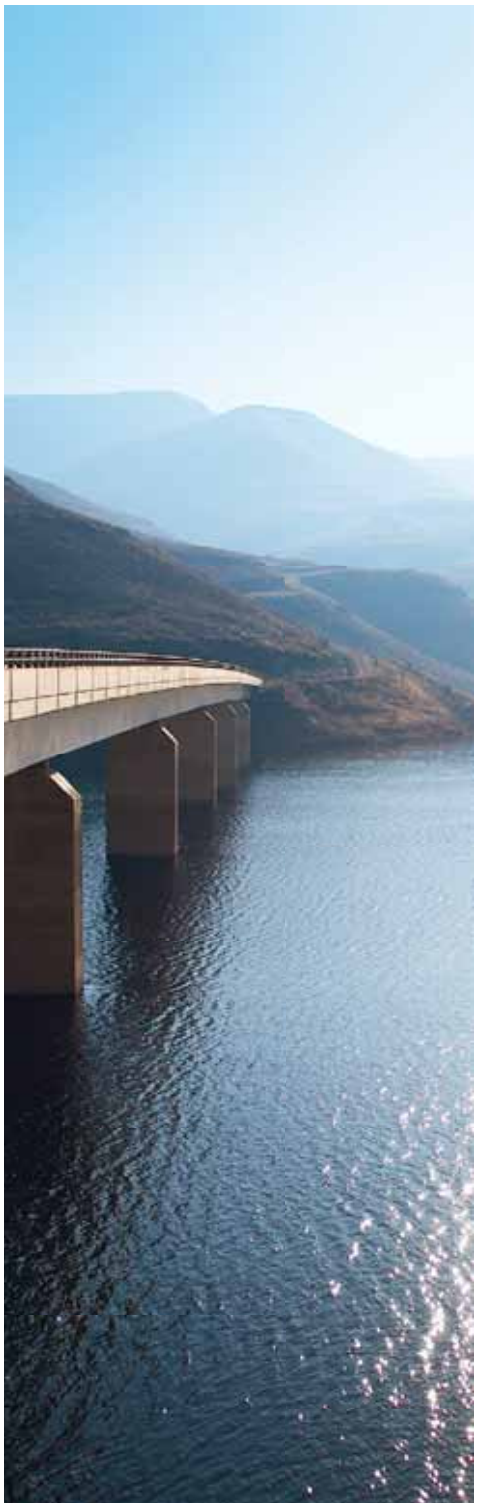
Pioneering for You

Wilo Pumps Korea – Edition 2014

General overview

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




“Developing the world’s most efficient product portfolio,
that’s what I call Pioneering for You.”
Dr. Franka Schneider, Research Engineer Fluid Mechanics
WILO SE

General overview
at a glance:

Contents

Wilo Group

THE COMPANY AT A GLANCE

WILO SE, based in Dortmund, is one of the world's leading manufacturers of pumps and pump systems for heating, cooling and air conditioning, water supply and sewage disposal. With more than 13 production sites, over 60 subsidiaries and more than 6,700 employees around the world, Wilo is a true global player.

Founded in 1872 as the Louis Opländer Copper and Brass Goods Factory, the company has developed to become the leading innovator in the high-tech pump sector. In 2012, Wilo achieved a turnover of EUR 1.19 billion.

Wilo worldwide

WILO BRANCHES / PRO DUCTION SITES

WILO SE, Dortmund plant / Germany
WILO SE, Oschersleben plant / Germany
WILO SE, Hof plant / Germany
WILO EMU Anlagenbau GmbH, Roth / Germany*
Pompes Salmson S. A. S., Laval plant / France
WILO INTEC S. A. S., Aubigny / France
TEK S. r. l., Bari / Italy*
WILO Pumps Ltd., Limerick / Ireland
Circulating Pumps Ltd., Kings Lynn / Great Britain
WILO USA LLC, Thomasville plant, Georgia / USA
WILO China Ltd., Beijing /China
WILO ELEC China Ltd., Qinhuangdao / China
WILO Pumps Ltd., Busan / Korea
Mather & Platt Pumps Ltd., Pune plant / India
Mather & Platt Pumps Ltd., Kolhapur plant / India

SUBSIDIARIES

With more than 60 subsidiaries, Wilo is at home all over the world.

We are Wilo

In the 140 years of the company's existence, technological progress has always been part of our tradition. At Wilo, visionary ideas are transformed into intelligent solutions and groundbreaking innovations that set new benchmarks in the industry. Wilo products are synonymous with top-notch quality, user-friendliness and energy efficiency.

The key to Wilo's success are its employees, with their innovative power, their experience and their commitment. The art of engineering that Wilo is famous for is a result of productive teamwork, at all of Wilo's sites around the world.

THE RIGHT PUMP FOR ALL APPLICATIONS

Wilo Korea
Pioneering for You.

History of Wilo Korea

1969	Produce HH pumps
1987	Produce CM pumps
2000	Foundation of WILO-LG Pumps LTD. (2000.12.19)
2002	Sales consolidation
	Contribution for local community award
2003	WILO Sole brand
	Industrial service medal (President of Korea)
2004	Biz. Transfer
	Best harmonized labor-management award
2005	New CI, SVC network
	WILO ELEC
2009	New Test Bay
2012	NET (New Excellent Technology for IE4 level) Motor
	Ground-breaking Ceremony for New Factory
2013	Grand-Opening Ceremony for New Factory

Wilo Pumps Ltd.
Busan, Korea

Product range

Vertical, multistage centrifugal pumps
Series
Helix V

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 90 m³/h
  - H max. : 290 m
- 50hz
  - Q max. : 80 m³/h
  - H max. : 245 m
- Liquid temp. : -15~120 ℃
- Motor power : 0.55~45 kW
- IP class : IP54 or IP55
- Dis. Sizes : 25~80 mm
- Max. operating pressure
  - Standard : 16bar/25bar/30bar
  - Option : 25bar/30bar

Standard materials
(For other materials, pls consult)
- Casing : Gray Cast Iron
- Impeller : Stainless Steel
- Shaft : Stainless Steel

Applications
- Water supply and pressure boosting
- Industrial circulation systems
- Process water
- Cooling water circulation systems
- Fire extinguishing systems
- Washing systems
- Irrigation

Features
- Efficiency-optimised, laser-welded 2D/3D high-efficiency hydraulics
- Easy replacement without pipe modification: the modular pump housing
- WRAS/KTW/ACS approval (EPDM version)

Product range

Vertical, multistage centrifugal pumps
Series
MVI

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 170 m³/h
  - H max. : 234 m
- 50hz
  - Q max. : 140 m³/h
  - H max. : 240 m
- Liquid temp. : -15~120 ℃
- Motor power : 0.55~45 kW
- IP class : IP54 or IP55
- Dis. Sizes : 25~100 mm
- Max. operating pressure
  - Standard : 16bar/25bar
  - Option : 25bar

Standard materials
(For other materials, pls consult)
- Casing : Gray Cast Iron
- Impeller : Stainless Steel
- Shaft : Stainless Steel

Applications
- Water supply and pressure boosting
- Industrial circulation systems
- Process water
- Cooling water circulation systems
- Fire extinguishing systems
- Washing systems
- Irrigation

Features
- Non self-priming
- KTW (Germany), and WRAS (Great Britain) approved for drinking water
- Motor and pump shaft under IEC-standard
- Assembled by rigid coupling

Product range

Vertical, multistage centrifugal pumps with frequency converter
Series
Helix VE/MVIE

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 145 m³/h
  - H max. : 250m
- 50hz
  - Q max. : 145 m³/h
  - H max. : 250m
- Liquid temp. : -15~120 ℃
- Motor power : 1.1~22 kW
- IP class : IP54
- Dis. Sizes : 25~100 mm
- Max. operating pressure
  - Standard : 16bar/25bar
  - Option : 25bar

Standard materials
(For other materials, pls consult)
- Casing : Gray Cast Iron
- Impeller : Stainless Steel
- Shaft : Stainless Steel

Applications
- Water supply and pressure boosting
- Fire extinguishing systems
- Industrial circulation systems
- Cooling water circulation systems
- Washing systems
- Supplying sprinkler systems

Features
- Efficiency-optimised, laser-welded 2D/3D high-efficiency hydraulics
- Easy pump replacement without pipe modification
- WRAS/KTW/ACS approval for hydraulic parts (EPDM version)

Product range

Multi-pump pressure boosting systems
Series
PUZeN Premium

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 1360 m³/h
  - H max. : 290 m
- 50hz
  - Q max. : 1120 m³/h
  - H max. : 245 m
- Liquid temp. : 0~70 ℃
- Motor power : 0.55~45 kW
- IP class : IP54 or IP55
- Dis. Sizes : Pump 25~100 mm/ Manifold:50~350 mm
- Tank : 100~450 ℓ
- Max. operating pressure
  - Standard : 10bar/20bar/30bar

Standard materials
(For other materials, pls consult)
- Casing : Stainless Steel
- Impeller : Stainless Steel
- Shaft : Stainless Steel

Applications
- Automatic water supply and pressure boosting in residential and office buildings and in industrial systems for pumping potable water and process water, cooling water, water for fire-fighting or other service water

Features
- Excellent control and protection functions
- Semiconductor pressure transmitter
- High efficiency vertical multistage pump
- Compact design of manifold
- Check valve : corrosion resistant
- No. of pumps : up to 8 pumps

Product range

Multi-pump pressure boosting systems
Series
KF

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 850 m³/h
  - H max. : 290 m
- 50hz
  - Q max. : 700 m³/h
  - H max. : 245 m
- Liquid temp. : 0~70 ℃
- Motor power : 0.55~45 kW
- IP class : IP54 or IP55
- Dis. Sizes :
  - Pump 25~100mm
  - Manifold:50~350 mm
- Tank : 100~450 ℓ
- Max. operating pressure
  - Standard : 10bar/20bar/30bar

Standard materials
(For other materials, pls consult)
- Casing : Stainless Steel
- Impeller : Stainless Steel
- Shaft : Stainless Steel

Applications
- Automatic water supply and pressure boosting in residential and office buildings and in industrial systems For pumping potable water and process water, cooling water, water for fire-fighting or other service water

Features
- Control Panel with excellent protection function
- Semiconductor pressure transmitter applied
- High efficiency vertical multi stage pump
- Compact design
- Check Valve
- Corrosion resistant
- SS(Structure steel) bed for high flow application
- No. of pumps : up to 5 pumps

Product range

Glanded high-efficiency in-line pumps
Series
Stratos GIGA

Technical data
(For further details, pls consult)
- 60hz / 50Hz
  - Q max. : 60 m³/h
  - H max. : 50 m
- Liquid temp. : -20~140 ℃
- Motor power : 0.6~4.5 kW
- IP class : IP55
- Dis. Sizes : 40~65 mm
- Max. operating pressure
  - Standard : 16bar

Standard materials
(For other materials, pls consult)
- Casing : Gray Cast Iron + Cataphoresis Coating
- Impeller : Engineering Plastic
- Shaft : Stainless Steel

Applications
- Pumping of heating water, cold water and water/glycol mixtures without abrasive substances in heating, cold water and cooling systems

Features
- Flow and pressure control function :Δp-c Δp-v setting
- Remote control : DDC sensor
- Uncontrolled function available
- Operation status display
- IR controller
- WILO-IF module : Double pump control and BMS (Building Management System)

Product range

Glandless premium high-efficiency pumps
Series
Stratos

Technical data
(For further details, pls consult)
- 60hz / 50Hz
  - Q max. : 60 m³/h
  - H max. : 12 m
- Liquid temp. : -10~110 ℃
- Motor power : 30~1300 W
- IP class : IP44
- Dis. Sizes
  : G 1½" ~ G 2", 32~100mm
- Max. operating pressure
  - Standard : 6bar/10bar

Standard materials
(For other materials, pls consult)
- Casing : Gray Cast Iron
- Impeller : Engineering Plastic
- Shaft : Stainless Steel

Applications
- Hot-water heating systems of all kinds, air-conditioning systems, closed cooling circuits, industrial circulation systems

Features
- Uncontrolled circulation pumps
- European energy class A
- Up to 80% power savings in building and systems technology.
- Remote control : IR controller
- WILO-IF module : double pump and BMS(Building Management System) control
- Flexible module mounting positions

Product range

Glandless premium high-efficiency pumps (Dual pumps)
Series
Stratos-D

Technical data
(For further details, pls consult)
- 60hz / 50Hz
  - Q max. : 108 m³/h
  - H max. : 12 m
- Liquid temp. : -10~110 ℃
- Motor power : 100~1300 W
- IP class : IP44
- Dis. Sizes : 32~80 mm
- Max. operating pressure
  - Standard : 6bar/10bar

Standard materials
(For other materials, pls consult)
- Casing : Gray Cast Iron
- Impeller : Engineering Plastic
- Shaft : Stainless Steel

Applications
- Hot-water heating systems of all kinds, air-conditioning systems, closed cooling circuits, industrial circulation systems

Features
- Uncontrolled circulation pumps
- European energy class A
- Maximum efficiency due to ECM technology
- Dual pump management
- Red-button technology for simple operation
- Flexible module mounting positions

Product range

Glanded in-line pumps

Series
IL

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 850 m³/h
  - H max. : 90 m
- 50hz
  - Q max. : 700 m³/h
  - H max. : 60 m
- Liquid temp. : -20~140 ℃
- Motor power : 0.4~160 kW
- IP class : IP55
- Dis. Sizes : 32~250 mm
- Max. operating pressure
  - Standard : 16bar
  - Option : 25bar

Standard materials
(For other materials, pls consult)
- Casing : Gray Cast Iron
- Impeller : Gray Cast Iron
- Shaft : Stainless Steel

Applications
- Heating water , Cold and cooling water systems

Features
- Easy maintenance : back pull out structure & Cartridge mechanical seal
- High compatibility : IEC standard motor
- High efficiency : 3D welded impeller

Product range

Glanded in-line pumps with frequency converter

Series
IL-E/DL-E

Technical data
(For further details, pls consult)
- 60hz / 50Hz
  - Q max. : 640 m³/h(IL-E) / 680 m3/h(DL-E)
  - H max. :65 m(IL-E) / 63 m (DL-E)
- Liquid temp. : -20~140 ℃
- Motor power : 5.5~22 kW
- IP class : IP55
- Dis. Sizes : 40~200 mm
- Max. operating pressure
  - Standard : 16bar

Standard materials
(For other materials, pls consult)
- Casing : Gray Cast Iron
- Impeller : Gray Cast Iron
- Shaft : Stainless Steel

Applications
- For pumping heating water, water-glycol mixtures and cooling and cold water without abrasive substances in heating, cold water and cooling water systems

Features
- Motors with IE2 technology for higher efficiency as standard
- Energy savings due to integrated electronic control
- Integrated dual pump management
- Integrated full motor protection (PTC thermistor sensor) with trip electronics

Product range

Glanded in-line pumps

Series
IPL

Technical data
(For further details, pls consult)
- 60Hz
  - Q max. : 70 m³/h
  - H max. : 28 m
- 50Hz
  - Q max. : 70 m³/h
  - H max. : 28 m
- Liquid temp. : -10~120 ℃
- Motor power : 0.4~2.2 kW
- IP class : IP55
- Dis. Sizes : 32~80 mm
- Max. operating pressure
  - Standard : 10bar
  - Option : 16bar

Standard materials
(For other materials, pls consult)
- Casing : Gray Cast Iron
- Impeller : Engineering Plastic
- Shaft : Stainless Steel

Applications
- For pumping heating water, water-glycol mixtures and cooling and cold water without abrasive substances in heating, cold water and cooling water systems

Features
- High efficiency motor :IE2 Class as standard
- Standard condensate drainage holes in the motor housings and lanterns
- Bidirectional mechanical seal with forced flushing
- Easy to install due to feet with threaded holes on pump housing

Product range

Vertical, in-line pumps

Series
PIL

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 480 m³/h
  - H max. : 55 m
- 50hz
  - Q max. : 480 m³/h
  - H max. : 40 m
- Liquid temp. : 0~120 ℃
- Motor power : 0.75~75 kW
- IP class : IP54
- Dis. Sizes : 32~200 mm
- Max. operating pressure
  - Standard : 16bar
  - Option : 20bar

Standard materials
(For other materials, pls consult)
- Casing : Gray Cast Iron
- Impeller : Gray Cast Iron
- Shaft : Stainless Steel

Applications
- Handling cold and hot water in central heating, domestic, chilled system
- Cooling tower, condenser water systems

Features
- Spiral volute of inline design
- Easy installation and maintenance
- Compact design : aluminun frame (But, cast iron for above 15HP)
- Pump and motor, integrated : perfect coupling
- High reliability bearing in TEFC motor

Product range

Axially split case pumps

Series
SCP

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 3500 m³/h
  - H max. : 230 m
- 50hz
  - Q max. : 3200 m³/h
  - H max. : 180 m
- Liquid temp. : 0~80 ℃
- Motor power : 11~1000 kW
- IP class : IP54
- Dis. Sizes : 100~400 mm
- Max. operating pressure
  - Standard : 16bar/25bar
  - Option : 25bar

Standard materials
(For other materials, pls consult)
- Casing : Gray Cast Iron
- Impeller : Bronze
- Shaft : Stainless Steel

Applications
- Pumping heating water in accordance with VDI 2035, water/glycol mixtures, cooling/cold water and process water
- Applications in municipal water supply, irrigation, building services, general industry, power stations, etc.

Features
- High efficiency : 3D welded impeller
- Low NPSHre
- Easy maintenance
- Double suction design
- Vertical version optional
- Various material available

Product range

Sectional pumps

Series
RN, HS, PB/IPB, PJ Plurovanes

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 1000 m³/h
  - H max. : 1100 m
- 50hz
  - Q max. : 1000m³/h
  - H max. : 1100m
- Liquid temp. : 0~120 ℃
- Motor power : 5.5~1800 kW
- IP class : IP54
- Dis. Sizes : DN40~DN250

Standard materials
(For other materials, pls consult)
- Casing : Gray Cast Iron
- Impeller : Gray Cast Iron
- Shaft : Stainless Steel

Applications
- For industrial use in high-pressure applications
- Metal industry and Mine drainage
- Desalination plants
- Boiler supply
- Fire fighting
- High-pressure cleaning
- Water supply

Features
- Modular design ensures pump versions in a variety of materials and versions which can be adapted to meet customer demands precisely
- Hydraulic pressure compensation relieves load on bearings and ensures a longer lifetime.
- Multiple optional pressure connections allow different pressures to be supplied from a single pump

Product range

Sewage pumps

Series
KN, SW

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 8000 m³/h
  - H max. : 70 m
- 50hz
  - Q max. : 8000m³/h
  - H max. : 70m
- Liquid temp. : 0~60 ℃
- Motor power : 3.7~1500 kW
- IP class : IP54
- Dis. Sizes : DN50~DN600
- Ball passage : 5~20mm

Standard materials
(For other materials, pls consult)
- Casing : Ductile iron
- Impeller : Ductile iron
- Shaft : High tensile steel

Applications
- Municipal sewage and water supply services
- Juice application for sugar industries
- Paper and pulp industry
- Sewage treatment plants / Effluent treatment plants
- Irrigation

Features
- Back pull out construction
- High quality of cast steel
- Non-clog impeller design
- Large solid handling capacity
- Replaceable sleeve
- Thrust bearings
- Flanges in accordance with IS1538

Product range

Vertical Axial & Mixed Flow turbine pumps

Series
VMF, CNE, VAF

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 30,000 m³/h
  - H max. : 450 m
- 50hz
  - Q max. : 30,000 m³/h
  - H max. : 450 m
- Liquid temp. : 0~80 ℃
- Motor power : 37~1800 kW
- IP class : IP54
- Dis. Sizes : DN100~DN2000

Standard materials
(For other materials, pls consult)
- Casing : Gray Cast Iron
- Impeller : Gray Cast Iron
- Shaft : Stainless Steel

Applications
- For industrial or municipal water supply
- Irrigation
- Fire fighting
- Cooling water supply
- Dewatering and flood control

Features
- Minimum surface area needed
- High hydraulic efficiency
- Submerged pump hydraulics
- Pull out / Non-Pull Out Design
- Design to order as per customer specifications
- Turnkey project available

Product range

Standard glanded pumps

Series
NL

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 500 m³/
  - H max. : 90 m
- 50hz
  - Q max. : 500 m³/
  - H max. : 90 m
- Liquid temp. : -20~120 ℃
- Motor power : 0.4~160 kW
- IP class : IP54
- Dis. Sizes : 32~150 mm
- Max. operating pressure
  - Standard : 10bar/16bar

Standard materials
(For other materials, pls consult)
- Casing : Gray Cast Iron
- Impeller : Gray Cast Iron
- Shaft : Stainless Steel

Applications
- Pumping clean or slightly contaminated water (max. 20 ppm) without solid matter for circulation, transfer and pressure boosting purposes
- Pumping heating water, water/ glycol mixtures, cooling/cold water and process water
- Municipal water supply, irrigation, building services, general industry, power stations, etc.

Features
- 3D impeller design
- Easy maintenance : Stuffing Box in compliant with DIN EN 733
- A wide range of operating point
- Back pull-out design
- Low noise /vibration operation
- High efficiency and durability

Product range

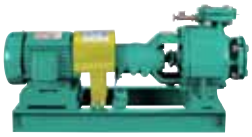
Standard glanded pumps
(Large Sized End Suction Pump)
Series
NLG

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 1600 m³/h
  - H max. : 100 m
- 50hz
  - Q max. : 1600 m³/h
  - H max. : 100 m
- Liquid temp. : -20~120 ℃
- Motor power : 22~350 kW
- IP class : IP54
- Dis. Sizes : 150~300 mm
- Max. operating pressure
  - Standard : 16bar/25bar

Standard materials
(For other materials, pls consult)
- Casing : Gray Cast Iron
- Impeller : Gray Cast Iron
- Shaft : Stainless Steel

Applications
- Pumping clean or slightly contaminated water (max. 20 ppm) without solid matter, for circulation, transfer and pressure boosting
- Pumping heating water, water/ glycol mixtures, cooling/cold water and process water
- Applications in municipal water supply, irrigation, building services, general industry, power stations, etc.

Features
- Higher efficiency IE2 motor as standard
- Worldwide availability of standard motors and m/ seals
- Burgmann mechanical seal with conical seal chamber
- Branded shaft protection SPM connections for vibration and temperature sensors
- Shaft deflection in accordance with the DIN ISO 5199
- Greased for life 2Z oversized ball bearings



Product range

Vortex Pumps

Series
PVH

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 180 m³/h
  - H max. : 30 m
- 50hz
  - Q max. : 150 m³/h
  - H max. : 20 m
- Liquid temp. : 0~80 ℃
- Motor power : 1.5~30 kW
- IP class : IP54
- Dis. Sizes : 40~100 mm
- Max. operating pressure
  - Standard : 10bar

Standard materials
(For other materials, pls consult)
- Casing : Gray Cast Iron
- Impeller : Gray Cast Iron
- Shaft : Chromium Molybdenum Steels

Applications
- Sludge, paper, pulp transfer
- Pumping sewage, waste water

Features
- Hydraulic optimized impeller
- Back pull-out structure
- Volute casing : reducing friction loss
- Perfect balancing : safe operation
- Back vane in impeller
- Deliver sewage/solid containing liquid
- Vortex flow will minimize damage on solid
- Teflon Gland Packing ensures a long lifecycle

Product range

Westco Pumps

Series
PSW

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 15 m³/h
  - H max. : 140 m
- 50hz
  - Q max. : 12 m³/h
  - H max. : 100 m
- Liquid temp. : 0~60 ℃
- Motor power : 2.2~15 kW
- IP class : IP54
- Dis. Sizes : 40~50 mm
- Max. operating pressure
  - Standard : 10bar/20bar

Standard materials
(For other materials, pls consult)
- Casing : Gray Cast Iron
- Impeller : Brass
- Shaft : Stainless steel

Applications
- Boiler supply
- Waterworks
- Fire extinguish system
- Sprinkler system
- Various machinery application

Features
- Compact Design
- Back pull-out design
- Regenerative turbine type impeller(Westco)
- High durability
- Reducing friction loss of impeller
- Ball Bearing with no lubrication necessary
- Easy maintenance

Product range

ANSI Process Pumps

Series
PCP

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 680 m³/h
  - H max. : 210 m
- 50hz
  - Q max. : 500 m³/h
  - H max. : 120m
- Liquid temp. : 0~120 ℃
- Motor power : 1.5~160 kW
- IP class : IP54
- Dis. Sizes : 25~200 mm
- Max. operating pressure
  - Standard : 150lb
  - Option : 300lb

Standard materials
(For other materials, pls consult)
- Casing : Stainless steel
- Impeller : Stainless steel
- Shaft : Stainless steel

Applications
- Application in Chemical Industry, Petroleum Refinery, Petrochemical Industry, plan facility

Features
- API 610 standardised design
- High efficiency and low pressure of Stuffing Box
- Closed Impeller
- Easy maintenance : back pull out design
- Easy alignment : no Bearing Housing Adapter
- Long life time : Labryinth Type Bearing Housing Sealing
- Radial Balance

Product range

End Suction Pump

Series
PSV

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 900 m³/h
  - H max. : 80 m
- 50hz
  - Q max. : 600 m³/h
  - H max. : 60m
- Liquid temp. : 0~100 ℃
- Motor power : 0.75~200 kW
- IP class : IP54
- Dis. Sizes : 40~200 mm
- Max. operating pressure
  - Standard : 10bar
  - Option : 20bar

Standard materials
(For other materials, pls consult)
- Casing : Gray Cast Iron
- Impeller : Gray Cast Iron
- Shaft : Chromium Molybdenum Steels

Applications
- Pumping clean or slightly contaminated water
- Applications in general industry and water supply
- Irrigation and marine machinery application
- Sprinkeler system
- Cooling and heating water circulation

Features
- 3D impeller design
- Easy maintenance : Stuffing Box in compliant with KS B 7501 (ISO3069)
- A wide range of operating point
- Back pull-out structure
- High efficiency and durability
- Shell core of impeller : reducing hydraulic loss

Product range

Multi-Stage Ring Section pumps

Series
PMT

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 300 m³/h
  - H max. : 250 m
- 50hz
  - Q max. : 240 m³/h
  - H max. : 200m
- Liquid temp. : 0~80 ℃
- Motor power : 1.5~200 kW
- IP class : IP54
- Dis. Sizes : 40~125 mm
- Max. operating pressure
  - Standard : 10bar/20bar
  - Option : 16bar/40bar

Standard materials
(For other materials, pls consult)
- Casing : Gray Cast Iron
- Impeller : Gray Cast Iron
- Shaft : Chromium Molybdenum Steels

Applications
- Raw water intake, Circulation, drainage, pressire boosting
- Water supply, cooling/heating water
- Fire extinguish system
- Boiler supply
- Agriculture
- Sprinkler system

Features
- Compact design and energy saving
- Easy piping and installation
- Flexible sealing : g/packing or m/seal
- No lubrication : ball bearing
- Balancing hole in impeller
- A wide range of operating point
- Back pull-out design
- Minimised axial thrust by balancing hole

Product range

Multi-Stage Ring Section pumps

Series
PMV

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 350 m³/h
  - H max. : 200 m
- 50hz
  - Q max. : 300 m³/h
  - H max. : 150 m
- Liquid temp. : 0~80 ℃
- Motor power : 11~200 kW
- IP class : IP54
- Dis. Sizes : 80~150 mm
- Max. operating pressure
  - Standard : 10bar/20bar
  - Option : 16bar/40bar

Standard materials
(For other materials, pls consult)
- Casing : Gray Cast Iron
- Impeller : Gray Cast Iron
- Shaft : Chromium Molybdenum Steels

Applications
- Raw water intake, Circulation, drainage, pressire boosting
- Water supply, cooling/heating water
- Fire extinguish system
- Boiler supply
- Agriculture
- Sprinkler system

Features
- Ball bearing : minimised End play and lubrication not necessary
- Pressure reducing pipe for above 3 stage pumps
- RF flange
- A wide range of operating point
- Low noise /vibration
- Flexible sealing : g/packing or m/seal
- Balancing hole in impeller : reduced axial thrust

Product range

Submersible drainage pumps

Series
PD (small)

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 200 ℓ/min
  - H max. : 11 m
- 50hz
  - Q max. : 180 ℓ/min
  - H max. : 7.5 m
- Liquid temp. : 0~40 ℃
- Motor power : 0.2~0.35 kW
- IP class : IPX8
- Dis. Sizes : 20~32 mm
- Ball passage max. : 5 mm
- Max. operating pressure
  - Standard : 1.5bar

Standard materials
(For other materials, pls consult)
- Casing : mPPO
- Impeller : mPPO
- Shaft : Stainless steel

Applications
- Basement drainage
- Sewage systems drainage
- Water tank cleaning

Features
- Perfect drain
- High durability
- Corrosion resistant
- Excellent motor cooling
- Excellent passage
- Double seal : M/Seal & Oil Seal
- Compact and light design
- Flexible piping
- Space efficiency

Product range

Submersible drainage pumps

Series
PD-G

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 50 ℓ/min
  - H max. : 5 m
- 50hz
  - Q max. : 45 ℓ/min
  - H max. : 3.5 m
- Liquid temp. : 0~40 ℃
- Motor power : 0.8 kW
- IP class : IPX8
- Dis. Sizes : 20~25 mm
- Ball passage max. : 5 mm
- Max. operating pressure
  - Standard : 1bar

Standard materials
(For other materials, pls consult)
- Casing : Poly Propylene
- Impeller : Polybutylene Terephthalate
- Shaft : SM20C+STS316L

Applications
- General drainage and wastewater drainage
- Bathroom, aquarium and water tank cleaning
- Sewage disposal for sink
- Underground drainage

Features
- Corrosion resistant materials
- Lowest water
- Flexible installation
- Compact and portable
- Easy maintenance by easy disassembling of strainer
- Safety design for motor :Built with Thermal Protector (T.P)

Product range

Submersible drainage pumps

Series
PD-S

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 390 ℓ/min
  - H max. : 18 m
- 50hz
  - Q max. : 320 ℓ/min
  - H max. : 14 m
- Liquid temp. : 0~40 ℃
- Motor power : 0.6~0.95 kW
- IP class : IPX8
- Dis. Sizes : 50 mm
- Ball passage max. : 5 mm
- Max. operating pressure
  - Standard : 2.5bar

Standard materials
(For other materials, pls consult)
- Casing : Poly Propylene
- Impeller : PBT
- Shaft : SM20C+STS316L

Applications
- Sea Water Drainage
- Aquarium, fish farm, etc

Features
- Corrosion resistant : Aluminum Galvanic Anode
- Leak-proof : Double Mechanical Seal/Epoxy molding cable assembly
- Automatic Operation : Float Switches (PD-S751MA)

Product range

Submersible drainage pumps

Series
PD-A

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 390 ℓ/min
  - H max. : 18 m
- 50hz
  - Q max. : 320 ℓ/min
  - H max. : 13 m
- Liquid temp. : 3~35 ℃
- Motor power : 0.6~0.95 kW
- IP class : IP68
- Dis. Sizes : 50 mm
- Ball passage max. : 5 mm
- Max. operating pressure
  - Standard : 2.5bar

Standard materials
(For other materials, pls consult)
- Casing : Poly Propylene
- Impeller : PBT
- Shaft : SM20C+STS410

Applications
- Wastewater and underground drainage for farm, septic tank, agriculture, gardening

Features
- Corrosion resistant materials
- Light weight and portable
- Leak-proof : perfect sealing by triple structure
- Integrated design of casing and discharge side
- Safety design for motor built with Thermal Protector (T.P)
- Automatic operation by Float switch

Product range

Submersible drainage pumps (Vortex type)
Series
PDV-A

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 380 ℓ/min
  - H max. : 16 m
- 50hz
  - Q max. : 320 ℓ/min
  - H max. : 12 m
- Liquid temp. : 0~40 ℃
- Motor power : 0.6~0.95 kW
- IP class : IP68
- Dis. Sizes : 50 mm
- Ball passage max. : 32 mm
- Max. operating pressure
  - Standard : 2.5bar

Standard materials
(For other materials, pls consult)
- Casing : Poly Propylene
- Impeller : Brass(CuZn39Pb2)
- Shaft : SM20C+STS410

Applications
- Wastewater and underground drainage for farm, septic tank , agriculture, gardening

Features
- Corrosion resistant materials
- Light weight and portable
- Leak-proof : perfect sealing by triple structure
- Integrated design of casing and discharge side
- Motor built with T.P or O.L.P for safety
- Auto on/off by float or level switch.
- Good to drain masses by Vortex structure

Product range

Submersible drainage pumps (Stainless steel)
Series
TS

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 220 ℓ/min
  - H max. : 13 m
- 50hz
  - Q max. : 217 ℓ/min
  - H max. : 11m
- Liquid temp. : -5~40 ℃
- Motor power : 0.35~0.6 kW
- IP class : IPX8
- Dis. Sizes : 32~40 mm
- Ball passage max. : 5 mm
- Max. operating pressure
  - Standard : 2bar

Standard materials
(For other materials, pls consult)
- Casing : Stainless steel
- Impeller : Stainless steel
- Shaft : Stainless steel

Applications
- General drainage for clear or slightly muddy water
- For tanks, sumps or pits
- For overflows and flooding
- For basement stairways and basement areas
- From domestic areas (washing machine water, soapsuds)
- From small fountains, waterworks or streams

Features
- No fluid-related odours
- Easy installation
- High operational reliability
- TMW, TSW with turbulator for constantly clean pump sump
- Easy operation
- Float switch (depending on type)
- Non-return valve enclosed (depending on type)

Product range

Sewage / Wastewater, Vortex type
Series
PDV

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 400 ℓ/min
  - H max. : 12 m
- 50hz
  - Q max. : 317 ℓ/min
  - H max. : 10m
- Liquid temp. : 0~40 ℃
- Motor power : 0.3~0.95 kW
- IP class : IPX8
- Dis. Sizes : 32~50 mm
- Ball passage max. : 32 mm
- Max. operating pressure
  - Standard : 2bar

Standard materials
(For other materials, pls consult)
- Casing : Gray cast iron
- Impeller : Gray cast iron
- Shaft : Stainless steel

Applications
- Domestic sewage
- Sewage treatment plant, waste treatment

Features
- Stainless steel shaft as standard
- Leak-proof by double M/Seal and Oil Seal
- Motor protection by T·P
- Excellent wastewater transfer by vortex impeller

Product range

Wastewater lifting units
Series
DLV

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 200 ℓ/min
  - H max. : 9 m
- 50hz
  - Q max. : 130 ℓ/min
  - H max. : 6m
- Liquid temp. : 0~40 ℃
- Motor power : 0.3 kW
- IP class : IPX8
- Dis. Sizes : 32 mm
- Ball passage max. : max 20mm
- Max. operating pressure
  - Standard :1.5bar

Standard materials
(For other materials, pls consult)
- Casing : Gray Cast Iron
- Impeller : Gray Cast Iron
- Shaft : Stainless steel

Applications
- For drainage of showers, washbasins, washing machines/ dishwashers
- Pumping wastewater and drainage water which is free of faeces, fibres, grease and oil
- Pumping of non-aggressive rainwater

Features
- No odours : Silicon gasket sealing
- Easy assembling & dis-assembling by hinges
- High Durability : Bucket material (LLDPE)
- Vortex pump – Free passage (20mm)
- Easy maintenance
- Low noise

Product range

Submersible drainage pumps

Series
PD (large)

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 90 m³/hr
  - H max. : 48 m
- 50hz
  - Q max. : 75 m³/hr
  - H max. : 35.5 m
- Liquid temp. : -5~40 ℃
- Motor power : 1.5~15 kW
- IP class : IP68
- Dis. Sizes : 50~100 mm
- Ball passage max. : 8.5 mm

Standard materials
(For other materials, pls consult)
- Casing : Gray cast iron
- Impeller : Gray cast iron, Ductile cast iron
- Shaft : Stainless steel

Applications
- General drainage
- Sewage disposal system
- For small fountains or streams
- Agriculture, horticulture
- Underground drainage

Features
- Stainless steel shaft as standard
- Leak-proof by double M/Seal and Oil Seal
- Motor protection by T·P
- High reliability with Sic/Sic mechanical seal
- Long life time by cast iron.
- Auto on/off by float or level switch

Product range

Sewage / Wastewater pumps, non-clog type

Series
PDN

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 108 m³/hr
  - H max. : 30 m
- 50hz
  - Q max. : 96 m³/hr
  - H max. : 21 m
- Liquid temp. : -5~40 ℃
- Motor power : 1.5~7.5 kW
- IP class : IP68
- Dis. Sizes : 80~100 mm
- Ball passage max. : 50 mm

Standard materials
(For other materials, pls consult)
- Casing : Gray cast iron
- Impeller : Gray cast iron
- Shaft : Stainless steel

Applications
- Drainage for waste water at factories, and waste water treatment plant
- Delivery of sewage at Sewage treatment plant, human waste treatment
- Drainage for buildings
- Treatment utility Drainage

Features
- Stainless steel shaft as standard
- Leak-proof by Double M/Seal and Oil Seal
- Motor protection by T·P
- Excellent sludge transfer by non-clog type
- Safety design with built-in OLP (Overload protector)
- Various materials are available

Product range

Sewage / Wastewater pumps, cutter type

Series
PDC

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 80 m³/hr
  - H max. : 20 m
- 50hz
  - Q max. : 55 m³/hr
  - H max. : 14.5 m
- Liquid temp. : -5~40 ℃
- Motor power : 1.5~3.7 kW
- IP class : IP68
- Dis. Sizes : 80 mm
- Ball passage max. : 48 mm

Standard materials
(For other materials, pls consult)
- Casing : Gray cast iron
- Impeller : Gray cast iron
- Shaft : Stainless steel

Applications
- Drainage for waste water at factories, and waste water treatment plant
- Delivery of sewage at Sewage treatment plant, human waste treatment
- Drainage for buildings
- Treatment utility Drainage

Features
- Leak free by double faced m/seals
- Heat and corrosion resistance by m/seals of silicon carbide(SiC) and tungsten carbide (TC) . and
- Excellent lubrication
- A snap action bimetal device to protect from over current
- Cutter type impeller

Product range

Sewage / Wastewater pumps

Series
PDX

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 450 m³/hr
  - H max. : 28 m
- 50hz
  - Q max. : 370 m³/hr
  - H max. : 19 m
- Liquid temp. : -5~40 ℃
- Motor power : 3.7~30 kW
- IP class : IP68
- Dis. Sizes : 80 ~150 mm
- Ball passage max. : 23 mm

Standard materials
(For other materials, pls consult)
- Casing : Gray cast iron
- Impeller : Ductile cast iron
- Shaft : Chromium Molybdenum Steels

Applications
- Domestic sewage
- Sewage treatment plant, waste treatment

Features
- Easy to maintain with auto discharge connector
- Easy to transfer solids with vortex structure
- Transfer waste water from septic tank
- Various materials are available

Product range

General Contractor's pumps

Series
PDU

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 150 m³/hr
  - H max. : 59 m
- 50hz
  - Q max. : 125 m³/hr
  - H max. : 43 m
- Liquid temp. : -5~40 ℃
- Motor power : 3.7~15 kW
- IP class : IP68
- Dis. Sizes : 50 ~150 mm
- Ball passage max. : 8.5 mm

Standard materials
(For other materials, pls consult)
- Casing : Gray cast iron
- Impeller : Ductile cast iron
- Shaft : Stainless steel

Applications
- Construction site for civil engineering, buildings, tunnel, subway, sewage facilities

Features
- Powerful starting torque
- Light design
- Overheating protection
- Pumped water cools motor
- The top discharge arrangement : easy access into areas with space limitations
- Hose or pipe connection with coupling for each bore size

Product range

Sewage / Wastewater pumps

Series
PDG

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 1800 m³/hr
  - H max. : 40 m
- 50hz
  - Q max. : 1480 m³/hr
  - H max. : 27 m
- Liquid temp. : -5~40 ℃
- Motor power : 11~75 kW
- IP class : IP68
- Dis. Sizes : 150 ~500 mm
- Ball passage max. : 98 mm

Standard materials
(For other materials, pls consult)
- Casing : Gray cast iron
- Impeller : Ductile cast iron
- Shaft : Chromium Molybdenum Steels

Applications
- Drainage and wastewater transfer
- Factory, wastewater disposal plant, sewage treatment plant, combined treatment
- General drainage for buildings

Features
- Easy maintenance by auto discharge connector
- Minimize stopping-up of foreign materials
- Various materials are available

Product range

Sand and Gravel pumps

Series
PDS

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 780 m³/hr
  - H max. : 35 m
- 50hz
  - Q max. : 600 m³/hr
  - H max. : 23m
- Liquid temp. : -5~40 ℃
- Motor power : 5.5~75 kW
- IP class : IP68
- Dis. Sizes : 100 ~250 mm

Standard materials
(For other materials, pls consult)
- Casing : Gray cast iron
- Impeller : Steel Casting Chromium Molybdenum
- Shaft : Chromium Molybdenum Steels

Applications
- Gravel and sand delivery

Features
- High reliability with high stiffness material
- Excellent transfer of sand of remicon plant
- Discharging deposited soil
- Dredging operation in river and harbor

Product range

Submersible borehole pumps

Series
PLS

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 400 m³/h
  - H max. : 460 m
- 50hz
  - Q max. : 260 ℓ/min
  - H max. : 200 m
- Liquid temp. : 4~40 ℃
- Motor power : 0.75~22 kW
- IP class : IP68
- Dis. Sizes : 32~65 mm
- Max. operating pressure
  - Standard : 20bar

Standard materials
(For other materials, pls consult)
- Casing : Noryl
- Impeller : Noryl
- Shaft : Stainless Steel

Applications
- For industrial : textile, iron manufacturing, leather, gliding, beverage, food
- For agriculture : well, farm, fishery, greenhouse
- For drinking water : building, hotel, school, hospital, apartment
- Others : fire station, civil defense

Features
- Low current and reliability
- Easy maintenance
- Compact design
- Corrosion resistant Material
- Franklin Motor (USA)
- GE: for high head / HE: for medium head/ QE: for big flow

Product range

Submersible borehole pumps (Stainless steel)
Series
PSS

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 240 m³/hr
  - H max. : 800 m
- 50hz
  - Q max. : 240 m³/hr
  - H max. : 480m
- Liquid temp. : 4~40 ℃
- Motor power : 0.75~93 kW
- IP class : IP68
- Dis. Sizes : 32 ~150 mm
- Max. operating pressure
  - Standard : 20bar

Standard materials
(For other materials, pls consult)
- Casing : Stainless Steel
- Impeller : Stainless Steel
- Shaft : Stainless Steel

Applications
- Water supply from boreholes and rainwater storage tanks
- Municipal and industrial systems
- Sprinkling and irrigation;
- Pressure boosting; lowering the ground water level;
- Pumping of water without long-fibre or abrasive components

Features
- Compact design
- Excellent durability by NEMA standard bearings and all stainless steel
- A wide range of motor
- Improved performance and efficiency
- Easy maintenance
- High compatibility
- Flexible installation with both Vertical & Horizontal

Product range

Submersible borehole pumps (4" Plastinc impeller)
Series
PS4

Technical data
(For further details, pls consult)
- 60hz only
  - Q max. : 430 ℓ/min
  - H max. : 315 m
- Liquid temp. : 4~40 ℃
- Motor power : 0.75~5.5 kW
- IP class : IP68
- Dis. Sizes : 32 ~50 mm
- Max. operating pressure
  - Standard : 20bar

Standard materials
(For other materials, pls consult)
- Casing : Stainless Steel
- Impeller : Noryl
- Shaft : Stainless Steel

Applications
- For industrial : textile, iron manufacturing, leather, gliding, beverage, food
- For agriculture : well, farm, fishery, greenhouse
- For drinking water : building, hotel, school, hospital, apartment
- Others : fire station, civil defense

Features
- Excellent efficiency and performance
- Reliability by low loaded current
- Easy maintenance
- Compact design and easy installation
- High compatibility

Product range

Submersible borehole pumps (3" Plastinc impeller)
Series
PS3

Technical data
(For further details, pls consult)
- 60hz only
  - Q max. : 45 ℓ/min
  - H max. : 100 m
- Liquid temp. : 4~30 ℃
- Motor power : 0.37~0.75 kW
- IP class : IP58
- Dis. Sizes : 25 mm
- Max. operating pressure
  - Standard : 20bar

Standard materials
(For other materials, pls consult)
- Casing : Polyacetal
- Impeller : Noryl
- Shaft : Stainless Steel

Applications
- Pumping groundwater for general agricultural purpose
- Where the size of well is smaller than 4 inch

Features
- Corrosion resistant materials
- Normal Speed(3400rpm) motor
- Reduced product faultiness
- High efficiency and performance

Product range

Submersible mixer
Series
EMU TR

Technical data
(For further details, pls consult)
- Thrust: 45 - 6620 N
- Liquid temp. : 40 ℃
- IP class : IP68

Standard materials
(For other materials, pls consult)
- Housing : A 48 Class 35/40 B (EN-GJL-250)
- Propeller: PUR or AISI 316TI (1.4571)

Applications
- Turbulation of solids in rain spillway basin and sump
- Destruction of floating sludge layers
- Use in sludge tanks for flow generation, suspension of solids, homogenisation
- Further applications in industry, agriculture and water supply

Features
- Low power consumption
- Light 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
- Max. immersion depth: 20 m

Product range

Home booster pumps (Automatic controlled)
Series
PE

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 75 ℓ/min
  - H max. : 26 m
- 50hz
  - Q max. : 58 ℓ/min
  - H max. : 18m
- Liquid temp. : 0~35 ℃
- Motor power : 350 W
- IP class : IPx6
- Dis. Sizes : 25 mm
- Max. operating pressure
  - Standard : 4bar

Standard materials
(For other materials, pls consult)
- Casing : Engineering Plastic (mPPO glassfiber 30%)
- Impeller : Engineering Plastic (mPPO glassfiber 20%)
- Shaft : Stainless Steel

Applications
- Water supply and Pressure boosting
- Small residence and building

Features
- Energy saving
- Automatic control (3 speed operation)
- Electric control by pressure & thermal sensor
- Corrosion-resistant materials
- Low noise operation
- Protection function : Dry running, Frozen, High pressure & temp.
- LED panel

Product range

Home booster pumps (upward)
Series
PB (upward)

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 4.6 m³/hr
  - H max. : 30 m
- 50hz
  - Q max. : 3.3 m³/hr
  - H max. : 20 m
- Liquid temp. : 0~60 ℃
- Motor power : 400~600 W
- IP class : IPx4
- Dis. Sizes : 25~32 mm
- Max. operating pressure
  - Standard : 4.5bar

Standard materials
(For other materials, pls consult)
- Casing : Gray cast iron with coating
- Impeller : Noryl
- Shaft : Stainless Steel

Applications
- Water supply and Pressure boosting
- Apartment, villa, small residences

Features
- Flow sensor
- Auto/Off/Manual optional operation
- Low noise operation
- Stable & constant pressure
- Self-priming up to 3m
- Motor built with thermal protector for safety

Product range

Home booster pumps (downward)
Series
PB (downward)

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 5.5 m³/hr
  - H max. : 28 m
- 50hz
  - Q max. : 4.5 m³/hr
  - H max. : 20 m
- Liquid temp. : 0~80 ℃
- Motor power : 135~600 W
- IP class : IPx4
- Dis. Sizes : 15~32 mm
- Max. operating pressure
  - Standard : 4.5bar

Standard materials
(For other materials, pls consult)
- Casing : Gray cast iron with coating
- Impeller : Noryl
- Shaft : Stainless Steel

Applications
- Water supply and Pressure boosting
- Rooftop tank water transfer
- Apartment, villa, small residences

Features
- Low noise operation
- Constant pressure by flow switch
- In compliant with CE
- TEFC motor
- Engineering Plastic for hydraulic parts (PB-S250MA)

Product range

Horizontal, multistage centrifugal pumps
Series
MHI

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 33 m³/hr
  - H max. : 100 m
- 50hz
  - Q max. : 26 m³/hr
  - H max. : 69m
- Liquid temp. : -15~110 ℃
- Motor power : 0.55~2.2 kW
- IP class : IPx4
- Dis. Sizes : 25~40 mm
- Max. operating pressure
  - Standard : 10bar

Standard materials
(For other materials, pls consult)
- Casing : Stainless Steel
- Impeller : Stainless Steel
- Shaft : Stainless Steel

Applications
- Water supply and pressure boosting
- Commerce and industry
- Cooling water circulation systems
- Washing and sprinkling systems

Features
- All stainless steel (STS304)
- High temp and high pressure applicable (Max. 110℃, 10bar)
- Compact design
- KTW and WRAS approval
- Close coupled
- Priming nozzle integrated
- Low noise and vibration by Mono Shaft

Product range

Booster pumps with inverter

Series
MHIKE

Technical data
(For further details, pls consult)
- 60hz / 50hz
  - Q max. : 16 m³/hr
  - H max. : 70 m
- Liquid temp. : -15~110 ℃
- Motor power : 0.75 ~ 1.85 kW
- IP class : IPx4
- Dis. Sizes : 25~32 mm
- Max. operating pressure
  - Standard : 10bar

Standard materials
(For other materials, pls consult)
- Casing : Stainless Steel
- Impeller : Stainless Steel
- Shaft : Stainless Steel

Applications
- Water supply and Pressure boosting
- Sprinkler systems

Features
- Energy saving by integrated inverter
- Various operation mode
- Various protection function
- Customer optimized system setting : speed and pressure
- Easy operation by display screen
- High durability by stainless steel pump

Product range

Booster pumps with inverter (light version)

Series
PBI-L

Technical data
(For further details, pls consult)
- 60hz / 50hz
  - Q max. : 10 m³/hr
  - H max. : 80 m
- Liquid temp. : 0~80 °C for 2/4 Series / 0~35℃ for 3/6 Series
- Motor power : 0.75~1.1 kW
- IP class : IPx4
- Dis. Sizes : 25 mm
- Tank : 2ℓ
- Max. operating pressure
  - Standard : 10bar

Standard materials
(For other materials, pls consult)
- Casing : Stainless Steel
- Impeller : Stainless Steel
- Shaft : Stainless Steel

Applications
- Water supply and Pressure boosting
- Sprinkler systems

Features
- Constant Pressure through speed control
- Automatic operation by pressure setting
- Manual operation by frequency setting
- Various Protection funtion
- Extremely Wide control range

Product range

Booster pumps with inverter (Dual pumps)

Series
MHIKE-D

Technical data
(For further details, pls consult)
- 60hz / 50hz
  - Q max. : 30 m³/hr
  - H max. : 80 m
- Liquid temp. : -15~80 °C
- Motor power : 1.5kW x 2ea ~ 1.85kW x 2ea
- IP class : IPx4
- Dis. Sizes : 50~65 mm
- Tank : 4 ℓ
- Max. operating pressure
  - Standard : 10bar

Standard materials
(For other materials, pls consult)
- Casing : Stainless Steel
- Impeller : Stainless Steel
- Shaft : Stainless Steel

Applications
- Water supply and Pressure boosting
- Sprinkler systems

Features
- Energy saving by integrated inverter
- Various operation mode
- Various protection function
- Customer optimized system setting : speed and pressure
- Easy operation by display screen
- High durability by stainless steel pump

Product range

Self Priming Centrifugal pump with Inverter

Series
PUI-S

Technical data
(For further details, pls consult)
- 60hz / 50hz
  - Q max. : 18 m³/hr
  - H max. : 27 m
- Liquid temp. : 0~80 °C
- Motor power : 1.5 kW
- IP class : IPx4
- Dis. Sizes : 50 mm
- Tank : 2 ℓ
- Max. operating pressure
  - Standard : 4bar

Standard materials
(For other materials, pls consult)
- Casing : Poly Propylene
- Impeller : Engineering Plastic (mPPO glassfiber 30%)+STS304
- Shaft : SM20C+STS316

Applications
- Water supply for potable, domestic water (without flooded suction)

Features
- Self priming (Max.6m)
- Corrosion resistant Material
- Integrated-Inverter controlled
- Various Protection and Functions
- Reliable & Safe design
- Various installation directions

Product range

Booster pumps with contral panels and dual pumps
Series
MHIKE-W

Technical data
(For further details, pls consult)
- 60hz / 50hz
  - Q max. : 36 m³/hr
  - H max. : 70 m
- Liquid temp. : -15~80 °C
- Motor power : 2.2kW x 2ea ~ 2.5kW x 2ea
- IP class : IPx4
- Dis. Sizes : 50~65 mm
- Max. operating pressure
  - Standard : 10bar

Standard materials
(For other materials, pls consult)
- Casing : Stainless Steel
- Impeller : Stainless Steel
- Shaft : Stainless Steel

Applications
- Water supply and Pressure boosting
- Sprinkler systems

Features
- Energy saving by integrated inverter
- Various operation mode
- Various protection function
- Customer optimized system setting : speed and pressure
- Easy operation by display screen
- High durability by stainless steel pump

Product range

Booster pumps with contral panels and triple pumps
Series
MHIKE-T

Technical data
(For further details, pls consult)
- 60hz / 50hz
  - Q max. : 50 m³/hr
  - H max. : 70 m
- Liquid temp. : -15~80 °C
- Motor power : 2.2kW x 3ea ~ 2.5kW x 3ea
- IP class : IPx4
- Dis. Sizes : 65~65 mm
- Max. operating pressure
  - Standard : 10bar

Standard materials
(For other materials, pls consult)
- Casing : Stainless Steel
- Impeller : Stainless Steel
- Shaft : Stainless Steel

Applications
- Water supply and Pressure boosting
- Sprinkler systems

Features
- Energy saving by integrated inverter
- Various operation mode
- Various protection function
- Customer optimized system setting : speed and pressure
- Easy operation by display screen
- High durability by stainless steel pump

Product range

Booster pumps with large tank
Series
PBE

Technical data
(For further details, pls consult)
- 60hz only
  - Q max. : 10 m³/hr
  - H max. : 43 m
- Liquid temp. : 0~80 °C
- Motor power : 0.5~1.1 kW
- IP class : IPx4
- Dis. Sizes : 25 mm
- Tank : 20ℓ (202LMA) / 50ℓ (203/402/403MLA)
- Max. operating pressure
  - Standard : 6.5bar

Standard materials
(For other materials, pls consult)
- Casing : Stainless Steel
- Impeller : Stainless Steel
- Shaft : Stainless Steel

Applications
- Various water supply in medium sized houses, building, vilas

Features
- Horizontal multi-stange stainless steel pump adopted
- Corrosion resistant material
- Low noise and vibration
- High quality & environment friendly product

Product range

Booster pumps, westco type (with small tank)
Series
PW (with small tank)

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 3300 ℓ/hr
  - H max. : 26 m
- 50hz
  - Q max. : 2400 ℓ/hr
  - H max. : 24m
- Liquid temp. : 0~40 °C
- Motor power : 2.2kW x 2ea
- IP class : IPx4
- Dis. Sizes : 20~30 mm
- Tank : 1.5 ℓ
- Max. operating pressure
  - Standard : 3.5bar

Standard materials
(For other materials, pls consult)
- Casing : Gray cast iron
- Impeller : Brass
- Shaft : Stainless Steel

Applications
- Water supply and pressure boosting
- Small residences and buildings

Features
- Self-Priming
- Automatic operation by Pressure Switch
- Constant pressure
- High Pressure with low power
- Save maintenance cost of pressure switch

Product range

Booster pumps , westco type (self-priming)
Series
PW (without tank)

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 6600 ℓ/hr
  - H max. : 63 m
- 50hz
  - Q max. : 4620 ℓ/hr
  - H max. : 58 m
- Liquid temp. : 0~40 °C
- Motor power : 200~2200 W
- IP class : IPx4
- Dis. Sizes : 20~40 mm
- Max. operating pressure
  - Standard : 10bar

Standard materials
(For other materials, pls consult)
- Casing : Gray cast iron
- Impeller : Brass
- Shaft : Stainless Steel

Applications
- Water supply and pressure boosting
- Small residences and buildings

Features
- Energy saving
- Low noise operation
- TEFC motor
- Easy maintenance
- Excellent motor cooling function
- High Pressure with low power
- Save maintenance cost of pressure switch

Product range

Booster pumps , westco type (with medium tank)
Series
PW (with medium tank)

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 2100 ℓ/hr
  - H max. : 24 m
- 50hz
  - Q max. : 2400 ℓ/hr
  - H max. : 24m
- Liquid temp. : 0~40 °C
- Motor power : 350 W
- IP class : IPx4
- Dis. Sizes : 25 mm
- Tank : 15 ℓ
- Max. operating pressure
  - Standard : 3.5bar

Standard materials
(For other materials, pls consult)
- Casing : Gray cast iron
- Impeller : Brass
- Shaft : Stainless Steel

Applications
- Water supply and pressure boosting
- Small residences and buildings

Features
- Self-Priming
- Automatic Operation by Pressure Switch
- Constant pressure
- High Pressure with low power
- Save maintenance cost of pressure switch

Product range

Booster pumps with large tank (for high head)
Series
PW (with large tank)

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 5500 ℓ/hr
  - H max. : 45 m
- 50hz
  - Q max. : 4620 ℓ/hr
  - H max. : 58 m
- Liquid temp. : 0~40 °C
- Motor power : 2200 W
- IP class : IPx4
- Dis. Sizes : 30~40 mm
- Tank : 20~80 ℓ
- Max. operating pressure
  - Standard : 6.5bar

Standard materials
(For other materials, pls consult)
- Casing : Gray cast iron
- Impeller : Brass
- Shaft : Stainless Steel

Applications
- Water supply and pressure boosting
- Small residences and buildings

Features
- Self-Priming
- Automatic Operation by Pressure Switch
- Constant pressure
- Big flow & deep well application
- Applicable for uplands where the water pressure unstable
- Roof top tank not necessary

Product range

Booster pumps , westco type (with flow sensor)
Series
PWS

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 2100 ℓ/hr
  - H max. : 19 m
- 50hz
  - Q max. : 1080 ℓ/hr
  - H max. : 25 m
- Liquid temp. : 0~40 °C
- Motor power : 350 W
- IP class : IPx4
- Dis. Sizes : 20~25 mm
- Tank : 1.5 ℓ
- Max. operating pressure
  - Standard : 3bar

Standard materials
(For other materials, pls consult)
- Casing : Gray cast iron
- Impeller : Brass
- Shaft : Stainless Steel

Applications
- Water supply and pressure boosting
- Small residences and buildings

Features
- Self-Priming
- Automatic Operation by Pressure Switch
- Constant pressure by flow sensor (reducing on/off cycle)
- Reducing power consupmtion and long lifetime

Product range

Booster pumps, westco type (with special materials)
Series
PW-S

Technical data
(For further details, pls consult)
- 60hz only
  - Q max. : 2100 ℓ/hr
  - H max. : 24 m
- Liquid temp. : 0~40 °C
- Motor power : 350 W
- IP class : IPx4
- Dis. Sizes : 25 mm
- Tank : 1.5 ℓ
- Max. operating pressure
  - Standard : 3.5bar

Standard materials
(For other materials, pls consult)
- Casing : Bronze Casting
- Impeller : Brass
- Shaft : Stainless Steel

Applications
- Water supply and pressure boosting
- Small residences and buildings

Features
- Corrosion resistant materials
- Compact Design
- Portable light weight
- Easy installation and maintenance (light weight)
- Good compatibility with the existing cast iron version
- Protection function (temp. sensor)

Product range

Booster pumps, westco type (non self-priming)
Series
PWN

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 1800 ℓ/hr
  - H max. : 70 m
- 50hz
  - Q max. : 1380 ℓ/hr
  - H max. : 24m
- Liquid temp. : 0~40 °C / 0~95 °C (400/401M)
- Motor power : 350~400 W
- IP class : IPx4
- Dis. Sizes : 15 mm
- Max. operating pressure
  - Standard : 10bar

Standard materials
(For other materials, pls consult)
- Casing : Gray cast iron
- Impeller : Brass
- Shaft : Stainless Steel

Applications
- General pressure boosting
- Automatic vending machine (PWN-350M)
- Boiler supply, industrial washing machine (PWN-351M)
- Steam boiler, high pressure machinery application

Features
- High Pressure with low power
- Corrosion resistant materials (PWN-350M) (bronze casing)
- Easy installation and long life time
- Applicable for high head and low flow operation
- Simple structure
- Low flow at high head

Product range

Handy pumps
Series
PF

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 1800 ℓ/hr
  - H max. : 4 m
- 50hz
  - Q max. : 1560 ℓ/hr
  - H max. : 4m
- Liquid temp. : 0~40 °C
- Motor power : 40 W
- IP class : IPx2
- Dis. Sizes : 25 mm
- Max. operating pressure
  - Standard : 0.7bar

Standard materials
(For other materials, pls consult)
- Casing : Gray cast iron
- Impeller : Noryl
- Shaft : Stainless Steel

Applications
- Portable water supply
- Foriculture, car wash, laundry, etc

Features
- Light and Handy
- Multi purpose usage

Product range

Multi purpose submersible circulation pumps
Series
AP

Technical data
(For further details, pls consult)
- 60hz only
  - Q max. : 4800 ℓ/hr
  - H max. : 5 m
- Liquid temp. : 0~40 °C
- Motor power : 130 W
- IP class : IPx8
- Dis. Sizes : 20 mm
- Max. operating pressure
  - Standard : 0.8bar

Standard materials
(For other materials, pls consult)
- Body : ABS
- Impeller : POM + Magnet
- Shaft : Ceramic

Applications
- Various sea water application (aquarium, rusty application)
- Agriculture
- Further application for weak acidic or alkaline (confirmation necessary)

Features
- Corrosion resistant materials
- Non-Seal type : leakage prevention
- Flexible installation
- Excellent motor protection

Product range

Universal pumps

Series
PU

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 57480 ℓ/hr
  - H max. : 32 m
- 50hz
  - Q max. : 16200 ℓ/hr
  - H max. : 21 m
- Liquid temp. : 0~40 °C
- Motor power : 350~2200 W
- IP class : IPx4
- Dis. Sizes : 32~80 mm
- Max. operating pressure
  - Standard : 5bar

Standard materials
(For other materials, pls consult)
- Casing : Gray cast iron
- Impeller : Brass
- Shaft : SM20C+STS430

Applications
- Agricultural use
- Industrial use

Features
- TEFC motor
- Plug for chemical insert attached (PU-950, 951, 955, 956M)
- Stainless wear plate : corrosion resistant (PU-952M)
- 3 inch piping for big flow (PU-2300M(I))

Product range

Universal pumps (non self-priming)

Series
PUN

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 37 ℓ/hr
  - H max. : 32 m
- 50hz
  - Q max. : 6900 ℓ/hr
  - H max. : 25 m
- Liquid temp. :
  - 0~40 °C
  - 0~80 °C for PUN-350M
- Motor power : 350~1850 W
- IP class : IPx4
- Dis. Sizes : 25~50 mm
- Max. operating pressure
  - Standard : 5bar

Standard materials
(For other materials, pls consult)
- Casing : Coated Gray cast iron
- Impeller : Noryl
- Shaft : Stainless steel

Applications
- Sprinkler systems
- Irrigation

Features
- Better performance and efficiency compared to self priming type
- Compact design and light weight
- Optional foot valve available (self-priming up to 3m possible)

Product range

Universal pumps (for sea water)

Series
PU-S

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 24000 ℓ/hr
  - H max. : 21 m
- 50hz
  - Q max. : 18000 ℓ/hr
  - H max. : 15 m
- Liquid temp. : 0~40 °C
- Motor power : 600~990 W
- IP class : IPx4
- Dis. Sizes : 40~50 mm
- Max. operating pressure
  - Standard : 3bar

Standard materials
(For other materials, pls consult)
- Casing : PP
- Impeller : Stainless steel
- Shaft : STS314 for 600M/U, 604M /SM20C+STS316 for 900M/I/U

Applications
- Sea water application - aquarium, fishery, vessel, etc
- Agriculture - greenhouse, flower garden, etc
- Sprinkler systems

Features
- Light weight and portable
- Optimised for sea water application
- Easy maintenance
- Long life time of bearing

Product range

Universal pumps (for high head)

Series
PUM

Technical data
(For further details, pls consult)
- 60hz only
  - Q max. : 17400 ℓ/hr
  - H max. : 36 m
- Liquid temp. : 0~40 °C
- Motor power : 1.5 kW
- IP class : IPx4
- Dis. Sizes : 40 mm
- Max. operating pressure
  - Standard : 5bar

Standard materials
(For other materials, pls consult)
- Casing : Gray cast iron
- Impeller : HBsC1
- Shaft : SM20C+STS430

Applications
- Agricultural use
- Industrial use

Features
- Self-Priming
- Optimised design for high head application (multi stage impeller)

Product range

Booster pumps with tank (for big flow)

Series
PU (with pressure tank)

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 9240 ℓ/hr
  - H max. : 12 m
- 50hz
  - Q max. : 9000 ℓ/hr
  - H max. : 11 m
- Liquid temp. : 0~40 °C
- Motor power : 950 W
- IP class : IPx4
- Dis. Sizes : 40 mm
- Tank : 80 ℓ
- Max. operating pressure
  - Standard : 2bar

Standard materials
(For other materials, pls consult)
- Casing : Gray cast iron
- Impeller : Brass
- Shaft : Stainless steel

Applications
- Water supply and pressure boosting
- Small residences and buildings

Features
- Self-Priming
- Automatic Operation by Pressure Switch
- Constant pressure
- Big flow & deep well application
- Applicable for uplands where the water pressure unstable
- Roof top tank not necessary

Product range

Deep WELL PUMP

Series
PC

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 3000 ℓ/hr
  - H max. : 58 m
- 50hz
  - Q max. : 1500 ℓ/hr
  - H max. : 54m
- Liquid temp. : 0~40 °C
- Motor power : 350~950 W
- IP class : IPx4
- Dis. Sizes : 25 mm
- Tank : Max 20ℓ
- Max. operating pressure
  - Standard : 8.5bar

Standard materials
(For other materials, pls consult)
- Casing : Gray cast iron
- Impeller : Noryl or XLON
- Shaft : SM20C+STS410

Applications
- Water supply and pressure boosting
- Small farming, gardening
- Industrial utilities

Features
- Self-priming & Automatic operation
- Safety design for Motor built with Thermal Protector
- Sanitary normal tank coated with Anti-rust paint
- No need for a foot valve at the end of suction pipe

Product range

Hot water circulation pumps

Series
PH

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 24000 ℓ/hr
  - H max. : 19 m
- 50hz
  - Q max. : 19020 ℓ/hr
  - H max. : 19 m
- Liquid temp. : 0~80 °C
- Motor power : 6~950 W
- IP class : IPx4
- Dis. Sizes : 25~80 mm
- Max. operating pressure
  - Standard : 3bar

Standard materials
(For other materials, pls consult)
- Casing : Gray cast iron
- Impeller : BrC3
- Shaft : Stainless steel

Applications
- Hot water circulation and heating system for houses, schools, hospitals, factories and apartment complexes, etc

Features
- Long lifetime of motor : low temp. of motor enclosure
- Compact design
- Light weight and good design by Al Frame Motor
- Excellent compatibility
- Corrosion resistant by power coating (PH-037M/045M/046M)

Product range

Whirpool bath pump

Series
WP

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 280 ℓ/min
  - H max. : 14 m
- 50hz
  - Q max. : 250 ℓ/min
  - H max. : 10m
- Liquid temp. : 0~60 °C
- Motor power : 400~590 W
- IP class : IP 55
- Dis. Sizes : 32 mm
- Max. operating pressure
  - Standard : 2bar

Standard materials
(For other materials, pls consult)
- Casing : P.P
- Impeller : noryl
- Shaft : Stainless steel

Applications
- Whirlpool Bath, Spa

Features
- Lower noise and vibration
- Air switch :dry running protection
- IP55 motor protection
- Motor built with thermal protection for safety
- Lght weight by aluminum frame of motor

Product range

Hot water circulation pump (FILTER PUMP, NON SELFPRIMING)

Series
PUF

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 21000 ℓ/hr
  - H max. : 28 m
- 50hz
  - Q max. : 16800 ℓ/hr
  - H max. : 17 m
- Liquid temp. : 0~60 °C
- Motor power : 950~1700 W
- IP class : IP x4
- Dis. Sizes : 40 mm
- Max. operating pressure
  - Standard : 4.5bar

Standard materials
(For other materials, pls consult)
- Casing : BC1
- Impeller : Brass
- Shaft : SM20C+STS316

Applications
- General Pressure Boosting
- Public Bath, Swimming Pool, Sauna, Sand Filtering, etc

Features
- Corrosion resistant for hydraulic parts
- Rust-proof by electric coating of casing
- Durable in hot water condition
- High grade bearing guarantees long-lasting operation
- Motor built with Thermal Protector for safety
- Easy maintenance
- Non self priming

Product range

Magnet pumps

Series
PM

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 580 ℓ/min
  - H max. : 35 m
- 50hz
  - Q max. : 500 ℓ/min
  - H max. : 23m
- Liquid temp. :
  - 0~60℃ for P.P
  - 0~80℃ for PVdF
  - 0~90℃ for Noryl
- Motor power : 15~3700 W
- IP class : IP x4 or IP55
- Dis. Sizes : 14~50 mm
- Max. operating pressure
  - Standard : 5bar

Standard materials
(For other materials, pls consult)
- Casing : NORYL/P.P/ PVdF
- Impeller : NORYL/P.P/ PVdF
- Shaft : CERAMIC

Applications
- General water circulation
- Hot water supply for solar system and heat tank
- Corrosive chemical solutions, acids and alkalis
- Etching apparatus for electronic parts, and photochemical processes
- Dyeing equipment and waste liquid treating units

Features
- High chemical resistant and reliability
- Suitable to handle low acid liquid
- Compact design
- Maintenance free : no sealing parts
- Long-lasting by adopting a closed motor
- Over 30cp of viscosity , pls consult

Product range

Magnet Pump (all stainlesss steel)

Series
PM-STS

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 70 ℓ/min
  - H max. : 90 m
- 50hz
  - Q max. : 60ℓ/min
  - H max. : 80 m
- Liquid temp. : -20~130℃
- Motor power : 750~2200 W
- IP class : IP X5
- Dis. Sizes : NPT 1/2~3/4, PT 1/2"~3/4"
- Max. operating pressure
  - Standard : 14bar

Standard materials
(For other materials, pls consult)
- Casing : Stainless steel
- Impeller : Stainless steel
- Shaft : CERAMIC

Applications
- General water circulation
- Hot water supply for solar system and heat tank
- Corrosive chemical solutions, acids and alkalis
- Etching apparatus for electronic parts, and photochemical processes
- Dyeing equipment and waste liquid treating units

Features
- High chemical resistant and reliability
- Compact design
- No leakage by magnet drive
- Maintenance free
- Over 30cp of viscosity , pls consult
- Optimized with the chiller application

Product range

Metering pumps (single head)

Series
PR

Technical data
(For further details, pls consult)
- 60hz
  - Q max. : 50000 cc/min
  - H max. : 3kgf/cm²
- 50hz
  - Q max. : 40000 cc/min
  - H max. : 3kgf/cm²
- Liquid temp. :
  - 0~60℃ for P.P, PVC, STS
  - 0~80 ℃ for PVdF, Tefron
- Motor power : 0.04~1.5 kW
- IP class : IP 55
- Dis. Sizes :
  - Hose : Ø6~38
  - Flange : KS 10K 15~50A
- Max. operating pressure
  - Standard : 3bar

Standard materials
(For other materials, pls consult)
- Pump head : PVC
- Diaphram : PTFE + EPDM
- Check Ball : Ceramics
- Connector : PVC

Applications
- For pumping : Acids, Bases (caustic soda, ammonia, sodium bicarbonate, trisodium phosphate etc), Chlorinated products, Coagulants , Other (hydrazine, amines, potassium permanganate, detergents, fertilizers etc) -> pls consult for liquid concentration

Features
- Stable and constant liquid flow
- Not necessary to have additional pulsation reducing tool due to air chamber integrated pump head
- Designed to prevent any damage and leakage caused by pipe vibration

Product range

OEM High Efficiency Circulation Pumps
Series
Yonos PARA

Technical data
(For further details, pls consult)
- 50Hz only
  - Q max. : 4 m³/h
  - H max. : 7.6 m
- Liquid temp. : 0~95 ℃
- Motor power : 37~70 W
- IP class : IP X4D
- Dis. Sizes : 55~90 mm
- Max. operating pressure
  - Standard : 6bar

Standard materials
(For other materials, pls consult)
- Casing : Cast iron with cataphoresis treatment
- Impeller : PP composite with GF 40%
- Shaft : Stainless steel

Applications
- Hot-water heating systems of all kinds
- Cooling applications

Features
- Self controlled pump (Red Knob) or externally controlled (PWM signal)
- Unique LED user interface
- Self-protecting modes
- Designed for optimised integration
- EEI ≤ 0.21
- Hydraulic part : Plastic version available as an option

Product range

OEM High Efficiency Circulation Pumps
Series
Stratos PARA

Technical data
(For further details, pls consult)
- 50Hz only
  - Q max. : 10 m³/h
  - H max. : 12 m
- Liquid temp. : -10~110 ℃
- Motor power : 30~200 W
- IP class : IP 44 or X4D
- Dis. Sizes : 65~90 mm
- Max. operating pressure :
  - Standard : 6bar/ 10bar

Standard materials
(For other materials, pls consult)
- Casing : Grey cast iron
- Impeller : Plastic (PP - 50% GF)
- Shaft : Stainless steel

Applications
- Hot-water heating systems of all kinds
- Closed cooling circuits
- Industrial circulation systems
- Circulation in solar thermal and geothermal systems

Features
- Electronic performance control via external control signals 0-10V or PWM
- Convenient setting of the operation mode : Red Button technology
- Manual differental-pressure setpoint setting : operating mode Δp-c and Δp-v.
- Standard delivery with cable for an easy electrical connection
- EEI ≤ 0.23

International references

Rhein-Neckar-Arena

Sinsheim, Germany

TSG 1899 Hoffenheim is a real phenomenon: the kickers from the first team made it from the German regional league right to the Bundesliga. Since the season 2008/2009 the team celebrated numerous successes and even surprisingly was the football autumn champion. At the end of January the Rhein-Neckar-Arena, the team's new venue, was inaugurated. 109 companies participated in the construction of the stadium which took 20 months. There is place for 30,150 fans. Hoffenheim and the Rhein-Neckar-Arena rely on Wilo technology at an important point.

Stratos, Comfort-CO MVI... /CC, Comfort-COR MVI... /CC, Comfort-Vario COR-MVIE... /VR, CronoTwin-DL-E, VeroLine-IP-E

Turning Torso

Malmoe, Sweden

Santiago Calatrava is the architect of this remarkable building. Based on a sculpture which depicts a human body in a turning movement, HSB Turning Torso is a fascinating high-rise building consisting of nine cubes twisting towards the waterfront and the surrounding area. Live, work and hold meetings in a new way in Malmo's most attractive location with world-class quality and service.

Multivert MVIE

Business complex "Federation"

Moscow, Russia

By 2015 "Moskwa Siti"(Moscow City) will sit on this 100 hectare site ? a modern international business centre with 15 high rise skyscrapers and 2.5 million square metres of offices, apartments, houses, hotels, shops, cafes and restaurants, accommodating half a million people ? the aim is to give Manhattan a run for its money!

Multivert MVIE, CronoLine-IL-E, Comfort-Vario COR-MVIE... /VR, Comfort-COR MVI... /CC , EMU FA, EMU KS, VeroNorm-NPG, CronoLine-IL, TOP-Z, Stratos

Media Tower / Glass Killepitsch factory

Duesseldorf, Germany

The Media Tower with the Glass Killepitsch factory is part of a building complex which is an interesting area within the micro site MedienHafen: there is a mix of offices, factory and restaurants.
The building has as 18 storeys and offers individual floor areas for offices. Openplan offices, cell offices and combined offices are possible.

Stratos, CronoTwin-DL, TOP-E

International references

Skyper

Frankfurt on the Main, Germany

Frankfurt am Main is considered Germany‘s only global city. And the Skyper is locatedin the middle of it. The tower of the Skyper is the core of the three-part building complex, the multistorey building, the historical villa and the residential and commercial building.

Comfort-CO MVI... /CR, Comfort-Vario COR-MVIE... /VR, VeroLine-IP-E, CronoLine-IL, Stratos-D, Stratos, TOP-E, TOP-S

World Trade Center Dresden

Dresden, Germany

The WTC in Dresden is an international centre for economy, exhibitions, offices, conferences and congresses located in the heart of the city. Its centre is the 2000m² glass-roof mall with restaurants, the theatre “Komodie Dresden”and small shops.
Above the mall, there is a 60 m glass tower with 16 floors – a distinctive point in the skyline of Dresden. Furthermore the 4-star hotel Elbflorenz with 400 beds is located in the WTC.

VeroLine-IPL, VeroLine-IP-E, Multivert MVI, MultiCargo MC, CronoLine-IL-E, CronoLine-IL IPn, Ipg, TOP-Z, Star-Z, Star-E, Stratos

KoelnTriangle skyscraper

Cologne, Germany

The city district located on the right side of the Rhine, across from the Cologne cathedral, is to become more attractive. The Deutsche Bahn, Cologne trade fair and the City of Cologne are establishing a new station for InterCityExpress trains in Deutz.
This plan also involved building several skyscrapers like the 29-floor KolnTriangle skyscraper.

VeroTwin-DP-E, TOP-SD, TOP-ED, DrainLift XXL, Comfort-Vario COR-MVIE... /VR, Drain TP 50/65, Drain TS40, TS50, TS65

Guangcai International Center (Minsheng Financial Center)

Beijing, China

The Beijing GUANGCAI International Center is located in the most important Chinese street, in the southeast of Dongdan, at the crossroads of Chang’an Avenue in Beijing.
It is a multifunctional intelligent building.

Multivert MVI. Comfort-COR MVI... /CR, ASP so on

International references

Regional Utilities – Walton County

Florida, USA

South Walton County, Florida is one of the fastest growing areas of the state, in part, because of its 16 certified Blue Wave Beaches and outstanding year–round weather. The important task of moving the sewage flow from various collection points and over considerable distances of table–top–flat land to the new centralized facilities was accomplished through the use of dozens of lift stations equipped with highvolume submersible sludge pumps.

EMU FA 1000 sets

Sheraton Amsterdam Airport Hotel

Amsterdam, Netherlands

The Sheraton Amsterdam Airport Hotel is the only five–star hotel with a direct access to the arrival and departure halls of the Schiphol International Airport.
Beside accommodation, it is also possible to arrange conferences. The hotel has 406 rooms from luxurious to even more luxurious. There are also 29 conference rooms.

A pressure boosting system with pressure switches used to be installed, providing little convenience. After renovation this pressure boosting system was replaced by a frequency control unit, COR–4 MVISE 806/VR. Beside the better convenience, the energy co

T–Mobile

Goettingen, Germany

Office building for 5000 staff members with training and conference areas, casino, shops, kid's nursery and technology centre.
1) Ecology : ground water cooling, concrete core activation, combined heat and power plant, waste heat utilisation, rainwater utilisation, heat recovery systems
2) Innovations : Well water utilisation instead of mechanical cooling machines

VeroLine–IP–E, TOP–S, TOP–E, DrainLift XL, Comfort–COR MVI... /CR, Drain EMU TP80, TC80, TP100, TP150, U TWU 6"–, 8"–, 10" ...24", NP so on

Reykjanesskagi Geothermal power plant

Reykjanes Peninsula , Island

Geothermal heat, which originates in the earth´s interior, is a promising renewable energy source that is gaining in significance around the world. Iceland is the country that makes the most extensive use of geothermal heat. This island in the Polar Circle has an absolutely unique location at one of the places where the Mid–Atlantic Ridge breaks the surface of the ocean. On Iceland, volcanic activity is driving the Eurasian and the North American Plates apart and 53% of primary energy is generated with geothermal heat. Five significant geothermal power stations cover around 20% of electrical power requirements and provide heat for 90% of the island´s domestic heating and warm water requirements.

EMU KM so on

International references

Lesotho Highland-Water-Project

Katse, Lesotho, Africa

The Lesotho Highland Project provides the water transfer from the rain-laden Kingdom of Lesotho to South Africa´s dry industrial region around Johnnesburg.
The water is taken from the Mohale Dam and transported through the Mohale Tunnel to the Katse Dam at a distance of 32 km. To guarantee an optimum utilization of the two reservoirs, the Mohale Tunnel can pump the water also in the reverse direction. For this project WILO delivered two clean water pumps K 221 and one sewage pump FA 15.99.

EMU K, EMU FA so on

Base tunnel Gotthard

Gotthard, Germany

57 km tunnel. 13.3 Mill. m3 excavated material.
5 drainage pumps protect the lives of hundreds of construction workers.
One of the most pioneering construction projects of the 21st century is being realised in Switzerland: the AlpTransit Gotthard project, a transalpine flat route with a superlative railway tunnel. The centrepiece is the Gotthard Base Tunnel which, at a length of 57 km, is the longest tunnel in the world. This pioneering achievement of the 21st century significantly improves the travel and transport conditions in the heart of Europe.

EMU FA, Drain TS40, TS50, TS65

Sun Microsystems

Munich, Germany

The architecture concept describes a structure which consists of a longitudinal board and four docked lateral boards. Towards the south there is the open longitudinal board, in the north the closed lateral board. The computers run 24 hours a day.
Therefore the working times can be very flexible. The corresponding long operating times of the building services make the advantage of energy-saving well cooling even more important.

VeroLine-IP-E, TOP-S, TOP-E, Sub-TWU 4", 6", IPn, Ipg, TOP-Z, Star-RS so on

Athens International Airport

Athens, Greece

In 2007, 16,5 m. people travelled from the Athens International Airport, 10,5 m. thereof had international destinations. In total, aircrafts started 205.000 times from there. This is the maintenance hangar where all maintenance and repair works for the Greek national carrier Olympic Airlines is carried out. Olympic Airlines had 6 m. passengers in 2007 with 13 international, 30 European and 37 domestic destinations. The hangar covers 25.000 square meters and is owned by Olympic Airlines. The fleet's main types of aircrafts are: Airbus A340-300, Boeing 737-300 and Boeing 737-400. The hangar was built in 2001.

VeroLine-IPL, VeroLine-IP-E, TOP-S, Drain TP80,TC80,TP100,TP150, CronoLine-IL so on

International references

Anpara Power Station

Anpara, India

88% hydraulic efficiency in the biggest vertical turbine pump in South Asia. The Anpara Power Station in India is one of the newest and also largest coal-fired power plants on the Asian continent. During the planning and completion, not only did economic efficiency play a major role, but also the ecological balance. To satisfy the gigantic cooling water demand of this 1,200 MW power plant, Wilo experts developed a new type of pump. Five of these gigantic vertical turbine pumps are used to pump the cooling water. They each have a driving power of 3,400 kW and each pump 35,600 $m^3$of water per hour. At the same time, they are the largest cooling water pumps made of metal ever built in South Asia in the energy sector. But the greatest thing about them: Thanks to the experience with highly efficient hydraulics, the energysavings potential in this performance.

Wilo-Vertical Turbine (3.4 MW motors)

Church of Our Lady Dresden

Dresden, Germany

The Frauenkirche (Church of Our Lady), built from 1726–1743 under the direction of George Bahr, was considered to be the most important church construction of Protestantism and was one of the most beautiful baroque churches in Europe.

Stratos

Ferry Porsche Congress Center

Zell am See, Austria

With an innovative conference centre in the city centre, the Austrian town Zell am See commemorates a legendary visionary and honorary citizen. Maximum flexibility and modern architecture: The sports car pioneer Ferry Porsche would have liked the new Congress Center in Zell am See-Kaprun. Since July 2007, this special building named after him adorns the town centre of Zell am See. Due to moveable walls the congress centre with several rooms can be converted into a concert hall for up to 1,000 visitors. Nothing is impossible in the new business Mecca. The Ferry Porsche Congress Center is a homage to one of the most famous citizens of the town. Ferry Porsche developed the legendary 'Model 356', creating with it the standard form of a sports car. He was appointed a honorary citizen of Zell am See as early as in 1981. The right "intuition" for planning was proven once more with the selection of the building project organisers. Only committed regional construction companies completed the construction within the planned construction period of 14 months. The ambitious Ferry Porsche would surely have liked this as well.

Stratos, Stratos-D, EMU TWU 3 , 4 , 6 – 8

National Library

Minsk, Belarus

The National Library of Belarus houses the largest collection of Belarusian printed materials and the third largest collection of books in Russian behind the Russian State Library (Moscow) and the Russian National Library (St Petersburg). The building can seat about 2,000 readers and features a 500-seat conference hall. Its main architectural component has the shape of a rhombicuboctahedron. The library´s building was designed by architects Mihail Vinogradov and Viktor Kramarenko and opened on 16 June 2006. The National Library of Belarus is the main information and cultural centre of the country. Its depository collections include 8 million items of various media. The library service is in great demand. More than 90 thousand citizens of Belarus are library users, who annually request 3.5 million documents. Everyday the library is visited by more than 2,200 people. The library delivers about 12,000 documents daily. In addition to serving as a functional library, the National Library is a city attraction. It is situated in a park on a river bank and has an observation deck looking over Minsk.

Star-Z, CronoLine-IL, CronoBloc-BL, Comfort-CO MVI... /CR, TOP-S, VeroLine-IPL

International references


MCGM Storm Water Pumping Station

Haji Ali & Love Grove, India

Storm water pumping stations in India have been set up to mitigate flooding in the city during monsoon at Haji Ali, Love Grove by Municipal Corporation of Greater Mumbai (MCGM). The pumps at these sites flush out floodwater from low-lying areas into the sea through sluice gates that prevent seawater from entering the drains.

Axial flow submersible pump (500kW, 21,600m³/h) x 16 sets


Jebel Ali Power & Desalination Station

Dubai, UAE

Dubai Electricity & Water Authority (DEWA) owns and operates a large power and de-salination station complex at Jebel Ali, Dubai, consisting of stations 'D', 'E', 'G', 'K', 'L'. To meet the ever growing requirement of power and water, DEWA planned to add under the term "Power and Desalination Station 'L' Phase II Project" a plant with capacity of around 1200 MW (gross) power & 55 MIGD water with a configuration consisting of gas turbines (GTs) associated with heat recovery steam generators (HRSGs), auxiliary boilers (ABs), condensing controlled extraction steam turbines (CST), MSF desalination units, and water storage and transfer system to town for potable water system.

PVT Series


Shell – Ocap CO2

Rotterdam, Netherlands

The main cause of climate change is the intensification of the greenhouse effect as a result of the use of fossil fuels and the resulting carbon dioxide (CO2) emissions. When the Kyoto Protocol entered into force in 2005, the industrialised nations that signed it undertook to reduce greenhouse gas emissions between 2008 and 2012 by an average of 5.2 percent below the 1990 level. This means an 8 percent reduction in the European Union. In order to meet this target, companies that operate plants with high CO2 emis-sions have to buy emission rights which are traded on the national and international markets. In the Netherlands, the OCAP (Organic Carbon Dioxide for Assimilation of Plants) project has shown that both the environment and the economy can profit from emission trading and the use of CO2.

NP, EMU FA


Soil filter plants A113 Autobahn

Berlin, Germany

The 11 soil filters are part of the drainage stations built during the new construction of the A113 Autobahn from the border of the Lander Berlin/Brandenburg to the inter-change Neukolln and Stadtring at the Autobahn A100 to Buschkrugallee. All of the 11 soil filters have machine technology completely made by Wilo.

EMU FA, EMU TR (Miniprop)

International references

Mopani Copper Mines

Mufulira, Zambia

Mopani Copper Mines, the operator of the biggest copper mine in Zambia, has put its trust in the German engineering talent of Wilo for controlling the water in the Mufulira Mine. Under extremely harsh conditions, the Wilo pumps have not shown any signs of malfunction or leakage. Reliability, from which the operator and the environment equally benefit.

Wilo ring-section pumps, Series PJ

Coca-Cola Beverages

Kyiv region, Ukraine

Coca-Cola in Ukraine began its successful activity 15 years ago. The official representative of Coca-Cola in Ukraine was opened in 1992, just after the proclamation of independence of the country. WILO pumps have ensured fulfillment of all tasks set for construction of the CHP. The project provided the construction of a key-ready gas reciprocating engine based cogeneration plant with the electrical output of 9MW for combined electrical and thermal power generation as well as carbon dioxide production.

Wilo-IL, NL, MHI, IPL

Salzgitter Flachstahl GmbH

Salzgitter, Germany

Salzgitter Flachstahl AG, the largest steel subsidiary of the Salzgitter Group, produces about 4.6 million tons of crude steel every year. In the scale-forming water circuit, highly wear-resistant submersible pumps are used, which achieve an unrivalled lifetime of over one year, thanks to the innovative Ceram coating and a special chilled cast iron alloy. And in the process, they not only keep production flowing, but also shine with the best life-cycle cost numbers.

Wilo-EMU FA 30

Marl Chemical Park

Marl, Germany

The Marl Chemical Park extends over an area of 6.5 square kilometres. It has the perfect location due to the canal link to the Rhine and the European waterway network, 180 km of rail and roads, freight terminal, Autobahn access, own power and energy supply, technical gases, biological wastewater treatment plants and an extensive service offer. Experts from Wilo detected the optimisation potential for existing pump systems for a production company for superabsorber. The uncontrolled glandless pumps had efficiencies of only 15-20 %, compared to 40-45 % of the Wilo-Stratos high-efficiency pumps.

Wilo-Stratos, CronoLine-IL-E

International references

Pump Station Ebquoreyeh

Ebquoreyeh, Jordan

The pilot project entitled “Pump replacement in thedrinking water pump station Ebquo-reyeh” took place in 2009 and involved the exemplary modernisation of a pumping station which supplied about 50,000 people with potable water. The old pumps were replaced with two highly efficient pressure shroud pumps (73 percent efficiency), while monitoringand energy saving systems were installed.

Pressure shroud pumps

Pump Station in Tuzla

Tuzla, Turkey

The municipal sewage treatment facility purifies sewage produced by 4.5 million residents. It is collected via two separate subterranean sewer systems and must then be lifted more than 8 m to supply it into the treatment plant. Two pump stations are in continuous use for this purpose. Wilo supplied reliable submersible sewage pumps of the type Wilo-EMU FA 50 with a special Ceram coating.

Wilo-EMU FA 50

Wastewater Treatment Plant

Heilbronn, Germany

32 submersible mixers (24 thereof are from Wilo) are installed in the eight activated sludge tanks of the wastewater treatment plant Heilbronn with a population equivalent of 500,000. The existing mixers, installed as original equipment, were quite susceptible to failure. The installation depth of almost 11 m was a problem because it affected the stability of the lowering devices.

Wilo-EMU TR

Philippine Arena

Bulacan, Philippines

The Philippine Arena is a multi-purpose indoor arena at Ciudad de Victoria, a 140-hectare tourism enterprise zone in Bocaue and Santa Maria, Bulacan, Philippines. With a maximum capacity of 55,000 people, it is the world's largest indoor arena and the largest mixed-use indoor theater.

Wilo-SCP, PUZeN, PDN

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