

2014 - North America 60 Hz.

## **Wilo Product Catalog**

Pumps and systems for Building Services, Water Management, and Groundwater.







# **Wilo Manufacturing Facility**

Thomasville, GA



# **General Overview** at a glance:

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Wilo from page 4

Pioneering for You.

**Building Services** 

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Pumps and pump systems for heating, air conditioning, cooling, pressure boosting, water supply and sewage disposal in domestic households, rented accommodation, administrative and commercial buildings.

**Water Management** 

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Pumps and pump systems for water supply, sewage disposal and sewage treatment in municipal buildings.

Groundwater

from page 27

Submersible pumps for water supply from water wells, agriculture, dewatering and industrial applications.



## Wilo

## Pioneering for You.

#### We are there for you worldwide.

Since 1872, we at Wilo have been turning visionary ideas into intelligent solutions that regularly set new standards in the industry. The goal of our company founder, Louis Opländer, was to use his copper and brass goods factory to improve and facilitate the supply of water and heat to people. He was very successful: in 1928, he designed the world's first circulation accelerator and revolutionized the field of heating technology. Since then, our company history has been marked again and again by pioneering innovations such as the world's first high-efficiency pump for heating, air-conditioning and cooling and the world's first decentralized pump system. Today Wilo SE, headquartered in Dortmund, is one of the world's leading manufacturers and providers of pumps and pump systems for heating, air-conditioning and cooling, for water supply and sewage disposal. With over 6,700 employees and 60 production and sales companies all over the world, we personally see to it that the wants and needs of our customers and users are optimally met every day — with pioneering developments and solutions, high-efficiency products, tailored solutions for special applications and for industry and extensive service offerings. This is what we mean by Pioneering for You.







# Wilo's way Our new Image.

#### Shaping the future for you.

This year, we are presenting ourselves not only with many trendsetting products, but also with a new image. The reason is simple: we have clearly changed in recent years and have become much more dynamic, large and international. We are now communicating this change with the outside world, through a fresh color scheme, our new logo and the slogan "Pioneering for You".

With this new slogan, we are making clear who is always at the center of all our thoughts and developments: our customers, whose life and work we want to make as simple as possible with our products, solutions and services. Our slogan "Pioneering for You" expresses our commitment to a clear customer focus, strict quality orientation and strong passion for technology. We will measure our future performance against this standard, and we hope you will do the same.

## Wilo planning support

## Our software applications for your efficiency.

At Wilo, we want you to be able to concentrate from the very start on what's important – you. This is why we design our pumps and pump systems so that you can integrate them as easily as possible. We also offer a selection of applications aimed at effectively supporting you in your day–to–day work.

#### Wilo Select 4:

The new and improved web-based selection sofware will launch Spring 2014. Be sure to check out our updated pump planning software where you can find the right pump for your application in seconds along with all the important information.



#### The online CAD catalogue:

You can download exact 2D and 3D drawings quickly and easily at wilo-usa.cadprofi.com.





Now you can have the best warranty in the business on Wilo Stratos, Stratos D and Stratos Z high efficiency ECM circulators!

That's right - Our standard warranty on select Stratos products is now 4 YEARS. We are so sure that the Stratos is the last circulator you'll need, that we've doubled the original two year warranty. Drop us a line and join the thousands who rest easy with Wilo!

T 888-945-6872 | www.wilo-usa.com











# **Building Services**

Pumps and pump systems for heating, air conditioning, cooling, pressure boosting, water supply and sewage disposal in domestic households, rented accommodation, administrative and commercial buildings.



# **Section Overview** Building Services:

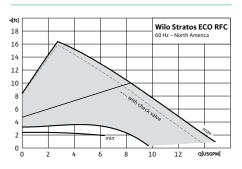
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#### **Wilo Stratos ECO RFC**

High Efficiency Wet Rotor Circulators



#### Application

- → Hot Water Heating Systems
- → HVAC Applications
- → Residential Heating
- → Water/Glycol concentrations up to 50%
- → Solar
- $\rightarrow$  Geothermal

#### Max. Flow

14 USGPM

#### Max. Head

16 feet

#### **Features & Benefits**

- → Patent-pending 360° Flange rotates to 12/6 or 3/9 o'clock positions
- → Installable hi-temp check valve included
- → EC motor technology reduces energy consumption by up to 80%
- → Automatically adjusts to system demands
- → No more over-pumped, noisy zones
- → Easy wiring quick connectors

#### **Technical Data**

- $\rightarrow$  Temp Range: 60°F to 230°F (15°C to 115 °C)
- → Amb Temp Range: 14°F to 104°F (-10°C to 40°C)
- → Electrical Connection: 1~115v
- → Max Working Pressure: 145 PSI

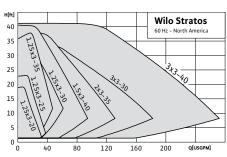
#### **Materials of Construction**

- → Cast Iron Volute
- → Cast Iron Rotating Flange
- → Engineered Composite Impeller
- → Stainless Steel Shaft
- → Carbon Impregnated Bearing



#### **Wilo Stratos**

High Efficiency Circulators



#### Application

- → Hot Water Heating Systems
- → Closed Cooling Circuits
- → Air Conditioning systems
- → Industrial Circulation
- → Water/Glycol concentrations up to 50%
- → Solar / Geothermal

#### Max. Flow

285 USGPM

#### Max. Head

43 feet

#### Features & Benefits

- → EC motor technology reduces energy consumption by up to 80%
- → 'Red Button' technology and LED display
- → 3 times higher starting torque than a standard circulator
- → On-board diagnostics and data logger
- → Multiple control modules available for integration with building management systems

#### Technical Data

- $\rightarrow$   $\Delta P-V$  or  $\Delta P-C$  constant speed control modes standard.  $\Delta P-T$  available with IR device
- $\rightarrow$  Temp Range: 14°F to 230°F (-10°C to 110°C)
- → Electrical Connection: 1~208/230v (+/- 10%)

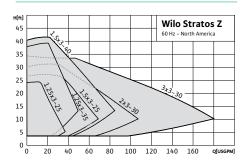
#### **Materials of Construction**

- → Cast Iron, Cataphoresis Coated Volute
- → Engineered Composite Impeller
- → Stainless Steel Shaft
- → Carbon Impregnated Bearing



#### Wilo Stratos Z

High Efficiency DHW Circulators



#### **Application**

- → Domestic Hot Water
- → Closed Cooling Circuits
- → HVAC Systems
- → Industrial Circulation
- → Solar
- $\rightarrow$  Geothermal

#### Max. Flow

180 USGPM

#### Max. Head

43 feet

#### Features & Benefits

- → NSF 61 / NSF 372 Certified
- → EC motor technology reduces energy consumption by up to 80%
- ightarrow 'Red Button' technology and LED display
- → Multiple control modules available for integration with building management systems

#### **Technical Data**

- → ΔP–V or ΔP–C constant speed control modes standard. ΔP–T available with IR device
- $\rightarrow$  Temp Range: 14°F to 230°F (–10°C to 110°C)
- → Electrical Connection: 1~208/230v (+/- 10%)

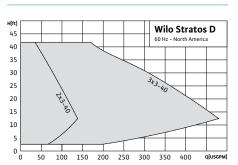
#### **Materials of Construction**

- → Stainless Steel Volute
- → Engineered Composite Impeller
- → Stainless Steel Shaft
- → Carbon Impregnated Bearing



#### **Wilo Stratos D**

High Efficiency Circulators



#### Application

- → Hot Water Heating Systems
- → Industrial Circulation
- → Closed Cooling Circuits
- → Air Conditioning Systems
- → Solar
- $\rightarrow$  Geothermal

#### Max. Flow

480 USGPM

#### Max. Head

43 feet

#### Features & Benefits

- → EC motor technology reduces energy consumption by up to 80%
- $\rightarrow$  3x higher starting torque
- → Lead/Lag operation with auto 24-hr alternation
- → 'Red Button' technology and LED display
- → On-board diagnostics and data logger
- → Multiple control modules available for integration with building management systems

#### **Technical Data**

- ightarrow  $\Delta$ P-V,  $\Delta$ P-C, or constant speed control modes standard.  $\Delta$ P-T control mode available with IR device
- $\rightarrow$  Temp Range: 14°F to 230°F (-10°C to 110°C)
- ightarrow Electrical Connection: 1~208/230v (+/- 10%)

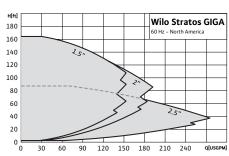
#### **Materials of Construction**

- ightarrow Cast Iron, Cataphoresis Coated Volute
- $\rightarrow$  Composite Impeller
- → Stainless Steel Shaft
- → Carbon, Metal Impregnated Bearing



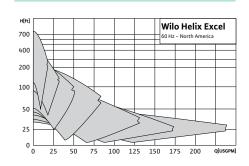
#### Wilo Stratos GIGA

High Efficiency Inline Circulators



## Wilo Helix Excel

High Efficiency Multistage Pumps



#### **Application**

- → Hot Water Heating Systems
- → Industrial Circulation
- → Closed Cooling Circuits
- → Air Conditioning Systems
- → Solar
- → Geothermal

#### Max. Flow

275 USGPM

#### Max. Head

167 feet

#### Features & Benefits

- → Highest efficienty motor–drive combination on the market up to 7.5HP
- → Over 33% energy savings vs. controlled inline pumps
- → Compact, Space-saving design
- → 'Red Button' technology and LED display
- → Various control modes: ΔPV, ΔPC, η, PID
- → Multiple control modules available for integration with building management systems

#### **Technical Data**

- → Temp Range: -4°F to 284°F (-20°C to +140°C)
- $\rightarrow$  Max Amb Temp: 104°F [40°C]
- → Max Operating Pressure: 232 PSI
- → Electrical Connection: 3~460v
- → IP 55 Enclosure

## Materials of Construction

- → Cast Iron, Cataphoresis Coated Volute
- → Cast Iron Lantern
- → High-Temp, High-Pressure Engineered Composite Impeller
- → Stainless Steel Pump Shaft

#### Application

- → Water Supply and Pressure Boosting
- → Process water
- → Washing Systems
- → Industrial Circulation Systems
- → Cooling water
- → Irrigation

#### Max. Flow

250 USGPM

## Max. Head

720 feet

### Features & Benefits

- → Highest efficienty motor-drive combination on the market up to 7.5HP
- → Over 33% energy savings vs. controlled multistage pumps
- → Uses catridge seal for easy maintenance
- → 'Red Button' technology and LED display
- → Various control modes: ΔPV, ΔPC, η, PID
- → Multiple control modules available for integration with building management systems

#### Technical Data

- → Temp Range: -4°F to 248°F [-20°C to +120°C]
- → Max Amb Temp: 104°F [40°C]
- → Max Operating Pressure: 232/363 PSI
- → Electrical Connection: 3~460v
- → IP 55 Enclosure

#### **Materials of Construction**

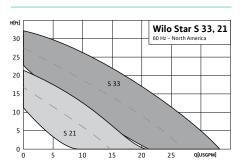
- → 3-D Stainless Impellers
- ightarrow Stainless Steel Volute, Shroud & Shaft

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Wilo Star S

3 Speed Wet Rotor Circulators



#### Application

- → Hot Water Heating Systems
- → Cold Water
- → Air-Conditioning Systems
- → Water/Glycol concentrations up to 50%
- → Solar
- → Geothermal

#### Max. Flow

35 USGPM

#### Max. Head

33 feet

#### Features & Benefits

- → Reliable wet rotor technology
- → Quick connect wiring
- → Powerful starting torque
- → Ultra quiet

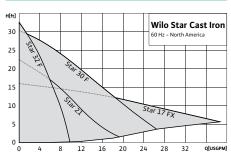
**Technical Data** 

(-10°C to 110°C)

- → Installable hi-temp check
- → RFC Patented Rotating Flange: US 8,297,664 B2

#### Wilo Star

Residential Wet Rotor Circulators



#### Application

- → Hot Water Heating Systems
- → Air-Conditioning Systems
- → Water/Glycol concentrations up to 50%
- → Solar
- → Geothermal

38 USGPM

- → Reliable wet rotor technology
- → Quick connect wiring
- → Powerful starting torque

- → Cold Water

#### Max. Flow

#### Max. Head

32 feet

#### Features & Benefits

- → Ultra quiet

#### **Technical Data**

- → Max Temp Range: 14°F to 230°F (-10°C to 110°C)
- → Max Amb Temp: 104°F (40°C)
- → Max Working Pressure: 140 PSI (10 Bar)

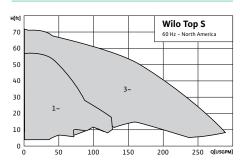
→ Electrical Connection: 1~115v

#### **Materials of Construction**

- → Cast Iron Volute
- → Engineered Composite Impeller
- → Stainless Steel Shaft
- → Carbon Impregnated Bearing
- → Steel Terminal Box

#### Wilo Top S

Commercial Wet Rotor Circulators



#### Application

- → All types of Hot Water Systems
- → Closed Cooling Circuits
- → Air Conditioning Systems
- → Industrial Circulation
- $\rightarrow$  Water/Glycol concentrations up to 50%
- → Solar / Geothermal

#### Max. Flow

290 USGPM

#### Max. Head

70 feet

#### Features & Benefits

- → No mechanical seal
- → Quiet, low maintenance wet rotor circulator
- → Two-speed operation on all voltages
- → Cataphoresis coating prevents corrosion
- → Sturdy cast aluminum electrical box
- → Short flange to flange dimension
- → Most extensive wet rotor line in the industry!

#### **Technical Data**

- → Max Temp Range: 14°F to 248°F (-10°C to 120°C)
- → Amb Temp Range: 32°F 104°F (0°C 40°C)
- → Electrical Connection: 1~115v, 230v 3~208-230v, 460v, 575v
- → Max Working Pressure: 145 PSI (10 Bar)

#### **Materials of Construction**

- → Cast Iron, Cataphoresis Coated Volute
- → Engineered Composite Impeller
- → Stainless Steel Shaft
- → Impregnated Carbon Bearing
- → Class H Insulation

### **Materials of Construction**

- → Cast Iron Volute
- → Engineered Composite Impeller

→ Max Temp Range: 14°F to 230°F

→ Max Amb Temp: 104°F (40°C)

→ Electrical Connection: 1~115v

Star S33 available in 1~115v, 230v

→ Max Working Pressure: 140 PSI (10 Bar)

- → Stainless Steel Shaft
- → Carbon Impregnated Bearing → Steel Terminal Box

Wilo Z-15 BN5, BS7

2.0 Q[USGPM]

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Wilo Star Z

Stainless Steel 3 Speed Wet Rotor Circulator



#### Wilo Z-15

**Domestic Hot Water Circulators** 

#### **Wilo DHW Accessories**

JetValve, Digital Timer, Fitting Pack, & Aquastat

#### Application

- → Potable Water systems
- → Air-Conditioning Systems
- → Open Systems Heating or Cooling
- → Industrial Circulation
- → Water/Glycol concentrations up to 50%
- → Solar / Geothermal

#### Max. Flow

35 USGPM

#### Max. Head

33 feet

#### **Features & Benefits**

- → Reliable wet rotor technology
- → Quick connect wiring
- → Powerful starting torque
- → Ultra quiet

#### **Application**

0.4

→ Domestic Hot Water Recirculation

0.8

1.2

1.6

#### Max. Flow

2 USGPM

#### Max. Head

5 feet

#### **Features & Benefits**

- → NSF 61/NSF 372 Certified
- → Compact design
- → 115v power cord included
- → Magnetic drive design
- → Optional digital timer available
- → Conserves energy and water
- $\rightarrow\,$  Safe and quick installation

#### **Technical Data**

- → Max Temp Range: 68°F to 150°F (20°C to 65°C)
- → Max Amb Temp: 104°F (40°C)
- ightarrow Max Working Pressure: 145 PSI (10 Bar)

#### JetValve

- → Mounts under the sink for instant hot water
- → Adjustable temperature setpoint screw
- → Conserves water

#### **Digital Timer**

- → Weekly digital timer
- → Large LCD display
- → Conserves energy

#### JetConnect™ Fitting Pack

- → Package of four (4) connectors to handle all types of piping
- → Two (2) ½" SW x FNPT
- $\rightarrow$  Two (2) 3/4" SW x FNPT
- → Two (2) ¾" SW x ½" SW Reducing Bushings
- → Two (2) ¾" Street Hub Copper Unions

#### **Digital Timer**

- → Clips directly on the ¾" pipe to control your DHW circulator
- → 8' Line cord
- → Turns on at 98°F (36°C)
- → Turns off at 114°F (46°C)

#### **Technical Data**

- → Max Temp Range: 14°F to 230°F (-10°C to 110°C)
- → Max Amb Temp: 104°F (40°C)
- → Electrical Connections: 1~115v
- → Max Working Pressure: 140 PSI (10 Bar)

#### **Materials of Construction**

- → Stainless Steel Volute & Shaft
- → Engineered Composite Impeller
- → Impregnated Carbon Bearing

#### **Materials of Construction**

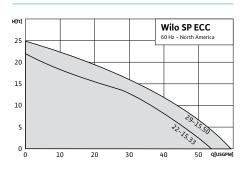
- → NSF 61/NSF 372 Certified Brass Volute
- → Stainless Steel Shaft
- → Engineered Composite Impeller
- → Impregnated Carbon Bearing





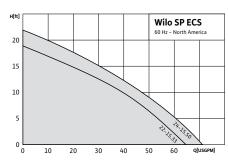


**Wilo ECC** Submersible Sump Pumps



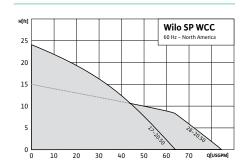
#### **Wilo ECS**

Submersible Sump Pumps



**Wilo WCC** 

Sewage/Effluent Pumps



#### Application

- → Sump & Effluent
- → De-watering
- → Drainage

#### Application

- → Sump & Effluent
- → De-watering
- → Drainage

#### Application

- → Residential Sewage & Effluent
- → Drainage

#### Max. Flow

58 USGPM

#### Max. Head

Features & Benefits

for automatic operation

→ 10' power cord included

25 feet

#### Max. Flow

71 USGPM

#### Max. Head

23 feet

### Features & Benefits

- → Oil-filled motor for max heat dissipation
- → Ideal for basement installations
- → 10' power cord included
- → CSA certified

#### Max. Flow

85 USGPM

#### Max. Head

24 feet

#### Features & Benefits

- → Replaceable piggyback tether float switch
- → Oil-filled motor for maximum heat dissipa-
- → Built-in thermal overload protection
- → 10' power cord included
- → CSA certified

#### **Technical Data**

→ CSA certified

- → Max Solids Handing: 3/8"
- → Max Fluid Temp: 77°F (25°C)
- → Electrical Connections: 1~115v
- → 1½" NPT Discharge (1¼" with adaptor)

→ Replaceable piggyback tether float switch

→ Permanent split capacitor motor with auto-

matic thermal overload protection

#### **Technical Data**

- → Max Solids Handling: 1/2"
- $\rightarrow$  Max Temp: 77°F (25°C)
- → Electrical Connections: 1~115v
- → 1½" Discharge (1¼" adaptor included)

#### **Technical Data**

- → Max Solids Handling: 2" (WCC17); ¾" (WCC28)
- → Max fluid temperature 130°F (55°C)
- → Electrical Connections: 1~115v
- → 2" NPT Discharge

#### **Materials of Construction**

- → Cast Iron Volute & Motor Housing
- → Engineered Composite Impeller
- → Stainless Steel Bottom-Screened Inlet

#### **Materials of Construction**

- → Cast Iron Volute
- → Stainless Steel Motor Housing
- → Engineered Composite Impeller

#### **Materials of Construction**

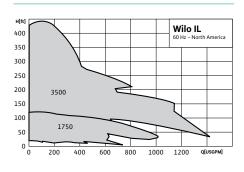
- → Cast Iron Volute & Motor Housing
- → Engineered Composite Impeller



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Wilo IL Inline Centrifugal Circulators



**Application** 

- → Hot Water Heating systems
- → Closed Cooling Circuits
- → Air Conditioning
- → Industrial Circulation
- → Solar
- → Geothermal

#### Max. Flow

1450 USGPM

#### Max. Head

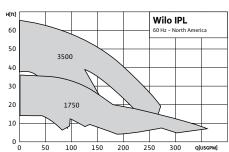
440 feet

#### Features & Benefits

- → Integrated suction straightening vane
- → Pump feet drilled and tapped
- → 125# ANSI standard flanges
- → Suction and discharge pressure gauge tappings
- → Lifting eyes for easy installation

#### Wilo IPL

Inline Pumps



#### **Application**

- → Hot Water Heating systems
- → Closed Cooling Circuits
- → Air Conditioning
- → Industrial Circulation
- → Solar
- → Geothermal

#### Max. Flow

400 USGPM

#### Max. Head

65 feet

#### Features & Benefits

- ightarrow Integrated suction straightening vane
- → Pump feet drilled and tapped
- → 125# ANSI standard flanges
- → Suction and discharge pressure gauge tappings
- → Lifting eyes for easy installation

#### **Technical Data**

- → TEFC motors standard (ODP available)
- → Temp Range: -5°F to 285°F (-20°C to 140°C)
- → Max Amb Temp: 104°F (40 °C)
- → Electrical Connection: 1~115v, 230v 3~208-230v, 460v, 575v

#### **Technical Data**

- → TEFC motors standard (ODP available)
- → Temp Range: 15°F to 250°F (-10°C to 120°C)
- → Max Amb Temp: 104°F (40 °C)
- → Electrical Connection: 1~115v, 230v 3~208-230v, 460v, 575v

#### **Materials of Construction**

- → Cast Iron, Cataphoresis Coated Volute
- → Trimmable Bronze Impeller
- → Stainless Steel Stub Shaft
- → 2-Part Epoxy Paint

### **Materials of Construction**

- → Cast Iron, Cataphoresis Coated Volute
- → Engineered Composite Impeller
- → Stainless Steel Stub Shaft
- → 2-Part Epoxy Paint

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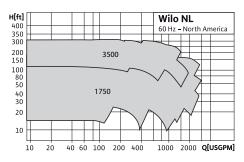






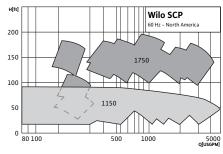
#### Wilo NL

**Base Mount End Suction Pumps** 



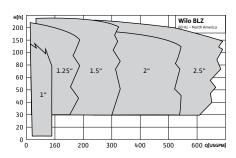
#### **Wilo SCP**

Split Case Pumps



#### Wilo BLZ

Block Line Stainless Steel Closed Coupling Pump



#### **Application**

- → Heating and Cooling Systems
- → Transfer and Pressure Boosting
- → Boiler Feed/Condensate
- → Irrigation
- → Industrial Applications

#### Max. Flow

2,500 USGPM

#### Max. Head

300 feet

#### Features & Benefits

- → Back pullout design allows replacement of bearings and seals without disturbing the piping
- → Three bearing bracket sizes for all models
- → Confined gasket between cover and casing
- → Maintenance-free ZZ bearings
- → Improved hydraulics for reduced vibration
- → Over 50 models available

#### **Application**

- → Heating and Cooling Systems
- → Transfer and Pressure Boosting
- → Boiler Feed/Condensate
- → Municipal Water Supply
- → Irrigation
- → Industrial Applications

#### Max. Flow

5,000 USGPM

#### Max. Head

180 feet

#### **Features & Benefits**

- → Horizontal split casing allows replacement of bearings and mechanical seal without disturbing the system piping
- → Double suction design available for maximum efficiencies
- → Hydraulically balanced double-suction impeller for minimal axial thrust
- → Tongue & groove neck ring design eliminates seizing of rotating assembly
- $\rightarrow$  Pump shaft guards

## Application

- → Heating and Cooling Systems
- → Water Supply Systems
- → Sprinkler/Flow Irrigation
- → Pressure Boosting
- → Municipal Water→ Heat Exchanger

#### Max. Flow

900 USGPM

#### Max. Head

290 feet

#### Features & Benefits

- → NSF 61/NSF 372 Certified
- → Close coupled design that saves space
- → Can be installed horizontally or vertically
- → Centerline discharge and foot support under casing
- → High operating efficiency which lowers operating costs

#### Technical Data

- → Temp Range: -5°F to 250°F (-20°C to 121°C)
- → Horsepower Range: 1–75HP (3500RPM) ½-200HP (1750RPM)
- → Flange Size Range: 1¼" to 8"
- → Max Pressure: 250 PSI

#### Technical Data

- → Temp Range: 18°F to 250°F (-8°C to 120°C)
- $\rightarrow$  Available in sizes up to 500HP

#### Technical Data

- → Temp Range: 212°F (100°C)
- → Max. Working Pressure 230 PSI (15 Bar)
- → Electrical Connections: 1~115/230V 3~ 208v, 230/460V

#### **Materials of Construction**

- → Cast Iron Volute
- → Bronze Impeller
- → Stainless Steel Shaft
- → C/SiC/EPDM Mechanical Seal (other seals available upon request)
- → NEMA Standard Motors

#### **Materials of Construction**

- → 9 different material specs available
- → 8 different seal types available
- → Standard Configuration: Cast Iron Volute, Bronze Impeller, Stainless Steel Shaft, C/ SiC/EPDM Mechanical Seal, NEMA Standard Motors

#### Materials of Construction

- → 304 Stainless Steel Casing and Impeller
- → Stainless Steel Shaft

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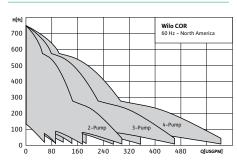






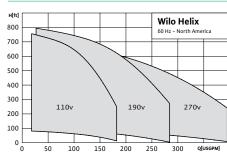
#### Wilo COR 2, 3, 4 - Pump

**Pressure Boosting Systems** 



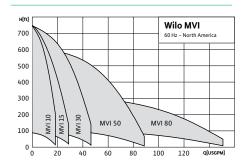
#### **Wilo Helix**

Vertical Multistage Pumps



#### Wilo MVI

Vertical Multistage Pumps



## For use in water supply applications requiring constant pressure, such as:

- → Residential, Commercial & Industrial Buildings
- → Hotels & Hospitals
- → Department Stores
- → Sports Arenas
- → Washing / Irrigation

#### Max. Flow

540 USGPM

#### Max. Head

800 feet

#### Features & Benefits

- $\rightarrow \ \mathsf{Factory\text{-}programmed}, \mathsf{packaged} \ \mathsf{system}$
- ightarrow Compact design for easy installation/retrofit
- ightarrow User-friendly, multi-language LCD display
- $\rightarrow$  Low maintenance costs
- → System monitoring records performance
- → Fixed or alternating base load pump
- → Balanced run time across all pumps

#### **Application**

- → Water Supply / Pressure Boosting
- → Condensate Return
- → Boiler Feed
- → Washing / Sprinkling
- → Process Engineering
- → Cooling Circuits

#### Max. Flow

380 USGPM

#### Max. Head

800 feet

#### Features & Benefits

- → Cartridge seal designed for easy service
- → 3D impellers for improved efficiency
- ightarrow Floating flanges for easy installation
- → Standard EISA compliant TEFC motors
- → Integrated thrust bearing reduces motor stress

#### Application

- → Water Supply / Pressure Boosting
- → Condensate Return
- → Boiler Feed
- → Washing / Sprinkling
- → Process Engineering
- → Cooling Circuits

#### Max. Flow

150 USGPM

#### Max. Head

750 feet

#### Features & Benefits

- → 304 Stainless steel construction on parts in contact with fluid
- ightarrow Standard TEFC NEMA frame Baldor motors
- → EPDM/Viton® mechanical seals
- → Heavy duty pump base
- → Both Oval and ANSI flanges available

#### **Technical Data**

- → CC Controller NEMA 12
- ightarrow VFD-Controlled Base Load Pump
- $\rightarrow\,$  4–20 mA, ¼" SS Pressure Transducers
- → Max System Pressure: 363 PSI
- → Fluid Temp Range: 30°F to 200°F (-1°C to 120°C)

#### **Technical Data**

- $\rightarrow$  Temp Range 4°F to 248°F (-15°C to 120°C)
- → Electrical Connections: 3~230/460/575v
- → Flange Connection: 250# ANSI
- → TEFC motors standard (ODP available on request)

#### **Technical Data**

- → Temp Range: -5°F to 250°F (-20°C to 121°C)
- → Electrical Connections: 1~115/230v 3~230/460/575v
- → 1¼" 250# ANSI (not included) or 1" FNPT Oval Flanges (included) Flange Connection
- → TEFC motors standard (ODP available on request)

#### **Materials of Construction**

- → Stainless Steel Pump Volute, Impeller, Shaft & Header
- → EPDM Elastomers
- → Carbon/Tungsten Carbide, SiC/Carbon Mechanical Seal
- → Tungsten Carbide/Ceramic Bearing

#### **Materials of Construction**

- → 304L SS or 316 SS construction available
- → Stainless Steel Impeller, Shaft, Pressure Shroud & Pump Base
- → EPDM/FKM Elastomers
- → Optional Mechanical Seals Available
- → Tungsten Carbide/Ceramic Bearing

## (ODP available on reques

- → Stainless Steel Volute, Impeller & Shaft
- → Carbon/tungsten Carbide, SiC/ Carbon, EPDM Elastomers Mechanical Seal







Wilo WXT, WAS, WAV

Expansion Tanks, Air Scoops, Air Vent

#### Wilo JetConnect™

Flanges and Accessories

#### Wilo JetConnect™

Swivel Flange Ball Valves

#### Application

- → Heating Systems
- → Cooling Systems
- → HVAC

## Application

- → Heating Systems
- → Cooling Systems
- $\rightarrow$  HVAC

#### **Expansion Tanks**

- → Controls system pressure in closed systems
- → Available in 2.0 & 4.4 Gal. models
- → ½" NPT Connection
- → Quick and easy Installation
- → Pre-charged to 12 PSI
- → Max Working Pressure: 100 PSI
- → Max Temp: 240°F (116°C)

#### **Cast Iron Flanges**

- → Residential FNPT cast iron flanges (3/4", 1", 11/4", 11/2")
- → HV cast iron FNPT flanges (1", 11/2", 2")
- → Wilo cast iron FNPT "Check Flange" kit (34", 1", 114")

#### **Swivel Flange Ball Valves**

- → Residential FNPT/SWT w check (3/4", 1", 11/4", 11/2")
- → Residential FNPT/SWT w purge and check (34", 1", 114", 11/2")
- → HV FNPT/SWT (11/4", 11/2")
- → HV SWT w purge (1¼", 1½")

#### Air Scoops

- → Quietly separates air from your hydronic
- → Available in ¾", 1", and 1¼" FNPT connections
- → Tapped for 1/8" air vent and 1/2" expansion tank
- → Maintenance free, cast iron construction

### **Bronze Flanges**

- → All: Lead Free
- → Residential FNPT bronze flanges (34", 1", 114")
- → Residential SWT bronze flanges (3/4", 1")
- → HV bronze flanges (1", 1¼, 2")



# **Water Management**

Pumps and pump systems for water supply, sewage disposal and sewage treatment in municipal buildings.



# **Section Overview Water Management:**

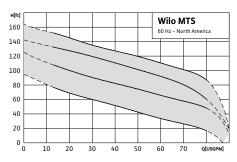
Contents	
Submersible / Sewage Pumps	from page 22
MTS, FA, EMU Port, KS, KPR, RZP	
Mixers	from page 24

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**Wilo MTS** 

Submersible Sewage Pumps with Macerator



#### Application

- → Solids Maceration
- → Sewage Handling
- → Drainage
- → Wastewater Treatment

#### Max. Flow

80 USGPM

#### Max. Head

165 feet

#### Features & Benefits

- ightarrow Cutter design yields fine solids for nonclogging operation
- → Highly efficient design means low operating costs
- → Stainless steel casing for maximum corrosion
- → Explosion protection on MTS40 E models
- → 25' cable included

#### **Technical Data**

- → Electrical Connections: MTS 40/95: 1~230v
- → Temp Range: 37°F 104°F (3°C 40°C)
- → Insulation class F

- MTS 40/95 MTS 40/165: 3~230v & 460v

#### **Materials of Construction**

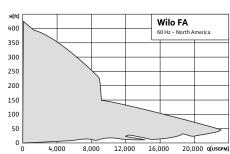
- → Cast Iron Volute & Impeller
- → Stainless Steel Macerator, Shaft & Motor Housing



Guaranteed 2-week delivery on select FA models!

#### Wilo FA

Submersible Sewage Pumps



#### Application

- → Sewage Collection
- → Storm Water
- → Raw Water
- → Sewage Treatment
- → Dewatering
- → Industry

#### Max. Flow

23,000 USGPM

#### Max. Head

420 feet

#### Features & Benefits

- → Rugged design for portable, wet pit, and dry well installation
- → Shaft Short overhang / large diameter
- → L3/D4 Shaft Bending Ratio lowest in industry
- → Continuous operation possible in Q vs H curve extremes
- → Internally closed loop cooled motors available

#### **Technical Data**

- → S1 Operating Mode (continuous duty)
- → Protection class: IP 68
- → Max Temp: 104°F (40°C) (higher temperatures on request)
- → Silicon carbide mechanical seals

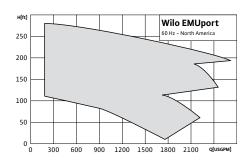
#### **Materials of Construction**

- → Cast Iron Volute (standard)
- → Stainless Steel Standard Shaft
- → Optional Materials of Construction and Coatings Available



#### Wilo EMUPort

Solids Separation System



#### Application

→ Solid separation for untreated sewage that cannot be discharged to the sewer system

#### Max. Flow

25,000 USGPM

#### Max. Head

265 feet

#### Features & Benefits

- → Low maintenance and operating costs
- → System remains fully functional during maintenance
- → Solids separation system includes: Collection reservoir, 2x solids tank, 2x sewage pumps & complete piping network

#### **Technical Data**

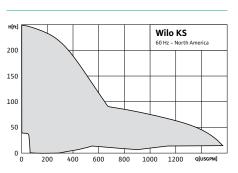
- → Pumps stations ready for connection
- → With dry-mounted sewage pumps and solids separation system
- → Available in shaft- (MS, FS) or building version (MG, FG)

#### **Materials of Construction**

→ Underground Pumping Station Made of PEHD







#### Application

- → For drainage of excavation pits
- → Basements
- → Pits and basins
- → Fountains

#### Max. Flow

1,550 USGPM

#### Max. Head

250 feet

#### Features & Benefits

- → Submersible drainage pumps in rugged design for use on building sites
- Mechanical seal independent of direction of rotation
- → Heavy-duty motors (oil-filled and dry) ensure permanent operation even with nonimmersed motor
- → Corrosion-resistant components

#### **Technical Data**

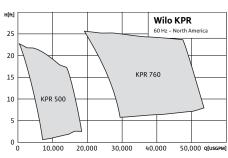
- $\rightarrow$  S1 Operating Mode (continuous duty)
- → Max Temp: 104°F (40°C)
- → Protection class IP 68
- → Sealed by double mechanical seal
- → Maintenance-free roller bearing

#### **Materials of Construction**

- → Normal Cast Iron version
- → Optional wear protection due to ceramic coating
- → Optional Abrasit pump coating available
- → With Ex protection, depending on type

#### Wilo KPR

Submersible Sewage Pumps



#### Application

- → Storm Water
- → Cooling Water
- → Cleaned sewage
- → Irrigation
- → Sludge

#### Max. Flow

52,000 USGPM

#### Max. Head

26 feet

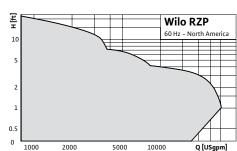
#### Features & Benefits

- → Submersible axial flow propeller pump
- → Special materials and coatings against abrasion and corrosion
- → Longitudinally watertight cable lead-in
- → Angle of propeller blades adjustable by hand

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#### **Wilo RZP**

**Recirulation Pumps** 



#### **Application**

- → Low head water / sewage delivery at high flow rates
- → Process, raw, pure and cooling water
- → Generation of fluid current in water channels

#### Max. Flow

30,000 USGPM

#### Max. Head

17 feet

#### Features & Benefits

- → Submersible
- → Vertical or in-line design
- → Self-cleaning propeller, partially with helix hub
- → ATEX and FM versions

#### **Technical Data**

- → Submerged operating mode: S1 (continuous duty)
- → Max Temp: 104°F (40°C), higher temperatures on request
- → Protection class: IP 68

#### **Materials of Construction**

- → Heavy-duty version made of Cast Iron
- → Stainless Steel Propeller
- → Silicon Carbide Mechanical Seals

#### **Technical Data**

- → Submerged operating mode: S1 (continuous duty)
- → Max Temp: 104°F (40°C)
- → Protection class: IP 68
- → Units are directly driven or with single stage planetary gear

#### **Materials of Construction**

→ PUR or Stainless Steel Propeller



#### **Wilo Miniprop**

Submersible Mixers



#### **Wilo Uniprop**

**Application** 

tanks

Thrust

→ Water supply → BNR

→ Suspension of solids

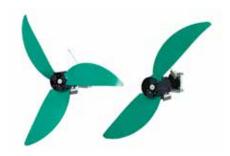
→ Industry & Agriculture

78 - 886 lbf (350 - 3940 N)

Submersible Mixers with Planetary

→ Creation of fluid current in activated sludge

ightarrow Prevention of floating sludge layers



#### Wilo Megaprop/Maxiprop

Submersible Mixers with Planetary

#### **Application**

- → Mixing deposits and solids in rain spillway basin and pump sump
- → Breaking down of sludge layers
- → Agriculture
- → Water supply
- → Wet Wells

#### Thrust

11-74 lbf (45 - 330 N)

#### Features & Benefits

- → Compact directly driven submersible mixer
- → Stationary installation on walls and floors
- → Can be swiveled vertically and horizontally for installation with lowering device
- → ATEX and FM versions
- → Self-cleaning propeller with helix hub
- → Easy-to-install propeller attachment

#### **Technical Data**

- → Submerged operating mode: S1 (continuous
- → Max Temp: 104°F (40°C)

**Materials of Construction** 

- → Protection class: IP 68
- → Permanently lubricated anti-friction bearing

→ Stainless Steel Motor Shaft (optional)

→ SiC/SiC Combination Mechanical Seal

→ PUR or Stainless Steel Propeller

#### Features & Benefits

- → Stationary installation on walls
- → Flexible installation
- → Single-stage planetary gear for adjusting the propeller speed
- → Self-cleaning propeller
- → Easy-to-install propeller attachment
- → Type "TRE" with IE3 performance optimized motors
- → ATEX and FM versions

#### **Technical Data**

- → Submerged operating mode: S1 (continuous duty)
- → Max Temp: 104°F (40°C)
- → Protection class: IP 68
- → Single-stage planetary gear
- → Permanently lubricated anti-friction bearing

#### **Materials of Construction**

- → Steel, PUR or PUR/GFK Propeller
- → Stainless Steel Gear Shaft
- → SiC/SiC Combination Mechanical Seal

#### Application

- → Mixing and circulation of activated sludge
- → Flow generation in water channels
- → Industry
- → Oxidation Ditches

#### Thrust

406 - 976 lbf (470 - 4340 N)

#### Features & Benefits

- → Slow-running submersible mixer with twostage planetary gear
- → Flexible installation
- → 2-stage planetary gear for adjusting the propeller speed
- → Self-cleaning propeller
- → Propeller blades can be replaced individually
- → Easy-to-install blades and hub
- → ATEX and FM versions

#### Technical Data

- → Submerged operating mode: S1 (continuous duty)
- → Max Temp: 104°F (40°C)
- → Protection class: IP 68
- → Two-stage planetary gear with exchangeable second planetary stage
- → Permanently lubricated anti-friction bearing

#### Materials of Construction

- → GFK Propeller
- → Stainless Steel Gear Shaft
- → SiC/SiC Combination Mechanical Seal

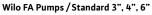


#### 10 DAYS OR LESS GUARANTEED!

The Guaranteed Pump Shipment (GPS) program is an industry first! Engineered wet-pit and dry-pit submersible pumps, from 3 to 57 HP, built to order and deliver in 10 business days or less. Need a replacement sooner? Ask about our 1 week fast-track adder. Put Wilo to the test! Should we miss the shipment deadline, we'll credit you 10% of the purchase price. Contact us at GPS@wilo-usa.com for more information.

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## **Groundwater**

Submersible pumps for water supply from water wells, agriculture, dewatering and industrial applications.



Wilo TWU 4

# **Section Overview Groundwater:**

#### Contents

**Submersible Pumps** 

from page 28

3HS, TWI, TWU, Motors, Accessories, Borehole, Bottom Intake

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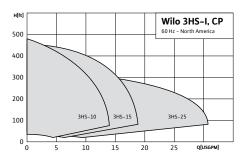






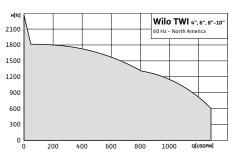
#### Wilo 3HS

3" High-Speed Submersible Pumps with Noryl Impellers



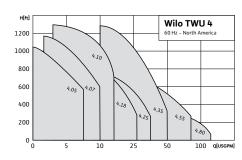
#### **Wilo TWI**

4"-10" Stainless Steel Submersible Well Pumps



#### **Wilo TWU**

4" Submersible Well Pumps with Noryl **Impellers** 



#### Application

- → Potable Water Supply
- → Irrigation
- → Municipal
- → Pressure Boosting
- → Agriculture
- → Industrial Process

#### Max. Flow

31 USGPM

#### Max. Head

475 feet

#### Features & Benefits

- → High-speed 8400 RPM rewindable motor
- → Available in Constant Pressure (CP) and Integrated (I) models
- → Integrated check valve
- → Frequency converter included on CP models
- → Vertical and horizontal installation possible

#### Application

- → Potable Water Supply
- → Irrigation
- → Municipal
- → Pressure Boosting
- → Agriculture
- → Industrial Process

#### Max. Flow

1,350 USGPM

#### Max. Head

2,200 feet

#### Features & Benefits

- → Vertical and horizontal installation possible
- → Motors up to 250 HP
- → Control boxes and VFD's available
- → NEMA standard mounting specs
- → High quality shaft bearings
- → Check valve standard on all model

→ Electrical Connection: 1~115/230v

→ Temp Range: 37°F to 122°F (3°C to 50°C)

→ Additional models available on request

#### Application

- → Potable Water Supply
- → Irrigation
- → Municipal
- → Pressure Boosting
- → Agriculture
- → Industrial Process

#### Max. Flow

110 USGPM

#### Max. Head

1,250 feet

#### Features & Benefits

- → Noryl impellers for maximum wear and abrasive resistance
- → High quality shaft bearings for long life and easy installation
- → Optional VFD's and control boxes available
- → NEMA standard mounting specifications
- → Vertical and horizontal installation possible
- → Check valve standard on all models
- → Additional models available on request

#### **Technical Data**

- → Electrical Connections: 1~230v
- → Temp Range: 37°F to 95°F (3°C to 35°C)
- → Max Sand Content: 50 ppm
- → Max Immersion Depth: 500'
- → Max Number of Starts: 30 /h → Protection Class: IP 58
- → Protection Class: IP 68

3~230/460/575v

**Technical Data** 

→ Max Sand Content: 50 ppm → Max Immersion Depth: 1000'

## **Technical Data**

- → Electrical Connection: 1~115/230v 3~230/460/575v
- $\rightarrow$  Temp Range: 37°F to 95°F (3°C to 35°C)
- → Max Sand Content: 50 ppm
- → Max Immersion Depth: 1000'
- → Protection Class: IP 68

#### **Materials of Construction**

- → 304 SS Construction
- → Noryl Impellers

### **Materials of Construction**

- → Stainless Steel Construction
- → Carbon / Graphite / PTFE Stop Ring
- → Stainless Steel / NBR Neck Ring
- → NBR Bearing

#### **Materials of Construction**

- → Stainless Steel Construction
- → Noryl Impellers & Shaft Sleeve
- → Glass-Filled Polycarbonate Bearing Spider & Diffuser
- → NBR O-Ring
- → Polyacetal Bearing



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#### **Wilo Submersible Motors**

4"-16" Submersible Motors



#### **Wilo Submersible Accessories**

Control Boxes, Variable Frequency Drives, Pump Panels

#### 4" Standard Submersible Motors

- → Stainless steel for Maximum corrosion resistance
- → Coal Bed Methane Series available for aggressive applications
- → Equipped with surge arrestors on 115/230v models
- → Automatic thermal overload protection
- → Efficient 2-wire motors
- → Electrical Connections: 1~115/230v and 3~230/460/575v
- → Max Temp: 86°F (30°C)
- → 48" cable length for ½-1½ HP models
- → 100" cable length for 2+ HP models
- → 6"-10" Standard Submersible Motors

#### **Control Boxes**

- → Standard
- → Deluxe
- → Deluxe CSCR
- → Deluxe (6")

#### 6"-10" Standard Submersible Motors

- → Electrical Connections: 3~230/460/575/1000v
- → NEMA standard flange
- → Standard Temp: 95°F (35°C)
- → High Temp: 176°F (80°C)
- → NEMA splined shaft
- → pH 6.5-8.0
- → Durable stainless steel motor housing, 304 & 316 available

#### **Variable Frequency Drives**

- → Max Amb Temp: 104°F (40°C)
- → Max Altitude: 3300' (1000m)
- → Protection Class: IP55 (NEMA 4)
- → 4 Digital input, N.O. or N.C (settable), for motor run and motor stop
- → RS485 serial communication

#### 6"-16" NU Rewindable Submersible Motors

- → Rewindable motor stator
- → Voltages up to 6000v
- → Hi-Temp models available
- → Custom power cable lengths
- → Cast Iron, 304 Stainless Steel, 316 Stainless Steel, Bronze, and Duplex Stainless Steel configurations available
- → Optional PT100 thermistor
- → High-quality thrust bearings
- → Water-filled design

#### **Wilo Pump Panel**

- → NEMA type 3R steel enclosure with powder coating finish
- → Full gasket hinged door with provision for padlocks
- → UL listed and suitable for use as service equipment
- → Heavy duty flange Fusible disconnect switch.
- → NEMA Full voltage magnetic motor starter.

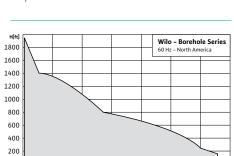






#### **Wilo Borehole Series**

Up to 24"



#### **Application**

→ Water Supply from boreholes and cisterns

3000

5000

- → Process water supply
- → Municipal & industrial water supply
- → Sprinkling, Irrigation, Geothermal & Offshore
- → Pressure boosting
- → Dewatering

#### Max. Flow

6,500 USGPM

#### Max. Head

1,950 feet

#### **Features & Benefits**

- ightarrow Up to 24" diameters available
- ightarrow Water pumping with large volume flows
- → Trimmable impellers
- → Motors with CoolAct<sup>™</sup> technology for high power density (from 10" motors on)
- → High voltage up to 6000v possible
- → Vertical and horizontal installation possible
- → Pressure shroud installation option

#### **Technical Data**

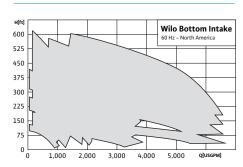
- ightarrow Immersed Operating Mode: S1
- → Max Temp: 122°F (50°C)
- → Min Flow at Motor: 0.33...1.64 f/s
- $\rightarrow$  Max Immersion Depth: 100 or 300/350 %
- → Protection Class: IP 68

#### **Materials of Construction**

- → Ceram Coating available for increased durability
- → Corrosion-Resistant Impellers
- → Wear-Resistant GI Bushing (depending on type)
- → Special Materials Available



#### **Wilo Bottom Intake Series**



#### Application

- → Potable and Process Water from tanks or shallow areas
- → Municipal and Industrial Water Supply
- → Sprinkling and Irrigation
- → Dewatering
- → Geothermal Energy & Offshore

#### Max. Flow

5,000 USGPM

#### Max. Head

524 feet

#### Features & Benefits

- → Self-cooling design
- → Compact design
- → Rewindable motors
- → Trimmable Impellers
- → Hydraulics and motor configurable according to power requirements
- → Rewindable Motors

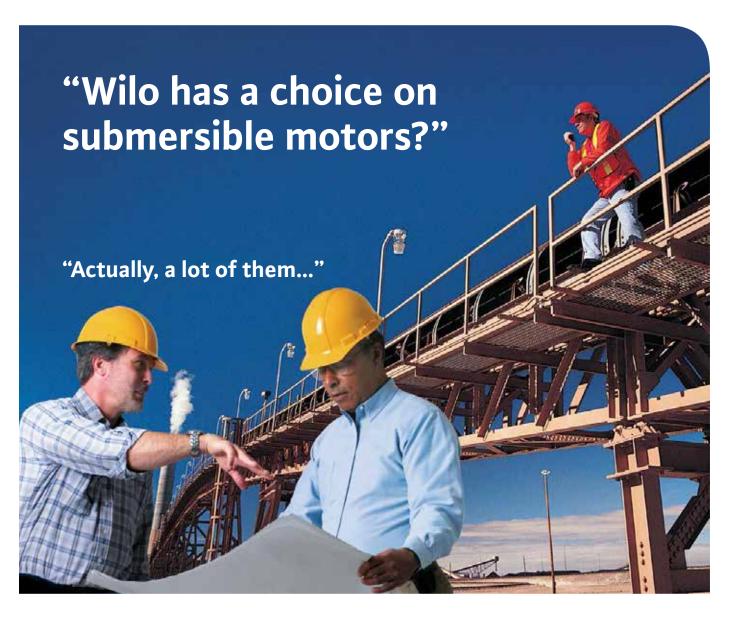
#### **Technical Data**

- → Max Temp: 68°F (20°C)
- → Max Immersion Depth: 984 ft
- → Protection Class: IP 68

#### **Materials of Construction**

→ Ceram Coating available for increased durability





Now you have a choice when it comes to submersible motors from Wilo, the brand setting the standard for technical performance and efficiency. What a lineup in motors! 4" to 10 hp - 6" & 7" to 75 hp -8" to 125 hp - 10" to 250 hp and Wilo CoolAct 1000 hp+! Wilo's submersible product line offers you, the professional, all the choice you need! Find out more. Call or visit our website for more information.

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Wilo - TWI 4" to 10" Stainless Steel Submersible Well Pumps

Wilo - WSM 7" to 10" Submersible Motors

Wilo - CoolAct 9" to 16" Submersible Motors





20-43-003-0114

### **WILO USA LLC**

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