation/agriculture, special applications, dewatering/flood control, industrial process
Duty chart			
Design	Self-priming drainage pumps for dry well installation	Submersible drainage pumps	Vertical drainage pumps
Application	For pumping wastewater with small amounts of solid matter for → Excavation pits and ponds → Sprinkling/spraying of gardens and green areas → Drainage of seepage water → Mobile drainage	Pumping of condensate, hot water and aggressive media in industrial applications	Pumping of wastewater and condensate up to 95 °C from pump sumps and from cellars at risk of flooding
Volume flow Q max.	60 m³/h	22 m³/h	14 m³/h
Delivery head H max.	29 m	15,5 m	20 m
Technical data	→ Mains connection 1~230 V, 50 Hz, 3~400 V, 50 Hz → Fluid temperature 3 °C to 35 °C → Free ball passage 5 to 12 mm, depending on type → Connection Rp 1½ to G3	→ Mains connection 3~400 V, 50 Hz → Immersed operating mode: S1 → Non-immersed operating mode: S3 25 % → Protection class IP 68 → Max. immersion depth 7 m → Fluid temperature max. 95 °C → Cable length 10 m → Free ball passage 9 mm → Pressure port G 1¼	→ Mains connection 1~230 V, 50 Hz or 3~400 V, 50 Hz → Protection class IP 54 → Fluid temperature +5 °C to +95 °C → Free ball passage 5 or 7 mm, depending on type → Pressure port Rp 1¼ or Rp 1½ depending on type
Equipment/function	→ Portable self-priming centrifugal pump	→ Housing and impeller made of grey cast iron → Winding temperature monitoring with bimetal sensor	→ Attached float switch
Special features	→ Long service life → Sturdy construction → Easy operation → Flexible use	→ For fluids up to 95 °C → Sealed cable inlet	→ For fluids up to 95 °C → Long service life → Easy operation thanks to attached float switch → Long standstill times possible → Integrated motor protection with thermal relay
Information	**Online catalogue: productfinder.wilo.com** **Water Management catalogue: Drainage and sewage – Wastewater transport and dewatering (pumps available ex stock)**	**Online catalogue: productfinder.wilo.com** **Building services catalogue: Drainage and sewage** **Water Management catalogue: Drainage and sewage – Wastewater transport and dewatering**	**Online catalogue: productfinder.wilo.com** **Building services catalogue: Drainage and sewage** **Water Management catalogue: Drainage and sewage – Wastewater transport and dewatering**

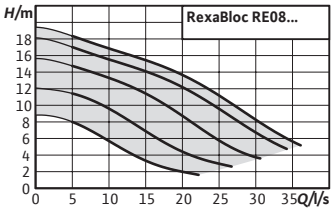
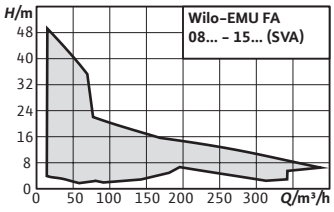
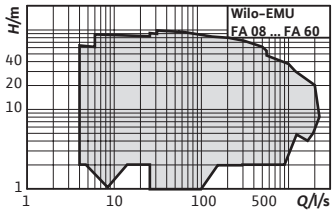
Product range	Submersible drainage pumps	Submersible drainage pumps	Submersible drainage pumps
Series	Wilo-Drain TM/TMW/TMR 32 Wilo-Drain TS/TSW 32	Wilo-Drain TS 40 Wilo-Drain TS 50 Wilo-Drain TS 65	Wilo-EMU KS
Field of application	Wastewater collection and transport, dewatering/flood control	Wastewater collection and transport, dewatering/flood control, industrial process	Dewatering/flood control, industrial process
Duty chart			
Design	Basement drainage pump	Submersible drainage pumps	Submersible drainage pumps in rugged design for use on building sites
Application	For pumping clear or slightly muddy water from tanks, sumps or pits. For help with overflows and flooding and for draining basement stairways and basement areas from domestic waste-water and for pumping water from small fountains, waterworks or streams	For pumping wastewater in house/site drainage, in environmental and water treatment technology and industrial and process engineering	For dewatering of excavation pits, cellar areas, chambers and basins. Ideally suited for use in fountains
Volume flow Q max.	16 m³/h	53 m³/h	165 m³/h
Delivery head H max.	12 m	25 m	62 m
Technical data	→ Mains connection 1~230 V, 50 Hz → Protection class IP 68 → Max. immersion depth TM/TMW/TMR = 1 m, TS/TSW = 7 m → Fluid temperature 3 °C to 35 °C, for short periods up to 3 min. max. 90 °C → Cable length 4 to 10 m, depending on type → Free ball passage 10 mm → Pressure port Rp 1¼, hose connection 35 mm (TM 32/...), 32 mm (R1) for TS/TSW	→ Mains connection 1~230 V, 50 Hz or 3~400 V, 50 Hz → Immersed operating mode: S1 → Non-immersed operating mode: S3 25 % → Protection class IP 68 → Immersion depth 5 to 7 m → Fluid temperature 3 °C to 35 °C → Free ball passage 10 mm → Pressure port Rp 1½, Rp 2 or Rp 2½ depending on type	→ Mains connection 1~230 V, 50 Hz or 3~400 V, 50 Hz → Operating mode S1 → Max. fluid temperature 40 °C → Protection class IP 68 → Sealed by double mechanical seal → Maintenance-free roller bearing
Equipment/function	→ Ready-to-plug → Motor monitoring via temperature → Sheath current cooling → Hose connection → Turbulator (TMW, TSW) → Float switch (depending on type)	→ Ready-to-plug versions also with float switch → Thermal motor monitoring → Explosion protection for TS 50 and TS 65 → Connection cable 10 m → Connection cable detachable → Integrated non-return valve for TS 40 → Hose connection for TS 40	→ Bidirectional mechanical seal → Heavy-duty motors (oil-filled and dry) ensure continuous duty even with non-immersed motor → Corrosion-resistant components
Special features	→ TMW, TSW with turbulator for constantly clean pump chamber → No generation of fluid-related odours → Easy installation → High operational reliability → Easy operation	→ Low weight → Large performance range → Oil separation chamber → Easy operation thanks to attached float switch and plug (A version)	→ Long service life → Sturdy construction → Slurping operation possible → Suitable for continuous duty (S1) → Ready-to-plug
Information	**Online catalogue: productfinder.wilo.com** **Building services catalogue: Drainage and sewage**	**Online catalogue: productfinder.wilo.com** **Building services catalogue: Drainage and sewage**	**Online catalogue: productfinder.wilo.com** **Building services catalogue: Drainage and sewage** **Water Management catalogue: Drainage and sewage – Wastewater transport and dewatering (pumps available ex stock)**

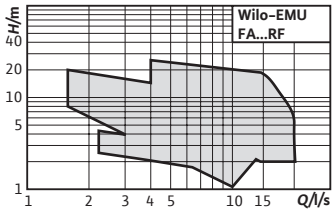
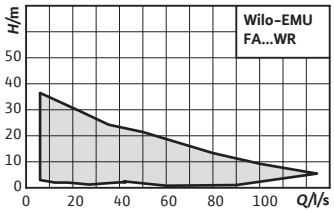
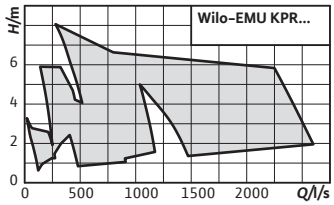
Series modification

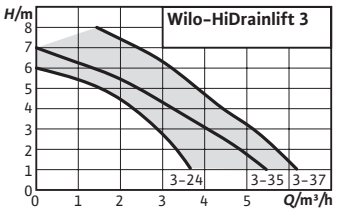
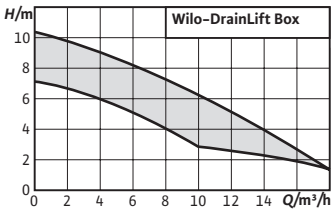
Product range	Submersible sewage pumps with macerator	Submersible sewage pumps	Submersible sewage pumps
Series	Wilo-Rexa CUT Wilo-Drain MTS Wilo-Drain MTC	Wilo-Drain TC 40	Wilo-Drain STS 40
Field of application	Wastewater collection and transport	Wastewater collection and transport, dewatering/flood control	Wastewater collection and transport, dewatering/flood control
Duty chart			
Design	Submersible sewage pumps with macerator	Submersible sewage pump	Submersible sewage pumps
Application	Pumping sewage containing faeces and municipal and industrial sewage, including fibrous matter, for pressure drainage, house and site drainage, sewage and water management and environmental and water treatment technology	Pumping heavily contaminated fluids for house/site drainage, sewage disposal (pumping of sewage free of faeces in acc. with DIN EN 12050-2) and environmental and water treatment technology	Pumping heavily contaminated fluids for house/site drainage, sewage disposal (pumping of sewage free of faeces in acc. with DIN EN 12050-2), water management, and environmental, water treatment, industrial and process engineering applications
Volume flow Q max.	17 m³/h	22 m³/h	20 m³/h
Delivery head H max.	55 m	10 m	10 m
Technical data	→ Mains connection: 1~230 V, 50 Hz or 3~400 V, 50 Hz → Immersed operating mode: S1 → Protection class: IP 68 → Insulation class: F → Thermal winding monitoring → Max. fluid temperature: 3–40 °C	→ Mains connection: 1~230 V, 50 Hz → Immersed operating mode: S1 → Non-immersed operating mode: S3 25 % → Protection class: IP 68 → Insulation class: B → Thermal winding monitoring → Max. fluid temperature: 3–40 °C → Free ball passage: 35 mm → Max. immersion depth: 2 m	→ Mains connection: 1~230 V, 50 Hz or 3~400 V, 50 Hz → Immersed operating mode: S1 → Non-immersed operating mode: S3 25 % → Protection class: IP 68 → Insulation class: B → Thermal winding monitoring → Max. fluid temperature: 3–35 °C → Free ball passage: 40 mm → Max. immersion depth: 5 m
Equipment/function	→ Internal or external macerator → Unimpeded flow to the impeller → Maceration of substances being conveyed → Simple installation via suspension unit or pump base → Oil separation chamber with optional external monitoring	→ Ready-to-plug → Including float switch → Thermal motor monitoring	→ AC variant ready-to-plug → A-model including float switch → Thermal motor monitoring
Special features	→ Low-weight version with stainless steel motor → Sturdy version in cast iron → Sealing with two mechanical seals → Longitudinal watertight cable inlet	→ Heavy-duty hydraulic housing made of cast iron → Easy operation due to the attached float switch → Integrated stainless steel pump base for easy installation → Free ball passage: 40 mm	→ Connection cable detachable → Stainless steel dry motor → Attached float switch (A-model) enables easy operation → Integrated pump base for easy installation → Free ball passage: 40 mm → No switchgear required for thermal fuse protection → Integrated thermal motor protection (1~/3~) and phase failure protection (3~)
Information	**Online catalogue: productfinder.wilo.com** **Building services catalogue: Drainage and sewage**	**Online catalogue: productfinder.wilo.com** **Building services catalogue: Drainage and sewage**	**Online catalogue: productfinder.wilo.com** **Building services catalogue: Drainage and sewage**

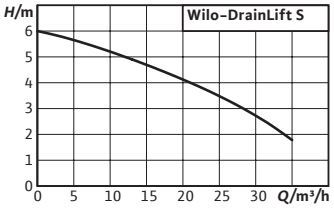
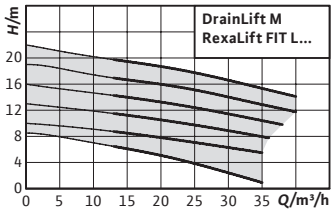
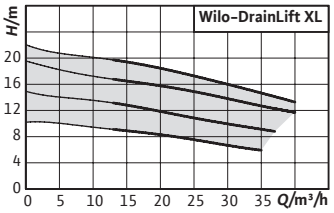
Series extension

Product range	Submersible sewage pumps	Submersible sewage pumps	Submersible sewage pumps
Series	Wilo-Drain TP 50 Wilo-Drain TP 65	Wilo-Drain TP 80 Wilo-Drain TP 100	Wilo-Rexa FIT Wilo-Rexa PRO
Field of application	Wastewater collection and transport, dewatering/flood control	Special applications, wastewater collection and transport, dewatering/ flood control, industrial process	Special applications, wastewater collection and transport, wastewater treatment, dewatering/flood control
Duty chart			
Design	Submersible sewage pumps	Submersible sewage pump for industrial applications	Submersible sewage pump
Application	Pumping heavily contaminated fluids for house and site drainage, sewage (not within the scope of DIN EN 12050-1) and water management, environmental and water treatment technology and industrial and process engineering	Pumping heavily contaminated fluids, for environmental and water treatment technology and industrial and process engineering	Pumping of drainage water and sewage, sewage containing faeces, and sludge up to max. 8 % dry matter from chambers and tanks, and also for house and site drainage
Volume flow Q max.	60 m³/h	180 m³/h	186 m³/h
Delivery head H max.	21 m	21 m	32 m
Technical data	→ Mains connection: 1~230 V, 50 Hz or 3~400 V, 50 Hz → Immersed operating mode: S1 → Non-immersed operating mode: S2-8 min, S3 25 % → Protection class: IP 68 → Insulation class: F → Thermal winding monitoring → Max. fluid temperature: 35 °C → Free ball passage: 44 mm → Max. immersion depth: 7 m	→ Mains connection: 3~400 V, 50 Hz → Immersed operating mode: S1 → Non-immersed operating mode: S1 → Protection class: IP 68 → Insulation class: F → Thermal winding monitoring → Sealing chamber control → Max. fluid temperature: 40 °C → Free ball passage: 80 or 100 mm → Max. immersion depth: 20 m	→ Mains connection: 1~230 V, 50 Hz or 3~400 V, 50 Hz → Immersed operating mode: S1 → Non-immersed operating mode: - Rexa FIT: S2-15 min; S3 10 % - Rexa PRO: S2-30 min, S3 25 % → Protection class: IP 68 → Insulation class: F → Fluid temperature: 3-40 °C, max. 60 °C for 3 min → Free passage: 50/65/80 mm → Max. immersion depth: 7 or 20 m → Cable length: 10 m
Equipment/function	→ AC variant with capacitor box → Thermal motor monitoring → ATEX approval (TP 65 3~ without floater)	→ Thermal motor monitoring → Sealing chamber monitoring → ATEX approval → Sheath current cooling	→ Winding temperature monitoring with bimetal sensor → Oil separation chamber with optional external monitoring
Special features	→ Stainless steel motor housing made of 1.4301 → Easy operation thanks to attached float switch (A version) → Low weight	→ Self-cooling motor for the use in wet well and dry well installations → Corrosion-resistant stainless steel motor housing in 1.4404 → Patented non-clogging hydraulics → Longitudinal watertight cable inlet → Low weight	→ Low-weight version with stainless steel motor or sturdy version in cast iron → Also with IE3 motor technology (on the basis of IEC 60034-30)
Information	**Online catalogue: productfinder.wilo.com** **Building services catalogue: Drainage and sewage**	**Online catalogue: productfinder.wilo.com** **Building services catalogue: Drainage and sewage** **Water Management catalogue: Drainage and sewage – Wastewater transport and dewatering**	**Online catalogue: productfinder.wilo.com** **Building services catalogue: Drainage and sewage**

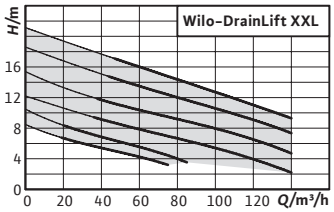
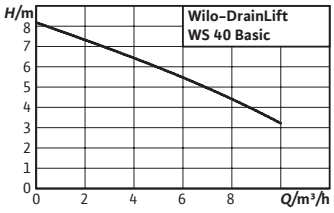
Product range	Sewage pumps	Submersible sewage pumps	Submersible sewage pumps
Series	Wilo-RexaBloc RE	Wilo-EMU FA 08 ... to FA 15 ... (standard pumps)	Wilo-EMU FA 08 ... to FA 60 ...
Field of application	Wastewater collection and transport, wastewater treatment, dewatering/ flood control	Wastewater collection and transport, wastewater treatment, dewatering/ flood control	Special applications, wastewater collection and transport, wastewater treatment, dewatering/flood control, industrial process
Duty chart			
Design	Sewage hydraulics with standard motor in monobloc design for stationary dry well installation	Submersible sewage pumps	Submersible sewage pump with dry motors or self-cooling motors
Application	Pumping of waste water and sewage containing faecal matter, including long-fibre constituents.	Pumping sewage with solid content in wastewater treatment plants and pumping stations, local dewatering, water control and process water extraction; construction applications and industrial applications	Pumping sewage with solid content in wastewater treatment plants and pumping stations, local dewatering, water control and process water extraction; construction applications and industrial applications
Volume flow Q max.	36 m³/h	380 m³/h	7,950 m³/h
Delivery head H max.	18 m	51 m	87 m
Technical data	→ Mains connection: 3~400 V, 50 Hz → Operating mode: S1 → Protection class: IP 55 → Insulation class: F → Fluid temperature: 3...70 °C → Ambient temperature: 3 to 40 °C → Motor efficiency class: IE3	→ Mains connection: 3~400 V, 50 Hz → Immersed operating mode: S1 → Non-immersed operating mode: S2-15 or S2-30 (depending on type) → Thermal motor monitoring → Protection class: IP 68 → Insulation class: F → Max. fluid temperature: 40 °C → Free ball passage of 45 to 100 mm → Permanently lubricated roller bearings → Max. immersion depth: 20 m	→ Mains connection: 3~400 V, 50 Hz → Immersed operating mode: S1 → Non-immersed operating mode with self-cooling motor: S1 → Protection class: IP 68 → Max. fluid temperature: 40 °C; higher temperatures on request → Sealing with rotary shaft seal and mechanical seal, two mechanical seals or one block seal cartridge, depending on motor → Free ball passage of 45 to 170 mm → Permanently lubricated roller bearings → Max. immersion depth: 20 m
Equipment/function	→ Winding temperature monitoring with bimetal sensor → Optional external sealing chamber monitoring for the sealing chamber	→ Oil separation chamber with optional external monitoring	→ Heavy-duty version made of cast iron → Oil separation chamber with optional external monitoring →
Special features	→ High reliability due to oil-filled sealing chamber and additional leakage chamber → 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 → Closed bearing bracket design. This means that no oil needs to be drained during dismantling	→ Sturdy version in cast iron → Operationally reliable thanks to Vortex and single-channel hydraulics with large free ball passage → Longitudinal watertight cable inlet	→ Self-cooling motors for the use in wet well and dry well installation → Process security thanks to extensive monitoring devices → Special versions for abrasive and corrosive fluids → Low vibrations and long standstill times thanks to high-quality components → Customised versions are possible
Information	**Online catalogue: productfinder.wilo.com** **Building services catalogue: Drainage and sewage**	**Online catalogue: productfinder.wilo.com** **Building services catalogue: Drainage and sewage**	**Online catalogue: productfinder.wilo.com** **Water Management catalogue: Drainage and sewage – Wastewater transport and dewatering (order-specific production)**

Product range	Submersible sewage pumps	Submersible sewage pumps	Submersible sewage pumps
Series	Wilo-EMU FA...RF	Wilo-EMU FA...WR	Wilo-EMU KPR ...
Field of application	Special applications, wastewater collection and transport, industrial process	Wastewater collection and transport, wastewater treatment	Raw water intake, professional irrigation/agriculture, special applications, wastewater treatment, dewatering/ flood control
Duty chart			
Design	Submersible sewage pumps made of cast stainless steel	Submersible sewage pump with mechanical stirring apparatus	Axial submersible pump with dry motor for use in pipe chambers
Application	Pumping sewage with solid content in water treatment systems and industrial applications	Pumping sewage and sludge in water treatment applications	Pumping cooling or rainwater, cleaned sewage and for irrigation and pumping sludge
Volume flow Q max.	70 m³/h	72 m³/h	9,500 m³/h
Delivery head H max.	30 m	27 m	8.4 m
Technical data	→ Mains connection: 3~400 V, 50 Hz → Immersed operating mode: S1 → Protection class: IP 68 → Max. fluid temperature: 40 °C; higher temperatures on request → Sealing with two mechanical seals or one block seal cartridge, depending on motor → Free ball passage of 35 to 45 mm → Permanently lubricated roller bearings → Max. immersion depth: 20 m	→ Mains connection: 3~400 V, 50 Hz → Immersed operating mode: S1 → Non-immersed operating mode with self-cooling motor: S1 → Protection class: IP 68 → Max. fluid temperature: 40 °C; higher temperatures on request → Sealing with rotary shaft seal and mechanical seal, two mechanical seals or one block seal cartridge, depending on motor → Free ball passage of 23 to 58 mm → Permanently lubricated roller bearings → Max. immersion depth: 20 m	→ Mains connection: 3~400 V, 50 Hz → Immersed operating mode: S1 → Protection class: IP 68 → Max. fluid temperature: 40 °C; higher temperatures on request → Sealing with two mechanical seals or one block seal cartridge, depending on motor → Free ball passage of 85 to 130 mm → Short common pump/motor shaft → Permanently lubricated roller bearings → Max. immersion depth: 20 m
Equipment/function	→ Oil separation chamber with optional external monitoring	→ Heavy-duty version made of cast iron → Mechanical stirring apparatus is fastened directly to the impeller → Mixer head made of Abrasit (chilled cast iron)	→ Heavy-duty version made of cast iron
Special features	→ Sturdy version completely in stainless steel casting 1.4581 for the use in corrosive fluids → Process security thanks to extensive monitoring devices → Longitudinal watertight cable inlet → Low vibrations and long standstill times thanks to high-quality components	→ Mechanical mixing device made of Abrasit material to avoid deposits in the pump chamber → Process security thanks to extensive monitoring devices → Low vibrations and long standstill times thanks to high-quality components → Customised versions are possible	→ Installation directly in the pressure pipe → Angle of propeller blades adjustable → Process security thanks to extensive monitoring devices → Low vibrations and long standstill times thanks to high-quality components → Customised versions are possible
Information	**Online catalogue: productfinder.wilo.com** **Water Management catalogue: Drainage and sewage – Wastewater transport and dewatering (pumps available ex stock)**	**Online catalogue: productfinder.wilo.com** **Water Management catalogue: Drainage and sewage – Wastewater treatment**	**Online catalogue: productfinder.wilo.com** **Water Management catalogue: Drainage and sewage – Wastewater transport and dewatering (order-specific production) – Wastewater treatment**

Product range	Wastewater lifting units	Wastewater lifting units for concealed floor installation	Wastewater lifting units
Series	Wilo-HiDrainlift 3	Wilo-DrainLift Box	Wilo-HiSewlift 3
Field of application	Waste water collection and transport	Wastewater collection and transport	Waste water collection and transport
Duty chart			
Design	Wastewater lifting units	Wastewater lifting units for concealed floor installation	Small sewing lifting units
Application	For automatic drainage of showers, washbasins, washing machines/dishwashers, or for pumping wastewater and drainage water which is free of faeces, fibres, grease and oil	For concealed floor installation, can be used for drainage of → Rooms at risk of flooding → Garage entrances → Cellar stairways → Showers, washbasins, washing machines, dishwashers	For disposal of sewage from a single toilet and up to three sources (washbasin, shower or bidet) which cannot be discharged to the sewer system via the natural fall
Volume flow Q max.	6 m³/h	20 m³/h	5 m³/h
Delivery head H max.	8 m	10 m	8 m
Technical data	→ Mains connection: 1~230 V, 50 Hz → Fluid temperature: 35 °C, up to 60/75 °C for short periods (5 min) according to model → Pressure port Ø 32 mm → Inlet connection Ø 40 mm → Protection class IP 44 → Gross tank volume 3.9 l; 16 l; 15.5 l → Switching Volume 0.7 l; 2 l; 2 l	→ Mains connection 1~230 V, 50 Hz → Max. fluid temperature 35 °C → Protection class IP 67 → Gross tank volume 85 l → Switching volume: 22 l, for type 40/10: 30 l	→ Mains connection: 1~230 V, 50 Hz → Fluid temperature: 35 °C → Pressure port: Ø 32 mm → Inlet connection: Ø 40 mm → Protection class: IP 44 → Gross tank volume: 14.4 l; 17.4 l → Switching Volume: 1 l
Equipment/function	→ Ready-to-plug (except HiDrainlift 3-24) → Thermal motor protection → Level control with pneumatic pressure transducer → Integrated non-return valves → Active carbon filter	→ Ready-to-plug system → Plastic tank with ready-mounted drainage pump, control, pressure pipe and integrated non-return valve → Mains connection cable with shock-proof plug → Motor monitoring via temperature → Level control with float switch	→ Ready-to-plug → Thermal motor protection → Level control with pneumatic pressure transducer → Integrated non-return valves → Active carbon filter
Special features	→ Very compact design for the installation into a wet cell or under a shower tray (HiDrainlift 3-24) → Low-noise operation and integrated active carbon filter for a high user comfort → Reliable performance and low power consumption for an efficient wastewater disposal → Easy installation with flexible connection possibilities → Systems ready for connection (HiDrainlift 3-35 and HiDrainlift 3-37)	→ Easy to install due to integrated pump and non-return valve → Large tank volume → Easy maintenance → Pumps with pressure pipe removable → Stainless steel tile frame with trap	→ HiSewlift 3-I35 in particularly narrow design (< 149 mm width) for an easy front-wall installation → Low-noise operation and integrated active carbon filter for a high user comfort → Reliable performance and low power consumption for an efficient sewage disposal → Easy installation with flexible connection possibilities → Ready for connection
Information	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Water supply**	**Online catalogue: productfinder.wilo.com** **Building services catalogue: Drainage and sewage**	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Water supply**

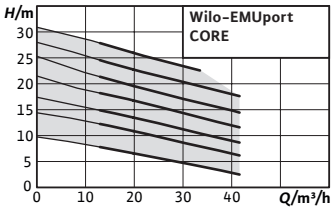
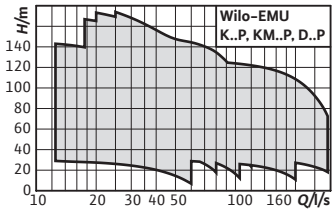
Product range	Compact sewage lifting units with 1 integrated pump	Sewage lifting units with 1 or 2 integrated pumps	Sewage lifting unit with 2 integrated pumps
Series	Wilo-DrainLift S	Wilo-DrainLift M Wilo-RexaLift FIT L	Wilo-DrainLift XL
Field of application	Wastewater collection and transport	Wastewater collection and transport	Wastewater collection and transport
Duty chart			
Design	Compact sewage lifting units with integrated pump	Sewage lifting units with 1 or 2 integrated pumps	Sewage lifting unit with 2 integrated pumps
Application	For pumping untreated sewage that cannot be discharged to the sewer system via the natural fall	For pumping untreated sewage that cannot be discharged to the sewer system via the natural fall	For pumping untreated sewage that cannot be discharged to the sewer system via the natural fall
Volume flow Q max.	35 m³/h	40 m³/h	40 m³/h
Delivery head H max.	6 m	22 m	22 m
Technical data	→ Mains connection 1~230 V, 50 Hz or 3~400 V, 50 Hz → Max. fluid temperature 35 °C, for short periods 60 °C → Protection class (without switchgear) IP 67 → Gross tank volume 45 l → Switching volume 20 l	→ Mains connection 1~230 V, 50 Hz or 3~400 V, 50 Hz → Max. fluid temperature 40 °C, for short periods 60 °C → Protection class (without switchgear) IP 67 → Gross tank volume 62 to 140 l, depending on type → Switching volume 24 to 50 l, depending on type	→ Mains connection 3~400 V, 50 Hz → Operating mode: S1; S3 → Fluid temperature max. 40 °C, for short periods 60 °C → Protection class IP 67 → Tank volume 380 l → Switching volume 260 l
Equipment/function	→ Ready-to-plug → Thermal motor monitoring → Level control with float switch → Mains-independent alarm → Potential-free contact → Pump cable detachable → Non-return valve (RV version) → Inlet seal → Keyhole saw for inlet borehole → Hose connection for venting → Kit for pressure pipe connection → Fixation material → Soundproofing material → Switchgear	→ Ready-to-plug → Thermal motor monitoring → Level control with float switch → Mains-independent alarm → Potential-free contact → Pump cable detachable → Non-return valve (RV version) → Inlet seal → Keyhole saw for inlet borehole → Hose connection for venting → Kit for pressure pipe connection → Fixation material → Soundproofing material → Switchgear	→ Thermal motor monitoring → Level control with level sensor → Potential-free contact → Pump cable detachable → Inlet seal DN 150 → Keyhole saw for inlet seal → Non-return valve → Hose connection for venting → Hose connection for diaphragm hand pump → Kit for pressure pipe connection → Fixation material → Switchgear with breakdown barrier
Special features	→ Space-saving installation → Installation-friendly due to low weight and large scope of delivery incl. non-return valve → Flexible thanks to freely selectable inlets → Operational reliability thanks to integrated thermal motor protection and mains-independent alarm for SSM and high water	→ Low system weight for an easy installation → Integrated non-return valve → Flexible thanks to freely selectable inlets → Operationally reliable thanks to integrated thermal motor protection and mains-independent alarm for SSM and high water	→ Flexible thanks to height-adjustable and swivel-mounted inlet connection → Easy operation with menu-guided switchgear → Integrated non-return valve → Operationally reliable due to high switching volume and reliable level detection → Continuous duty (S1) possible thanks to the use of self-cooling motors
Information	**Online catalogue: productfinder.wilo.com** **Building services catalogue: Drainage and sewage**	**Online catalogue: productfinder.wilo.com** **Building services catalogue: Drainage and sewage**	**Online catalogue: productfinder.wilo.com** **Building services catalogue: Drainage and sewage**

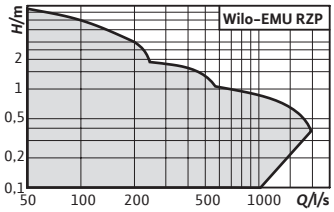
NEW

Product range	Sewage lifting unit with 2 pumps for dry well installation	Pumps station	Pump chamber
Series	Wilo-DrainLift XXL	Wilo-DrainLift WS 40 Basic Wilo-DrainLift WS 40/50	Wilo-Port 600 Wilo-Port 800
Field of application	Wastewater collection and transport	Wastewater collection and transport	Wastewater collection and transport
Duty chart			no illustration
Design	Sewage lifting unit with 2 pumps for dry well installation	Pump chamber with synthetic tank or as sewage lifting unit in the building, as single- or double-pump system	Pump chamber with synthetic tank as single or double pump system
Application	For pumping untreated sewage that cannot be discharged to the sewer system via the natural fall	For pumping untreated sewage that cannot be discharged to the sewer system via the natural fall	For pumping untreated sewage that cannot be discharged to the sewer system via the natural fall
Volume flow Q max.	140 m³/h	10 m³/h	
Delivery head H max.	21 m	8 m	
Technical data	→ Mains connection 3~400 V, 50 Hz → Operating mode S1 / S3 → Max. fluid temperature 40 °C, for short periods 60 °C → Protection class (without switchgear) IP 68 → Gross tank volume 400/800 l → Switching volume 305 ... 630 l	→ Synthetic pump chamber made of recyclable PE → Maximum upward pressure reliability and inherent stability due to finning → Inlets freely selectable on site → For supply line in DN 100 → Ventilation pipe connection in DN 70 → Max. pressure in the pressure pipe 6 bar	→ Synthetic pump chamber made of recyclable PE → Available in 4 different heights: from 1500 mm to 2250 mm → Pump chamber covers in three versions: A 15, B 125, D 400 → Telescopic chamber extension: 500 mm
Equipment/function	→ Sheath current cooling → Thermal motor monitoring and leakage detection → Level control with level sensor → Potential-free contact → Pump cable detachable → Hose connection for venting → Hose connection for diaphragm hand pump → Kit for pressure pipe connection → Fixation material → Switchgear with breakdown barrier in the housing	→ Wilo-DrainLift WS 40 Basic including sewage pump Drain TC 40 → For Wilo-DrainLift WS 40/50 following sewage pumps can be used: Drain TP 50/65 Rexa CUT	Wilo sewage pumps which can be used: Drain TMW 32 Drain TS 40 Drain TC 40 Drain STS 40 Drain MTC Rexa CUT
Special features	→ Flexible use thanks to one or two tanks → Optimum tank drainage with deep suction function → Operationally reliable thanks to large performance range and a reliable level detection → Continuous duty (S1) possible due to the use of self-cooling motors	→ Pressure-tight pump chamber for floor-mounted or concealed floor installation → Flexible thanks to freely selectable inlets → Large tank volume → Including pipework, level control, switchgear and pump (basic version)	→ Universal use thanks to continuous pump chamber extension up to 2.75 m → Anti-buoyant without weights for ground water levels up to the surface of the ground for maximum operational reliability → Pump chamber covers up to load class D 400 kN for high loading capacity → Easy maintenance thanks to surface coupling → Long service life thanks to pump chamber body made of corrosion-free polyethylene
Information	**Online catalogue: productfinder.wilo.com** **Building services catalogue: Drainage and sewage**	**Online catalogue: productfinder.wilo.com** **Building services catalogue: Drainage and sewage**	**Online catalogue: productfinder.wilo.com** **Building services catalogue: Drainage and sewage**

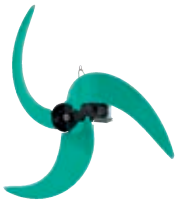
Series modification

NEW

Product range	Pump chamber	Solids separation system	Submersible pumps
Series	Wilo-DrainLift WS 1100	Wilo-EMUport CORE Wilo-EMUport FTS	Wilo-EMU polder pumps
Field of application	Wastewater collection and transport	Wastewater collection and transport	Water distribution/boosting, clean water treatment, raw water intake, desalination, dewatering, industrial process
Duty chart	no illustration		
Design	Pump chamber with synthetic tank, as single- or double-pump system	Sewage lifting unit with solid separation system according to DIN EN 12050-1 for installation in a building or manhole chamber (outdoor)	Polder pump
Application	For pumping untreated sewage that cannot be discharged to the sewer system via the natural fall	For pumping untreated sewage that cannot be discharged to the sewer system via the natural fall	Potable and process water from tanks or shallow bodies of water; municipal and industrial water supply; sprinkling and irrigation; lowering the ground water level; utilisation of geothermal energy and in offshore applications
Volume flow Q max.		60 m³/h	1,200 m³/h
Delivery head H max.		31 m	160 m
Technical data	→ Synthetic pump chamber made of recyclable PE → Maximum upward pressure reliability due to 4 lateral fins → 4 inlets can be selected on site → Maximum stability due to moulded hemispherical shape of the bottom of the pump chamber → Wilo surface coupling → Easy accessibility of the level sensor due to installation with hinged supporting bar → Maximum traffic load 5 kN/m² (in accordance with DIN EN 124, group 1)	→ Max. continous inlet: 15 m³/h → Max. inlet peak for 4h: 20 m³/h → Gross tank volume: 440 l → Usable tank volume: 295 l → Inlet connection: DN 200 → Discharge connection: DN 80 → Mains connection: 3~400 V, 50 Hz	→ Mains connection: 3~400 V, 50 Hz → Max. fluid temperature: 20 °C → Minimum flow across outside shroud: not necessary → Max. sand content: 35 g/m³ → Up to 10 starts per hour → Max. immersion depth: 300 m
Equipment/function	Wilo sewage pumps which can be used: Drain TS 40 Drain TP 50/65 Drain TP 80 Rexa FIT/PRO Drain MTC Rexa CUT	→ Sewage lifting unit with solid sapara-tion system - Collection reservoir - 2x solids separation reservoir - 2x sewage pump - Complete pipework including inlet and pressure connection and non-return valve	→ Multistage submersible pump → Semi-axial impellers → Hydraulics and motor freely configurable according to power requirements → Three-phase motor for direct or star-delta start → Motors rewindable as standard
Special features	→ Flexible installation → Anti-buoyant → High stability	→ Long service life and corrosion re-sistance thanks to PE/PUR material → Maintenance-friendly as all parts are accessible from outside → High operational reliability thanks to a pre-filtering of solid matter, the pumps deliver only the cleaned sewage → Retrofit system for the economic reconstruction of old pump stations	→ Deep water lowering thanks to self-cooling motors → Sturdy construction in cast iron or bronze → Compact construction → Maintenance-friendly, rewindable motors → Optionally with Ceram CT coating for increasing the efficiency
Information	**Online catalogue: productfinder.wilo.com** **Building services catalogue: Drainage and sewage**	**Online catalogue: productfinder.wilo.com** **Water Management catalogue: Drainage and sewage – Wastewater collection and transport**	**Online catalogue: productfinder.wilo.com** **Water Management catalogue: Water supply – Raw water intake**

Product range	Recirculation pumps	Submersible mixer	Submersible mixer
Series	Wilo-EMU RZP 20 to RZP 80-2	Wilo-EMU TR 14 to TR 28	Wilo-EMU TR 22 to TR 40
Field of application	Special applications, wastewater treatment	Special applications, wastewater treatment	Special applications, wastewater treatment
Duty chart		no illustration	no illustration
Design	Submersible mixers with housing unit, directly driven or with single-stage planetary gear	Compact, directly driven submersible mixer	Directly driven submersible mixer
Application	Pumping wastewater and sewage with low delivery heads and large volume flows, e.g. between equalising, nitrification and denitrification tanks; pumping process, raw, clean and cooling water e.g. in paint finishing systems or for clean water treatment; flow generation in water channels, e.g. amusement parks	Turbulation of deposits and solids in stormwater retention tank and pump sump; destruction of floating sludge layers; further applications in agriculture and water supply	Turbulation of deposits and solids in stormwater retention tank and pump sump; destruction of floating sludge layers; further applications in agriculture and water supply
Volume flow Q max.	6,800 m^3/h	Thrust: 45 – 330 N	Thrust: 185 – 1100 N
Delivery head H max.	1.1 m		
Technical data	→ Mains connection: 3~400 V, 50 Hz → Immersed operating mode: S1 → Protection class: IP 68 → Max. fluid temperature: 40 °C → Units directly driven or with single-stage planetary gear → Mechanical seal with SiC/SiC pairing → Permanently lubricated roller bearings → Max. immersion depth: 20 m	→ Mains connection: 3~400 V, 50 Hz → Immersed operating mode: S1 → Protection class: IP 68 → Max. fluid temperature: 40 °C → Mechanical seal with SiC/SiC pairing → Permanently lubricated roller bearings → Max. immersion depth: 20 m	→ Mains connection: 3~400 V, 50 Hz → Immersed operating mode: S1 → Protection class: IP 68 → Max. fluid temperature: 40 °C → Mechanical seal with SiC/SiC pairing → Permanently lubricated roller bearings → Max. immersion depth: 20 m
Equipment/function	→ Stationary installation directly on the flow pipe → Flexible installation via lowering device → Vertical or in-line installation possible	→ Stationary installation on wall and floor → Flexible installation through the use of lowering device or special pipe attachment → Can be swivelled vertically and horizontally when installed with a lowering device	→ Stationary installation on wall and floor → Flexible installation via lowering device → Can be swivelled vertically and horizontally when installed with a lowering device
Special features	→ Vertical or in-line installation possible → Self-cleaning propeller to avoid clogging → Propeller in steel or PUR	→ Low power consumption → Low weight → Self-cleaning propeller with Helix hub to avoid clogging → Propeller in steel or PUR	→ Self-cleaning propeller with Helix hub to avoid clogging → Propeller in cast iron, steel or PUR
Information	**Online catalogue: productfinder.wilo.com** **Water Management catalogue: Drainage and sewage – Wastewater treatment**	**Online catalogue: productfinder.wilo.com** **Water Management catalogue: Drainage and sewage – Wastewater treatment**	**Online catalogue: productfinder.wilo.com** **Water Management catalogue: Drainage and sewage – Wastewater treatment**

Series extension



Series extension

Product range	Submersible mixer	Submersible mixer	Treatment process
Series	Wilo-EMU TR 50-2 to TR 120-1 Wilo-EMU TRE 90-2 with IE3 motor	Wilo-EMU TR 212 to TR 326 Wilo-EMU TRE with IE3 motor	Wilo-Sevio ACT SD 101
Field of application	Special applications, wastewater treatment	Special applications, wastewater treatment	Wastewater treatment, industrial process
Duty chart	no illustration	no illustration	no illustration
Design	Submersible mixer with single-stage planetary gear	Slow-running submersible mixer with two-stage planetary gear reduction	Solids diffuser
Application	Use in activated sludge tanks and sludge tanks for flow generation, suspension of solids, homogenisation and prevention of floating sludge layers; further applications in industry, agriculture and water supply	Energetically optimised mixing and circulation of activated sludge; generation of flow rates in circulation channels; other applications in industry	Gentle mixing process of biomass particles in the pumped fluid
Volume flow Q max.	Thrust: 160 - 6620 N	Thrust: 390 - 4250 N	Circulation capacity 3300 – 4000 m³/h
Delivery head H max.			
Technical data	→ Mains connection: 3~400 V, 50 Hz → Immersed operating mode: S1 → Protection class: IP 68 → Max. fluid temperature: 40 °C → Single-stage planetary gear → Mechanical seal with SiC/SiC pairing → Permanently lubricated roller bearings → Max. immersion depth: 20 m	→ Mains connection: 3~400 V, 50 Hz → Immersed operating mode: S1 → Protection class: IP 68 → Max. fluid temperature: 40 °C → Two-stage planetary gear with exchangeable second planetary gear speed → Mechanical seal with SiC/SiC pairing → Permanently lubricated roller bearings → Max. immersion depth: 20 m	→ Mains connection: 3~400 V, 50 Hz → Immersed operating mode: S1 → Protection class: IP 68 → Max. fluid temperature: 40 °C → Max. immersion depth: 20 m
Equipment/function	→ Stationary installation on walls → Flexible installation via lowering device → Can be swivelled horizontally when installed with a lowering device → Installation with stand allows free placement in basin → Single-stage planetary gear	→ Installation with stand allows free placement in basin → Flexible installation → Two-stage planetary gear with exchangeable second planetary gear speed	→ Height-adjustable suction pipe due to lowering device → Suction pipe with telescopic extension
Special features	→ Planetary gear allows transmission of high torques to the propeller with an aerodynamic construction → Exchangeable planetary stage for adaptation of the propeller speed → Self-cleaning propeller with backward-bent blades to avoid clogging → Also with IE3 motor technology (on the basis of IEC 60034-30) → Propeller in steel, PUR or PUR/GFK	→ Planetary gear allows transmission of high torques to the propeller with aerodynamic construction → Exchangeable planetary stage for adaptation of the propeller speed → Self-cleaning propeller with backward-bent blades to avoid clogging → Also with IE3 motor technology (on the basis of IEC 60034-30)	→ Careful introduction of the biomass carrier particles into the fluid → Higher volume penetration for optimising the cleaning process → Reduced energy costs thanks to an improved cleaning performance → Also with IE3 motor technology (on the basis of IEC 60034-30) → Retrofit option for existing installations
Information	**Online catalogue: productfinder.wilo.com** **Water Management catalogue: Drainage and sewage – Wastewater treatment**	**Online catalogue: productfinder.wilo.com** **Water Management catalogue: Drainage and sewage – Wastewater treatment**	**Documentation on request**

Series modification

Product range	Aeration
Series	Wilo-Sevio AIR
Field of application	Sewage treatment
Duty chart	no illustration
Design	Aeration system with panel, tube or disc aerators
Application	For rough to fine-bubble aeration of aqueous media such as water, wastewater or sludge, for the purposes of supplying oxygen
Volume flow Q max.	
Delivery head H max.	
Technical data	→ Operating temperature range: – Air: 5...60 °C – Fluid: 5...30 °C → Nominal loading range: – Disc areator: 5...12 Nm³/h – Panel areator: 2...38 Nm³/h – Tube areator: 4...12 Nm³/h
Equipment/function	→ Aeration system including pipework made from PVC or stainless steel
Special features	→ High operational reliability thanks to integrated non-return valve (with panel aerators) → High system efficiency due to increased ventilation capacity → Optimised ventilation process due to selection of the appropriate aerator – plate, strip or disc aerator → Optimisation of the ventilation process in combination with submersible mixers
Information	**Documentation on request**

Wilo-RexaLift FIT L,
the dependable one

Industry

Pumps and systems for cooling and heating,
for cleaning or for peripheral process support.

Wilo vertical turbine pump,
the strong one

Finding the right solution
Wilo ideas for industry.

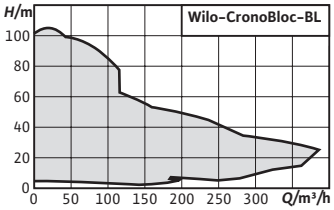
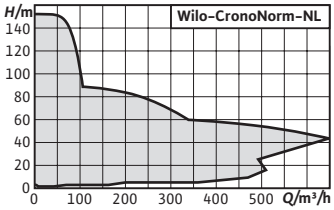
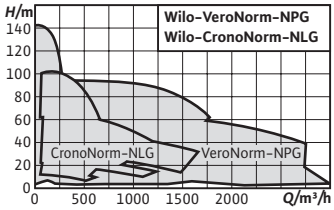
Every sector of industry has its own extremely high standards for its production processes and the material of all components involved. In light of this, Wilo pumps and systems can contribute in a wide variety of ways to ensuring highly efficient and highly reliable production.

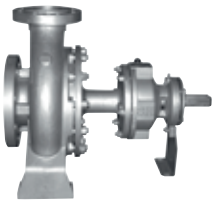
For instance, our solutions help the foodstuffs industry to comply with critical quality and hygiene standards, and help the metals industry to meet very demanding requirements and environmental standards. In the mining industry, our systems convey important raw materials securely and reliably while in the energy sector, they make a major contribution to security of supply in power stations, even at peak loads. Our pumps are also used in industry for precise climate control of rooms and factory halls, and for the supply, treatment and disposal of water.

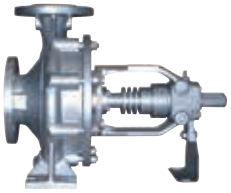
Regardless of the application, you can depend on our world-renowned quality and system expertise – just as many well-known industrial companies have before.

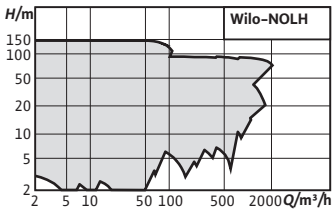
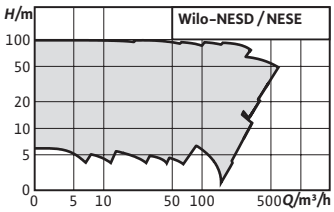
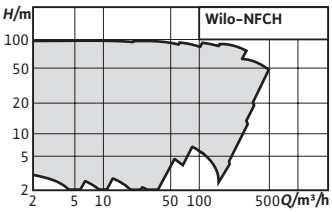
Salzgitter Flachstahl GmbH, Salzgitter, Germany.
Long lifetimes make for low operating costs.

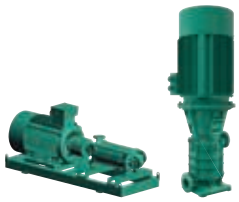
The task: Following an expansion of the warm water rolling mill, the increased production also increased the load on the scale-forming water circuit. A second circuit had to be installed.
The solution: A highly wear-resistant Wilo-EMU FA 30 submersible pump was used for more than a year and was replaced by two installers in just two days.
Result: Extremely low life cycle costs.

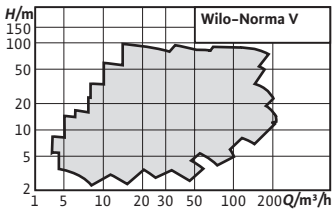
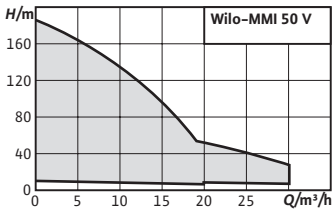
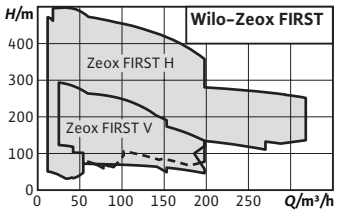
Product range	Glanded monobloc pumps	Standard glanded pumps	Standard glanded pumps
Series	Wilo-CronoBloc-BL	Wilo-CronoNorm-NL	Wilo-CronoNorm-NLG Wilo-VeroNorm-NPG
Field of application	Heating, air-conditioning, cooling, industrial process	Heating, air-conditioning, cooling, water supply, industrial process	Heating, air-conditioning, cooling, water supply, industrial process
Duty chart			
Design	Glanded pump in monobloc design with flange connection	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
Application	For pumping cold and hot water (in accordance with VDI 2035) without abrasive substances in heating, cold water and cooling water systems	→ Pumping of heating water (in accordance with VDI 2035), cold water and water-glycol mixtures without abrasive substances in heating, cold water and cooling systems → Applications in municipal water supply, irrigation, building services, general industry, power stations, etc.	→ Pumping of heating water (in accordance with VDI 2035), cold water and water-glycol mixtures without abrasive substances in heating, cold water and cooling systems → Applications in municipal water supply, irrigation, building services, general industry, power stations, etc.
Volume flow Q max.	377 m³/h	650 m³/h	2,800 m³/h
Delivery head H max.	105 m	150 m	140 m
Technical data	→ Fluid temperature -20 °C to +140 °C → Mains connection 3~400 V, 50 Hz → Minimum efficiency index (MEI) ≥ 0.4 → Protection class IP 55 → Nominal diameter DN 32 to DN 150 → Max. operating pressure 16 bar (25 bar on request)	→ Fluid temperature -20 °C to +120 °C → Mains connection 3~400 V, 50 Hz → Minimum efficiency index (MEI) ≥ 0.4 → Protection class IP 55 → Nominal diameter on suction side DN 50 to DN 500 → Nominal diameter on pressure side DN 32 to DN 500 → Max. operating pressure: varies according to type and application – up to 16 bar	→ Fluid temperature -20 °C to +120 °C (depending on type) → Mains connection 3~400 V, 50 Hz → Minimum efficiency index (MEI) ≥ 0.4) → Protection class IP 55 → Nominal diameters: DN 150 to DN 500 (depending on type) → Max. operating pressure: varies according to type and application – up to 16 bar
Equipment/function	Single-stage low-pressure centrifugal pump in monobloc design, with axial suction port and radially arranged pressure port with → Mechanical seal → Flange connection with pressure measuring connection R ⅛ → Lantern → Coupling → Motors with efficiency class IE3 for motors ≥ 0.75 kW	→ Single-stage horizontal spiral housing pump with bearing bracket and exchangeable casing wear rings in process design → Shaft sealing with mechanical seals in accordance with EN 12756 or packing stuffing box → Spiral housing with cast pump bases → Shaft coupling with spacer coupling → Motors with efficiency class IE3 for motors ≥ 0.75 kW	→ Single-stage horizontal spiral housing pump with bearing bracket and exchangeable casing wear rings (NLG only) in process design → Shaft sealing with mechanical seals in accordance with EN 12756 or packing stuffing box → Spiral housing with cast pump bases → Greased grooved ball bearings for bearing of pump shaft → Motors with efficiency class IE3
Special features	→ Reduced life-cycle costs through optimised efficiency levels → High corrosion protection through cataphoretic coating of the cast iron components → Standard condensate drainage holes in the motor housings → High worldwide availability of standard motors (according to Wilo specifications) and mechanical seals → Meets user requirements due to performance and main dimensions in accordance with EN 733 (DIN for norm pumps)	→ Reduced life-cycle costs through optimised efficiency levels → Bidirectional, force-flushed mechanical seal → Low NPSH values, best cavitation properties → Shaft coupling with or without spacer coupling	NLG: → Reduced life cycle costs through optimised efficiency → Mechanical seal independent of the direction of rotation, with forced flushing → Interchangeable casing wear ring → Permanently lubricated, generously dimensioned roller bearings → Low NPSH values, best cavitation properties NPG: → Suitable for temperatures up to 140°C → Back-pull-out version → Extension of the DIN EN 733 product range
Information	**Online catalogue: productfinder.wilo.com**	**Online catalogue: productfinder.wilo.com**	**Online catalogue: productfinder.wilo.com**

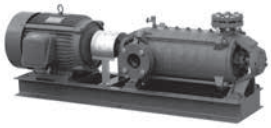


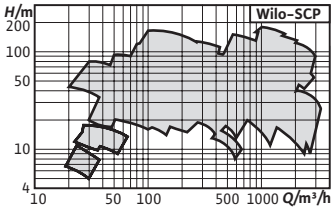


Product range	Standard pumps in accordance with EN 733	Standard pumps in accordance with EN 733 and EN 22858	Standard pumps in accordance with EN 733
Series	Series NOLH Series NOEH	Series NESD Series NESE	Series NFCH
Field of application	Industrial process	Industrial process	Industrial process
Duty chart			
Design	Single-stage low-pressure centrifugal pump mounted on a baseplate	Single-stage low-pressure centrifugal pump mounted on a baseplate	Single-stage low-pressure centrifugal pump mounted on a baseplate
Application	For supplying clean or slightly muddy fluids without solid material. For use in the following applications: → Industrial process → Non-hygienic food industry → Power generation → Water circulation in the metals industry → Heating, cold water and cooling water systems	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
Volume flow Q max.	1,800 m³/h	600 m³/h	1,000 m³/h
Delivery head H max.	140 m	90 m	90 m
Technical data	→ Permitted temperature range -20 °C to +120 °C → Mains connection 3~400 V, 50 Hz → Nominal diameter on pressure side DN 32 to DN 125 → Max. operating pressure PN 16 → Minimum efficiency index MEI ≥ 0.1 (NOLH only, for the series)	→ Max. permitted fluid temperature NESD: 207 °C NESE: 0 °C ... 120 °C (40 bar) 120 °C ... 200 °C (35 bar) 200 °C ... 230 °C (32 bar) → Minimum fluid temperature: 170 °C → Nominal diameter on pressure side DN 32 to DN 125 → Max. operating pressure NESD: PN 25; NESE: PN 40	→ Permitted temperature range up to +350 °C, depending on max. operating pressure: 0 °C ... 120 °C (16 bar) 120 °C ... 300 °C (13 bar) 300 °C ... 350 °C (16 bar) → Nominal diameter on pressure side DN 32 to DN 125 → Max. operating pressure PN 16
Equipment/function	→ Single-stage, horizontal centrifugal pump with axial suction connection and radial, upwards-facing pressure connection → Dimensions and hydraulic output as per EN 733 → Hydraulics made from cast iron (ML) or stainless steel (MX) depending on version. → Sealed by uncooled mechanical seal → Version with or without spacer coupling → 2 or 4-pole IEC standard motor → Baseplate made from steel or cast iron → Supplied as a complete unit: - With pump, coupling, coupling guard, motor and baseplate or - Without motor or - Pump only, with free shaft end	→ Single-stage, horizontal centrifugal pump with axial suction connection and radial, upwards-facing pressure connection → Dimensions and hydraulic output as per EN 22858 → Special self-cooling design allows use of an uncooled shaft seal. Additional or external cooling devices are not required. → Hydraulics in spheroidal cast iron EN-GS400 (MG version) → Flange version in accordance with EN 1092-1 → With or without spacer coupling → 2 or 4-pole IEC standard motor 50 Hz → Baseplate steel or cast iron → Supplied as a complete unit: - With pump, coupling, coupling guard, motor and baseplate or - Without motor or - Pump only, with free shaft end	→ Single-stage, horizontal centrifugal pump with axial suction connection and radial, upwards-facing pressure connection → Dimensions and hydraulic output as per EN 733 → Self-cooling design with double temperature barrier allows the use of an uncooled shaft seal and reduces heat loss. → Standard mechanical seal corresponding to the heat-carrier fluid → Version with or without spacer coupling → 2 or 4-pole IEC standard motor 50 Hz → Supplied as a complete unit: - With pump, coupling, coupling guard, motor and baseplate or - Without motor or - Pump only, with free shaft end
Special features	→ Impeller diameter is adjusted to the desired duty point → Many version options for the shaft seal → 60 Hz or ATEX version on request	→ Impeller diameter is adjusted to the desired duty point → 60 Hz or ATEX version on request	→ Impeller diameter is adjusted to the desired duty point → 60 Hz or ATEX version on request
Information	**Documentation on request**	**Documentation on request**	**Documentation on request**



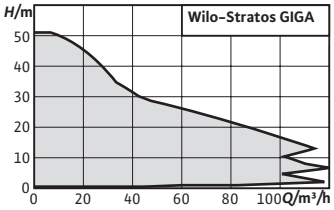
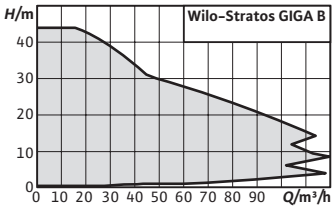
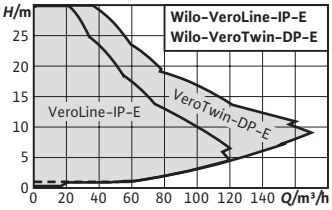
Product range	Submersible pumps	Submersible pumps	Vertical and horizontal, multistage centrifugal pumps
Series	Series Norma V	Series MMI 50 V	Wilo-Zeox FIRST H Wilo-Zeox FIRST V
Field of application	Industrial process	Industrial process	Rainwater utilisation, water distribution/boosting, raw water intake
Duty chart			
Design	Single-stage submersible pump with pump hydraulics as per EN 733	Multistage submersible pump	Non-self-priming, high-efficiency multistage high-pressure centrifugal pump in vertical or horizontal design with off-line connections
Application	For pumping clean or slightly contaminated fluids in industrial processes and in sewage treatment as well as for transporting lightweight mineral oil products For installation in tanks, vessels, rainwater storage tanks and chambers	For pumping clean or slightly contaminated water in industrial processes or clean water treatment. Ideal in situations where only small installation spaces are available → Installation in tanks, vessels, rainwater storage tanks and chambers	For domestic water supply, sprinkling, irrigation, spraying and rainwater utilisation
Volume flow Q max.	200 m³/h	30 m³/h	280 m³/h
Delivery head H max.	100 m	180 m	495 m
Technical data	→ Permitted temperature range up to +120 °C → Nominal diameter on pressure side DN 32 to DN 100 → Max. operating pressure PN 16 → Mains connection 3~400 V, 50 Hz → Max. viscosity 150 cSt	→ Permitted temperature range -20 °C to +120 °C → Nominal diameter on pressure side DN 32 to DN 100 → Max. operating pressure PN 10 or PN 16 → Mains connection 3~400 V, 50 Hz → Max. viscosity 150 cSt	→ Permitted temperature range of the fluid: -5 °C to +90 °C → Max. suction pressure: - Zeox FIRST .. V/ .. H: 6/16 bar → Max. operating pressure: - Zeox FIRST V: 27 bar - Zeox FIRST H (DN65 to DN100): 50 bar; Zeox FIRST H (DN150): 40 bar → Protection class: IP 55 → Minimum efficiency index MEI ≥ 0,4 (for Zeox FIRST V up to 100 m³/h)
Equipment/function	→ Single-stage vertical turbine pump, discharge bend with axial suction → Connection on pressure side above or optionally also below the connection plate → Flange version in PN 10/16/25 → Basic versions: - VCS: adjustable base/fixed coupling - VEM: cast iron support/fixed coupling - VTM: bearing block/semi-elastic coupling → Optional: explosion-proof float switch; → Optional: external lubrication of bearing or lubrication provided by fluid (default)	→ VCS: adjustable base and fixed coupling → VEM: cast iron support and fixed coupling → VTM: bearing block and semi-elastic coupling → VTMRI: bearing block and semi-elastic coupling with internal drain (shaft seal) for small installation spaces → VRI: cast iron support, fixed coupling and internal drain (shaft seal) for small installation spaces	→ IE3 high-efficiency motor as standard → Flushing by-pass device to ensure a long service life → Packing gland on request, exchangeable without disassembling the pump
Special features	→ Low maintenance → No shaft sealing → Noise-free suction → Replaceable IEC standard motor → Semi-elastic coupling with the VTM version	→ Low maintenance → No mechanical seal → Noise-free suction → Replaceable IEC standard motor → VTM with semi-elastic coupling → VTMRI/VRI: internal seal for pressure side and mechanical seal → All parts in contact with fluid are made of stainless steel → For high-pressure applications	→ High-efficiency hydraulics and high-efficiency IE3 motor → Standard rinsing device for the sealing system → Additional flange alignments and stuffing box packing on request → Bronze impeller on request
Information	**Documentation on request**	**Documentation on request**	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Water supply**



Product range	Sectional pumps	Axially split case pumps	Vertical turbine pumps
Series	Series RN, HS, IPB, PJ, STD PLURO, FG/FH	Wilo-SCP	Series VMF, CNE, VAF
Field of application	Industrial process	Cooling, air-conditioning, water distribution/boosting, industrial process	Water distribution/boosting, industrial process
Duty chart	no illustration		no illustration
Design	Multistage high-pressure multistage centrifugal pump in sectional construction, mounted on baseplate	Low-pressure centrifugal pump with axially split housing mounted on a baseplate	Vertical turbine pumps for dry well installation with submerged axial or semi-axial hydraulics
Application	For industrial use in high-pressure applications, such as: → Metal industry → Mine dewatering → Desalination plants → Boiler supply → Fire fighting → High-pressure cleaning → Water supply	→ Pumping heating water in accordance with VDI 2035, water-glycol mixtures, cooling/cold water and process water → Applications in municipal water supply, irrigation, building services, general industry, power stations, etc.	For industrial or municipal water supply and → Irrigation → Fire fighting → Cooling water supply → Dewatering and flood control
Volume flow Q max.	1,000 m³/h	3,400 m³/h	40,000 m³/h
Delivery head H max.	1800 m	245 m	450 m
Technical data	→ Permitted temperature range up to +80 °C, or up to +160 °C on request → Max. operating pressure 180 bar → Nominal diameter on pressure side DN 32 to DN 250	→ Mains connection 3~400 V, 50 Hz → Fluid temperature -8 °C to +120 °C → Protection class IP 55 → Nominal diameters – Suction side: DN 65 to DN 500 → Pressure side: DN 50 to DN 400 → Max. operating pressure: 16 or 25 bar, depending on type	→ Permitted temperature range up to 80 °C, or up to 105 °C on request → Nominal diameter on pressure side DN 100 to DN 2000
Equipment/function	→ High-pressure multistage centrifugal pump in sectional construction → 2 to 15-stage industrial version → Screwed segments → Hydraulic axial compensation → Shaft sealing with mechanical seal or stuffing box packing → Optionally with multiple pressure outlets for e.g.: Fire extinguishing applications → 2- or 4-pole 50 Hz motors, 60 Hz on request → Supplied as a complete unit – With pump, coupling, motor mounted on baseplate or – Without motor or – As pump only, with free shaft end	1- or 2-stage, low-pressure centrifugal pump in monobloc design → Deliverable as complete unit or without motor or only pump hydraulics → Shaft sealing with mechanical seal or stuffing box packing → 4-pole and 6-pole motors Materials: → Pump housing: EN-GJL-250 → Impeller: G-CuSn5 ZnPb → Shaft: X12Cr13	For types of installation with pressure port, for concealed floor, floor-mounted or twin-ceiling installation → Design: – As removable or permanent installation – With axial or semi-axial, single or multistage hydraulics – With open shaft for bearing lubrication with the fluid, or with shaft trim for separate bearing lubrication → Drive options: Electric motor, diesel motor or steam turbine
Special features	→ Modular design ensures pump versions in a variety of materials and versions which can be adapted to meet customer demands precisely → Hydraulic pressure compensation relieves load on bearings and ensures a longer lifetime. → Multiple optional pressure connections allow different pressures to be supplied from a single pump	→ Higher capacities up to 17,000 m³/h on request → Special motors and other materials on request	→ Minimum surface area needed → High hydraulic efficiency → Submerged pump hydraulics → Design to order as per customer specifications
Information	**Documentation on request**	**Online catalogue: productfinder.wilo.com**	**Documentation on request**

NEW

Series modification

Product range	Glanded high-efficiency pumps in in-line design	Glanded high-efficiency pumps in monobloc design.	Glanded energy-saving pumps in in-line design
Series	Wilo-Stratos GIGA	Wilo-Stratos GIGA B	Wilo-VeroLine-IP-E Wilo-VeroTwin-DP-E
Field of application	Heating, air-conditioning, cooling, industrial process	Heating, air-conditioning, cooling, industrial process	Heating, air-conditioning, cooling, industrial process
Duty chart			
Design	High-efficiency in-line pump with EC motor, electronically controlled, with flange connection, in glanded design	High-efficiency monobloc pump with EC motor and electronic power adjustment in glanded pump design, with flange connection and mechanical shaft seal	Energy-saving in-line pump/in-line double pump with electronic duty adaptation in glanded construction. Version as single-stage low-pressure centrifugal pump with flange connection and mechanical seal
Application	Pumping of heating water (in accordance with VDI 2035), cold water and water-glycol mixtures without abrasive substances in heating, cold water and cooling systems	Pumping of heating water (acc. to VDI 2035), cold water and water-glycol mixtures without abrasive substances in heating, cold water and cooling systems	Pumping of heating water (in accordance with VDI 2035), cold water and water-glycol mixtures without abrasive substances in heating, cold water and cooling systems
Volume flow Q max.	120 m³/h	120 m³/h	170 m³/h
Delivery head H max.	52 m	52 m	30 m
Technical data	→ Fluid temperature -20 °C to +140 °C → Mains connection: 3~380 V - 3~480 V (±10 %), 50/60 Hz → Minimum efficiency index (MEI) ≥ 0.7 → Protection class IP 55 → Max. operating pressure 16 bar up to +120 °C, 13 bar up to +140 °C	→ Fluid temperature -20 °C to +140 °C → Mains connection: 3~380 V -3~480 V (±10 %), 50/60 Hz → Minimum efficiency index (MEI) ≥ 0.7 → Protection class IP 55 → Max. operating pressure 16 bar up to +120 °C, 13 bar up to +140 °C	→ Fluid temperature -20 °C to +120 °C → Mains connection: 3~440 V ±10 %, 50/60 Hz 3~400 V ±10 %, 50/60 Hz 3~380 V -5 %/+10 %, 50/60 Hz → Minimum efficiency index (MEI) ≥ 0.4 → Protection class IP 55 → Nominal diameter DN 32 to DN 80 → Max. operating pressure 10 (16) bar
Equipment/function	→ Operating modes: Δp-c, Δp-v, PID control, n=constant → Manual functions: E.g. differential pressure setpoint setting, manual control mode, error acknowledgement → External control functions: E.g. Overriding Off, external pump cycling (effective only in double pump operation mode), analogue input 0-10 V/0-20 mA for manual control mode (DDC) → Infrared interface for wireless data exchange with IR-Monitor/IR-Stick, plug-in position for IF-Modules for connection to building automation → Safety functions: E.g. full motor protection, access disable → Dual pump management	→ Operating modes: Δp-c, PID control, n=constant → Manual functions: E.g. differential pressure setpoint setting, manual control mode, error acknowledgement → External control functions: E.g. Overriding Off, External pump cycling, analogue input 0-10 V/0-20 mA for manual control mode (DDC) → Infrared interface for wireless data exchange with IR-Monitor/IR-Stick, Plug-in position for IF-Modules for connection to building automation → Safety functions: E.g. full motor protection, access disable	→ Operating modes: Δp-c, Δp-v, PID control, n=constant → Manual functions: E.g. differential pressure setpoint setting, manual control mode, error acknowledgement → External control functions: E.g. Overriding Off, external pump cycling (effective only in double pump operation mode), analogue input 0-10 V/0-20 mA for manual control mode (DDC) → Infrared interface for wireless data exchange with IR-Monitor/IR-Stick, plug-in position for IF-Modules for connection to building automation → Safety functions: E.g. full motor protection, access disable
Special features	→ Innovative high-efficiency pump for maximum total-system efficiency → High-efficiency EC motor (efficiency above IE4 limit values → Highly efficient hydraulics, optimally adapted to the EC motor technology with optimised efficiency, minimum efficiency index (MEI) ≥ 0.7 according to ErP Directive 2009/125/EC → Control range is up to three times higher than that of conventional electronically controlled pumps	→ Innovative high-efficiency pump with principal dimensions in accordance with EN 733 → High-efficiency EC motor (efficiency above IE4 limit values) → Highly efficient hydraulics, optimally adapted to the EC motor technology, with optimised efficiency, minimum efficiency index (MEI) ≥ 0.7 according to ErP Directive 2009/125/EC → Control range is up to three times higher than that of conventional electronically controlled pumps	→ Energy savings due to integrated electronic control → Optional interfaces for bus communication using plug-in IF-Modules → Simple operation with red-button technology and display → Integrated dual pump management → Integrated full motor protection with trip electronics → Motors with efficiency class IE4
Information	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Heating, air-conditioning, cooling**	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Heating, air-conditioning, cooling**	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Heating, air-conditioning, cooling**

ErP READY — APPLIES TO EUROPEAN DIRECTIVE FOR ENERGY RELATED PRODUCTS

Series modification

ErP READY — APPLIES TO EUROPEAN DIRECTIVE FOR ENERGY RELATED PRODUCTS

Series modification

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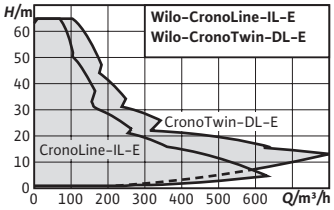
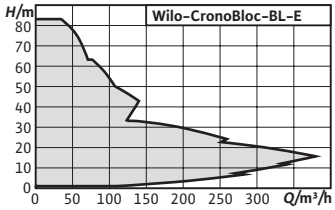
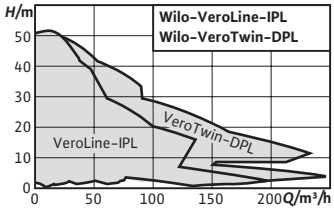
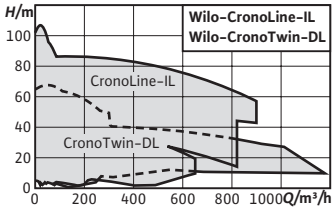
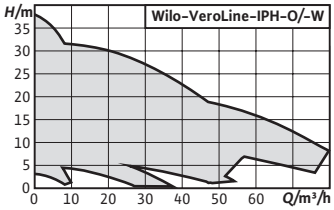
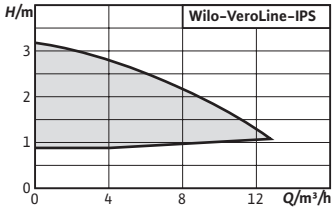
Product range	Glanded energy-saving pumps in in-line design	Glanded energy-saving pumps in monobloc design	Glanded standard pumps in in-line design
Series	Wilo-CronoLine-IL-E Wilo-CronoTwin-DL-E	Wilo-CronoBloc-BL-E	Wilo-VeroLine-IPL Wilo-VeroTwin-DPL
Field of application	Heating, air-conditioning, cooling, industrial process	Heating, air-conditioning, cooling, industrial process	Heating, air-conditioning, cooling, industrial process
Duty chart			
Design	Energy-saving in-line pump/in-line double pump with electronic duty adaptation in glanded construction. Version as single-stage low-pressure centrifugal pump with flange connection and mechanical seal	Energy-saving pump in monobloc design with electronic duty adaptation 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 screwed connection or flange connection
Application	Pumping of heating water (in accordance with VDI 2035), cold water and water-glycol mixtures without abrasive substances in heating, cold water and cooling systems	Pumping of heating water (in accordance with VDI 2035), cold water and water-glycol mixtures without abrasive substances in heating, cold water and cooling systems	Pumping of heating water (in accordance with VDI 2035), cold water and water-glycol mixtures without abrasive substances in heating, cold water and cooling systems
Volume flow Q max.	800 m³/h	380 m³/h	245 m³/h
Delivery head H max.	65 m	84 m	52 m
Technical data	→ Fluid temperature -20 °C to +140 °C → Mains connection: 3~440 V ±10 %, 50/60 Hz 3~400 V ±10 %, 50/60 Hz 3~380 V -5 %/+10 %, 50/60 Hz → Minimum efficiency index (MEI) ≥ 0.4 → Protection class IP 55 → Nominal diameter DN 40 to DN 80 → Max. operating pressure 16 bar	→ Fluid temperature -20 °C to +140 °C → Mains connection: 3~440 V ±10 %, 50/60 Hz 3~400 V ±10 %, 50/60 Hz 3~380 V -5 %/+10 %, 50/60 Hz → Minimum efficiency index (MEI) ≥ 0.4 → Protection class IP 55 → Nominal diameter DN 32 to DN 125 → Max. operating pressure 16 bar (120 °C)	→ Fluid temperature -20 °C to +120 °C → Mains connection 3~400 V, 50 Hz → Minimum efficiency index (MEI) ≥ 0.4 → Protection class IP 55 → Nominal diameter Rp 1 to DN 100 → Max. operating pressure 10 bar (special version: 16 bar)
Equipment/function	→ Operating modes: Δp-c, Δp-v, PID control, n=constant → Manual functions: E.g. differential pressure setpoint setting, manual control mode, error acknowledgement → External control functions: E.g. Overriding Off, external pump cycling (effective only in double pump operation mode), analogue input 0-10 V/0-20 mA for manual control mode (DDC) → Infrared interface for wireless data exchange with IR-Monitor/IR-Stick, plug-in position for IF-Modules for connection to building automation → Safety functions: E.g. full motor protection, access disable	→ Operating modes: Δp-c (with external DDG), PID control, n=constant → Manual functions: E.g. differential pressure setpoint setting, manual control mode, error acknowledgement → External control functions: E.g. Overriding Off, analogue input 0-10 V/0-20 mA for manual control mode (DDC) → Infrared interface for wireless data exchange with IR-Monitor/IR-Stick, plug-in position for IF-Modules for connection to building automation → Safety functions: E.g. full motor protection, access disable → Motors with efficiency class IE4 for motors from 11 kW up to 22 kW	Single-stage, low-pressure centrifugal pump in in-line design with → Mechanical seal → Flange connection with pressure measuring connection R ⅛ → Motor with one-piece shaft → DPL with switchover valve → Motors with efficiency class IE3 for motors ≥ 7.5 kW
Special features	→ Energy savings due to integrated electronic control → Optional interfaces for bus communication using plug-in IF-Modules → Simple operation with red-button technology and display → Integrated dual pump management → Integrated full motor protection with trip electronics → 2-pole pumps: Motors with efficiency class IE4; 4-pole-pumps: Motors with efficiency class IE4 for motors from 11 kW up to 22 kW	→ Energy savings due to integrated electronic control → Optional interfaces for bus communication using plug-in IF-Modules → Simple operation due to tried-and-tested red-button technology and display → Integrated full motor protection with trip electronics → Meets user requirements due to performance and main dimensions in accordance with EN 733 (DIN for norm pumps)	→ High standard of corrosion protection thanks to cataphoretic coating → Standard condensate drainage holes in the motor housings and lanterns → Series design: motor with one-piece shaft → Version N: Standard motor B5 or V1 with stainless steel plug shaft → Bidirectional, force-flushed mechanical seal → DPL: Main-/standby operation or peak-load operation (via additional external device)
Information	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Heating, air-conditioning, cooling**	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Heating, air-conditioning, cooling**	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Heating, air-conditioning, cooling**

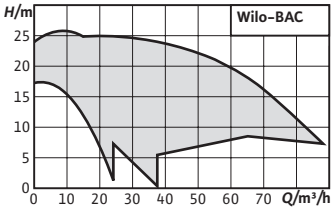
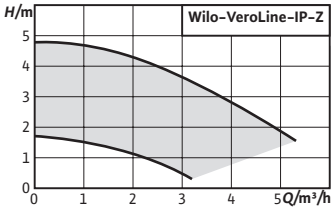
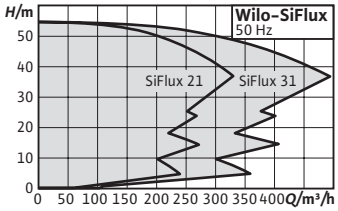
ErP READY

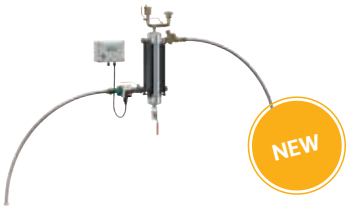
Series extension

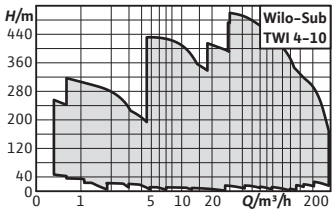
ErP READY

Product range	Glanded standard pumps in in-line design	Special glanded pumps in in-line design	Special glanded pumps in in-line design
Series	Wilo-CronoLine-IL Wilo-CronoTwin-DL	Wilo-VeroLine-IPH-W Wilo-VeroLine-IPH-O	Wilo-VeroLine-IPS
Field of application	Heating, air-conditioning, cooling, industrial process	Heating, air-conditioning, cooling, industrial process	Heating, air-conditioning, cooling, industrial process
Duty chart			
Design	Glanded pump/double pump in in-line design with flange connection	Glanded pump in in-line design with flange connection	Glanded pump in in-line design with screwed connection or flange connection
Application	Pumping of heating water (in accordance with VDI 2035), cold water and water-glycol mixtures without abrasive substances in heating, cold water and cooling systems	IPH-W: For pumping hot water without abrasive substances in closed industrial circulation systems, district heating, closed heating systems, etc. IPH-O: For pumping heat transfer oil in closed industrial circulation systems	For pumping cold and hot water (in accordance with VDI 2035) without abrasive substances in heating, cold water and cooling water systems
Volume flow Q max.	1,170 m³/h	80 m³/h	13 m³/h
Delivery head H max.	108 m	38 m	3 m
Technical data	→ Fluid temperature -20 °C to +140 °C → Mains connection 3~400 V, 50 Hz → Minimum efficiency index (MEI) ≥ 0.4 → Protection class IP 55 → Nominal diameter DN 32 to DN 250 → Max. operating pressure 16 bar (25 bar on request)	→ Fluid temperature IPH-W: -10 °C to +210 °C (at max. 23 bar) → Fluid temperature IPH-O: -10 °C to +350 °C (at max. 9 bar) → Mains connection 3~400 V, 50 Hz → Protection class IP 55 → Nominal diameter DN 20 to DN 80	→ Fluid temperature -10 °C to +140 °C → Mains connection 3~230 V, 3~400 V, 50 Hz → Minimum efficiency index (MEI) ≥ 0.4 → Protection class IP 55 → Nominal diameter Rp 1, DN 40 and DN 50 → Max. operating pressure 10 bar, or 6 bar for flange connection
Equipment/function	Single-stage, low-pressure centrifugal pump in in-line design with → Mechanical seal → Flange connection with pressure measuring connection R ⅛ → Lantern → Coupling → IEC standard motor → DL with switchover valve → Motors with efficiency class IE3 for motors ≥ 7.5 kW	Single-stage, low-pressure centrifugal pump in in-line design with → Mechanical seal → Flange connection → Lantern → Motor with special shaft	Single-stage, low-pressure centrifugal pump in in-line design with → Mechanical seal or stuffing box packing → Screwed or flange connection with pressure measuring connection R ⅛ → Standard motor
Special features	→ Reduced life cycle costs thanks to optimised efficiency → Standard condensate drainage holes in the motor housings → Can be used flexibly in air-conditioning and cooling systems, with application benefits due to direct draining of condensat → High standard of corrosion protection → High worldwide availability of standard motors (according to Wilo specifications) and standard mechanical seals → Main/standby mode or peak-load operation (by means of external auxiliary device)	→ Self-cooling mechanical seal, independent of direction of rotation → Great variety of applications due to a wide fluid temperature range without additional wearing parts	→ Worldwide availability of the standard motors used → Bidirectional force-flushed mechanical seal
Information	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Heating, air-conditioning, cooling**	**Online catalogue: productfinder.wilo.com**	**Online catalogue: productfinder.wilo.com**

ErP READY — APPLIES TO EUROPEAN DIRECTIVE FOR ENERGY RELATED PRODUCTS

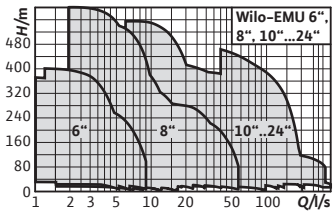
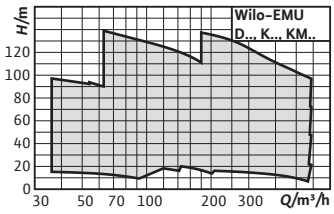
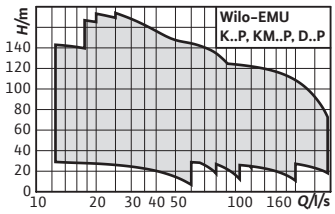
Product range	Glanded monobloc pumps	Glanded special pumps	Glanded energy-saving pumps Multi-pump systems
Series	Wilo-BAC	Wilo-VeroLine-IP-Z	Wilo-SiFlux
Field of application	Heating, air-conditioning, cooling, industrial process	Domestic hot water	Heating, air-conditioning, cooling, industrial process
Duty chart			
Design	Glanded pump in monobloc design with screwed connection or Victaulic connection	Glanded circulation pump in in-line design with screwed connection	Highly efficient, 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 glanded in-line pumps switched in parallel
Application	For pumping of cooling water, cold water, water-glycol mixtures and other fluids without abrasive substances	For pumping drinking water, cold and hot water (in accordance with VDI 2035) without abrasive substances, in heating, cold water and cooling water systems	For pumping heating water (in accordance with VDI 2035), water-glycol mixtures and cooling and cold water without abrasive substances in heating, cold water and cooling water systems
Volume flow Q max.	87 m³/h	5 m³/h	490 m³/h
Delivery head H max.	26 m	4.5 m	55 m
Technical data	→ Fluid temperature -15 °C to +60 °C → Mains connection 3~400 V, 50 Hz → Minimum efficiency index (MEI) ≥ 0.4 → Protection class IP 54 → 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) → Max. operating pressure 6.5 bar	→ Fluid temperature: domestic hot water up to a water hardness of 4.99 mmol/l (28 °d) max. +65 °C → In short-term duty (2 h) up to +110 °C → Heating water -8 °C to +110 °C → Mains connection 1~230 V, 50 Hz, 3~400 V, 50 Hz → Protection class IP 44 → Nominal diameter Rp 1 → Max. operating pressure 10 bar	→ Pump type: VeroLine-IP-E or CronoLine-IL-E → Mains connection: 3~230/400 V, 50 Hz ±10 % → Fluid temperature: 0 °C to +120 °C → Pipe connections: DN 125 to DN 300 → Flanges: PN 16, according EN 1092-2 → Max. permissible operating pressure: 10 bar (IP-E), 16 bar (IL-E)
Equipment/function	Single-stage low-pressure centrifugal pump in monobloc design, with axial suction port and radially arranged pressure port → Motors with efficiency class IE3	Single-stage, low-pressure centrifugal pump in in-line design with → Mechanical seal → Screwed connection → Motor with one-piece shaft	→ Number of pumps: 2+1 or 3+1 (2 or 3 pumps in operation, 1 standby pump each) → Automatic pump control via Wilo-SCe → Parts that come in contact with the fluid are corrosion-resistant → Base frame made of galvanised steel, with height-adjustable vibration absorbers for insulation against structure-borne noise → Distributor steel, with corrosion-resistant coating → Shut-off valves, non-return valve, pressure gauge and premounted seals → Differential pressure sensor
Special features	→ Reduced life cycle costs through optimised efficiency levels → Pump housing in plastic design → Version with Victaulic or threaded connection (BAC 70/135... only with Victaulic connection)	→ High resistance to corrosive fluids due to stainless steel housing and Noryl impeller → Wide range of applications due to suitability for water hardness up to 5 mmol/l (28 °dH) → All plastic parts that come into contact with the fluid fulfil KTW recommendations	→ Quick and easy installation → Energy-saving: Operation in partial load area according to current needs → Reliable system thanks to optimally matched components → Compact design, good accessibility to all components
Information	**Online catalogue: productfinder.wilo.com**	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Heating, air-conditioning, cooling**	**Online catalogue: productfinder.wilo.com**



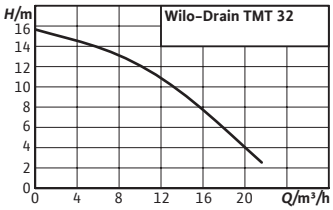
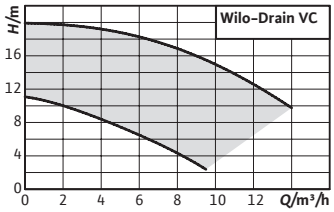
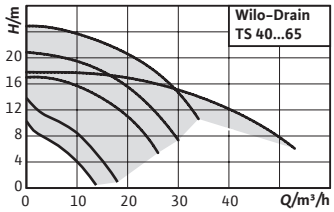
Product range	Particle separator systems for closed HVAC loops	Particle separator systems for closed HVAC loops	Submersible pumps
Series	Wilo-SiClean	Wilo-SiClean Comfort	Wilo-Sub TWI 4/6/8/10 ...
Field of application	Heating, air-conditioning, cooling	Heating, air-conditioning, cooling	Rainwater utilisation, water distribution/boosting, clean water treatment, raw water intake, desalination, professional irrigation/agriculture
Duty chart	no illustration	no illustration	
Design	Compact particle separator kit, consisting of mechanical and hydraulic components. Manual emptying of the system.	Fully-automatic, compact particle separator, provided as "Plug & Play" version, consisting of mechanical and hydraulic components. The system is drained automatically.	Submersible pump, multistage
Application	SiClean removes magnetic and non-magnetic particles from heating systems via natural physical phenomena. Installation in commercial properties and heating/air-conditioning systems for district heating.	SiClean Comfort removes particles from heating systems using natural physical phenomena. For installation in commercial properties and heating/air-conditioning systems for district heating.	Water supply (including drinking water supply) from boreholes and rainwater storage tanks; municipal and industrial water supply; sprinkling and irrigation; pressure boosting; lowering the ground water level; pumping of water without long-fibre or abrasive components
Volume flow Q max.	4 m³/h	47 m³/h	165 m³/h
Delivery head H max.	–	–	500 m
Technical data	→ Fluid temperature 0 °C to +95 °C → Mains connection: 1~230 V, 50 Hz	→ Fluid temperature 0 °C to +95 °C → Mains connection: 3~400 V, 50 Hz	→ Mains connection: 1~230 V, 50 Hz (only TWI 4 ...) or 3~400 V, 50 Hz → Fluid temperature: 3–20 °C or 3–30 °C → Min. flow rate at motor: 0.08–0.5 m/s → Max. sand content: 50 g/m³ → Up to 10 or 20 starts per hour → Max. immersion depth: 100–350 m → Minimum efficiency index MEI: up to ≥ 0.7 (for the series TWI 4 and TWI 6)
Equipment/function	→ Anti-corrosive, hydraulic components → Fabric-reinforced hoses connected to inlet and outlet of the particle separator → Pre-assembled venting unit for expulsion of microbubbles → Movable magnetic rods for separation of iron oxide particles → Volume flow limiter → Manual purge valve for draining of collected particles → Switchbox for monitoring the circulation pump	→ Corrosion-resistant, hydraulic components → Fabric-reinforced hoses connected to inlet and outlet of the particle separator → Pre-assembled flushing device including electronic drain valve and additional safety valve → Automatic draining of the particle collection chamber → SC switchgear → Separator for removing magnetic and non-magnetic particles	→ Multistage submersible pump with radial or semi-axial impellers → Integrated non-return valve → NEMA coupling → Single-phase or three-phase AC motor
Special features	→ Removal of magnetic and non-magnetic particles from the medium, venting of micro bubbles → High cleaning efficiency due to physical effects (gravity, filtration...) → Easy to use due to ease of installation, maintenance, and simplified settings → Corrosion-resistant thanks to stainless steel particle separator	→ High efficiency via combination of physical effects → fully automated operation → "Plug & Play" design → Fully automated and adjustable disposal of collected particles in the desludging tank → Highly functional thanks to removal of all magnetic and non-magnetic particles, free air and micro bubbles in the fluid and support for the degasification process	→ Corrosion-resistant thanks to stainless steel version → Flexible installation thanks to vertical and horizontal installation → Easy installation due to integrated non-return valve → Large performance range → ACS approval for TWI 4 for drinking water application
Information	**Online catalogue: productfinder.wilo.com**	**Online catalogue: productfinder.wilo.com**	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Water supply/Water Management catalogue: Water supply – Raw water intake**

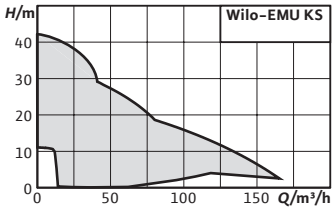
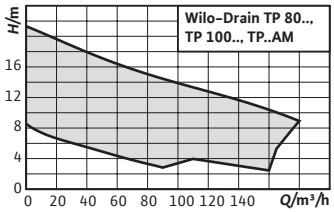
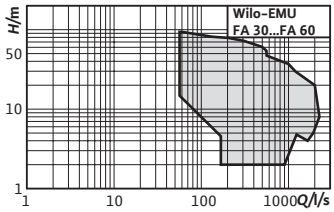
Series extension

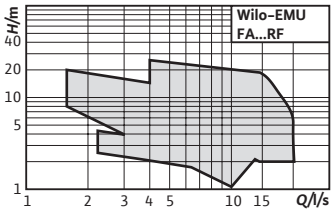
Series modification

Product range	Submersible pumps	Sprinkler pumps with VdS approval	Submersible pumps
Series	Wilo-EMU 6" series Wilo-EMU 8" series Wilo-EMU 10"...24" series Wilo-Zetos K 8	Wilo-EMU sprinkler pumps	Wilo-EMU polder pumps
Field of application	Water distribution/boosting, clean water treatment, raw water intake, desalination, professional irrigation/ agriculture	Fire fighting	Water distribution/boosting, clean water treatment, raw water intake, desalination, dewatering, industrial process
Duty chart			
Design	Submersible pump with sectional construction	Submersible pump with sectional construction	Polder pump
Application	Supply of potable and other water from boreholes and rainwater storage tanks; process water supply; municipal and industrial water supply; sprinkling and irrigation; pressure boosting; lowering the ground water level; utilisation of geothermal energy and in offshore applications	Supplying sprinkler systems	Potable and process water from tanks or shallow bodies of water; municipal and industrial water supply; sprinkling and irrigation; lowering the ground water level; utilisation of geothermal energy and in offshore applications
Volume flow Q max.	2,400 m³/h	580 m³/h	1,200 m³/h
Delivery head H max.	560 m	140 m	160 m
Technical data	→ Mains connection: 3~400 V, 50 Hz → Max. fluid temperature: 20 ... 30 °C → Minimum flow rate at motor: 0.1 ... 0.5 m/s → Max. sand content: 35 g/m³ → Up to 10 starts per hour → Max. immersion depth: 100 or 300/350 m → Minimum efficiency index MEI: up to ≥ 0.7 (for the series NK 6...)	→ Mains connection: 3~400 V/50 Hz → Max. fluid temperature: 25 °C; higher temperatures on request → Minimum flow rate at motor: 0.1 m/s → Max. sand content: 35 g/m³ → Up to 10 starts per hour → Max. immersion depth: - NU 611 = 100 m - Other motors = 300 m	→ Mains connection: 3~400 V, 50 Hz → Max. fluid temperature: 20 °C → Minimum flow across outside shroud: not necessary → Max. sand content: 35 g/m³ → Up to 10 starts per hour → Max. immersion depth: 300 m
Equipment/function	→ Multistage submersible pump → Radial or semi-axial impellers → Hydraulics and motor freely configurable according to power requirements → Integrated non-return valve (depending on type) → NEMA coupling or standardised connection → Three-phase motor for direct or star-delta start	→ Multistage submersible pump → Radial or semi-axial impellers → NEMA coupling (depending on type) → Three-phase motor for direct or star-delta start → Rewindable motors	→ Multistage submersible pump → Semi-axial impellers → Hydraulics and motor freely configurable according to power requirements → Three-phase motor for direct or star-delta start → Motors rewindable as standard
Special features	→ Pressure shroud in corrosion-resistant and hygienic stainless steel version → Hydraulic in stainless steel precision casting (Zetos K 8) → Maintenance-friendly motors → Optionally with Ceram CT coating for increasing the efficiency → Optional with ACS approval for drinking water application	→ VdS certification → Sturdy version in cast iron or bronze → Pressure shroud in corrosion-resistant and hygienic stainless steel version with rubber bearing for minimising noise and vibrations → VdS certified non-return valve is available as an accessory	→ Deep water lowering thanks to self-cooling motors → Sturdy construction in cast iron or bronze → Compact construction → Maintenance-friendly, rewindable motors → Optionally with Ceram CT coating for increasing the efficiency
Information	**Online catalogue: productfinder.wilo.com** **Water Management catalogue: Water supply – Raw water intake**	**Online catalogue: productfinder.wilo.com** **Building Services catalogue: Water supply**	**Online catalogue: productfinder.wilo.com** **Water Management catalogue: Water supply – Raw water intake**

Series modification

Product range	Submersible drainage pumps	Pedestal pumps	Submersible drainage pumps
Series	Wilo-Drain TMT	Wilo-Drain VC	Wilo-Drain TS 40 Wilo-Drain TS 50 Wilo-Drain TS 65
Field of application	Special applications, dewatering/flood control, industrial process	Professional irrigation/agriculture, special applications, dewatering/flood control, industrial process	Wastewater collection and transport, dewatering/flood control, industrial process
Duty chart			
Design	Submersible drainage pumps	Vertical drainage pumps	Submersible drainage pumps
Application	Pumping of condensate, hot water and aggressive media in industrial applications	Pumping of wastewater and condensate up to 95 °C from pump sumps and from cellars at risk of flooding	For pumping wastewater in house/site drainage, in environmental and water treatment technology and industrial and process engineering
Volume flow Q max.	22 m³/h	14 m³/h	53 m³/h
Delivery head H max.	15,5 m	20 m	25 m
Technical data	→ Mains connection 3~400 V, 50 Hz → Immersed operating mode: S1 → Non-immersed operating mode: S3 25 % → Protection class IP 68 → Max. immersion depth 7 m → Fluid temperature max. 95 °C → Cable length 10 m → Free ball passage 9 mm → Pressure port G 1¼	→ Mains connection 1~230 V, 50 Hz or 3~400 V, 50 Hz → Protection class IP 54 → Fluid temperature +5 °C to +95 °C → Free ball passage 5 or 7 mm, depending on type → Pressure port Rp 1¼ or Rp 1½ depending on type	→ Mains connection 1~230 V, 50 Hz or 3~400 V, 50 Hz → Immersed operating mode: S1 → Non-immersed operating mode: S3 25 % → Protection class IP 68 → Immersion depth 5 to 7 m → Fluid temperature 3 °C to 35 °C → Free ball passage 10 mm → Pressure port Rp 1½, Rp 2 or Rp 2½ depending on type
Equipment/function	→ Housing and impeller made of grey cast iron → Winding temperature monitoring with bimetal sensor	→ Attached float switch	→ Ready-to-plug versions also with float switch → Thermal motor monitoring → Explosion protection for TS 50 and TS 65 → Connection cable 10 m → Connection cable detachable → Integrated non-return valve for TS 40 → Hose connection for TS 40
Special features	→ For fluids up to 95 °C → Sealed cable inlet	→ For fluids up to 95 °C → Long service life → Easy operation thanks to attached float switch → Long standstill times possible → Integrated motor protection with thermal relay	→ Low weight → Large performance range → Oil separation chamber → Easy operation thanks to attached float switch and plug (A version)
Information	**Online catalogue: productfinder.wilo.com** **Building services catalogue: Drainage and sewage** **Water Management catalogue: Drainage and sewage – Wastewater transport and dewatering**	**Online catalogue: productfinder.wilo.com** **Building services catalogue: Drainage and sewage** **Water Management catalogue: Drainage and sewage – Wastewater transport and dewatering**	**Online catalogue: productfinder.wilo.com** **Building services catalogue: Drainage and sewage**

Product range	Submersible drainage pumps	Submersible sewage pumps	Submersible sewage pumps
Series	Wilo-EMU KS	Wilo-Drain TP 80 Wilo-Drain TP 100	Wilo-EMU FA 30 ... to FA 60 ...
Field of application	Dewatering/flood control, industrial process	Special applications, wastewater collection and transport, dewatering/flood control, industrial process	Special applications, wastewater collection and transport, dewatering/flood control, industrial process
Duty chart			
Design	Submersible drainage pumps in rugged design for use on building sites	Submersible sewage pump for industrial applications	Submersible sewage pump with dry motors or self-cooling motors
Application	For dewatering of excavation pits, cellar areas, chambers and basins. Ideally suited for use in fountains	Pumping heavily contaminated fluids, for environmental and water treatment technology and industrial and process engineering	Pumping sewage with solid content in wastewater treatment plants and pumping stations; local dewatering and industrial applications
Volume flow Q max.	165 m³/h	180 m³/h	7,950 m³/h
Delivery head H max.	62 m	21 m	87 m
Technical data	→ Mains connection 1~230 V, 50 Hz or 3~400 V, 50 Hz → Operating mode S1 → Max. fluid temperature 40 °C → Protection class IP 68 → Sealed by double mechanical seal → Maintenance-free roller bearing	→ Mains connection: 3~400 V, 50 Hz → Immersed operating mode: S1 → Non-immersed operating mode: S1 → Protection class: IP 68 → Insulation class: F → Thermal winding monitoring → Sealing chamber control → Max. fluid temperature: 40 °C → Free ball passage: 80 or 100 mm → Max. immersion depth: 20 m	→ Mains connection: 3~400 V, 50 Hz → Immersed operating mode: S1 → Non-immersed operating mode with self-cooling motor: S1 → Protection class: IP 68 → Max. fluid temperature: 40 °C; higher temperatures on request → Sealing with rotary shaft seal and mechanical seal, two mechanical seals or one block seal cartridge, depending on motor → Free ball passage of 80 to 170 mm → Permanently lubricated roller bearings → Max. immersion depth: 20 m
Equipment/function	→ Bidirectional mechanical seal → Heavy-duty motors (oil-filled and dry) ensure continuous duty even with non-immersed motor → Corrosion-resistant components	→ Thermal motor monitoring → Sealing chamber monitoring → ATEX approval → Sheath current cooling	→ Heavy-duty version made of cast iron → Oil separation chamber with optional external monitoring
Special features	→ Long service life → Sturdy construction → Slurping operation possible → Suitable for continuous duty (S1) → Ready-to-plug	→ Self-cooling motor for the use in wet well and dry well installations → Corrosion-resistant stainless steel motor housing in 1.4404 → Patented non-clogging hydraulics → Longitudinal watertight cable inlet → Low weight	→ Self-cooling motors for the use in wet well and dry well installation → Process security thanks to extensive monitoring devices → Special versions for abrasive and corrosive fluids → Low vibrations and long standstill times thanks to high-quality components → Customised versions are possible
Information	**Online catalogue: productfinder.wilo.com** **Building services catalogue: Drainage and sewage** **Water Management catalogue: Drainage and sewage – Wastewater transport and dewatering (pumps available ex stock)**	**Online catalogue: productfinder.wilo.com** **Building services catalogue: Drainage and sewage** **Water Management catalogue: Drainage and sewage – Wastewater transport and dewatering**	**Online catalogue: productfinder.wilo.com** **Water Management catalogue: Drainage and sewage** **Water Management catalogue: Drainage and sewage – Wastewater treatment**

Product range	Submersible sewage pumps	Submersible mixer	Treatment process
Series	Wilo-EMU FA...RF	Wilo-Sevio MIX DM 50-2	Wilo-Sevio ACT SD 101
Field of application	Special applications, wastewater collection and transport, industrial process	Special applications, industrial process	Wastewater treatment, industrial process
Duty chart		no illustration	no illustration
Design	Submersible sewage pumps made of cast stainless steel	Submersible mixer with single-stage planetary gear	Solids diffuser
Application	Pumping sewage with solid content in water treatment systems and industrial applications	Pumping of drilling mud on on-shore and off-shore installations	Gentle mixing process of biomass particles in the pumped fluid
Volume flow Q max.	70 m³/h	Thrust: 1010 N	Circulation capacity 3300 – 4000 m³/h
Delivery head H max.	30 m		
Technical data	→ Mains connection: 3~400 V, 50 Hz → Immersed operating mode: S1 → Protection class: IP 68 → Max. fluid temperature: 40 °C; higher temperatures on request → Sealing with two mechanical seals or one block seal cartridge, depending on motor → Free ball passage of 35 to 45 mm → Permanently lubricated roller bearings → Max. immersion depth: 20 m	→ Mains connection: 3~400 V, 50 Hz → Immersed operating mode: S1 → Protection class: IP 68 → Max. fluid temperature: 90 °C → Single-stage planetary gear → Mechanical seal with SiC/SiC pairing → Permanently lubricated roller bearings → Max. immersion depth: 20 m	→ Mains connection: 3~400 V, 50 Hz → Immersed operating mode: S1 → Protection class: IP 68 → Max. fluid temperature: 40 °C → Max. immersion depth: 20 m
Equipment/function	→ Oil separation chamber with optional external monitoring	→ Flexible installation via lowering device → Can be swivelled horizontally when installed with a lowering device → Single-stage planetary gear	→ Height-adjustable suction pipe due to lowering device → Suction pipe with telescopic extension
Special features	→ Sturdy version completely in stainless steel casting 1.4581 for the use in corrosive fluids → Process security thanks to extensive monitoring devices → Longitudinal watertight cable inlet → Low vibrations and long standstill times thanks to high-quality components	→ Sturdy construction for fluid temperatures of up to 90 °C → Exchangeable planetary stage for adaptation of the propeller speed → Stainless steel propeller with high wear resistance → Ex approval as standard	→ Careful introduction of the biomass carrier particles into the fluid → Higher volume penetration for optimising the cleaning process → Reduced energy costs thanks to an improved cleaning performance → Also with IE3 motor technology (on the basis of IEC 60034-30) → Retrofit option for existing installations
Information	**Online catalogue: productfinder.wilo.com** **Water Management catalogue: Drainage and sewage – Wastewater transport and dewatering (pumps available ex stock)**	**Documentation on request**	**Documentation on request**