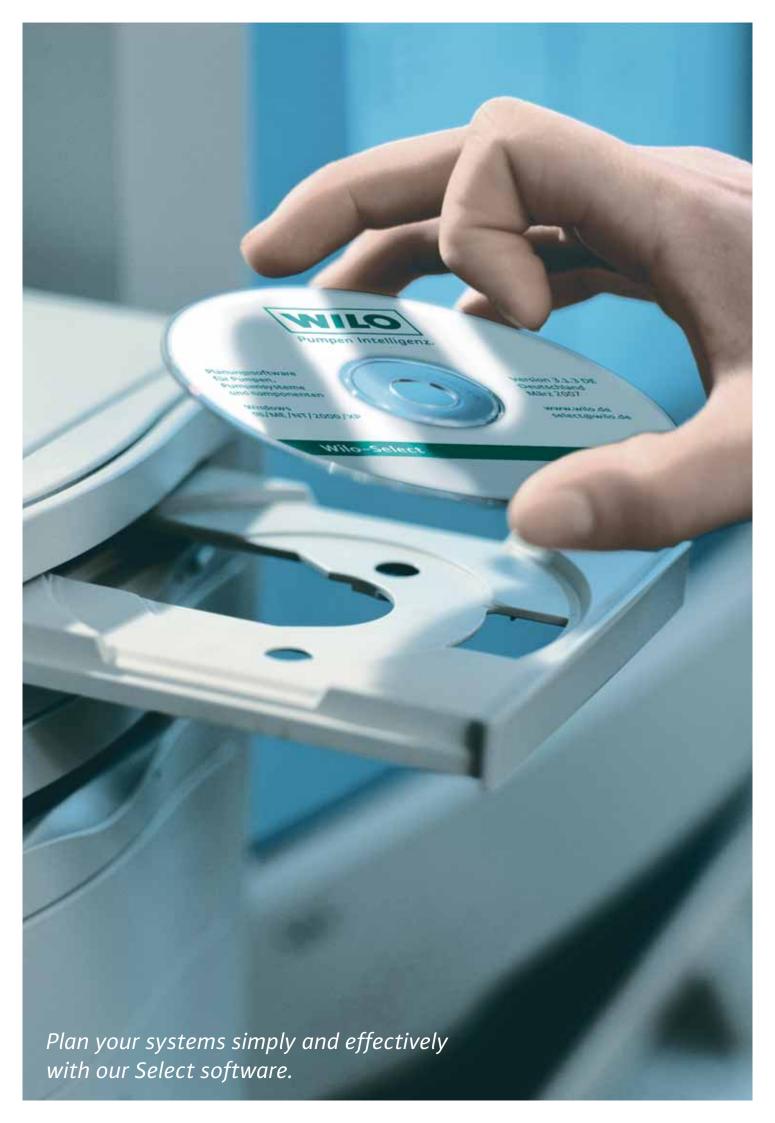


General Overview 2009

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



Supply programme – 50 Hz – March 2009



Contents

| Heating, air-conditioning, cooling | 10-21 |
|------------------------------------|-------|
| Water supply | 22-37 |
| Drainage and sewage | 38-51 |
| Keyword index Series A to Z | 52-55 |



You can find information quickly on all pump applications in our catalogue edition 2009.



Pumpen Intelligenz.



Wilo is synonymous with the tradition of first-class German engineering throughout the world. Our pumps and pump systems for heating, cooling, airconditioning, water supply and sewage disposal are used in commercial buildings, municipal facilities, industry and of course also in private homes.

Working closely with our customers over several decades, we have expanded our knowledge beyond pumps to become full system specialists. This knowledge forms the basis for solutions tailored specifically to the needs of our customers.

We call this Pumpen Intelligenz.



Pumps and pump systems for all fields of application.



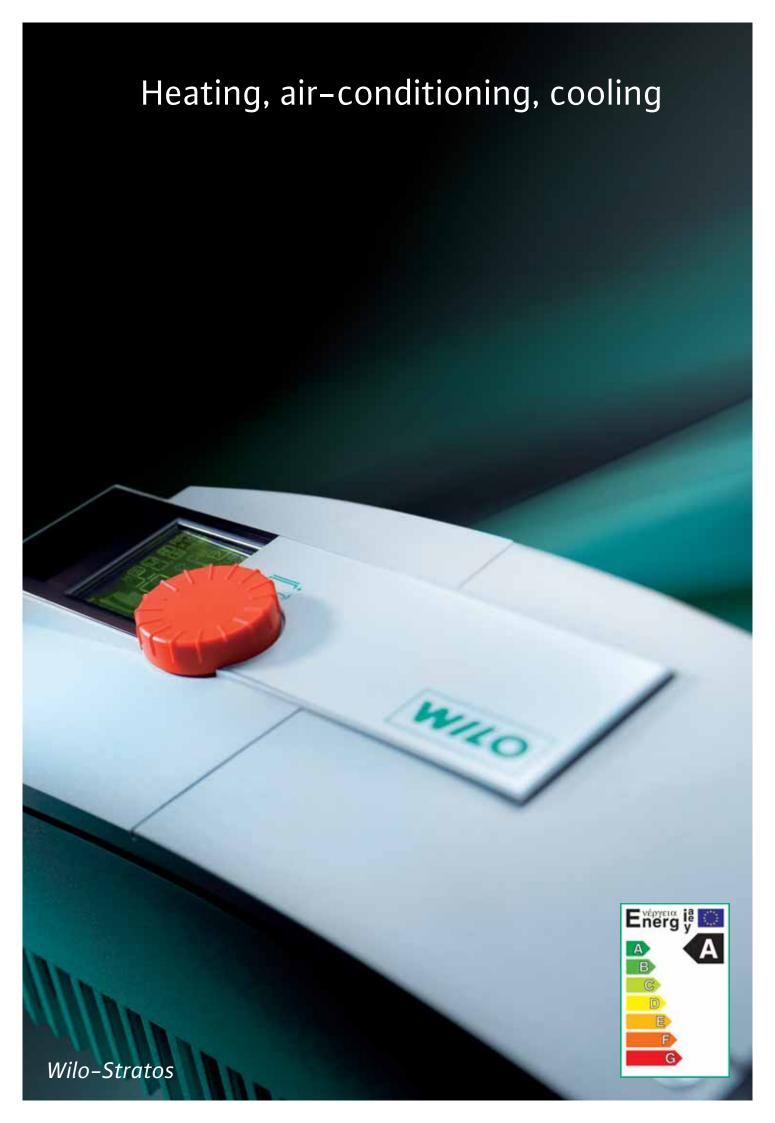


Product expertise.



Pumps and pump systems by Wilo convince due to their high quality and technology that sets standards. Individual customer requirements and current market developments have frequently triggered innovations for highly successful product developments that were finally produced in series: for example

Wilo-Stratos, the worldwide first high-efficiency pump for heating, cooling, air-conditioning – or Wilo-Multivert MVIS, the worldwide first glandless pump for pressure boosting. Our Wilo-EMU pumps with their unique Ceram coating are also highly successful in municipal sewage management.



Heating, air-conditioning, cooling

Glandless high-efficiency pumps

Wilo-Stratos ECO Wilo-Stratos ECO RG

Wilo-Stratos ECO ... BMS Wilo-Stratos ECO-L



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

Glandless circulation pump with threaded

connection, EC motor and automatic power

 $\frac{5 \text{ m}}{\bullet \text{ Perm. temperature range } +15 \,^{\circ}\text{C to } +110 \,^{\circ}\text{C}}$ $\bullet \text{ Mains connection } 1{\sim}230 \text{ V}, 50 \text{ Hz}$

Glandless circulation pump with threaded connection or flange connection, EC motor and automatic power adjustment.

Hot-water heating systems of all kinds,

circuits, industrial circulation systems

air-conditioning systems, closed cooling

Glandless high-efficiency pumps

Wilo-Stratos

Wilo-Stratos-D

61 m³/h

13 m

- Perm. temperature range -10 °C to +110 °C

 Mains connection 1~230 V, 50 Hz
- Protection class IP 44
- · Nominal width Rp 1 to DN 100
- Max. operating pressure screw-end pumps 10 bar • Flange-end pumps 6/10 bar / 6 bar
- (special version: 10 bar or 16 bar)

3.5 m³/h

5 m

• Nominal width Rp 1/2, Rp 1 or Rp 11/2

Hot-water heating systems of all kinds,

Glandless circulation pump with threaded connection and automatic power adjustment

Perm. temperature range +20 °C to +110 °C

Mains connection 1~230 V, 50 Hz

industrial circulation systems

Glandless energy-saving pumps

0

Wilo-Star-E

Max. operating pressure 10 bar

Protection class IP 42

Equipment/function

Special features

Catalogue

2.5 m³/h

• Protection class IP 44

- Nominal width Rp 1 and Rp $1 \ensuremath{\ensuremath{\upmu}}\xspace_2$

Max. operating pressure 10 bar

- Control mode Λp-v: (BMS versions Δp -v and Δp -c)
- No noise due to AutopilotRed-button technology for easy operation
- Blocking current-proof motor
- · Cable lead-in on both sides for easy installation
- Quick connection with spring clips for easy electrical connection
- Thermal insulation shell (not ECO-L)
 ECO 25/1-5 RG version with red brass housing for systems where oxygen entry is possible
- ECO-L version with connection for rapid ventilation
- BMS version with connection for building automation (BA)
- Energy efficiency class A Up to 80% electricity savings compared to uncontrolled circulation pumps
- Highest degrees of efficiency due to ECM technology
- 5.8 W minimum power consumption
- · Safe starting due to high torque

STIFTUNG WARENTEST

SEHR GUT (1,4) Im Test: 9 Heizungspumpen



9/2007

www.test.de

A1 Circulation pumps

Heating, air-conditioning, cooling

- Pre-selectable control modes Δp-c, Δp-v, Δр-Т
- Automatic setback operation for additional savings potential
- Dual pump management
- Red-button technology for easy operation
 Graphical pump display with rotating display
- Remote control via infrared interface (IR-Module/IR-Monitor)
- Integrated motor protection
- · System expansion by retrofit communication modules LON, CAN PLR etc.
- · Pump housing with cataphoretic coating
- · Combination flanges PN 6/PN 10 (for DN 32 to DN 65)
- · Thermal insulation shells as standard for heating applications
- Energy efficiency class A
 Up to 80% electricity savings compared to uncontrolled circulation pumps
- Highest degrees of efficiency due to ECM technology

- Control mode Δp-v
- ${\bf \cdot}$ Automatic setback operation for additional savings potential
- Red-button technology for easy operation
 Blocking current-proof motor; motor
- protection not required Cable lead-in on both sides for easy
- installation
- · Quick connection with spring clips

- Up to 50% electricity savings compared to uncontrolled heating pumps
- · Optimum heating comfort with maximum energy savings

A1 Circulation pumps

Heating, air-conditioning, cooling

A1 Circulation pumps

Heating, air-conditioning, cooling

12

Subject to change without prior notice. Wilo SE 03/2009

Standard glandless pumps

Hot-water heating systems of all kinds,

industrial circulation systems, cold-water systems and air-conditioning systems

Glandless circulation pump with threaded connection or flange connection.

 Perm. temperature range -20 °C to +130 °C In short-term operation (2 h) up to +140 °C

· For use with Wilo-Protect Module C:

· Pre-selectable speed stages for power

Pump housing with cataphoretic coating

· Thermal insulation shells as standard for

Extendable motor protection, signal and display functions

Cable lead-in on both sides for easy

Combination flanges PN 6/PN 10

Mains connection 1~230 V, 50 Hz

• Nominal width Rp 1 to DN 100 Max. operating pressure screw-end pumps 10 bar • Flange-end pumps 6/10 bar / 6 bar (special version: 10 bar or 16 bar)

-20 °C to +110 °C

3~400 V. 50 Hz • Protection class IP 44

adjustment

installation

(DN 40 to DN 65)

heating applications

75 m³/h

Wilo-TOP-S Wilo-TOP-SD

Glandless energy-saving pumps

Wilo-TOP-E



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

Glandless circulation pump with threaded connection or flange connection, EC motor and automatic power adjustment

62 m³/h

11 m

- Temperature range +20 °C to +110 °C
 Mains connection 1~230 V, 50 Hz
- Nominal width Rp 1 to DN 100
- Protection class IP 43
- Max. operating pressure
- screw-end pumps 10 bar Flange-end pumps 6/10 bar / 6 bar (special version: 10 bar or 16 bar)
- Pre-selectable control modes An-c. An-v. An-T
- Automatic setback operation for additional savings potential
- Pre-selectable speed for constant duty point
- Red-button technology for easy operation · Display for state indication
- · Motor protection, fault signal light and
- contact for collective fault signal • Extendable BA interfaces
- Programming via manual operation level or operation and service device
- Pump housing with cataphoretic coating
 Combination flanges PN 6/PN 10 (DN 40
- · Standard thermal insulation shells.
- Up to 50% power savings compared to uncontrolled heating pumps
- Automatic control function
- · Remote control via infrared interface (IR-Monitor)
- · Pump communication in simple retrofit plug-in technology

A1 Circulation pumps

Heating, air-conditioning, cooling

Glandless automatic pumps

Wilo-Smart



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

Glandless circulation pump with threaded connection and automatic power adjustment

3.5 m³/h

6 m

- Perm. temperature range +2 °C to +95 °C
 Mains connection 1~230 V, 50 Hz
- Protection class IP 42
- · Nominal width Rp 1
- Max. operating pressure 10 bar
- Automatic load adjustment
- · Red-button technology for easy operation
- Blocking current-proof motor

- · Quick connection with spring clips

Automatic control function

A1 Circulation pumps

Heating, air-conditioning, cooling

Standard glandless pumps

Wilo-Star-RS Wilo-Star-RSL

Wilo-Star-RSD



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

Glandless circulation pump with threaded connection. Pre-selectable speed stages for power adjustment

4.0 m³/h

5.5 m

- Perm. temperature range -10 °C to +110 °C

 Mains connection 1~230 V, 50 Hz
- Protection class IP 44
- Nominal width Rp 1/2, Rp 1 or Rp 11/2
- Max. operating pressure 10 bar
- 3 manually selectable speed stages
- · Wrench attachment point on pump housing
- Blocking-current proof motor, motor protection not required Cable lead-in on both sides for easy
- installation
- · Ouick connection with spring clips
- RSD version as double pump
- RSL version with connection for rapid

- Suitable for any installation position with
- 3 pre-selectable speed stages for load
- o'clock positions
- horizontal shaft; terminal box in 3-6-9-12
- adjustment
- - · Easy installation due to combination flanges up to nominal width DN 65

STIFTUNG WARENTEST

GUT (2,4)

Im Test: 9 Heizungspumpen



9/2007

www.test.de

A1 Circulation pumps

Heating, air-conditioning, cooling

· Pump communication in simple and safe retrofit plug-in technology

A1 Circulation pumps

Heating, air-conditioning, cooling Standard glandless pumps Standard glandless pumps Standard glandless pumps Wilo-TOP-RL Wilo-TOP-D Wilo-AXL Wilo-SE Wilo-SE-TW Hot-water heating systems of all kinds, industrial circulation systems, cold-water Hot-water heating systems of all kinds, industrial circulation systems, cold-water Hot-water heating systems of all kinds industrial circulation systems, cold-water systems and air-conditioning systems systems and air-conditioning systems systems and air-conditioning systems Glandless circulation pump with threaded Glandless circulation pump with threaded Glandless circulation pump with threaded connection or flange connection. connection or flange connection and fixed connection or flange connection. 14 m³/h 18 m³/h 75 m³/h 7.5 m

• Perm. temperature range –20 °C to +130 °C

• Mains connection 1~230 V, 50 Hz, 8.0 m 2.9 m Perm. temperature range -20 °C to +130 °C
 In short-term operation (2 h) up to +140 °C Perm. temperature range -20 °C to +130 °C
 Mains connection 1~230 V, 50 Hz, 3~400 V, 50 Hz mains connection 1~230 V, 50 Hz, with KDS 3~400 V, 50 Hz Protection class IP 44 Protection class IP 44 3~400 V, 50 Hz and 3~230 V, 50 Hz Nominal width Rp 1 to DN 40 • Protection class IP 44 Nominal width Rp 1 to DN 40 Max. operating pressure screw-end pumps 10 bar Nominal width Rp 1¼ to DN 125
Max. operating pressure screw-end pumps Max. operating pressure screw-end pumps 10 bar flange-end pumps 6/10 bar or 6 bar 10 bar flange-end pumps 6/10 bar or 6 bar flange-end pumps 6/10 bar or 6 bar (special version: 10 bar or 16 bar) (special version: 10 bar or 16 bar) (special version: 10 bar or 16 bar) Pre-selectable speed stages for power control
 Combination flanges PN 6/PN 10 (DN 40) Pre-selectable speed stages for power control
 Combination flanges PN 6/PN 10 (DN 40) Equipment/function Blocking current-proof motor or full motor protection Pump housing with cataphoretic coating Pump housing with cataphoretic coating Pump housing with cataphoretic coating Combination flanges PN 6/PN 10 (DN 40 to DN 65) (does not apply to Wilo-AXL) Thermal insulation shells as standard for heating applications • Pre-selectable speed stages for manual Special features • For the commercial area: for systems with Pre-selectable speed stages for manual power adjustment low pipework resistances power adjustment Catalogue **A1** Circulation pumps **A1** Circulation pumps **A1** Circulation pumps

Heating, air-conditioning, cooling

Heating, air-conditioning, cooling

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



Secondary hot water circulation systems and similar systems in industrial and building services

Glandless circulation pump with threaded connection and automatic power adjustment

2.5 m³/h

- 5 m
 Fluid temperature of secondary hot water up to a water hardness of 3.2 mmol/l (18 °d)
- In short-term operation (2 h) up to +70 °C
- Heating water: +15 °C to +110 °C
- Mains connection 1~230 V, 50 Hz
 Protection class IP 44
- Nominal width Rp 1 Max. operating pressure 10 bar
- EC motor
- Control mode Ap-v
- (BMS versions Δp -v and Δp -c) • Automatic setback operation for additional
- savings potential
- Red-button technology for easy operation · Blocking current-proof motor
- · Cable lead-in on both sides for easy
- installation
- · Quick connection with spring clips · Thermal insulation shell
- Corrosion–resistant pump housing in red
- brass for systems where oxygen entry is possible 3 times higher starting torque than conventional circulating pumps
- All plastic parts that come into contact with the fluid fulfil KTW recommendations
- Min. electronic power consumption only
 5.8 W

Glandless high-efficiency pumps

Wilo-Stratos-Z

Wilo-Stratos-ZD



Secondary hot water circulation systems and similar systems in industrial and building services

Glandless circulation pump with threaded connection and automatic power adjustment

41 m³/h

12 m

- Perm. temperature range of secondary hot water up to a water hardness of 3.56 mmol/l (20 °d) max. +80 °C
- Heating water -10 °C to +110 °C
- Mains connection 1~230 V, 50 Hz
- · Protection class IP 44
- · Nominal width Rp 1 to DN 50
- Max. operating pressure screw-end pumps 10 bar flange pumps 6/10 bar
- · Pre-selectable control modes Δρ-c, Δρ-ν, Δρ-Τ
- Pre-selectable speed for constant operation
 Automatic setback operation for additional
- savings potential
- · Dual pump management
- Red-button technology for easy operation
- Graphical pump display with rotating display
 Remote control via infrared interface
- (IR-Module/IR-Monitor)
- · Integrated motor protection
- System expansion due to retrofit communication modules LON, CAN PLR etc.
- · Combination flanges PN 6/PN 10 (for DN 40 and DN 50)
- Thermal insulation shells as standard for heating applications
- Up to 80% electricity savings compared to uncontrolled circulation pumps
- Highest degrees of efficiency due to

A1 Circulation pumps

Heating, air-conditioning, cooling

ECM technology
• Corrosion–resistant pump housing made of red brass

the fluid fulfil KTW recommendations

All plastic parts that come into contact with

A1 Circulation pumps

Heating, air-conditioning, cooling

Standard glandless pumps

Wilo-TOP-Z



Secondary hot water circulation systems and similar systems in industrial and building services

Glandless circulation pump with threaded connection

Glandless circulation pump with threaded connection or press fittings

Secondary hot water circulation systems

and similar systems in industrial and building

4.8 m³/h

services

6.0 m

- Fluid temperature of secondary hot water up to a water hardness of 3.2 mmol/l (18 °d)
- In short-term operation (2 h) up to +70 °C
- Heating water -10 °C to +110 °C

Standard glandless pumps

Wilo-Star-Z

- Mains connection 1~230 V, 50 Hz or for Star-Z 25/2 DM 3~400 V, 50 Hz
- Protection class IP 44 (IP 42 for Star-Z 15)
- Nominal width Rp ½, Rp 1 or DN 15 press fittings
- · Max. operating pressure 10 bar
- Constant speed or for Star-Z 25/6 three selectable speed stages
- Blocking-current proof motor, motor protection not required

 • Quick connection with spring clips

65 m³/h

- Perm. temperature range of secondary hot water up to a water hardness of 3.56 mmol/l (20 °d) max. +80 °C • Heating water -10 °C to +110 °C • Mains connection 1~230 V, 50 Hz

- · Protection class IP 44
- Nominal width Rp 1 to DN 50
- Max. operating pressure screw-end pumps 10 bar
- Flange pumps 6/10 bar
- Pre-selectable speed stages
- · Thermal insulation as standard
- All plastic parts that come into contact with
- the fluid fulfil KTW recommendations Combination flange PN 6/PN 10 (DN 40 to DN 65)
- Extendable motor protection, signal and display functions
- · Full motor protection
- Cable feed into terminal box possible on both sides (starting from P1 \geq 250 W) with integrated strain relief
- Pump communication in simple and safely retrofit plug-in technology
- Easy installation due to combination flanges, nominal width DN 40 to DN 65

A1 Circulation pumps

Heating, air-conditioning, cooling

A1 Circulation pumps

Heating, air-conditioning, cooling Standard glanded pumps Wilo-VeroLine IP-Z

Equipment/function

Special features

Catalogue

• High resistance to corrosive fluids due to stainless steel housing and Noryl impeller

· High degree of versatility due to suitability

the fluid fulfil KTW recommendations

for water hardness up to 28 °d
• All plastic parts that come into contact with

A1 Circulation pumps

Heating, air-conditioning, cooling

Glandless high-efficiency pumps Wilo-Stratos-ECO-ST



Secondary hot water circulation systems or circulation in heating, cold water and cooling water systems

Glanded circulating pump in in-line design with threaded connection

5 m³/h

4.5 m

- Perm. temperature range of secondary hot water up to a water hardness of 4.99 mmol/l (28 °d) max. +65 °C
- In short-term operation (2 h) up to +110 °C
 Heating water -8 °C to +110 °C
- Mains connection 1~230 V, 50 Hz, 3~400 V, 50 Hz
- Protection class IP 44
- · Nominal width Rp 1
- Max. operating pressure 10 bar

Single-stage, low-pressure centrifugal pump in in-line design with

- Mechanical seal
- Threaded connectionMotor with one-piece shaft

- Class A motor technology
 Up to 80% electricity savings compared to uncontrolled circulation pumps
- Highest degrees of efficiency due to ECM technology
- · Min. electronic power consumption only 5.8 W
- 3 times higher starting torque than conventional circulating pumps

Standard glandless pumps Wilo-Star-ST



Circulation in solar heating systems

Circulation in solar heating systems

Glandless circulation pump with threaded connection. Pre-selectable speed stages for power adjustment

Perm. temperature range -10 °C to +110 °C
 In short-term operation (2 h) up to +120 °C

Mains connection 1~230 V, 50 Hz

• Max. operating pressure 10 bar

 Protection class IP 44 • Nominal width Rp ½ and Rp 1

4 m³/h

12 m

2.5 m³/h

5 m • Per. temperature range +15 °C to +110 °C • Mains connection 1~230 V, 50 Hz

Glandless circulation pump with threaded connection, EC motor and automatic power

- Protection class IP 44
- · Nominal width Rp 1
- Max. operating pressure 10 bar

- Control modes Δp-v and Δp-c
- Automatic setback operation for additional savings potential

 Red-button technology for easy operation
- Blocking current-proof motor
- · Cable lead-in on both sides for easy installation
- Quick connection with spring clips
 Connection for building automation (BA)
- Pump housing with cataphoretic coating for external corrosion protection
- Three manually selectable speed stages
- · Wrench attachment point on pump housing
- Blocking-current proof motor, motor protection not required Cable lead-in on both sides for easy
- installation
- Quick connection with spring clips for simple electric connection
- Pump housing with cataphoretic coating for external corrosion protection

 Special hydraulics for application in solar thermal systems

Up to 30% less current consumption due to class B motor technology

A1 Circulation pumps

Heating, air-conditioning, cooling

A1 Circulation pumps Heating, air-conditioning, cooling

Standard glandless pumps Wilo-Star-RSG



Circulation in geothermal systems

Glandless circulation pump with threaded connection. Pre-selectable speed stages for power adjustment

5.5 m³/h

8.5 m

- Perm. temperature range -10 °C to +110 °C

 Mains connection 1~230 V, 50 Hz
- Protection class IP 44
- Nominal width Rp 1 and Rp 11/4
- Max. operating pressure 10 bar
- Three manually selectable speed stages
- Wrench attachment point on pump housing
- Blocking-current proof motor, motor protection not required

 • Cable lead-in on both sides for easy
- installation
- · Ouick connection with spring clips
- Pump housing with cataphoretic coating

Single-stage, low-pressure centrifugal pump in in-line design with

For pumping cold and hot water (in accord-

substances in heating, cold water and cooling

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

Perm. temperature range -10 °C to +120 °C

Mains connection 3~400 V, 50 Hz

automatic power adjustment

• Protection class IP 55

(special version: 16 bar)

Nominal width DN 32 to DN 80

Max. operating pressure 10 bar

ance with VDI 2035) without abrasive

water systems

105 m³/h

30 m

- Mechanical seal
- Flange connectionMotor with integrated electronic speed
- · DP-E with switchover valve

Glanded energy-saving pumps in in-line design Wilo-VeroLine-IP-E

Wilo-VeroTwin-DP-E

Materials:

- Pump housing and lantern: EN-GJL-250
- Impeller: PP, fibreglass-reinforced
- Shaft: 1.4021
- Mechanical seal: AQ1EGG Other mechanical seals: on request
- Special hydraulics for use in geothermal systems
- Red-button technology and display for easy operation
- Infrared interface (IR monitoring)

A2 Glanded pumps

Heating, air-conditioning, cooling

- · Optional interfaces via retrofit IF-Modules for BUS communication, LON or PLR
- Integrated dual pump management

Glanded energy-saving pumps

in in-line design

Wilo-CronoLine-IL-E Wilo-CronoLine-IL-E ... BF

Wilo-CronoTwin-DL-E 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

650 m³/h

70 m

- Perm. temperature range -20 °C to +140 °C

 Mains connection 3~400 V, 50 Hz
- Protection class IP 54
- Nominal width DN 40 to DN 80
- Max. operating pressure 16 bar

Single-stage, low-pressure centrifugal pump in in-line design with

- Mechanical seal
- Flange connection Lantern
- Coupling
- · Motor with integrated electronic speed
- · DL-E with switchover valve

Materials.

- Pump housing and lantern: EN-GJL-250
- Standard version: FN-G II -200 Special version: G-CuSn 10
- Shaft: 1 4122
- · Mechanical seal: AQ1EGG

Other mechanical seals: on request

For IL-E and DL-E

- Control modes Δp-c und Δp-v
- Manual control mode (0-10 V/0-20 mA)
- Red-button technology for easy operation
 Infrared interface (IR monitoring)

Heating, air-conditioning, cooling

· Optional interfaces via retrofit IF-Modules for BUS communication, LON or PLR

For IL-E ... BF. DL-E ... BF

- Control mode ∆p-c
- Manual control mode (0-10 V/0-20 mA)

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 threaded connection or flange connection

200 m³/h

50 m

- Perm. temperature range -10 °C to +120 °C

 Mains connection 3~400 V, 50 Hz
- Protection class IP 55
- Nominal width Rp 1 to DN 100
- Max. operating pressure 10 bar (special version: 16 bar)

Single-stage, low-pressure centrifugal pump in in-line design 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 pump type)
- Shaft: 1.4021 (version N: 1.4404)
- Mechanical seal: AO1FGG Other mechanical seals on request
- Long motor life due to standard condensate drainage holes in the motor housings
- Series design: Motor with one-piece shaft
- · Version N: Standard motor B5 or V1

A2 Glanded pumps

A2 Glanded pumps Heating, air-conditioning, cooling

A1 Circulation pumps

Heating, air-conditioning, cooling

General Overview - 50 Hz - March 2009

Heating, air-conditioning, cooling

Glanded pumps in in-line design Wilo-CronoLine-IL

Wilo-CronoTwin-DI

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 in-line design with flange connection

1,140 m³/h

85 m

- Perm. temperature range -20 °C to +140 °C
 Mains connection 3~400 V, 50 Hz
- Protection class IP 55
- Nominal width DN 32 to DN 250
- · Max. operating pressure 16 bar (25 bar on request)

Single-stage, low-pressure centrifugal pump in in-line design with

- Mechanical seal
- Flange connection with pressure measuring connection $R^{\,1\!/\!_{B}}$
- Lantern

Equipment/function

Special features

- 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 brass G-CuSn 10 • Shaft: 1.4122
- · Mechanical seal: AQ1EGG Other mechanical seals: on request
- Long motor life due to standard condensate drainage holes in the motor housings
- Corrosion protection due to cataphoretic
- coating

 Easy to install due to feet on the pump housing with threaded bores

Special glanded pumps in in-line design Wilo-VeroLine-IPS



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 in-line design with threaded connection or flange connection

23 m³/h

- $\frac{4~m}{\bullet ~Perm.~temperature~range~-10~^{\circ}C~to~+140~^{\circ}C}$ $\bullet ~Mains~connection~3~400~V,~50~Hz$
- Protection class IP 55
- Nominal width Rp 1, DN 40 and DN 50
- Max. operating pressure 10 bar or 6 bar for flange connection

Single-stage, low-pressure centrifugal pump in in-line design with

- Mechanical shaft seal or stuffing box
- Threaded or flange connection with pressure measuring connection R¹/₈
- Standard motor

Materials:

- Pump housing and lantern: EN-GJL-200 Impeller: Plastic
- Shaft: 1.4021
- Mechanical seal: BVEGG Other mechanical seals on request

· High degree of versatility due to shaft sealing with mechanical seal or stuffing box

Special glanded pumps in in-line design

Wilo-VeroLine-IPH-W

Wilo-VeroLine-IPH-O

IPH-W: For pumping hot water without abrasive substances IPH-O: For pumping heat transfer oil

Glanded pump in in-line design with flange connection

80 m³/h

38 m

- Perm. temperature range -10 °C to +350 °C

 Mains connection 3~400 V, 50 Hz
- Protection class IP 55
- Nominal width DN 20 to DN 80
- Max. operating pressure 23 bar

Single-stage, low-pressure centrifugal pump in in-line design with

- Mechanical seal
- Flange connectionLantern with cooling fins
- Standard motor

- Self-cooled mechanical seal, independent of direction of rotation
- Large range of applications due to wide fluid temperature range IPH-W: -10 °C to +210 °C, max. 23 bar IPH-O: -10 °C to +350 °C, max. 9 bar

Catalogue

A2 Glanded pumps

Heating, air-conditioning, cooling

A2 Glanded pumps

Heating, air-conditioning, cooling

A2 Glanded pumps

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 m³/h

105 m

- Perm. temperature range -20 °C to +140 °C
 Mains connection 3~400 V, 50 Hz

- Protection class IP 55 Nominal width DN 32 to DN 150
- Max. operating pressure 16 bar (25 bar on request)

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

- Mechanical sealFlange connection with pressure measuring connection R 1/8
- Lantern Coupling
- · IEC standard motor

- Meets user requirements due to performance and main dimensions in accordance with EN 733
- · Long motor life due to standard condensate drainage holes in the motor housing
- · Corrosion protection due to cataphoretic coating
- impeller
- Type R with Victaulic connection

A3 Monobloc and norm pumps

Heating, air-conditioning, cooling, water supply

Norm pumps

Wilo-CronoNorm NL Wilo-VeroNorm-NPG



Glanded monobloc pumps

Wilo-BAC

For pumping water-glycol mixtures with 20 to 40% glycol volume proportion

Glanded pump in monobloc design with threaded connection or Victaulic connection

80 m³/h

25 m

- Perm. temperature range –15 °C to +60 °C
 Mains connection 3~400 V, 50 Hz
- Protection class IP 54
- Nominal width G2/G $1\frac{1}{2}$ (only BAC 40 ...) or Victaulic connection 60.3/48.3 mm (BAC 40 ...) 73.0/73.0 mm (BAC 70 ...)
- Max. operating pressure 6 bar

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

Corrosion-resistant pump housing and

A3 Monobloc and norm pumps

Heating, air-conditioning, cooling, water supply

Pumps with axially split housing Wilo-SCP





For pumping 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 housing mounted on a baseplate

3,000 m³/h

140 m

Perm. temperature range -20 °C to +140 °C
 Mains connection 3~400 V, 50 Hz

Single-stage low-pressure centrifugal pump mounted on a baseplate

For pumping 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.

- Protection class IP 55
- Nominal width on suction side DN 50 to DN 500
- · Nominal width on pressure side DN 32 to DN 500
- Maximum operating pressure: depending on type and application up to 16 bar

Single-stage, low-pressure centrifugal pump in monobloc design with coupling, coupling

- Mechanical seal or stuffing box
- · Wilo factory motor or ATB motor

Materials:

- Pump housing: EN-GJL-250
- Impeller: EN-GJL-250 Shaft: 1.4028
- protection, motor and baseplate

· Other materials and versions on request

3,400 m³/h

245 m

- Perm. temperature range -20 °C to +120 °C
 Mains connection 3~400 V, 50 Hz
- Protection class IP 55
- · Nominal width on suction side DN 65 to DN 500
- · Nominal width on pressure side DN 50 to DN 400
- Max. operating pressure: depending on type 16 or 25 bar
- 1- or 2-stage, low-pressure centrifugal pump in monobloc design
- Delivered as complete unit (pump with coupling, coupling protection, motor and baseplate) or without motor or only pump
- Shaft seal with mechanical seal or stuffing
- · 4-pole and 6-pole motors

Materials:

- Pump housing: EN-GJL-250
- Impeller: GCuSn5 ZnPb
- Shaft: X12Cr13
- Higher capacities up to 17,000 m³/h on request
- Special motors and other materials on

request

A3 Monobloc and norm pumps

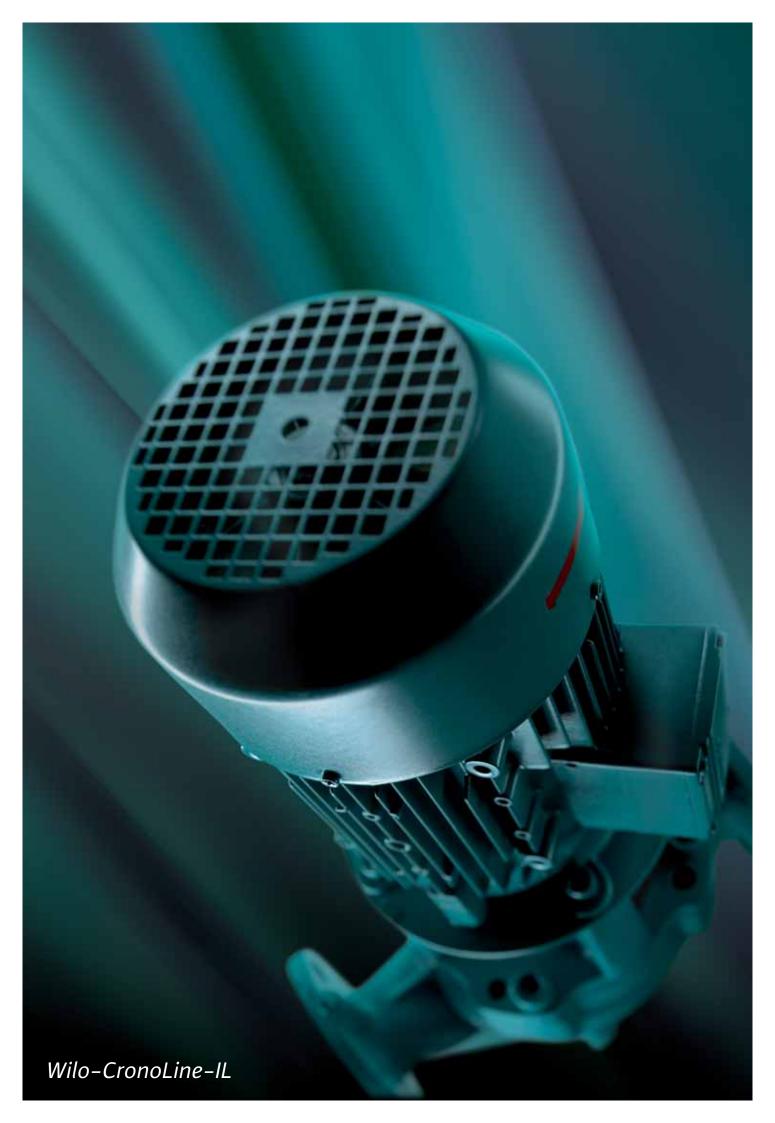
Heating, air-conditioning, cooling, water supply

Heating, air-conditioning, cooling, water supply

A3 Monobloc and norm pumps

General Overview - 50 Hz - March 2009

Heating, air-conditioning, cooling Switchgears / package heat exchanger assembly Control devices Wilo-IR-Module/Wilo-Dia-Log/IR-Monitor Wilo-CC-HVAC System Wilo-SK Wilo-CR System Wilo-IR-Module Stratos/Wilo-IR-Module Wilo-SR System Wilo-CRn System
Wilo-VR-HVAC System Wilo-SD System Wilo-Protect Module C Wilo-Control AnaCon Wilo-Safe Wilo-Control DigiCon/DigiCon-A Wilo-Control products for connecting pumps Switchgear for controlling 1 or 2 pumps Switchgears for controlling 1 or 6 pumps to the building automation Wilo-Safe: Floor heating systems of all kinds, system separation for oxygen-rich fluids Wilo-Safe: Complete system/basic device for hydraulic separation of floor heating systems Wilo-Safe: · Max. operating pressure 6 bar Perm. temperature range +20 °C to +90 °C
 Mains connection 1~230 V, 50 Hz • Heat exchanger 5-24 kW Equipment/function Wilo-SK Wilo-CC-HVAC system and Wilo-CR system Wilo-IR-Module/Dia-Log/IR-Monitor Timer switchgear · Remote control with infrared interface for · Comfort control system for 1 to 6 pumps switched in parallel, with fixed speed electronically controlled Wilo pumps Motor protection tripping devices Wilo-CRn system Wilo-IF-Modules Stratos/IF-Modules Plug-in modules for building automation connection of Stratos, IP-E, DP-E and • Stage switchgears for 4-stage glandless Comfort control system for 1 to 6 pumps switched in parallel, with integrated speed pumps or dual pump switchgear IL-E/DL-E pumps Wilo-SD Switchgear for double pumps in glanded Wilo-VR-HVAC system Wilo-Protect Module C Plug-in module for building automation control of TOP-S/SD pumps without speed design Vario controller for 1 to 4 pumps switched in parallel, with integrated speed control · The complete system is ready-mounted and pressure-checked Wilo-Control AnaCon and DigiCon/DigiCon-A Analogue and digital interface converter for connecting pumps to the building automation Special versions on request Special versions on request (apart from Wilo-Safe) Catalogue A1, A2, A3 A1, A2 A1, A2 Heating, air-conditioning, cooling, water supply Heating, air-conditioning, cooling Heating, air-conditioning, cooling





Water supply Self-priming multistage pumps Self-priming multistage pumps Non-self-priming multistage pumps Wilo-Jet WJ Wilo-MultiCargo MC Wilo-MultiPress MP For domestic water supply, sprinkling, irriga-For pumping water from wells for filling, For domestic water supply, sprinkling, irrigation, spraying and rainwater utilisation pumping empty, transferring by pumping, tion, spraying and rainwater utilisation irrigation and sprinkling.
As emergency pump for overflows Self-priming multistage centrifugal pumps Self-priming multistage centrifugal pumps Non-self-priming multistage centrifugal pumps 5 m³/h 7 m³/h 8 m³/h 40 m 58 m 56 m Mains connection 1~230 V, 50 Hz / 3~400 V, 50 Hz Mains connection 1~230 V, 50 Hz / 3~400 V, 50 Hz Mains connection 1~230 V, 50 Hz / 3~400 V, 50 Hz • Inlet pressure max. 1 bar Inlet pressure max. 4 bar Inlet pressure max. 6 bar • Fluid temperature max. +5 °C to +35 °C Fluid temperature max. +5 °C to +35 °C
Ambient temperature max. +40 °C Fluid temperature max. +5 °C to +35 °C
Ambient temperature max. +40 °C Operating pressure max. 6 bar Protection class IP 44
Connection on suction and pressure sides Operating pressure max. 8 bar
 Protection class IP 54 Operating pressure max. 10 bar
Protection class IP 54 • Connections on suction and pressure sides · Connections on suction and pressure sides Rp 1 Rp 1 Equipment/function With or without carrying frame, depending Directly flanged motor Directly flanged motor · Thermal motor protection switch for single-· Thermal motor protection switch for on the version • For single-phase AC motor (1~230 V) phase AC motor (1~230 V) 1~230 V version Connection cable with plugOn/Off switch • Thermal motor protection switch Special features • Ideal for portable outdoor applications • Low-noise • Low-noise Ideal as a base-load pump for rainwater Ideal as a base-load pump for rainwater (hobby, garden) utilisation utilisation Catalogue **B1** Domestic water supply **B1** Domestic water supply **B1** Domestic water supply Water supply Water supply Water supply

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

Filter block pumps

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

Self-priming filter block pumps

Mains connection 1~230 V, 50 Hz /

Low-noise glandless technology

· Preliminary filter

Fluid temperature max. +5 °C to +40 °C

16 m³/h

3~400 V, 50 Hz

Suction head max. 3 m

Protection class IP 54

28 m

Wilo-FilTec FBS



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

Submersible pumps

16 m³/h

86 m

- Mains connection 1~230 V, 50 Hz / 3~400 V, 50 Hz
- Fluid temperature max. +3 °C to +40 °C
- Operating pressure max. 10 bar Protection class IP 68
- Connection on pressure side Rp 1¼
 Connection on suction side for SE version
- Connection cable, 20 m
 Standard inlet basket for TWI 5 version
- Inlet connecting piece for TWI 5–SE version
- · Thermal motor protection for EM version (1~230 V)

- Ready-to-plug in EM version (1~230 V)
- Pump (housing, stages, impellers) made entirely of stainless steel 1.4301 (AISI 304)
- Self-cooling motorInstallation possible outside water
- Thermal motor protection for EM version (1~230 V)
- Patented, water-cooled, particularly lownoise glandless pump motor
- Low-vibration bearing configuration
- fibreglass-reinforced, pressure-resistant and heat-resistant plastic
- · Large preliminary filter for protecting the gump

without anti-friction bearings
• Lightweight, compact design due to

B1 Domestic water supply

Water supply

Self-priming water-supply units

Wilo-Jet HWJ Wilo-Jet FWJ



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

Self-priming water-supply units

5 m³/h

40 m

- Mains connection 1~230 V, 50 Hz / 3~400 V, 50 Hz
- Inlet pressure max. 1 bar
- · Start-up pressure 1.5 bar
- Switch-off pressure min. 2.2 bar
- Fluid temperature +5 °C to +35 °C
 Operating pressure max. 6 bar
- Protection class IP 44
- · Connection on suction and pressure sides
- Directly flanged motor
- · Connection cable with plug
- Thermal motor protection switch
- Automatic pump control
- Low-water cut-out switchgear

· Ideal for outdoor applications (hobby,

• Electronic pump control
• All parts that come in contact with the fluid

· Completely pre-installed system

garden)

are corrosion-free

Self-priming water-supply units

Wilo-Jet HMC

Wilo-Jet FMC

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

Self-priming water-supply units

7 m³/h

58 m

- Mains connection 1~230 V, 50 Hz / 3~400 V, 50 Hz
- Suction head max. 8 m
- · Inlet pressure max. 4 bar
- Fluid temperature +5 °C to +35 °C
- Operating pressure max. 8 bar
 Pressure switch setting range 1-5 bar
- Protection class IP 54
- Connection on suction and pressure sides
- Directly flanged motor
- · Pressure switch
- Diaphragm pressure vessel for single-phase AC motor
- · Connection cable with plug
- Thermal motor protection switch

- Ideal system for supplying water throughout the building
 - · Low-noise due to multistage design
 - Outstanding self-priming capability due to innovative priming wing
 - · All parts that come in contact with the fluid are corrosion-free
 - Reduction of switch-on frequency and avoidance of pressure surges due to 50 I diaphragm pressure vessel

B1 Domestic water supply

Water supply

B1 Domestic water supply

Water supply

B1 Domestic water supply

Water supply Self-priming water-supply units Water-supply units Water-supply units Wilo-MultiPress HMP Wilo-Sub TWI 5-SE Plug & Pump Wilo-SilentMaster Wilo-MultiPress FMP For domestic water supply, sprinkling, irriga-For domestic water supply, sprinkling, irrigation, spraying and rainwater utilisation For domestic water supply, sprinkling, irrigation, spraying and rainwater utilisation tion, spraying and rainwater utilisation Water-supply unit Type 303, non self-priming Non-self-priming water-supply units Water-supply system with submersible pump, control and complete accessories Types 304 and 305, self-priming 8 m³/h 6 m³/h 4 m³/h 52 m 65 m 56 m Mains connection 1~230 V, 50 Hz / 3~400 V, 50 Hz Mains connection 1~230 V, 50 Hz Mains connection 1~230 V, 50 Hz / · Suction head max. 8 m 3~400 V, 50 Hz • Inlet pressure max. 4 bar Inlet pressure max. 6 bar • Fluid temperature +3 °C to +40 °C • Fluid temperature +5 °C to +35 °C • Fluid temperature +5 °C to +35 °C • Operating pressure max. 10 bar • Protection class IP 68 Operating pressure max. 8 bar Operating pressure max. 10 bar Protection class IP 54
Connection on suction and pressure sides Pressure switch setting range 1–5 bar
Protection class IP 54 Connection on suction and pressure sides Rp 11/4 • Connection on suction and pressure sides Rp 1 Equipment/function Self-priming multistage centrifugal pump Directly flanged motor Connection cable, 20 m Standard inlet basket for TWL5 version. with directly flanged motor · Pressure switch • Mains connection 1~230 V, 50 Hz Inlet connecting piece for TWI 5-SE version • Diaphragm pressure vessel for single-phase Connection cableThermal motor protection switch AC motor

Connection cable with plug • Thermal motor protection for EM version (1~230 V) • Fully automatic control Thermal motor protection switch · Low-water cut-out switchgear Ideal system for supplying water throughout the building • Ready-to-plug in EM version (1~230 V) Special features • Quiet operation 43 dB (A) Pump (housing, stages, impellers) made entirely of stainless steel 1.4301 (AISI 304) · Compact water supply system • Dry-running protection system Low-noise due to multistage design · All parts that come in contact with the fluid · Self-cooling motor · New innovative design Integrated non-return valve are corrosion-free Complete accessories • Ready-to-plug, easy installation · Reduction of switch-on frequency and Installation possible outside water avoidance of pressure surges due to large- Thermal motor protection for EM version sized 50 l diaphragm pressure vessel (1~230 V) Catalogue **B1** Domestic water supply **B1** Domestic water supply **B1** Domestic water supply

Water supply

Water supply

Water supply

Rainwater utilisation systems Wilo-RainSystem AF Basic Wilo-RainSystem AF Comfort



Rainwater utilisation for saving potable water in conjunction with cisterns or tanks

Ready-to-plug rainwater utilisation system

4 m³/h

52 m

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

Rainwater utilisation systems Wilo-RainSystem AF 150



Rainwater utilisation in multi-family houses and small trade businesses for saving potable water in conjunction with cisterns or tanks

Automatic rainwater utilisation system with 2 self-priming pumps

12 m³/h

- 58 m
- Mains connection 1~230 V, 50 Hz
- · Suction head max. 8 m
- Fluid temperature max. +5 °C to +35 °C
- · Operating pressure max. 8 bar
- Replenishment reservoir 150 I
- · Protection class IP 41

Rainwater utilisation systems Wilo-RainSystem AF 400



Hybrid system for commercial and industrial rainwater utilisation for saving potable water in conjunction with cisterns or tanks

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

16 m³/h

56 m

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

Rainwater utilisation for saving potable water

Rainwater utilisation system

Wilo-RainCollector II RWN

Ready-to-plug rainwater utilisation system with rainwater tank

4 m³/h 52 m

- Mains connection 1~230 V, 50 Hz
- Fluid temperature max. +5 °C to +35 °C
- Operating pressure max. 6 bar
- Replenishment reservoir 1.500 L
- Protection class IP 54

- Compact, ready-to-plug rainwater utilisation system • Low-noise, due to multistage centrifugal
- pump and complete encapsulation of the system (AF Comfort) • Fulfilment of DIN 1988 and EN 1717 High economic efficiency due to fresh water
- replenishment according to requirements Flow-optimised and noise-optimised
- replenishment reservoirs · All parts that come in contact with the fluid are corrosion-free
- For AF Comfort: automatic support function for evacuation of air from the suction line
- Low-noise due to multistage centrifugal pumps
- All parts that come in contact with the fluid are corrosion-free Maximum operational safety due to
- fully electronic RainControl Professional controller • High economic efficiency due to fresh water
- replenishment according to requirements
 High reliability due to DVGW-certified, flow-optimised and noise-optimised replenishment reservoir
- · Low-noise due to multistage centrifugal pumps
- All parts that come in contact with the fluid are corrosion-free · Maximum operational safety due to
- trendsetting fully electronic RainControl Hybrid controller
- High economic efficiency due to fresh water
- replenishment according to requirements
 High reliability due to flow-optimised and
- noise-optimised overall concept
 Automatic control of the feeding pump
- System/level control in low-voltage range
- Low-noise, self-priming pump ensures almost noiseless system operation
- Corrosion-free
- Can be expanded at any time
- Multi-tank system with replenishment and setting zone for better water quality (Wilo-MKS system)
- Maximum connection flexibility due to rotating rainwater inlet

B1 Domestic water supply

Water supply

Water supply

B1 Domestic water supply

B1 Domestic water supply

Water supply

General Overview - 50 Hz - March 2009

B1 Domestic water supply

Water supply Borehole pumps Wilo-Sub TWU 3 ... Plug & Pump Borehole pumps Borehole pumps Wilo-Sub TWU 3. Wilo-Sub TWU 6 Wilo-Sub TWU 4 ... Wilo-Sub TWU 4 ... Plug & Pump Wilo-Sub TWU 8 .. Wilo-Sub TWU 4 ...-QC Series modification Domestic water supply from boreholes, wells Water-supply unit for water supply from Water supply from boreholes and cisterns: and cisterns; sprinkling, irrigation and pressure boreholes, wells and cisterns; domestic water sprinkling and irrigation for lowering the water supply, sprinkling and irrigation; pumping water without long-fibre and abrasive boosting; pumping water without long-fibre level; for pumping water without long-fibre and abrasive constituents and abrasive constituents constituents Borehole pump, multistage Water-supply unit with borehole pump, Borehole pump, multistage control and complete accessories. 5.5 m³/h 135 m³/h 23 m³/h 95 m 290 m 375 m Mains connection: 1~230 V, 50 Hz or 3~400 V, 50 Hz Mains connection: 1~230 V, 50 Hz
Submerged operating mode: S1 Mains connection: 3~400 V, 50 Hz Submerged operating mode: S1
Fluid temperature: 3-30 °C Submerged operating mode: S1 Fluid temperature: 3-40 °C • Fluid temperature: $3-40~^{\circ}\text{C}$ • Min. flow at motor: 0.08~m/s· Min. flow at motor: 0.08 m/s · Min. flow at motor: 0.16 m/s Max. sand content: (4" motors = 0.08 m/s) Max. sand content:
 TWU 3- ...: 40 g/m³
 TWU 4- ...: 50 g/m³ • TWU 3- ... : 40 g/m³ • TWU 4- ... : 50 g/m³ Max. sand content: 50 g/m³
 Up to 20 starts per hour Up to 20 starts per hour
Max. submersion depth: • Max. submersion depth: Up to 20 starts per hourMax. submersion depth: • TWU 6 ... = 250 m • TWU 8 ... = 350 m • TWU 3- ... : 60 m • TWU 3- ... : 60 m • TWU 4- ... : 200 m • TWU 4- ...: 200 m · Protection class: IP 68 • Protection class: Protection class:
TWU 3- ...: IP 58
TWU 4- ...: IP 68 • TWU 3- ... : IP 58 • TWU 4- ... : IP 68 Submersible, multistage borehole pump Submersible, multistage borehole pump Submersible, multistage borehole pump with radial impellers with radial impellers Radial or semi-axial impellers Integrated non-return valve Integrated non-return valve Integrated non-return valve NEMA coupling NEMA coupling NEMA coupling • Single-phase or three-phase AC motor · Single-phase motor · Three-phase AC motor Integrated thermal motor protection Encapsulated motor Integrated thermal motor protection for Dry-running protection system (only for TWU 4- ... -P&P with Wilo-Sub-I package) single-phase motor Electrical system components already • Rewindable motors (TWU 3- ...) Impellers made of bronze • Integrated non-return valve prewired Integrated non-return valve · Parts that come in contact with the fluid are Easy installation and operation · Immersion depth up to 350 m Integrated non-return valve
Safe motor operation due to high starting corrosion-free · Vertical and horizontal installation possible - Pump connection head and flange made of stainless steel (TWU 3– \dots) torque and shake-free function (TWU 4- ... -P&P)
• Lightning and overload protection inte-• Vertical and horizontal installation possible · Single-phase version with starting capacitor and On/Off switch grated in the motor (TWU 4- ... -P&P) Catalogue B2, B1 B2, B1 B2, B1 Water supply Water supply Water supply

Borehole pumps Wilo-Sub TWI 4 Wilo-Sub TWI 6 Wilo-Sub TWI 8



Water and potable water supply from boreholes and cisterns; process water supply; municipal and industrial water supply; sprinkling and irrigation; pressure boosting; lowering the water level; pumping water without long-fibre and abrasive constituents

Borehole pump, multistage

130 m³/h

420 m

- Mains connection: 1~230 V, 50 Hz (TWI 4 ...) or 3~400 V, 50 Hz
- Submerged operating mode: S1
- Fluid temperature: 3-30 °C
 Min. flow at motor: 0.1-0.5 m/s
- Max. sand content: 35 g/m³
 Up to 20 starts per hour
- Max. submersion depth: 100-300 m
- · Protection class: IP 68

- Submersible, multistage borehole pump with radial or semi-axial impellers
- Integrated non-return valve
- NEMA coupling
- Single-phase or three-phase AC motor
 Encapsulated or rewindable
- (TWI 6 ... / TWI 8 ...) motor
- Unit made completely of stainless steel
- Easy maintenance due to rapid installation and dismantling
- · Integrated non-return valve
- Vertical and horizontal installation possible
- Standard and configurable versions available (TWI 6 ... / TWI 8 ...)
 • Star-delta version

B2, B1

Water supply

· Rewindable motors

Borehole pumps Wilo-EMU 6" series Wilo-EMU 8" series Wilo-EMU 10"...24" series

Series extension



Water and potable water supply from boreholes and cisterns; process water supply; municipal and industrial water supply; sprin-kling and irrigation; pressure boosting; lowering the water level; utilisation of geothermal energy and off-shore applications; supplying fountains, snow cannons and water organs

Borehole pump in sectional design

2.500 m³/h

580 m

- Mains connection: 3~400 V, 50 Hz
 Submerged operating mode: S1
- Max. fluid temperature: NU 5 .../NU 6 .../NU 7 .../NU 811 = 30 °C NU 801/NU 9 .../NU 12 .../U ... = 20 °C

- Nu 801/Nu 9 .../Nu 12 .../ 0 ... 20 0 Min. flow at motor: Nu 5 .../Nu 7 ... = 0.16 m/s Nu 6 .../Nu 811 = 0.5 m/s Nu 801/Nu 9 .../Nu 12 .../ u ... = 0.1 m/s
- Max. sand content: 35 g/m³
- · Up to 10 starts per hour · Max. submersion depth:
- NU 611 = 100 m Other motors = 300 m
- Protection class: IP 68
- Control range for frequency converter:
 NU 5 ... / NU 6 ... / NU 7 ... / NU 811 / U 15 ... / U 21 ... = 30-50 Hz • NU 801 / NU 911 / NU 12 ... (2-pole) =
- 25-50 Hz • NU 801 / NU 911 / NU 12 ... (4-pole) =
- 30-50 Hz U 17 = 25-50 Hz
- Submersible, multistage borehole pump
- Radial or semi-axial impellers
- · Hydraulics and motor freely configurable according to power requirements
- Integrated non-return valve (depending on type)
- NEMA coupling or standardised connection (from 10" motors on)
- Three-phase motor for direct or star-delta start
- Encapsulated motor
- (NU 4 ..., NU 5 ..., NU 7 ...)
- Other motor types rewindable as standard
- Water pumping with large volume flows
- Corrosion-resistant impellers
- Wear-resistant GI bushing (depending on type)
- Special materials possibleEncapsulated and rewindable motors
- Individual adjustment to duty point due to impeller correction
- 4-pole motors for long service life and high degree of efficiency
- Motors with CoolAct technology for high power density (from 10" motors on)
 - High voltage up to 6000 V possible
- · Vertical and horizontal installation possible

B2 Borehole pumps

Water supply

Borehole pumps

Wilo-EMU polder pumps



Potable and process water from tanks or shallow bodies of water; municipal and industrial water supply; sprinkling and irrigation; lower-ing the water level; utilisation of geothermal energy and off-shore applications;

Polder pump

1,400 m³/h

170 m

- Mains connection: 3~400 V, 50 Hz
- · Max. fluid temperature: 20 °C
- Min. flow at outside shroud: not necessary
- · Max. sand content: 35 g/m3 • Up to 10 starts per hour
- Max. submersion depth: 300 m
 Protection class: IP 68
- · Control range for frequency converter:

Submersible, multistage borehole pump

Hydraulics and motor freely configurable

· Three-phase motor for direct or star-delta

according to power requirements

Motors rewindable as standard

Semi-axial impellers

start

- 2-pole: 25-50 Hz
- · 4-pole: 30-50 Hz

Sprinkler pumps with VdS approval Wilo-EMU sprinkler pumps





For supplying sprinkler systems

Sprinkler pump in sectional design

450 m³/h

110 m

- Mains connection: 3~400 V/50 Hz
- · Submerged operating mode: S1
- Max. fluid temperature: 25 °C, higher temperatures on request
- Min. flow at motor: 0.1 m/s
- Max. sand content: 35 g/m³
 Up to 10 starts per hour
- Max. submersion depth:
 NU 611 = 100 m
- Other motors = 300 m
- · Protection class: IP 68

- Submersible, multistage borehole pump
 - Radial or semi-axial impellers • NEMA coupling (depending on type)
 - Three-phase motor for direct or star-delta
- · Rewindable motors
- Deep water lowering
- Self-cooling designEasy installation on the ascending pipe
- Wear-resistant design due to different material versions
- · Compact design
- Rewindable motors

B2 Borehole pumps

Water supply

VdS certification

· Certified non-return valve available as accessory

Version in bronze material

· Pressure shroud installation possible

B5 Sprinkler pumps with VdS approval

Water supply Horizontal, multistage centrifugal pumps Vertical, multistage centrifugal pumps Horizontal, multistage centrifugal pumps Wilo-Economy MHIL Wilo-Multivert MVIL Wilo-Economy MHI Water supply and pressure boosting
 Commerce and industry
 Cooling water circulation systems Water supply and pressure boosting
 Commerce and industry · Water supply and pressure boosting Commerce and industry Washing and spraying systems
 Rainwater utilisation Washing and spraying systems Rainwater utilisation Washing and sprinkling systems • Cooling and cold water circulation systems • Cooling and cold water circulation systems Non-self-priming multistage pump Non-self-priming multistage pump Non-self-priming multistage pump 13 m³/h 13 m³/h 25 m³/h 68 m Fluid temperature -15 to +90 °C
Operating pressure max. 10 bar • Fluid temperature –15 to +90 °C • Fluid temperature -15 to +110 °C · Operating pressure max. 10 bar · Operating pressure max. 10 bar Inlet pressure max. 6 bar
Protection class IP 54 • Inlet pressure max. 6 bar Inlet pressure max. 6 bar Protection class IP 54 · Protection class IP 54 Pump in in-line design
 Oval flange Equipment/function • Pump in block design Stainless steel pump in block design · Threaded connection · Threaded connection Single-phase or three-phase AC motor Single-phase or three-phase AC motor • Single-phase or three-phase AC motor Single-phase AC motor with integrated thermal motor protection • Single-phase AC motor with integrated thermal motor protection • Single-phase AC motor with integrated thermal motor protection Impellers and stage chambers made of stainless steel 1.4301 (AISI 304) Impellers and stage chambers made of stainless steel 1.4301 (AISI 304) All parts that come in contact with the fluid are made of stainless steel 1.4301 (AISI 304) Special features Pump housing made of grey cast iron · Pump housing made of grey cast iron or 1.4404 (AISI 316) EN-GJL-250, cataphoretic coating

• All relevant components have KTW and EN-GJL-250, cataphoretic coating

• All relevant components have KTW and Compact designAll relevant components have KTW and WRAS approval WRAS approval WRAS approval **B3** High-pressure multistage **B3** High-pressure multistage **B3** High-pressure multistage centrifugal pumps centrifugal pumps centrifugal pumps Water supply Water supply Water supply

Vertical, multistage centrifugal pumps

Water supply and pressure boostingIndustrial circulation systems

· Cooling water circulation systems

Non-self-priming multistage pump

• Fluid temperature -20 to +120 °C · Operating pressure max. 16/25 bar

• PN 16 and PN 25 with loose round flanges

Impellers and stage chambers made of stainless steel 1.4307, pump housing made

of grey cast iron EN-GJL-250, cataphoretic

coating Version PN 16 and PN 25 with round loose

flanges in accordance with ISO 2531 and

· EFF1 IEC standard three-phase AC motor

Inlet pressure max. 10 bar

Protection class IP 55

 Fire extinguishing systems • Washing systems Irrigation

· Process water

35 m³/h

Wilo-Helix-V

Vertical, multistage centrifugal pumps Wilo-Multivert MVIS



Water supply and pressure boosting

Non-self-priming multistage pump with glandless pump motor

14 m³/h

110 m

- Fluid temperature –15 to +50 °C Operating pressure 16 bar

- Protection class IP 54
- Stainless steel pump in in-line design
- · Three-phase AC motor in glandless pump

- Low-noise (up to 20 dB(A) quieter than conventional pumps)
- All parts that come in contact with the fluid are corrosion-resistant
- Glandless pump technology
- All relevant components have KTW and WRAS approval
- Easy commissioning
- All parts that come in contact with the fluid are made of stainless steel 1.4301 (AISI 304) or 1.4404 (AISI 316L)
- Integrated frequency converter
 Full motor protection
- All relevant components have KTW and WRAS approval

- Compact design

B3 High-pressure multistage centrifugal pumps

Water supply

Vertical, multistage centrifugal pumps Wilo-Multivert MVISE



Horizontal, multistage centrifugal pumps

· Water supply and pressure boosting

Cooling water circulation systems

Non-self-priming multistage pump with integrated frequency converter

Fluid temperature -15 to +110 °C
Operating pressure max. 10 bar

• Inlet pressure max. 6 bar

Stainless steel in block design

Integrated frequency converter

Single-phase or three-phase AC motor
Three-phase version with red-button tech-

nology and LCD display for state indication

· Integrated thermal motor protection

· Threaded connection

Protection class IP 54

· Washing and sprinkling systems

34 m³/h

95 m

 Industrial circulation systems · Process engineering

Wilo-Economy MHIE

· 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
- Inlet pressure 6 bar
- Protection class IP 44
- Emitted interference in accordance with EN 50081 T1 (EN 50081 T1 optional)
- Interference resistance in accordance with EN 50082 T2
- Stainless steel pump in in-line design
- Glandless numr
- Self-venting
- Hydraulics in 1.4301
- Oval flange, round flange Three-phase AC motor with integrated frequency converter, with red-button tech-
- nology and LCD display for state indication Integrated thermal motor protectionProtection against low water level
- Easy commissioning
- Glandless pump technology
- Low-noise (up to 20 dB(A) quieter than conventional pumps)
- Integrated frequency converter
- All components that come in contact with the fluid are made of stainless steel 1.4301 (AISI 304)
- All relevant components have KTW and WRAS approval

ISO 7005

- Helix V22 Efficiency-optimised, laser-welded 2D/3D high-efficiency hydraulics
- Easy pump replacement without pipe modification. Due to the modular pump housing, Helix pumps can be installed in existing pipes.
- User-friendly mechanical seal with cartridge, equipped with a standard seal for easy maintenance
- Potable water approval according to ACS/KTW/WRAS for all parts that come in contact with the fluid

B3 High-pressure multistage centrifugal pumps

Water supply

B3 High-pressure multistage centrifugal pumps

Water supply

B3 High-pressure multistage

centrifugal pumps

Water supply Vertical, multistage centrifugal pumps Vertical, multistage centrifugal pumps Vertical, multistage centrifugal pumps Wilo-Helix-VE Wilo-Multivert MVI Wilo-Multivert-MVIE Water supply and pressure boostingFire extinguishing systems Water supply and pressure boostingIndustrial circulation systems · Water supply and pressure boosting Industrial circulation systems Process engineeringCooling water circulation systems · Process water · Boiler feed · Cooling water circulation systems · Industrial circulation systems Washing systems • Process engineering · Washing and sprinkling systems Irrigation · Cooling water circulation systems Washing and sprinkling systems Non-self-priming, multistage pump Non-self-priming, multistage pump Non-self-priming multistage pump with integrated frequency converter 155 m³/h 145 m³/h 45 m³/h 234 m 235 m 245 m • Fluid temperature -15 to +120 °C • Fluid temperature -20 to +120 °C • Fluid temperature -15 to +120 °C · Operating pressure max. 16/25 bar · Operating pressure max. 16/25 bar · Operating pressure max. 16 bar/25 bar Inlet pressure max. 10 bar Inlet pressure max. 10 bar Inlet pressure max. 6 bar • Protection class IP 54 or IP 55 Protection class IP 55 Protection class IP 55 • PN 16 and PN 25 with loose round flanges Stainless steel pump in in-line design Equipment/function Impellers and stage chambers made of Stainless steel pump in in-line design PN 16 with oval flangesPN 16/25 with DIN round flanges, Victaulic stainless steel 1.4307, pump housing made Version of grey cast iron EN-GJL-250, cataphoretic PN 16 with oval flanges coating
• Version PN16 and PN25 with round loose PN 16/25 with DIN round flanges, Victaulic connections depending on pump type connections depending on pump type Single-phase or three-phase current flanges in accordance with ISO 2531 and • IEC standard motor in single-phase or standard motor ISO 7005 three-phase version, Single-phase AC motor Integrated frequency converter • EFF1 IEC standard three-phase AC motor with integrated thermal motor protection Integrated thermal motor protection • Integrated frequency converter · Protection against low water level Special features Helix VE22 • MVI 100 ... 1600-6 Efficiency-optimised, laser-welded 2D/3D All parts that come in contact with the fluid · Full motor protection high-efficiency hydraulics made of stainless steel 1.4301 (AISI 304) or Easy pump replacement without pipe modification. Due to the modular pump 14404 (AISI 316L) MVI 1600 ... MVI 9500 housing, Helix pumps can be installed in depending on pump type in stainless steel 1.4404 (AISI 316L) or 1.4301 (AISI 304) with existing pipes. User-friendly mechanical seal with cartridge, equipped with a standard seal for easy pump housing made of grey cast iron EN-GJL-250, cataphoretic coating maintenance All relevant components have KTW and Potable water approval according to ACS/KTW/WRAS for all parts that come in WRAS approval

> Catalogue **B3** High-pressure multistage centrifugal pumps

contact with the fluid

Water supply

- Easy commissioning
- Large control range
- MVI 100 1600-6
- All parts that come in contact with the fluid made of stainless steel 1.4301 (AISI 304) or 14404 (AISI 316L)
- MVI 1600 ... MVI 9500 depending on pump type in stainless steel 1.4404 (AISI 316L) or 1.4301 (AISI 304) with pump housing made of grey cast iron EN-GJL-250, cataphoretic coating
- All relevant components have KTW and WRAS approval

B3 High-pressure multistage centrifugal pumps

Water supply

B3 High-pressure multistage centrifugal pumps



Helix high-pressure multistage centrifugal pump.

High efficiency for water supply: Our new Helix pump uses its innovative pump design, highly efficient hydraulics with best efficiency and an energy–saving EFF1 motor to again significantly increase potential savings. At the same time, high–quality materials ensure increased durability, and lower life cycle costs contribute to long–term cost savings. And because handling also has to do with efficiency, we have also drastically simplified maintenance with the cartridge system X–Seal. Highest performance? We call it Pumpen Intelligenz!



Water supply

Glanded energy-saving pumps in in-line design Wilo-CronoLine-IL-E Wilo-CronoLine-IL-E...BF Wilo-CronoTwin-DL-E Wilo-CronoTwin-DL-E...BF

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

650 m³/h 70 m

- Perm. temperature range -20 °C to +140 °C

 Mains connection 3~400 V, 50 Hz
- Protection class IP 54
- · Nominal width DN 40 to DN 80
- Max. operating pressure 16 bar

Equipment/function

Single-stage, low-pressure centrifugal pump in in-line design with

- · Mechanical seal
- Flange connection
- LanternCoupling control
- Motor with integrated electronic speed
- 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: AO1EGG Other mechanical seals: on request

Catalogue

For IL-E and DL-E

- Control modes Δp -c und Δp -v Manual control mode (0–10 V/0–20 mA)
- Red-button technology for easy operation
- · Infrared interface (IR monitoring)
- Optional interfaces via retrofit IF–Modules for BUS communication, LON or PLR

For IL-E ... BF, DL-E ... BF

- Control mode ∆p-c
- Manual control mode (0-10 V/0-20 mA)

A2 Glanded pumps

Heating, air-conditioning, cooling

Glanded pumps in in-line design

Wilo-CronoLine-IL Wilo-CronoTwin-DL



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 in-line design with flange connection

1,140 m³/h

85 m

- Perm. temperature range -20 °C to +140 °C

 Mains connection 3~400 V, 50 Hz
- Protection class IP 55
- Nominal width DN 32 to DN 250
- · Max. operating pressure 16 bar (PN 25 on request)

Single-stage, low-pressure centrifugal pump in in-line design with

- · Mechanical seal
- Flange connection with pressure measuring connection R1/8
- Lantern
- Coupling
- · IEC standard motor · DL with switchover valve
- Materials:
- Pump housing and lantern: Standard version: EN-GJL-250 Optional: Spheroidal cast iron FN-G IS-400-18-IT
- · Impeller:
- Standard: EN-GJL-200 Special version: Red brass G-CuSn 10
- Shaft: 1.4122
- · Mechanical seal: AO1EGG
- Other mechanical seals: on request
- · Long motor life due to standard condensate drainage holes in the motor housings
- Corrosion protection due to cataphoretic
- Easy to install due to feet on pump housing with threaded bores

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 m³/h

105 m

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

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

- Mechanical seal
- Flange connection with pressure measuring connection R $^1\!/_8$
- Coupling
- IEC standard motor

- · Meets user requirements due to performance and main dimensions in accordance with EN 733
- Long motor life due to standard condensate drainage holes in the motor housing
- Corrosion protection due to cataphoretic coating

A2 Glanded pumps

Heating, air-conditioning, cooling

A3 Monobloc and norm pumps

Heating, air-conditioning, cooling, water supply

Norm pumps Wilo-CronoNorm NL Wilo-VeroNorm-NPG



For pumping 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 a baseplate

3,000 m³/h

- Perm. temperature range -20 °C to +140 °C Mains connection 3~400 V, 50 Hz
- Protection class IP 55
- · Nominal width on suction side DN 50 to
- · Nominal width on pressure side DN 32 to DN 500
- Max. operating pressure: depending on type and application up to 16 bar

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

- Mechanical shaft seal or stuffing box
- Wilo factory motor or ATB motor

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

Other materials and versions on request

Pumps with axially split housing



For pumping 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 housing mounted on a baseplate

3,400 m³/h

245 m

- Perm. temperature range -20 °C to +120 °C
 Mains connection 3~400 V, 50 Hz
- Protection class IP 55
- · Nominal width on suction side DN 65 to
- Nominal width on pressure side DN 50 to DN 400
- · Max. operating pressure: depending on type 16 or 25 bar
- 1- or 2-stage, low-pressure centrifugal pump in block design
- · Delivered as complete unit (pump with coupling, coupling protection, motor and baseplate) or without motor or only pump hydraulics
- Shaft seal with mechanical seal or stuffing
- box • 4-pole and 6-pole motors

- Pump housing: EN-GJL-250Impeller: GCuSn5 ZnPb
- Shaft: X12Cr13
 - Higher capacities up to 17,000 m³/h on
 - Special motors and other materials on

A3 Monobloc and norm pumps

Heating, air-conditioning, cooling, water supply

General Overview - 50 Hz - March 2009

A3 Monobloc and norm pumps

Heating, air-conditioning, cooling, water supply

Water supply

Single-pump pressure boosting system with system separation Wilo-Economy CO/T-1 MVI ... /ER



For fully automatic water supply in inlet mode from the public water supply network

 For pumping potable water and process water, cooling water, water for fire-fighting or other service water

Water supply systems with system separation and a non-self-priming, high-pressure multistage centrifugal pump

8 m³/h 110 m

- Mains connection 3~230 V / 400 V, 50 Hz (other versions on request)
- Fluid temperature max. 50 °C
- · Operating pressure 16 bar
- Inlet pressure 6 bar
- · Protection class IP 41
- Equipment/function
- 1 pump of MVI series
- · PE preliminary tank, atmospherically ventilated (120 I)
- Components that come in contact with the fluid are corrosion–resistant
- Pipework made of stainless steel 1.4571
- · Check valve, on pressure side
- · Non-return valve, on pressure side
- \bullet Preliminary tank including float valve and float switch
- · Diaphragm pressure vessel 8 l, PN 16, on pressure side
- Low-water cut-out switchgear
- Special features

Catalogue

- · Compact system, ready for connection, for all applications that require system separation
- Operationally reliable due to the combination of the MVI pump series with the ER-1 control unit

B4 Pressure boosting systems

Water supply

Single-pump pressure boosting systems

Wilo-Economy CO-1 MVIS ... /ER Wilo-Economy CO-1 MVI ... /ER Wilo-Economy CO-1 Helix-V ... /CE



For fully automatic water supply in inlet mode from the public water supply network or from a break tank

· For pumping potable water, process water, cooling water, water for fire-fighting or other service water

Water-supply units with a non-self-priming, high-pressure multistage centrifugal pump

135 m³/h

160 m

- Mains connection 3~230 V / 400 V, 50 Hz (other versions on request)
- Fluid temperature max. 50 °C
- · Operating pressure 16 bar
- Inlet pressure 6 bar
- Switching pressure stages 6 / 10 / 16 bar
 Protection class IP 41
- 1 pump of the MVIS, MVI or Helix-V series
- · Components that come in contact with the fluid are corrosion-resistant
- Base frame made of stainless steel 1.4301 with height-adjustable vibration damper for insulation against structure-borne noise
- Pipework made of stainless steel 1.4571
- Check valve, on pressure side
- · Non-return valve, on pressure side
- Diaphragm pressure vessel 8 l, PN 16, on pressure side
- For systems with MVIS pump
- · Virtually noiseless system due to a glandless, high-pressure multistage centrifugal
- Up to 20 dB(A) guieter than conventional
- systems with comparable hydraulic output · Operationally reliable due to the combination with the ER-1 control device

For systems with Helix-V pump

- EFF1 standard motors
- Efficiency-optimised, laser-welded 2D/3D hydraulics
- · User-friendly mechanical seal with cartridge, equipped with a standard seal for easy maintenance
- Operationally reliable due to the combination CE control device
- **B4** Pressure boosting systems

Water supply

Single-pump pressure boosting systems with speed-controlled pump
Wilo-Comfort-N-Vario COR-1 MVISE ... Wilo-Comfort-Vario COR-1 MVIE ... Wilo-Comfort-Vario COR-1 Helix-VE



For fully automatic water supply in inlet mode from the public water supply network or from a break tank

· For pumping potable water, process water, cooling water, water for fire-fighting or other service water

Water-supply units with a non-self-priming, high-pressure multistage centrifugal pump with integrated speed control

97 m³/h

150 m

- Mains connection 3~400 V, 50 Hz
- Fluid temperature max. 50 °C
- Operating pressure 16 bar
- · Inlet pressure 6 bar
- Protection class IP 44
- 1 pump of the MVIE, Helix-VE or MVISE series with integrated frequency converter
- All parts that come in contact with the fluid are corrosion-resistant
 Pipework made of stainless steel 1.4571
- Check valve, on pressure side
- Non-return valve, on pressure side • Diaphragm pressure vessel 8 l, PN 16

- · For systems with MVISE pump
- · Virtually noiseless system due to the use of glandless, stainless steel, high-pressure, multistage centrifugal pumps with
- integrated frequency converter
 Up to 20 dB(A) quieter than conventional systems with comparable hydraulic output

For systems with Helix-VE pump

- · EFF1 standard motors
- Efficiency-optimised, laser-welded 2D/3D hydraulics
 • User-friendly mechanical seal with
- cartridge, equipped with a standard seal for easy maintenance

B4 Pressure boosting systems

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 Wilo-Comfort-CO 2-6 Helix-V ... /CC



For fully automatic water supply and pressure boosting in residential, commercial and public buildings, hotels, hospitals, department stores and for industrial systems

 For pumping potable water and process water, cooling water, water for fire-fighting or other service water

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

800 m³/h

- Mains connection 3~230 V / 400 V, 50 Hz
- · Fluid temperature max. 50 °C
- Operating pressure 10 bar or 16 bar
- · Inlet pressure 6 bar
- Protection class IP 54
- 2 to 4 or 2 to 6 pumps per system
- . Components that come in contact with the fluid are corrosion-resistant
- Galvanized base frame with height-adjust-able vibration damper for insulation against structure-borne noise
- Pipework made of stainless steel 1.4571
- Gear-operated shut-off ball cock/ annular shut-off valve on every pump, on suction and pressure sides
- Non-return valve, on pressure side
- · Diaphragm pressure vessel 8 I, PN 16, on pressure side
- Pressure sensor, on discharge side
- Compact system in accordance with the requirements of DIN 1988
- 2 to 4 or 2 to 6 high-pressure, multistage centrifugal pumps switched in parallel
- Easily adjustable and operationally reliable due to integrated control devices
- · Series with Helix-V with EFF1 motors

For systems with MVIS pumps

- · Virtually noiseless system due to glandless. high-pressure, multistage centrifugal pump
- Up to 20 dB(A) quieter than conventional systems with comparable hydraulic output

requirements of DIN 1988

 2 to 6 vertical high-pressure multistage centrifugal pumps switched in parallel

Easy-to-use system in accordance with all

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

Wilo-Comfort-COR 2-6 MVI ... /CC

Wilo-Comfort-COR2-6 Helix-V ... /CC

For fully automatic water supply and pressure

boosting in residential, commercial and public

buildings, hotels, hospitals, department stores

For pumping potable water and process water, cooling water, water for fire-fighting

Pressure boosting system with speed control and 2 to 6 non-self-priming, stainless steel,

high-pressure, multistage centrifugal pumps

Mains connection 3~230 / 400 V, 50 Hz
Fluid temperature max. 50 °C

Operating pressure 16 bar

· Inlet pressure 6 bar

Protection class IP 54

• 2 to 6 pumps per system

fluid are corrosion-resistant

structure-borne noise

and pressure sides

on pressure side

· Continuous control operation of the

base-load pump via frequency converter

integrated in the CC controller

Components that come in contact with the

Galvanized base frame with height-adjust-

Pipework made of stainless steel 1.4571

Gear-operated shut-off ball cock/annular

shut-off valve on every pump, on suction

Non-return valve, on pressure side

Pressure sensor, on discharge side

• Diaphragm pressure vessel 8 l, PN 16,

able vibration damper for insulation against

and for industrial systems

or other service water

switched in parallel

160 m

- Speed-controlled base-load pump.
- Series with Helix-V with EFF1 motors

For systems with MVIS pumps

Water supply

- Virtually noiseless system due to a glandless, high-pressure, multistage centrifugal
- Up to 20 dB(A) guieter than conventional systems with comparable hydraulic output

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 fully automatic water supply and pressure boosting in residential, commercial and public buildings, hotels, hospitals, department stores and for industrial systems

 For pumping potable water and process water, cooling water, water for fire-fighting or other service water

Pressure boosting system with 2 to 4 non-self-priming, stainless steel, high-pressure, multistage centrifugal pumps switched in parallel, with integrated speed control

380 m³/h

150 m

- Mains connection 3~400 V, 50 / 60 Hz, depending on type also 1~230 V, 50/60 Hz
- Fluid temperature max. 70 °C
- · Operating pressure 10 bar
- Inlet pressure 6 bar
- · Protection class IP 54
- 2 to 4 pumps per system
- Continuous control operation due to pumps with integrated frequency converters
- Components that come in contact with the fluid are corrosion-resistant
- Galvanized base frame with height-adjustable vibration damper for insulation against structure-borne noise
- Pipework made of stainless steel 1.4571 Gear-operated shut-off ball cock/annular
- shut-off valve on every pump, on suction and pressure sides
- Non-return valve, on pressure side
- Diaphragm pressure vessel 8 l. PN 16. on pressure side
- · Pressure sensor, on discharge side
- · Compact system with excellent value for money due high-pressure, multistage centrifugal pumps with integrated frequency
- Superproportionally large control range
- Integrated full motor protection via P
- Integrated dry-running detection with automatic cut-out in event of low water via performance characteristics of the motor control electronics
- · Series with Helix-V with EFF1 motors

For systems with MVISE pumps

- Virtually noiseless system due to a glandless, high-pressure, multistage centrifugal
- Up to 20 dB(A) quieter than conventional systems with comparable hydraulic output

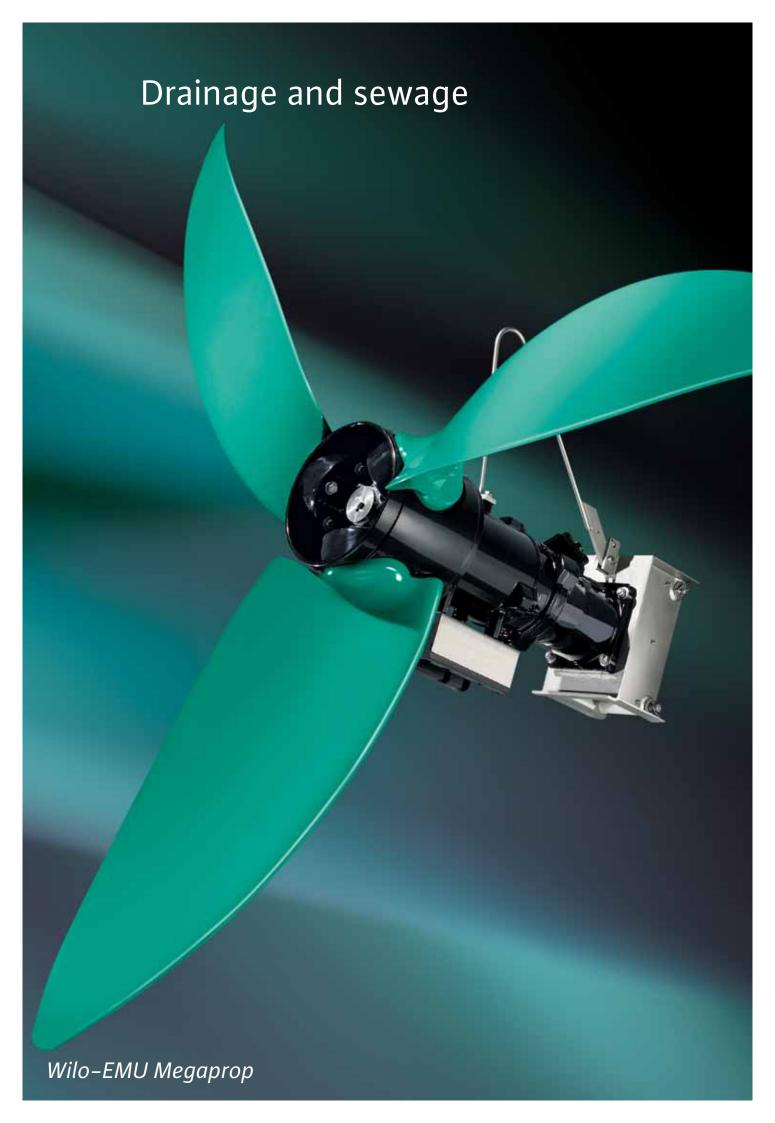
B4 Pressure boosting systems **B4** Pressure boosting systems

Water supply

B4 Pressure boosting systems

Water supply

General Overview - 50 Hz - March 2009



Special features

Catalogue

- High operational safety
- Easy operation

C1 Drainage pumps

Drainage and sewage

Submersible drainage pumps Wilo-Drain TM/TMW 32 Wilo-Drain TS/TSW 32





For pumping clear or slightly muddy water
• From tanks, sumps or pits

- · For overflows and flooding
- For draining cellar stairways and cellar areas
- From domestic areas (washing machine water, soapsuds)
- · From small fountains, waterworks or streams

Basement drainage pump

16 m³/h

12 m

- Mains connection 1~230 V, 50 Hz
- Protection class IP 68
- Max. submersion depth TM/TMW = 3 m, TS/TSW = 10 m
- Fluid temperature 3 °C to 35 °C, for short periods up to 3 min. max. 90 $^{\circ}\text{C}$
- · Cable length 3 to 10 m, depending on type
- Free ball passage 10 mm
- Pressure port Rp 1¼, hose connection 35 mm (TM 32/...), 32 mm (R1) for TS/TSW
- Ready-to-plug
- Motor monitoring via temperatureSheath current cooling
- Connection cable
- · Hose connection • Turbulator (TMW, TSW)
- Float switch (depending on type)Non-return valve enclosed
- (depending on type)
- TMW, TSW with turbulator for constantly
- clean pump sump
- · No fluid-related odour formation
- · Easy installation

Submersible drainage pumps Wilo-Drain TS 40 Wilo-Drain TS 50 Wilo-Drain TS 65



For pumping wastewater with foreign matter of max. ø 10 mm for

- · House/site drainage
- Environmental and wastewater treatment technology
- Industrial and process engineering

Submersible drainage pumps

52 m³/h

24 m

- Mains connection 1~230 V, 50 Hz or 3~400 V. 50 Hz
- Protection class IP 68
- Submersion depth 5 to 10 m
 Fluid temperature 3 °C to 35 °C
- Free ball passage 10 mm
- Pressure port, depending on type Rp $1\frac{1}{2}$, Rp 2 or Rp 21/2
- Ready-to-plug for 1~230 V and model A
- Motor monitoring via temperature for 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
- Inox & composite
- Low weight
- Detachable connection cable
- Detachable float switch for model A
- Thermal motor monitoring for 3~, also without switchgear for TS 40

C1 Drainage pumps

Drainage and sewage

Submersible drainage pumps

Wilo-EMU KS



For drainage of excavation pits, cellar areas. pits and basins. Ideally suited for applications in fountains

Submersible pump for portable and stationary applications

340 m³/h

64 m

- · Rated speed 2,900 rpm
- Operating mode S1Max. fluid temperature 40 °C
- Protection class IP 68
 Sealed by double mechanical seal
- Maintenance-free roller bearing
- Direction of rotation independent of
- mechanical seal

 Heavy-duty motors (oil-filled and dry) ensure permanent operation even with warm fluid and surfaced motor
- · Corrosion-resistant components

Modular material system:

- · Normal cast iron version
- · Wear protection due to ceramic coating
- · Pump components made of Abrasite (chilled cast iron)
- With Ex protection, depending on type

C1 Drainage pumps

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



For pumping wastewater with small amounts of solid matter for

- · Excavation pits and ponds
- · Sprinkling/spraying of gardens and greenery
- · Drainage of seepage water
- · Mobile drainage

Dry-mounted and self-priming drainage pumps

72 m³/h 30 m

- Mains connection 1~230 V, 50 Hz, 3~400 V. 50 Hz
- Fluid temperature 3 °C to 35 °C
- Free ball passage, depending on type 5 to 12 mm
- Connection Rp $1\frac{1}{2}$ to G3
- Portable self-priming centrifugal pump

- High operational safety
- · Easy handling
- Easy operation

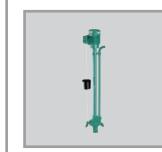
High temperature resistance

Also suitable for aggressive fluids

C1 Drainage pumps

Drainage and sewage

Pedestal pumps Wilo-Drain VC



For pumping wastewater/fluids up to 95 °C

- From pump sumps
- · With condensate
- · From cellars at risk of flooding

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
- Fluid temperature +5 °C to +95 °C
 Free ball passage 5 or 7 mm, depending
- · Pressure port, depending on type Rp 1 or Rp 1½
- Attached float switch
- · Capacitor box (VC 32, 1~)

· External macerator

Innovative patented macerator

Internal rotating cutter

Submersible sewage pumps

Series extension

For pumping sewage containing faeces and municipal and industrial sewage, including

fibrous matter for pressure drainage, house and site drainage, sewage and water manage-

ment and environmental and water treatment

Submersible sewage pumps with macerator

Mains connection: 1~230 V, 50 Hz or

Submerged operating mode: S1/S3 25%

Heavy-duty version made of grey cast iron

Unimpeded flow to the impeller Maceration of substances being conveyed

• Easy installation due to suspension unit or pump base

• Attached float switch (only model A)

with macerator

Wilo-Drain MTC

Wilo-Drain MTS.

technology

16 m³/h

3~400 V. 50 Hz

• Insulation class: F

(depending on type) Protection class: IP 68

Thermal winding monitoring

• Max. fluid temperature: 3-40 °C

55 m

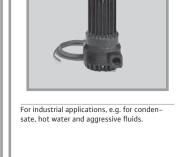
- · Spherically formed macerator
- Pulling cut (shearing cut)
- Submersible
- · Oil barrier chamber
- · High degree of efficiency
- Mechanical seal on pump side made of solid silicon carbide material
- External hardened macerator (MTC)
- Internal, spherically formed macerator (MTS)
- Longitudinally watertight cable
 Version with Ex protection
- (depending on type)

C1 Drainage pumps

Drainage and sewage

C2 Sewage pumps

Drainage and sewage



Submersible drainage pumps

Wilo-Drain TMT

Wilo-Drain TMC

Submersible drainage pumps

- Mains connection 3~400 V, 50 Hz Protection class IP 68
- Submersion depth max. 5 m
- Fluid temperature 95 °C, 65 °C non-immersed
- Cable length 5 m

20 m³/h

12 m

- Free ball passage 10 mm
- Pressure port, depending on type Rp 1¼ or Rp 11/2

 Pump housing and impeller made of grey cast iron, bronze or stainless steel, depending on version

Long service life

Easy commissioning

Connection outside the fluid

• Long downtimes possible • Integrated motor protection due to thermal relay and control electrode

C1 Drainage pumps

Drainage and sewage Submersible sewage pumps Submersible sewage pumps Wilo-Drain TC 40 Wilo-Drain STS 40 Wilo-Drain TP 50 Wilo-Drain STS 65 Series modification For pumping heavily contaminated fluids For pumping heavily contaminated fluids for house/site drainage, sewage (not within the scope of DIN EN 12050-2) and water containing faeces (STS 65 ...), for house and site drainage, sewage (not within the scope of DIN EN 12050–2) and water management, management and environmental and water treatment technology environmental and water treatment technology and industrial and process engineering engineering Submersible sewage pump Submersible sewage pumps 18 m³/h 70 m³/h 60 m³/h 10 m 22 m 21 m Mains connection: 1~230 V, 50 Hz or 3~400 V, 50 Hz Mains connection: 1~230 V, 50 Hz - Submerged operating mode: S1 or S3 25% Protection class: IP 68 Submerged operating mode: S1 or S3 25% Surfaced operating mode STS 65 ...:
 S2-8 min/S3-25 % or S1/S3-25 % in Insulation class: B Thermal winding monitoring Insulation class: F Max. fluid temperature: 3–40 °C
Free ball passage: 35 m CS version
• Protection class: IP 68 • Thermal winding monitoring • Max. fluid temperature: 35 °C Max. submersion depth: 5 m • Insulation class: • STS 40 ... : B • STS 65 ... : F Thermal winding monitoring
 Max. fluid temperature: 3-40 °C • Free ball passage: 40 or 65 mm • Max. submersion depth: 5-10 m Ready-to-plug · 1-phase version, ready-to-plug Including float switch A-model including float switch Thermal motor monitoring
CS version with cooling jacket for dry well · Thermal motor monitoring installation Special features • Submersible • Submersible Submersible Heavy-duty hydraulics housing made of · Detachable connection cable and float Stainless steel dry motor
 Attached float switch (A-model) enables · Easy operation due to the attached float switch • Integrated stainless steel pump base for easy operation easy installation • Integrated pump base (STS 40) for easy · Low weight • Free ball passage: 40 m installation • Free ball passage: 40-65 mm No switchgear required for thermal fuse protection Integrated thermal motor protection (1~/3~) and phase failure protection (3~) for STS 40 \dots Longitudinally watertight cable version ATEX approval (STS 65F ...) Catalogue **C2** Sewage pumps

Submersible sewage pumps

Wilo-Drain TP 65



For pumping heavily contaminated fluids, for house and site drainage, sewage (not within the scope of DIN EN 12050-1) and water management, environmental and water treatment technology and industrial and process

Submersible sewage pumps

- Mains connection: 1~230 V, 50 Hz or 3~400 V, 50 Hz
- Submerged operating mode: S1 or S3 25%
- · Protection class: IP 68

- Free ball passage: 44 m
- Max. submersion depth: 10 m
- Surfaced operating mode:
- S2-8 min/S3-25 %
- 1-phase version with capacitor box
- A-model including float switch and plug
- Thermal motor monitoringATEX approval
- (TP 65 3~ without float)

- · Detachable connection cable
- Stainless steel dry motor
 ATEX approval (TP 65 3~ without float)
- Attached float switch (A–model) enables easy operation
- Wide range of pump curves
- Motor housing optional in 1.4435

C2 Sewage pumps

Drainage and sewage

Drainage and sewage

C2 Sewage pumps

Submersible sewage pumps Wilo-EMU FA 05 ... to FA 15





For pumping sewage with solid constituents in water treatment systems and pumping stations; local drainage, water control and process water extraction; applications in construction and industry

Submersible sewage pumps

380 m³/h

42 m

- Mains connection: 3~400 V, 50 Hz
 Submerged operating mode: S1
- Surfaced operating mode: S2-15 or S2-30 (depending on type)
 • Thermal motor monitoring
- · Protection class: IP 68
- Insulation class: F
- Max. fluid temperature: 40 °C
- Free ball passage of 35 to 100 mm
- Permanently lubricated anti-friction bearing
- · Max. submersion depth: 12.5 m
- Stationary dry well installation possible in short-term operation S2 (depending on type)
- Heavy-duty version made of grey cast iron
- · Easy installation due to suspension unit or pump base

Operation in stationary and portable dry well

· Heavy-duty version made of grey cast iron Easy installation due to suspension unit or

Longitudinally watertight cable lead-in

installation

• Submersible

pump base

ATEX approval

Wilo-EMU FA 05 ... to FA 15 Wilo-EMU FA 20 ... to FA 25 Wilo-EMU FA 30 ... to FA 60 Submersible sewage pumps

In water treatment applications or industrial

Submersible sewage pumps

Mains connection: 3~400 V, 50 Hz

· Submerged operating mode: S1

· Max. fluid temperature: 40 °C,

higher temperatures on request

Free ball passage of 35 to 45 mm

· Max. immersion depth: 12.5 m

Sealing with two mechanical seals or one block seal cartridge, depending on motor

Permanently lubricated anti-friction bearing

Heavy-duty version made of cast stainless

· Easy installation due to suspension unit or

• Protection class: IP 68

70 m³/h

30 m

Wilo-EMU FA...RF

EMU

Submersible sewage pumps



For pumping sewage with solid constituents in water treatment systems and pumping stations; local drainage, water control and process water extraction; applications in construction and industry

Submersible sewage pump with dry motors or self-cooling motors

8.000 m³/h

100 m

- Mains connection: 3~400 V, 50 Hz
- Submerged operating mode: S1
- Surfaced operating mode with self-cooling motor: S1
- Protection class: IP 68
- Max. fluid temperature: 40 °C, higher temperatures on request
- · Sealing with rotary shaft seal and mechanical seal, two mechanical seals or one block seal cartridge, depending on motor
- Free ball passage of 35 to 170 mm
 Permanently lubricated anti-friction bearing
- Max. submersion depth: 12.5 m
- Heavy-duty version made of grey cast iron · Self-cooling motors with 1 or 2-chamber
- system Easy installation due to suspension unit or
- pump base

- Operation in stationary and portable wet well and dry well installation
- Submersible
- · Easy installation due to suspension unit or pump base
- Special materials and coatings against abrasion and corrosion
- Longitudinally watertight cable lead-in (depending on motor)
- Adjustment of duty point by trimming the impeller
- Operation in stationary and portable dry well installation
- Submersible

pump base

- · Version made exclusively of 1.4581 cast stainless steel
- · Easy installation due to suspension unit or pump base
- Longitudinally watertight cable lead-in
- · Adjustment of duty point by trimming the impeller

Submersible sewage pumps Wilo-EMU FA...WR



In grit chambers and for pumping sludge

Submersible sewage pump with mechanical stirring apparatus

400 m³/h

33 m

- Mains connection: 3~400 V, 50 Hz
- Submerged operating mode: S1
- Surfaced operating mode with self-cooling motor: \$1
- Protection class: IP 68
- Max. fluid temperature: 40 °C, higher temperatures on request
- · Sealing with rotary shaft seal and mechanical seal, two mechanical seals or one block
- seal cartridge, depending on motor
- Free ball passage of 23 to 58 mm
 Permanently lubricated anti-friction bearing
- · Max. submersion depth: 12.5 m
- Heavy-duty version made of grey cast iron
- Self-cooling motors with 1 or 2-chamber system
- Easy installation due to suspension unit or pump base Mechanical stirring apparatus attached
- directly to the impeller
- · Mixer head made of Abrasite (chilled cast iron)
- Operation in stationary and portable dry well installation
- Submersible
- Avoidance of deposits in the suction area of the pump
- Easy installation due to suspension unit or pump base
 - Coatings against abrasion and corrosion
- Longitudinally watertight cable lead-in (depending on motor)
- Adjustment of duty point by trimming the impeller

C2 Sewage pumps

Drainage and sewage

C2 Sewage pumps

Drainage and sewage

C2 Sewage pumps

Drainage and sewage

C2 Sewage pumps

Drainage and sewage Condensate lifting units Submersible sewage pumps Submersible sewage pumps Wilo-EMU KPR Wilo-Drain TP 80 Wilo-DrainLift Con Wilo-Drain TP 100 EMU For pumping heavily contaminated fluids, for For pumping condensate out of For pumping cooling or rainwater, cleaned sewage and for irrigation and pumping sludge environmental and water treatment technol- Heat generators with condensing boiler ogy and industrial and process engineering technology Air conditioning and cooling systems (such as refrigerators, refrigerated display cases and evaporators) Axial submersible pump with dry motor for Submersible sewage pump for industrial Condensate lifting units applications use in pipe sumps 10,000 m³/h 0.37 m³/h 180 m³/h 7.5 m • Mains connection: 3~400 V, 50 Hz 20 m 5.4 m Mains connection: 3~400 V, 50 Hz Mains connection 1~230 V, 50 Hz • Submerged operating mode: S1 Submerged operating mode: S1 or S3 25% Operating mode S3 • Fluid temperature max. 80 °C • Protection class IP 20 Protection class: IP 68 · Surfaced operating mode: S1 or S3 25% • Max. fluid temperature: 40 °C, higher Protection class: IP 68 temperatures on request
• Sealing with two mechanical seals or one Pressure port 12 mm
 Inlet connection 19/24 mm · Insulation class: F Thermal winding monitoring Sealing chamber control
Max. fluid temperature: 40 °C block seal cartridge, depending on motor Gross tank volume 1.5 l Free ball passage of 85 to 130 mmShort common pump/motor shaft • Free ball passage: 80 or 100 mm Permanently lubricated anti-friction bearing
 Max. immersion depth: 12.5 m · Max. submersion depth: 20 m Thermal motor monitoring Readv-to-plug system Heavy-duty version made of grey cast iron Sealing chamber monitoring Level control with float switch ATEX approvalSheath current cooling Alarm signal via potential-free contact (NC contact/NO contact) Integrated non-return valve Fixation material • 5 m pressure hose Submersible Stainless steel & composite Low-noise operation (≤ 43 dB[A]) • Special materials and coatings against ATEX approval as standard 2 inlet openings • Standard alarm contact (NC/NO contact) abrasion and corrosion Low weight Longitudinally watertight cable lead-in Detachable connection cable • Easy to install Motor unit reversible by 180° • Angle of propeller blades adjustable by hand Standard-equipped with cooling jacketCorrosion-resistant Variable inlets/drains (e.g. swimming pool water, salt water, etc.)

• HD version with Viton seals or special Suitable for condensates with a pH value ≥2.4 mechanical seals Mobile trolley version with float switch and CEE plug Catalogue C2 Sewage pumps **C2** Sewage pumps C3 Lifting units Drainage and sewage Drainage and sewage Drainage and sewage

Wastewater lifting units Wilo-DrainLift TMP



For automatic drainage of showers, washbasins. washing machines/dishwashers or for pumping wastewater and drainage water that is free of faeces, fibres, grease and oil and non-aggressive rainwater

Wastewater lifting units

11 m³/h 10 m

- Mains connection 1~230 V, 50 Hz depending on type:
- Fluid temperature max. 35/45 °C, for short periods (3 min.) 75/90 °C
- Ventilation connection 25/32 mm
 Protection class IP 44/67
- Gross tank volume 17/32 l
- Switching volume 2.6/15 I
- 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 pump of the TMW series (TMP 40)

- Contemporary design
- · Shower drain with a height of 110 mm nossible
- (only in conjunction with TMP 32-0,5)
- Low-noise operation
 Service-friendly due to integrated submersible motor pump (TMP 40)

- non-return valve · Large tank volume
- Easy to maintain
- Pumps with pressure pipe that can be pulled
 Stainless steel tile frame with trap

C3 Lifting units

Drainage and sewage

Wastewater lifting units for underfloor

Small sewage lifting units

For disposal of sewage from a single toilet

(free-standing toilets) and e.g. an additional

washbasin that cannot be discharged to the

sewer system via the natural fall

Small sewage lifting units

Mains connection 1~230 V, 50 Hz

Fluid temperature max. 35 °C

Protection class IP 44

Gross tank volume 17 I

· Switching volume 2.6 l

Operating mode: Intermittent operation

Free ball passage 10 mm
Min. suction head (bottom to top of inlet)

Ready-to-plug system
 Level control with pneumatic pressure

· Kit for pressure pipe connection

· Integrated active carbon filter

4 m³/h

5.5 m

53. 28%

180 mm

transducer Non-return valve

Fixation material

Inlet seal

Wilo-DrainLift KH 32

installation Wilo-DrainLift Box



For concealed floor installation, can be used

- · Rooms at risk of flooding
- Garage entrances
- Cellar stairwaysShowers, washbasins, washing machines, dishwashers

Wastewater lifting units for underfloor installation

18 m³/h 10.5 m

- Mains connection 1~230 V, 50 Hz
- Operating mode S3, 25%
- Fluid temperature max. 35 °C
- Protection class IP 67
- · Gross tank volume 85 l
- Switching volume: 22 l for type 40/10: 30 l
- Ready-to-plug system
- Plastic tank with ready-mounted drainage pump, control, pressure pipe and integrated non-return valve
- · Mains connection cable with shock-proof plua
- Motor monitoring via temperature (TWC)
- · Level control with float switch

Easy to install due to integrated pump and

C3 Lifting units

Drainage and sewage

 Contemporary, space-saving design · Easy installation due to self-sealing, direct toilet connection

Small sewage lifting units for front wall

installation Wilo-DrainLift XS-F

For the sewage disposal of a single toilet (wall-mounted WC) in addition to a hand washbasin, a shower or bidet, the wastewater/ sewage of which cannot be discharged to the sewer system via the natural fall

Small sewage lifting units

9.5 m³/h 5.7 m

Mains connection 1~230 V, 50 Hz

- Operating mode: Intermittent operation 53.30%
- Fluid temperature max. 35 °C
- Free ball passage 25 mm
 Min. suction head (bottom to middle of inlet) 220 mm
- Protection class IP 44
- Tank volume 7.9 l
- Switching volume 1.2 l

Ready-to-plug system for front wall

- · Level control with pneumatic pressure
- transducer

 Potential-free contact
- · Non-return valve
- Inlet seals
- · Kit for pressure pipe connection
- Fixation material
- · Active carbon filter

• Quiet operation for high user comfort

- · Operationally reliable due to integrated
- · Large scope of delivery (all sleeves, nonreturn valve, ventilation set with active carbon filter etc.)

C3 Lifting units

Drainage and sewage

C3 Lifting units

Drainage and sewage

General Overview - 50 Hz - March 2009

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



For pumping untreated sewage that cannot be discharged to the sewer system via the natural fall

Compact sewage lifting units with integrated pump

27 m³/h

- 5 m Mains connection 1~230 V, 50 Hz or 3~400 V, 50 Hz
- Operating mode S3, 15%
- · Max. fluid temperature 35 °C, for short periods 60 °C
- Free ball passage 40 mm
 Min. suction head (bottom to top of inlet)
- Protection class (without switchgear) IP 67 Gross tank volume 45 l
- Switching volume 20 l

• Ready-to-plug system

- Stainless steel motor with double mechanical seal
- Motor monitoring via temperature (TWC) Level control with pneumatic pressure
- transducer Alternating and peak-load operation
- (double-pump system)
 Potential-free contact
- · Pump cable detachable
- · Non-return valve
- · Keyhole saw for inlet borehole
- Hose connection for ventilation
- Hose connection for diaphragm hand pump
- · Fixation material
- Sound insulation material

46

- Freely selectable inlets
- · Front-wall-like installation possible
- · Low weight
- Space-saving installation
- · Only 30 cm installation depth

Catalogue C3 Lifting units

Drainage and sewage

Sewage lifting units with 1 or 2 integrated pumps

Wilo-DrainLift M

Wilo-DrainLift L



For pumping untreated sewage that cannot be discharged to the sewer system via the natural fall

Sewage lifting units with 1 or 2 integrated pumps

40 m³/h 20 m

- Mains connection 1~230 V, 50 Hz or 3~400 V, 50 Hz
- Operating mode S3, 15%
- Max. fluid temperature 40 °C,
- for short periods 60 °C Free ball passage of 40 or 45 mm, depending on type
- Min. suction head (bottom to top of inlet)
- 180 mm Protection class (without switchgear) IP 67
- · Gross tank volume, depending on type, of 62 to 130 l
- · Switching volume 24 to 40 l, depending on type
- Ready-to-plug system
 Stainless steel motor with double mechanical seal
- Motor monitoring via temperature (TWC)
- Level control with float switch
- Alternating and peak-load operation (double-pump system)
- Mains-independent alarmPotential-free contact
- · Pump cable detachable
- · Non-return valve
- Inlet seal
- · Keyhole saw for inlet borehole
- Hose connection for ventilation
- Hose connection for diaphragm hand pump
 Kit for pressure pipe connection
- Fixation material
- · Sound insulation material
- Switchgear
- Freely selectable inlets
- Low weight
- · Mains-independent alarm
- Integrated non-return valve
- Large tank volume

Drainage and sewage

- Wide range of pump curves (DrainLift L)
- Optional with individual fault signal and follow-up time (DrainLift L, version C)

Sewage lifting unit

Wilo-DrainLift XL

with 2 integrated pumps

For pumping untreated sewage that cannot be discharged to the sewer system via the natural fall

Sewage lifting unit with 2 integrated pumps

40 m³/h

22 m

- Mains connection 3~400 V, 50 Hz
 Operating mode: S1; S3, 60%
- Fluid temperature max. 40 °C, for short periods 60 °C
- Free ball passage 45 mm
- Min. suction head (bottom to middle of inlet) 700 mm
- Protection class IP 67
- Tank volume 440 l
- Switching volume 220 I
- Ready-to-plug system
- Sheath current cooling
- Motor monitoring via temperature (TWC)
 Level control with float switch
- Alternating 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
- Large tank volume
- Low weight
- · Mains-independent alarm
- Integrated non-return valve
- Wide performance rangeSuitable for permanent operation

(due to integrated sheath current cooling)

C3 Lifting units

Drainage and sewage

C3 Lifting units

For pumping untreated sewage that cannot be discharged to the sewer system via the natural fall

Sewage lifting unit with 2 dry-mounted pumps

180 m³/h 20.5 m

- Mains connection 3~400 V, 50 Hz
- Operating mode S3
- Max. fluid temperature 40 °C, for short periods 65 °C
- Free ball passage 78 or 95 mm, depending on type
- Min. suction head (bottom to top of inlet) 700 mm
- Protection class (without switchgear) IP 68
- Gross tank volume 400/800 I
- Switching volume 200/400 l
- Sheath current cooling
- Motor monitoring via temperature (TWC) and impermeability

 • Level control with float switch
- Alternating and peak-load operation
- · Potential-free contact
- Pump cable detachable
- Hose connection for ventilation
 Hose connection for diaphragm hand pump
- Kit for pressure pipe connection
- · Fixation material
- Switchgear
- Large tank volume
- Low weight
- Wide performance range
 Suitable for permanent operation (due to integrated sheath current cooling)
- small free ball passage
- High delivery heads
- Ready for connection and fully submersible

 Non-return valve Inlet seal · Fixation material

- System non-susceptible to plugging due to solids separation

 High degree of efficiency due to pumps with

Sewage lifting unit

Wilo-DrainLift FTS

with solids separation system

For pumping untreated sewage that cannot

be discharged to the sewer system via the

Sewage lifting unit with solids separation

Mains connection 3~400 V, 50 Hz

Operating mode: S2–10 (15) min

Motor monitoring via temperature

Level control with level sensor

· Potential-free contact

• Free ball passage 65 or 70 mm, depending

· Min. suction head (bottom to bottom of

• Protection class (without switchgear) IP 68

• Max. fluid temperature 40 °C

natural fall

system

70 m³/h

on type

inlet) 750 mm

Tank volume 400 l

• Switching volume 300 l

30 m

· Large tank volume

C3 Lifting units

Drainage and sewage

Pumps station with synthetic tank

Wilo-DrainLift WS 40 Basic Wilo-DrainLift WS 40-50



For pumping untreated sewage that cannot be discharged to the sewer system via the natural fall

Pumps station with synthetic tank or as sewage lifting unit in the building

60 m³/h

28 m

- Synthetic pumps station made of recyclable PE-HD
- · Highest degree of upward pressure reliability and inherent stability due to finning
 Inlets freely selectable on site

- For supply line in DN 100Ventilation pipe connection in DN 70
- Max. pressure in the pressure pipe 6 bar

Wilo-Drain pumps that can be used:

TC 40 TP 50

TP 65

MTS 40/21 ... 27

- Freely selectable inlets · Flexible installation due to optional sump length extension
- Easy installation and maintenance of the pumps due to surface coupling when Wilo-Drain pumps TP 50 and/or TP 65 are used
- Also with macerator pumps Wilo-Drain MTS 40/21 ... 27
- Small sump diameter (625 mm)

Pumps station with synthetic tank

For pumping untreated sewage that cannot

be discharged to the sewer system via the

Pumps station with synthetic tank

Synthetic pumps station made of recyclable

· Highest degree of upward pressure reliability

Available in 4 heights, 1,200, 1,500, 1,800

Sump covers in the standard versions, can

· Max. pressure in the pressure pipe 6 bar

Wilo-Drain pumps that can be used:

natural fall

18 m³/h

due to finning

and 2.100 mm

(MTS 40) or 4 bar

TMW 32

TC 40

STS 40

MTS 40/21 ... 27

be walked on or driven over

Wilo-DrainLift WS 625

- · Flexible use due to different installation heiahts
- Complete due to integrated valves and seals · Can be walked on or driven over, depending on optional cover
- Application as sewage lifting unit within buildinas
- As pumps station outside buildings

C3 Lifting units

Drainage and sewage

C3 Lifting units

Drainage and sewage

C3 Lifting units

Drainage and sewage Pumps station with synthetic tank EMUPORT solids separation system Pumps station made of concrete Wilo-DrainLift WS 900 Wilo-EMU Anlagenbau EMUPORT PEHD pumps station Wilo-DrainLift WS 1100 Application For pumping untreated sewage that cannot be discharged to the sewer system via the For pumping untreated sewage that cannot For pumping untreated sewage that cannot be discharged to the sewer system via the be discharged to the sewer system via the natural fall natural fall natural fall Pumps station with synthetic tank Pumps station made of concrete Underground pumping station made of PEHD 125 m³/h On request On request 37 m On request On request Made of monolithic, statically tested Synthetic pumps station made of recyclable Pumps stations ready for connection watertight concrete With wet-mounted sewage pumps As single or double-pump systemComplete with pipework and all required With dry-mounted sewage pumps and solids · Maximum upward pressure reliability due to 2 or 4 lateral fins separation system 2/4 inlets can be selected on site
Maximum stability due to moulded hemivalves spherical shape of the sump floor Wilo surface coupling
 Good accessibility of the level sensor due to installation with hinged supporting bar
• Max. traffic load 5 kN/m2 (in accordance with DIN EN 124, Group 1) • Max. pressure in the pressure pipe 6 bar Wilo-Drain pumps that can be used: TS 40 TP 50 TP 65 STS 65 TP 80 MTS 40 Freely selectable inlets Customer-specific versions For solids separation system Flexible application: As lifting unit inside Low maintenance and operating costs
Pump room is dry, clean and odourless buildings or as pumps station outside of buildings.

• Large tank volume (200/400 l) • With double-pump system, the system remains fully functional even during the • Flexible installation due to optional sump maintenance of a pump length extension

• Easy installation and maintenance of the · Low wear pumps due to surface coupling when Wilo Drain pumps TP 50, TP 65, STS 65, MTS • Also with macerator pumps Wilo-Drain MTS 40/... Catalogue C3 Lifting units On request On request Drainage and sewage

Wilo-EMU Miniprop

TR 14 to TR 28



Swirling of deposits and solids in rain spillway basin and pump sump; destruction of floating sludge layers; other areas of application in agriculture and water supply

Compact directly driven submersible mixer

Thrust: 45 - 330 N

- Mains connection: 3~400 V, 50 Hz
- Submerged operating mode: S1
- · Protection class: IP 68
- Max. fluid temperature: 40 °C
- Mechanical seal with SiC/SiC combination
 Permanently lubricated anti-friction bearing
- Max. submersion depth: 12.5 m

- Stationary installation on walls and floors
- Flexible installation due to lowering device or special pipe attachment
- · Can be swivelled vertically and horizontally for installation with lowering device
- Submersible
- Low power consumption
- Low weight
- ATEX and FM versions
 Self-cleaning propeller with Helix hub
- Easy-to-install propeller attachment
- · Propeller in steel or PUR version
- Optional: Motor shaft made of 1.4462 material

C4 Submersible mixers

Mixers

Wilo-EMU Uniprop without gear

TR 22 to TR 40





Swirling of deposits and solids in rain spillway basin and pump sump; destruction of floating sludge layers; other areas of application in agriculture and water supply

Compact directly driven submersible mixer

Thrust: 185 - 1060 N

- Mains connection: 3~400 V, 50 Hz
- Submerged operating mode: S1
 Protection class: IP 68
- Max. fluid temperature: 40 °C
- Mechanical seal with SiC/SiC combination
 Permanently lubricated anti-friction bearing
- Max. submersion depth: 12.5 m

- Stationary installation on walls and floors
- Flexible installation via lowering device
- Can be swivelled vertically and horizontally for installation with lowering device

- Submersible
- Self-cleaning propeller with Helix hub
 Easy-to-install propeller attachment
- Propeller in cast, steel or PUR version
 ATEX and FM versions

C4 Submersible mixers

Mixers

Wilo-EMU Uniprop with gear TR 50-2 to TR 90-2



Application in activated sludge tanks and sludge tanks for creation of fluid current , suspension of solids, homogenisation and prevention of floating sludge layers; other areas of application in industry, agriculture and water supply

Submersible mixer with single-stage planetary gear

Thrust: 350 - 2120 N

- Mains connection: 3~400 V, 50 Hz
- Submerged operating mode: S1
 Protection class: IP 68
- Max. fluid temperature: 40 °C
- Single-stage planetary gear
 Mechanical seal with SiC/SiC combination
- Permanently lubricated anti-friction bearing
- · Max. submersion depth: 12.5 m

- · Stationary installation on walls
- Flexible installation via lowering deviceCan be swivelled horizontally for installation with lowering device
- Installation with stand allows free placement. in basin
- · Single-stage planetary gear
- Submersible
- Single-stage planetary gear for adjusting the propeller speed
- Self-cleaning propeller
- Easy-to-install propeller attachment
- · Propeller in steel, PUR or PUR/GFK version
- ATEX and FM versions
- · 1.4462 gear shaft

Wilo-EMU Maxiprop TR 215 to TR 226 Wilo-EMU Megaprop TR 315 to TR 326





Energy-optimised mixing and circulation of activated sludge; generation of flow rates in circulation channels; further areas of application in industry

Slow-running submersible mixer reduced by two-stage planetary gear

Thrust: 300 - 5270 N

- Mains connection: 3~400 V, 50 Hz
- Submerged operating mode: S1
 Protection class: IP 68
- Max. fluid temperature: 40 °C
- Two-stage planetary gear with exchange-able second planetary gear speed
- Mechanical seal with SiC/SiC combination · Permanently lubricated anti-friction bearing
- · Max. submersion depth: 12.5 m

- · Installation with stand allows free placement
- in basin
 Flexible installation
- Two-stage planetary gear with exchangeable second planetary gear speed
- Submersible
- 2-stage planetary gear for adjusting the propeller speed
- Self-cleaning propeller
- Propeller blades can be replaced individually
- · Easy-to-install blades and hub
- · Propeller in GFK version ATEX and FM versions
- · 1.4462 gear shaft

C4 Submersible mixers

C4 Submersible mixers

Mixers

Drainage and sewage Wilo-EMU RZP ... For pumping sewage via low delivery heads at high flow rates, e.g. between balancing, nitrification and denitrification basins; for pumping process, raw, pure and cooling water, e.g. in paint finishing systems or for potable water treatment; generation of fluid current in water channels, e.g. amusement parks Submersible mixers with housing unit, directly driven (RZP 20 ..., RZP 25-2 ...) or with single-stage planetary gear (RZP 50-3 ..., RZP 60-3 ..., RZP 80-2 ...) 10,000 m³/h 7 m • Mains connection: 3~400 V, 50 Hz Submerged operating mode: \$1
Protection class: IP 68
Max. fluid temperature: 40 °C Units are directly driven or with single-stage planetary gear Mechanical seal with SiC/SiC combination Permanently lubricated anti-friction bearing
 Max. submersion depth: 12.5 m Equipment/function Stationary installation directly on flow pipe Flexible installation via lowering device
 Vertical or in-line installation possible • Submersible Vertical or in-line design
 Self-cleaning propeller, partially with Helix Propeller in steel or PUR version ATEX and FM versions C4 Submersible mixers

Re-circulation pumps



| Series A to Z C | atalogue 50 Hz | Series A to Z | Catalogue 50 Hz |
|---------------------------------------|-------------------|------------------------|--------------------|
| EMUPORT PEHD solids separation system | On request | Wilo-CRn System | A1, A2 |
| Wilo-AXL | A1 | Wilo-CronoBloc-BL | A3 |
| Wilo-BAC | А3 | Wilo-CronoLine-IL | A2 |
| Wilo-Cargo MC | B1 | Wilo-CronoLine-IL-E | A2 |
| Wilo-CC-HVAC-System | A1, A2, A3 | Wilo-CronoLine-IL-E BF | A2 |
| Wilo-Comfort-CO 2-6 MVI /CC | B4 | Wilo-CronoNorm NL | А3 |
| Wilo-Comfort-CO 2-6 Helix/CC | B4 | Wilo-CronoTwin-DL | A2 |
| Wilo-Comfort-COR 2-6 MVI /CC | B4 | Wilo-CronoTwin-DL-E | A2 |
| Wilo-Comfort-COR 2-6 Helix-V/CC | B4 | Wilo-Dia-Log | A1, A2 |
| Wilo-Comfort-N-CO 2-6 MVIS /CC | B4 | Wilo-Drain LP | C1 |
| Wilo-Comfort-N-COR 2-6 MVIS /CC | B4 | Wilo-Drain LPC | C1 |
| Wilo-Comfort-N-Vario COR-1 MVISE | B4 | Wilo-Drain MTC | C2 |
| Wilo-Comfort-N-Vario-COR 2-4 MVISE /V | 'R B4 | Wilo-Drain MTS | C2 |
| Wilo-Comfort-Vario COR-1 MVIE | B4 | Wilo-Drain STS | C2 |
| Wilo-Comfort-Vario-COR 2-4 MHIE /VR | B4 | Wilo-Drain TC | C2 |
| Wilo-Comfort-Vario-COR 2-4 MVIE /VR | B4 | Wilo-Drain TM/TMW | C1 |
| Wilo-Control AnaCon | A1, A2 | Wilo-Drain TMC | C1 |
| Wilo-Control DigiCon | A1, A2 | Wilo-Drain TMT | C1 |
| Wilo-CR System | A1, A2, A3 | Wilo-Drain TP 50, 65 | C2 |

| Series A to Z | Catalogue 50 Hz | Series A to Z | Catalogue 50 Hz |
|-----------------------------|--------------------|-----------------------------|--------------------|
| Wilo-Drain TP 80, 100 | C2 | Wilo-Economy CO/T-1 MVI /ER | В4 |
| Wilo-Drain TS | C1 | Wilo-Economy CO-1 MVI /ER | B4 |
| Wilo-Drain VC | C1 | Wilo-Economy CO-1 Helix/ER | B4 |
| Wilo-DrainLift Box | C3 | Wilo-Economy CO-1 MVIS /ER | B4 |
| Wilo-DrainLift Con | A1, C3 | Wilo–Economy MHI | В3 |
| Wilo-DrainLift FTS | C3 | Wilo-Economy MHIE | В3 |
| Wilo-DrainLift KH 32 | C3 | Wilo-Economy MHIL | В3 |
| Wilo-DrainLift L | C3 | Wilo-EMU AVU | C4 |
| Wilo-DrainLift M | C3 | Wilo-EMU D | B2 |
| Wilo-DrainLift S | C3 | Wilo-EMU DCH | B2 |
| Wilo-DrainLift TMP | C3 | Wilo-EMU FA | C2 |
| Wilo-DrainLift WB | On request | Wilo-EMU K | B2 |
| Wilo-DrainLift WS 40-50 | C3 | Wilo-EMU KD | B2 |
| Wilo-DrainLift WS 625 | C3 | Wilo-EMU KM | B2 |
| Wilo-DrainLift WS 900-1100 | C3 | Wilo-EMU KPR | C2 |
| Wilo-DrainLift XS-F | C3 | Wilo-EMU KS | C1 |
| Wilo-DrainLift XL | C3 | Wilo-EMU NK | B2 |
| Wilo-DrainLift XXL | C3 | Wilo-EMU NR | В2 |
| Wilo-Economy CO 2-4 MHI /ER | В4 | Wilo-EMU RZP | C4 |

General Overview – 50 Hz – March 2009

| Series A to Z | Catalogue 50 Hz | Series A to Z | Catalogue 50 Hz |
|------------------------------------|--------------------|---|--------------------|
| Wilo-EMU SCH | В2 | Wilo-MultiPress MP | B1 |
| Wilo-EMU SR | C4 | Wilo-Multivert MVI | В3 |
| Wilo-EMU TR | C4 | Wilo-Multivert MVIE | В3 |
| Wilo-FilTec FBS | B1 | Wilo-Multivert MVIL | В3 |
| Wilo-Helix-V | В3 | Wilo-Protect-Module C | A1 |
| Wilo-Helix-VE | В3 | Wilo-RainCollector II RWN | B1 |
| Wilo-IF-Module | A1, A2 | Wilo-RainSystem AF 150 | B1 |
| Wilo-IF-Module Stratos | A1 | Wilo-RainSystem AF 400 | B1 |
| Wilo-IR-Module | A1, A2 | Wilo-RainSystem AF Basic | B1 |
| Wilo-IR-Monitor | A1, A2 | Wilo-RainSystem AF Comfort | B1 |
| Wilo-Jet FWJ | B1 | Wilo-Safe package heat exchanger assemb | oly A1 |
| Wilo-Jet HWJ | B1 | Wilo-SCP | А3 |
| Wilo-Jet WJ | B1 | Wilo–SD Switchgears | A1 |
| Wilo-MBH diaphragm pressure vessel | В4 | Wilo-SK Switchgears | A1 |
| Wilo-MultiCargo FMC | B1 | Wilo-SR Switchgears | A1 |
| Wilo-MultiCargo HMC | B1 | Wilo-SilentMaster | B1 |
| Wilo-MultiCargo MC | B1 | Wilo-Smart | A1 |
| Wilo-MultiPress FMP | B1 | Wilo-Star-E | A1 |
| Wilo-MultiPress HMP | B1 | Wilo-Star-RS | A1 |

| Series A to Z | Catalogue 50 Hz | Series A to Z | Catalogue 50 Hz |
|-------------------------------|--------------------|---------------------|--------------------|
| Wilo-Star-RSD | A1 | Wilo-TOP-S | A1 |
| Wilo-Star-RSG | A1 | Wilo-TOP-SD | Al |
| Wilo-Star-RSL | A1 | Wilo-TOP-Z | A1 |
| Wilo-Star-ST | A1 | Wilo-VBH Tank | B4 |
| Wilo-Star-Z | A1 | Wilo-VeroLine-IPH-O | A2 |
| Wilo-Stratos | A1 | Wilo-VeroLine-IPH-W | A2 |
| Wilo-Stratos ECO | A1 | Wilo-VeroLine-IP-Z | A2 |
| Wilo-Stratos ECO-L | A1 | Wilo-VeroLine-IP-E | A2 |
| Wilo-Stratos ECO-ST | A1 | Wilo-VeroLine-IPL | A2 |
| Wilo-Stratos ECO-Z | A1 | Wilo-VeroLine-IPS | A2 |
| Wilo-Stratos-D | A1 | Wilo-VeroNorm-NPG | А3 |
| Wilo-Stratos-Z | A1 | Wilo-VeroTwin-DP-E | A2 |
| Wilo-Sub TWI 5 / TWI 5-SE | B1 | Wilo-VeroTwin-DPL | A2 |
| Wilo-Sub TWI 5-SE Plug & Pump | B1 | Wilo-VR HVAC system | A1, A2, A3 |
| Wilo-Sub TWU | B2, B1 | | |
| Wilo-Sub TWI | В2 | | |
| Wilo-TOP-D | A1 | | |
| Wilo-TOP-E | A1 | | |
| Wilo-TOP-ED | A1 | | |

General Overview – 50 Hz – March 2009



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

WILO FMU GmbH Heimgartenstraße 1 95030 Hof Germany T +49 9281 974-0 F +49 9281 96528 info@wiloemu.de www.wiloemu.com

Wilo - International (Subsidiaries)

Argentina WILO SALMSON Argentina S.A. C1270ABE Ciudad Autónoma de Buenos Aires info@salmon.com.ar

WILO Pumpen Österreich GmbH 1230 Wien

Azerbaijan WILO Caspian LLC 1065 Baku T +994 12 5962372 info@wilo.az

Belarus WILO Bel OOO 220035 Minsk T +375 17 2503393

Belgium WILO SA/NV T +32 2 4823333 info@wilo.be

Bulgaria WILO Bulgaria Ltd. info@wilo.bg

Canada WILO Canada Inc. Calgary, Alberta T2A 5L4 T +1 403 2769456 bill.lowe@wilo-na.com

China 101300 Beijing T +86 10 80493900 wilobj@wilo.com.cn

Croatia

WILO Hrvatska d.o.o. 10090 Zagreb wilo-hrvatska@wilo.hr

Czech Republic T +420 234 098711 info@wilo.cz

Denmark 2690 Karlslunde T +45 70 253312 wilo@wilo.dk

Estonia WILO Eesti OÜ 12618 Tallinn T +372 6509<u>780</u> info@wilo.ee

Finland WILO Finland OY 02330 Espoo T +358 207401540 wilo@wilo.fi

France 78390 Bois d'Arcy T +33 1 30050930 info@wilo.fr

Great Britain DE14 2WJ Burton-

Greece 14569 Anixi (Attika) T +302 10 6248300 Hungary

WILO Magyarország Kft

Ireland sales@wilo.ie

Italy T +39 25538351 wilo.italia@wilo.it

Kazakhstan in.pak@wilo.kz

Korea Gyeongnam

Latvia WILO Baltic SIA 1019 Riga T +371 67 145229 mail@wilo.lv

Lebanon 12022030 El Metn

Lithuania WILO Lietuva UAB 03202 Vilnius T +370 5 2136495

mail@wilo.lt

The Netherlands WILO Nederland b.v. 1551 NA Westzaan T +31 88 9456 000

Norway 0975 Oslo T +47 22 8<u>04570</u> wilo@wilo.no

Poland 05-090 Raszyn T +48 22 7026161 wilo@wilo.pl

Portugal Bombas Wilo-Salmson 4050-040 Porto bombas@wilo.pt

Romania WILO Romania s.r.l. 077040 Com. Chiajna wilo@wilo.ro

Russia 123592 Moscow wilo@orc.ru

Saudi Arabia WILO ME - Riyadh Riyadh 11465 wshoula@wataniaind.com Serbia and Montenegro WILO Beograd d.o.o. 11000 Beograd

Slovakia T +421 2 45520122 wilo@wilo.sk

Slovenia

South Africa

Spain WILO Ibérica S.A. 28806 Alcalá de Henares wilo.iberica@wilo.es

Sweden WILO Sverige AB 35246 Växjö wilo@wilo.se

Switzerland 4310 Rheinfelden Γ +41 61 83680-20 info@emb-pumpen.ch Taiwan WILO-EMU Taiwan Co. Ltd.

Turkey 34530 Istanbul T +90 216 6610211 wilo@wilo.com.tr

Ukraina wilo@wilo.ua

Vietnam Ho Chi Minh-Ville Vietnam T +84 8 8109975 nkm@salmson.com.vn

United Arab Emirates WILO ME - Dubai

WILO-EMU USA LLC Georgia 31792 Г +1 229 5840097 info@wilo-emu.com

USA WILO USA LLC T +1 708 3389456 wilo-na.com

Wilo - International (Representation offices)

Algeria Bad Ezzouar, Dar El Beida

T +213 21 247979

Armenia 375001 Yerevan T +374 10 544336 info@wilo.am

Bosnia and Herzegovina 71000 Saraievo

T +387 33 714510

Georgia 0179 Tbilisi info@wilo.ge Macedonia

1000 Skopie T +389 2 3122058

Mexico 07300 Mexico T +52 55 55863209 roberto.valenzuela@wilo.com.mx Moldova

2012 Chisinau T +373 2 223501 sergiu.zagurean@wilo.md

Rep. Mongolia wilo@magicnet.mn Taiikistan

Turkmenistan 744000 Ashgabad T +993 12 345838 wilo@wilo-tm.info

Uzbekistan 100015 Tashkent T +998 71 1206774

January 2009

info@wilo.uz