



**Product Portfolio 2021** 

# **Pumps I Automation**



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# Our mission: Certified quality assurance

First-class products and excellent service take top priority at KSB. To maintain this level of excellence, we have developed a modern quality management system with globally applicable guidelines. It is based on the Business Excellence model of the European Foundation for Quality Management, which already ensures improved quality management Europewide.

Our guidelines define uniform quality for all KSB locations and have helped us to optimise our manufacturing processes. The results are shorter delivery times and global availability of our products. These guidelines govern the way we act so comprehensively that even the competence of our consulting and the good value for money we offer are clearly stipulated. Like the 'Made in Germany' quality seal, we introduced internal certification as a sign of the highest quality: 'Made by KSB'.

#### Our five key goals:

- Maximum customer satisfaction: We do everything to fulfil our customers' wishes on time and in full.
- Fostering quality awareness: We put our quality commitment into daily practice – from executives to employees, whose qualifications and competence we foster through continuing training.
- **Prevention rather than cure:** We systematically analyse errors and prevent the causes.
- Improvement in quality: We continually optimise our processes in order to work more efficiently.
- Involvement of suppliers: We attach great importance to working together fairly and openly to achieve our shared goals.



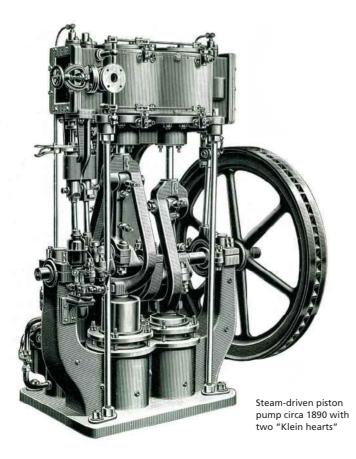
As a signatory to the United Nations Global Compact, KSB is committed to endorsing the ten principles of the international community in the areas of human rights, labour standards, environmental protection and anticorruption.





# A modern company – for 150

KSB is celebrating its 150th anniversary in 2021 under the motto "People. Passion. Performance." What began with an idea has developed into a leading global player for pumps, valves and service.



#### It all began with an idea

In 1871, mechanical engineer Johannes Klein received the patent for his boiler feed apparatus. In that same year, together with Friedrich Schanzlin and Jakob August Becker, he founded Frankenthaler Maschinen- & Armatur - Fabrik Klein, Schanzlin & Becker, employing twelve staff.

The company grew steadily, becoming an Aktiengesellschaft (public limited company) in 1887 and acquiring many companies in Germany.

#### The path to becoming a global group

In 1925, KSB founded its first company abroad. New companies in Argentina (1941), Pakistan (1953) and South Africa (1959) marked the beginning of the operations outside of Europe.

During the 1980s KSB took over further companies and expanded its range of products. In 1986, KSB acquired the leading French pump manufacturer Pompes Guinard, followed three years later by Amri, the second largest valve manufacturer in the world. The acquisition of the US company GIW Industries in 1988 signalled KSB's entry to the slurry pump market. In 1991, KSB integrated Hallesche Pumpenwerke GmbH into its



# years

operations, today a production site for water and waste water pumps.

To strengthen activities in key markets such as China, India and Brazil, many new companies and joint ventures were founded from the mid-1990s. In Europe additional companies such as DP Industries B.V. in the Netherlands joined the Group, further expanding KSB's portfolio of products.

#### Smart for the future

KSB helps customers to remain competitive with digital solutions geared towards the future. Smart products and services ensure greater transparency in systems and increase their efficiency.

Through its digital factory approach, KSB is increasingly switching its production processes to standardised and automatic operations. Already today, additive manufacturing enables spare parts to be rapidly produced using 3D printing processes.

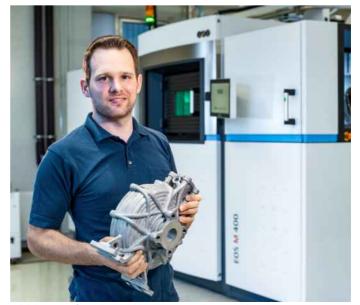
#### 150 years of experience

KSB is one of the world's leading suppliers of pumps, valves and related systems. Over 15,000 employees work in production, sales and service locations on all continents. The Group is represented with subsidiaries in more than 40 countries.

KSB's highly efficient and reliable products are used in applications where fluids need to be transported or reliably shut Inside the valves shop in Frankenthal (around 1930)

off, for example in building services and industrial applications, in the chemical/petrochemical industries, in water supply and waste water treatment as well as in power plant processes and mining.

Around the globe, over 190 service workshops and some 3500 service specialists provide inspection, maintenance and repair services locally under the brand name KSB SupremeServ. Innovative technology that is the fruit of KSB's research and development activities forms the basis for the company's success.



Additive manufacturing enables KSB to produce complex components.

# **Smart services** for maximum availability and efficiency

As a leading supplier of pumps and valves, we attach great importance to providing you with a comprehensive service of the highest quality. In fact, we believe it's so important that we even gave it a special name: KSB SupremeServ.

KSB SupremeServ is on hand to support you with classic and digital service and spare parts solutions over the entire product life cycle. Whether it's a KSB product, non-KSB product or other rotating equipment, you'll benefit from the reliable and sustainable operation of your system.

#### Applications:

- Water and Waste Water
- Industry
- Energy
- Building Services
- Mining

Wherever and whenever you need us, we're there for you – worldwide.



# FluidFuture<sup>®</sup>: the energy-saving concept for your system

Many systems do run reliably but they also use a lot more power than necessary. The solution: efficiency optimisation with FluidFuture<sup>®</sup> in four steps. We look at the entire hydraulic system to achieve maximum energy efficiency throughout the life cycle. The optimisation costs will pay for themselves within a short period through the high energy savings that can be made.

The process and its four steps are clearly defined – based on extensive expertise and experience. This systematic and targeted approach ensures maximum savings at minimum costs. Perfectly matching the hydraulic system, drive and automation products as well as the piping dimensions can result in savings of up to 60 %. We reduce the operating costs of your system by combining our expert knowledge with smart products and services. This is our joint contribution towards an energy-efficient future.

More on FluidFuture<sup>®</sup>: www.ksb.com/fluidfuture



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## **General Information**

Regional products	Not all depicted products are available for sale in every country. Products only available in individual regions are indicated accordingly. Please contact your sales representative for details.
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Product illustrations	The products illustrated as examples may include options and accessories incurring a surcharge. Subject to modifications due to technical enhancements.
Product information	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see http://www.ksb.com/reach.

## Pumps

Design / Application	Type series	Page	Factory-automated	Automation available	Water Transport and Water Treatment	Industry	Energy Conversion	Building Services	Solids Transport
	Calio-Therm S NC/NCV	30							
Drinking water circulators, fixed speed	Calio-Therm NC	30							
	Calio-Therm	30							
Drinking water circulators, variable speed	Calio-Therm S	30							
	Calio S	31							
Circulators, variable speed	Calio	31							
	Calio Z	31							
	Etaline L	31							
	Etaline DL	32							
	Etaline	32							
	Etaline Z	32							
In-line pumps	Etaline-R	32							
	ILN	32							
	ILNC	33							
	ILNR	33							
	Megaline	33		•					
	Etanorm	33							
	Etanorm-R	34							
	Etabloc	34							
	Etachrom B	34		•					
Standardised / close-coupled pumps	Etachrom L	34							
	Etanorm V	35							
	Meganorm	35							
	Megabloc	35							
	HPK-L	35							
Hot water pumps	НРН	36							
	НРК	35							
	Etanorm SYT / RSY	36							
Hot water / thermal oil pumps	Etabloc SYT	36							
	Etaline SYT	36							
	MegaCPK	37							
Standardised chemical pumps	CPKN	37							
	СРКNО	37							
	Magnochem	38							
	Magnochem 685	38							
Seal-less pumps	Magnochem-Bloc	38							
	Etaseco / Etaseco-I	38							
	Etaseco RVP	38							
	RPH	39							
	RPH-LF	39							
	RPHb / RPHd / RPHbd	39							
	RPH-V	39							
	CTN	39							
	CHTR	40							
Process pumps	CHTRa	40							
	CINCP / CINCN	40			_				
	INVCP	40							
	Estigia	40							
	RWCP / RWCN	40							
	WKTR	41							
	Hya-Rain / Hya-Rain N	41							
Rainwater harvesting systems	Hya-Rain Eco	42							

Design / Application	Type series	Page	Factory-automated	Automation available	Water Transport and Water Treatment	Industry	Energy Conversion	Building Services	Solids Transport
	Multi Eco	42							
	Multi Eco-Pro	42							
Domestic water supply systems with automatic	Multi Eco-Top	43							
control unit / swimming pool pumps	Ixo N	43							
	Ixo-Pro	43							
	Filtra N	43							
	KSB Delta Macro	43							
	KSB Delta Solo/Basic Compact	44							
	KSB Delta Basic	44							
	KSB Delta Primo	44							
	KSB Delta Solo	44	-		-	-		_	
Pressure booster systems	Hya-Solo D	44				-			
ressure booster systems	Hya-Solo D FL	44	-						
	Hya-Duo D FL	45						_	
	-								
	Hya-Solo D FL Compact	45							
	Hya-Duo D FL Compact	45							
	Surpress Feu SFE	45							
	Ama-Drainer N	46		-					
	Ama-Drainer 4 / 5	46		-					
Drainage pumps / waste water pumps	Ama-Drainer 80, 100	46		-					
	Ama-Porter F / S	46		-					
	Rotex	46							
	MK / MKY	47							
	Amaclean	47							
	Ama-Drainer-Box Mini	47							
	Ama-Drainer-Box	47							
	Evamatic-Box N	47							
	mini-Compacta	48							
Lifting units / package pump stations	Compacta	48							
Enting units / package pump stations	CK 800 Pump Station	48							
	CK 1000 Pump Station	48							
	Ama-Porter CK Pump Station	48							
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	SRA	49							
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Submersible motor pumps	Amarex N	50							
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	Amacan K	50							
Submersible pumps in discharge tubes	Amacan P	51							
	Amacan S	51							
	Amamix	52							
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	Amaline	52							
	Sewatec	52			-				
	Sewatec SPN	53			-	-			
Pumps for solids-laden fluids	Sewabloc	53							
ramps for solids-laden hulds	KWP	53							
	KWP-Bloc	53		-	-				

Design / Application	Type series	Page	Factory-automated	Automation available	Water Transport and Water Treatment	Industry	Energy Conversion	Building Services	Solids Transport
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	LCC-R	54							
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	LCV	55							
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	MHD	55							
	LHD	55							
	MDX	55							
	ZW	56							
	HVF	56							
	DWD	56							
	Etaprime L	57							
	Etaprime B	57							
Self-priming pumps	EZ B/L	57							
	AU	57							
	AU Monobloc	57							
	UPA C 100 EE	58							
	UPA C 100 EN	58							
	UPA C 150	58							
Submersible borehole pumps	UPA 200, UPA 250	58							
	UPA 300, UPA 350	58							
	UPA 400-850	59							
	UPA D	59							
Vertical turbine pumps	B Pump	59							
	Comeo	60							
	Movitec H(S)I	60							
High-pressure pumps	Movitec	60							
	Movitec VCI	60							
	Multitec	61							
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Axially split pumps	RDLO	61							
	RDLP	61							
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Hygienic pumps for the food, beverage and	Vitacast Bloc	62							
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	Vitastage	63							
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Design / Application	Type series	Page	Factory-automated	Automation available	Water Transport and Water Treatment	Industry	Energy Conversion	Building Services	Solids Transport
	CHTA / CHTC / CHTD	63							
	HGB / HGC / HGD	63							
	HGI	64							
	HGM	64							
	YNK	64							
	LUV / LUVA	64							
	WKTB	64							
Pumps for power station conventional islands	SEZ	65							
	SEZT	65							
	PHZ	65							
	PNZ	65							
	SNW	65							
	PNW	66							
	Beveron	66							
	SPY	66							
	RER	66							
	RSR	66							
	RUV	67							
	PSR	67							
	RHD	67							
Pumps for nuclear power stations	LUV Nuclear	67							
	RHM	67							
	RVM	68							
	RHR	68							
	RVR	68							
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	RPH-RO	68							
Pumps for desalination by reverse osmosis	HGM-RO	69							
	Multitec-RO	69							
Positive displacement pumps	RC / RCV	69							
Eiro fighting systems	EDS	69							
Fire-fighting systems	DU / EU	70							

Design / Application	Type series	Page	Water Transport and Water Treatment	Industry	Energy Conversion	Building Services	Solids Transport
Automation and drives	KSB SuPremE	28					
	KSB UMA-S	28					
	Controlmatic E	71					
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Monitoring and diagnosis	KSB Leakage Sensor	29					
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Solids (ore, sand, gravel, ash)       2         River, lake and groundwater       Liqueffed gas         Liqueffed gas       1         Food and beverage production       1         Gas-containing liquids       1         Gas-containing liquids       1         Gas-containing liquids       1         Gas-torbine fuels       1         High-temperature hor water       1         High-temperature hor water       1         High-temperature hor water       1         Condemsate       1         Cooling water       1         Cooling water       1         Cooling water       1         Goling water       1         Solwarts       1         Solwarts       1         Granting liquids       1         Goling water       1         Goling water       1         Goling water       1         Solwarts       1         Granting liquids       1         Goling water	Waste water with faeces	b		b			p			ps								ps														
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River, lake and groundwater   Liqueffed gas   Food and beverage production   Gas containing liquids   Gas turbine fuels   Filtered water   Geothermal water   High-temperature hot water   High-temperature hot water   High-temperature hot water   Condemate   Condemate   Condemate   Condemate   Condemate   Condemate   Conding water   Filtered water   High-temperature hot water   Condemate   Condemate   Conding water   Valuable liquids   Fire-fighting water   Solvents   Solvents   Solvents   Solvents   Raw widge   Raw widge   Lubricants   Fire-fighting water   Raw widge   High-temperature hot water   Raw widge   Raw widge   Raw widge   Raw widge   Raw widge   Rine   Rine    Rine   Rine <td< td=""><td></td><td></td><td>+</td><td>rin</td><td><math>\vdash</math></td><td>-</td><td>┠</td><td>+</td><td>+</td><td></td><td><math>\vdash</math></td><td>+</td><td>+-</td><td>+</td><td><math>\vdash</math></td><td>+</td><td>+</td><td></td><td>-</td><td><math>\vdash</math></td><td>+</td><td>+</td><td>+</td><td>+</td><td>+</td><td>+</td><td>+</td><td>+</td><td>+</td><td><math>\left  \right </math></td><td><math>\left  - \right </math></td><td><math>\vdash</math></td></td<>			+	rin	$\vdash$	-	┠	+	+		$\vdash$	+	+-	+	$\vdash$	+	+		-	$\vdash$	+	+	+	+	+	+	+	+	+	$\left  \right $	$\left  - \right $	$\vdash$
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Filtered water       Image: Strategy of the strategy o	Gas-containing liquids																															
Geothermal water       Harmful liquids         Toxic liquids       High-temperature hot water         High-temperature hot water       High-temperature hot water         Condensate       High-temperature hot water         Condensate       High-temperature hot water         Condensate       High-temperature hot water         Coolong water       High-temperature hot water         Coolong water       High-temperature hot water         Solvents       High-temperature hot water         Solvents       High-temperature hot water         Solvents       High-temperature hot water         Geoling water       High-temperature hot water         Organic liquids       High-temperature hot water         Geoling water       High-temperature hot water         High-temperature hot water       High-temperature hot water         High-temperature hot water       High-temperature hot water         High-temperature hot water       High-temperature hot water         Gooling water       High-temperature hot w	Gas turbine fuels			1																												
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High-temperature hot water       Heating water       H	· · · · · · · · · · · · · · · · · · ·																									$\perp$	$\perp$				$\square$	
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Highly aggressive liquids       Image: service water			-	-		_							_			_		-		$\mapsto$					_		+	_			$\square$	<u> </u>
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Condensate       Corrosive liquids       Corrosive liquids       Coloreste       Coloreste <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>┢</td><td>-</td><td>-</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>+</td><td>-</td><td>+-</td><td></td><td></td><td><math>\vdash</math></td><td>-</td></t<>							┢	-	-																	+	-	+-			$\vdash$	-
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Fuels       Image: Coolants       Image: Coo	Corrosive liquids		$\vdash$																					+		+	+					
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Volatile liquids       Image: Solvents       Image: Solvents <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td><math>\perp</math></td><td></td><td></td><td></td><td></td><td><math>\square</math></td><td></td></td<>																										$\perp$					$\square$	
Fire-fighting water       Solvents         Solvents       Seawater         Oils       Seawater         Oils       Seawater         Organic liquids       Seawater         Pharmaceutical fluids       Seawater         Organic liquids       Seawater         Organic liquids       Seawater         Organic liquids       Seawater         Pharmaceutical fluids       Seawater         Cleaning agents       Seawater         Cleaning agents       Seawater         Swimming pool water       Seawater         Swimming pool water       Seawater         Dipiping paints       Seawater         Dipiping paints       Seawater         Swimming water       Seawater         Swimming pool water       Seawater         Swimer       Seawater																										┛	_	_	_		$\square$	
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Oils Oils   Organic liquids   Pharmaceutical fluids   Polymerising liquids   Rainwater / stormwater   Cleaning agents   Raw sludge   Lubricants   Grey water   Swimming pool water   Brine   Feed water   Dipping paints   Dipping paints   Dipping paints		-	-	-	$\vdash$	_	-	+	-			+		-			_	-	-	$\left  - \right $		+	+	+	+	+	+			$\vdash$	$\vdash$	├
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Waste water with faeces			_	bumps				an Sel	_	_	Seal-less pumps			_	_	Process pumps		_	_									harvesting systems	$\rightarrow$	$\rightarrow$	+
Waste water without faeces	n			- n	$\vdash$			<u> </u>		_	uno -				_	- n			_						-			/ste	$ \rightarrow$	$\rightarrow$	$\rightarrow$
Aggressive liquids	er									_	ss					ss l		_					-					g s)			
Inorganic liquids	vat			alo							- e					e e e e e e e e e e e e e e e e e e e												ţ.			
Activated sludge	r S			E				her			Sea					Pro												ves			
Brackish water	Ξ			the												1												Jar			
Service water				1							1					1												ert			+
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Solids (ore, sand, gravel, ash)			-						-	_				_	_			_	-				$ \square$		$\rightarrow$				$ \rightarrow$	$\downarrow$	$\downarrow$
Flammable liquids	-																														
River, lake and groundwater	-																														
Liquefied gas																															
Food and beverage production				1							1 [					1 [			1												
Gas-containing liquids											1 -					1			1								_			-	+
Gas turbine fuels	_		+						+		1  -			+	-	1			1						$\neg$	$\neg$				-	+
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Harmful liquids	- 1		_	-	$\vdash$				_		-				_									_		$ \rightarrow$			$\rightarrow$	$\rightarrow$	$\rightarrow$
Toxic liquids	_			-			_		_	_			_			-													$ \rightarrow$	$\rightarrow$	$\rightarrow$
High-temperature hot water																									$ \downarrow$					$\downarrow$	$\downarrow$
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Volatile liquids									_																						
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Solvents																															
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				-	$\vdash$	_	_											+-		╞═┤		$\vdash$	-+		-	$ \rightarrow$	=		_	_+	+
Rainwater / stormwater	_		_	-	$\vdash$	_	_		_	_		_		_			_	_	-			-		_						-	$\rightarrow$
Cleaning agents			_									<b>•</b>	•																$ \square$	$\downarrow$	$\downarrow$
Raw sludge	- 1																														
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Grey water						T						T													T					T	
Swimming pool water																															
Brine	-		1																1										$\neg$	$\neg$	$\neg$
Feed water	-					+			+					+	+				1				$\neg$		$\dashv$	$\neg$			$\neg$	+	+
Dipping paints			+-			+			+	+					+			+	+			-	$\neg$		$\dashv$	-+	$\neg$		-+	+	+
Drinking water			+		$\vdash$	-	—											+-	+	$\left  - \right $				-			-		$\rightarrow$	+	+
Thermal oil	-		+				_		•		4 -								-	$\left  - \right $					-		_		$\rightarrow$	+	+
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Hot water				4	⊢								■					_	-					_		_			$\rightarrow$	$\rightarrow$	+
Wash water														1															_ [		

	Multi Eco	Multi Eco-Pro	Multi Eco-Top	Ixo N	Ixo Pro Elitera M		KSB Delta Macro	KSB Delta Solo/Basic Compact	KSB Delta Basic	KSB Delta Primo	KSB Delta Solo	Hya-Solo D	Hya-Solo D FL	Hya-Duo D FL	Hya-Solo D FL Compact	Hya-Duo D FL Compact	Surpress Feu SFE														
Waste water with faeces	bs						2																								
Waste water without faeces	Domestic water supply systems with automatic control unit / swimming pool pumps					Pressure hooster systems																									
Aggressive liquids	d lo					L SV	<u>_</u>																								
Inorganic liquids	od f					oste	- 2									_			_	_	_	_						_			
Activated sludge	ning	-		$\rightarrow$		Q	§	_				_			_	_	_		+	_	-	-		_				_		$\rightarrow$	_
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Distillate	/ sw			-		res	<u>i</u>	-					-	_		$\rightarrow$	-	_	+		+	-	-	-	$\left  \right $	-	_	-	$\left  \cdot \right $	+	_
Slurries	nit	-		+		_ ^		-									-		+	-	┢	-		-				-		+	
Explosive liquids				$\neg$													-		+	-	+									+	
Digested sludge	ontr	$\top$		$\uparrow$	$\neg$			1								$\uparrow$	$\uparrow$	$\uparrow$	╈	+	1					$\neg$		1		$\uparrow$	
Solids (ore, sand, gravel, ash)	ic co																														
Flammable liquids	mat																														
River, lake and groundwater	utoi		$\square$							Ц															Ц						
Liquefied gas	ha																			_		_						_			
Food and beverage production	wit	_		$\rightarrow$		_		_				_			_	_	_		+	_	-	-		_				_		$\rightarrow$	_
Gas-containing liquids Gas turbine fuels	ems		$\left  \right $	$\rightarrow$	+	_		-				_	_	-	_	$\rightarrow$	_	_	+		-		-	-	$\left  \right $		_	+-		+	_
Filtered water	syst	-	$\left  \right $	+		-		-								-+	-	_	+		+	-	-	-	$\left  \right $			-		+	
Geothermal water	ply	-		+	-			-									-		+	-	┢	+	-	-				-		+	-
Harmful liquids	dns	1															-		+	+	+	+						+		+	
Toxic liquids	iter																				$\square$	1									
High-temperature hot water	N C																														
Heating water	esti																														
Highly aggressive liquids	u –					_																									
Industrial service water		-		-		_								-		_			_	_	-	-	-	<u> </u>				_		+	
Condensate Corrosive liquids		-	$\left  \right $	$\rightarrow$	_	_		-				_	_	_	_	$\rightarrow$	_	_	+	_	-	-	-	-			_	-		$\rightarrow$	_
Valuable liquids	-	-	$\left  \right $	$\rightarrow$		_	-	-				_					-		-		+	-	-	-			_	-		-	
Fuels		+		+	+	-		-						$\neg$		$\rightarrow$	-		+	+-	+	+	-	-		$\rightarrow$	+	+		+	
Coolants		+						1											╈	+	$\vdash$	1						+		+	
Cooling lubricant																					$\square$										
Cooling water																															
Volatile liquids																															
Fire-fighting water		_		_		_	-	-										_	_	_	_	-	_	_	$\square$		_	_	$\square$		
Solvents		-	$\left  \right $	$\dashv$		_	-	_		$\square$			_	_		-+	$\rightarrow$		+	_	-	-	-	_		-+		-		+	_
Seawater Oils		+	$\left  \right $	-	+	_	⊢	-		$\mid$		-				-	+	+	+	+	-	-	-	-	$\vdash$	-+	_	+	$\left  \cdot \right $	+	-
Organic liquids		+	$\left  \right $	+	+		-	-	$\vdash$	$\left  - \right $		-	-	$\dashv$	-	+	+	-+	+	+	+	+	-	-	$\left  - \right $	-+	+	+	$\left  \cdot \right $	+	
Pharmaceutical fluids		+-	$\left  \right $	$\dashv$	+		-	-		$\square$				$\neg$		$\rightarrow$	+	$\neg$	+	+-	+	$\vdash$	-	-	$\left  - \right $	$\dashv$	-	+-		+	+
Polymerising liquids		$\top$		$\uparrow$	$\top$											$\uparrow$	$\uparrow$		$\uparrow$	1		1	1	1	$\square$	$\neg$		1	$ \uparrow $	$\uparrow$	
Rainwater / stormwater																															
Cleaning agents																	Ţ								Ш				$\square$	Ţ	
Raw sludge										Ц															Ц				$\square$		
Lubricants		-		$ \rightarrow$	_	_	-	_		Ц						_			+	_	-	-	-			-+		_		$\parallel$	_
Grey water Swimming pool water		+-	$\left  \right $	+		_	-				_		_	_	-	-+	$\rightarrow$	-	+	+-	-	-	-	-	$\left  - \right $	-+	_		$\left  \cdot \right $	+	_
Swimming pool water Brine		+	$\left  - \right $	+			H	-					-	-		+	+	_	+		$\vdash$	$\vdash$	-	-	$\left  - \right $	-+	_	+-	$\left  - \right $	+	
Feed water		+	$\left  \right $	+	+		-	-		$\left  - \right $			$\neg$	$\dashv$		+	+		+	+-	+	+	-	-	$\left  - \right $	-+		+-	$\left  - \right $	+	+
Dipping paints		+	$\left  \right $	+	+			+				$\neg$			$\neg$	+		+	+	+	-	-			$\vdash$	$\dashv$	+	+		+	+
Drinking water				$\uparrow$	$\neg$											$\uparrow$	$\uparrow$		1		$\top$	$\vdash$	1	<u> </u>		1		1		$\uparrow$	
Thermal oil																															
Hot water																[									$\square$						
Wash water																															

	Ama-Drainer N	Ama-Drainer 4 / 5	Ama-Drainer 80, 100	Ama-Porter F / S	Rotex	MK / MKY	Amaclean	Ama-Drainer-Box Mini	Ama-Drainer-Box	- 1	mini-Compacta	- 1	- 1	CK 1000 Pump Station		SRP			Amarex		Amarex KRT									
Waste water with faeces	sdu	_										-			_	_							_				_		$\rightarrow$	
Waste water without faeces	nu				_																		_			_	_		_	
Aggressive liquids	fer	-			!		5	-		$\rightarrow$					+	_	_	- Jo	_				_				_		$\rightarrow$	+
Inorganic liquids	Wat	_			+	_	_	-		$\rightarrow$	_	_	_	_	+	_	_	Submersible motor pumps	-		_		_			_	_		_	_
Activated sludge Brackish water	ste	-			$\rightarrow$		2	-		$\rightarrow$			$\rightarrow$	_	+	_	_	e e	•				-		$\left  \right $	_	_	$\left  \right $	_	—
Service water	/ wa				$\rightarrow$	= ackar				-						_	+-	ersil					-	-	$\left  \right $		+	$\left  \right $	+	+
Distillate	/ sd	-					2	-		-	-	-	-		╉	+	+	- ŭ	-		-		+		$\vdash$		+		+	+-
Slurries	mn	-			+	- iti		+		$\rightarrow$			+		╈	-	-	- Su	-				-		$\vdash$		+			+-
Explosive liquids	Drainage pumps / waste water pumps	+	$\left  - \right $		+	l ifting units / nackage bump stations		$\vdash$	$\vdash$	+	+	+	+		+	+	+					+	+		$\vdash$		+	$\left  \right $	+	+
Digested sludge	ina	1		$\dashv$	+		í –	1		$\neg$	$\dashv$	+	$\uparrow$		+	+							$\uparrow$	$\square$	$\vdash$		+	$\left  \right $	+	+
Solids (ore, sand, gravel, ash)	Dra				+			1	$\square$	$\neg$	+	+	$\uparrow$		+	$\neg$					-		1	$\square$	$\vdash$		+		+	+
Flammable liquids		1			+			1		$\uparrow$	+	+	$\uparrow$		+	$\top$	+						1		$  \uparrow  $		1		+	+
River, lake and groundwater																														
Liquefied gas																														
Food and beverage production																														
Gas-containing liquids																														
Gas turbine fuels																														
Filtered water																														
Geothermal water																		_												_
Harmful liquids		_					-	_		_	_			_	+	_	_	_	-				_				_		_	_
Toxic liquids					$\rightarrow$	_	-	-		$\rightarrow$	$\rightarrow$	_	-		+	_	_	-			_		+		$\left  \right $		_	$\left  \right $	+	—
High-temperature hot water Heating water		-			+	_	-	-		$\rightarrow$	$\rightarrow$	_	$\rightarrow$		+	_	_	-	-			_	+			_	+	$\left  \right $	+	—
Highly aggressive liquids		-			+	_		-		$\rightarrow$	-	_	$\rightarrow$	_	+	_		-	-				+		$\vdash$		-	$\left  \right $	+	+-
Industrial service water					$\rightarrow$			$\vdash$		$\rightarrow$			$\rightarrow$		+	+	+	-					+-		$\vdash$	-	+	$\left  \right $	+	+
Condensate		-	-					$\vdash$		-			+	-	+	+	+	-	-		-		+		$\left  \right $		+	$\left  \right $	+	+
Corrosive liquids		+				-		1			-	-	+		╈	+	+						+				+		+	+
Valuable liquids					-			1							╈		-		-		-				$\vdash$		-			+
Fuels					+			1			$\uparrow$				+		+						1				1		+	+
Coolants																													-	1
Cooling lubricant																														$\top$
Cooling water																														1
Volatile liquids																														
Fire-fighting water				I					$\square$	Ţ	_									$\square$					$\square$			$\square$		
Solvents																								$\square$	$\square$					$\perp$
Seawater		_		$\square$			-											_							$\square$				$\perp$	_
Oils		-		$\square$	!		-	-		$\rightarrow$	$\downarrow$	-	$ \rightarrow$	_	+	_	_		-				_			_	_		+	_
Organic liquids		-		$ \rightarrow $		_	-	-		$\rightarrow$	$\dashv$		$\rightarrow$		+		_	-		$\left  \right $			-	$\square$			_	$\left  \right $		—
Pharmaceutical fluids Polymerising liquids			$\left  - \right $	$ \rightarrow $	-+	_	-		$\left  - \right $	-+	$\dashv$	+	+	_	+	_	_	-	-	$\left  \right $		_	+-	$\left  - \right $	$\left  - \right $		_	$\left  \right $	+	—
Rainwater / stormwater		+	$\left  - \right $	$ \rightarrow $	+	_	-	-	$\vdash$	$\rightarrow$	+	+	+	_	+	+		-	-	$\left  \right $		_	+-	$\vdash$	$\left  - \right $	_	+	$\left  \right $	+	+
Cleaning agents					+	_	-	-		$\rightarrow$	+	-	$\rightarrow$		+	_	_	-		$\vdash$			+	$\vdash$	$\vdash$		-	$\left  \right $	_	+
Raw sludge		+	$\left  - \right $		+	-	-	$\vdash$	$\left  \right $	+	+	+	+		+	+	+					+	+		$\left  \right $		+	$\left\{ - \right\}$	+	+
Lubricants		-	$\left  - \right $	$\rightarrow$	+			-	$\vdash$	+	$\dashv$	+	$\dashv$		+	+	+		F				+	$\square$	$\vdash$		+	$\left  \right $	+	+
Grey water																						+	+		$\vdash$		+	+	+	+-
Swimming pool water		+					F	<u> </u>		-			+	-	+	+	+		Ē				+			$\neg$	1		+	+
Brine				$\neg$	$\uparrow$					$\neg$	$\uparrow$	$\uparrow$	$\uparrow$		╈								1	$\square$				$ \uparrow $	+	$\uparrow$
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Wash water								1																						

		Amacan K	Amacan P Amacan S		Amamix	Amaprop	Amaline		Sewatec	Sewatec SPN	Sewabloc	KWP	KWP-Bloc		WBC	LSA-S	LCC-M	TBC	ГСЛ	FGD	CH H	MDX	ZW	HVF	DWD	-	Etaprime L	Etaprime B c7 p./	EZ D/L AU	AU Monobloc		
Waste water with faeces	es			Inits		_		ds				_		bs												bs						
Waste water without faeces	tubes							flu					•	Slurry pumps											_		$\perp$	$\perp$			$\square$	
Aggressive liquids	rge				" <u> </u>	_		den					•	N.				L								bu			┦		$\square$	
Inorganic liquids	in discharge	_	_	cleaning		_	_	Pumps for solids-laden fluids				$\dashv$	_	Slui	_	_		_			_	_			_ !	Selt-priming pumps	+	+	+		$\vdash$	
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Distillate	- Un	-		- v		-		ps f	$\vdash$				-	-	-			+-			+	-	$\vdash$		-	ŀ			+	+	$\vdash$	
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Digested sludge	Submersible pumps			Mixers /																												
Solids (ore, sand, gravel, ash)	Sub			Mix																												
Flammable liquids																											$\bot$				$\square$	_
River, lake and groundwater													•					_							_	Ľ			ื่่∎		$\square$	
Liquefied gas			_	_								$ \rightarrow$	_	-	_		_	_		_	_	_			_	╞	+	+	+	$\vdash$	$\square$	
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Gas-containing liquids Gas turbine fuels	$\left\{ \right\}$	$\rightarrow$	_	_									•	-	_	_			-		_		-		_	┢	+	+	+	+	$\vdash$	
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Heating water																																
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Polymerising liquids		+	_		⊢	-			$\vdash$		$\vdash$	+	_		+	+		+		-+	+	+	-	$\vdash$	-	┠	+	+	+	+	$\vdash$	
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	UPA C 100 EE	UPA C 100 EN	UPA C 150	UPA 200, UPA 250	UPA 400-850	UPA D		B Pump	Comeo	Movitec H(S)	Movitec	Movitec VCI	Multitec	Omega	RDLO	RDLP	Vitachrom	Vitacast/Vitacast Bloc	Vitaprime	Vitastage	Vitalobe		CHTA / CHTC / CHTD	HGB / HGC / HGD	HGI	HGM	YNK LUV / LUVA	WKTB		
Waste water with faeces	bs						bs		bs				sd				es					ds								
Waste water without faeces	m						sdwnd		m													islands	$\square$	$\square$						
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Digested sludge																	Hyglenic pumps for the food, beverage and pharmaceutical moustries					Pumps for power station			$ \uparrow $					
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Filtered water	-	-		+	-	-		_		+-				-	$\left  \right $	-		-	-		$\vdash$		$\vdash$	-	$\rightarrow$	+	+	+-	+	┢
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Brine		-		_	-	-		_	-	+-		$\vdash$	_	-		_	-	-	-	$\vdash$	$\vdash$				_				$\square$	┝
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General irrigation	waste water pumps	-		-			mno	_				_	_	+		_	_		mot	$\rightarrow$			$\left  - \right $	_		$\rightarrow$		$\vdash$	_
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Drainage							acka						+	+				+	nersi					+					-
Pressure boosting	sdwnd						s / pi												Submersible motor pumps										_
Sludge thickening	e pu						unit												, or							$\perp$		$\square$	_
Disposal	nag	_				E	Lifting units / package pump stations	-	H	-				_			_	_						_		$\rightarrow$		$\vdash$	_
Dewatering Descaling units	Drainage					-	Ľ	-													-			-			+		-
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Solids transport																													_
Fire-fighting systems		Ţ											Ţ		T										$\square$				_
Geothermal energy		+	_	-	$\vdash$			<u> </u>			+	_	-	+	-			-						_	$\left  \right $	+		$\vdash$	_
Drawdown of groundwater levels Maintenance of groundwater levels	-	+	_	-	$\left  - \right $	-		-		$\vdash$	+	+	+	+	+	+	+	+					$\vdash$	_	+	+	+		_
Domestic water supply	-	+		+							-	-	+	+	+		+	+			-			+			+		-
Flood control / coast protection (stormwater)		Ť												Ť															_
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Industrial recirculation systems		_									_		_	+			_							_		$\rightarrow$		$\vdash$	_
Nuclear power stations Boiler feed applications	-	+	_	+				-				_	+	+	+	_	+-				+		$\left  \right $		$\left  \right $	+			-
Boiler recirculation	-	╈		-									╈	╈	+		-	-			$\neg$			+			+		-
Waste water treatment plants																			1										_
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Cooling circuits Paint shops	-	+		-				-			-	-	+	+	+		-	-			+			-	$\left  \right $	+			-
Food and beverage industry		+		-							-		+	+	+		-	+						+					-
Seawater desalination / reverse osmosis																													_
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Cleaning of stormwater tanks / storage sewers		+	+	+	$\vdash$				$\left  - \right $	$\left  \right $	+	+	+	+	+								$\square$	+	+	+			-
Recirculation																													_
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Sludge disposal		+	+	-	$\vdash$			-		$\vdash$	+	+	+	+	+	-	+	+					$\vdash$	+	+	+			-
Snow-making systems																													_
Heavy oil and coal upgrading		Ţ			$\square$						$\downarrow$			1						$\square$								$\square$	_
Swimming pools		+	_	-				<u> </u>			+	_	-	+	$\rightarrow$		_	-			-		$\square$	_	$\left  \right $	+		$\vdash$	_
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Keeping in suspension		+	-	+							+	+	+	+	+						+			-		+			-
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Draining of pits, shafts, etc.									Ц	$\square$	_		-	$\downarrow$											$\square$	$\perp$		$\square$	_
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Water treatment	( H																									$\square$			_
Water extraction								<u> </u>			_	_			-			-		$\rightarrow$	-			_				$\vdash$	_
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Sugar Industry				<u> </u>																									-

		Amacan K	Amacan P Amacan S		Amamix	Amaprop	Amaline		Sewatec	Sewatec SPN	Sewabloc	KWP KMP-Bloc		WBC	LSA-S	RCC-M	LCC-R	TBC	LCV	DHM	LHD	MDX	ZW	HVF		Etaprime L	Etaprime B	EZ B/L	AU	AU Monobloc
Aquaculture	bes			ite				fluids					nps												sou		$\square$		$\square$	$\square$
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General irrigation	narg			tank cleaning		┢		solids-laden			_		ur v		1	-		-	_	1	+-	-								+
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Dock facilities	sin					_		or so					_		_						-						$\square$	$ \rightarrow$	$\rightarrow$	$\downarrow$
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Sludge thickening	e pu	$\rightarrow$	-	i+ + + i		+	-	- sdmna			+	_	-	┢	+	-		$\rightarrow$		+-	-	-			-	$ \vdash $	$\vdash$		+	+
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Fire-fighting systems						+	-				-	-			+			$\rightarrow$		+	-				-			$\rightarrow$		
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Maintenance of groundwater levels																														
Domestic water supply		_		_	-	-	_				_	_	_			_		$\rightarrow$	_	_	_			_	_			$\rightarrow$		4
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Industrial recirculation systems					-		-								+					+	+				-	$\left  - \right $		$\rightarrow$	+	+
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Boiler feed applications																														
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Cooling circuits						$\vdash$																							$\neg$	+
Paint shops											_		_																	
Food and beverage industry			_		-		_				_			_				_			-				_			$\rightarrow$		
Seawater desalination / reverse osmosis Mixing	┥┝	$\rightarrow$				+	-				+		-	⊢				-+	_	+-	+				_	$\left  - \right $	$\vdash$	$\rightarrow$	$\rightarrow$	+
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Flue gas desulphurisation						┢	-								+						+				-		$\vdash$	$\rightarrow$	+	+
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Cleaning of stormwater tanks / storage sewers																														
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Washing plants																														
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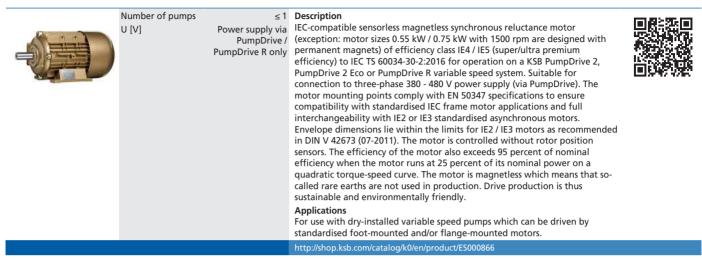
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				250	350	200															7						CHTD	GD						
	12 000 0 11.	UPA C 100 EE	UPA C 100 EN	UPA C 150	UFA 200, UFA 230	UFA 300, 950		UPA D	B Pump		Comeo	Movitec H(S)I	Movitec	Movitec VCI	Multitec		Omega	KDLO	RDLP		Vitachrom	Vitacast/Vitacast bloc	vitaprime	Vitastage	Vitalobe		CHTA / CHTC / CHTD	HGB / HGC / HGD	IBH	HGM	YNK	LUV / LUVA	WKTB	
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Pressure boosting	men								>										•	ohai						tior								T
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Disposal										-										ge a				$\downarrow$		wer						$\square$		
Dewatering	-				_	_	_			-	<u> </u>				_	-		┛┤		eraç		_		$\downarrow$		r po					$\square$		-	╞
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Solids transport		+	+	+	+	+	+	-			-	-		-	-		-	┛┼	-	pumps for the food, beverage and	+	+	+	+	_	Pumps for power station conventional	$\vdash$	$\neg$	$\vdash$	$\neg$	H	$\vdash$		╀
Fire-fighting systems							+				-								-	e to	+	+	+	+		ď	$\square$	$\neg$	$\square$	$\neg$	$\mid \mid$	$\mid \mid$	_	┢
Geothermal energy		+	+	┽	+	+	+					<u> </u>					Ť	+	-	r th	+	+	+	+				$\neg$	$\square$	$\neg$	H	$\square$	_	t
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Cleaning of stormwater tanks / storage sewers		+		$\uparrow$	$\uparrow$	+	╞										$\uparrow$	$\uparrow$			+	+	+	+				$\neg$	$\square$	$\neg$	H			t
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Swimming pools		+	+	+	+	+	+										+	+			+	+	+	+				$\neg$	$\square$	$\neg$	⊢			t
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Fountains	<u> </u>					Ē																Ţ		_										Ĺ
Keeping in suspension				_	_	_		_											_			_		$\downarrow$					$\square$	Щ	$\sqcup$	$\square$	<u> </u>	╞
Thermal oil circulation		+	_	_	+	_	_				-	-	$\left  - \right $				-	+	_	-	_	_		+	_		-	$ \rightarrow $	$\mid \mid$	$ \dashv$	$\mid \mid$	$\mid \mid$	-	╀
Draining of pits, shafts, etc.		+	-	-	+	+	+	_			-	-	$\left  - \right $				+	+	_	-	+	+	_	+	_		$\vdash$		$\vdash$	$\square$	$\vdash$	$\mid \mid$		╀
Process engineering Heat recovery systems		+	+	+	┼	+	+	-			-	-	$\left  - \right $				+	+	-	-	+	+	+	+	-			$\neg$	$\vdash$	$\dashv$	$\mid \mid$	$\vdash$	_	╀
Hot-water heating systems		+	+	+	+	+	+										+	+			+	+	+	+				$\neg$	$\square$	$\dashv$		H		t
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		SEZ / SEZI	SNW / PNW	Beveron	SPΥ		RER	RSR	RUV	PSR	RHD	LUV Nuclear	RHM	RVM	RHR	RVR	RVT	RPH-RO	HGM-RO	Multitec-RO		RC / RCV		cua DU / EU		KSB SuPremE	KSB UMA-S		PumpDriv	PumpDrive R		PumpMeter	KSB Guard	KSB Leaka
Aquaculture	sp						-		_				_		_							_			es s			_		_			T	_
Spray irrigation	power station conventional islands					power stations											0 cm ocic				sdwnd		Fire-fighting systems		Drives			Variable speed systems			Monitoring and diagnosis			_
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General irrigation Chemical industry	ntior		•		-	OWE	_		+	+		+	_	+	+	+	reverse	_	-	-	eme		htin	_		₽		spee		-	and			-
Dock facilities	nver				-	arp	-		+	-		+	-	+	+	+			+	-	Positive displacement	-	e-fig					ble		-	ing			-
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## Drive, variable speed system and monitoring

### **KSB SuPremE**



#### **KSB UMA-S**

1.000.0	Number of pumps U [V] Other mains voltages on request	 Description Permanent-magnet submersible synchronous motor, for operation on a KSB PumpDrive R variable speed system. NEMA connections and identical outside diameters ensure full interchangeability with comparable 6-inch or 8-inch asynchronous motors. The motor is controlled without rotor position sensors. The motor efficiency is 5 - 12 % above that of asynchronous motors. Given the design and functionality the use of permanent magnets is essential. Applications Exclusively for submersible borehole pumps in the range of 4 to 150 kW.
		http://shop.ksb.com/catalog/k0/en/product/ES000003

## PumpDrive 2 / PumpDrive 2 Eco

P U	· · ·	of analog standard signals, a field bus or the control nanel. As PumpDrive is	
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#### http://shop.ksb.com/catalog/k0/en/product/ES000911

## **PumpDrive R**

	of analog standard signals, a field bus or the control nanel. As PumpDrive R is
	http://shop.ksb.com/catalog/k0/en/product/ES000898

## PumpMeter

Number of pumps ≤ 1 U [V DC] 24	Description Device for monitoring the operation of one pump. It is an intelligent pressure transmitter for pumps, with on-site display of measured values and operating data. It records the load profile of the pump in order to indicate any potential for optimising energy efficiency and availability. The device comprises two pressure sensors and a display unit. PumpMeter is supplied completely assembled and parameterised for the pump it is used with. It is ready for operation as soon as the M12 plug connector is plugged in. Applications Air-conditioning systems, cooling circuits, cooling lubricant distribution, heating systems, water treatment plants, water supply systems, water distribution systems, water transport systems, water extraction systems
	http://shop.ksb.com/catalog/k0/en/product/ES000807

## KSB Guard

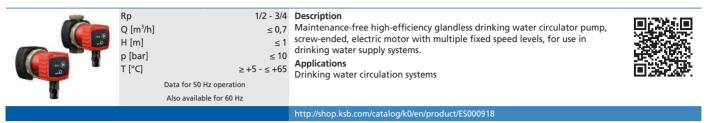
Sensor units U [V AC] U [V DC]	(gateway)	System for monitoring the condition of pumps: Sensors on the pump record vibration and temperature data, which is processed in the KSB Cloud.	
		http://shop.ksb.com/catalog/k0/en/product/ES000938	

## KSB Leakage Sensor

		<b>Description</b> The KSB Leakage Sensor is an intelligent monitoring system for measuring and displaying mechanical seal leakage on site. It comprises a leakage measuring instrument and a display unit. <b>Applications</b> Industry (heat transfer fluid market)	
KSB Leakage Sensor		http://shop.ksb.com/catalog/k0/en/product/ES000982	

## Drinking water circulators, fixed speed

## Calio-Therm S NC/NCV

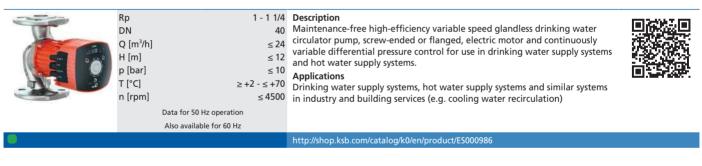


## **Calio-Therm NC**

Rp Q [m³/h] H [m] p [bar] T [°C] n [rpm]	≤7 ≤10	Applications Drinking water supply systems, hot water supply systems and similar systems in industry and building services (e.g. cooling water recirculation)	
		http://shop.ksb.com/catalog/k0/en/product/ES000928	

## Drinking water circulators, variable speed

#### **Calio-Therm**

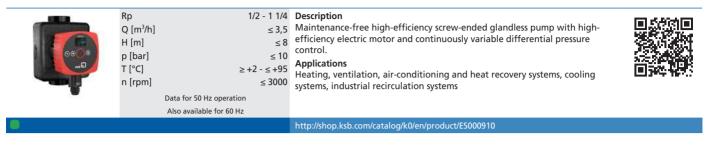


## **Calio-Therm S**

$ H [m] \leq 6 $ $ p [bar] \leq 10 $ $ T [°C] \geq +2 - \leq +65 $	<ul> <li>Description</li> <li>Maintenance-free high-efficiency variable speed glandless drinking water circulator pump, screw-ended, electric motor and continuously variable differential pressure control for use in drinking water supply systems and hot water supply systems.</li> <li>Applications</li> <li>Hot water supply, drinking water circulation systems and similar systems in industry and building services (e.g. cooling water recirculation).</li> </ul>
	http://shop.ksb.com/catalog/k0/en/product/ES000882

## Circulators, variable speed

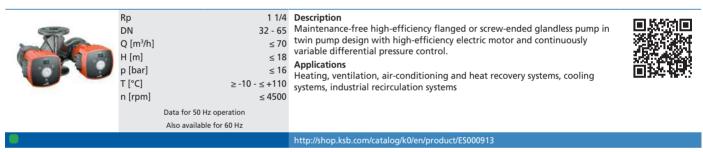
#### Calio S



### Calio

Rp DN Q [m³/h] H [m] p [bar] T [°C] n [rpm]	pressure control. Applications Heating, ventilation, air-conditioning and heat recovery systems, cooling systems, industrial recirculation systems
	http://shop.ksb.com/catalog/k0/en/product/ES000881

#### Calio Z



## **In-line pumps**

#### **Etaline L**

Rp DN Q [m³/h] H [m] p [bar] T [°C]	32 - 80 ≤ 95 ≤ 21 ≤ 10	Heating systems, air conditioning systems, cooling sirsuits, water supply	
		http://shop.ksb.com/catalog/k0/en/product/ES000925	

Pumps

Rp DN Q [m³/h] H [m] p [bar] T [°C]	$\begin{array}{c} 1 \ 1/4 \\ 32 - 80 \\ \leq 150 \\ \leq 21 \\ \leq 10 \\ \geq -15 - \leq +120 \end{array}$ Data for 50 Hz operation Also available for 60 Hz	Single-stage close-coupled in-line volute casing pump as twin pump, with PumpDrive variable speed system and common motor/pump shaft <b>Applications</b> Heating systems, air-conditioning systems, cooling circuits, water supply systems (not approved for drinking water according to the German	
		http://shop.ksb.com/catalog/k0/en/product/ES000926	

## Etaline

DN Q [m³/h] H [m] p [bar] T [°C]	≤ 700 ≤ 96 ≤ 16	system; pump shaft and motor shaft are rigidly connected. With KSB SuPremE, a magnetless synchronous reluctance motor (exception: motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets) of efficiency class IE4/IE5 to IEC TS 60034-30-2:2016, for operation on a KSB PumpDrive 2 or KSB PumpDrive 2 Eco variable speed system without rotor position sensors. Motor mounting points in accordance with EN 50347, envelope dimensions in accordance with DIN V 42673 (07-2011). ATEX-compliant version available. <b>Applications</b> Hot water heating, cooling circuits, air-conditioning, water supply systems, service water supply systems, industrial recirculation systems	
		http://shop.ksb.com/catalog/k0/en/product/ES000113	

## Etaline Z

$\begin{array}{llllllllllllllllllllllllllllllllllll$	magnetless KSB SuPremE motor of efficiency class IE4/IE5 and PumpDrive variable speed system; pump shaft and motor shaft are rigidly connected. An M12 module (accessory) enables redundant operation of Etaline Z without the need for a higher-level controller. With KSB SuPremE, a magnetless synchronous reluctance motor (exception: motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets) of efficiency class IE4/IE5 to IEC TS 60034-30-2:2016, for operation on a KSB PumpDrive 2 or KSB PumpDrive 2 Eco variable speed system without rotor position sensors. Motor mounting points in accordance with EN 50347, envelope dimensions in accordance with DIN V 42673 (07-2011). ATEX-compliant version available. <b>Applications</b> Hot water heating, cooling circuits, air-conditioning, water supply systems, service water supply systems, industrial recirculation systems
	http://shop.ksb.com/catalog/k0/en/product/ES000114

## Etaline-R

Q [m] H [m] p [ba T [°C]	≤ 93 ≤ 25 ≥ -30 - ≤ +140 Data for 50 Hz operation	and PumpDrive variable speed system. <b>Applications</b> Hot water heating, cooling circuits, air-conditioning, water supply systems,	
	Also available for 60 Hz	Hot water heating, cooling circuits, air-conditioning, water supply systems, service water supply systems, industrial recirculation systems http://shop.ksb.com/catalog/k0/en/product/ES000812	

ILN

	$\leq 3310$ $\leq 112$ $\leq 16$ $\geq 20 \leq 170$	design allows the impeller to be dismantled without removing the piping and the motor. ATEX-compliant version available. Applications
Control unit		http://shop.ksb.com/catalog/k0/en/product/ES000730

#### ILNC

	DN	32 - 125	Description
	Q [m³/h]		Vertical close-coupled centrifugal pump in in-line design, with electric motor,
a second as a second second second second second second second second second second second second second second	H [m]	≤ 112	closed impeller and mechanical seal. ILNCS fitted with an auxiliary vacuum
	p [bar]	≤ 16	pump, ILNCE with ejector. Standardised IEC frame motor. ATEX-compliant
	T [°C]	≥ -20 - ≤ +70	version available.
	n [rpm]		Applications
	n [ɪpm]	≤ 3000	Hot-water heating systems, cooling circuits, air-conditioning systems, marine
		Data for 50 Hz operation	applications, water and service water supply systems, cleaning systems and
		Also available for 60 Hz	industrial recirculation systems
Control unit			http://shop.ksb.com/catalog/k0/en/product/ES000731

ILNR

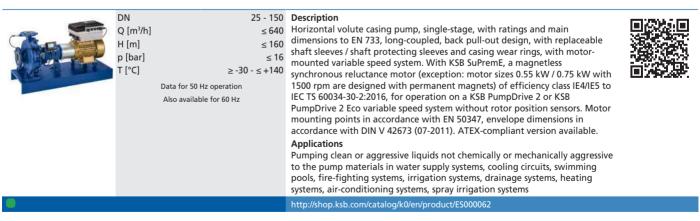
р н ц т	DN Q [m <sup>3</sup> /h] d [bar] [ °C] h [rpm] Data for 50 Hz Also available	$\leq 1600$ $\leq 93$ $\leq 10$ $\geq -15 - \leq +70$ $\leq 1450$ operation	and casing cover. ILNR with flexible coupling. Applications Marine applications, cargo tank cleaning, scrubbers, brine circulation, ballast
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#### Megaline

DN Q [m³/h] H [m] p [bar] T [°C]	< 600	curved vanes, single mechanical seal to EN 12756.	
		http://www.ksb.com.br/ksb-br-pt/pesquisa.php?_q=megaline	

## Standardised / close-coupled pumps

#### **Etanorm**



$H \begin{bmatrix} m \end{bmatrix} & \leq 101 \\ p \begin{bmatrix} bar \end{bmatrix} & \leq 161 \\ T \begin{bmatrix} c \end{bmatrix} & \geq -30 - \leq +140 \\ Data for 50 Hz operation \\ Also available for 60 Hz \\ H \begin{bmatrix} m \end{bmatrix} & c \\ p \begin{bmatrix} bar \end{bmatrix} & c \\ p \begin{bmatrix} bar \end{bmatrix} & c \\ p \begin{bmatrix} bar \end{bmatrix} & c \\ p \begin{bmatrix} bar \end{bmatrix} & c \\ p \begin{bmatrix} bar \end{bmatrix} & c \\ p \begin{bmatrix} bar \end{bmatrix} & c \\ p \begin{bmatrix} bar \end{bmatrix} & c \\ p \begin{bmatrix} bar \end{bmatrix} & c \\ p \begin{bmatrix} bar \end{bmatrix} & c \\ p \begin{bmatrix} bar \end{bmatrix} & c \\ p \begin{bmatrix} bar \end{bmatrix} & c \\ p \begin{bmatrix} bar \end{bmatrix} & c \\ p \end{bmatrix} & c \\ p \begin{bmatrix} bar \end{bmatrix} & c \\ p \\ p \\ p \\ p \\ p \\ p \\ p \\ p \\ p \\$	al long-coupled single-stage (two-stage for pump size 125-500) using pump in back pull-out design, with replaceable shaft sleeves / otecting sleeves and casing wear rings, with magnetless KSB SuPremE xception: motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed manent magnets) of efficiency class IE4/IE5 and PumpDrive variable stem; ATEX-compliant version available.
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## Etabloc

DN Q [m³/h] H [m] p [bar] T [°C]	25 - 150 $\leq 660$ $\leq 140$ $\leq 16$ $\geq -30 - \leq +140$ Data for 50 Hz operation Also available for 60 Hz	Single-stage close-coupled volute casing pump, with ratings to EN 733, with replaceable shaft sleeve and casing wear rings, with motor-mounted variable speed system. With KSB SuPremE, a magnetless synchronous reluctance motor (exception: motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with	
		The produce is the second seco	

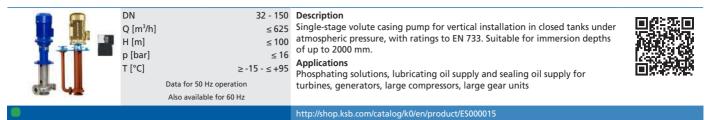
## Etachrom **B**

http://shop.ksb.com/catalog/k0/en/product/ES000066
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## **Etachrom L**

	Description Horizontal single-stage circular casing pump, with ratings and main dimensions to EN 733, with replaceable casing wear rings and motor-mounted variable speed system. With KSB SuPremE, a magnetless synchronous reluctance motor (exception: motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets) of efficiency class IE4/IE5 to IEC TS 60034-30-2:2016, for operation on a KSB PumpDrive 2 or KSB PumpDrive 2 Eco variable speed system without rotor position sensors. Motor mounting points in accordance with EN 50347, envelope dimensions in accordance with DIN V 42673 (07-2011). ATEX-compliant version available. Applications Cleaning systems (bottle rinsing, crate washing, etc.), water treatment plants, water supply systems, fire-fighting systems, spray irrigation systems, general irrigation systems, drainage systems, hot-water heating systems, air- conditioning systems, industrial washing plants, general industry, disposal of paint sludge, surface treatment	
	http://shop.ksb.com/catalog/k0/en/product/ES000065	

### Etanorm V



## Meganorm

DN Q [m³/h] H [m] p [bar] T [°C]	≤ 1160	Available with cylindrical or conical shaft seal chamber.	
		http://www.ksb.com.br/ksb-br-pt/pesquisa.php?_q=Meganorm	

## Megabloc

DN Q [m³/h] H [m] p [bar] T [°C]	≤ 550 < 140	Description Volute casing pump for horizontal or vertical installation, back pull-out design, single-stage, radially split volute casing, flanged or screw-ended (optional), replaceable casing wear rings. Volute casing with closed radial impeller with multiply curved vanes, single mechanical seal to EN 12756. Applications Water supply systems, irrigation systems, air-conditioning systems, building services systems, hotels, shopping centres, etc., fire-fighting systems, cooling circuits, general industry
		http://www.ksb.com.br/ksb-br-pt/pesquisa.php?_q=Megabloc

## Hot water pumps

HPK-L

DN Q [m³/h] H [m] p [bar] T [°C]	≤ 1160	external cooling. Alex-compliant version available.	
		http://shop.ksb.com/catalog/k0/en/product/ES000036	

HPK

DN Q [m³/h] H [m] p [bar] T [°C]	≤ 4150 ≤ 185 ≤ 40	Applications	
		http://shop.ksb.com/catalog/k0/en/product/ES000034	

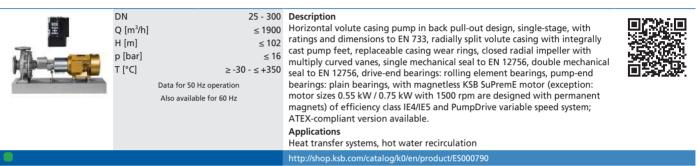
#### HPH

Pumps

DN Q [m³/h] H [m] p [bar] T [°C]	≤ 2350	TRD type testing by TÜV. ATEX-compliant version available.	
		http://shop.ksb.com/catalog/k0/en/product/ES000037	

## Hot water / thermal oil pumps

### **Etanorm SYT / RSY**



## **Etabloc SYT**

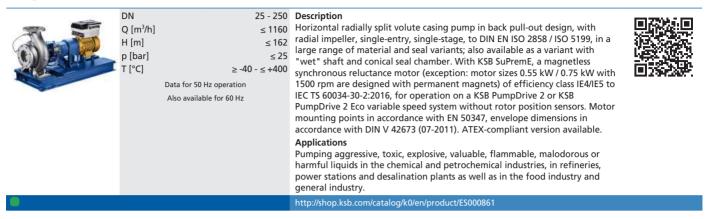
E.	DN Q [m³/h] H [m] p [bar] T [°C]	≤ 280 ≤ 68 ≤ 16	<b>Description</b> Volute casing pump for horizontal or vertical installation, back pull-out design, single-stage, with ratings to EN 733, radially split volute casing, replaceable casing wear rings, volute casing with integrally cast pump feet, closed radial impeller with multiply curved vanes, single mechanical seal to EN 12756, product-lubricated carbon plain bearing, grease-lubricated radial ball bearing in the motor housing, with magnetless KSB SuPremE motor (exception: motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets) of efficiency class IE4/IE5 and PumpDrive variable speed system; ATEX-compliant version available. <b>Applications</b> Heat transfer systems, hot water recirculation	
			http://shop.ksb.com/catalog/k0/en/product/ES000791	

## **Etaline SYT**

DN Q [m³/h] H [m] p [bar] T [°C]	≤ 316 ≤ 69 ≤ 16	Description Single-stage volute casing pump in in-line design, with magnetless KSB SuPremE motor (exception: motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets) of efficiency class IE4/IE5 and PumpDrive variable speed system; pump shaft and motor shaft are rigidly connected. ATEX-compliant version available. Applications Heat transfer systems, hot water recirculation	
		http://shop.ksb.com/catalog/k0/en/product/ES000789	

# Standardised chemical pumps

## MegaCPK



#### **CPKN**

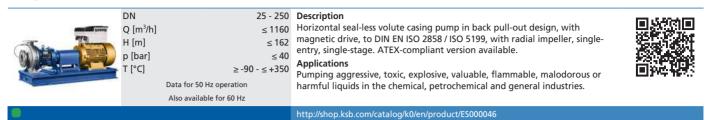
<b>1</b>	DN Q [m³/h] H [m] p [bar] T [°C]	≤ 4150	Description Horizontal radially split volute casing pump in back pull-out design, with radial impeller, single-entry, single-stage, to ISO 2858 / ISO 5199. Also available as a variant with "wet" shaft, conical seal chamber and/or semi- open impeller. ATEX-compliant version available. Applications Pumping aggressive, toxic, explosive, valuable, flammable, malodorous or harmful liquids in the chemical and petrochemical industries, in refineries, power stations and desalination plants as well as in the food industry and general industry.	
			http://shop.ksb.com/catalog/k0/en/product/ES000027	

#### **CPKNO**

<b>(</b>	DN Q [m³/h] H [m] p [bar] T [°C]	≤ 150 < 25	Horizontal volute casing pump in back pull-out design, with semi-open impeller, single-stage, to ISO 2858 / ISO 5199. ATEX-compliant version available.
			http://shop.ksb.com/catalog/k0/en/product/ES000027

# Seal-less pumps

## Magnochem



# Magnochem 685

	DN Q [m³/h] H [m] p [bar] T [°C]	≤ 1160	<b>Description</b> Horizontal seal-less volute casing pump, with magnetic drive, radial impeller, single-entry, single-stage. Design to ISO 15783 / API 685 (centreline mounting, ASME flanges, and twice the permissible nozzle forces). ATEX-compliant version available. <b>Applications</b> Pumping aggressive, toxic, explosive, valuable, flammable, malodorous or harmful liquids in the chemical, petrochemical and general industries.
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# Magnochem-Bloc

	≤ 625 ≤ 162 < 40	single-entry, single-stage. ATEX-compliant version available.
		http://shop.ksb.com/catalog/k0/en/product/ES000045

## Etaseco / Etaseco-l

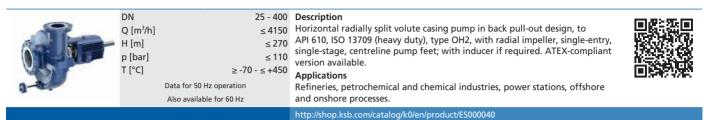
DN Q [m³/h] H [m] p [bar] T [°C]	≤ 250 < 100	line design.
		http://shop.ksb.com/catalog/k0/en/product/ES000122

#### **Etaseco RVP**

0	DN Q [m³/h] H [m] p [bar] T [°C]	$\begin{array}{l} 25 - 40\\ \leq 44\\ \leq 40\\ \leq 16\\ \geq -50 - \leq +110\\ \end{array}$ Data for 50 Hz operation Also available for 60 Hz	Horizontal or vertical seal-less volute casing pump in back pull-out design with fully enclosed canned motor, low noise emission, with radial impeller, single-stage, single-entry, casing connecting dimensions to EN 733, or in in- line design. Applications Pumping toxic, volatile or valuable liquids in environmental engineering and industrial applications and as coolant pump in cooling systems. Transport vehicles, environmental engineering and industry; applications where low noise emission, smooth running or long service intervals are required.	
			http://shop.ksb.com/catalog/k0/en/product/ES000122	

# **Process pumps**

## RPH



#### **RPH-LF**

## RPHb / RPHd / RPHbd

O [m³/h] ≤ 510	compliant version available.
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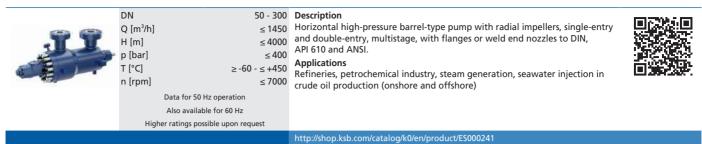
#### **RPH-V**

	- 165	Vertical single-stage sump pump to API 610 and ISO 13709 (heavy duty), type VS4, with integral thrust bearing assembly and separate discharge line. ATEX-compliant version available.	
		http://shop.ksb.com/catalog/k0/en/product/ES000880	

**CTN** 

	< 115	Radially split vertical shaft submersible pump with double volute casing for wet and dry installation, with radial impeller, single-entry, single-stage or two-stage; heatable model available. ATEX-compliant version available. <b>Applications</b> Pumping chemically aggressive liquids, also slightly contaminated or with a low solids content, in the chemical and petrochemical industries.
		http://shop.ksb.com/catalog/k0/en/product/ES000014

## CHTR



# **CHTR**a

Contraction of the second	DN Q [m³/h] H [m] p [bar] T [°C] n [rpm]	≤ 1200 ≤ 1550 ≤ 155 ≥ -40 - ≤ +205	(ISO 13709), type BB3. First stage optionally available in double-entry design for low NPSH requirements. ATEX-compliant version available.
			http://shop.ksb.com/catalog/k0/en/product/ES000933

# **CINCP / CINCN**

Q $[m^3/h]$ $\leq$ 780         H $[m]$ $\leq$ 105         p $[bar]$ $\leq$ 10	bearings in the upper section of the pump set. Supplied with discharge pipe extending above the baseplate (CINCP) or without discharge pipe (CINCN). ATEX-compliant version available.
	http://shop.ksb.com/catalog/k0/en/product/ES000718

## INVCP

<b>H</b>	$\begin{array}{c c} DN & 32 - 3i \\ Q \; [m^3/h] & \leq 16i \\ H \; [m] & \leq 1 \\ p \; [bar] & \leq \\ T \; [^\circC] & \geq -10 - \leq +10 \\ n \; [rpm] & \leq 30i \\ \\ Data \; for \; 50 \; Hz \; operation \\ Also \; available \; for \; 60 \; Hz \end{array}$	<ul> <li>Vertical immersion pump for wet or dry installation, available with closed or semi-open impeller. Supplied with discharge pipe extending above the baseplate (INVCP) or without discharge pipe (INVCN). ATEX-compliant version available.</li> <li>Applications</li> </ul>	
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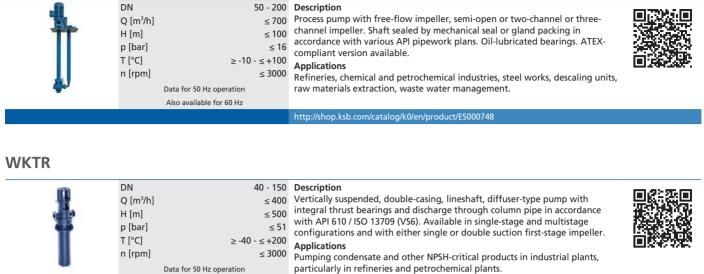
#### http://shop.ksb.com/catalog/k0/en/product/ES000737

# **Estigia**

		< 1160	Description         Vertical immersion pump for wet installation, with various impeller types         designed to meet specific fluid requirements. Supplied with discharge pipe         extending above the cover plate, DN according to nominal flow rate. Sealing         by lip seal, single or double cartridge mechanical seal. ATEX-compliant version         available.         Applications         Pumping chemically aggressive, slightly contaminated or solids-laden fluids in         the chemical and petrochemical industries.	
KSB SuPremE, PumpDrive, Frequency inverter		nverter	http://shop.ksb.com/catalog/k0/en/product/ES000937	

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#### **RWCP / RWCN**



Also available for 60 Hz

http://shop.ksb.com/catalog/k0/en/product/ES000875

# **Rainwater harvesting systems**

# Hya-Rain / Hya-Rain N

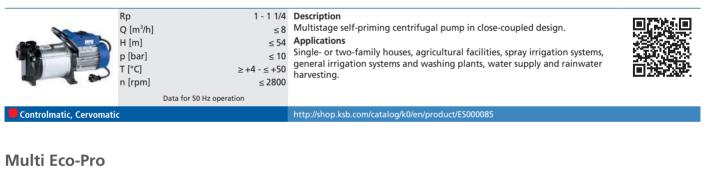


## Hya-Rain Eco

Rp Q [m³/h] H [m] p [bar] T [°C]	1 $\leq 4$ $\leq 43$ $\leq 6$ $\geq 0 - \leq +35$ Data for 50 Hz operation	integrated dry running protection and demand-driven automatic pump control.	
		http://shop.ksb.com/catalog/k0/en/product/ES000600	

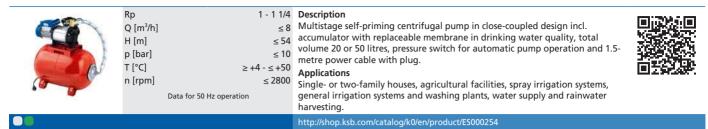
# Domestic water supply / swimming pool pumps

# Multi Eco



Rp	1 - 1 1/4	Description	101345 00 (CT
Q [m³/h] H [m] p [bar] T [°C] n [rpm]	≤ 8 ≤ 54 ≤ 10 ≥ +4 - ≤ +50	Multistage self-priming centrifugal pump in close-coupled design, with power cable, plug and Controlmatic E automatic control unit starting and stopping the pump in line with consumer demand and protecting it against dry running. Automated with automatic control unit.	
		harvesting.	
		http://shop.ksb.com/catalog/k0/en/product/ES000253	

# Multi Eco-Top



## Ixo N

J	Rp Q [m <sup>3</sup> /h] H [m] T [°C] n [rpm]	≤ 8 < 65	Multistage close-coupled centrifugal pump for fully or partly submerged operation (min. immersion depth 0.1 m), with low-level inlet, suction strainer with a max. mesh width of 2.0 mm.	
Control unit, Cervomatic			http://shop.ksb.com/catalog/k0/en/product/ES000007	

#### Ixo-Pro

Rp Q [m³/h] H [m] T [°C]	≤ 3,9	<b>Description</b> Multistage submersible borehole pump with integrated pressure switch, flow sensor and lift check valve. Electronic dry running protection with four consecutive start-up attempts; integrated capacitor. 15-metre H07 RN-F power cable with shockproof plug included. <b>Applications</b> Rainwater harvesting, pressure boosting, water extraction, irrigation systems	
		http://shop.ksb.com/catalog/k0/en/product/ES000896	

## Filtra N

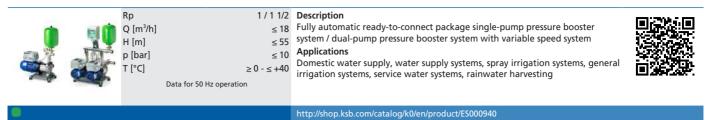
Rp Q [m³/h] H [m] p [bar] T [°C] n [rpm]	≤ 36 ≤ 21	<b>Description</b> Single-stage self-priming centrifugal pump in close-coupled design. <b>Applications</b> Pumping clean or slightly contaminated water, swimming pool water with a max. chlorine content of 0.3 %; ozonised swimming pool water with a max. salt content of 7 ‰.	
		http://shop.ksb.com/catalog/k0/en/product/ES000090	

# Pressure booster systems

# **KSB Delta Macro**

Rp Q [m³/h] H [m] p [bar] T [°C]	≤ 960	pressure. The frequency inverter operated VC and SVP versions ensure	
		http://shop.ksb.com/catalog/k0/en/product/ES000978	

# KSB Delta Solo/Basic Compact



# **KSB Delta Basic**

Rp Q [m³/h] H [m] p [bar] T [°C]	< 88	vertical high-pressure pumps in two variable speed versions. The frequency inverter operated MVP and SVP versions ensure variable speed control of each pump by motor-mounted frequency inverter for asynchronous motors (MVP)	
		http://shop.ksb.com/catalog/k0/en/product/ES000942	

# **KSB Delta Primo**

$Q[m^{3}/h] \leq 88$	two variable speed versions. Cascade control (F) for ensuring the required	
	http://shop.ksb.com/catalog/k0/en/product/ES000941	

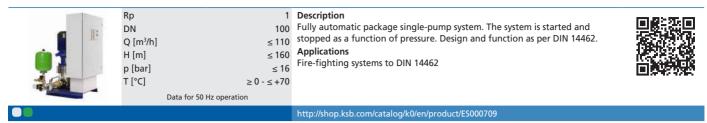
# **KSB Delta Solo**

Rp Q [m³/h] H [m] p [bar] T [°C]	- 1/5	<ul> <li>Description</li> <li>Fully automatic single-pump system available in two variable speed versions.</li> <li>The frequency inverter operated MVP and SVP versions ensure variable speed control of each pump by motor-mounted frequency inverter for asynchronous motors (MVP) or PumpDrive variable speed system and KSB SuPremE motor (SVP), respectively, providing fully electronic control to ensure the required supply pressure.</li> <li>Applications</li> <li>Water supply systems for residential buildings and office buildings, irrigation systems and rainwater harvesting systems, service water supply systems, in trade and industry.</li> </ul>	
		http://shop.ksb.com/catalog/k0/en/product/ES000939	

# Hya-Solo D

Rp DN Q [m³/h] H [m] p [bar] T [°C]	100 ≤ 110 < 160	accumulator. The system is started and stopped as a function of pressure. Applications Water supply systems for residential and office buildings, irrigation and spray irrigation, rainwater harvesting and service water supply systems in trade and	
		http://shop.ksb.com/catalog/k0/en/product/ES000250	

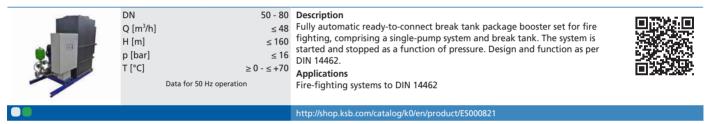
## Hya-Solo D FL



# Hya-Duo D FL

HE HE	Rp DN Q [m <sup>3</sup> /h] H [m] p [bar] T [°C]	150	DIN 14462.	
			http://shop.ksb.com/catalog/k0/en/product/ES000710	

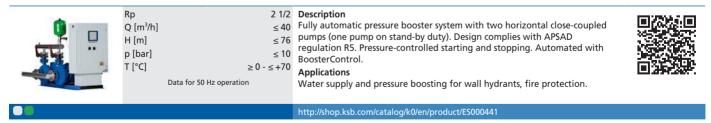
# Hya-Solo D FL Compact



# Hya-Duo D FL Compact

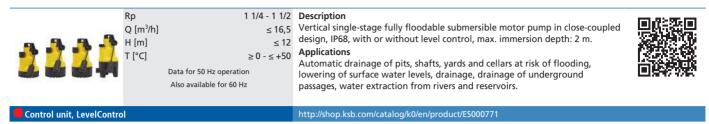
DN Q [m³/h] H [m] p [bar] T [°C]	≤ 48 < 160	pressure. Design and function as per DIN 14462.	
		http://shop.ksb.com/catalog/k0/en/product/ES000820	

## **Surpress Feu SFE**



# Drainage pumps / waste water pumps

## **Ama-Drainer N**



# Ama-Drainer 4 / 5

	Rp Q [m³/h] H [m] T [°C]		A well-setiens	
Control unit, LevelControl			http://shop.ksb.com/catalog/k0/en/product/ES000078	

## Ama-Drainer 80, 100

	Rp DN Q [m³/h] H [m] T [°C]	100 < 130	<b>Description</b> Vertical single-stage fully floodable submersible motor pump in close-coupled design, IP68, with or without level control, max. immersion depth: 10 m. <b>Applications</b> Automatic drainage of pits, shafts, yards and cellars at risk of flooding, lowering of surface water levels, drainage, drainage of underground passages, water extraction from rivers and reservoirs.	
Control unit, LevelContro	bl		http://shop.ksb.com/catalog/k0/en/product/ES000079	

# Ama-Porter F / S

	DN Q [m³/h] H [m] T [°C]		≤ 40 ≤ 16	DescriptionVertical single-stage fully floodable submersible waste water pump in close- coupled design (grey cast iron variant), non-explosion-proof.ApplicationsHandling waste water, especially waste water containing long fibres and solid substances, liquids containing gas/air, removing waste water from flooded rooms and surfaces.
Control unit, LevelControl				http://shop.ksb.com/catalog/k0/en/product/ES000082

#### Rotex

∩ [m³/h] < 24	Applications
	http://shop.ksb.com/catalog/k0/en/product/ES000012

Ρ	u	n	n	р	s
				-	

## MK / MKY

			<ul> <li>designed as inlet strainer.</li> <li>Applications</li> <li>Pumping condensate and heat transfer fluids below boiling point, condensate return systems, primary and secondary heating circuits, for direct installation in heating tanks or heat exchangers in the secondary circuits of heat transfer systems (MKY).</li> </ul>
Control unit	t, LevelContro	ol	http://shop.ksb.com/catalog/k0/en/product/ES000013

# Lifting units / package pump stations

# Amaclean

•	Ø [mm] DN Installation depth [m]	50 - 100	<b>Description</b> Self-cleaning tank insert for grouted installation in new concrete structures or in concrete structures in need of refurbishment. Designed to prevent soiling of the structure and clogging of the pumps by heavily waste or fibre loaded waste water. Suitable for pump stations emitting unpleasant odours and/or gases. <b>Applications</b> Waste water disposal, rainwater disposal	
			http://shop.ksb.com/catalog/k0/en/product/ES000936	

# Ama-Drainer-Box Mini

<b>a</b>	DN Q [m³/h] H [m] T [°C] Data for	≤ 10	<ul> <li>Description</li> <li>Reliable and compact waste water lifting unit in a modern design with activated carbon filter meeting hygiene requirements and with shower connection as standard; complies with EN 12050-2</li> <li>Applications</li> <li>Automatic disposal of waste water from washbasins, showers, washing machines and dishwashers. Use mini-Compacta sewage lifting unit for handling sewage from urinals and toilets.</li> </ul>	
			http://shop.ksb.com/catalog/k0/en/product/ES000862	

# Ama-Drainer-Box

11	10 22 li	DN Q [m³/h] H [m] T [°C]	≤ 46	<b>Description</b> Stable above-floor plastic collecting tank or impact-resistant underfloor plastic collecting tank, with floor drain and odour trap, both with Ama- Drainer submersible motor pump starting and stopping automatically and swing check valve <b>Applications</b> Automatic disposal of waste water from washbasins, showers, washing machines, garage driveways, basements and rooms prone to flooding	
				http://shop.ksb.com/catalog/k0/en/product/ES000262	

# **Evamatic-Box N**

	DN Q [m³/h] H [m] T [°C]	Data for 50 Hz operation	≤ 40 < 21	<b>Description</b> Floodable lifting unit for domestic waste water, equipped with either one or two pumps of type Ama-Porter F (free-flow impeller) or Ama-Porter S (cutter) <b>Applications</b> Disposal of domestic and municipal waste water occurring below the flood level	
				http://shop.ksb.com/catalog/k0/en/product/ES000430	

# mini-Compacta

Kan D.	DN Q [m³/h] H [m] T [°C]	≤ ≤	≤ 36 < 25	<b>Description</b> Floodable single-pump sewage lifting unit or dual-pump sewage lifting unit for automatic disposal of domestic waste water and faeces in building sections below the flood level. <b>Applications</b> Basement flats, bars, basement party rooms, basement saunas, cinemas, theatres, department stores, hospitals, hotels, restaurants, schools.	
				http://shop.ksb.com/catalog/k0/en/product/ES000261	

# Compacta

 DN Q [m³/h] H [m] T [°C]	soctions below the fleed level	
	http://shop.ksb.com/catalog/k0/en/product/ES000260	

# **CK 800 Pump Station**

DN Q [m³/h] H [m] T [°C] Data for 50 Hz op	≤ 22 ≤ 49 ≤ +40	with either one or two submersible waste water numps of type Amarex NS	
		http://shop.ksb.com/catalog/k0/en/product/ES000778	

# **CK 1000 Pump Station**

-1.	DN Q [m³/h] H [m] T [°C]	with either one or two submersible waste water pumps of type Amarex (explosion-proof or non-explosion-proof) or Ama-Porter (non- explosion-proof). Tank design to DIN 1986-100 and EN 752/EN 476. Applications Drainage of buildings and premises, waste water disposal, premises renovation, joint sewage disposal for multiple residential units, pumped drainage
		http://shop.ksb.com/catalog/k0/en/product/ES000266

# Ama-Porter CK Pump Station

DN Q [m³/h] H [m] T [°C]	with either one or two submersible waste water numps of type Ama-Porter
	http://shop.ksb.com/catalog/k0/en/product/ES000498

SRP

	DN Q [m³/h] H [m] T [°C]	≤ 500 < 75	Description Single-pump station or dual-pump station as ready-to-connect package system, with fibreglass collecting tank for buried installation Applications Premises renovation, disposal of domestic, municipal and industrial waste water, joint sewage disposal for multiple residential units
Control unit, LevelControl			http://shop.ksb.com/catalog/k0/en/product/ES000443

SRL

-	DN Q [m³/h] H [m] T [°C] Data for 50 Hz operation	≤ 500 ≤ 55 ≤ +40	Description Package pump station with tank made of glass fibre reinforced polyester, equipped with two dry-installed Sewabloc pumps with a rating of 2.2 to 30 kW, integrated valves and a control unit with frequency inverters. Pump operation is adjusted in line with flow rate demand, thus minimising energy costs. This maintenance-friendly pump station prevents intermediate storage of waste water and the related odour nuisance. Applications Joint disposal of domestic, municipal and industrial waste water to the sewer system / waste water treatment plant
			http://shop.ksb.com/catalog/k0/en/product/ES000856

SRA

	DN Q [m³/h] H [m] T [°C]	≤ 200 < 75	<b>Description</b> Dual-pump station as ready-to-connect package system, with fibreglass collecting tank for buried installation <b>Applications</b> Site remediation, disposal of domestic, municipal and industrial waste water, joint sewage disposal for multiple residential units	
Amacontrol, LevelCo	ntrol		http://shop.ksb.com/catalog/k0/en/product/ES000987	

# Submersible motor pumps

#### Amarex

	DN Q [m³/h] H [m] T [°C]	transportable version. Single-stage single-entry close-coupled nump sets	
Control unit, LevelContro	bl	http://shop.ksb.com/catalog/k0/en/product/ES000979	

## **Amarex N**

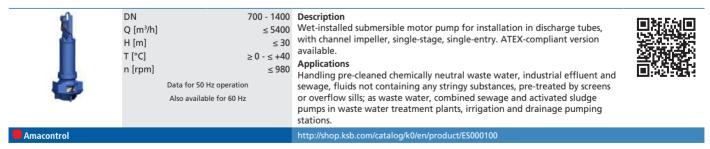
	DN Q [m³/h] H [m] T [°C] Data for 50 Hz operation Also available for 60 Hz	single-stage, single-entry close-coupled nump sets which are not self-priming	
Control unit, LevelContro	l	http://shop.ksb.com/catalog/k0/en/product/ES000507	

## **Amarex KRT**

	DN Q [m <sup>3</sup> /h] H [m] T [°C] n [rpm] Data for 50 Hz operation Also available for 60 Hz	≤ 10080 ≤ 120 ≤ +60 ≤ 2900	installation, stationary or transportable version, with energy-saving motor and models for use in potentially explosive atmospheres.	
PumpDrive, Amacontrol, LevelControl			http://shop.ksb.com/catalog/k0/en/product/ES000092	

# Submersible pumps in discharge tubes

#### Amacan K



## Amacan P

	DN Q [m³/h] H [m] T [°C] n [rpm]	version available. Applications Irrigation and drainage pumping stations, for stormwater transport in stormwater pumping stations, raw and clean water transport in water and waste water treatment plants, cooling water transport in power stations and industrial plants, industrial water supply, water pollution control and flood control, aquaculture.	
Amacontrol		http://shop.ksb.com/catalog/k0/en/product/ES000099	

Amacan S

	DN Q [m³/h] H [m] T [°C] n [rpm] Data for 50 H Also availabl	$\leq 10800$ $\leq 40$ $\geq 0 - \leq +40$ $\leq 1450$ z operation	
Amacontrol			http://shop.ksb.com/catalog/k0/en/product/ES000101

# Mixers / agitators / tank cleaning units

## Amamix



# Amaprop

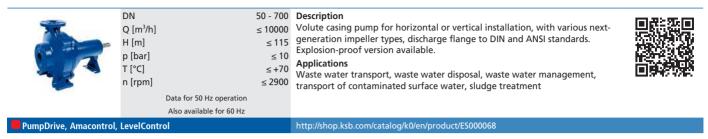
	) - ≤ +40 ≤ 12	Description Horizontal submersible mixer with self-cleaning ECB propeller, close-coupled design, with coaxial spur gear drive. ATEX-compliant version available. Applications In environmental engineering, particularly in municipal and industrial waste water and sludge treatment, for circulating, keeping in suspension and inducing flow in nitrification tanks and denitrification tanks, activated sludge tanks, biological phosphate elimination tanks, flocculation tanks and sludge storage tanks	
Amacontrol		http://shop.ksb.com/catalog/k0/en/product/ES000271	

# Amaline

	DN Q [m³/h] H [m] T [°C] n [rpm]	< 6600	Applications
Amacontrol			http://shop.ksb.com/catalog/k0/en/product/ES000273

# Pumps for solids-laden fluids

## Sewatec



## **Sewatec SPN**

	DN Q [m³/h] H [m] p [bar] T [°C]	≤	≤ 32400 ≤ 115	<b>Description</b> Vertical volute casing pump with multi-channel impellers (K), discharge flange to DIN and ANSI standards. <b>Applications</b> Waste water transport, waste water disposal, waste water management, transport of contaminated surface water
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## **Sewabloc**

	DN Q [m³/h] H [m] p [bar] T [°C] n [rpm] Data for 50 Hz operation Also available for 60 Hz	standards. Explosion-proof version available. Applications Waste water transport, waste water disposal, waste water management.	
PumpDrive, LevelControl		http://shop.ksb.com/catalog/k0/en/product/ES000069	

PumpDrive, LevelControl

#### KWP

	DN Q [m³/h] H [m] p [bar] T [°C] n [rpm]	≤ 15000	impeller, open multi-vane impeller and free-flow impeller. ATEX-compliant version available. Applications	
PumpDrive			http://shop.ksb.com/catalog/k0/en/product/ES000018	

#### **KWP-Bloc**

	DN Q [m³/h] H [m] p [bar] T [°C] n [rpm]	≤ 325 ≤ 100 ≤ 10	Description Horizontal or vertical radially split close-coupled volute casing pump, single- stage, single-entry, available with various impeller types: closed multi-channel impeller, open multi-vane impeller and free-flow impeller. Applications Paper industry, cellulose industry, sugar industry, food industry, chemical industry, petrochemical industry, flue gas desulphurisation, industrial engineering, waste water transport	
PumpDrive			http://shop.ksb.com/catalog/k0/en/product/ES000020	

# Slurry pumps

WBC

Q [m³/h] H [m] p [bar] T [°C]	≤ 80	<b>Description</b> Patented design with state-of-the-art hydraulic system and highly wear- resistant materials for high-pressure applications. The pump casing is designed to withstand maximum stresses, e.g. during pressure surges. <b>Applications</b> Ideal for the single-stage or multistage transport of ore and tailings over long distances and for dredging.	
		http://shop.ksb.com/catalog/k0/en/product/ES000227	

# LSA-S

Q [m³/h] H [m] p [bar] T [°C]	≤ 90 < 16	<b>Description</b> Premium design white cast iron pump for long service life handling severe slurries. The maintenance-friendly single-wall construction and heavy section white cast iron wet end combined with the cartridge bearing assembly provide maximum reliability, a long service life and ease of maintenance. <b>Applications</b> Ore and tailings transport, cyclone feed, dredging (dry-installed or submerged operation) and industrial processes.	
		http://shop.ksb.com/catalog/k0/en/product/ES000220	

# LCC-M

Q [m³/h] H [m] p [bar] T [°C]	≤ 90	Description The wetted pump end (casing, impeller and suction plate / liner) is made of white cast iron. Design optimised to permit easy dismantling and reassembly for maintenance and inspection. Applications Reliable pump for high heads and moderately corrosive slurries. Used in mine dewatering, ash and tailings transport and dredging.
		http://shop.ksb.com/catalog/k0/en/product/ES000217

## LCC-R

Q [m³/h] H [m] p [bar] T [°C]	≤ 42 < 16	<b>Description</b> Interchangeable rubber-lined or part-metal design allows adaptation of existing pumps to new applications by simply exchanging the pump wet end. <b>Applications</b> The pumps are suitable for moderate heads, fine particles and highly corrosive slurries.	
		http://shop.ksb.com/catalog/k0/en/product/ES000218	

#### TBC

Q [m³/h] H [m] p [bar] T [°C]	≤ 90 < 37	design transfors stross loads from the wear parts to the sasing sovers in high	
		http://shop.ksb.com/catalog/k0/en/product/ES000226	

LCV

F	Q [m³/h] H [m] p [bar] T [°C]	 <b>Description</b> Rugged vertical shaft submersible pump with casing, impeller and suction plate / liner made of white cast iron, bearing assembly located outside the fluid handled. Replaceable wetted parts made of white cast iron or natural rubber. <b>Applications</b> Particularly suitable for use in industrial processes and for transporting tailings in mines and pits.	
		http://shop.ksb.com/catalog/k0/en/product/ES000016	

FGD

Q [m³/h] H [m] p [bar] T [°C]	≤ 30 ≤ 10	<b>Description</b> High-flow / low-head white cast iron pump with single-wall casing and high- efficiency impeller. Single-piece suction cover with integrated mounting plate. <b>Applications</b> Flue gas desulpurisation systems and process circuits	
		http://shop.ksb.com/catalog/k0/en/product/ES000231	

# MHD

Q [m³/h] H [m] p [bar] T [°C]	≤ 115 < 13	<ul> <li>Description         Horizontal volute casing pump for high-volume hydrotransport of solids. For pumping slurries of large and very large particle sizes with a very good suction behaviour and high efficiency. Pump components made of white cast iron.     </li> <li>Applications         Ideal for pipeline pressure booster stations and severe mining duties. Highly suitable for loading and unloading duties on (cutter) suction dredgers.     </li> </ul>	
		http://shop.ksb.com/catalog/k0/en/product/ES000224	

LHD

Q [m³/h] H [m] p [bar] T [°C]	 Description Horizontal volute casing pump for high-volume hydrotransport of solids. For pumping slurries of large and very large particle sizes with a very good suction behaviour and high efficiency. Used in low-pressure applications. Pump components made of white cast iron. Applications Ideal for handling sand and gravel, on dredgers for land reclamation and as booster pumps.	
	http://shop.ksb.com/catalog/k0/en/product/ES000223	

MDX

Q [m³/h] H [m] p [bar]	≤ 51 < 10	Description Pump designed with the latest technology from GIW. Superior wear properties and extremely long service life handling aggressive slurries.	
T [°C]	≥ -20 - ≤ +120	Applications Designed for SAG and ball mill discharge duties, cyclone feed, screen feed and other ore mining and treatment processes.	

http://shop.ksb.com/catalog/k0/en/product/ES000850

#### ZW

Q [m³/h] H [m] p [bar] T [°C]	≤ 35	<b>Description</b> Rugged vertical shaft submersible pump with casing, impeller and suction cover made of white cast iron, top and bottom impeller inlet. Long-life bearings not exposed to fluid handled. Replaceable wetted components. <b>Applications</b> Particularly suitable for pumping abrasive slurries, dewatering, floor clean-up and process applications.	
		http://shop.ksb.com/catalog/k0/en/product/ES000852	

# HVF

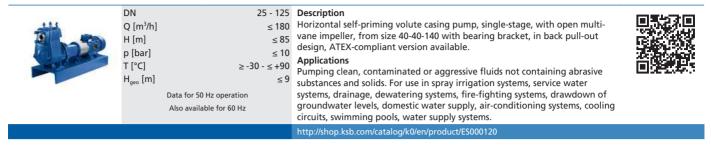
	Q [m³/h] H [m] p [bar] T [°C]	<b>Description</b> The pump provides continuous operation without shutdown or operator intervention. The new hydraulic design removes air from the impeller eye while the pump is running, and the pump can be retrofitted into any existing operation. <b>Applications</b> For use in all froth pumping applications in the mineral processing and industrial minerals industries.	
		http://shop.ksb.com/catalog/k0/en/product/ES000851	

## DWD

Q [m³/h] H [m] p [bar] T [°C]	A high-efficiency, heavy-duty, double-wall pump designed specifically for dredge applications requiring large solids passage and low NPSHR. The internal components (replaceable wear resistant cosing, side liner, and
	Applications Inboard and underwater pumps for cutter suction dredges (CSD) and trailing suction hopper dredges (TSHD).

# Self-priming pumps

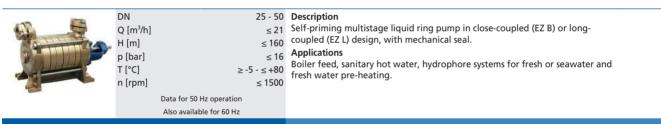
## **Etaprime L**



## **Etaprime B**

DN Q [m³/h] H [m] p [bar] T [°C] H <sub>geo</sub> [m]	ATEX-compliant version available.	
	http://shop.ksb.com/catalog/k0/en/product/ES000119	

## EZ B/L



AU

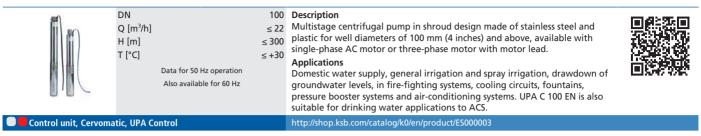
DN Q [m³/h] H [m] p [bar] T [°C]	$\leq 600 \\ \leq 52 \\ \leq 10 \\ \geq -10 - \leq +80 \\ \end{tabular}$ Data for 50 Hz operation	available. Applications Pumping clean, contaminated and aggressive fluids also containing solids. In fresh water and seawater circuits, fire-fighting applications, as ballast and
	Also available for 60 Hz	bilge pumps, and for drainage and waste water applications.
		http://shop.ksb.com/catalog/k0/en/product/ES000750

# **AU Monobloc**

DN Q [m³/h] H [m] p [bar] T [°C]	≤ 53	electric motors or internal combustion engines; ATEX-compliant version available.	
		http://shop.ksb.com/catalog/k0/en/product/ES000715	

# Submersible borehole pumps

# **UPA C 100 EN**



# UPA C 100 EE

h	DN Q [m³/h] H [m] T [°C] Data for 50 Hz operation Also available for 60 Hz	Multistage centrifugal pump in ring-section design made of stainless steel for well diameters of 100 mm (4 inches) and above, available with single-phase	
Control unit, Cervomatic, UPA Control		http://shop.ksb.com/catalog/k0/en/product/ES000932	

# UPA C 150

	 ≤ 79	150 mm (6 inches) and above. <b>Applications</b> Spray irrigation systems, general irrigation systems, drawdown of groundwater levels, domestic water supply, fountains, heat pump systems, water supply systems	
PumpDrive, KSB UMA-S		http://shop.ksb.com/catalog/k0/en/product/ES000003	

## UPA 200, UPA 250

I	DN Q [m³/h] H [m] T [°C]	check valve or connection branch. For well diameters of 8 inches and above. Applications Pumping clean or slightly contaminated water in general water supply, spray irrigation and general irrigation, drawdown and maintenance of groundwater levels, fountains and pressure booster systems, mining, fire- fighting systems, emergency water supply, etc.
PumpDrive, KSB UMA-S		http://shop.ksb.com/catalog/k0/en/product/ES000003

# UPA 300, UPA 350

	DN Q [m³/h] H [m] T [°C]	≤ 840 < 480	with trimmable impellers. Ontionally available with lift shock value or	
PumpDrive, KSB UMA-S			http://shop.ksb.com/catalog/k0/en/product/ES000003	

Ρ	u	m	۱	р	s

#### UPA 400-850

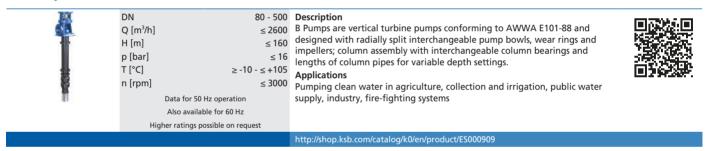


## UPA D

	≤ 5000 < 1500	<b>Description</b> Multistage double-entry centrifugal pump in ring-section design for vertical or horizontal installation. <b>Applications</b> Pumping clean or slightly contaminated water, seawater, liquefied gases and oils in water supply, offshore and cavern applications and in groundwater management.
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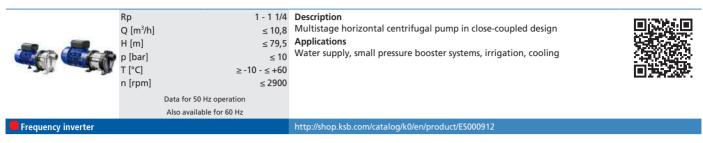
# Vertical turbine pumps

#### **B** Pump



# **High-pressure pumps**

Comeo



# Movitec H(S)I

	Rp Q [m³/h] H [m] p [bar] T [°C] n [rpm]	< 26.3	0.75 kW with 1500 rpm are designed with permanent magnets) of efficiency class IE4/IE5 to IEC TS 60034-30-2:2016, for operation on a KSB PumpDrive 2 or KSB PumpDrive 2 Eco variable speed system without rotor position sensors.
KSB SuPremE, PumpDrive, PumpMeter			http://shop.ksb.com/catalog/k0/en/product/ES000927

# Movitec

	Rp DN Q [m <sup>3</sup> /h] H [m] p [bar] T [°C] n [rpm]	25 - 125 ≤ 160 ≤ 401 ≥ -20 - ≤ +140	opposite to each other (in-line design), close-coupled. With KSB SuPremE, a magnetless synchronous reluctance motor (exception: motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets) of efficiency	
KSB SuPremE PumpDrive	DumpMa	tor.	http://shop.ksh.com/catalog/k0/en/product/ES000865	

# Movitec VCI

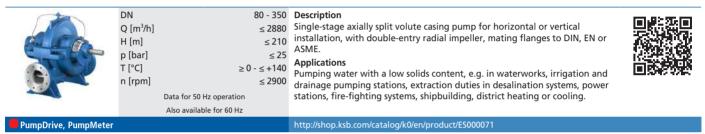
	Q [m³/h] ≤ 2 H [m] <2	
KSB SuPremE. PumpDrive	2	http://shop.ksb.com/catalog/k0/en/product/ES000870

## **Multitec**

	DN Q [m³/h] H [m] p [bar] T [°C] n [rpm]	≤ 1500 ≤ 1000 ≤ 100 ≥ -10 - ≤ +200	long-coupled or close-coupled, with axial or radial suction nozzle, cast radial impellers and motor-mounted variable speed system. ATEX-compliant version available.	
KSB SuPremE, PumpDriv	e, PumpMeter		http://shop.ksb.com/catalog/k0/en/product/ES000214	

# **Axially split pumps**

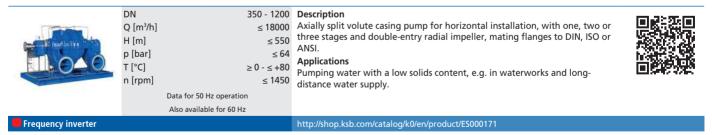
## Omega



# RDLO

	DN Q [m³/h] H [m] p [bar] T [°C] n [rpm]	≤ 10000 ≤ 290 ≤ 30 ≥ 0 - ≤ +140	installation, with double-entry radial impeller, mating flanges to DIN, EN or ASME. Applications	
PumpMeter, Frequency inverter			http://shop.ksb.com/catalog/k0/en/product/ES000170	

## **RDLP**



# Hygienic pumps

# Vitachrom

	DN Q [m³/h] H [m] p [bar] T [°C]		sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets) of efficiency class IE4/IE5 and PumpDrive variable speed system. The	
KSB SuPremE, PumpDriv	e. PumpMe	ter	http://shop.ksb.com/catalog/k0/en/product/ES000030	

## Vitacast

-	DN Q [m <sup>3</sup> /h] H [m] p [bar] T [°C] $\geq$ Data for 50 Hz operat Also available for 60 Other ratings possible on	$\leq 540$ $\leq 105$ $\leq 10$ $e -20 - \leq +140$ ion Hz	(exception: motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets) of efficiency class IE4/IE5 and PumpDrive variable speed system. All wetted components are made of 1.4404/1.4409 (AISI 316L/CF3M)
KSB SuPremE, PumpDrive	, PumpMeter		http://shop.ksb.com/catalog/k0/en/product/ES000785

# Vitacast Bloc

	Als	< 105		
KSB SuPremE, PumpDrive	, PumpMeter		http://shop.ksb.com/catalog/k0/en/product/ES000785	

# Vitaprime

A CONTRACTOR	DN Q [m³/h] H [m] p [bar] T [°C] Data for 50 H Also availab Other ratings pos	$\leq 58 \\ \leq 45 \\ \leq 10 \\ \geq -20 - \leq +100 \\ \text{Hz operation} \\ \text{le for 60 Hz}$	<b>Description</b> Service-friendly close-coupled side-channel pump (self-priming) with magnetless KSB SuPremE motor (exception: motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets) of efficiency class IE4/ IE5 and PumpDrive variable speed system. All wetted components are made of 1.4404/1.4409 (AISI 316L/CF3M) stainless steel. Hygienic design for the highest cleanability requirements (CIP/SIP-compatible). All materials comply with FDA standards and EN 1935/2004. Trolley available among other accessories. ATEX-compliant version available. <b>Applications</b> Hygienic handling of fluids in the food, beverage and pharmaceutical industries as well as in the chemical industry.	
KSB SuPremE, PumpDrive	2		http://shop.ksb.com/catalog/k0/en/product/ES000787	

# Vitastage

	≤ 150 < 16	compatible. All materials comply with FDA standards and EN 1935/2004. Trolley also available among other accessories. <b>Applications</b> Processes with hygienic requirements in the food and beverage industries and in the chemical industry.	
		http://shop.ksb.com/catalog/k0/en/product/ES000788	

# Vitalobe

	DN Q [m <sup>3</sup> /h] H [m] p [bar] T [°C] Viscosity [CP] Data for 50 Hz op Also available fo Other ratings possible	$\leq 342$ $\leq 200$ $\leq 20$ $\geq -40 - \leq +180$ $\leq 200000$ where the second sec	<ul> <li>available. Installed as a pump set with gear unit and standardised motor.</li> <li>Vitalobe is EHEDG-certified. The pump elastomers comply with the FDA standards and EN 1935/2004. Accessories include a trolley, a heatable casing or casing cover and a pressure relief arrangement. ATEX-compliant version available.</li> <li>Applications</li> <li>Hygienic and gentle handling of sensitive or high-viscosity fluids in the food,</li> </ul>	
			beverage and pharmaceutical industries, the chemical industry and general process engineering.	
KSB SuPremE, PumpDrive	2		http://shop.ksb.com/catalog/k0/en/product/ES000847	

# Pumps for power station conventional islands

# CHTA / CHTC / CHTD

DN Q [m <sup>3</sup> /h] H [m] p [bar] T [°C] n [rpm] Also available for 60 Hz Higher ratings possible on req	≤ 5700 ≤ 5400 ≤ 560 ≤ +270 ≤ 6750	ANSI. Applications Pumping feed water and condensate in power stations and industrial plants.	
		http://shop.ksb.com/catalog/k0/en/product/ES000239	

# HGB / HGC / HGD

Q [m³/h] H [m]	≤ 2300 ≤ 5300	A un lies die ne	
p [bar] T [°C] n [rpm]	≤ 560 ≤ +210 ≤ 7000	Pumping feed water and condensate in power stations and industrial plants, pumping gas turbine fuels, generating pressurised water for bark peeling and	
Also available for 60 Hz			
 Higher ratings possible on reque	est		
		http://shop.ksb.com/catalog/k0/en/product/ES000233	

## HGI

p [bar]       ≤ 200       Appreciations         T [°C]       ≤ +180       Pumping feed water and condensate in power stations and industrial plants.         n [rpm]       ≤ 3600         Also available for 60 Hz       Also available for 60 Hz
---

## HGM

DN Q [m <sup>3</sup> /h] H [m] p [bar] T [°C] n [rpm] Also available for 60 Hz Higher ratings possible on reque	≤ 350 ≤ 1400 ≤ 140 ≤ +160 ≤ 3600	radial impellers, axial and radial single-entry inlet. <b>Applications</b> Pumping feed water in power stations, boiler feed systems and condensate transport in industrial plants.	
		http://shop.ksh.com/catalog/k0/en/product/ES000236	

## **YNK**

DN Q [m <sup>3</sup> /h] H [m] p [bar] T [°C] n [rpm] Higher ratings p	≤ 5200 < 540	<b>Description</b> Horizontal radially split single-stage double-entry boiler feed booster pump (booster system) with cast steel single or double volute casing. <b>Applications</b> Pumping feed water in power stations and industrial plants.	
		http://shop.ksb.com/catalog/k0/en/product/ES000181	

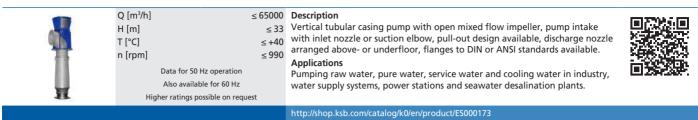
# LUV / LUVA

DN Q [m³/h] H [m] p [bar] T [°C] n [rpm] Data for 50 Hz operation Also available for 60 Hz	$\leq 7000$ $\leq 300$ $\leq 400$ $\leq +425$	systems. Design to TRD, ASME or IBR. Applications	
		http://shop.ksb.com/catalog/k0/en/product/ES000183	

# **WKTB**

DN Q [m³/h] H [m] p [bar] T [°C] n [rpm] Data for 50 Hz op Also available for	$\leq 1500$ $\leq 370$ $\leq 40$ $\leq +140$ $1500$	<b>Description</b> Vertical can-type ring-section pump on base frame, multistage, first-stage impeller designed as a double-entry suction impeller, radial impellers. Flanges to DIN or ANSI. <b>Applications</b> Pumping condensate in power stations and industrial plants.	
		http://shop.ksb.com/catalog/k0/en/product/ES000506	

## SEZ



## SEZT

H [m] ≤ 110	<ul> <li>Description</li> <li>Vertical tubular casing pump with open or closed mixed flow impeller</li> <li>Applications</li> <li>Handling seawater in seawater desalination plants.</li> </ul>
	http://shop.ksb.com/catalog/k0/en/product/ES000174

#### PHZ

H [m] ≤ 25	<b>Description</b> Vertical tubular casing pump with mixed flow propeller, pump intake with inlet nozzle or suction elbow, pull-out design available, discharge nozzle arranged above- or underfloor, flanges to DIN or ANSI standards available. <b>Applications</b> Raw water, pure water, service water and cooling water in industry, water supply systems, power stations and seawater desalination plants.
	http://shop.ksb.com/catalog/k0/en/product/ES000158

## PNZ

		H [m] ≤ 15 T [°C] <+80	DescriptionVertical tubular casing pump with axial propeller, pump intake with inlet nozzle or suction elbow, pull-out design available, discharge nozzle arranged above- or underfloor, flanges to DIN or ANSI standards available.Applications Raw water, pure water, service water and cooling water in industry, water 
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SNW

1	DN Q [m <sup>3</sup> /h] H [m] p [bar] T [°C] n [rpm] Data for 50 Hz operation Also available for 60 Hz Higher ratings possible on requ	≤ 60 ≤ 10 ≤ +60 ≤ 1500	그는 것 같은 것 같은 것 같은 것 같은 것 같은 것 같은 것 같은 것 같
			http://shop.ksb.com/catalog/k0/en/product/ES000176

#### 65

#### **PNW**

	1	Q [m³/h] ≤ H [m] p [bar] T [°C]	≤ 9000 ≤ 10 ≤ 10 ≤ +60 ≤ 1500	maintenance-free Residur bearings, discharge nozzle arranged above or below floor level. Applications Irrigation and drainage, stormwater pumping stations, for raw water and
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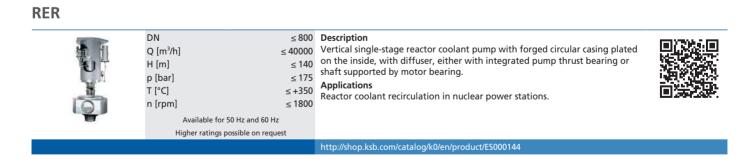
#### **Beveron**

Q [m³/s] H [m] Data for 50 Hz operation Also available for 60 Hz Higher ratings possible on request	<b>Description</b> Concrete volute casing pump with mixed flow impeller, single-stage, with zero-maintenance Residur bearings lubricated by the fluid handled. <b>Applications</b> Coast protection and flood control, irrigation and drainage, low-lift pumping stations, reservoir filling, cooling water, raw and pure water.	
	http://shap.ksh.com/catalog/k0/op/product/ES000868	

#### SPY

DN Q [m <sup>3</sup> /h] H [m] p [bar] T [°C] n [rpm]	≤ 21600 ≤ 50 ≤ 10	<b>Description</b> Long-coupled volute casing pump, single-stage, in back pull-out design. <b>Applications</b> Irrigation, drainage and water supply systems, for pumping condensate, cooling water, service water, etc.
Data for 5	0 Hz operation	
Also avail	able for 60 Hz	
Higher ratings possible on request		

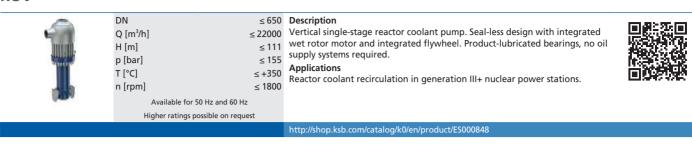
# Pumps for nuclear power stations



#### **RSR**

DN Q [m <sup>3</sup> /h] H [m] p [bar] T [°C] n [rpm] Available for 50 Hz and 60 H: Higher ratings possible on requ	≤ 215 ≤ 175 ≤ +350 ≤ 1800	<b>Description</b> Vertical single-stage reactor coolant pump with cast or forged casing, shaft supported by motor bearing. <b>Applications</b> Reactor coolant recirculation in nuclear power stations.	
		http://shop.ksb.com/catalog/k0/en/product/ES000146	

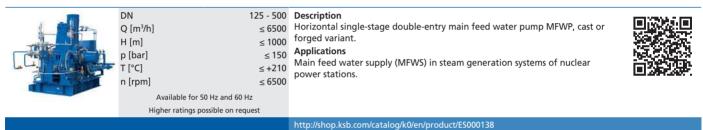
## RUV



## PSR

$Q[m^{3}/h] \leq 900$ H [m] <4	0
	http://shap.ksh.com/catalog/k0/ap/product/ES000150

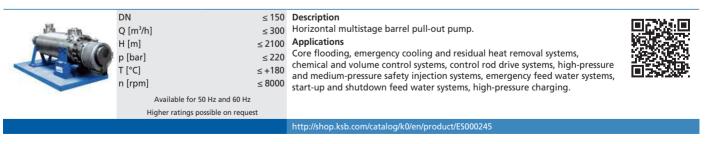
## RHD



# **LUV Nuclear**

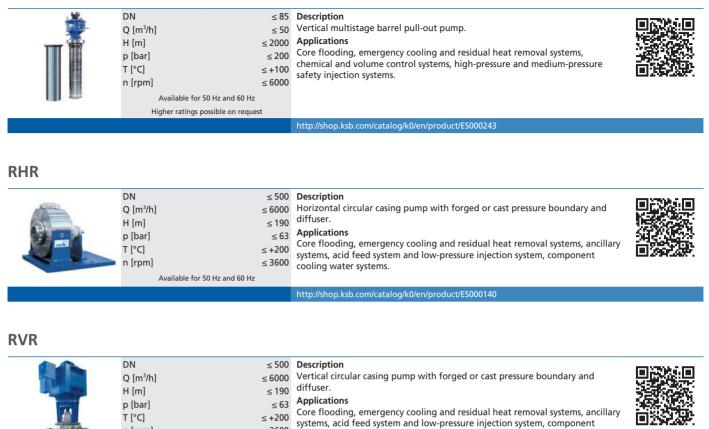
Lawrence St.	DN Q [m <sup>3</sup> /h] H [m] p [bar] T [°C] Data for 50 Hz operation Also available for 60 Hz		
		http://shop.ksb.com/catalog/k0/en/product/ES000855	

#### RHM

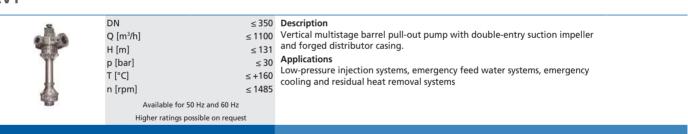


#### RVM

Pumps



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http://shop.ksb.com/catalog/k0/en/product/ES000142

cooling water systems.

≤ 3600

# Pumps for desalination by reverse osmosis

Available for 50 Hz and 60 Hz

n [rpm]

**RPH-RO** 

DN Q [m³/h] H [m] p [bar] T [°C]	< 250	Poorter nump for PO converter decalination systems
		http://shop.ksb.com/catalog/k0/en/product/ES000570

## HGM-RO

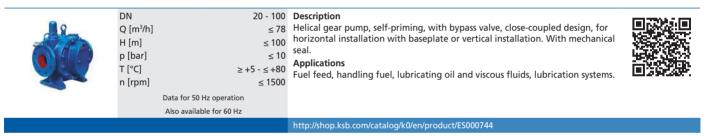
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		$ \begin{array}{ll} Q \; [m^3/h] & \leq 1500 \\ H \; [m] & \leq 950 \\ p \; [bar] & \leq 120 \\ T \; [^{\circ}C] & \geq 0 - \leq +40 \\ n \; [rpm] & \leq 3600 \end{array} $	radial impellers and plain bearings, axial and radial single-entry inlet. Duplex stainless steel variant or super duplex stainless steel variant, also suitable for chilled water applications. Applications High-pressure pump for RO seawater desalination systems
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## **Multitec-RO**

	DN Q [m³/h] H [m] p [bar] T [°C] n [rpm]	≤ 850 ≤ 1000 ≤ 100	Closed radial impellers. Made of duplex or super duplex stainless steel.
		Data for 50 Hz operation	
		Also available for 60 Hz	
KSB SuPremE, PumpDrive			

# Positive displacement pumps

RC / RCV



# **Fire-fighting systems**

EDS

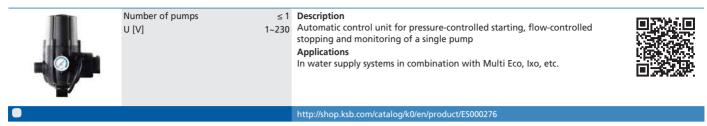
http://shop.ksb.com/catalog/k0/en/product/E5000726	DN Q [m³/h] H [m] p [bar] T [°C] n [rpm]	accessories and control unit. To EN 12845, CEA 4001, UNE-23500, NFPA-20, etc.
		http://shop.ksb.com/catalog/k0/en/product/ES000726

## DU / EU

	≤ 2500 ≤ 150 ≤ 25	Office buildings, notels, industry, snopping mails, etc.
		http://shop.ksb.com/catalog/k0/en/product/ES000727

# **Control units**

# **Controlmatic E**



# **Controlmatic E.2**

Number of pumps U [V]	<b>Description</b> Automatic control unit for pressure-controlled starting, flow-controlled stopping and monitoring of a single pump <b>Applications</b> In water supply systems in combination with Multi Eco, Ixo, etc.	
	http://shop.ksb.com/catalog/k0/en/product/ES000276	

# **Cervomatic EDP.2**

Conversion CEDA	Number of pumps U [V]	≤ 1 1~230 / 3~400	<b>Description</b> Automatic control unit for pressure-controlled starting and either pressure- controlled or flow-controlled stopping and monitoring of a single pump. <b>Applications</b> In water supply systems with pumps of the Multi Eco, Ixo, etc. type series with single-phase or three-phase motors	
			http://chap.ksh.com/catalog/k0/en/product/ES000275	

# **LevelControl Basic 2**

Number of pumps ≤ 2 P [kW] ≤ 22 U [V] 1~230 / 3~400 Available for higher ratings and other mains voltages on request.	Level control unit for controlling and protecting either one or two pumps. DOL starting up to 4 kW, star-delta starting up to 22 kW. Higher ratings on request. Applications Tank drainage using float switches, digital switches, 420 mA, pneumatic (without compressor) or bubbler system in building services and waste water applications. Tank filling using float switches, digital switches or 420 mA signals in building services and water supply applications.
	http://shop.ksb.com/catalog/k0/en/product/ES000603

# **UPA Control**

Number of pumps P [kW] U [V]	3	<ul> <li>Description         The KSB switchgear is suitable for level control and protection of submersible borehole pumps, submersible motor pumps and dry-installed pumps with single-phase AC motors 1~ 230 V or three-phase motors 3~ 230 / 400 V / 50 Hz. The motor is started DOL. Enclosure: IP56, dimensions: 205 × 255 × 170 mm (H × W × D).     </li> <li>Applications         Irrigation and filling or draining tanks in water supply applications in combination with 4-inch and 6-inch pumps.     </li> </ul>	
		http://shop.ksb.com/catalog/k0/en/product/ES000006	

# Hyatronic N

P [kW] 22	Description         Pump control system in control cabinet for cascade starting and stopping of up to six pumps.         Applications         For draining tanks and sumps in drainage and waste water disposal applications. For filling tanks in water supply applications. Level measurement using float switch or 420 mA sensor.
	http://shop.ksb.com/catalog/k0/en/product/ES000303

# Monitoring and diagnosis

# **Amacontrol III**

Connections Fastening T [°C] Dimensions H × W ×D [mm] U [V]	35 mm standard rail ≥ -30 - ≤ +70 127,2 × 45 × 113,6	Protection module for water and waste water products as all-in-one device
U [V] U [V]	AC 115-230 ± 10 % AC/DC 24 ± 10 %	
		http://shop.ksb.com/catalog/k0/en/product/ES000946

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Product Portfolio Pumps I Automation

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