

The reliability of all-in solutions: Building Services from KSB



Expertise you can plan





Major projects also pose major planning challenges. Integrated solutions are therefore crucial to success and considerably simplify complex planning phases. At KSB you get individual components for drainage, water supply and all heating and air-conditioning circuits as well as fully matched systems – highly efficient and from a single source.

For decades we have supported consultants with our experience and technical expertise. And we attach particular importance to always finding the right solution for the specific requirements of every project. We adjust our products to match your installation and its specific features and optimise the system with our comprehensive energy efficiency concept FluidFuture®.

But an all-in solution involves even more. Thus we not only use outstanding products to find the optimum solution for our customers, but also offer the matching engineering and service. Our Sales is there for you with expert advice – right from the outset.

KSB is a brand name partner of the German trade seal quality alliance "Handwerkermarke". Numerous KSB products have been certified for top quality and excellent service.



Help your business take off with KSB

In the planning and implementation of big projects you need a partner known for reliability and quality – an example here is the new Terminal 2 at Munich airport. We were able to persuade consultants and operators alike of the high-tech products and service from KSB.

In the new system, the whole product range for building services applications was used. Two hundred pumps of the Eta family provide for a pleasant climate, while numerous Compacta Z lifting units and a variety of other pumps and valves make for trouble-free operation and ensure that the terminal is kept supplied without any problem.

But KSB takes reliability even further: thanks to our customised service concepts, any malfunctions that might occur are already identified early on and ensure that failures are practically excluded.





A convincing choice of products – from cellar to ceiling





Drainage



Ama-Drainer N 301/N 358

Floodable, submersible waste water pump, optional automation with LevelControl Basic 2 control unit including alarm

Applications

Disposal of waste water containing solids with a particle size of 10 to 35 mm

Benefits

- Absolutely tight: magnetic float switch with variable level control and maximum travel stop
- Easy to connect: 5 or 10 metre power cable
- Highly reliable: also suitable for operation with the pump not submerged (jacket cooling)
- Space-saving: includes swing check valve



Technical data

DN:	1¼–1½
Q m³/h:	max. 16.5
H m:	max. 12
n min⁻¹:	max. 2,800
Height:	321 mm
Width:	214.5 mm



Ama-Drainer 400/500

Floodable, submersible waste water pump, optional automation with LevelControl Basic 2 control unit including alarm

Applications

Disposal of waste water containing solids with a particle size of 10 to 35 mm

Benefits

- Maintenance-free: grease-packed bearings sealed for life
- Jacket cooling for operation with the pump not submerged, retrofit option for conversion to cooled variant
- Robust and reliable: also suitable for waste water containing long fibres and solid substances

Technical data

DN:	1½–2
Q m³/h:	max. 47
H m:	max. 24
T °C:	max. 40
Height:	440 mm
Width:	300 mm



Ama-Porter

Submersible motor pump, optional automation with LevelControl Basic 2 control unit including alarm

Applications

Waste water transport, waste water disposal

Benefits

- Robust: large, sturdy pump for waste water containing long fibres and solid substances
- Fit and forget: automatic, bolt-free connection in combination with KSB duckfoot bend

Technical data

DN:	50–65
Q m³/h:	max. 40
H m:	max. 12
T °C:	max. 40
Height:	408 mm
Width:	374 mm



Amarex

Submersible motor pump, optional automation with LevelControl Basic 2 control unit including alarm

Applications

Abwassertransport

Benefits

- Easy replacement of existing pumps, easy to handle: smallest dimensions, intelligent adaptation concept, re-usable and polarised cable entry
- Significant reduction of energy costs by optimised hydraulic system and optimum efficiency
- Replacements quickly available with short delivery times
- Highly reliable with a robust cutter or, alternatively, an impeller type with a large free passage

Technical data

DN:	32–100
Q m³/h:	max. 190 (53 l/s)
H m:	max. 49
T °C:	max. 55

Drainage



Ama-Drainer-Box

Floodable waste water lifting unit, optional automation with LevelControl Basic 2 control unit including alarm

Applications

Automatic drainage of buildings, disposal of domestic waste water

Benefits

- Universal use: single-pump or dual-pump lifting unit for above-floor or underfloor installation for all pumps of the Ama-Drainer series
- Flexible: can be adapted to conditions or constraints on site thanks to level-adjustable, rotatable extension of the underfloor box and graded inlet connections
- A siphon trap integrated in the cover prevents bad odours
- Fast to install: work on site is limited to fitting the inlet and discharge piping and connecting the pump to the power supply

Technical data

DN:	40/50
DN inlet:	50/70/100/150
Q m³/h:	max. 46 (12.8 l/s)
H m:	max. 24
Volume:	100/200 l



Ama-Drainer-Box Mini

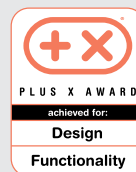
Automatic waste water lifting unit for above-floor installation

Applications

Automatic drainage of washbasins, showers, washing machines, dishwashers, etc.

Benefits

- Fast to install: ready to connect, no accessories required
- Space-saving: low-height design, stable solution, wall or floor mounting
- Free from bad odours: new type of activated carbon filter meeting hygiene requirements, integrated overflow protection
- Flexible: large variety of connection options, 2 inlet nozzle heights, shower connection as a standard
- Service-friendly: maintenance-free Ama-Drainer N301 submersible motor pump, high availability



Technical data

DN:	40
Q m³/h:	max. 10
H m:	max. 6.5
T °C :	max. 35
Height:	328 mm
Width:	460 mm



Compacta up to UZ300

Floodable sewage lifting unit, automated with LevelControl Basic 2 control unit including alarm

Applications

Disposal of domestic and industrial waste water

Benefits

- Space-saving: compact design, easy to install
- Reliable: dual-pump system, integrated swing check valve, integrated mains-independent alarm and control system with self-diagnosis
- Optional 10-year spare parts supply
- Includes y-pipe



mini-Compacta U1.60

Floodable sewage lifting unit, automated with LevelControl Basic 2 control unit including alarm

Applications

Disposal of sewage from toilet facilities below the flood level

Benefits

- Space-saving: compact dimensions of 510 x 510 mm
- Easy to install
- Reliable: integrated swing check valve, integrated mains-independent alarm and control system with self-diagnosis
- 10-year spare parts warranty
- Ready to connect
- Robust, powerful, durable motor



Technical data

DN:	80
DN inlet:	3 x 100/150 graded
Q m³/h:	max. 70
H m:	max. 25
Height:	1,110 mm
Width:	1,095 mm
Volume:	300 l

Technical data

DN:	80
DN inlet:	2 x 50/3 x 100
Q m³/h:	max. 36
H m:	max. 25
Height:	575 mm
Width:	510 mm
Volume:	60 l



CK packaged pump station

Ready-to-connect pump station, automated with LevelControl Basic 2 control unit including alarm

Applications

Automatic drainage of buildings, disposal of waste water below the flood level

Benefits

- Low-weight, compact pump station
- Free choice of locations: tank cover available in 3 load classes for foot traffic / cars / trucks
- Optional tank extensions enable flexible installation depths of up to 2,700 mm
- Several inlet nozzles at different heights
- Reliable pump control: pneumatic or bubbler control system
- Durable and corrosion-resistant

Technical data

DN:	50/65
DN inlet:	6 x 150
Q m³/h:	max. 50 (13.9 l/s)
H m:	max. 39
Height:	1,700–2,700 mm
Width:	1,070 mm
Volume:	360 l

Water supply



Movitec PumpDrive

High-pressure in-line pump with variable speed system

Applications

Pressure boosting, fire-fighting systems, cooling water circuits

Benefits

- High-pressure pump designed for high industry standards
- Very versatile with large range of sizes, pressure classes and materials
- Flexible connection variants: round flange, oval flange, external thread, Victaulic coupling, tri-clamp coupling
- Easy to combine with a PumpDrive variable speed system for automatically controlled operation and energy savings; compatible with most common field bus systems, easy to connect to process control systems

Technical data

DN:	25–100
Q m³/h:	max. 113
H m:	max. 380



Hyamat VP

Pressure booster system with KSB SuPremE® motor

Applications

Pressure boosting in the water supply of commercial buildings, industrial plants, water supply systems

Benefits

- Fully automatic pressure booster system, approved for drinking water, with automatic pump changeover
- Energy-efficient: automatic output adjustment and equal distribution of pump load, which minimises pressure fluctuations
- Highly reliable: monitoring of sensors and daily operation check run
- Most convenient: compact, low-noise design, ready to connect
- Large variety of operation and fault message options meeting advanced requirements of process control systems
- Fitted with a KSB SuPremE® motor the unit meets the IE4 requirements, already today.

Technical data

DN:	50–150
Q m³/h:	max. 660 m³/h
H m:	max. 160 m
Height:	max. 2,000 mm



Hya-Duo D FL Compact

Fire-fighting system

Applications

Fire-fighting systems

Benefits

- Convenient: compact dimensions of 800 x 1,800 mm max., system ready to connect, modular design
- Highly reliable: pressure switches are continuously monitored for broken wires and short circuit; dry running protection is disabled in the event of a fire; master switch and valves are secured against unauthorised activation; daily operation check run increases operating reliability
- Integrated inlet tank

Technical data

DN:	50–80
Q m³/h:	max. 55
H m:	max. 150
Height:	max. 1,800 mm



Hya-Solo E/DV

Pressure booster system

Applications

Pressure boosting in the water supply of residential and office buildings, on commercial premises and in industrial plants

Benefits

- Fully automatic pressure booster system, approved for drinking water
- Highly reliable: monitoring of sensors and daily operation check run
- Space-saving: compact design
- Ready to connect: saves time and costs
- Low-noise operation

Technical data

DN:	25–100
Q m³/h:	max. 110
H m:	max. 160
Height:	max. 1,350 mm



Hya-Eco VP

Pressure booster system with automatic pump changeover

Applications

Pressure boosting in the water supply of commercial buildings, industrial plants, residential and office buildings

Benefits

- Energy-efficient: automatic output adjustment and equal distribution of pump load
- Highly reliable: monitoring of sensors and daily operation check run
- Large variety of operation and fault message options

Technical data

DN:	50/80
Q m³/h:	max. 70
H m:	max. 110
Height:	max. 1,058 mm



UPA 150C / S100D

Submersible borehole pump

Applications

Domestic water supply, pumping clean or slightly contaminated water

Benefits

- Low maintenance
- High-grade materials for high operating reliability and long service life
- Broad application range: in 4" wells, pump sumps, water tanks and open waters
- Easy to install/remove: all connecting elements are made of stainless CrNiMo steel

Technical data

DN:	32/50
Q m³/h:	max. 79/16
H m:	max. 570/300
Diameter:	147/96 mm

Recommended valves



BOA-Compact EKB

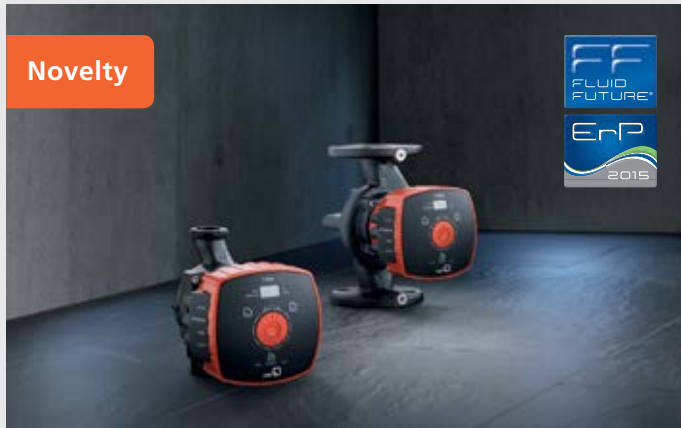


SISTO 16 TWA



BOAX-S/-SF

Heating / air-conditioning



Calio

High-efficiency circulator

Applications

Heating/venting/air-conditioning systems, industrial circulation systems

Benefits

- Major cost savings by "Eco Mode" and all-in concept (integrated Modbus reduces investment and commissioning costs)
- Broad range of applications
- Maximum energy efficiency: ErP2015-ready (EEI ≤ 0.23)
- Easy to install and operate: also without remote control
- Automatic functions: setback operation, manual open-loop control



Technical data

DN:	32–100
Q m³/h:	max. 70
H m:	max. 16
P bar:	max. 6/10
T °C :	-10 to 110



Etaline PumpDrive/Etaline Z PumpDrive

In-line pump

Applications

Hot water heating systems, cooling circuits, water supply systems

Benefits

- ErP2015-ready with a minimum efficiency index ≥ 0.4
- Space-saving: compact in-line design
- Trimmed impeller diameter for optimum efficiency
- Highly reliable: standardised motors ensure high spare parts availability
- Fitted with a KSB SuPremE® motor and PumpDrive the pump set meets the IE4 requirements, already today.

Technical data

DN:	32–200
Q m³/h:	max. 570
H m:	max. 96

Novelty**Etanorm PumpDrive**

Standardised close-coupled pump

Applications

Irrigation, water supply systems

Benefits

- ErP2015-ready with a minimum efficiency index ≥ 0.4
- Suitable for all common fluids and applications with a large range of material variants
- Trimmed impeller diameter for optimum efficiency
- Fitted with a KSB SuPremE® motor and PumpDrive the pump set meets the IE4 requirements, already today.

Technical data

DN:	25–150
Q m³/h:	max. 660
H m:	max. 160

**Etaline-R**

Vertical in-line pump, optional automation with PumpDrive/PumpMeter

Applications

Air-conditioning systems, heating systems

Benefits

- ErP2015-ready with a minimum efficiency index ≥ 0.4
- Space-saving: compact in-line design
- Trimmed impeller diameter for optimum efficiency
- Highly reliable: standardised motors ensure high spare parts availability
- Fitted with a KSB SuPremE® motor and PumpDrive the pump set meets the IE4 requirements, already today.

Technical data

DN:	150–350
Q m³/h:	max. 1,900
H m:	max. 97

Recommended valves

BOA-Super Compact



BOA-Compact

BOA-Control IMS
with BOATRONIC M2BOA-H
(grey cast iron/
nodular cast iron)

Serie 2000



BOAX-S/-SF



DANAIS



BOA-S

Energy-optimised hydraulic system with BOA-Systronic®

KSB's control system makes full use of the hydraulic saving potential in heating, venting and air-conditioning circuits. It is part of the FluidFuture® energy efficiency concept and makes sure that the system as well as its pumps and valves are operated in an energy-efficient manner, in line with the demand. Unlike in conventional solutions the circulator works very closely with the control valve. The pump transports the exact amount of water required. And considerably reduces the operating costs. BOA-Systronic can help save up to 70 % in energy costs.

The innovative BOA-Systronic system consists of a control unit, one measurement valve and two control valves:

- BOA-Control IMS (measurement valve)
- BOA-CVE SuperCompact with Systrobox (control valve with control unit)
- BOA-CVE SuperCompact (control valve)

The benefits are obvious:

- Low planning costs: straightforward system selection with economic efficiency analysis; automatic calculation of control valve
- Future-proof: quadrupled efficiency will prepare your installation for current and future requirements such as energy-saving regulations and energy performance certificates.
- Compatible technology: proven components for standard control systems
- Comprehensive system solution: for room heating and air-conditioning systems with static heating surfaces, convectors and air heating/cooling registers
- Convenient: economic all-in solution from a single source, based on KSB's comprehensive know-how as a systems supplier
- Local KSB service: global service network for optimum solutions, no matter how complex





www.ksb.com/service

Service from start to finish – wherever you are

KSB is an all-in solutions provider. This means that, with us, you can count not only on outstanding products, but also on optimal service – from commissioning through inspection and maintenance work to the repair of pumps of any make – including provision of spare parts.

Stay on the safe side with KSB Service

Our own service specialists and the experts of our regional service partners are at your disposal 24/7 and make sure your system also runs safely and reliably in the long term.

- Trained service staff
- Individual service concepts
- Original KSB spare parts
- 24/7

KSB's Piping Calculator

It is easy, quick and convenient. Have pump-related and other technical data of your system calculated by KSB's Piping Calculator, right from the planning phase.

The flow rates, pressures and resistance values throughout the piping system and its individual components give you insight into the system's behaviour and help you to arrive at the optimum solution for your installation. The integrated pump selection program is a great tool for selecting and optimising your system to the specific requirements.

The Piping Calculator and the **app** for your smartphone are available at www.ksb.com/calio



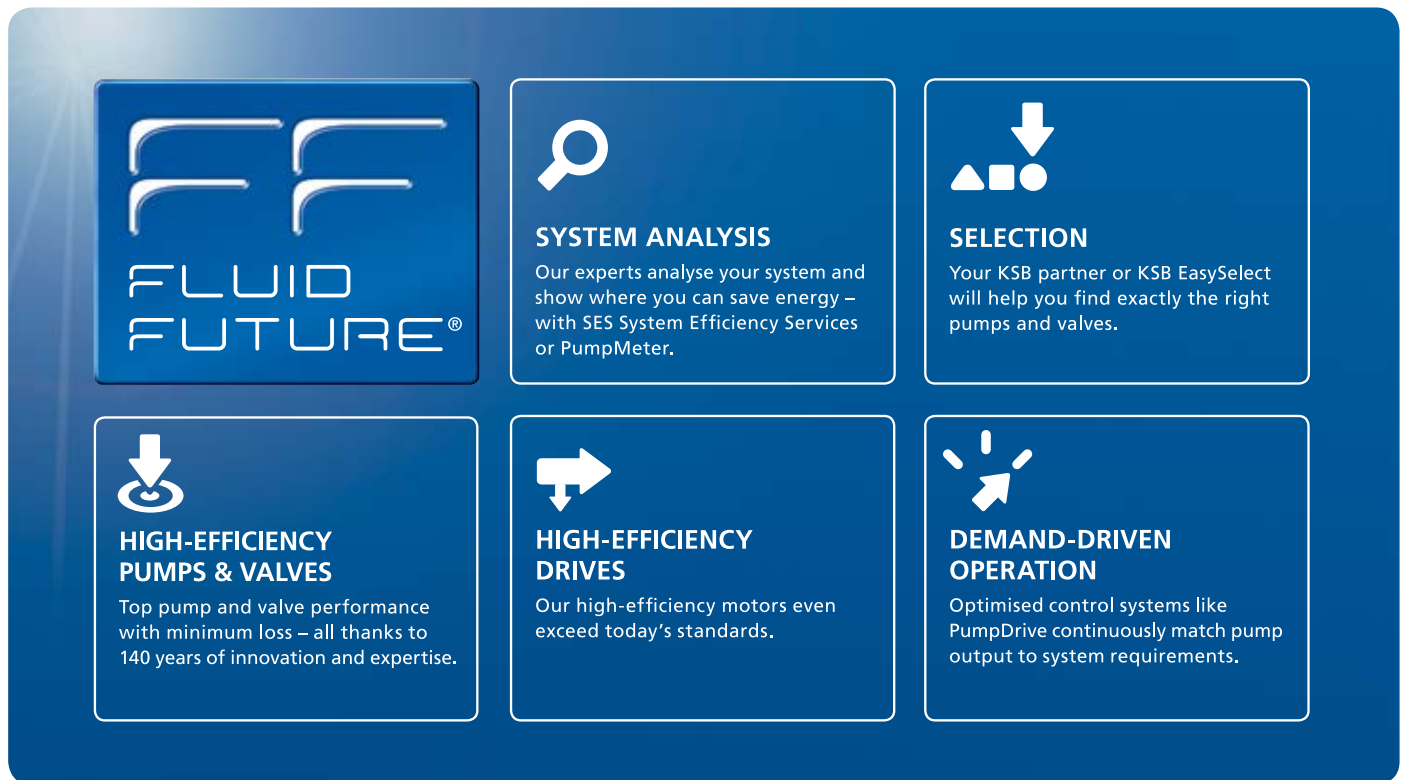
The selection software KSBbase Consult *Building.* Planning assistance online and up to date

Product research is costly and takes up a lot of time. To simplify things for you, we have developed the selection software KSBbase. This allows you to find KSB products with their related specifications and information on a variety of levels. Different search options are provided depending on what information is needed or what information is already available.

Don't hesitate to contact your KSB partner, who will be happy to advise you.



Maximum savings with FluidFuture®



A system's quality is not only determined by its products but also by its energy efficiency. In these times of rising energy prices, saving energy costs during operation has become a key criterion for selecting and installing systems. We make full use of a system's energy saving potential by employing the five modules

of FluidFuture® – KSB's energy efficiency concept. We analyse the entire hydraulic system and optimise it with high-efficiency products and demand-driven operating modes which perfectly match the specific requirements of each system.

The ErP ecodesign regulations

FluidFuture® is based on products which are not only reliable but also highly efficient to counter the continuous rise of the global energy consumption of "Energy-related Products" – products with high energy requirements. The ErP regulations stipulate mandatory minimum efficiency levels, which will gradually be increased until 2020. The objectives:

- 20 % fewer greenhouse gases
- 20 % more renewable energies
- 20% less energy consumption

Our response to these high requirements: expertise and years of experience. The outcome: highly efficient products which meet or even exceed the minimum efficiency levels for 2015, already today.

For standardised water pumps, the following values apply:

MEI (minimum efficiency index):
 high value = high efficiency
 From 1 January 2013: MEI ≥ 0.10
 From 1 January 2015: MEI ≥ 0.40



For electric motors, the following codes apply:

IE4 = Super premium efficiency
 IE3 = Premium efficiency
 IE2 = High efficiency



KSB SuPremE® motor
ErP2017-ready

From 1 January 2015:

IE3 or IE2 with frequency inverter P = 7.5 kW – 375 kW

From 1 January 2017:

IE3 or IE2 with frequency inverter P = 0.75 kW – 375 kW

Your local KSB representative:



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