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WILO
Pumpen Intelligenz.

General Overview

Pumps and systems for
building engineering / building services, industry,
municipal water supply and disposal

Supply Programme – 50 Hz – March 2007

Plan your systems simply and effectively with our Select Software.

Contents

Find quick information on all pumping applications in our catalogue edition 2007.

Pumpen Intelligenz.


City of Dortmund, Dortmund Agency

Worldwide the name Wilo is synonymous with the tradition of first class German engineering. Our pumps and pump systems for heating, air-conditioning, cooling, water supply and sewage are used in all areas of public life: in commercial buildings, communal facilities, industry as well as in private homes. In close cooperation with our customers, we have over the decades further developed our know-how from pumps and beyond to system competence. This know-how is the basis for solutions which are geared towards meeting the special needs of our customers. That is what we call Pumpen Intelligenz.

Private residential buildings

Commercial residential buildings

Municipal buildings

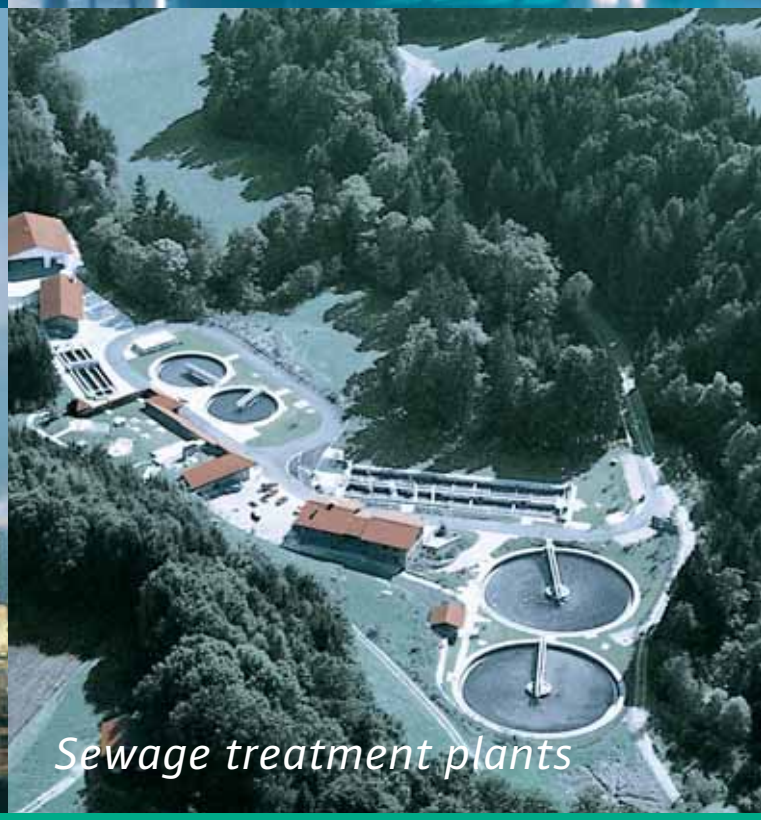
Hotels & food service industry

Pumps and pump systems for all areas of application.

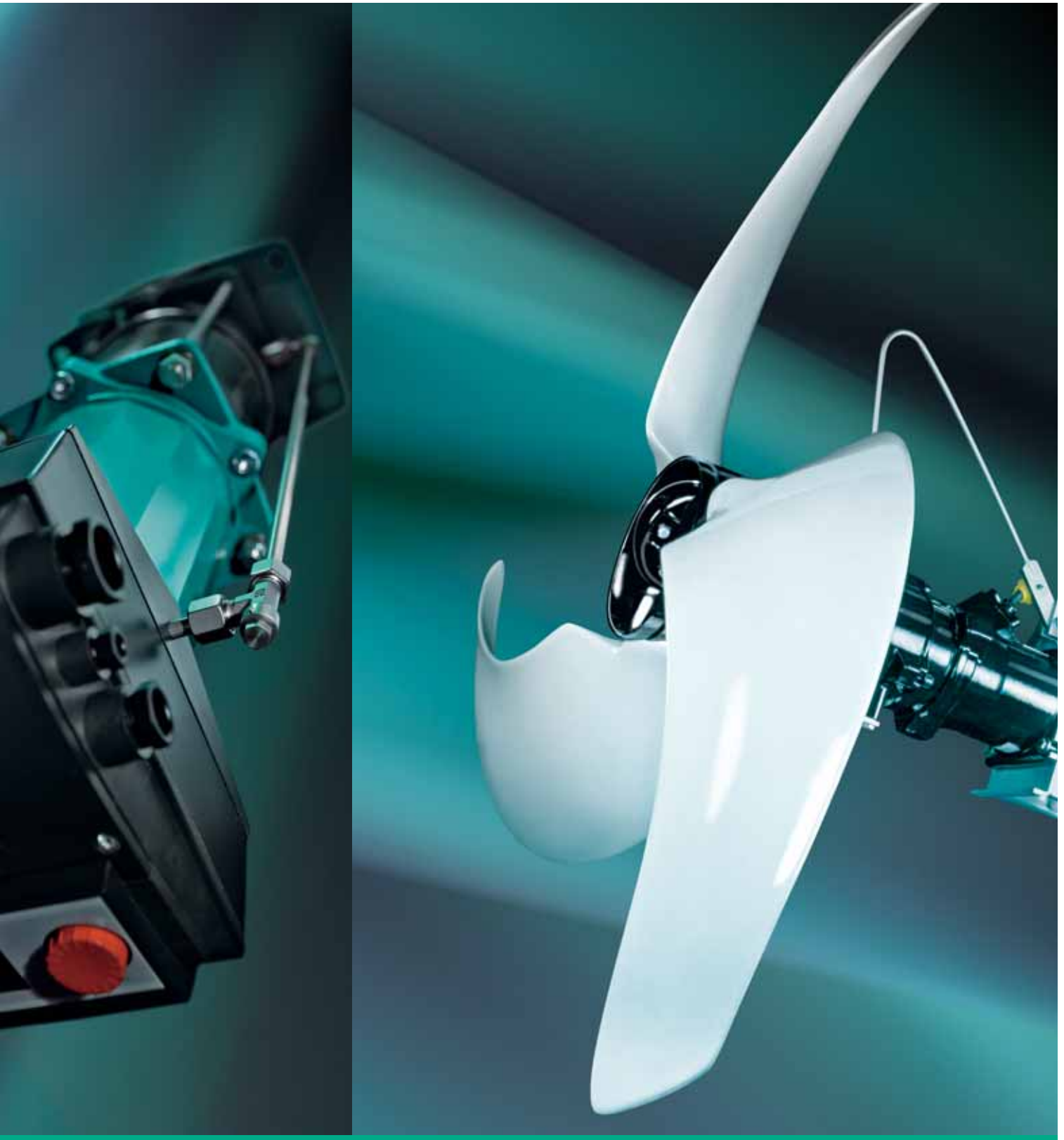

Public buildings


Administrative office buildings


Industry


Sewage treatment plants

Product competency.



Pumps and pump systems from Wilo will win you over through their high quality and trendsetting technology. It has often been the case that individual customer requirements and current market developments were the innovative impetus for extremely successful product developments, which then went into series production: e. g. Wilo-Stratos, the world's first high-efficiency pump for heating, cooling and air-conditioning – or Wilo-Multivert MVIS, the world's first gland-less pump for pressure boosting.
We have also been extremely successful in municipal sewage with our Wilo-EMU pumps with their unique Ceram coating.

Heating, air-conditioning, cooling

Wilo-Stratos

Heating, air-conditioning, cooling

Heating, air-conditioning, cooling
Circulating pumps
Glandless pumps and accessories, package heat exchanger assembly

Catalogue A1

Heating, air-conditioning, cooling
Glanded pumps
Pumps in in-line design and accessories

Catalogue A2

Heating, air-conditioning, cooling, water supply
Monobloc and norm pumps, axially split case pumps
Pumps and accessories

Catalogue A3

Water supply
Domestic water supply, rainwater utilisation
Pumps, systems and accessories

Catalogue B1

Water supply
Borehole pumps 3" to 10"
Pumps and systems for building engineering / building services

Catalogue B2.1

Water supply
Borehole pumps 4" to 24"
Pumps and systems for municipal and industrial water supply

EMU Technologie

Catalogue B2.2

Water supply
High-pressure centrifugal pumps
Pumps and accessories

Catalogue B3

Water supply
Pressure boosting systems
Single and multiple-pump systems mounted on dry bases and accessories

Catalogue B4

Sewage disposal
Drainage pumps
Submersible pumps, self-priming pumps and accessories

EMU Technologie

Catalogue C1

Sewage disposal
Sewage pumps DN 32 to DN 150
Submersible pumps and accessories for building engineering / building services

EMU Technologie

Catalogue C2.1

Sewage disposal
Sewage pumps DN 50 to DN 600
Submersible pumps for municipal and industrial applications

EMU Technologie

Catalogue C2.2

Sewage disposal
Wastewater and sewage lifting units, pumps stations
Pump systems and accessories

Catalogue C3

Heating, air-conditioning, cooling

Product sector	Glandless high-efficiency pumps	Glandless high-efficiency pumps	Energy-saving glandless pumps
Series	Wilo-Stratos-ECO Wilo-Stratos ECO ... RG Wilo-Stratos ECO ... BMS Wilo-Stratos ECO-L	Wilo-Stratos Wilo-Stratos-D	Wilo-Star-E
			
Application	Hot-water heatings systems of all kinds, industrial circulation systems	Hot-water heating systems of all kinds, air-conditioning, closed cooling circuits, industrial circulating systems	Hot-water heatings systems of all kinds, industrial circulation systems
Design	Glandless circulating pump with threaded connection, EC motor and automatic power adjustment	Glandless circulating pump with threaded or flange connection, EC motor and automatic power adjustment	Glandless circulating pump with threaded connection and automatic power adjustment
Flow volume Q maximum	2.5 m^3/h	62 m^3/h	3.5 m^3/h
Delivery head H maximum	5 m	13 m	5 m
Technical data	• Authorised temperature range +15°C to +110°C • Mains connection 1~230 V, 50 Hz • Protection class IP 44 • Nominal diameter Rp 1 and Rp 1 1/2 • Maximum operating pressure 10 bar	• Authorised temperature range -10°C to +110°C • Mains connection 1~230 V, 50 Hz • Protection class IP 44 • Nominal diameter Rp 1 to DN 100 • Maximum operating pressure screw-end pumps 10 bar • Flanged pumps 6/10 bar or 6 bar (special version: 10 bar or 16 bar)	• Authorised temperature range +20°C to +110°C • Mains connection 1~230 V, 50 Hz • Protection class IP 42 • Nominal diameter Rp 1/2, Rp 1 or Rp 1 1/2 • Maximum operating pressure 10 bar
Equipment/Function	• EC motor • Control mode Δp-v; (BMS Version Δp-v and Δp-c) • Noiseless thanks to Autopilot • Red-button technology for easiest operation • Blocking-current proof motor • Two-sided cable feed for simple installation • Quick connection with spring clips for easy electrical connection • Thermal insulation shell (not with ECO-L) • Version ECO 25/1-5 RG with red brass housing for systems with possible oxygen entry • Version ECO-L with connection for rapid ventilation • Version BMS with connection for connection for building automation (BA)	• EC motor • Preselectable control modes Δp-c, Δp-v, Δp-T • Automatic setback operation for additional potential savings • Dual pump management • Red-button technology for easiest operation • Graphics pump display with rotatable display • Programming at manual operation level or Wilo-IR-Monitor • Infrared interface for Wilo-IR-Monitor • Integrated motor protection • Extensible pump communications with optional IF-Moduls • Pump housing KTL-coated • Combination flange PN 6/PN 10 (for DN 32 to DN 65) • Thermal insulation shells for heating applications as standard equipment	• Control mode Δp-cv • Automatic setback operation for additional potential savings • Red-button technology for easiest operation • Blocking-current proof motor; motor protection not required • Two-sided cable feed for simple installation • Quick connection with spring clips for easy electrical connection
Special features	• Energy efficiency class A • Up to 80 % electricity savings in comparison with unregulated circulating pumps • Highest efficiency thanks to ECM technology • 5.8 W min. power input • Safe start-up thanks to high torque	• Energy efficiency class A • Up to 80 % electricity savings in comparison with unregulated circulating pumps • Highest efficiency thanks to ECM technology	• Up to 50 % electricity savings in comparison with unregulated heating pumps • Optimal heating ease with maximum energy savings
Catalogue	**A1** Circulating pumps Heating, air-conditioning, cooling	**A1** Circulating pumps Heating, air-conditioning, cooling	**A1** Circulating pumps Heating, air-conditioning, cooling

Energy-saving glandless pumps
Wilo-TOP-E
Wilo-TOP-ED

Hot-water heating systems of all kinds and industrial circulation systems

Glandless circulating pump with threaded or flange connection and automatic power adjustment

64 m³/h
11 m

- Temperature range +20°C to +110°C
- Mains connection 1~230 V, 50 Hz
- Protection class IP 43
- Nominal diameter Rp 1 to DN 100
- Maximum operating pressure screw-end pumps 10 bar
- Flanged pumps 6/10 bar or 6 bar (special version: 10 bar or 16 bar)

- Preselectable control modes Δp-c, Δp-v, Δp-T
- Automatic setback operation for additional potential savings
- Preselectable speed for constant duty point
- Red-button technology for easiest operation
- Status display
- Motor protection, fault signal light and contact for collective fault signal
- Extensible BA interfaces
- Programming using manual operation level or operating and service unit
- Pump housing KTL-coated
- Combination flange PN 6/PN 10 (DN 40 to DN 65)
- Thermal insulation shells as standard equipment

- Up to 50 % electricity savings in comparison with unregulated heating pumps
- Automatic control function
- Remote control via infrared interface (IR-Monitor)
- Pump communications in simple retrofittable plugging technology

A1 Circulating pumps

Heating, air-conditioning, cooling

Glandless automatic pumps
Wilo-Smart

Hot-water heating systems of all kinds, industrial circulation systems

Glandless circulating pump with threaded connection and automatic power adjustment

3.5 m³/h
5 m

- Authorised temperature range +2°C to +95°C
- Mains connection 1~230 V, 50 Hz
- Protection class IP 42
- Nominal diameter Rp 1
- Maximum operating pressure 10 bar

- Automatic load adjustment
- Red-button technology for easiest operation
- Blocking-current proof motor
- Quick connection with spring clips for easy electrical connection

- Automatic control function

A1 Circulating pumps

Heating, air-conditioning, cooling

Glandless standard pumps
Wilo-Star-RS
Wilo-Star-RSL
Wilo-Star-RSD

Hot-water heating systems of all kinds, industrial circulating systems, cold-water systems and air-conditioning systems

Glandless circulating pump with threaded connection. Preselectable speed stages for power adjustment

3.5 m³/h
5.5 m

- Authorised temperature range -10°C to +110°C
- Mains connection 1~230 V, 50 Hz
- Protection class IP 44
- Nominal diameter Rp 1/2, Rp 1 or Rp 1 1/2
- Maximum operating pressure 10 bar

- Three manually selectable speed stages
- Wrench attachment point on the pump housing
- Blocking-current proof motor, motor protection not required
- Two-sided cable feed for easiest installation
- Quick connection with spring clips for easy electrical connection
- RSD version as twin-head pump
- RSL version with connection for rapid ventilation

- Suitable for any installation position with horizontal shaft; Terminal box in 3-6-9-12 o'clock position
- Preselectable three speed stages for load adaptation

A1 Circulating pumps

Heating, air-conditioning, cooling

Glandless standard pumps
Wilo-TOP-S
Wilo-TOP-SD

Hot-water heating systems of all kinds, industrial circulating systems, cold-water systems and air-conditioning systems

Glandless circulating pump with screwed connection or flange connection

70 m³/h
15 m

- Authorised temperature range -20°C to +130°C
  In short-term operation (2 h) +140°C
- Mains connection 1~230-240 V, 50 Hz 3~400-415 V, 50 Hz
- Protection class IP 44
- Nominal diameter Rp 1 to DN 100
- Maximum operating pressure screw-end pumps 10 bar
- Flanged pumps 6/10 bar or 6 bar (special version: 10 bar or 16 bar)

- Preselectable speed stages for power adjustment
- Combination flange PN 6/PN 10 (DN 40 to DN 65)
- Pump housing KTL-coated
- Thermal insulation shells for heating applications as standard equipment
- Extensible motor protection, signal and display functions
- Two-sided cable feed for simple installation

- Pump communications in simple and secure retrofittable plugging technology
- Simple installation through combination flange with nominal diameter DN 65

A1 Circulating pumps

Heating, air-conditioning, cooling

Heating, air-conditioning, cooling

Product sector / Series	Glandless standard pumps Wilo-TOP-RL	Glandless standard pumps Wilo-TOP-D	Glandless standard pumps Wilo-RP Wilo-P Wilo-DOP
			
Application	Hot-water heating systems of all kinds, industrial circulating systems, cold-water systems and air-conditioning systems	Hot-water heating systems of all kinds, industrial circulating systems, cold-water systems and air-conditioning systems	Hot-water heatings systems of all kinds, industrial circulation systems
Design	Glandless circulating pump with screwed connection or flange connection	Glandless circulating pump with threaded or flange connection and fixed speed	Glandless circulating pumps with flange connection
Flow volume Q maximum	10 m³/h	35 m³/h	80 m³/h
Delivery head H maximum	7 m	1.8 m	14 m
Technical data	• Authorised temperature range -20°C to +130°C • Mains connection 1~230-240 V, 50 Hz 3~400-415 V, 50 Hz • Protection class IP 44 • Nominal diameter Rp 1 to DN 40 • Maximum operating pressure Screw-end pumps 10 bar, flanged pumps 6/10 bar or 6 bar (special version: 10 bar or 16 bar)	• Authorised temperature range -20°C to +130°C In short-term operation (2 h) to +140°C Mains connection 1~230–240 V, 50 Hz, with Cap 3~400–415 V, 50 Hz and 3~230–240 V, 50 Hz • Protection class IP 44 • Nominal diameter Rp 1 1/4 to DN 125 • Maximum operating pressure screw-end pumps 10 bar, flanged pumps 6/10 bar or 6 bar (special version: 10 bar or 16 bar)	• Authorised temperature range +20°C to +130°C In short-term operation (2 h) +140°C • Mains connection 3~400 V, 50 Hz, (P 40/100 also 1~230 V, 50 Hz) • Protection class IP 42 • Nominal diameter DN 40 to DN 100, maximum operating pressure 6 bar or 10 bar, optional also up to 16 bar
Equipment/Function	• Preselectable speed stages for power adjustment • Combination flange PN 6/ PN 10 (DN 40) • Pump housing KTL-coated	• Blocking-current proof motor or full motor protection • Pump housing KTL-coated • Combination flange PN 6/PN 10 (DN 40 to DN 65) • Thermal insulation shells for heating applications as standard equipment	• Preselectable speed stages for power adjustment • Pump housing KTL-coated (not RP 25/60-2) • Blocking-current proof motor or full motor protection in conjunction with Wilo-tripping unit
Special features	• Preselectable speed stages for manual power adjustment	• For the building sector: for systems with low pipe network resistances	• Preselectable speed stages for manual power adjustment
Catalogue	**A1** Circulating pumps Heating, air-conditioning, cooling	**A1** Circulating pumps Heating, air-conditioning, cooling	**A1** Circulating pumps Heating, air-conditioning, cooling

Glandless standard pump
Wilo-AXL
Wilo-SE
Wilo-SE-TW

Hot-water heating systems of all kinds, industrial circulating systems, cold-water systems and air-conditioning systems

Glandless circulating pump with screwed connection or flange connection

11 m³/h
7 m

- Authorised temperature range -20°C to +130°C
- Mains connection 1~230-240 V, 50 Hz 3~400-415 V, 50 Hz
- Protection class IP 44
- Nominal diameter Rp 1 to DN 40
- Maximum operating pressure Screw-end pumps 10 bar, flanged pumps 6/10 bar or 6 bar (special version: 10 bar or 16 bar)

- Preselectable speed stages for power adjustment
- Combination flange PN 6/PN 10 (DN 40)
- Pump housing KTL-coated (not with AXL)

- Preselectable speed stages for manual power adjustment

A1 Circulating pumps

Heating, air-conditioning, cooling

Glandless high-efficiency pumps
Wilo-Stratos-ECO-Z
Wilo-Stratos ECO-Z ... BMS

Potable water circulation systems and similar-type systems in industry and building engineering / building services

Glandless circulators with threaded connection and automatic power adjustment

2.5 m³/h
5 m

- Pumping fluid temperature potable water to 18°d maximum +65°C
- In short-term operation (2 h) to +70°C
- Heating water: +15°C to +110°C
- Mains connection 1~230 V, 50 Hz
- Protection class IP 44
- Nominal diameter Rp 1
- Maximum operating pressure 10 bar

- EC motor
- Control mode Δp-v (BMS Version Δp-v and Δp-c)
- Automatic setback operation for additional potential savings
- Red-button technology for easiest operation
- Blocking-current proof motor
- Two-sided cable feed for simple installation
- Quick connection with spring clips for simple electrical connection
- Thermal insulation shell

- Corrosion-resistant pump housing in red bronze for systems where oxygen entry is possible M24
- Three-times greater starting torque than conventional circulating pumps
- All plastic parts that come into contact with the fluid are in compliance with KTW recommendations
- Minimum electronic power consumption only 5.8 Watt

A1 Circulating pumps

Heating, air-conditioning, cooling

Glandless high-efficiency pumps
Wilo-Stratos-Z
Wilo-Stratos-ZD

Potable water circulation systems and similar-type systems in industry and building engineering / building services

Glandless circulators with threaded connection and automatic power adjustment

28 m³/h
12 m

- Authorised temperature range potable water to 20°d maximum +80°C
- Heating water -10°C to +110°C
- Mains connection 1~230 V, 50 Hz
- Protection class IP 44
- Nominal diameter Rp 1 to DN 50
- Maximum operating pressure screw-end pumps 10 bar flanged pumps 6/10 bar

- EC motor
- Preselectable control modes Δp-c, Δp-v, Δp-T
- Preselectable speed for constant operation
- Automatic setback operation for additional potential savings
- Dual pump management
- Red-button technology for easiest operation
- Graphics pump display with rotatable display
- Programming at manual operation level or Wilo-IR-Monitor
- Infrared interface for Wilo-IR-Monitor
- Integrated motor protection
- Extensible pump communications with optional IF-Moduls
- Combination flange PN 6/PN 10 (with DN 40 and DN 50)
- Thermal insulation shells for heating applications as standard equipment

- Up to 80 % electricity savings in comparison with unregulated circulating pumps
- Highest efficiency thanks to ECM technology
- Corrosion-resistant pump housing in red bronze

A1 Circulating pumps

Heating, air-conditioning, cooling

Glandless standard pumps
Wilo-Star-Z

Potable water circulation systems and similar-type systems in industry and building engineering / building services

Glandless circulator with threaded connection or press fittings

4.8 m³/h
5.5 m

- Pumping fluid temperature Potable water up to 18°d maximum +65°C In short-term operation (2 h) to +70°C Heating water -10°C to +110°C
- Mains connection 1~230 V, 50 Hz or with Star-Z 25/2 DM 3~400 V, 50 Hz
- Protection class IP 44 (IP 42 with Star-Z 15)
- Nominal diameter Rp 1/2, Rp 1 or DN 15 press fittings
- Maximum operating pressure 10 bar

- Speed constant or 3 speed stages selectable with Star-Z 25/6
- Blocking-current proof motor, motor protection not required
- Quick connection with spring clips for simple electrical connection

- All parts that come into contact with the fluid made of plastic parts are in compliance with KTW recommendations

A1 Circulating pumps

Heating, air-conditioning, cooling

Heating, air-conditioning, cooling

Product sector	Glandless standard pumps	Glanded standard pumps	Glandless high-efficiency pumps
Series	Wilo-TOP-Z	Wilo-VeroLine IP-Z	Wilo-Stratos-ECO-ST
			
Application	Potable water circulation systems and similar-type systems in industry and building engineering / building services	Potable water circulation systems or circulation in heating, cold water and cooling water systems	Circulation in solar thermal systems
Design	Glandless circulators with screwed connection	Glanded circulation pump in in-line design with threaded connection	Glandless circulating pump with threaded connection, EC motor and automatic power adjustment
Flow volume Q maximum	65 m^3/h	5 m^3/h	2.5 m^3/h
Delivery head H maximum	9 m	6 m	5 m
Technical data	• Authorised temperature range potable water to 20°d maximum +80°C • Heating water -10°C to +110°C • Mains connection 1~230 V, 50 Hz • Protection class IP 44 • Nominal diameter Rp 1 to DN 50 • Maximum operating pressure screw-end pumps 10 bar • Flanged pumps 6/10 bar	• Authorised temperature range potable water to 28°d maximum +65°C • In short-term operation (2 h) 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 • Maximum operating pressure 10 bar	• Authorised temperature range +15°C to +110°C • Mains connection 1~230 V, 50 Hz • Protection class IP 44 • Nominal diameter Rp 1 • Maximum operating pressure 10 bar
Construction			
Equipment/Function	• Preselectable speed stages • Heat insulation as standard equipment • All parts that come into contact with the fluid made of plastic parts are in compliance with KTW recommendations • Combination flange PN 6/PN 10 (DN 40 to DN 65) • Extensible motor protection, signal and display functions • Full motor protection • Cable feed to terminal box possible on both sides (starting with P1 ≥ 250 W) with integrated strain-relief device	Single-stage low-pressure centrifugal pump in in-line design with: - mechanical seal - threaded connection - motor with one-piece shaft	• EC motor • Control mode Δp-v and Δp-c • Automatic setback operation for additional potential savings • Red-button technology for easiest operation • Blocking-current proof motor • Two-sided cable feed for simple installation • Quick connection with spring clips for simple electrical connection • Connection for connection for building automation (BA) • Pump housing with KTL coating for external corrosion protection
Special features	• Pump communications in simple and secure retrofittable plugging technology • Simple installation through combination flange with nominal diameter DN 65	• High resistance to corrosive media, due to the stainless steel housing and Noryl impeller • Great versatility due to suitability for water with hardness values up to 28° d • All parts that come into contact with the fluid made of plastic parts are in compliance with KTW recommendations	• Energy efficiency class A • Up to 80 % electricity savings in comparison with unregulated circulating pumps • Highest efficiency thanks to ECM technology • Minimum electronic power consumption only 5.8 Watt • Three-times greater starting torque than conventional circulating pumps
Catalogue	**A1** Circulating pumps Heating, air-conditioning, cooling	**A1** Circulating pumps Heating, air-conditioning, cooling	**A1** Circulating pumps Heating, air-conditioning, cooling

Glandless standard pumps
Wilo-Star-ST

Circulation in solar thermal systems

Glandless circulating pump with threaded connection. Preselectable speed stages for power adjustment

3 m³/h
11 m

- Authorised temperature range -10°C to +110°C
- In short-term operation (2 h) to +120°C
- Mains connection 1~230 V, 50 Hz
- Protection class IP 44
- Nominal diameter Rp 1/2 and Rp 1
- Maximum operating pressure 10 bar

- Three manually selectable speed stages
- Wrench attachment point on the pump housing
- Blocking-current proof motor, motor protection not required
- Two-sided cable feed for easiest installation
- Quick connection with spring clips for simple electrical connection
- Pump housing with KTL coating for external corrosion protection

- Special hydraulics for utilisation in solar thermal systems
- Up to 30 % lower current consumption

A1 Circulating pumps

Heating, air-conditioning, cooling

Energy-saving glanded pumps in in-line design
Wilo-VeroLine-IP-E
Wilo-VeroTwin-DP-E

Series extension:
5 more VeroTwin-DP-E types

For pumping cold and hot water (in accordance with VDI 2035) without abrasive substances in heating, cold water and cooling water systems

Electronically controlled glanded pump in in-line design with flange connection and automatic power adjustment

105 m³/h
30 m

- Authorised temperature range -10°C to +120°C
- Mains connection 3~400 V, 50 Hz
- Protection class IP 55
- Nominal diameter DN 32 to DN 80
- Maximum operating pressure 10 bar (special version: 16 bar)

Single-stage, low-pressure centrifugal pump in in-line construction with:
- Mechanical seal
- Flange connection
- Motor with integrated electronic speed control
- DP-E with switchover valve

Materials:
- Pump housing and lantern: EN-GJL-250
- Impeller: PP, fibreglass-reinforced
- Shaft: 1.4021
- Mechanical seal: AQ1EGG
  Other mechanical seals on request

- Red-button technology and display for easiest operation
- Infrared interface (IR monitoring)
- Optional interfaces available via retrofit interface modules for LON bus communication or PLR
- Integrated dual pump management

A2 Glanded pumps

Heating, air-conditioning, cooling

Energy-saving glanded pumps in inline design
Wilo-CronoLine-IL-E
Wilo-CronoLine-IL-E...BF
Wilo-CronoTwin-DL-E

For pumping cold and hot water (in accordance with VDI 2035) without abrasive substances in heating, cold water and cooling water systems

Electronically controlled glanded pump in in-line design with flange connection and automatic power adjustment

260 m³/h
50 m

- Authorised temperature range -20°C to +140°C
- Mains connection 3~400 V, 50 Hz
- Protection class IP 54
- Nominal diameter DN 40 to DN 80
- Maximum operating pressure 16 bar

Single-stage, low-pressure centrifugal pump in in-line construction with:
- Mechanical seal
- Flange connection
- Lantern
- Coupling
- Motor with integrated electronic speed control
- DL-E with switchover valve

Materials:
- Pump housing and lantern: EN-GJL-250
- Impeller:
  Standard version: EN-GJL-200 special version: G-CuSn 10
- Shaft: 1.4122
- Mechanical seal: AQ1EGG
  Other mechanical seals on request

For IL-E and DL-E
- Control mode Δp-c and Δp-v
- Remote speed control (0–10 V/0–20 mA)
- Red-button technology for easiest operation
- Infrared interface (IR monitoring)
- Optional interfaces available via retrofit interface modules for LON bus communication or PLR

For IL-E ... BF
- Control mode Δp-c
- Remote speed control (0–10 V/0–20 mA)

A2 Glanded pumps

Heating, air-conditioning, cooling

Glanded pumps in in-line design
Wilo-VeroLine-IPL
Wilo-VeroTwin-DPL

For pumping cold and hot water (in accordance with VDI 2035) without abrasive substances in heating, cold water and cooling water systems
Versions for secondary hot water circulation on request

Glanded pump in in-line design with screwed or flange connection

200 m³/h
50 m

- Authorised temperature range -10°C to +120°C
- Mains connection 3~400 V, 50 Hz
- Protection class IP 55
- Nominal diameter Rp 1 to DN 100
- Maximum operating pressure 10 bar (special version: 16 bar)

Single-stage, low-pressure centrifugal pump in in-line construction with:
- Mechanical seal
- For flange connection with pressure measuring connection R 1/8
- Motor with one-piece shaft
- DPL with switchover valve

Materials:
- Pump housing and lantern: EN-GJL-250
- Impeller: Plastic / EN-GJL-200 (depending on the pump type)
- Shaft: 1.4021 (Version N: 1.4404)
- Mechanical seal: AQ1EGG
  Other mechanical seals on request

- High motor life due to condensate drain holes as standard in the motor housings
- Series version: Motor with one-piece shaft
- Version N: Standard motor B5 or V1

A2 Glanded pumps

Heating, air-conditioning, cooling

Heating, air-conditioning, cooling

Product sector	Glanded 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-IPS	Wilo-VeroLine IPH-W Wilo-VeroLine IPH-O
			
Application	For pumping cold and hot water (in accordance with VDI 2035) without abrasive substances in heating, cold water and cooling water systems	For pumping cold and hot water (in accordance with VDI 2035) without abrasive substances in heating, cold water and cooling water systems	IPH-W: Pumping of hot water without abrasive constituents IPH-O: Pumping of heat transfer oil
Design	Glanded pump in in-line design with flange connection	Glanded pump in in-line design with screwed or flange connection	Glanded pump in in-line design with flange connection
Flow volume Q maximum	1140 m^3/h	23 m^3/h	80 m^3/h
Delivery head H maximum	85 m	4 m	38 m
Technical data	• Authorised temperature range -20°C to +140°C • Mains connection 3~400 V, 50 Hz • Protection class IP 55 • Nominal diameter DN 32 to DN 250 • Maximum operating pressure 16 bar (25 bar on request)	• Authorised temperature range -10°C to +140°C • Mains connection 3~400 V, 50 Hz • Protection class IP 55 • Nominal diameter Rp 1, DN 40 and DN 50 • Maximum operating pressure 10 bar or 6 bar with flange connection	• Authorised temperature range -10°C to +350°C • Mains connection 3~400 V, 50 Hz • Protection class IP 55 • Nominal diameter DN 20 to DN 80 • Maximum operating pressure 23 bar
Construction	Single-stage, low-pressure centrifugal pump in in-line construction with: • Mechanical seal • Flange connection with pressure measuring connection R 1/8 • Lantern • Coupling • IEC standard motor • DL with switchover valve Materials: • Pump housing and lantern: Standard version: EN-GJL-250 Optional: Spheroidal cast iron EN-GJS-400-18-LT • Impeller: Standard: EN-GJL-200 Special version: Red bronze G-CuSn 10 • Shaft: 1.4122 • Mechanical seal: AQ1EGG Other mechanical seals on request	Single-stage, low-pressure centrifugal pump in in-line construction with: • Mechanical seal or packing gland • Screwed connection or flange connection with pressure measuring connection R 1/8 • Standard motor Materials: • Pump housing and lantern: EN-GJL-200 • Impeller: Plastic • Shaft: 1.4021 • Mechanical seal: BVEGG Other mechanical seals on request	Single-stage, low-pressure centrifugal pump in in-line construction with: • Mechanical seal • Flange connection • Lantern with cooling fins • Standard motor
Special features	• High motor life due to condensate drain holes as standard in the motor housings • Corrosion protection through KTL coating • User-friendly installation through feet with threaded boreholes on the pump housing	• Large versatility due to shaft seals with mechanical seals or packing gland	• Self-cooled mechanical seal, independent of direction of rotation • Great versatility thanks to the wide fluid temperature range of IPH-W: -10°C to +210°C, maximum 23 bar IPH-O: -10°C to +350°C, maximum 9 bar
Catalogue	**A2** Glanded pumps Heating, air-conditioning, cooling	**A2** Glanded pumps Heating, air-conditioning, cooling	**A2** Glanded pumps Heating, air-conditioning, cooling

Glanded monobloc pumps
Wilo-CronoBloc BL

For pumping cold and hot water (in accordance with VDI 2035) without abrasive substances in heating, cold water and cooling water systems

Glanded pump in monobloc design with flange connection

360 m^3/h
105 m

- Authorised temperature range -20°C to +140°C
- Mains connection 3~400 V, 50 Hz
- Protection class IP 55
- Nominal diameter DN 32 to DN 150
- Maximum operating pressure 16 bar (25 bar on request)

Single-stage low-pressure-centrifugal pump in monobloc design, axial suction port and radially configured pressure port with:

- Mechanical seal
- Flange connection with pressure measuring connection R 1/8
- Lantern
- Coupling
- IEC standard motor

- User-friendly thanks to outputs and main dimensions in accordance with EN 733
- High motor life due to condensate drain holes as standard in the motor housings
- Corrosion protection through KTL coating

A3 Monobloc and norm pumps

Heating, air-conditioning, cooling, water supply

Glanded monobloc pumps
Wilo-BAC

Series extension:
BAC 70/135..

For pumping water-glycol mixtures with glycol volume percentages of from 20 to 40 %

Glanded pump in monobloc design with screwed or Victaulic connection

80 m^3/h
25 m

- Authorised temperature range -15°C to +60°C
- Mains connection 3~400 V, 50 Hz
- Protection class IP 54
- Nominal diameter G 2 1/2 / G 2 / G 1 1/2 or Victaulic connection
  60.3/48.3 mm (BAC 40...)
  73.0/73.0 mm (BAC 70...)
- Maximum operating pressure 6 bar

Single-stage low-pressure-centrifugal pump in monobloc design, axial suction port and radially configured pressure port

- Corrosion-resistant pump housing and impeller
- Type R with Victaulic connection

A3 Monobloc and norm pumps

Heating, air-conditioning, cooling, water supply

Norm pumps
Wilo-VeroNorm-NP
Wilo-VeroNorm-NPG

For the supply of heating water in accordance with VDI 2035, water-glycol mixtures, cooling/cold water and process water.
For applications in municipal water supply, irrigation, building services, industry, power stations, etc.

Single-stage low-pressure centrifugal pump mounted on baseplate

3,000 m^3/h
140 m

- Authorised temperature range -20°C to +140°C
- Mains connection 3~400 V, 50 Hz
- Protection class IP 55
- Nominal suction-side diameter DN 50 to DN 500
- Nominal pressure side diameter DN 32 to DN 500
- Maximum operating pressure: up to 16 bar depending on type and use

Single-stage low-pressure centrifugal pump in monobloc design with coupling, coupling protection, motor and baseplate

- Mechanical seal or packing gland
- Wilo factory or ATB motor

Materials:

- Pump housing: EN-GJL-250
- Impeller: EN-GJL-250
- Shaft: 1.4028

- Other materials and versions on request

A3 Monobloc and norm pumps

Heating, air-conditioning, cooling, water supply

Axially split case pumps
Wilo-ASP

For the supply of heating water in accordance with VDI 2035, water-glycol mixtures, cooling/cold water and process water.
For applications in municipal water supply, irrigation, building services, industry, power stations, etc.

Low-pressure centrifugal pump with axially split baseplate-mounted pump housing

3400 m^3/h
245 m

- Authorised temperature range -8°C to +120°C
- Mains connection 3~400 V, 50 Hz
- Protection class IP 55
- Nominal suction-side diameter DN 65 to DN 500
- Nominal pressure side diameter DN 50 to DN 400
- Maximum operating pressure: depending on type, 16 or 25 bar

1- or 2-stage low-pressure centrifugal pump in monobloc design

- Supplied as complete aggregate (pump with coupling, coupling protection, motor and baseplate) or without motor or only pump hydraulics
- Shaft sealing with mechanical seal or packing gland
- 4- and 6-pole motors

Materials:

- Pump housing: EN-GJL-250
- Impeller: G-CuSn ZnPb
- Shaft: X12cr13

- Higher performance up to 17,000 m^3/h on request
- Special motors and other materials on request

A3 Monobloc and norm pumps

Heating, air-conditioning, cooling, water supply

Heating, air-conditioning, cooling

Product sector	Switchgears / Package heat exchanger assembly	Control devices	Pump Control
Series	Wilo-SK Wilo-SR System Wilo-SD System Wilo-Safe	Wilo-AS System Wilo-CC-HVAC-System Wilo-CRn System Wilo-VR-HVAC System **New:** CC-HVAC system replaces the CR-System	Wilo-IR-Monitor Wilo-IF-Modul Wilo-Protect-Modul C Wilo-Control AnaCon Wilo-Control DigiCon
			
Application	Switchgears for controlling 1 or 2 pumps Wilo-Safe: Floor heating systems for all systems, system separation for oxygen-rich fluids	Switchgears for regulating 1 to 6 pumps	Wilo-Control products to connection for building automation
Design	Wilo-Safe: Complete system/basic device for hydraulic separation of floor heating systems		
Flow volume Q maximum	-	-	-
Delivery head H maximum	-	-	-
Technical data	Wilo-Safe: • Maximum operating pressure 6 bar • Authorised temperature range +20°C to +90°C • Mains connection 1~230 V, 50 Hz • Safe heat exchanger 5-24 kW		
Construction	Wilo-SK: Time switch unit and motor protection tripping unit Wilo-SR: Stage switching devices for 4-stage glandless pumps or twin-head pump changeover panels Wilo-SD: Changeover panel for twin-head pumps in glanded pump design Wilo-Safe: The entire system is fully installed and pressure-tested	Wilo-AS System: stepless speed control for glandless pumps Wilo-CC-HVAC System: Comfort-Control system with speed control and control of one to six unregulated pumps in parallel operation Wilo-CRn System: Comfort control system for one to four parallel-switched pumps with integrated speed control Wilo-VR-HVAC System: Vario-controller for one to four parallel-switched pumps with integrated speed control	Wilo-IR-Monitor: Remote control with infrared interface for electronically controlled Wilo pumps Wilo-IF-Moduls: Plug-in modules for the BA linkage with Stratos, TOP-E/ED, IP-E, DP-E and IL-E/DL-E pumps Wilo-Protect-Modul C: Plug-in module for the BA linkage of unregulated TOP-S/SD pumps Wilo-Control AnaCon and DigiCon: Analogue and digital interface converter for connection to building automation
Special features	• Non-standard versions on request (except for Wilo-Safe)	• Non-standard versions on request	
Catalogue	**A1, A2** Heating, air-conditioning, cooling	**A1, A2, A3** Heating, air-conditioning, cooling, water supply	**A1, A2** Heating, air-conditioning, cooling

Wilo-Smart

Water supply

Wilo-Economy MVISE

Heating, air-conditioning, cooling
Circulating pumps
Glandless pumps and accessories, package heat exchanger assembly

Catalogue A1

Heating, air-conditioning, cooling
Glanded pumps
Pumps in in-line design and accessories

Catalogue A2

Heating, air-conditioning, cooling, water supply
Monobloc and norm pumps, axially split case pumps
Pumps and accessories

Catalogue A3

Water supply
Domestic water supply, rainwater utilisation
Pumps, systems and accessories

Catalogue B1

Water supply
Borehole pumps 3" to 10"
Pumps and systems for building engineering / building services

Catalogue B2.1

Water supply
Borehole pumps 4" to 24"
Pumps and systems for municipal and industrial water supply

EMU Technologie

Catalogue B2.2

Water supply
High-pressure centrifugal pumps
Pumps and accessories

Catalogue B3

Water supply
Pressure boosting systems
Single and multiple-pump systems mounted on dry bases and accessories

Catalogue B4

Water supply

Sewage disposal
Drainage pumps
Submersible pumps, self-priming pumps and accessories

EMU Technologie

Catalogue C1

Sewage disposal
Sewage pumps DN 32 to DN 150
Submersible pumps and accessories for building engineering / building services

EMU Technologie

Catalogue C2.1

Sewage disposal
Sewage pumps DN 50 to DN 600
Submersible pumps for municipal and industrial applications

EMU Technologie

Catalogue C2.2

Sewage disposal
Wastewater and sewage lifting units, pumps stations
Pump systems and accessories

Catalogue C3

Water supply

Product sector	Self-priming multistage pumps	Self-priming multistage pumps	Non-self priming multistage pumps
Series	Wilo-Jet WJ	Wilo-Cargo MC	Wilo-MultiPress MP
			
Application	For water pumping from wells/fountains for filling, pumping empty, transferring by pumping and for irrigation and sprinkling. As an emergency pump for use during flooding	For domestic water supply, sprinkling, irrigation, spraying and rainwater utilisation	For domestic water supply, sprinkling, irrigation, spraying and rainwater utilisation
Design	Self-priming single-stage centrifugal pumps	Self-priming multistage centrifugal pumps	Non-self-priming multistage centrifugal pumps
Flow volume Q maximum	5 m³/h	7 m³/h	8 m³/h
Delivery head H maximum	40 m	58 m	56 m
Technical data	• Mains connection 1~230 V, 50 Hz / 3~400 V, 50 Hz • Intake pressure maximum 1 bar • Fluid temperature maximum +5°C to +35°C • Operating pressure maximum 6 bar • Protection class IP 44 • Suction-side and pressure side connection Rp 1	• Mains connection 1~230 V, 50 Hz / 3~400 V, 50 Hz • Intake pressure maximum 4 bar • Fluid temperature maximum +5°C to +35°C • Ambient temperature maximum +40°C • Operating pressure maximum 8 bar • Protection class IP 54 • Suction-side and pressure side connections Rp 1	• Mains connection 1~230 V, 50 Hz / 3~400 V, 50 Hz • Intake pressure maximum 6 bar • Fluid temperature maximum +5°C to +35°C • Ambient temperature maximum +40°C • Maximum operating pressure 10 bar • Protection class IP 54 • Suction-side and pressure side connections Rp 1
Equipment/Function	• With or without support frame, depending on the version • For single-phase AC motors (1~230 V) • Connection cable with plug • On/Off switch • Thermal motor protection switch	• Directly flanged motor • Thermal motor protection switch with single-phase AC motor (1~230 V)	• Directly flanged motor • Thermal motor protection switch for 1~230 V version
Special features	• Ideal for portable use in outside areas (hobbies & gardening)	• Low-noise • Ideal as basic pump for rainwater utilisation	• Low-noise • Ideal as basic pump for rainwater utilisation
Catalogue	**B1** Domestic water supply Water supply	**B1** Domestic water supply Water supply	**B1** Domestic water supply Water supply

Cistern pumps
Wilo-Sub TWI 5 / TWI 5-SE

New:
TWI 5 / TWI 5-SE
replaces TW 5 / TW 5-SE

For domestic water supplies from wells, cisterns and reservoirs. For irrigation, sprinkling, rainwater utilisation or for pumping out

Submersible-motor deep-well pumps

16 m³/h
88 m

- Mains connection 1~230 V, 50 Hz / 3~400 V, 50 Hz
- Fluid temperature maximum +5°C to +35°C
- Maximum operating pressure 10 bar
- Protection class IP 68
- pressure side connection Rp 1 1/4
- Suction-side connection with SE-Version Rp 1 1/4

For single-phase AC motor with:
- Connection cable
- Thermal motor protection switch

- KTW and ACS approval for pumping potable water
- AC version
  - Ready-to-plug
  - Thermal motor protection

B1 Domestic water supply

Water supply

Filter block pumps
Wilo Filtec FBS

For pumping swimming-pool water in accordance with DIN 19643, parts 1 to 5

Self-priming filter block pumps

16 m³/h
28 m

- Mains connection 1~230 V, 50 Hz / 3~400 V, 50 Hz
- Suction height maximum 3 m
- Fluid temperature maximum +5°C to +40°C
- Protection class IP 54

- Low-noise glandless technology
- Preliminary filter

- Patented, water-cooled, special low-noise glandless pump motor
- Low vibration bearing configuration without roller bearings
- Light and compact construction using glass fibre-reinforced, pressure and heat-resistant plastic
- Large preliminary filter for protection of the pump

B1 Domestic water supply

Water supply

Self-priming water supply plants
Wilo-Jet HWJ
Wilo-Jet FWJ

For domestic water supply, sprinkling, irrigation, spraying and rainwater utilisation

Self-priming water supply plants

5 m³/h
40 m

- Mains connection 1~230 V, 50 Hz / 3~400 V, 50 Hz
- Intake pressure maximum 1 bar
- Start-up pressure 1.5 bar
- Switch-off pressure minimum 2.2 bar
- Fluid temperature +5°C to +35°C
- Operating pressure maximum 6 bar
- Protection class IP 44
- Suction-side and pressure side connection Rp 1

- Directly flanged motor
- Connection cable with plug
- Thermal motor protection switch
- Automatic pump control
- Low water cut-out switchgear

- Ideal for outside use (hobbies & gardening)
- Complete preassembled system
- Electronic pump control
- All parts that come into contact with the fluid are corrosion-free

B1 Domestic water supply

Water supply

Self-priming water supply plants
Wilo-Jet HMC
Wilo-Jet FMC

For domestic water supply, sprinkling, irrigation, spraying and rainwater utilisation

Self-priming water supply plants

7 m³/h
58 m

- Mains connection 1~230 V, 50 Hz / 3~400 V, 50 Hz
- Suction height maximum 8 m
- Intake pressure maximum 4 bar
- Fluid temperature +5°C to +35°C
- Operating pressure maximum 8 bar
- Pressure switch adjustment range 1-5 bar
- Protection class IP 54
- Suction-side and pressure side connection Rp 1

- Directly flanged motor
- Pressure switch
- Diaphragm pressure vessel with single-phase AC motor
- Connection cable with plug
- Thermal motor protection switch

- Ideal as water supply system in buildings
- Low-noise operation due to multistage design
- Excellent self-priming capacity due to innovative suction tract
- All parts that come into contact with the fluid are corrosion-free
- Reduction of switch-on frequency and avoidance of pressure surges due to the 50 l diaphragm pressure vessel

B1 Domestic water supply

Water supply

Water supply

Product sector	Self-priming water supply plants	Water supply plants	Water supply plants
Series	Wilo-SilentMaster *Series extension:* SilentMaster MP 303	Wilo-MultiPress HMP Wilo-MultiPress FMP	Wilo-TWI 5-SE PnP *New:* TWI 5-SE PnP replaces TW 5-SE PnP
			
Application	For domestic water supply, sprinkling, irrigation, spraying and rainwater utilisation	For domestic water supply, sprinkling, irrigation, spraying and rainwater utilisation	For domestic water supply, sprinkling, irrigation, spraying and rainwater utilisation
Design	Self-priming water supply system or non-self-priming like SilentMaster MP 303	Non-self-priming water supply plants	Water supply system with submersible pump, control unit and complete accessories
Flow volume Q maximum	4 m³/h	8 m³/h	6 m³/h
Delivery head H maximum	52 m	56 m	65 m
Technical data	• Mains connection 1~230 V, 50 Hz • Suction height maximum 8 m • Intake pressure maximum 4 bar • Fluid temperature +5°C to +35°C • Operating pressure maximum 8 bar • Protection class IP 54 • Suction-side and pressure side connection Rp 1	• Mains connection 1~230 V, 50 Hz / 3~400 V, 50 Hz • Intake pressure maximum 6 bar • Fluid temperature +5°C to +35°C • Maximum operating pressure 10 bar • Pressure switch adjustment range 1-5 bar • Protection class IP 54 • Suction-side and pressure side connection Rp 1	• Mains connection 1~230 V, 50 Hz / 3~400 V, 50 Hz • Fluid temperature +5°C to +35°C • Maximum operating pressure 10 bar • Protection class IP 68 • Suction-side and pressure side connection Rp 1 1/4
Equipment/Function	• Self-priming multistage centrifugal pump with directly flanged motor • Mains connection 1~230 V, 50 Hz • Connection cable • Thermal motor protection switch • Completely automatic control • Low water cut-out switchgear	• Directly flanged motor • Pressure switch • Diaphragm pressure vessel with single-phase AC motor • Connection cable with plug • Thermal motor protection switch	• Submersible-motor deep-well pump • Single-phase AC motor with – Connection cable – Thermal motor protection switch
Special features	• Quiet operation 43 dB (A) • Compact water supply system • Dry-running protection • New innovative design • Integrated non-return valve • Ready-to-plug, easy installation	• Ideal as water supply system in buildings • Low-noise operation due to multistage design • All parts that come into contact with the fluid are corrosion-free • Reduction of the switch-on frequency and avoidance of pressure surges due to the generously sized 50 l diaphragm pressure vessel	• KTW and ACS approval for pumping potable water • Single-phase AC version – Ready-to-plug – Thermal motor protection
Catalogue	**B1** Domestic water supply Water supply	**B1** Domestic water supply Water supply	**B1** Domestic water supply Water supply

Rainwater Utilisation Systems
Wilo-RainSystem AF Basic
Wilo-RainSystem AF Comfort

Rainwater utilisation for reducing potable water consumption in connection with cisterns or tanks

Ready-to-plug rainwater utilisation system

4 m³/h
52 m

- Mains connection 1~230 V, 50 Hz
- Suction height maximum 8 m
- Fluid temperature maximum +5°C to +35°C
- Operating pressure maximum 8 bar
- Replenishment reservoir 11 l
- Protection class IP 42

- Compact ready-to-plug rainwater utilisation system
- Low-noise, thanks to multistage centrifugal pump and full encapsulation of the system (AF Comfort)
- In compliance with DIN 1988 and EN 1717
- Highly economical due to the metering of fresh water to meet demands
- Flow and noise-optimised replenishment tanks
- All parts that come into contact with the fluid medium are corrosion-free
- With AF Comfort: automatic support function for evacuation of air from the suction line

B1 Domestic water supply

Water supply

Rainwater Utilisation Systems
Wilo-RainSystem AF 150

Rainwater utilisation in multifamily houses and small trade businesses for reducing potable water consumption in connection with cisterns or tanks.

Automatic rainwater utilisation system with two self-priming pumps

12 m³/h
58 m

- Mains connection 1~230 V, 50 Hz
- Suction height maximum 8 m
- Fluid temperature maximum +5°C to +35°C
- Operating pressure maximum 8 bar
- Replenishment reservoir 150 l
- Protection class IP 41

- Low-noise operation due to multistage centrifugal pumps
- All parts that come into contact with the fluid are corrosion-free
- Highest operational safety, thanks to fully electronic RainControl Professional controller
- Highly economical due to the metering of fresh water to meet demands
- High reliability due to the DVGW certificated, flow and noise-optimised make-up tanks

B1 Domestic water supply

Water supply

Rainwater Utilisation Systems
Wilo-RainSystem 400

Hybrid system for commercial and industrial rainwater utilisation for reducing potable water consumption in connection with cisterns or tanks.

Automatic rainwater utilisation system with run-down tank container and 2 non-self-priming pumps

16 m³/h
56 m

- Mains connection 3~400 V, 50 Hz
- Fluid temperature maximum +5°C to +35°C
- Maximum operating pressure 10 bar
- Replenishment reservoir 400 l
- Protection class IP 54

- Low-noise operation due to multistage centrifugal pumps
- All parts that come into contact with the fluid are corrosion-free
- Highest operational safety due to the advanced, all-electronic "RainControl Hybrid" controller
- Highly economical due to the metering of fresh water to meet demands
- High reliability due to the total concept of flow and noise optimisation
- Automatic control of the feed pump
- System/level control in the low-voltage range

B1 Domestic water supply

Water supply

Rainwater Utilisation System
Wilo-RainCollector II RWN

Rainwater utilisation for reducing potable water consumption

Ready-to-plug rainwater utilisation system with rainwater tank

4 m³/h
52 m

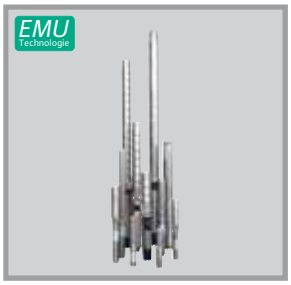
- Mains connection 1~230 V, 50 Hz
- Fluid temperature maximum +5°C to +35°C
- Operating pressure maximum 6 bar
- Replenishment reservoir 1,500 l
- Protection class IP 54

- Low-noise, self-priming pump guarantees virtually noise-free operation
- Corrosion-free
- System can be expanded whenever the need arises
- Multi-tank system with make-up and settling zone for improved water quality (Wilo MKS-System)
- Greatest possible connection flexibility provided by swivelling rainwater inlet

B1 Domestic water supply

Water supply

Water supply

Product sector	Borehole pumps	Borehole pumps in stainless steel construction	Borehole pumps
Series	Wilo-Sub TWU Series extension: TWU 405 QC + 806 QC	NR 4 NR 6 NR 8	6" 8" 10" and larger, 2-pole 10" and larger, 4-pole
			
Application	For water supplies from boreholes for sprinkling, irrigation, pressure boosting, lowering of the ground water level or industrial applications	For potable water wells, aquaculture, snowmaking systems, recreation parks, the paper industry, swimming-pool technology, fountain systems, water conditioning and extraction, off-shore and ocean technology, saltworks, industrial	For potable water wells, aquaculture, snowmaking systems, recreation parks, the paper industry, swimming-pool technology, fountain systems, water conditioning and extraction, off-shore and ocean technology, saltworks, industry
Design	Submersible-motor deep-well pump	Submersible-motor deep-well pump for vertical and horizontal installation. Single-stream sectional construction with radial to semi-axial impellers	Submersible-motor deep-well pump for vertical and horizontal installation. Single-stream sectional construction with radial, semi-axial to axial impellers
Flow volume Q maximum	310 m³/h	130 m³/h	2200 m³/h
Delivery head H maximum	220 m	420 m	580 m
Technical data	• Mains connection 1~230 V, 50 Hz / 3~400 V, 50 Hz • Fluid temperature +3 to + 30°C • Immersion depth maximum 200 m • Sand content maximum 50 g/m³ • Water speed minimum 8 cm/s • Starts per hour, maximum 20 • Protection class IP 58 • 3" to 10"	• Rated speed: – 2-pole: 2900 1/min (50 Hz) • Max. medium temperature: 20°-30°C depending on motor; higher temp. on request; • Flow at the motor min. 0.1 m/s • Sand content max. 35 g/m³ • Immersion depth max. 350 m • Protection class IP 68	• Rated speed: – 2-pole: 2900 1/min (50 Hz) – 4-pole: 1450 1/min (50 Hz) • Max. medium temperature: 20°-30°C depending on motor; higher temp. on request • Flow at motor min. 0.1 m/s (depending on motor choice) • Sand content max. 35 g/m³ • Immersion depth max. 350 m • Protection class IP 68
Equipment/Function	• Totally immersible, multistage submersible pump • Hydraulics fully installed with the motor • Integrated non-return valve • NEMA coupling • Three-phase motor	• 4" motors with special filling; • 6"/8" motors filled with special or potable water, depending on the construction	• Sealing of the motor up to series 12" by means of mechanical seal, larger than 12" on request • Motors with special water or potable water filling, depending on design • Hydraulics with replaceable stationary wear rings
Special features	• Parts that come into contact with the fluid medium are corrosion-free • Vertical or horizontal installation is possible • Integrated non-return valve	• With integrated non-return valve • Screw thread from 1 1/4" to 5" for each series • NEMA connection • Hydraulics completely in stainless steel	• Non-return valve is either already built-in or can be attached, depending on the series • Coupling for up to and including 8" motors standardised in accordance with NEMA • Version in cast iron or bronze • Non-standard materials on request • Hydraulics from 8" on and with metal impellers can be corrected to the individual duty point
Catalogue	**B2.1, B1** (TWU 3" + 4") Water supply	**B2.2** Borehole pumps 4"-24" Water supply	**B2.2** Borehole pumps 4"-24" Water supply

Polder pumps
10" and larger, 2-pole
10" and larger, 4-pole

For horizontal potable water wells, water conditioning and extraction, off-shore and ocean technology, industrial and sewage conditioning (purified water or secondary circulation systems)

Submersible-motor deep-well pumps in special construction with motor mounted above and suction piece placed low for vertical installation

1000 m^3/h
170 m

- Rated speed:
  - 2-pole: 2900 1/min (50 Hz)
  - 4-pole: 1450 1/min (50 Hz)
- Maximum temperature of pumped liquid: 20°C Higher temperatures on request
- Sand content max. 35 g/m^3
- Flow at motor 0,5 m/s
- Protection IP 68

- Motor sealing with double mechanical seal in SIC/SIC
- With separation chamber
- Hydraulics with rubber bearings and replaceable stationary wear rings
- Motors with special water or potable water filling, depending on design

- Version in cast iron or bronze
- Non-standard materials on request
- Hydraulics tailored to desired duty point possible by correction of impeller
- Use in semi-submerged status possible provided there is compliance with the minimum coverage requirements

B2.2 Borehole pumps 4"-24"

Water supply

Sprinkler pumps with VDS authorisation
8" to 14"

For supplying water to sprinkler systems

Submersible-motor deep-well pump for vertical and horizontal installation. Single-stream sectional construction with semi-axial impellers

450 m^3/h
110 m

- Rated speed:
  - 2-pole: 2900 1/min (50 Hz)
- Maximum temperature of pumped liquid: 25°C Higher temperatures on request;
- Flow at the motor a minimum of 0.1 m/s
- Protection class IP 68

- Sealing of the motor by means of mechanical seal in SIC/SIC
- Motors with special water or potable water filling
- Hydraulics with replaceable stationary wear rings

- Certified series products with defined pump curve ranges
- Construction of a certified non-return valve possible
- Hydraulics tailored to desired duty point possible
- Also suitable for pressure jacket installation

Wilo-EMU Catalogue No. 10

Water supply

Water supply

Product sector	Horizontal multistage centrifugal pumps	Horizontal multistage centrifugal pumps	Vertical multistage centrifugal pumps
Series	Wilo-Economy MHIL	Wilo-Economy MHI	Wilo-Multivert MVIS
			
Application	• Water supply and pressure boosting • Commerce and industry • Washing and spraying systems • Rainwater utilisation • Cooling and cold water circuits	• Water supply and pressure boosting • Commerce and industry • Cooling water circuits • Washing and sprinkling systems	• Water supply and pressure boosting systems
Design	Non-self-priming multistage pumps	Non-self-priming multistage pumps	Non-self-priming multistage pump with glandless pump motor
Flow volume Q maximum	13 m^3/h	25 m^3/h	14 m^3/h
Delivery head H maximum	68 m	68 m	110 m
Technical data	• Fluid temperature -15 to +90°C • Operating pressure 10 bar • Intake pressure 6 bar • Protection class IP 54	• Fluid temperature -15 to +110°C • Operating pressure 10 bar • Intake pressure 6 bar • Protection class IP 54	• Fluid temperature -15 to +50°C • Operating pressure 16 bar • Intake pressure 6 bar • Protection class IP 44
Equipment/Function	• Pump in monobloc construction form • Screw thread • Single-phase AC motor or three-phase motor • Single-phase AC motor with integrated thermal motor protection	• Monobloc stainless steel pump • Screw thread • Single-phase AC motor or three-phase motor • Single-phase AC motor with integrated thermal motor protection	• Stainless steel pump in in-line construction form • Three-phase motor in glandless design
Special features	• Impellers and stage chambers made of stainless steel 1.4301 (AISI 304) • Pump housing made of cast iron EN-GJL-250, KTL-coated • All relevant components are KTW and WRAS approved • Version in single-phase (EM) and three-phase current (DM)	• All parts made of stainless steel 1.4301 (AISI 304) that come into contact with the fluid • Compact construction form • All relevant components are KTW and WRAS approved	• Low-noise (up to 20 dB (A) quieter than conventional pumps) • All parts that come into contact with the fluid medium are corrosion-resistant • Glandless pump technology • All relevant components are KTW and WRAS approved
Catalogue	**B3** High-pressure centrifugal pumps Water supply	**B3** High-pressure centrifugal pumps Water supply	**B3** High-pressure centrifugal pumps Water supply

Vertical multistage centrifugal pumps
Wilo-Multivert MVIL

- Water supply and pressure boosting
- Commerce and industry
- Washing and spraying systems
- Rainwater utilisation
- Cooling and cold water circuits

Non-self-priming multistage pumps

13 m³/h
135 m

- Fluid temperature -15 to +90°C
- Maximum operating pressure 10 bar
- Protection class IP 55

- Pump in in-line construction form
- Hydraulics in 1.4301
  Pump base in EN-GJL-250
- Oval flange
- Single-phase AC motor or three-phase motor
- Single-phase AC motor with integrated thermal motor protection

- Stainless steel hydraulics 1.4301 (AISI 304)
- Pump housing made of cast iron EN-GJL-250, KTL-coated
- All relevant components are KTW and WRAS approved
- Version in AC and three-phase current

B3 High-pressure centrifugal pumps

Water supply

Vertical multistage centrifugal pumps
Wilo-Multivert MVI

- Water supply and pressure boosting
- Fire fighting systems
- Boiler feed
- Industrial circulation systems
- Process technology
- Cooling water circuits
- Washing and sprinkling systems

Non-self-priming multistage pumps

155 m³/h
235 m

- Fluid temperature -15 to +120°C
- Operating pressure 16/25 bar
- Intake pressure 10 bar
- Protection class IP 55
- Oval flange for PN 16
- Flange connections for PN 25
- Optional with Victaulic connections

- Stainless steel pump in in-line construction form
- Version
  - PN 16 with oval flange
  - PN 25 with round flange
  - Optional with Victaulic connections
- IEC standard motor

- MVI 100 ... 1600-6
  All parts made of stainless steel 1.4301 (AISI 304) that come into contact with the fluid
- MVI 1600 ... MVI 9500
  All parts that come into contact with the fluid are corrosion-resistant
- All relevant components are KTW and WRAS approved
- Other materials optional
- Drive via IEC-Standard motor

B3 High-pressure centrifugal pumps

Water supply

Horizontal multistage centrifugal pumps
Wilo-Multivert-MHIE

- Water supply and pressure boosting
- Fire fighting systems
- Industrial circulation systems
- Process technology
- Cooling water circuits
- Washing and sprinkling systems

Non-self-priming multistage pump with integrated frequency converter

34 m³/h
95 m

- Fluid temperature -15 to +110°C
- Operating pressure 10 bar
- Intake pressure 6 bar
- Protection class IP 44
- Emitted interference in accordance with EN 50081 T2 (EN 50081 T1 optional)
- Interference resistance in compliance with EN 50082 T2

- Monobloc stainless steel pump
- Hydraulics in 1.4301
- Screw thread
- Integrated frequency converter
- Three-phase version with red-button technology and LCD screen for status display
- Integrated thermal motor protection

- Simple commissioning
- All parts made of stainless steel 1.4301 (AISI 304) that come into contact with the fluid
- Compact construction form
- Integrated frequency converter
- Full motor protection
- All relevant components are KTW and WRAS approved

B3 High-pressure centrifugal pumps

Water supply

Vertical multistage centrifugal pumps
Wilo-Economy MVISE

- Water supply and pressure boosting

Non-self-priming multistage pump with glandless pump motor and integrated frequency converter

15 m³/h
110 m

- Fluid temperature -15 to +50°C
- Operating pressure 16 bar
- Intake pressure 6 bar
- Protection class IP 44
- Emitted interference in accordance with EN 50081 T1 (EN 50081 T1 optional)
- Interference immunity in accordance with EN 50082 T2

- Stainless steel pump in in-line construction form
  - glandless pump
  - self-venting
  - hydraulics in 1.4301
  - oval flange, round flange
- Three-phase motor with integrated frequency converter, with red-button technology and LCD status display
  - integrated thermal motor protection
  - protection against low water level

- Easy commissioning
- Glandless pump technology
- Low-noise (up to 20 dB (A) quieter than conventional pumps)
- Integrated frequency converter
- All parts made of stainless steel 1.4301 (AISI 304) that come into contact with the fluid are
- All relevant components are KTW and WRAS approved

B3 High-pressure centrifugal pumps

Water supply

Water supply

Product sector	Vertical multistage centrifugal pumps	Energy-saving glanded pumps in in-line design	Glanded pumps in in-line design
Series	Wilo-Multivert-MVIE	Wilo-CronoLine-IL-E Wilo-CronoLine-IL-E...BF Wilo-CronoTwin-DL-E	Wilo-CronoLine-IL Wilo-CronoTwin-DL
			
Application	• Water supply and pressure boosting • Fire fighting systems • Industrial circulation systems • Process technology • Cooling water circuits • Washing and sprinkling systems	For pumping cold and hot water (in accordance with VDI 2035) without abrasive substances in heating, cold water and cooling water systems	For pumping cold and hot water (in accordance with VDI 2035) without abrasive substances in heating, cold water and cooling water systems
Design	Non-self-priming multistage pump with integrated frequency converter	Electronically controlled glanded pump in in-line design with flange connection and automatic power adjustment	Glanded pump in in-line design with flange connection
Flow volume Q maximum	97 m^3/h	260 m^3/h	1140 m^3/h
Delivery head H maximum	245 m	50 m	85 m
Technical data	• Fluid temperature -15 to +120°C • Operating pressure 16 bar/25 bar • Intake pressure 6 bar • Protection class IP 54 • Emitted interference in accordance with EN 50081 T1 (EN 50081 T1 optional) • Interference resistance in compliance with EN 50082 T2 • Oval flange for PN 16 • Flange connections for PN 25 • Optional with Victaulic connections	• Authorised temperature range -20°C to +140°C • Mains connection 3~400 V, 50 Hz • Protection class IP 54 • Nominal diameter DN 40 to DN 80 • Maximum operating pressure 16 bar	• Authorised temperature range -20°C to +140°C • Mains connection 3~400 V, 50 Hz • Protection class IP 55 • Nominal diameter DN 32 to DN 250 • Maximum operating pressure 16 bar (PN 25 on request)
Construction	• Stainless steel pump in in-line construction form • Hydraulics in 1.4301 • Oval flange, round flange • Victaulic connections • Single-phase AC motor or three-phase standard motor • Integrated frequency converter • Integrated thermal motor protection • Protection against low water level	Single-stage, low-pressure centrifugal pump in in-line construction with: • Mechanical seal • Flange connection • Lantern • Coupling • Motor with integrated electronic speed control • DL-E with switchover valve Materials: • Pump housing and lantern: EN-GJL-250 • Impeller: Standard version: EN-GJL-200 special version: G-CuSn 10 • Shaft: 1.4122 • Mechanical seal: AQ1EGG Other mechanical seals on request	Single-stage, low-pressure centrifugal pump in in-line construction with: • Mechanical seal • Flange connection with pressure measuring connection R 1/8 • Lantern • Coupling • IEC standard motor • DL with switchover valve Materials: • Pump housing and lantern: Standard version: EN-GJL-250 Optional: Spheroidal cast iron EN-GJS-400-18-LT • Impeller: Standard: EN-GJL-200 Special version: Red bronze G-CuSn 10 • Shaft: 1.4122 • Mechanical seal: AQ1EGG Other mechanical seals on request
Equipment/Function			
Special features	• Easy commissioning • Full motor protection • Large control range • MVI 100 ... 1600-6 All parts that come into contact with the fluid made of stainless steel 1.4301 (AISI 304) • MVI 1600 ... MVI 9500 All parts that come into contact with the fluid are corrosion-resistant • All relevant components are KTW and WRAS approved • Other materials optional	For IL-E and DL-E • Control mode Δp-c and Δp-v • Remote speed control (0–10 V/0–20 mA) • Red-button technology for easiest operation • Infrared interface (IR monitoring) • Optional interfaces available via retrofit interface modules for LON bus communication or PLR For IL-E ... BF • Control mode Δp-c • Remote speed control (0–10 V/0–20 mA)	• High motor life due to condensate drain holes as standard in the motor housings • Corrosion protection through KTL coating • User-friendly installation through feet with threaded boreholes on the pump housing
Catalogue	**B3** High-pressure centrifugal pumps Water supply	**A2** Glanded pumps Heating, air-conditioning, cooling	**A2** Glanded pumps Heating, air-conditioning, cooling

Glanded monobloc pumps
Wilo-CronoBloc BL

For pumping cold and hot water (in accordance with VDI 2035) without abrasive substances in heating, cold water and cooling water systems

Glanded pump in monobloc design with flange connection

360 m^3/h
105 m

- Authorised temperature range -20°C to +140°C
- Mains connection 3~400 V, 50 Hz
- Protection class IP 55
- Nominal diameter DN 32 to DN 150
- Maximum operating pressure 16 bar (PN 25 on request)

Single-stage low-pressure-centrifugal pump in monobloc design, axial suction port and radially configured pressure port with:
- Mechanical seal
- Flange connection with pressure measuring connection R 1/8
- Lantern
- Coupling
- IEC standard motor

- User-friendly thanks to outputs and main dimensions in accordance with EN 733
- High motor life due to condensate drain holes as standard in the motor housings
- Corrosion protection through KTL coating

A3 Monobloc and norm pumps

Heating, air-conditioning, cooling, water supply

Norm pumps
Wilo-VeroNorm-NP
Wilo-VeroNorm-NPG

For the supply of heating water in accordance with VDI 2035, water-glycol mixtures, cooling/cold water and process water. For applications in municipal water supply, irrigation, building services, industry, power stations, etc.

Single-stage low-pressure centrifugal pump mounted on baseplate

3,000 m^3/h
140 m

- Authorised temperature range -20°C to +140°C
- Mains connection 3~400 V, 50 Hz
- Protection class IP 55
- Nominal suction-side diameter DN 50 to DN 500
- Nominal pressure side diameter DN 32 to DN 500
- Up to 16 bar depending on type and use

Single-stage low-pressure centrifugal pump in monobloc design with coupling, coupling protection, motor and baseplate
- Mechanical seal or packing gland
- Wilo factory or ATB motor

Materials:
- Pump housing: EN-GJL-250
- Impeller: EN-GJL-250
- Shaft: 1.4028

- Other materials and versions on request

A3 Monobloc and norm pumps

Heating, air-conditioning, cooling, water supply

Axially split case pumps
Wilo-ASP

For the supply of heating water in accordance with VDI 2035, water-glycol mixtures, cooling/cold water and process water. For applications in municipal water supply, irrigation, building services, industry, power stations, etc.

Low-pressure centrifugal pump with axially split baseplate-mounted pump housing

3400 m^3/h
245 m

- Authorised temperature range -8°C to +120°C
- Mains connection 3~400 V, 50 Hz
- Protection class IP 55
- Nominal suction-side diameter DN 65 to DN 500
- Nominal pressure side diameter DN 50 to DN 400
- Maximum operating pressure: depending on type, 16 or 25 bar

1- or 2-stage low-pressure centrifugal pump in monobloc design
- Supplied as complete aggregate (pump with coupling, coupling protection, motor and baseplate) or without motor or only pump hydraulics
- Radial shaft sealing ring with mechanical seal or packing gland
- 4- and 6-pole motors

Materials:
- Pump housing: EN-GJL-250
- Impeller: G-CuSn ZnPb
- Shaft: X12cr13

- Higher performance up to 17,000 m^3/h on request
- Special motors and other materials on request

A3 Monobloc and norm pumps

Heating, air-conditioning, cooling, water supply

Water supply

Product sector	Single-pump pressure boosting system with system separation	Single-pump pressure boosting systems	Single-pump pressure boosting systems with speed-controlled pump
Series	Wilo-Economy CO/T-1 MVI ... /ER	Wilo-Economy CO-1 MVIS ... /ER Wilo-Economy CO-1 MVI.../ER **Series extension:** CO-1 MVI 95.../ER	Wilo-Comfort-N-Vario COR-1 MVISE ... Wilo-Comfort-Vario COR-1 MVIE ...
			
Application	For fully automatic water supply in intake mode from the public water supply network • Pumping of potable water, process water, cooling water, water for fire fighting or other water mixtures	For fully automatic water supply in intake mode, either directly from the public mains, or indirectly via a break tank • Pumping of potable water, process water, cooling water, water for fire fighting or other water mixtures	For fully automatic water supply in intake mode, either directly from the public mains, or indirectly via a break tank • Pumping of potable water, process water, cooling water, water for fire fighting or other water mixtures
Design	Water supply systems with system separation and a non-self-priming high-pressure centrifugal pump	Water supply systems with a non-self-priming high-pressure centrifugal pump	Water supply systems with a non-self-priming high-pressure centrifugal pump with integrated speed control
Flow volume Q maximum	8 m³/h	155 m³/h	97 m³/h
Delivery head H maximum	110 m	150 m	150 m
Technical data	• Mains connection 3~230 V / 400 V, 50 Hz (other versions on request) • Fluid temperature maximum 50°C • Operating pressure 16 bar • Intake pressure 6 bar • Protection class IP 41	• Mains connection 3~230 V / 400 V, 50 Hz (other versions on request) • Fluid temperature maximum 50°C • Operating pressure 16 bar • Intake pressure 6 bar • Switching pressure stages 6 / 10 / 16 bar • Protection class IP 41	• Mains connection 3~400 V, 50 Hz • Fluid temperature maximum 50°C • Operating pressure 16 bar • Intake pressure 6 bar • Protection class IP 44
Equipment/Function	• 1 MVI series pump • PE preliminary tank, atmospherically ventilated (120 l) • Components that come into contact with fluids corrosion-resistant • 1.4571 stainless-steel pipework • Shut-off valve on the pressure side • Non-return valve, on the pressure side • Preliminary tank including float valve and float switch • Diaphragm pressure vessel 8 l, PN 16, pressure side • Low water cut-out switchgear	• 1 MVIS or MVI series pump • Components that come into contact with fluids corrosion-resistant • Base frame made of stainless steel 1.4301 with height-adjustable vibration absorber for insulation against structure-borne noise • 1.4571 stainless-steel pipework • Shut-off valve on the pressure side • Non-return valve, on the pressure side • Diaphragm pressure vessel 8 l, PN 16, pressure side	• 1 MVIE or MVISE series pump with integrated frequency converter • All the components that come into contact with flow media are corrosion-resistant • Pipework made of stainless steel 1.4571 • Shut-off valve on the pressure side • Non-return valve, on the pressure side • Diaphragm pressure vessel 8 l, PN 16
Special features	• Compact connection-ready system for all applications that make a system separation necessary • Operationally reliable thanks to the combination of the MVI pump series with the ER-1 control unit	For systems with MVIS pumps • Virtually noiseless system thanks to a glandless high-pressure centrifugal pump • Up to 20 dB (A) quieter than conventional systems with comparable hydraulic performance • Operationally reliable, thanks to being combined with the ER-1 control device	For systems with MVISE pumps • Virtually noiseless system thanks to the utilisation of glandless stainless-steel high-pressure centrifugal pumps with integrated frequency converter • Up to 20 dB[A] quieter than conventional systems with comparable hydraulic performance
Catalogue	**B4** Pressure boosting systems Water supply	**B4** Pressure boosting systems Water supply	**B4** Pressure boosting systems Water supply

Multi-pump pressure boosting systems
Wilo-Economy CO 2-4 MHI ... /ER
Wilo-Comfort-N-CO 2-6 MVIS ... /CC
Wilo-Comfort-CO 2-6 MVI ... /CC

Series extension:
CO 2-6 MVI 95.../CC

For completely automatic water supply and pressure boosting in residential, office and administrative office buildings, hotels, hospitals, department stores and for industrial systems.
- Pumping of potable water, process water, cooling water, water for fire fighting or other water mixtures

Pressure boosting system with two to six non-self-priming stainless steel high-pressure centrifugal pumps switched in parallel

800 m³/h
150 m
- Mains connection 3~230 V / 400 V, 50 Hz
- Fluid temperature maximum 50°C
- Operating pressure 10 bar
- Intake pressure 6 bar
- Protection class IP 54

- 2 to 4 or 2 to 6 pumps per system
- Components that come into contact with fluids corrosion-resistant
- Base frame galvanised with height-adjustable vibration absorber for insulation against structure-borne noise
- 1.4571 stainless-steel pipework
- Gear-operated shut-off ball cock/annular shut-off valve on every pump, on suction and pressure side
- Non-return valve, on the pressure side
- Diaphragm pressure vessel 8 l, PN 16, pressure side
- Pressure sensor, discharge side

- Compact system in compliance with the requirements of DIN 1988
- 2 to 4 or 2 to 6 high-pressure centrifugal pumps switched in parallel
- Can be adjusted without difficulty and is operationally reliable thanks to integrated control devices

For systems with MVIS pumps:
- Virtually noiseless system thanks to a glandless high-pressure centrifugal pump
- Up to 20 dB (A) quieter than conventional systems with comparable hydraulic performance

B4 Pressure boosting systems

Water supply

Multi-pump pressure boosting systems
with speed control
Wilo-Comfort-N-COR 2-6 MVIS ... /CC
Wilo-Comfort-COR 2-6 MVI ... /CC

Series extension:
COR 2-6 MVI 95.../CC

For completely automatic water supply and pressure boosting in residential and office buildings, hotels, hospitals, department stores and for industrial systems.
- Pumping of potable water, process water, cooling water, water for fire fighting or other water mixtures

Pressure boosting system with speed control and 2 to 6 non-self-priming stainless steel high-pressure centrifugal pumps switched in parallel

800 m³/h
150 m
- Mains connection 3~230 V / 400 V, 50 Hz
- Fluid temperature maximum 50°C
- Operating pressure 16 bar
- Intake pressure 6 bar
- Protection class IP 44

- 2 to 6 pumps per system
- Stepless base-load pump control operation via frequency converter integrated in CC controller
- Components that come into contact with fluids corrosion-resistant
- Base frame galvanised with height-adjustable vibration absorber for insulation against structure-borne noise
- 1.4571 stainless-steel pipework
- Gear-operated shut-off ball cock/annular shut-off valve on every pump, on suction and pressure side
- Non-return valve, on the pressure side
- Diaphragm pressure vessel 8 l, PN 16, pressure side
- Pressure sensor, discharge side

- Easy-to-use system conforming to all the requirements of DIN 1988
- 2 to 6 vertical high-pressure centrifugal pumps switched in parallel
- Speed-controlled base-load pump

For systems with MVIS pumps:
- Virtually noiseless system thanks to a glandless high-pressure centrifugal pump
- Up to 20 dB (A) quieter than conventional systems with comparable hydraulic performance

B4 Pressure boosting systems

Water supply

Multi-pump pressure boosting systems
with speed-controlled pumps
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

For completely automatic water supply and pressure boosting in residential, office and administrative office buildings, hotels, hospitals, department stores and for industrial systems.
- Pumping of potable water, process water, cooling water, water for fire fighting or other water mixtures

Pressure boosting system and two to four non-self-priming stainless steel high-pressure centrifugal pumps with integrated speed control switched in parallel

380 m³/h
150 m
- Mains connection 3~400 V, 50 / 60 Hz, also 1~230 V, 50/60 Hz, depending on type
- Fluid temperature maximum 70°C
- Operating pressure 10 bar
- Intake pressure 6 bar
- Protection class IP 54

- 2 to 4 pumps per system
- Stepless control operation by means of pumps with integrated frequency converters
- Components that come into contact with fluids corrosion-resistant
- Base frame galvanised with height-adjustable vibration absorber for insulation against structure-borne noise
- 1.4571 stainless-steel pipework
- Gear-operated shut-off ball cock/annular shut-off valve on every pump, on suction and pressure side
- Non-return valve, on the pressure side
- Diaphragm pressure vessel 8 l, PN 16, pressure side
- Pressure sensor, discharge side

- Compact system with exceptional price/performance ratio thanks to high-pressure centrifugal pumps with integrated frequency converters
- Superproportionally large control range
- Integrated full motor protection via PTC
- Integrated dry-running detection with automatic shut-off in the event of low water by way of performance characteristics of the motor control electronics

For systems with MVISE pumps:
- Virtually noiseless system thanks to a glandless high-pressure centrifugal pump
- Up to 20 dB (A) quieter than conventional systems with comparable hydraulic performance

B4 Pressure boosting systems

Water supply

Product sector	Borehole pumps with pressure shell	Borehole pumps with pressure shell
Series	NR 4 NR 6 NR 8	6" 8" 10" and larger, 2-pole 10" and larger, 4-pole
		
Application	For pressure boosting in potable water networks and cooling circuits	For pressure boosting in potable water networks and cooling circuits
Design	Submersible motor pump for vertical and horizontal installation. Single-stream sectional construction with radial to semiaxial impellers.	Submersible motor pump for vertical and horizontal installation. Single-stream sectional construction with radial, semiaxial to axial impellers.
Flow volume Q maximum	130 m^3/h	2200 m^3/h
Delivery head H maximum	420 m	580 m
Technical data	• Rated speed: – 2-pole: 2900 1/min (50Hz) • Maximum temperature of pumped fluid: 20°-30°C, depending on motor, higher temp. on request • Flow at the motor a minimum of 0.1 m/s • Sand content max. 35 g/m^3 • Immersion depth max. 350 m • Protection class IP 68	• Rated speed: 2-pole: 2900 1/min (50 Hz), 4-pole: 1450 1/min (50 Hz) • Maximum temperature of pumped liquid: 20°C to 30°C depending on motor, higher temp. on request • Flow at the motor a minimum of 0.1 m/s (depending on the choice of motor) • Sand content max. 35 g/m^3 • Immersion depth max. 350 m • Protection class IP 68
Equipment/Function	• 4" motors with special filling; • 6"/8" motors with special or potable water filling, depending on construction	• Sealing of the motor up to 12" by means of mechanical seal, if larger than 12", sealing on request • Motors with special water or potable water filling, depending on design • Hydraulics with replaceable stationary wear rings
Special features	Screw thread from 1 1/4" to 5" for each series • NEMA connection • Hydraulics completely in stainless steel • Built into pressure shell	• Coupling for up to and including 8" motors standardised in accordance with NEMA • Version in cast iron or bronze • Non-standard materials on request • Hydraulics tailored to the desired duty point starting with size 8" and with metal impellers possible • Non-return valve can be mounted on the pipe casing pressure ports
Catalogue	**B2.2** Borehole pumps 4"-24" Water supply	**B2.2** Borehole pumps 4"-24" Water supply

Wilo-Comfort COR 6 MVI

Sewage disposal

Wilo-EMU Megaprop

Heating, air-conditioning, cooling
Circulating pumps
Glandless pumps and accessories, package heat exchanger assembly

Catalogue A1

Heating, air-conditioning, cooling
Glanded pumps
Pumps in in-line design and accessories

Catalogue A2

Heating, air-conditioning, cooling, water supply
Monobloc and norm pumps, axially split case pumps
Pumps and accessories

Catalogue A3

Water supply
Domestic water supply, rainwater utilisation
Pumps, systems and accessories

Catalogue B1

Water supply
Borehole pumps 3" to 10"
Pumps and systems for building engineering / building services

Catalogue B2.1

Water supply
Borehole pumps 4" to 24"
Pumps and systems for municipal and industrial water supply

EMU Technologie

Catalogue B2.2

Water supply
High-pressure centrifugal pumps
Pumps and accessories

Catalogue B3

Water supply
Pressure boosting systems
Single and multiple-pump systems mounted on dry bases and accessories

Catalogue B4

Sewage disposal
Drainage pumps
Submersible pumps, self-priming pumps and accessories

EMU Technologie

Catalogue C1

Sewage disposal
Sewage pumps DN 32 to DN 150
Submersible pumps and accessories for building engineering / building services

EMU Technologie

Catalogue C2.1

Sewage disposal
Sewage pumps DN 50 to DN 600
Submersible pumps for municipal and industrial applications

EMU Technologie

Catalogue C2.2

Sewage disposal
Wastewater and sewage lifting units, pumps stations
Pump systems and accessories

Catalogue C3

Sewage disposal

Product sector	Submersible drainage pumps	Submersible drainage pumps	Submersible drainage pumps
Series	Wilo-Drain TM/TMW	Wilo-Drain TS 40 Wilo-Drain TS 50 Wilo-Drain TS 65	Wilo-EMU KS
			
Application	Pumping of clear or slightly soiled water • From containers, shafts or pits • With overflows, flooding and inundation • For draining cellar stairways and cellar areas	For the pumping of wastewater containing solids with a maximum diameter of 10 mm for: • House/site drainage • Environmental and wastewater treatment technology • Industrial and processing technology	For drainage of excavation pits, cellar areas, shafts and basins. Intended for use in fountains.
Design	Cellar drainage pump	Submersible drainage pumps	Submersible pump for portable and stationary utilisation
Flow volume Q maximum	16 m³/h	52 m³/h	340 m³/h
Delivery head H maximum	9 m	24 m	64 m
Technical data	• Mains connection 1~230 V, 50 Hz • Protection class IP 68 • Submersion depth maximum 3 m • Pumping fluid temperature 3°C to 35°C, short periods up to three minutes maximum 90°C (TMTMW 32) • Cable length depending on type 3 to 10 m • Free ball passage depending on type 3 to 10 mm • Pressure port depending on type Rp 1 or Rp 1 1/4	• Mains connection 1~230 V, 50 Hz or 3~400 V, 50 Hz • Protection class IP 68 • Submersion depth 5 to 10 m • Pumping fluid temperature 3°C to 35°C • Free ball passage 10 mm • Pressure port depending on type Rp 1 1/2, Rp 2 or Rp 2 1/2	• Rated speed 2900 1/min • Operating mode S1 • Maximum pumping fluid temperature 40°C • Protection class IP 68 • Sealing double mechanical seal • Maintenance-free roller bearings
Equipment/Function	• Ready-to-plug • Motor operation monitoring via temperature • Sheath current cooling • Connection cable • Hose connection (TM 25/6) • Tubulator (TMW) • Float switch (depending on type)	• Ready-to-plug with 1~230 V and Version A • Motor operation monitoring via temperature with 3~400-V version • 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	• Mechanical seal independent of the direction of rotation • Robust motors (oil-filled and dry) guarantee permanent operation also with warm media and non-immersed motor • Corrosion-resistant components
Special features	• TMW with turbulence apparatus for continuously clean pump shaft • Flat suction up to 5 mm (with TM 25/6) • Prevents odour build-up from fluids • Easy to install • High operational safety • Easy operation	• Inox & Composite • Lightweight • Detachable power cable • Detachable float switch for Version A • Thermal motor operation monitoring for 3~ , also without switchgear (with TS 40)	Modular material system: – Normal cast iron version – Protection against wear and tear thanks to ceramic coating – Pump parts in Abrasit (chilled cast iron material)
Catalogue	**C1** Drainage pumps Sewage disposal	**C1** Drainage pumps Sewage disposal	**C1** Drainage pumps Sewage disposal

Submersible drainage pumps
Wilo-Drain TP 50
Wilo-Drain TP 65

For pumping heavily contaminated fluids with:
- House/site drainage
- Sewage and water management
- Environmental and wastewater treatment technology
- Industrial and processing technology

Submersible drainage pumps

60 m³/h
21 m

- Mains connection 1~230 V, 50 Hz or 3~400 V, 50 Hz
- Power consumption P_1 1.0 to 2.9 kW
- Protection class IP 68
- Submersion depth maximum 10 m
- Pumping fluid temperature 35°C
- Cable length 10 m
- Free ball passage 44 mm
- Pressure port depending on type DN 50 / DN 65

- Ready-to-plug (Version A)
- Motor operation monitoring via temperature (with TP 50 1~230 V and TP 65)
- Explosion protection (for TP 65 3~400 V)
- Connection cable 10 m
- Attached float switch (Version A)
- Capacitor box for 1~230 V (for TP 50)

- Inox & Composite
- Detachable connection cable
- Version with Ex-protection (depending on type)
- Wide range of pump curves
- Optionally in material 1.4435

C1 Drainage pumps

Sewage disposal

Self-priming drainage pumps
Wilo-Drain LP
Wilo-Drain LPC

For pumping of wastewater containing small amounts of solid substances with:
- Excavation pits and ponds
- Sprinkling/spraying of gardens and greenery
- Drainage of seepage water
- Mobile drainage

Self-priming drainage pumps in dry-well installation

72 m³/h
47 m

- Mains connection 1~230 V, 50 Hz, 3~400 V, 50 Hz or driven by combustion motor
- Pumping fluid temperature 3°C to 35°C
- Free ball passage depending on type 5 to 12 mm
- Connection Rp 1 1/2 to G3

Portable self-priming centrifugal pump, also baseplate-mounted or handcart-mounted, depending on the version

- High operational safety
- Resistant against saline water (LP 40)
- Easy handling
- Easy operation

C1 Drainage pumps

Sewage disposal

Submersible-motor deep-well pumps
Wilo-Drain TMT
Wilo-Drain TMC

For pumping condensate, hot water and aggressive fluids

Submersible drainage pumps

20 m³/h
12 m

- Mains connection 3~400 V, 50 Hz
- Protection class IP 68
- Submersion depth maximum 5 m
- Pumping fluid temperature 95°C, 65°C surfaced
- Cable length 5 m
- Free ball passage 10 mm
- Pressure port depending on type Rp 1 1/4 or Rp 1 1/2

- Pump housing and impeller in cast iron, bronze or stainless steel, depending on the version

- High temperature resistance
- Suitable even for aggressive media

C1 Drainage pumps

Sewage disposal

Pedestal pumps
Wilo-Drain VC

For pumping wastewater/fluids with temperatures up to 100°C (e.g. condensate, boiler system pump sumps)

Vertical drainage pumps

17 m³/h
20 m

- Mains connection 1~230 V, 50 Hz or 3~230/400 V, 50 Hz
- Protection class IP 54
- Pumping fluid temperature +3°C to +100°C
- Free ball passage depending on type 5 or 7 mm
- Pressure port depending on type Rp 1 or Rp 1 1/2

- Attached float switch
- Capacitor box

- Long standstill periods possible
- Connection outside the media

C1 Drainage pumps

Sewage disposal

Sewage disposal

Product sector	Submersible sewage pumps with macerator	Submersible sewage pumps with macerator	Submersible sewage pumps
Series	Wilo-Drain MTS Wilo-Drain MTC	Wilo-EMU FA with macerator	Wilo-Drain STS 40 Wilo-Drain STS 65 Wilo-Drain STS 80 Wilo-Drain STS 100
			
Application	For pumping sewage with faeces in pressure drainage systems	For pumping sewage with faeces in pressure drainage systems	For the pumping of faeces, municipal and industrial sewage, even with fibrous constituents, for: • House/site drainage • Sewage and water management • Environmental and wastewater treatment technology • Industrial and processing technology
Design	Submersible sewage pumps with macerator	Submersible sewage pumps with macerator	Submersible sewage pumps
Flow volume Q maximum	16 m³/h	18 m³/h	170 m³/h
Delivery head H maximum	55 m	42 m	22 m
Technical data	• Mains connection 1~230 V, 50 Hz or 3~400 V, 50 Hz • Protection class IP 68 • Pumping fluid temperature 3°C to 35°C • Cable length 10 m • Pressure port DN 32, 40 (depending on type)	• Single-stage submersible monobloc unit • Operating mode S1 • Protection class IP 68 • Maximum pumping fluid temperature 40°C Higher fluid temperatures on request • Permanently lubricated roller bearings up to 15 starts per hour • Outer macerator	• Mains connection 1~230 V, 50 Hz or 3~400 V, 50 Hz • Protection class IP 68 • Submersion depth maximum 5 or 10 m • Pumping fluid temperature depending on type – 3 to 35°C – Maximum 40°C, short periods 60°C • Cable length 5 or 10 m • Free ball passage depending on type 40, 65, 75 or 100 mm • Pressure port depending on type DN 40, 65, 80 or DN 100
Equipment/Function	Submersible sewage pump as submersible monobloc unit with macerator for vertical wet installation • Innovative patented macerator (MTS) • Unimpeded feed line to the impeller • Internal rotating cutter (MTS) • Spherically formed macerator (MTS) • Maceration of substances being conveyed • Pulling cut (shearing cut)	• Proven hardened macerator • Rust-free thread connections • Oil barrier chamber • Motors in accordance with ATEX requirements	• STS 40, 65 2-pole • STS 80, 100 4-pole
Special features	• Patented macerator (MTS) • High degree of efficiency • Low operating costs • Resistant to obstructions and blockages • High operational safety • Corrosion-resistant stainless steel motor in 1.4404 / 316L (MTS) Also with MTS 40 E • Double mechanical seal and oil barrier chamber • Standard-series longitudinal watertight cable feed • Extra-sturdy motor cable (NSS Höu)	Impeller shut-off possible at the duty point	• Detachable connection cable • Stainless steel motor
Catalogue	**C2.1** Sewage pumps Sewage disposal	**C2.2** Sewage pumps Sewage disposal	**C2.1** Sewage pumps Sewage disposal

Submersible sewage pumps
Wilo-Drain TP 80
Wilo-Drain TP 100
Wilo-Drain TP 150

For the pumping of faeces, municipal and industrial sewage, even with fibrous constituents, for:
- House/site drainage
- Sewage and water management
- Environmental and wastewater treatment technology
- Industrial and processing technology

Submersible sewage pumps

380 m³/h
22 m

- Mains connection 3~400 V, 50 Hz
- Power consumption P_1 depending on type 1.9 to 19.6 kW
- Protection class IP 68
- Maximum pumping fluid temperature 40°C
- Cable length 10 m
- Free ball passage depending on type 78 mm, 95 mm or 125 mm

- Motor operation monitoring via temperature
- Motor operation monitoring (impermeability)
- Explosion protection
- Sheath current cooling
- Connection cable 10 m
- Connection cable detachable

- Inox & Composite
- Explosion protection fitted as standard
- Lightweight
- Detachable connection cable
- Cooling jacket fitted as standard
- Corrosion-resistant (e.g., when used for swimming-pool drainage)

C2.1 Sewage pumps

Sewage disposal

Submersible sewage pumps
Wilo-EMU FA – DN50 to DN600

For pumping sewage containing amounts of solid matter in sewage treatment plants.
For site drainage, water storage, process water extraction or for construction and industrial applications

Submersible sewage pump with different cooling systems

8000 m³/h
100 m

- Single-stage submersible monobloc unit
- Operating mode:
  - Wet sump installation: S1
  - Dry sump installation with self-cooling motor: S1
  - Dry sump installation with dry motor: S2
- Protection class: IP 68
- Maximum pumping fluid temperature 40°C Higher fluid temperatures on request
- Mechanical seal made of solid-material silicon carbide
- Permanently lubricated roller bearings
- Up to 15 starts per hour

- Pumps for wet and dry well installation
- Explosion-protected versions in accordance with ATEX and FM
- Heavy sturdy version made of grey cast iron for long trouble-free operation
- Self-cooling motors with 2-chamber-cooling systems

Versions on request
- Coatings against aggressive fluids
- Coating against abrasion
- Special materials
- Impeller shut-off at the duty point

C2.1, C2.2 Sewage pumps

Sewage disposal

Submersible sewage pumps
Wilo-EMU FA RF-Models

For utilisation in sewage treatment plants or in sewage treatment or industrial applications

Submersible sewage pumps

70 m³/h
30 m

- Single-stage submersible monobloc unit
- Operating mode S1
- Protection class IP 68
- Maximum pumping fluid temperature 40°C Higher fluid temperatures on request
- Mechanical seal made of solid-material silicon carbide
- Permanently lubricated roller bearings
- Up to 15 starts per hour

- Pumps for wet sump installation
- Explosion-protected versions in accordance with ATEX
- Heavy sturdy version made of 1.4581 (V4A) for long trouble-free operation

Impeller shut-off at the duty point on request

C2.2 Sewage pumps

Sewage disposal

Submersible sewage pumps
Wilo-EMU FA with stirring apparatus

For utilisation in sand-catcher systems or for pumping sludge

Submersible sewage pumps

400 m³/h
33 m

- Single-stage submersible monobloc unit
- Operating mode:
  - Wet sump installation: S1
  - Wet sump installation with non-immersed self-cooling motor : S1
- Protection class IP 68
- Maximum pumping fluid temperature 40°C Higher fluid temperatures on request
- Mechanical seal made of solid-material silicon carbide
- Permanently lubricated roller bearings
- Up to 15 starts per hour

- Pumps for wet sump intallation
- Explosion-protected versions in accordance with ATEX and FM
- Heavy sturdy version made of grey cast iron for long trouble-free operation

Versions on request
- Coatings against aggressive fluids
- Coating against abrasion
- Special materials
- Impeller shut-off at the duty point

Wilo-EMU Catalogue No. 4

Sewage treatment plant technology

Sewage disposal

Product sector	Axial machines	Condensate lifting units	Wastewater lifting unit
Series	Wilo-EMU KPR	Wilo-DrainLift Con	Wilo-DrainLift TMP
			
Application	Rainwater, irrigation, cooling water, sludges, purified sewage	For pumping of condensate from: • Heat generators with condensing boiler technology • Air-conditioning and cooling systems (e.g. refrigerators, refrigerated display cases, evaporators)	For pumping domestic sewage not containing faeces, washing machine soap and water mixture (without fibrous constituents), shower and bath water (unchlorinated)
Design	Vertical propeller pump	Condensate lifting units	Wastewater lifting unit
Flow volume Q maximum	10000 m^3/h	0.37 m^3/h	8.5 m^3/h
Delivery head H maximum	7.5 m	5.4 m	8 m
Technical data	• Operating mode S1 • Maximum pumping fluid temperature 40°C • Short, joint pipe and motor shaft • Permanently lubricated roller bearings	• Mains connection 1~230 V, 50 Hz • Operating mode S3 • Maximum pumping fluid temperature 80°C • Protection class IP 20 • Pressure port 12 mm • Intake connection 19/24 mm • Tank gross volume 1.5 l	• Mains connection 1~230 V, 50 Hz Depending on type: • Pumping fluid temperature maximum 35 / 45°C, short periods (3 min.) 75 / 90°C • Ventilation connection 25 / 32 mm • Protection class IP 44 / 67 • Tank gross volume 17 / 32 l • Switching volume 2.6 / 15 l
Equipment/Function	• Pumps for wet sump installation suspended in pipe or shaft • Heavy sturdy version made of grey cast iron for long trouble-free operation	• Ready-to-plug system • Level control with float switch • Alarm signal via potential-free contact • Integrated non-return valve • Fixation material • 5 m pressure hose	• Ready-to-plug system • Level control with pneumatic pressure transducer (TMP 32) • Integrated non-return valve • Fixation material • Integrated active carbon filter (TMP 32) • Integrated submersible motor pump of the TMW series (TMP 40)
Special features	• Scooping can be adjusted manually	• Low-noise operation • Two Intake openings • Alarm contact (NC contact/NO contact) as standard equipment • User-friendly installation • Variable feed lines/drains	• Contemporary design • Shower drains possible at 110 mm height • Low-noise operation thanks to built-in submersible pump • Easy pump replacement (TMP 40)
Catalogue	**C2.2** Sewage pumps Sewage disposal	**C3** Lifting Units Sewage disposal	**C3** Lifting Units Sewage disposal

Wastewater lifting units
for underfloor installation
Wilo-DrainLift Box

For automatic drainage of:
- Rooms subject to possible flooding
- Garage drive-in entrances
- Cellar stairways
- Showers
- Washbasins, etc.

Wastewater lifting units for underfloor installation

18 m³/h
10.5 m

- Mains connection 1~230 V, 50 Hz
- Operating mode S3, 25 %
- Maximum pumping fluid temperature 35°C
- Protection class IP 67
- Tank gross volume 85 l
- Switching volume: 22 l type 40/10: 30 l

- Ready-to-plug system
- Plastic container with fully installed drainage pump, control, pressure pipe and integrated non-return valve
- Mains connection cable with shockproof plug
- Motor operation monitoring via temperature (WSK)
- Level control with float switch

- User-friendly installation thanks to built-in pump and flap trap
- Large tank volume
- Easy maintenance
- Pumps with pressure pipe that can be pulled

C3 Lifting Units

Sewage disposal

Small sewage lifting unit
Wilo-DrainLift KH 32

For pumping the sewage from an individual toilet (standing), as well as, e. g. that of an additional hand-washing basin which cannot be piped to the canalisation through the use of natural inclines

Small sewage lifting unit

4 m³/h
5.5 m

- Mains connection 1~230 V, 50 Hz
- Operating mode: Intermittent duty S3, 28 %
- Maximum pumping fluid temperature 35°C
- Ball passage 10 mm
- Minimum suction head (invert to top edge inlet) 180 mm
- Protection class IP 44
- Tank gross volume 17 l
- Switching volume 2.6 l

- Ready-to-plug system
- Level control with pneumatic pressure sensor
- Non-return valve
- Feed seal
- Kit for pressure pipe connection
- Fixation material
- Integrated active carbon filter

- Contemporary, space-saving design
- Easy installation through self-sealing, direct toilet connection

C3 Lifting Units

Sewage disposal

Small sewage lifting unit for front-wall installation
Wilo-DrainLift XS-F

New series

For pumping the sewage from an individual toilet (wall hanging WC) as well as, e.g. that of an additional hand-washing basin, a shower or a bidet which cannot be piped to the canalisation through the use of natural inclines.

Small sewage lifting unit

9.5 m³/h
5.7 m

- Mains connection 1~230 V, 50 Hz
- Operating mode: Intermittent duty S3, 30%
- Maximum pumping fluid temperature 35°C
- Ball passage 25 mm
- Minimum suction head (invert to top edge inlet) 220 mm
- Protection class IP 44
- Tank volume 7.9 l
- Switching volume 0.9 l

- Ready-to-plug system for front-wall installation
- Level control with pneumatic pressure sensor
- Potential-free contact
- Non-return valve
- Feed seals
- Kit for pressure pipe connection
- Fixation material
- Active carbon filter

- Quiet operation for high user convenience
- Operationally safe due to integrated alarm
- Large scope of delivery (including all sleeves, non-return valves, ventilation kit with active carbon filter, etc.)

C3 Lifting Units

Sewage disposal

Compact sewage lifting units
with 1 integrated pump
Wilo-DrainLift S

For the pumping of raw sewage, which cannot be piped to the canalisation through the use of natural inclines

Compact sewage lifting units with integrated pump

44 m³/h
6.8 m

- Mains connection 1~230 V, 50 Hz or 3~400 V, 50 Hz
- Operating mode S3, 15 %
- Maximum pumping fluid temperature 35°C, short periods 60°C
- Ball passage 40 mm
- Minimum suction head (invert to top edge inlet) 180 mm
- Protection class (without switchgear) IP 67
- Tank gross volume 45 l
- Switching volume 20 l

- Ready-to-plug system
- Stainless steel motor with double mechanical seal
- Motor operation monitoring via temperature (WSK)
- Level control with pneumatic pressure sensor
- Change-over and peak-load operation (double-pump system)
- Potential-free contact
- Pump cable detachable
- Non-return valve
- Feed seal
- Curve cutter for intake borehole
- Hose connection for ventilation
- Hose connection for diaphragm hand pump
- Fixation material
- Sound insulation material

- Freely selectable feed lines
- Front-wall installation possible
- Lightweight
- Space-saving installation
- Only 30 cm installation depth

C3 Lifting Units

Sewage disposal

Sewage disposal

Product sector	Sewage lifting unit with 1 or 2 integrated pumps	Sewage lifting unit with 2 integrated pumps	Sewage lifting units with two pumps on dry bases
Series	Wilo-DrainLift M Wilo-DrainLift L	Wilo-DrainLift XL	Wilo-DrainLift XXL
			
Application	For the pumping of raw sewage, which cannot be piped to the canalisation through the use of natural inclines	For the pumping of raw sewage, which cannot be piped to the canalisation through the use of natural inclines	For the pumping of raw sewage, which cannot be piped to the canalisation through the use of natural inclines
Design	Sewage lifting unit with 1 or 2 integrated pumps	Sewage lifting unit with 2 integrated pumps	Sewage lifting units with two pumps on dry bases
Flow volume Q maximum	40 m³/h	40 m³/h	180 m³/h
Delivery head H maximum	20 m	22 m	20.5 m
Technical data	• Mains connection 1~230 V, 50 Hz or 3~400 V, 50 Hz • Operating mode S3, 15 % • Maximum pumping fluid temperature 60°C • Ball passage 45 mm • Minimum suction head (invert to top edge inlet) 180 mm • Protection class (without switchgear) IP 67 • Gross tank volume depending on type 90 to 130 l • Switching volume depending on type 30 to 40 l	• Mains connection 3~400 V, 50 Hz • Operating mode: S1; S3, 60% • Maximum pumping fluid temperature 40°C • Ball passage 45 mm • Minimum suction head (invert to top edge inlet) 700 mm • Protection class IP 67 • Tank volume 440 l • Switching volume 220 l	• Mains connection 3~400 V, 50 Hz • Operating mode S3 • Maximum pumping fluid temperature 40°C, short periods 65°C • Ball passage 80 mm • Minimum suction head (invert to middle inlet) 700 mm • Protection class (without switchgear) IP 68 • Tank gross volume 400/800 l • Switching volume 200/400 l
Equipment/Function	• Ready-to-plug system • Stainless steel motor with double mechanical seal • Motor operation monitoring via temperature (WSK) • Level control with float switch • Change-over and peak-load operation (double-pump system) • Mains-independent alarm • Potential-free contact • Pump cable detachable • Non-return valve • Feed seal • Curve cutter for intake borehole • Hose connection for ventilation • Hose connection for diaphragm hand pump • Kit for pressure pipe connection • Fixation material • Sound insulation material • Switchgear	• Ready-to-plug system • Sheath current cooling • Motor monitoring via temperature (WSK) • Level control with float switch • Change-over and peak-load operation • Mains-independent alarm • Potential-free contact • Pump cable detachable • Non-return valve • Hose connection for ventilation • Hose connection for diaphragm hand pump • Kit for pressure pipe connection • Fixation material • Switchgear	• Sheath current cooling • Motor operation monitoring via temperature (WSK) and impermeability • Level control with float switch • Change-over and peak-load operation (double-pump system) • Potential-free contact • Pump cable detachable • Hose connection for ventilation • Hose connection for diaphragm hand pump • Kit for pressure pipe connection • Fixation material • Switchgear
Special features	• Freely selectable feed lines • Lightweight • Mains-independent alarm • Built-in flap trap • Large tank volume • Large pump curve range (DrainLift L) • Optionally with individual fault signal and after-run time (DrainLift L, version C)	• Large tank volume • Lightweight • Mains-independent alarm • Built-in flap trap • Large performance range • Suitable for permanent operation	• Large tank volume • Lightweight • Wide range of performance levels • Suitable for continuous operation
Catalogue	**C3** Lifting Units Sewage disposal	**C3** Lifting Units Sewage disposal	**C3** Lifting Units Sewage disposal

Sewage lifting unit with solids separation system
Wilo-DrainLift FTS

New series

For the pumping of raw sewage, which cannot be piped to the canalisation through the use of natural inclines

Sewage lifting units with solids separation system

70 m³/h
30 m

- Mains connection 3~400 V, 50 Hz
- Operating mode: S2-10 (15) min
- Maximum pumping fluid temperature 40°C
- Ball passage depending on type 65 or 70 mm
- Minimum suction head (invert to top edge inlet) 750 mm
- Protection class (without switchgear) IP 68
- Tank volume 400 l
- Switching volume 300 l

- Motor monitoring via temperature
- Level control with level sensor
- Potential-free contact
- Non-return valve
- Feed seal
- Fixation material

- Clogging-resistant system due to solids separation
- High efficiency due to pumps with small free ball passage
- Large delivery heads
- Ready-to-plug and fully submersible
- Large tank volume

C3 Lifting Units

Sewage disposal

Pumps stations with plastic tank
Wilo-DrainLift WS 40 Basic
Wilo-DrainLift WS 40-50

For the pumping of raw sewage, which cannot be piped to the canalisation through the use of natural inclines

Pumps stations with plastic tank or as sewage lifting pump in buildings

60 m³/h
28 m

- Plastic pumps station made of recyclable PE-HD
- Highest degree of upward pressure reliability and inherent stability through the use of ribbing
- Feed lines freely selectable onsite
- For service pipe in DN 100
- Ventilation pipe connection in DN 70
- Maximum pressure in the pressure pipe 6 bar

- Freely selectable inlets
- Flexible installation through optional shaft length extension
- Easy pump installation and maintenance by means of above-water coupling when utilising Wilo-Drain TP 50, TP 65 pumps
- Also with macerator pumps Wilo-Drain MTS 40 ...

C3 Lifting Units

Sewage disposal

Pumps stations with plastic tank
Wilo-DrainLift WS 625

For the pumping of raw sewage, which cannot be piped to the canalisation through the use of natural inclines

Pumps stations with plastic tank

18 m³/h
27 m

- Plastic pumps station made of recyclable PE
- Greatest upward pressure reliability through ribbing
- Available in 4 heights: 1200, 1500, 1800 and 2100 mm
- Shaft coverings in the following versions: standard, can be walked on, or can be driven over
- Maximum pressure in the pressure pipe 6 bar (MTS 40) or 4 bar

- Smaller shaft diameter (625 mm)
- Flexible utilisation thanks to different installation heights
- Complete as a result of integrated fittings and seals
- Can be walked on or driven over, depending on the optional cover
- Application as sewage lifting unit inside buildings
- As pumps station outside buildings

C3 Lifting Units

Sewage disposal

Pumps stations with plastic tank
Wilo-DrainLift WS 900
Wilo-DrainLift WS 1100

For the pumping of raw sewage, which cannot be piped to the canalisation through the use of natural inclines

Pumps stations with plastic tank

125 m³/h
37 m

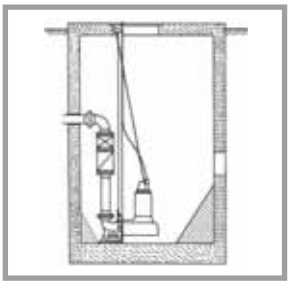
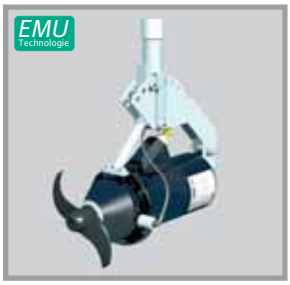
- Plastic pumps station made of recyclable PE
- Greatest degree of upward pressure reliability, thanks to 2 or 4 lateral fins
- 2/4 feed lines can be selected onsite
- Highest degree of stability through moulded hemispherical shape of the shaft floor
- Wilo Above-water coupling
- Ready accessibility of the level sensor, thanks to installation with hinged supporting bar
- Maximum live load 5 kN/m² (in accordance with DIN EN 124, Group 1)
- Maximum pressure in the pressure pipe 6 bar

- Deposit-free collection room
- Highest degree of stability through hemispherical shaft floor
- 2 or 4 feed lines can be selected onsite

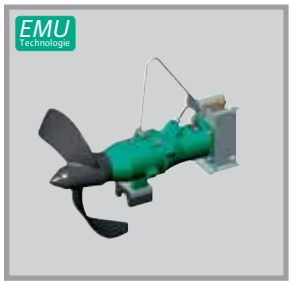
C3 Lifting Units

Sewage disposal

Sewage disposal

Product sector	Pumps stations in concrete	EMUPORT Solids separation system	Wilo-EMU Miniprop TR 14 to TR 28
Series	Wilo-DrainLift WB	EMUPORT PEHD Pumps stations	
			
Application	For the pumping of raw sewage, which cannot be piped to the canalisation through the use of natural inclines	For the pumping of raw sewage, which cannot be piped to the canalisation through the use of natural inclines.	Cleaning of storage basin for rainwater. Prevention of deposits and destruction of surface scum in the pump sump. Utilisation in small activated sludge tanks
Design	Pumps stations in concrete	Under-floor pump mechanism made of HDPE	Compact direct-drive submersible motor stirring apparatus
Flow volume Q maximum	400 m^3/h	On request	Circulating capacity: 0.03 to 0.15 m^3/s
Delivery head H maximum	28 m	On request	Rated power: 0.5 to 1.3 kW
Technical data	• Manufactured out of monolithic, statically tested non-water-permeable concrete • As single or double pump systems • Complete with pipework and all required fittings	Connection-ready pumps stations • with wet-installation sewage pumps • with dry-installation sewage pumps and solid substance separation system	• Submersible monobloc unit • Operating mode S1 • Protection class IP 68 • Maximum pumping fluid temperature 40°C • Mechanical seal made of silicon carbide • Propeller obtainable in PUR and A4 material • Permanently lubricated roller bearings • Up to 15 starts per hour
Fluids			Sewage up to < 3% dry substance
Construction			• Flow-promoting coaxial alignment of motor, gasket housing and propeller • Almost completely entwining-free propeller construction, thanks to entry edges being curved backward • Patented cleaning helix propeller
Equipment/Function			• Stationary and mobile utilisation • Vertical slewing option in connection with special frame or sliding carriage • Horizontal slewability +/- 60° through AVU or pipe assembly • Optional propeller coating C2/C1 and external control of the seal chamber
Special features	• Customer-specific versions	With solid substance separation system • Low maintenance and operating costs • Pump room is dry, clean and odour-free • With double pump systems, the system continues to be completely functional, even when one pump is undergoing maintenance • Little wear	• Low weight • Ex- and FM versions are possible • Special version of the motor shaft in 1.4462 possible • Easy to maintain and repair • Coating of the TR-housing and propeller is possible • Propeller fixing is easy to install
Catalogue	On request	**Wilo-EMU Catalogue No. 4** Sewage treatment plant technology	**Wilo-EMU Catalogue No. 4** Sewage treatment plant technology

Wilo-EMU Uniprop TR 36 to TR 90-2



Cleaning of storage basin for rainwater. Prevention of deposits and destruction of surface scum in the pump sump. Utilisation in activated sludge tanks and in sludge containers. Application in sewage treatment technology, water disposal, industry, agriculture and in sewage pumping stations

- Compact construction
- TR36/40: directly driven submersible mixer
- TR50-2 to 90-2: Submersible mixer with 1-stage planetary gearbox

Circulating capacity: 0.09 to 1.41 m^3/s
Rated power: 1.1 to 18.5 kW

- Submersible monobloc unit
- Operating mode S1
- Protection class IP 68
- Maximum pumping fluid temperature 40°C
- Mechanical seal made of silicon carbide
- Propeller obtainable in PUR and A4 material
- Permanently lubricated roller bearings
- Up to 15 starts per hour

Sewage up to < 3% dry substance
Sludge up to < 10% dry substance

- Short-circuit motors with integrated thermal winding contact
- Largely clogging-free propeller construction due to backward-bent leading edge
- Directly driven submersible mixers: large sealing chamber, sealing to the medium by mechanical seal and to the motor by radial shaft sealing ring
- Submersible mixers with gearbox: Submersible mixer with three separated chambers
- Sealing to the medium and to the motor with a mechanical seal
- Calculative lifecycle of the gearboxes > 100000 h
- Speed reduction thanks to 1-stage planetary gearbox, an optimum adaption of the mixing capacity is therefore possible.

- Stationary and mobile utilisation
- Vertical slewing option in connection with special frame or sliding carriage
- Horizontal +/- 60° slewability by means of AVU
- Optional external control of the sealing chamber

- Ex- and FM-versions are possible
- Easy to maintain and to repair
- Coating of TR-housing and propeller is possible
- Propeller fixing is easy to install
- The gearbox shaft is made of 1.4462 is for all submersible mixers with gearbox

Wilo-EMU Catalogue No. 4

Sewage treatment plant technology

Wilo-EMU Maxiprop TR 215 to TR 225
Wilo-EMU Megaprop TR 315 to TR 325

Mixing and circulation of activated sludges and generation of rates of flow in circulation channels

Compact, slow-running submersible motor stirring apparatus, with speed reduced by 2-stage planetary gearing

Circulating capacity: 0.78 to 4.25 m^3/s / 0.89 to 4.2 m^3/s
Rated power: 1.1 to 4.5 kW

- Submersible monobloc unit
- Operating mode S1
- Protection class IP 68
- Maximum pumping fluid temperature 40°C
- Mechanical seal made of silicon carbide
- Propeller in GFK material
- Permanently lubricated roller bearings
- Up to 15 starts per hour

Activated sludges with < 1% dry substance

- Short-circuit motors with integrated thermal winding contact
- Flange plate at the motor housing to fix the frame or sliding carriage
- Largely clogging-free propeller construction due to backward-bent leading edge
- Submersible mixer with three separated chambers
- Sealing to the medium and to the motor by mechanical seal
- Calculative bearing life cycle of the gearboxes > 100000 h
- Speed reduction by means of a 2-stage planetary gearbox, therefore an optimum adaption of the mixing capacity is possible.
- Propeller hub makes the fixing of the propeller blades easy

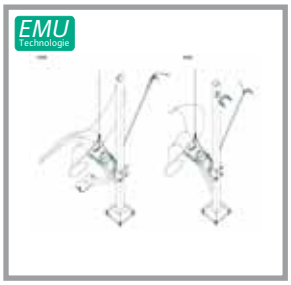
- Anchoring on fixed tripod units
- Positioning of the stirring apparatuses is specified
- Optional external DK

- Ex- and FM-versions are possible
- Easy to maintain and repair
- Coating of TR-housing is possible
- Propeller fixing is easy to install
- The gearbox shaft is made of 1.4462

Wilo-EMU Catalogue No. 4

Sewage treatment plant technology

AVU 50 to 140 AVMS and AVUS



Lowering device for submersible mixers

Welded construction

- Guide tube cross-section of 50 - 140 mm
- Standard guide tube length 6 m
- Wall thickness of guide tubes > 4 mm
- Standard materials are: A4 (1.4571), A 2 (1.4301) and steel, hot-dip galvanised
- Longer guide tubes can be created by adding guide tube extensions

- Slewable lowering device for compensating for ground unevenness and invert inclinations up to 30°
- Slewability is provided in 15° ratchet increments
- The stirring mixers can be pulled freely at any time

AVU:
Horizontal slewability is guaranteed for the submersible mixers. It is possible to realign the flow impulse at a later date

AVMS and AVUS:
Fixed tripod lowering devices.
The alignment of the flow impulse is determined by the installation of the tripod lowering device

- Non-standard construction on request

Wilo-EMU Catalogue No. 4

Sewage treatment plant technology

Auxiliary lifting devices HHV 125 - 350 kg
HHV Z - ZT2

For lifting and lowering the submersible mixers in the clarifier

Welding construction with a type check by the LGA

Standard material is steel, hot-dip galvanised; A2 (1.4301) and A4 (1.4571)

Bearing capacity:
Depending on the version, from 125 to 500 kg
jib length:
Depending on the version, from 1.1 m to 3.2 m

HHV 125 - 350 kg are not decomposable. The shifted pulleys allow different projections. The decomposable HHV Z - ZT2 reach a projection of 3.2 m.

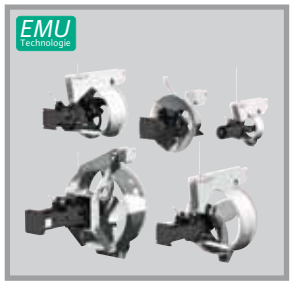
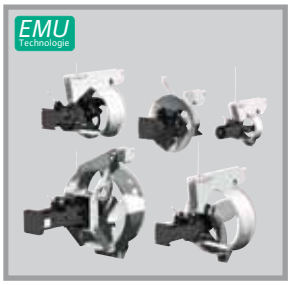
Thanks to different pockets, the lifting device can be adapted to local installation situations.

- Non-standard construction on request

Wilo-EMU Catalogue No. 4

Sewage treatment plant technology

Sewage disposal

Product sector			
Series	Wilo-EMU RZP RZP 20 to RZP 25-1	Wilo-EMU RZP RZP 50-3 to RZP 80-1	Submersible sewage pumps Wilo-EMU FA with stirring apparatus
			
Application	Pumping of larger volumetric flows at lower delivery heads in sewage treatment or in recreation or theme parks for flow generation	Pumping of larger volumetric flows at lower delivery heads in sewage treatment or in recreation or theme parks for flow generation	For utilisation in sand-catcher systems or for pumping sludge
Design	Compact direct-drive submersible mixer with flow housing	Compact medium-speed submersible mixer with flow housing and planetary gearbox	Submersible sewage pump with mixer
Flow volume Q maximum	930 m³/h	6.800 m³/h	400 m³/h
Delivery head H maximum	7 m	2.5 m	33 m
Technical data	• Protection class IP 68 • Maximum pumping fluid temperature 40°C Higher fluid temperatures on request • Mechanical seal made of solid-material silicon carbide • Propeller obtainable in PUR and A4 material • Permanently lubricated roller bearings • Up to 15 starts per hour	• Protection class IP 68 • Maximum pumping fluid temperature 40°C Higher fluid temperatures on request • Mechanical seal made of solid-material silicon carbide • Propeller obtainable in PUR and A4 material • Permanently lubricated roller bearings • Up to 15 starts per hour	• Single-stage submersible monobloc unit • Operating mode: – Wet sump installation: S1 – Wet sump installation with non-immersed self-cooling motor: S1 • Protection class IP 68 • Max. fluid temperature: 40°C, higher temperatures on request • Mechanical seal made of solid-material silicon carbide • Permanently lubricated roller bearings • Up to 15 starts per hour
Fluids	Sewage up to < 3% dry substance Pure water	Sewage up to < 3% dry substance Pure water	
Construction	• Short-circuit motors with integrated thermal winding contact • Large sealing chamber • Sealing to the medium with mechanical seal and to the motor with radial shaft seal ring • Largely clogging-free propeller construction due to backward-bent leading edge • Flow housing in V4A material	• Calculative bearing life cycle of the gearbox: > 100000 h • 1-stage planetary gearbox, therefore an optimum adaption of the delivery capacity is possible. • Short-circuit motors with integrated thermal winding contact • Large sealing chamber • Sealing to the medium with mechanical seal and to the motor with radial shaft seal ring • Largely clogging-free propeller construction due to backward-bent leading edge • Flow housing in V4A material	
Equipment/Function	• Stationary (flanged mounting) and mobile (AVR) application possible • Horizontal and vertical mounting possible • Optionally: submersible mixer coating CO • Optionally: propeller coating with C2 / C1 • Optionally: external sealing chamber control • Manifold accessories available: lifting devices, lowering devices, ...	• Stationary (flanged mounting) and mobile (AVR) application possible • Horizontal and vertical mounting possible • Optionally: submersible mixer coating CO • Optionally: propeller coating with C2 / C1 • Optionally: external sealing chamber control • Manifold accessories available: lifting devices, lowering devices, ...	• Pumps for wet sump installation • Explosion-protected versions in accordance with ATEX and FM • Heavy sturdy version made of grey cast iron for long trouble-free operation
Special features	• Ex- and FM versions are possible • Easy to maintain and repair • Propeller fixing is easy to install	• Ex- and FM versions are possible • Easy to maintain and repair • Propeller fixing is easy to install • Gearbox shaft in material 1.4462	Versions on request • Coatings against aggressive fluids • Coating against abrasion • Special materials • Impeller shut-off at the duty point
Catalogue	**Wilo-EMU Catalogue No. 4** Sewage treatment plant technology	**Wilo-EMU Catalogue No. 4** Sewage treatment plant technology	**Wilo-EMU Catalogue No. 4** Sewage treatment plant technology

Wilo-EMU FA

Sewage disposal

Series A to Z	Catalogue 50 Hz
EMUPORT HDPE solid substance separation system	No. 4*
Wilo-AS System	A1, A2
Wilo-ASP	A3
Wilo-AXL	A1
Wilo-BAC	A3
Wilo-Cargo MC	B1
Wilo-CC-HVAC System	A1, A2, A3
Wilo-Comfort-CO 2-6 MVI ... /CC	B4
Wilo-Comfort-COR 2-6 MVI ... /CC	B4
Wilo-Comfort-N-CO 2-6 MVIS ... /CC	B4
Wilo-Comfort-N-COR 2-6 MVIS ... /CC	B4
Wilo-Comfort-N-Vario COR-1 MVISE ...	B4
Wilo-Comfort-N-Vario-COR 2-4 MVISE ... /VR	B4
Wilo-Comfort-Vario COR-1 MVIE ...	B4
Wilo-Comfort-Vario-COR 2-4 MHIE ... /VR	B4
Wilo-Comfort-Vario-COR 2-4 MVIE ... /VR	B4
Wilo-Control AnaCon	A1, A2
Wilo-Control DigiCon	A1, A2
Wilo-CRn System	A1, A2, A3
Wilo-CronoBloc-BL	A3

Series A to Z	Catalogue 50 Hz
Wilo-CronoLine-IL	A2
Wilo-CronoLine-IL-E	A2
Wilo-CronoLine-IL-E...BF	A2
Wilo-CronoTwin-DL	A2
Wilo-CronoTwin-DL-E	A2
Wilo-DOP	A1
Wilo-Drain LP	C1
Wilo-Drain LPC	C1
Wilo-Drain MTC	C2.1
Wilo-Drain MTS	C2.1
Wilo-Drain STS	C2.1
Wilo-Drain TM/TMW	C1
Wilo-Drain TMC	C1
Wilo-Drain TMT	C1
Wilo-Drain TP 50, 65	C1
Wilo-Drain TP 80, 100, 150	C2.1
Wilo-Drain TS	C1
Wilo-Drain VC	C1
Wilo-DrainLift Box	C3
Wilo-DrainLift Con	A1, C3

*Wilo-EMU Catalogue

Series A to Z	Catalogue 50 Hz
Wilo-DrainLift FTS	C3
Wilo-DrainLift KH 32	C3
Wilo-DrainLift L	C3
Wilo-DrainLift M	C3
Wilo-DrainLift S	C3
Wilo-DrainLift TMP	C3
Wilo-DrainLift WB	On request
Wilo-DrainLift WS 40-50	C3
Wilo-DrainLift WS 625	C3
Wilo-DrainLift WS 900-1100	C3
Wilo-DrainLift XS-F	C3
Wilo-DrainLift XL	C3
Wilo-DrainLift XXL	C3
Wilo-Economy CO 2-4 MHI ... /ER	B4
Wilo-Economy CO/T-1 MVI ... /ER	B4
Wilo-Economy CO-1 MVI ... /ER	B4
Wilo-Economy CO-1 MVIS ... /ER	B4
Wilo-Economy MHI	B3
Wilo-Multivert-MHIE	B3
Wilo-Economy MHIL	B3

Series A to Z	Catalogue 50 Hz
Wilo-EMU AVU	No. 4*
Wilo-EMU D	B2.2
Wilo-EMU DCH	B2.2
Wilo-EMU FA	C2.2
Wilo-EMU K	B2.2
Wilo-EMU KD	B2.2
Wilo-EMU KM	B2.2
Wilo-EMU KPR	C2.2
Wilo-EMU KS	C1
Wilo-EMU NK	B2.2
Wilo-EMU NR	B2.2
Wilo-EMU RZP	No. 4*
Wilo-EMU SCH	B2.2
Wilo-EMU SR	No. 4*
Wilo-EMU TR	No. 4*
Wilo-FilTec FBS	B1
Wilo-IF-Modul	A1, A2
Wilo-IR-Monitor	A1, A2
Wilo-Jet FWJ	B1
Wilo-Jet HWJ	B1

*Wilo-EMU Catalogue

Series A to Z	Catalogue 50 Hz
Wilo-Jet WJ	B1
Wilo-MBH Diaphragm pressure vessel	B4
Wilo-MultiCargo FMC	B1
Wilo-MultiCargo HMC	B1
Wilo-MultiCargo MC	B1
Wilo-MultiPress FMP	B1
Wilo-MultiPress HMP	B1
Wilo-MultiPress MP	B1
Wilo-Multivert MVI	B3
Wilo-Multivert-MVIE	B3
Wilo-Multivert MVIL	B3
Wilo-Multivert MVIS	B3
Wilo-Economy MVISE	B3
Wilo-P	A1
Wilo-Protect-Modul C	A1
Wilo-RainCollector II RWN	B1
Wilo-RainSystem AF 150	B1
Wilo-RainSystem 400	B1
Wilo-RainSystem AF Basic	B1
Wilo-RainSystem AF Comfort	B1

Series A to Z	Catalogue 50 Hz
Wilo-RP	A1
Wilo-Safe System separation for floor heating	A1
Wilo-SD Switchgears	A1
Wilo-SE	A1
Wilo-SE-TW	A1
Wilo-SK Switchgears	A1
Wilo-SR Switchgears	A1
Wilo-SilentMaster	B1
Wilo-Smart	A1
Wilo-Star-E	A1
Wilo-Star-RS	A1
Wilo-Star-RSD	A1
Wilo-Star-RSL	A1
Wilo-Star-ST	A1
Wilo-Star-Z	A1
Wilo-Stratos	A1
Wilo-Stratos-ECO	A1
Wilo-Stratos ECO-L	A1
Wilo-Stratos-ECO-ST	A1
Wilo-Stratos-ECO-Z	A1

*Wilo-EMU Catalogue

Series A to Z	Catalogue 50 Hz
Wilo-Stratos-D	A1
Wilo-Stratos-Z	A1
Wilo-Sub TWI 5 / TWI 5-SE	B1
Wilo-Sub TWI 5-SE PnP	B1
Wilo-Sub TWU	B2.1, B1
Wilo-TOP-D	A1
Wilo-TOP-E	A1
Wilo-TOP-ED	A1
Wilo-TOP-RL	A1
Wilo-TOP-S	A1
Wilo-TOP-SD	A1
Wilo-TOP-Z	A1
Wilo-VBH Preliminary tank	B4
Wilo-VeroLine-IPH-O	A2
Wilo-VeroLine-IPH-W	A2
Wilo-VeroLine-IP-Z	A2
Wilo-VeroLine-IP-E	A2
Wilo-VeroLine-IPL	A2
Wilo-VeroLine-IPS	A2
Wilo-VeroNorm-NP	A3

Series A to Z	Catalogue 50 Hz
Wilo-VeroNorm-NPG	A3
Wilo-VeroTwin-DP-E	A2
Wilo-VeroTwin-DPL	A2
Wilo-VR HVAC System	A1, A2, A3

*Wilo-EMU Catalogue

Pumpen Intelligenz.

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