



Pumps and Automation 2009



Type series index	p. 3
Product portfolio	p. 6-7
Overview of applications	p. 8-15



Our high standard: Creating intelligent solutions

We have supplied generations of customers worldwide with pumps, valves, automation products and services. A company with that kind of experience knows that success never stands still. It flows. And the process that makes that possible is a running partnership between developer and user, between production and practice.

Partners move more together. We do everything possible to ensure that our customers always have access to the ideal product and system solutions. KSB is a loyal partner. And a strong one:

- Over 130 years' experience
- Present in more than 100 countries
- More than 14,000 employees
- More than 100 service centres worldwide
- Approximately 1,900 service specialists

Type series index

for pumps and automation

Amacan K	34	HGB / HGC / HGD	41	Omega	40
Amacan P	35	HGM	41		
Amacan S	35	HGM-RO	48	PSR	44
Amacontrol	51	HHH	46	PumpDrive	50
Ama-Drainer-Box	32	HK (Nikkiso-KSB)	25	PumpExpert	51
Ama-Drainer 301 – 356	31	HN/BN/TN (Nikkiso-KSB)	25		
Ama-Drainer 400 – 500	31	HPH	21	RDLO	40
Ama-Drainer 80, 100	31	HPK	21	RER	43
Amajet	36	HPK-L	21	RHD	42
Amaline	36	HT/BT/TT (Nikkiso-KSB)	25	RHM	44
Amamix	35	HX (Nikkiso-KSB)	22	RHR / RVR	44
Ama-Porter F / S / ICS	31	HY (Nikkiso-KSB)	22	Rio C	16
Ama-Porter CK		Hya-Eco K	29	Rio-Eco / Rio-Eco Z	17
Pumping Station	33	Hya-Eco VP	29	Rio / Rio Z	16
Amaprop	35	Hyamaster ISB	49	Riotherm	16
Amarex KRT	34	Hyamaster SPS	50	Riotherm C	16
Amarex KRT, dry installed	34	Hya-Eco VP	29	Riotronic ECO	17
Amarex N	34	Hyamat IK, IV, IVP	30	Riotronic S	17
Amarex N CK		Hyamat K	30	Rotex	31
Pumping Station	33	Hyamat V	30	RPH	26
		Hyamat VP	30	RPH-RO	48
Cervomatic EDP	51	Hya-Rain / Hya-Rain-N	27	RSR	43
CHTA / CHTC / CHTD	41	Hya-Solo E / D / DV	29	RVM	44
CHTR	41	hyatronic K / N	49		
Compacta	32	hyatronic S	49	S 100D / UPA 100C	37
Controlmatic E.2	51	hyatronic SP	49	SalTec® System	48
CPK-D	23	hyatronic mb	49	SalTec® DT	48
CPKN	23	hyatronic spc	50	Secochem Ex	24
CPKN PumpDrive	23			Secochem Ex K	24
CTN	26	Ixo	28	Sewatec / Sewabloc	36
				SEZ / PHZ / PNZ	42
DN (Nikkiso-KSB)	25	KWP / KWP-Bloc	36	SNW / PNW	43
				SPY	43
Eco-Rain	27	LCC-M	45		
Etabloc	19	LCC-R	45	TBC	45
Etabloc PumpDrive	19	LCV	46	Trialine	17
Etabloc SY / Etaline SY	22	Level Control	50	Trialine Z	18
Etachrom BC	19	LHD	47	UPA 150C	37
Etachrom BC PumpDrive	20	LSA-S	45	UPA 200, 200B, 250C	38
Etachrom NC	20	LSR	46	UPA 300, 350	38
Etachrom NC PumpDrive	20	LUV / LUVA / LUVB	42	UPA Control	50
Etaline	18	LUV nuklear	44	UPZ, BSX-BSF	38
Etaline PumpDrive	18				
Etaline Z	18	Magnochem	24	Vitachrom	40
Etaline Z PumpDrive	18	Magnochem-Bloc	24	VN (Nikkiso-KSB)	25
Etamagno SY / SYI / Bloc SY	22	Mega	46		
Etanorm PumpDrive	19	MDX	47	WBC	45
Etanorm / Etanorm R	19	MHD	47	WKT / WKTA / WKTB	42
Etanorm GPV / CPV	20	Microchem	26		
Etanorm SYA / RSY	21	mini-Compacta	32	YNK / KRHA	41
Etaprime B / BN	37	MK / MKY	32		
Etaprime L	37	Movitec PumpDrive	39		
Etaseco / Etaseco-I	24	Movitec VE	28		
Evamatic-Box	33	Movitec V / LHS / VS / VC	39		
Evamatic-Box ICS	33	Multi Eco	27		
		Multi Eco-Pro	27		
Filtra	28	Multi Eco-Top	28		
FGD	46	Multitec	39		
		Multitec PumpDrive	39		
		Multitec-RO	48		



Our services: Dependability at your call

We tailor our services to enable new ways of individually optimizing our products. They underscore our far-reaching sense of customer responsibility. That commitment starts before any orders – for example with sound advice on financing options. And it goes far beyond product arrival. A dependable partnership with KSB lasts for years. Our services to customers include:

- Remote diagnosis
- Revamping
- TPM® (Total Pump Management)
- System engineering
- Advice on life cycle costs
- Financing options
- Teleservice
- Savings potential analysis

Ready where you are. KSB runs more than 100 service centres around the world. Some 1,900 highly trained KSB specialists are on call to inspect and maintain your equipment. So you can plan for a future free of unwanted surprises. And we also provide individual on-site training sessions. They ensure that operators can use KSB products and systems efficiently and profitably, day in, day out.

Which is how we secure the long-term value of our customers' facilities.





Our vision: Moving more, together

Yesterday: Movement with a mission.

When KSB started business in 1871, our pumps got things moving almost overnight. From the word go, the company was an enthusiastic pioneer. The motor of that dynamism was the sense of contributing to new movement in modern industry.

That is all history now. But KSB still stays true to its tradition, and continues to pioneer remarkable technical skills.

Today: Impetus from innovations.

KSB has spent its long history providing technical innovations that help customers and partners work more successfully than ever.

We gear everything we do to the real demands of everyday operations. Products, systems, life cycle costs and our steadily growing range of services all put customers and their processes first. This relies on our special concentration of activities – from development to sales and marketing.

Tomorrow: Perspectives for partnerships.

Lively dialogue with customers has been a KSB speciality for over 130 years. Mutual respect remains its hallmark.

Our aim is to strengthen this working partnership still further. The benefits are mutual, too: we profit from practical experience that complements our years of development know-how. And so our customers profit from innovative products, systems and services that match their demands with precision and performance.

Partnership is a value whose products keep their value. So moving more together makes doubly good sense. We look forward to teaming up.

			A	Segment					
Type / Application	Type Series	Page		Water	Waste Water	Industry	Energy	Building Services	Mining
Circular pumps / hot water service pumps, fixed speed	Rio / Rio Z	16	■					■	
	Rio C	16						■	
	Riotherm C	16						■	
	Riotherm	16				■		■	
Circular pumps, variable speed	Rio-Eco / Rio-Eco Z	17						■	
	Riotronic S / Riotronic ECO	17						■	
In-line pumps with fixed/variable speed drive	Trialine / Trialine Z	17, 18	■			■		■	
	Etaline / Etaline Z	18	■			■		■	
	Etaline PumpDrive	18	■			■		■	
	Etaline Z PumpDrive	18	■			■		■	
Standardized / close-coupled pumps, fixed/variable speed	Etanorm / Etanorm R	19	■	■		■	■	■	
	Etanorm PumpDrive	19	■	■		■	■	■	
	Etabloc / Etabloc PumpDrive	19	■	■		■	■	■	
	Etachrom BC / Etachrom BC PumpDrive	19, 20	■	■		■	■	■	
	Etachrom NC / Etachrom NC PumpDrive	20	■	■		■	■	■	
	Etanorm GPV / CPV	20	■	■		■	■	■	
Hot water pumps	HPK-L / HPK / HPH	21	■			■	■	■	
Hot water / thermal oil pumps	Etanorm SYA / RSY	21	■			■		■	
	Etabloc SY / Etaline SY	22	■			■		■	
Thermal oil pumps with magnetic drive / canned motor	Etamagno SY / SYI / Bloc SY	22	■			■			
	HX (Nikkiso-KSB) / HY (Nikkiso-KSB)	22				■			
Standardized chemical pumps	CPKN / CPKN PumpDrive	23	■	■		■	■	■	
	CPK-D	23	■			■			
Seal-less pumps	Magnochem	24	■			■	■		
	Magnochem-Bloc	24	■			■			
	Etaseco / Etaseco-I	24	■	■		■	■	■	
	Secochem Ex / Secochem Ex K	24	■			■	■		
	HN / BN / TN (Nikkiso-KSB)	25				■	■		
	HT / BT / TT (Nikkiso-KSB)	25				■	■		
	HK (Nikkiso-KSB)	25				■	■		
	VN (Nikkiso-KSB)	25				■	■		
	DN (Nikkiso-KSB)	25				■			
Process pumps	RPH	26	■			■	■		
	CTN	26	■			■			
Micro-process engineering	Microchem	26				■			
Rainwater harvesting systems	Hya-Rain / Hya-Rain N	27		■				■	
	Eco-Rain	27		■				■	
Domestic water supply systems with automatic control unit / swimming pools	Multi Eco / Multi Eco-Pro	27	■	■		■		■	
	Multi Eco-Top	28		■		■		■	
	Movitec VE	28		■		■		■	
	Ixo	28	■	■		■		■	
	Filtra	28						■	
Pressure boosting units	Hya-Solo E / D / DV	29		■		■		■	
	Hya-Eco K / Hya-Eco VP	29		■		■		■	
	Hyamat K / Hyamat V / Hyamat VP	30		■		■		■	
	Hyamat IK, IV, IVP	30		■		■		■	
Drainage pumps / waste water pumps	Ama-Drainer 301, 303, 324, 356	31	■					■	
	Ama-Drainer 400/10, 400/35, 500/10/11	31	■			■		■	
	Ama-Drainer 80, 100	31	■					■	
	Ama-Porter F / S / ICS	31	■					■	
	Rotex	31	■			■	■		
	MK / MKY	32	■			■	■		
Lifting units/collection tanks	Ama-Drainer-Box	32	■					■	
	mini-Compacta	32	■					■	
	Compacta	32	■			■		■	
	Ama-Porter CK Pumping Station	33	■					■	
	Amarex N CK Pumping Station	33	■					■	
	Evamatic-Box / Evamatic-Box ICS	33						■	
Submersible motor pumps	Amarex N	34	■		■	■		■	
	Amarex KRT	34	■	■	■	■		■	
	Amarex KRT dry installed	34	■		■	■		■	
Submersible pumps in discharge tubes	Amacan K	34	■		■				
	Amacan P / Amacan S	35	■	■	■				
Mixers / agitators / tank cleaning units	Amamix	35			■	■			
	Amaprop	35			■	■			
	Amajet	36			■	■			
	Amaline	36			■	■			
Pumps for solids-laden fluids	Sewatec / Sewabloc	36	■		■	■			
	KWP / KWP-Bloc	36	■		■	■	■		

A Automation possible

Type / Application		Type Series	Page	A	Water	Waste Water	Industry	Energy	Building Services	Mining
Self-priming pumps		Etaprime L	37		■		■			
		Etaprime B / BN	37		■		■			
Submersible borehole pumps		S 100D / UPA 100C	37	■	■		■		■	
		UPA 150C	37	■	■		■		■	
		UPA 200, 200B, 250C	38	■	■		■		■	■
		UPA 300, 350	38	■	■		■		■	■
		UPZ, BSX-BSF	38		■					■
High-pressure pumps, fixed / variable speed		Movitec V / LHS / VS / VC	39	■	■		■	■	■	
		Movitec PumpDrive	39	■	■		■	■	■	
		Multitec / Multitec PumpDrive	39	■	■		■	■	■	
Axially split pumps		Omega	40	■	■	■	■	■	■	
		RDLO	40	■	■	■	■	■	■	
Stainless steel pumps for the food industry		Vitachrom	40	■			■			
Pumps for power station conventional islands		CHTA / CHTC / CHTD	41					■		
		CHTR	41					■		
		HGB / HGC / HGD	41				■	■		
		HGM	41				■	■		
		YNK / KRHA	41					■		
		RHD	42					■		
		LUV / LUVA / LUVB	42					■		
		WKT / WKTA / WKTB	42					■		
		SEZ / PHZ / PNZ	42		■			■		
		SNW / PNW	43		■			■		
		SPY	43		■	■	■	■		
Pumps for power station nuclear islands		RER	43					■		
		RSR	43					■		
		PSR	44					■		
		LUV nuklear	44					■		
		RHM	44					■		
		RVM	44					■		
Slurry pumps		RHR / RVR	44					■		
		WBC	45							■
		LSA-S	45				■	■		■
		LCC-M	45				■	■		■
		LCC-R	45				■	■		■
		TBC	45							■
		LSR	46							■
		LCV	46							■
		FGD	46				■	■		■
		Mega	46							■
		HHD	46							■
		MHD	47							■
		LHD	47							■
		MDX	47				■			■
Pumps and pressure exchangers for seawater desalination by reverse osmosis		SalTec® System	48		■					
		SalTec® DT	48		■					
		RPH-RO	48		■					
		HGM-RO	48		■					
		Multitec-RO	48		■					

Automation		Page	Segment							
Control systems	hyatronic K / N	49	■	■	■			■		
	hyatronic S	49	■	■	■			■		
	hyatronic SP	49	■	■	■			■		
	hyatronic mb	49	■	■	■			■		
	Hyamaster ISB	49	■	■	■			■		
	Hyamaster SPS	50	■	■	■			■		
	hyatronic spc	50	■	■	■			■		
	PumpDrive	50	■		■			■		
	UPA Control	50	■					■		
	LevelControl	50	■	■				■		
	Controlmatic E.2	51	■					■		
	Cervomatic EDP	51	■					■		
Monitoring and diagnostic systems	Amacontrol	51	■	■	■					
	PumpExpert	51	■	■	■					

A Automation possible

Fluids

Pumps

	Rio / Rio Z	Rio C	Riotherm C	Riotherm	Rio-Eco / Rio-Eco Z	Riotronic S / Riotronic ECO	Trialine	Trialine Z	Etaline	Etaline Z	Etaline PumpDrive	Etaline Z PumpDrive	Etanorm / Etanorm R	Etanorm PumpDrive	Etaloc	Etaloc PumpDrive	Etachrom BC / Etachrom BC PumpDrive	Etachrom NC / Etachrom NC PumpDrive	Etanorm GPV / CPV	HPK-L	HPH	HPK	Etanorm SYA / RSY	Etaloc SY / Etaline SY	Etamagno SY / SY1 / Bloc SY	HX (Nikkiso-KSB)	HY (Nikkiso-KSB)	CPKN / CPKN PumpDrive	CPK-D
Activated sludge																													
Aggressive liquids																													
Brackish water																													
Brine																													
Cleaning agents																													
Condensate																													
Cooling water																													
Corrosive liquids																													
Destillate																													
Digested sludge																													
Dipping paints																													
Drinking water																													
Explosive liquids																													
Feed water																													
Fire-fighting water																													
Flammable liquids																													
Fuels																													
Gas-containing liquids																													
Harmful liquids																													
Heating water																													
Highly aggressive liquids																													
High-temperature hot water																													
Hot water																													
Industrial service water																													
Inorganic liquids																													
Liquefied gas																													
Lubricants																													
Oils																													
Organic liquids																													
Polymerizing liquids																													
Raw sludge																													
River, lake and ground water																													
Seawater																													
Service water																													
Sewage with faeces																													
Sewage without faeces																													
Slurries																													
Slurries (ore, sand, gravel, ash)																													
Solvents																													
Swimming-pool water																													
Thermal oil																													
Toxic liquids																													
Valuable liquids																													
Volatile liquids																													
Wash water																													
Waste water																													

Fluids

Pumps

Fluids		Pumps																																			
		Ama-Drainer-Box mini-Compacta	Compacta	Ama-Porter CK Pumping Station	Amarex N CK Pumping Station	Evamatic-Box / Evamatic-Box ICS	Amarex N	Amarex KRT	Amarex KRT dry installed	Amacan K	Amacan P	Amacan S	Amamix	Amaprop	Amajet	Amaline	Sewatec / Sewabloc KWP / KWP-Bloc	Etaprime L	Etaprime B / BN	S 100D / UPA 100C	UPA 150C	UPA 200, 200B, 250C	UPA 300, 350	UPZ, BSX-BSF	Movitec V / LHS / VS / VC	Movitec PumpDrive	Multitec / Multitec PumpDrive	Omega RDLO									
Activated sludge Agressive liquids Brackish water Brine Cleaning agents Condensate Cooling water Corrosive liquids Destillate Digested sludge Dipping paints Drinking water Explosive liquids Feed water Fire-fighting water Flammable liquids Fuels Gas-containing liquids Harmful liquids Heating water Highly aggressive liquids High-temperature hot water Hot water Industrial service water Inorganic liquids Liquefied gas Lubricants Oils Organic liquids Polymerizing liquids Raw sludge River, lake and ground water Seawater Service water Sewage with faeces Sewage without faeces Slurries Slurries (ore, sand, gravel, ash) Solvents Swimming-pool water Thermal oil Toxic liquids Valuable liquids Volatile liquids Wash water Waste water	Lifting units / collecting tanks																																				
		Submersible motor pumps																																			
			Submersible pumps in discharge tubes																																		
				Mixers / agitators / tank cleaning units																																	
					Pumps for solids-laden fluids																																
						Self-priming pumps																															
							Submersible borehole pumps																														
								High-pressure pumps, fixed / variable speed																													
									Axially split pumps																												

Applications

Pumps

	Rio / Rio Z	Rio C	Riotherm C	Riotherm	Rio-Eco / Rio-Eco Z	Riotronic S / Riotronic ECO	Trialine	Trialine Z	Etaline	Etaline Z	Etaline PumpDrive	Etaline Z PumpDrive	Etanorm / Etanorm R	Etanorm PumpDrive	Etaloc	Etaloc PumpDrive	Etachrom BC / Etachrom BC PumpDrive	Etachrom NC / Etachrom NC PumpDrive	Etanorm GPV / CPV	HPK-L	HPH	HPK	Etanorm SYA / RSY	Etaloc SY / Etaline SY	Etamagno SY / SYI / Bloc SY	HX (Nikkiso-KSB)	HY (Nikkiso-KSB)	CPKN / CPKN PumpDrive	CPK-D
Air-conditioning systems	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Aquaculture	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Boiler circulation	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Boiler feed applications	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Chemical industry	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Cleaning of stormwater tanks / storage sewers	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Condensate transport	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Cooling circuits	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Descaling units	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Dewatering	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Disposal	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
District heating	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Dock facilities	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Domestic water supply	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Drainage	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Drainage of pits, shafts, etc.	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Dredging	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Fire-fighting systems	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Flue gas desulphurization	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Food and beverages industry	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Fountains	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Heat recovery systems	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Heavy oil and coal upgrading	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Homogenization	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Hot water heating systems	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Hydraulic solids transport	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Industrial recirculation systems	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Irrigation	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Keeping in suspension	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Lowering ground water levels	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Maintaining ground water levels	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Mining	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Mining	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Nuclear power stations	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Paint shops	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Paper and cellulose industry	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Petrochemical industry	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Pipelines and tank farms	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Pressure boosting	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Process engineering	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Rainwater harvesting	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Recirculation	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Refineries	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Seawater desalination / reverse osmosis	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Sewage treatment plants	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Shipbuilding	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Sludge disposal	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Sludge processing	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Snow guns	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Spray irrigation	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Sugar industry	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Swimming pools	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Thickening	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Washing plants	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Water extraction	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Water supply	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Water treatment systems	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

Applications

- 13

Applications

Pumps

	Lifting units / collecting tanks						Submersible motor pumps			Submersible pumps in discharge tubes			Mixers / agitators / tank cleaning units		Pumps for solids-laden fluids		Self-priming pumps		Submersible borehole pumps			High-pressure pumps, fixed / variable speed				Axially split pumps				
Air-conditioning systems																														
Aquaculture																														
Boiler circulation																														
Boiler feed applications																														
Chemical industry																														
Cleaning of stormwater tanks / storage sewers																														
Condensate transport																														
Cooling circuits																														
Descaling units																														
Dewatering																														
Disposal																														
District heating																														
Dock facilities																														
Domestic water supply																														
Drainage																														
Drainage of pits, shafts, etc.																														
Dredging																														
Fire-fighting systems																														
Flue gas desulphurization																														
Food and beverages industry																														
Fountains																														
Heat recovery systems																														
Heavy oil and coal upgrading																														
Homogenization																														
Hot water heating systems																														
Hydraulic solids transport																														
Industrial recirculation systems																														
Irrigation																														
Keeping in suspension																														
Lowering ground water levels																														
Maintaining ground water levels																														
Mining																														
Mining																														
Nuclear power stations																														
Paint shops																														
Paper and cellulose industry																														
Petrochemical industry																														
Pipelines and tank farms																														
Pressure boosting																														
Process engineering																														
Rainwater harvesting																														
Recirculation																														
Refineries																														
Seawater desalination / reverse osmosis																														
Sewage treatment plants																														
Shipbuilding																														

Circulator pumps / hot water service pumps, fixed speed

Rio/Rio Z

Circulator pump with manual speed control



Rp / DN 1-1 1/4 / 32 - 100
 Q [m³/h] max. 120
 H [m] max. 18
 p [bar] max. 10
 T [°C] -20 to +130
 Data for 50 Hz operation

Design: Maintenance-free, glandless wet rotor pump, flanged or screw-ended, with three speed levels; in twin pump design (Rio Z) for standby operation with integrated swing check valve or, on option, peak load operation (parallel operation).

Applications: Hot water heating systems, heat recovery systems and cooling circuits in air-conditioning systems.



A Switchgears

Reference no. 1115.51

Rio C

Circulator pump with manual speed control



Rp 1-1 1/4
 Q [m³/h] max. 4
 H [m] max. 5.8
 p [bar] max. 10
 T [°C] -10 to +110
 Data for 50 Hz operation

Design: Maintenance-free, glandless wet rotor pump, screw-ended, with three speed levels.

Applications: Hot water heating systems, heat recovery systems and cooling circuits in air-conditioning systems.



Reference no. 1120.5

also available in 60 Hz

Riotherm C

Hot water service pump



Rp / DN 1/2-1 1/4 / 40 - 50
 Q [m³/h] max. 28
 H [m] max. 7.5
 p [bar] max. 10
 T [°C] -10 to +110
 Data for 50 Hz operation

Design: Maintenance-free, glandless wet rotor pump, screw-ended, with three speed levels.

Applications: Hot water supply, heat transfer / recovery systems and cooling circuits in air-conditioning systems.

Reference no. 1109.5

Riotherm

Hot water service pump



Rp 1-1 1/4
 Q [m³/h] max. 10
 H [m] max. 6
 p [bar] max. 10
 T [°C] -2 to +110
 Data for 50 Hz operation

Design: Screw-ended dry rotor pump with mechanical seal and fixed speed.

Applications: Hot water supply systems, swimming pools, cooling circuits and industrial plants.

Reference no. 1118.5

also available in 60 Hz

Circulator pumps, variable speed

Rio-Eco/Rio-Eco Z

Circulator pump with continuously variable differential pressure control



Rp / DN 1-1 1/4 / 32 - 65
Q [m³/h] max. 108
H [m] max. 13
p [bar] max. 10
T [°C] -10 to +110
n [min⁻¹] max. 4800

Design: Maintenance-free wet rotor pump with integrated frequency inverter for continuously variable differential pressure control and IR interface for remote control.

Applications: Hot water heating systems, heat recovery systems and cooling circuits in air-conditioning systems.



Reference no. 1137.5

also suitable for 60 Hz operation

Riotronic S

Circulator pump with continuously variable differential pressure control



Rp 1-1 1/4
Q [m³/h] max. 3.5
H [m] max. 6
p [bar] max. 10
T [°C] +20 to +110
n [min⁻¹] max. 2680

Design: Maintenance-free, glandless wet rotor pump, screw-ended, with integrated electronics for continuously variable differential pressure control.

Applications: Hot water heating systems and heat recovery systems.



Reference no. 1112.5

Riotronic ECO

High-efficiency circulator pump with continuously variable differential pressure control



Rp 1-1 1/4
Q [m³/h] max. 2.5
H [m] max. 5
p [bar] max. 10
T [°C] +15 to +110
n [min⁻¹] max. 3500

Design: Maintenance-free, glandless wet rotor pump, screw-ended, with EC motor technology and continuously variable differential pressure control.

Applications: Hot water heating systems and heat recovery systems.



Reference no. 1112.51

In-line pumps with fixed / variable speed drive

Trialine

In-line pump



DN 32 - 80
Q [m³/h] max. 90
H [m] max. 16
p [bar] max. 10
T [°C] -15 to +120
Data for 50 Hz operation

Design: Close-coupled in-line pump with common pump / motor shaft.

Applications: Hot water heating systems, cooling circuits, air-conditioning and water supply systems.

A Hyamaster · hyatronic · Switchgears

Reference no. 1144.51

also available in 60 Hz

In-line pumps with fixed / variable speed drive

Trialine Z		In-line twin pump
	DN 32 - 80 Q [m³/h] max. 120 H [m] max. 16 p [bar] max. 10 T [°C] -15 to +120 <small>Data for 50 Hz operation</small>	<p>Design: Close-coupled in-line pump with common pump / motor shaft; in twin pump design for standby operation with integrated change-over flap or, on option, peak load operation (parallel operation).</p> <p>Applications: Hot water heating systems, cooling circuits, air-conditioning and water supply systems.</p>
A Hyamaster · hyatronic · Switchgears	Reference no. 1144.52	also available in 60 Hz
Etaline		In-line pump
	DN 32 - 200 Q [m³/h] max. 700 H [m] max. 95 p [bar] max. 16 T [°C] -30 to +140 <small>Data for 50 Hz operation</small>	<p>Design: Close-coupled, in-line circulator pump with volute casing and standardized motor.</p> <p>Applications: Hot water heating systems, cooling circuits, air-conditioning, water and service water supply systems, industrial recirculation systems.</p>
A Hyamaster · hyatronic · Switchgears	Reference no. 1146.51	also available in 60 Hz
Etaline Z		In-line twin pump
	DN 32 - 200 Q [m³/h] max. 1120 H [m] max. 77 p [bar] max. 16 T [°C] -30 to +140 <small>Data for 50 Hz operation</small>	<p>Design: Close-coupled, in-line twin circulator pump, pump shaft and motor shaft are rigidly coupled.</p> <p>Applications: Hot water heating systems, cooling circuits, air-conditioning systems, water and service water supply systems, industrial recirculation systems.</p>
A Hyamaster · hyatronic · Switchgears	Reference no. 1148.5	also available in 60 Hz
Etaline PumpDrive		In-line pump with motor-mounted variable speed system
	DN 32 - 150 Q [m³/h] max. 788 H [m] max. 100 p [bar] max. 16 T [°C] -10 to +110 n [min⁻¹] max. 4200	<p>Design: Close-coupled in-line circulator pump with motor-mounted variable speed system; pump shaft and motor shaft are rigidly coupled.</p> <p>Applications: Hot water heating systems, cooling circuits, air-conditioning systems, water and service water supply systems, industrial recirculation systems.</p>
A PumpDrive	Reference no. 1149.52	also suitable for 60 Hz operation
Etaline Z PumpDrive		In-line pump with motor-mounted variable speed system
	DN 32 - 125 Q [m³/h] max. 479 H [m] max. 76 p [bar] max. 16 T [°C] -10 to +110 n [min⁻¹] max. 4200	<p>Design: Close-coupled in-line circulator pump, in twin pump design with motor-mounted variable speed system; pump shaft and motor shaft are rigidly coupled. Double pump control modules (accessories) enable redundant operation of Etaline Z without a higher-level controller.</p> <p>Applications: Hot water heating systems, cooling circuits, air-conditioning systems, water and service water supply systems, industrial recirculation systems.</p>
A PumpDrive	Reference no. 1154.51	also suitable for 60 Hz operation

Standardized / close-coupled pumps, fixed / variable speed

Etanorm / Etanorm R

Standardized pump



DN 32 - 300
Q [m³/h] max. 1900
H [m] max. 102
p [bar] max. 16
T [°C] max. +140
Data for 50 Hz operation

Design: Horizontal, long-coupled, single-stage volute casing pump (pump size > 125 with two stages) in back pull-out design, with replaceable shaft sleeves / shaft protecting sleeves and casing wear rings. Design to ATEX.

Applications: Spray irrigation, irrigation, drainage, district heating, water supply systems, heating and air-conditioning systems, condensate transport, swimming pools, fire-fighting systems, handling of hot water, cooling water, fire-fighting water, oil, brine, drinking water, brackish water, service water, etc.

A PumpExpert • PumpDrive • Hyamaster • hyatronic

Reference no. 1211.5

also available in 60 Hz

Etanorm PumpDrive

Standardized pump with motor-mounted variable speed system



DN 32 - 150
Q [m³/h] max. 800
H [m] max. 102
p [bar] max. 16
T [°C] max. +140
n [min⁻¹] max. 4200
Data for 50 Hz operation

Design: Horizontal, long-coupled, single-stage volute casing pump (pump size > 125 with two stages) in back pull-out design, with replaceable shaft sleeves / shaft protecting sleeves and casing wear rings. Design to ATEX.

Applications: Spray irrigation, irrigation, drainage, district heating, water supply systems, heating and air-conditioning systems, condensate transport, swimming pools, fire-fighting systems, handling of hot water, cooling water, fire-fighting water, oil, brine, drinking water, brackish water, service water, etc.

A PumpExpert • PumpDrive

Reference no. 1211.5 + 4070.5

Etabloc

Close-coupled pump



DN 25 - 150
Q [m³/h] max. 660
H [m] max. 102
p [bar] max. 16
T [°C] max. +140
Data for 50 Hz operation

Design: Close-coupled, single-stage volute casing pump, ratings to EN 733, with replaceable shaft sleeve and casing wear rings. Design to ATEX.

Applications: Spray irrigation, irrigation, drainage and water supply systems, heating and air-conditioning systems, condensate transport, swimming pools, handling of hot water, cooling water, fire-fighting water, seawater, oil, brine, drinking water, cleaning agents, brackish water, service water, etc.

A PumpDrive • Hyamaster • hyatronic

Reference no. 1167.5

also available in 60 Hz

Etabloc PumpDrive

Close-coupled pump with motor-mounted variable speed system



DN 25 - 150
Q [m³/h] max. 800
H [m] max. 102
p [bar] max. 16
T [°C] max. +110
n [min⁻¹] max. 4200

Design: Close-coupled, single-stage volute casing pump, ratings to EN 733, with replaceable shaft sleeve and casing wear rings. Design to ATEX.

Applications: Spray irrigation, irrigation, drainage and water supply systems, heating and air-conditioning systems, condensate transport, swimming pools, handling of hot water, cooling water, fire-fighting water, seawater, oil, brine, drinking water, cleaning agents, brackish water, service water, etc.

A PumpDrive

Reference no. 1167.5 + 4070.5

Etachrom BC

Close-coupled chrome steel pump



DN 25 - 80
Q [m³/h] max. 260
H [m] max. 108
p [bar] max. 12
T [°C] max. +110
Data for 50 Hz operation

Design: Close-coupled, horizontal, single-stage annular casing pump, with ratings and main dimensions to EN 733, with replaceable casing wear rings. Design to ATEX.





Applications: Spray irrigation, irrigation, drainage and water supply systems, heating and air-conditioning systems, fire-fighting systems, swimming pools, handling of condensate, hot water, cooling water, fire-fighting water, oil, drinking water, cleaning agents, service water.

A Hyamaster • hyatronic


Reference no. 1213.5


also available in 60 Hz


Standardized / close-coupled pumps, fixed / variable speed

Etachrom BC PumpDrive		Close-coupled chrome steel pump with motor-mounted variable speed system
	DN 25 - 80 Q [m³/h] max. 260 H [m] max. 106 p [bar] max. 12 T [°C] max. +110 n [min⁻¹] max. 3500	<p>Design: Close-coupled, horizontal, single-stage annular casing pump, with ratings and main dimensions to EN 733, with replaceable casing wear rings and motor-mounted variable speed system.</p> <p>Applications: Spray irrigation, irrigation, drainage and water supply systems, heating and air-conditioning systems, fire-fighting systems, swimming pools, handling of condensate, hot water, cooling water, fire-fighting water, oil, drinking water, cleaning agents, service water.</p>
	A PumpDrive	Reference no. 1213.5 + 4070.5
Etachrom NC		Standardized chrome steel pump
	DN 25 - 80 Q [m³/h] max. 260 H [m] max. 106 p [bar] max. 12 T [°C] max. +110 <small>Data for 50 Hz operation</small>	<p>Design: Horizontal, single-stage annular casing pump, with ratings and main dimensions to EN 733, with replaceable casing wear rings. Design to ATEX.</p> <p>Applications: Water supply, spray irrigation, irrigation and drainage systems, heating and air-conditioning systems, handling of drinking water, service water, hot water, cooling water, swimming pool water, fire-fighting water, condensate, oil and cleaning agents.</p>
	A Hyamaster • hyatronic	Reference no. 1212.5 also available in 60 Hz
Etachrom NC PumpDrive		Standardized chrome steel pump with motor-mounted variable speed system
	DN 25 - 80 Q [m³/h] max. 260 H [m] max. 106 p [bar] max. 12 T [°C] max. +110 n [min⁻¹] max. 3500	<p>Design: Horizontal, single-stage annular casing pump, with ratings and main dimensions to EN 733, with replaceable casing wear rings and motor-mounted variable speed system.</p> <p>Applications: Water supply, spray irrigation, irrigation and drainage systems, heating and air-conditioning systems, handling of drinking water, service water, hot water, cooling water, swimming pool water, fire-fighting water, condensate, oil and cleaning agents.</p>
	A PumpDrive	Reference no. 1212.5 + 4070.5
Etanorm GPV/CPV		Vertical low-pressure pump
	DN 32 - 150 Q [m³/h] max. 660 H [m] max. 102 p [bar] max. 16 T [°C] max. +95 <small>Data for 50 Hz operation</small>	<p>Design: Single-stage volute casing pump, ratings to EN 733, for vertical installation in closed tanks under atmospheric pressure. Up to an immersion depth of 2000 m.</p> <p>Applications: Handling of neutral degreasing and phosphatizing solutions, wash water with degreasing agents, dipping paints, etc.</p>
		Reference no. 1214.5 also available in 60 Hz


Hot water pumps

HPK-L		Hot water / thermal oil recirculation pump without external cooling
	DN 25 - 250 Q [m³/h] max. 1330 H [m] max. 155 p [bar] max. 40 T [°C] max. +240 / +350 <small>Data for 50 Hz operation</small>	Design: Horizontal, radially split volute casing pump in back pull-out design to EN 22 858 / ISO 2858 / ISO 5199, single-stage, single-entry, with radial impeller. Equipped with heat barrier, seal chamber air-cooled by integrated fan impeller, no external cooling. Design to ATEX. Applications: Handling of hot water in piping or tank systems, particularly in medium-sized and large heating systems, forced circulation boilers, district heating systems, etc.
	A PumpExpert • Hyamaster • hyatronic	Reference no. 1136.5 also available in 60 Hz


HPK		Hot water recirculation pump
	DN 300 - 400 Q [m³/h] max. 4150 H [m] max. 185 p [bar] max. 40 T [°C] max. +400 <small>Data for 50 Hz operation</small>	Design: Horizontal, radially split volute casing pump in back pull-out design to EN 22 858 / ISO 2858 / ISO 5199, single-stage, single-entry, with radial impeller. TÜV certification to TRD on option. Design to ATEX. Applications: Handling of hot water and thermal oil in piping or tank systems, particularly in medium-sized and large heating systems, forced circulation boilers, district heating systems, etc.
	A PumpExpert • Hyamaster • hyatronic	Reference no. 1121.51 also available in 60 Hz

HPH		Hot water recirculation pump
	DN 40 - 350 Q [m³/h] max. 2350 H [m] max. 225 p [bar] max. 110 T [°C] max. +320 <small>Data for 50 Hz operation</small>	Design: Horizontal, radially split volute casing pump in back pull-out design, single-stage, single-entry, with centreline pump feet and radial impeller. TÜV certification to TRD on option. Design to ATEX. Applications: Handling of hot water in high-pressure hot water generation plants and for use as boiler feed and recirculation pump.
	A Hyamaster • hyatronic	Reference no. 1122.5 also available in 60 Hz


Hot water / thermal oil pumps

Etanorm SYA / RSY		Hot water / thermal oil pump
	DN 32 - 300 Q [m³/h] max. 1900 H [m] max. 102 p [bar] max. 16 T [°C] max. +350 <small>Data for 50 Hz operation</small>	Design: Horizontal, long-coupled volute casing pump in back pull-out design with ratings and main dimensions to EN 733, single-stage, with replaceable casing wear rings. Design to ATEX. Applications: Heat transfer systems (DIN 4754, VDI 3033) or hot water recirculation.
	A PumpExpert • Hyamaster • hyatronic	Reference no. 1220.5 also available in 60 Hz


Hot water / thermal oil pumps

Etabloc SY / Etaline SY		Hot water / thermal oil pump
	DN 32 - 100 Q [m³/h] max. 280 H [m] max. 67 p [bar] max. 16 T [°C] max. +350 <small>Data for 50 Hz operation</small>	Design: Horizontal, single-stage volute casing pump in back pull-out design with ratings and main dimensions to EN 733, or in in-line design, with replaceable casing wear rings. Applications: Heat transfer systems (DIN 4754) or hot water recirculation.
	A PumpExpert • Hyamaster • hyatronic	Reference no. 1170.5 also available in 60 Hz


Thermal oil pumps with magnetic drive / canned motor

Etamagno SY / SYI / Bloc SY		Thermal oil pump
	DN 32 - 150 Q [m³/h] max. 660 H [m] max. 102 p [bar] max. 16 T [°C] max. +350 <small>Data for 50 Hz operation</small>	Design: Horizontal, seal-less, single-stage volute casing pump with magnetic drive, ratings and main dimensions to EN 733, with replaceable casing wear rings. Applications: Handling of thermal oil in heat transfer systems to DIN 4754.
	A PumpExpert • Hyamaster • hyatronic	Reference no. 1218.5 also available in 60 Hz

(Only available in Europe, Russia, Middle East and Africa)

HX (Nikkiso-KSB)		Thermal oil pump
	DN 32 - 100 Q [m³/h] max. 200 H [m] max. 100 p [bar] max. 40 T [°C] max. +350 <small>Data for 50 Hz operation</small>	Design: Horizontal, seal-less, single-stage pump with fully enclosed canned motor, uncooled, cooled or heatable, with explosion protection. Design to ATEX. Applications: Handling of thermal oils and other hot fluids in heat transfer systems to DIN 4754.
		also available in 60 Hz

(Only available in Europe, Russia, Middle East and Africa)

HY (Nikkiso-KSB)		Thermal oil pump
	DN 32 - 80 Q [m³/h] max. 150 H [m] max. 100 p [bar] max. 40 T [°C] max. +250 <small>Data for 50 Hz operation</small>	Design: Horizontal, seal-less, single-stage pump with fully enclosed canned motor, uncooled, cooled or heatable, with explosion protection. Design to ATEX. Applications: Handling of thermal oils and other hot fluids in heat transfer systems to DIN 4754.
		also available in 60 Hz

Standardized chemical pumps

CPKN

Standardized chemical pump with reinforced bearing bracket



DN 25 - 400
Q [m³/h] max. 4150
H [m] max. 185
p [bar] max. 25
T [°C] max. +400
Data for 50 Hz operation

Design: Horizontal, radially split volute casing pump in back pull-out design to EN 22 858 / ISO 2858 / ISO 5199, single-stage, single-entry, with radial impeller. Also available as variant with "wet" shaft, conical seal chamber, heatable volute casing (CPKNO-CHs) and/or semi-open impeller (CPKNO). Design to ATEX.

Applications: Handling of aggressive liquids in the chemical and petrochemical industries as well as in refinery and fire-fighting systems, handling of brine.

A PumpExpert • Hyamaster • hyatronic

Reference no. 2730.5

also available in 60 Hz

CPKN PumpDrive

Standardized chemical pump with reinforced bearing bracket and motor-mounted variable speed system



DN 25 - 300
Q [m³/h] max. 1050
H [m] max. 220
p [bar] max. 25
T [°C] max. +110
n [min⁻¹] max. 3600

Design: Horizontal, radially split volute casing pump in back pull-out design to EN 22 858 / ISO 2858 / ISO 5199, single-stage, single-entry, with radial impeller. Also available as variant with "wet" shaft, conical seal chamber and/or semi-open impeller (CPKNO) with motor-mounted variable speed system.

Applications: Handling of aggressive liquids in the chemical and petrochemical industries as well as in refinery and fire-fighting systems.

A PumpDrive

Reference no. 2730.5 + 4070.5

CPK-D

Standardized chemical pump with hydrodynamic shaft seal



DN 32 - 250
Q [m³/h] max. 1100
H [m] max. 128
p [bar] max. 25
T [°C] max. +150
Data for 50 Hz operation

Design: Horizontal, radially split volute casing pump in back pull-out design to ISO 2858, single-stage, single-entry, with radial impeller and zero-leakage hydrodynamic shaft seal.

Applications: Handling of liquids in the chemical and petrochemical industry, in refineries and paint shops.

A PumpExpert • Hyamaster • hyatronic

Reference no. 2726.1

also available in 60 Hz

Seal-less pumps

Magnochem

Standardized chemical pump with mag-drive



DN 25 - 250
Q [m³/h] max. 1250
H [m] max. 153
p [bar] max. 25
T [°C] max. +300
Data for 50 Hz operation

Design: Horizontal, seal-less, mag-drive volute casing pump in back pull-out design to ISO 2858 / EN 22 858 / ISO 5199, single-stage, single-entry, with radial impeller, seal-less. Design to ATEX.

Applications: Handling of aggressive, toxic, explosive, valuable, flammable, mal-odorous or harmful liquids in the chemical, petrochemical and general industry.

A PumpExpert • Hyamaster • hyatronic

Reference no. 2739.5

also available in 60 Hz

Magnochem - Bloc

Close-coupled chemical pump with mag-drive



DN 25 - 125
Q [m³/h] max. 240
H [m] max. 153
p [bar] max. 25
T [°C] max. +250
Data for 50 Hz operation

Design: Close-coupled, mag-drive volute casing pump to ISO 2858 / EN 22 858 / ISO 5199, single-stage, single-entry, with radial impeller, seal-less. Design to ATEX.

Applications: Handling of aggressive, toxic, explosive, valuable, flammable, mal-odorous or harmful liquids in the chemical, petrochemical and general industry.

A PumpExpert • Hyamaster • hyatronic

Reference no. 2749.5

also available in 60 Hz

Etaseco / Etaseco-I

Water motor pumps with canned motor



DN 32 - 100
Q [m³/h] max. 250
H [m] max. 100
p [bar] max. 16
T [°C] max. +140
Data for 50 Hz operation

Design: Horizontal / 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, pump casing connecting dimensions to EN 733.

Applications: Handling of aggressive, flammable, toxic, volatile, or valuable liquids in the chemical and petrochemical industry, in environmental engineering and the general industry.

A PumpExpert • Hyamaster • hyatronic

Reference no. 2935.5

also available in 60 Hz

Secochem Ex

Standardized chemical pump with canned motor and explosion protection



DN 25 - 100
Q [m³/h] max. 300
H [m] max. 150
p [bar] max. 25
T [°C] max. +130
Data for 50 Hz operation

Design: Horizontal, 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 22 858 / ISO 2858, with explosion protection. Design to ATEX.

Applications: Handling of aggressive, flammable, explosive, toxic, volatile or valuable liquids in the chemical and petrochemical industry, in environmental engineering and the general industry.

A PumpExpert • Hyamaster • hyatronic

Reference no. 2939.5

also available in 60 Hz

Secochem Ex K

Standardized chemical pump with canned motor and explosion protection



DN 25 - 100
Q [m³/h] max. 300
H [m] max. 150
p [bar] max. 25
T [°C] max. +400
Data for 50 Hz operation

Design: Horizontal, 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, pump casing connecting dimensions to EN 22 858 / ISO 2858, with explosion protection and external cooler. Design to ATEX.

Applications: Handling of aggressive, flammable, explosive, toxic, volatile or valuable liquids in the chemical and petrochemical industry, in environmental engineering and the general industry.


A PumpExpert • Hyamaster • hyatronic

Reference no. 2939.51


also available in 60 Hz

Seal-less pumps


(Only available in Europe, Russia, Middle East and Africa)

HN / BN / TN (Nikkiso-KSB)		Chemical pump with canned motor, explosion-proof
	DN	32 - 300
	Q [m³/h]	max. 800
	H [m]	max. 200
	p [bar]	max. 40
	T [°C]	max. +180
Data for 50 Hz operation		
		also available in 60 Hz


(Only available in Europe, Russia, Middle East and Africa)

HT / BT / TT (Nikkiso-KSB)		Chemical pump with canned motor, explosion-proof, for special applications
	DN	32 - 300
	Q [m³/h]	max. 800
	H [m]	max. 200
	p [bar]	max. 40
	T [°C]	max. +400
Data for 50 Hz operation		
		also available in 60 Hz


(Only available in Europe, Russia, Middle East and Africa)

HK (Nikkiso-KSB)		Double-stage canned motor pump
	DN	25 - 40
	Q [m³/h]	max. 10
	H [m]	max. 220
	p [bar]	max. 40
	T [°C]	max. +150
n [min⁻¹] max. 8400		
Data for n = 8400 min⁻¹		
		high speed, up to 130 Hz


(Only available in Europe, Russia, Middle East and Africa)


VN (Nikkiso-KSB)		Multistage canned motor pump
	DN	40 - 100
	Q [m³/h]	max. 140
	H [m]	max. 450
	p [bar]	max. 40
	T [°C]	max. +180
Data for 50 Hz operation		
		also available in 60 Hz

(Only available in Europe, Russia, Middle East and Africa)


DN (Nikkiso-KSB)		Self-priming canned motor pump
	DN	32 - 50
	Q [m³/h]	max. 40
	H [m]	max. 60
	p [bar]	max. 40
	T [°C]	max. +180
Data for 50 Hz operation		
		also available in 60 Hz

Process pumps


RPH		Process pump
	DN _____ 25 - 400 Q [m³/h] _____ max. 4,150 H [m] _____ max. 270 p [bar] _____ max. 51 T [°C] _____ max. +450 <small>Data for 50 Hz operation</small>	Design: Horizontal, radially split volute casing pump in back pull-out design to API 610, 9th edition, or ISO 13709 (heavy duty), with radial impeller, single-stage, single-entry, centreline pump feet; with inducer, if required. Design to ATEX. Applications: Refineries, petrochemical and chemical industry, power stations.
	A PumpExpert • Hyamaster • hyatronic	Reference no. 1312.5/1316.51 also available in 60 Hz


CTN		Chemical vertical shaft submersible pump
	DN _____ 25 - 250 Q [m³/h] _____ max. 800 H [m] _____ max. 93 p [bar] _____ max. 16 T [°C] _____ max. +300 <small>Data for 50 Hz operation</small>	Design: Radially split, vertical shaft submersible pump with double volute for wet and dry installation, single- or double stage, single-entry, with radial impeller; heatable model available. Design to ATEX. Applications: Handling of chemically aggressive liquids, also slightly contaminated or with a low solids content, in the chemical and petrochemical industry.
	A Hyamaster • hyatronic	Reference no. 2711.5 also available in 60 Hz

Micro-process engineering


Microchem		Centrifugal pump for micro-process engineering
	Q [ml/min] _____ max. 5000 H [m] _____ max. 250 p [bar] _____ max. 25 T [°C] _____ -10 to +100	Design: Pump unit consisting of a variable-speed single-stage centrifugal pump with directly flanged motor and control unit. Applications: Continuous volume flow control for handling aggressive organic and inorganic fluids in chemical processes. The pump is suitable for use in laboratories, pilot plants and in production processes, particularly in industrial process engineering, continuous processes, micro-process engineering, miniplants, dosing applications.
		Reference no. 2600.5


Rainwater harvesting systems

Hya-Rain / Hya-Rain N		Rainwater harvesting system with one pump
	<p> Rp _____ 1 Q [m³/h] _____ max. 4 H [m] _____ max. 43 p [bar] _____ max. 6 T [°C] _____ max. +35 Data for 50 Hz operation </p>	<p>Design: Ready-to-connect package rainwater harvesting system.</p> <p>Applications: Rainwater and service water utilization, irrigation and spray irrigation systems.</p>
	Reference no. 5602.51	


Eco-Rain		Rainwater harvesting system with one pump
	<p> Rp _____ 1 Q [m³/h] _____ max. 4 H [m] _____ max. 43 p [bar] _____ max. 6 T [°C] _____ max. +35 Data for 50 Hz operation </p>	<p>Design: Basic ready-to-connect package rainwater harvesting system.</p> <p>Applications: Rainwater and service water utilization, irrigation and spray irrigation systems.</p>
	Reference no. 5605.5	

Domestic water supply systems with automatic control unit / swimming pool

Multi Eco		Multistage, self-priming centrifugal pump
	<p> Rp _____ 1-1¼ Q [m³/h] _____ max. 8 H [m] _____ max. 54 p [bar] _____ max. 10 T [°C] _____ max. +50 n [min⁻¹] _____ max. 2800 </p>	<p>Design: Multistage, self-priming centrifugal pump in close-coupled design.</p> <p>Applications: Single- or two-family houses, agricultural facilities, spray irrigation and irrigation systems, washing plants, water supply and rainwater harvesting systems.</p>
	A Switchgears	Reference no. 5180.5

Multi Eco-Pro		Multistage, self-priming centrifugal pump with automatic control unit
	<p> Rp _____ 1-1¼ Q [m³/h] _____ max. 8 H [m] _____ max. 54 p [bar] _____ max. 10 T [°C] _____ max. +50 n [min⁻¹] _____ max. 2800 </p>	<p>Design: Multistage, self-priming centrifugal pump in close-coupled design, with power supply cable, plug and automatic control unit Controlmatic E switching the pump on and off as consumers are opened / closed and protecting the pump against dry running.</p> <p>Applications: Single- or two-family houses, agricultural facilities, spray irrigation and irrigation systems, washing plants, water supply and rainwater harvesting systems.</p>
	A Switchgears	Reference no. 5182.5

Domestic water supply systems with automatic control unit / swimming pool

Multi Eco-Top		Domestic water supply system
	Rp _____ 1-1¼ Q [m³/h] _____ max. 8 H [m] _____ max. 54 p [bar] _____ max. 7 T [°C] _____ max. +50 n [min⁻¹] _____ max. 2800	Design: Multistage, self-priming centrifugal pump in close-coupled design incl. accumulator with replaceable membrane in drinking water quality, total volume 20 or 50 l, pressure switch for automatic pump operation and 1.5 m power supply cable. Applications: Single- or two-family houses, agricultural facilities, spray irrigation and irrigation systems, washing plants, water supply and rainwater harvesting systems.
	Reference no. 5181.5	
Movitec VE		High-pressure in-line pump in close-coupled design
	Rp _____ 1½ Q [m³/h] _____ max. 12 H [m] _____ max. 70 p [bar] _____ max. 10 T [°C] _____ max. +60 n [min⁻¹] _____ max. 2900	Design: Multistage, vertical (horizontal installation upon request) high-pressure centrifugal pump, with suction and discharge nozzles of identical nominal diameters arranged opposite to each other (in-line design). Applications: Single- or two-family houses, agricultural facilities, spray irrigation and irrigation systems, washing plants, water supply and rainwater harvesting systems, pressure boosting, hot water and cooling water recirculation, fire-fighting systems.
	Reference no. 1798.5 also available in 60 Hz	
Ixo		Submersible motor pump
	Rp _____ 1¼ Q [m³/h] _____ max. 8 H [m] _____ max. 65 T [°C] _____ max. +35 n [min⁻¹] _____ max. 2900	Design: Fully or partly submerged, multistage, close-coupled centrifugal pump (min. immersion depth 0.1 m), low-level inlet, suction strainer with a max. mesh size of 2.5 mm. Applications: Water supply, spray irrigation and irrigation systems, washing plants, rainwater harvesting systems, water extraction from wells, tanks and cisterns.
	A Switchgears Reference no. 2146.5	
Filträ		Recirculating pump for swimming pool filtering systems
	Rp _____ 2 Q [m³/h] _____ max. 36 H [m] _____ max. 21 p [bar] _____ max. 2.5 T [°C] _____ max. +35 n [min⁻¹] _____ max. 2800	Design: Self-priming, single-stage, close-coupled centrifugal pump. Applications: Handling of clean or slightly contaminated water, swimming pool water with a chlorine content of up to 0.3 %, ozonized swimming pool water with a salt content of up to 7 ‰.
	Reference no. 2127.5	

Pressure boosting units

Hya-Solo E

Pressure boosting unit, 1 pump



Rp 1¼
Q [m³/h] max. 6
H [m] max. 50
p [bar] max. 10
T [°C] max. +60
Data for 50 Hz operation

Design: Fully automatic package single-pump unit with 8 l membrane-type accumulator, pressure-controlled start-up and flow-controlled shutdown.
Applications: Water supply systems for residential and office buildings, irrigation/spray irrigation and rainwater harvesting systems, service water supply systems in trade and industry.

Reference no. 1951.5

Hya-Solo D

Pressure boosting unit, 1 pump



Rp / DN 1¼ / 100
Q [m³/h] max. 75
H [m] max. 150
p [bar] max. 16
T [°C] max. +70
Data for 50 Hz operation

Design: Fully automatic package single-pump unit with 8 l membrane-type accumulator, pressure-controlled start-up and flow-controlled shutdown.
Applications: For industrial plants, water supply systems for residential and office buildings, irrigation/spray irrigation and rainwater harvesting systems, service water supply systems in trade and industry.

Reference no. 1951.5

Hya-Solo DV

Pressure boosting unit, 1 pump



Rp / DN 1¼ / 100
Q [m³/h] max. 110
H [m] max. 150
p [bar] max. 16
T [°C] max. +70
Data for 2900 min⁻¹

Design: Fully automatic variable-speed package single-pump unit with PumpDrive, pressure-controlled start-up and flow-controlled shutdown.
Applications: For industrial plants, water supply systems for residential and office buildings, irrigation/spray irrigation and rainwater harvesting systems, service water supply systems in trade and industry.

A PumpDrive

Reference no. 1951.5

Hya-Eco K

Pressure boosting unit, 2 to 3 pumps



Rp / DN 2 / 80
Q [m³/h] max. 70
H [m] max. 100
p [bar] max. 10
T [°C] max. +70
Data for 50 Hz operation

Design: Fully automatic package pressure boosting unit, with 2 to 3 vertical high-pressure pumps, fully electronic control to ensure the required supply pressure, standard version with volt-free contact for general fault indication and live-zero monitoring of the connected sensors, configuration and functions to DIN 1988, part 5.
Applications: Residential buildings, hospitals, office buildings, hotels, department stores, industry, etc.

Reference no. 1967.5

Hya-Eco VP

Pressure boosting unit with continuously variable speed control of each pump



Rp / DN 2 / 80
Q [m³/h] max. 70
H [m] max. 120
p [bar] max. 12
T [°C] max. +70
Data for 3500 min⁻¹

Design: Fully automatic pressure boosting package unit, with 2 to 3 vertical high-pressure pumps and continuously variable speed adjustment of each pump for fully electronic control of the required supply pressure, with two standard volt-free changeover contacts for fault indication. Configuration and functions to DIN 1988, Part 5.
Applications: Residential buildings, hospitals, office buildings, hotels, department stores, industry, and other applications

Reference no. 1967.52

Pressure boosting units

Hyamat K

Pressure boosting unit, 2 to 6 pumps



Rp / DN 1½ / 250
Q [m³/h] max. 660
H [m] max. 160
p [bar] max. 16
T [°C] max. +70
Data for 50 Hz operation

Design: Fully automatic package pressure boosting unit, with 2 to 6 vertical high-pressure pumps, fully electronic control to ensure the required supply pressure, with volt-free contact for general fault indication and live-zero monitoring of the connected sensors, configuration and functions to DIN 1988, part 5.

Applications: Residential buildings, hospitals, office buildings, hotels, department stores, industry, etc.

Reference no. 1952.5

Hyamat V

Pressure boosting unit with continuously variable speed adjustment of one pump



Rp / DN 1½ / 250
Q [m³/h] max. 660
H [m] max. 160
p [bar] max. 16
T [°C] max. +70
Data for 2900 min⁻¹

Design: Fully automatic package pressure boosting unit, with 2 to 6 vertical high-pressure pumps and continuously variable speed adjustment of one pump for fully electronic control of the required supply pressure, configuration and functions to DIN 1988, part 5.

Applications: Pressure boosting in residential buildings, hospitals, office buildings, hotels, department stores, industry, etc.

A hyatronic

Reference no. 1953.51

Hyamat VP

Pressure boosting unit with continuously variable speed control of each pump



Rp / DN 1½ / 250
Q [m³/h] max. 660
H [m] max. 160
p [bar] max. 16
T [°C] max. +70
Data for 2900 min⁻¹

Design: Fully automatic pressure boosting package unit with 2 to 6 vertical high-pressure pumps and continuously variable speed control of each pump by PumpDrive speed control system. For fully electronic control of the required supply pressure; configuration and functions to DIN 1988, Part 5.

Applications: Pressure boosting in residential buildings, hospitals, office buildings, hotels, department stores, industry, etc.

A PumpDrive

Reference no. 1953.52

Hyamat IK, IV, IVP

Pressure boosting unit for industrial applications



DN 100 - 200
Q [m³/h] max. 640
H [m] max. 160
p [bar] max. 16
T [°C] max. +70
Data for 50 Hz operation

Design: Fully automatic package pressure boosting unit, with 2 to 4 vertical high-pressure pumps and fully electronic control to ensure the required supply pressure, configuration and functions to DIN 1988, part 5.

Applications: Handling of service water and cooling water not chemically or mechanically aggressive to the pump materials in industry, etc.

A Hyamaster • hyatronic

Reference no. 1950.5

Drainage pumps / waste water pumps

Ama®-Drainer 301, 303, 324, 356

Floodable submersible motor pump



Rp _____ 1¼ - 1½
Q [m³/h] _____ max. 17
H [m] _____ max. 12
T [°C] _____ max. +35
Data for 50 Hz operation

Design: Vertical, fully floodable submersible motor pump in close-coupled design, IP 68, single-stage, with or without level control, max. immersion depth 2 m.
Applications: Automatic drainage of pits, shafts, yards and cellars subject to a flooding risk, lowering of surface water levels, dewatering, drainage of underground passages, water extraction from rivers and reservoirs.

A Switchgears • LevelControl

Reference no. 2331.51 / 2331.52

Ama®-Drainer 400/10 400/35 500/10/11

Floodable submersible motor pump



Rp _____ 1½ - 2
Q [m³/h] _____ max. 50
H [m] _____ max. 24
T [°C] _____ max. +40
Data for 50 Hz operation

Design: Vertical, fully floodable submersible motor pump in close-coupled design, IP 68, single-stage, with or without level control, max. immersion depth 10 m.
Applications: Automatic drainage of pits, shafts, yards and cellars subject to a flooding risk, lowering of surface water levels, dewatering, drainage of underground passages, water extraction from rivers and reservoirs, disposal of highly contaminated, fibre-containing water.

A Switchgears • LevelControl

Reference no. 2331.53

Ama®-Drainer 80, 100

Floodable submersible motor pump



Rp / DN _____ 2½ / 100
Q [m³/h] _____ max. 130
H [m] _____ max. 26
T [°C] _____ max. +50
Data for 50 Hz operation

Design: Vertical, fully floodable submersible motor pump in close-coupled design, IP 68, single-stage, with or without level control, max. immersion depth 10 m.
Applications: Automatic drainage of pits, shafts, yards and cellars subject to a flooding risk, lowering of surface water levels, dewatering, drainage of underground passages, water extraction from rivers and reservoirs.

A Switchgears • LevelControl

Reference no. 2331.54

Ama®-Porter F / S / ICS

Floodable submersible motor pump



DN _____ 50 - 65
Q [m³/h] _____ max. 40
H [m] _____ max. 21
T [°C] _____ max. +40
Data for 50 Hz operation

Design: Vertical, fully floodable submersible waste water pump in close-coupled design (cast iron variant), single-stage, without explosion protection.
Applications: Handling of all types of waste water.

A Switchgears • LevelControl

Reference no. 2541.51/2539.51/2539.52/2539.53

Rotex

Waste water pump




Rp _____ 1¼ - 2
Q [m³/h] _____ max. 24
H [m] _____ max. 14
T [°C] _____ max. +90
Data for 50 Hz operation

Design: Vertical, single-stage centrifugal pump with discharge to the top and parallel with the pump shaft, pump foot designed as suction strainer. Pump and motor are rigidly connected by a support pipe, ready to be plugged in, with 1.5 m power supply cable and level switch.
Applications: Automatic disposal of waste water from buildings, pits and tanks, lowering of surface water levels and drainage.


A Switchgears


Reference no. 2322.5


Drainage pumps / waste water pumps

MK / MKY		Waste water, condensate and heat transfer liquid pump
	<p>Rp / DN 2 / 50</p> <p>Q [m³/h] max. 36</p> <p>H [m] max. 19</p> <p>T [°C] max. +200</p> <p>Data for 50 Hz operation</p>	<p>Design: Vertical submersible pump with three-channel impeller, volute casing designed as suction strainer.</p> <p>Applications: Handling of condensate and heat transfer liquids below the boiling point, condensate return systems, primary and secondary heating circuits, direct installation in heating tanks or heat exchangers in the secondary circuits of heat transfer systems (MKY).</p>
	<p>A Switchgears • LevelControl</p>	<p>Reference no. 2324.5</p>

Lifting units / collecting tanks

Ama®-Drainer-Box		Automatic waste water lifting unit
	<p>DN 40 - 50</p> <p>Q [m³/h] max. 35</p> <p>H [m] max. 21</p> <p>T [°C] max. +40</p> <p>Data for 50 Hz operation</p>	<p>Design: Stable above-floor or impact-resistant underfloor plastic collecting tank with floor drain and odour trap, both variants with Ama®-Drainer submersible motor pump starting and stopping automatically and swing check valve.</p> <p>Applications: Wash-basins, showers, washing machines, garage gateways, basements, rooms subject to a flooding risk, etc.</p>
	<p>A Switchgears</p>	<p>Reference no. 2331.55</p>

mini-Compacta®		Floodable sewage lifting unit
	<p>DN 32 - 100</p> <p>Q [m³/h] max. 36</p> <p>H [m] max. 25</p> <p>T [°C] max. +40</p> <p>Data for 50 Hz operation</p>	<p>Design: Floodable single or duplex sewage lifting unit for automatic disposal of domestic sewage and faeces below the backwash level.</p> <p>Applications: Basement flats, bars, basement party rooms and saunas, cinemas and theatres, department stores and hospitals, hotels, restaurants, schools, etc.</p>
	<p>A Switchgears • LevelControl</p>	<p>Reference no. 2317.54</p>

Compacta®		Floodable sewage lifting unit
	<p>DN 80 - 100</p> <p>Q [m³/h] max. 140</p> <p>H [m] max. 24</p> <p>T [°C] max. +40*</p> <p>Data for 50 Hz operation</p> <p>* up to +65 °C for short periods</p>	<p>Design: Floodable single or duplex sewage lifting unit for automatic disposal of sewage and faeces below the backwash level.</p> <p>Applications: Basement flats, bars, basement party rooms and saunas, cinemas and theatres, department stores and hospitals, hotels, restaurants, schools, public buildings, industrial plants, joint sewage disposal for rows of houses, etc.</p>
	<p>A Switchgears • LevelControl</p>	<p>Reference no. 2317.55</p>

Lifting units / collecting tanks

Ama®-Porter CK Pumping Station

Pumping station, plastic collecting tank with Ama®-Porter



DN 50 - 65
Q [m³/h] max. 40
H [m] max. 21
T [°C] max. +40
Data for 50 Hz operation

Design: Ready-to-connect package single or dual pumping station with PE-LLD (polyethylene) collecting tank for underground installation. Equipped with one or two Ama®-Porter submersible waste water pumps without explosion protection. Collecting tank design to DIN 1986-100 and EN 752 / EN 476.

Applications: Renovation of premises, sewage disposal in various sectors, joint sewage disposal for several residential units, pumped drainage.

A Switchgears

Reference no. 2334.51

Amarex N CK Pumping Station

Pumping station, plastic collecting tank with Amarex N



DN 32 - 65
Q [m³/h] max. 190
H [m] max. 49
T [°C] max. +40
Data for 50 Hz operation

Design: Ready-to-connect package single or dual pumping station with PE-LLD (polyethylene) collecting tank for underground installation. Equipped with one or two Amarex N submersible waste water pumps, also available with explosion protection. Collecting tank design to DIN 1986-100 and EN 752 / EN 476.

Applications: Renovation of premises, sewage disposal in various sectors, joint sewage disposal for several residential units, pumped drainage.

A Switchgears • LevelControl

Reference no. 2334.52

also available in 60 Hz

Evamatic-Box

Sewage lifting unit



DN 50 - 65
Q [m³/h] max. 40
H [m] max. 21
T [°C] max. +40
Data for 50 Hz operation

Design: Single or duplex sewage lifting unit with 1 or 2 Ama®-Porter submersible waste water pumps with free-flow impeller (F) or cutter (S), to EN 12050-1.

Applications: Disposal of domestic waste water and sewage.

Reference no. 2319.51-10

Evamatic-Box ICS

Sewage lifting unit




DN 50 - 65
Q [m³/h] max. 40
H [m] max. 21
T [°C] max. +40
Data for 50 Hz operation


Design: Single or duplex sewage lifting unit with 1 or 2 Ama®-Porter ICS submersible waste water pumps with free-flow impeller (F) or cutter (S) and ICS control system.


Applications: Disposal of domestic waste water and sewage.

Reference no. 2319.52-10


Submersible motor pumps

Amarex N		Submersible motor pump DN 32 to 100
	DN _____ 32 - 100 Q [m³/h] _____ max. 190 H [m] _____ max. 49 T [°C] _____ max. +55 <small>Data for 50 Hz operation</small>	<p>Design: Vertical, single-stage submersible motor pump, for wet installation, stationary and transportable design. Amarex N pumps are floodable, single-stage, single-entry close-coupled units which are not self-priming. Design to ATEX.</p> <p>Applications: Handling of all types of waste water, especially untreated sewage containing long fibres and solid substances, fluids containing gas / air, as well as raw, activated and digested sludge, dewatering / water extraction, drainage of rooms and surfaces subject to a flooding risk.</p>
	A Switchgears • LevelControl	Reference no. 2563.5 also available in 60 Hz


Amarex KRT		Submersible motor pump DN 40 to DN 700
	DN _____ 40 - 700 Q [m³/h] _____ max. 10800 H [m] _____ max. 100 T [°C] _____ max. +60 n [min⁻¹] _____ max. 2900	<p>Design: Vertical, single-stage submersible motor pump in close-coupled design, various impeller types, for wet or dry installation, stationary and transportable version. Design to ATEX.</p> <p>Applications: Handling of all types of abrasive or aggressive waste water in water and waste water engineering as well as industry, especially untreated sewage containing long fibres and solid substances, fluids containing gas / air, as well as raw, activated and digested sludge; sea water desalination.</p>
	A PumpExpert • Hyamaster • hyatronic • Switchgears • LevelControl	Reference no. 2553.5 also available in 60 Hz


Amarex KRT, dry installed		Submersible motor pump DN 100 to DN 700
	DN _____ 100 - 700 Q [m³/h] _____ max. 10000 H [m] _____ max. 100 p [bar] _____ max. 10 T [°C] _____ max. +40 n [min⁻¹] _____ max. 1450	<p>Design: Vertical, single-stage submersible motor pump in close-coupled design, various impeller types, dry installation.</p> <p>Applications: Handling of all types of waste water in waste water engineering and industry, especially sewage containing long fibres and solid substances, fluids containing gas/air, as well as raw, activated and digested sludge.</p>
	A PumpExpert • Hyamaster • hyatronic	Reference no. 2553.57 also available in 60 Hz

Submersible pumps in discharge tubes


Amacan K		Submersible motor pump with non-clogging impeller
	DN _____ 700 - 1400 Q [m³/h] _____ max. 7200 H [m] _____ max. 30 T [°C] _____ max. +40 n [min⁻¹] _____ max. 980	<p>Design: Wet-installed submersible motor pump with non-clogging impeller, single-stage, single-entry, for installation in discharge tubes, explosion protection to ATEX II G2 T3.</p> <p>Applications: Handling of pre-cleaned, chemically neutral waste water, industrial effluents and sewage, fluids not containing any stringy substances pre-treated by screens and sills, as waste water, mixed water and activated sludge pump in effluent treatment plants, irrigation and drainage pumping systems.</p>
	A PumpExpert • Hyamaster • hyatronic	Reference no. 1579.5 also available in 60 Hz


Submersible pumps in discharge tubes

Amacan P		Submersible motor pump with axial propeller
	DN	500 - 1500
	Q [m³/h]	max. 25200
	H [m]	max. 12
	T [°C]	max. +40
	n [min⁻¹]	max. 1450
A PumpExpert • Hyamaster • hyatronic		Reference no. 1580.5 also available in 60 Hz


Amacan S		Submersible motor pump with mixed flow impeller
	DN	650 - 1300
	Q [m³/h]	max. 10800
	H [m]	max. 40
	T [°C]	max. +30
	n [min⁻¹]	max. 1450
A PumpExpert • Hyamaster • hyatronic		Reference no. 1589.5 also available in 60 Hz


Mixers / agitators / tank cleaning units

Amamix		Submersible mixer
	Propeller ø [mm]	200 - 600
	Installation depth [m]	max. 30
	T [°C]	max. +40
	n [min⁻¹]	max. 1400
	Design: Horizontal submersible mixer with self-cleaning ECB propeller, close-coupled design, direct drive or with gear unit, explosion protection to ATEX II G2 T3 or T4. Applications: Handling of municipal and industrial waste water and sludges, also in environmental engineering (biogas plants, etc.).	
A		Reference no. 1592.551/1592.552 also available in 60 Hz


Amaprop		Submersible agitator
	Propeller ø [mm]	1200 - 2500
	Installation depth [m]	max. 30
	T [°C]	max. +40
	n [min⁻¹]	max. 109
	Design: Horizontal submersible agitator with self-cleaning ECB propeller, close-coupled design, equipped with coaxial spur gear, explosion protection to ATEX II G2 T3 or T4. Applications: Circulating, keeping in suspension and inducing flow in municipal and industrial waste water and sludges, also in environmental engineering (biogas plants, etc.).	
A		Reference no. 1592.505


Mixers / agitators / tank cleaning units

Amajet		Cleaning system
	DN	100 - 150
	Q [m³/h]	max. 195
	T [°C]	max. +40
	n [min⁻¹]	max. 1450
	Design: Stationary or portable unit with horizontal or vertical submersible motor propulsive jet pump with non-clogging free-flow impeller. Motor rating 5.5 to 27 kW. Available variants: Amajet, SewerAmajet, SwingAmajet, MultiAmajet. Applications: Cleaning of stormwater tanks and storage sewers.	
Reference no. 1574.5		

Amaline		Submersible motor recirculation pump
	DN	300 - 800
	Q [m³/h]	max. 5400
	H [m]	max. 2
	T [°C]	max. +40
	n [min⁻¹]	max. 960
	Design: Wet-installed, horizontal propeller pump with submersible motor, equipped with spur gear or direct drive, ECB propeller with 3 rigid, fibre-repellent blades, boltfree connection to the discharge pipe, explosion protection to ATEX II G2 T3 or T4.	
Applications: Recirculation of activated sludge in waste water treatment systems.		
Reference no. 1594.5		

Pumps for solids-laden fluids

Sewatec / Sewabloc		Dry-installed volute casing pump
	DN	50 - 700
	Q [m³/h]	60 - 10000
	H [m]	max. 95
	p [bar]	max. 10
	T [°C]	max. +70
	n [min⁻¹]	max. 2900
	Design: Horizontal or vertical volute casing pump with free-flow (F), single vane (E), multi-vane (K) and diagonal single vane (D) impellers, discharge flange to DIN and ANSI standards. Design to ATEX. Applications: Handling of sewage and all types of waste water in waste water management and industry.	
A PumpExpert • Hyamaster • hyatronic		Reference no. 2580.5/2580.45/2580.35 also available in 60 Hz

KWP / KWP-Bloc		Non-clogging impeller centrifugal pump / close-coupled unit
	DN	40 - 800
	Q [m³/h]	max. 1300
	H [m]	max. 100
	p [bar]	max. 10
	T [°C]	max. +280
	n [min⁻¹]	max. 2900
	Design: Horizontal, radially split volute casing pump in back pull-out or close-coupled design, single-stage, single-entry, available with various impeller types: non-clogging impeller, open multi-vane impeller, free-flow impeller. Design to ATEX. Applications: Handling of pre-treated sewage, waste water, all types of slurries without stringy substances and pulps up to 5 % bone dry with a maximum density of 1.1 kg/dm³.	
A PumpExpert • Hyamaster • hyatronic		Reference no. 2361.5/2362.5/2361.450/2361.453/2361.460 also available in 60 Hz

Self-priming pumps

Etaprime L

Self-priming pump for pure or contaminated liquids



DN 25 - 125
Q [m³/h] max. 180
H [m] max. 85
p [bar] max. 10
T [°C] max. +90
Data for 50 Hz operation

Design: Horizontal, long-coupled, self-priming volute casing pump in back pull-out design, single-stage, with open multi-vane impeller. Design to ATEX.

Applications: Handling of pure, contaminated or aggressive liquids not containing abrasive substances and / or solids.

Reference no. 2745.5

also available in 60 Hz

Etaprime B / BN

Self-priming close-coupled pump for pure or contaminated liquids



DN 25 - 100
Q [m³/h] max. 130
H [m] max. 72
p [bar] max. 10
T [°C] max. +90
Data for 50 Hz operation

Design: Horizontal, self-priming volute casing pump, single-stage, with open multi-vane impeller, in close-coupled design, with common pump and motor shaft (B) or rigidly connected (BN). Design to ATEX.

Applications: Handling of pure, contaminated or aggressive liquids not containing abrasive substances and / or solids.

Reference no. 2746.5

also available in 60 Hz

Submersible borehole pumps

S 100D / UPA 100C

Submersible borehole pump



DN 100
Q [m³/h] max. 16
H [m] max. 400
T [°C] max. +30
Data for 50 Hz operation

Design: Multistage centrifugal pump in ring-section design, made of plastic (S 100D) or stainless steel (UPA 100C) for well diameters of 100 mm (4 inches) and above, available with single-phase a.c. motor or three-phase motor with motor lead.

Applications: Domestic water supply, irrigation and spray irrigation systems, lowering of ground water levels, fire-fighting systems, cooling circuits, fountains, pressure boosting and air-conditioning systems. UPA 100C is also used for ACS drinking water.

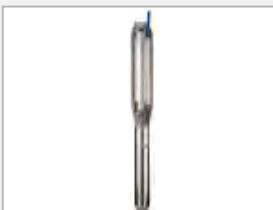
A Switchgears

Reference no. 3400.5

also available in 60 Hz

UPA 150C

Submersible borehole pump



DN 150
Q [m³/h] max. 79
H [m] max. 570
T [°C] max. +30
Data for 50 Hz operation

Design: Multistage centrifugal pump in ring-section design, completely made of stainless steel, for well diameters from 150 mm (6 inches).




Applications: Handling of clean and slightly contaminated water, irrigation and drainage, spray irrigation, industrial and municipal water supply, maintaining / lowering of groundwater levels, fire-fighting systems, drinking, raw and service water supply, pressure boosting.

A Hyamaster • hyatronic • Switchgears • PumpDrive > 5,5 kW

Reference no. 3400.52

also available in 60 Hz

Submersible borehole pumps

UPA 200, 200B, 250C		Submersible borehole pump
	DN _____ 200 - 250 Q [m³/h] _____ max. 840 H [m] _____ max. 460 T [°C] _____ max. +50 <small>Data for 50 Hz operation</small>	Design: Single- or multistage centrifugal pump in ring-section design for vertical installation. Non-return valve integrated in the discharge nozzle. Applications: Handling of clean or slightly contaminated water in general water supply, irrigation and spray irrigation systems, maintaining / lowering of ground water levels, fountains, pressure boosting systems, in mines, fire-fighting systems, emergency water supply systems, etc.
	A Hyamaster • hyatronic • Switchgears • PumpDrive > 5.5 kW	Reference no. 3400.5 also available in 60 Hz
UPA 300, 350		Submersible borehole pump
	DN _____ 300 - 350 Q [m³/h] _____ max. 840 H [m] _____ max. 480 T [°C] _____ max. +50 <small>Data for 50 Hz operation</small>	Design: Single- or multistage, single-entry centrifugal pump in ring-section design for vertical or horizontal installation. Non-return valve or connection branch on option. Mixed flow hydraulic systems available with reduced impeller diameters. Both versions with threaded or flanged end. Applications: Handling of clean or slightly contaminated water in general water supply, irrigation and spray irrigation systems, maintaining / lowering of ground water levels, in mines, fire-fighting systems, fountains, etc.
	A Hyamaster • hyatronic • Switchgears	Reference no. 3400.5 also available in 60 Hz
UPZ, BSX-BSF		Submersible borehole pump
	DN _____ > 350 Q [m³/h] _____ max. 2200 H [m] _____ max. 1500 T [°C] _____ max. +50 <small>Data for 50 Hz operation</small>	Design: Single- or multistage, single-entry (BSX-BSF) or double-entry (UPZ) centrifugal pump in ring-section design for vertical or horizontal installation. Applications: Handling of clean or slightly contaminated water, maintaining / lowering of ground water levels, in mines.
		Reference no. 3470.021 also available in 60 Hz

High-pressure pumps, fixed / variable speed

Movitec V / LHS / VS / VC

High-pressure in-line pump



DN	32 - 100
Q [m³/h]	max. 102
H [m]	max. 401
p [bar]	max. 40
T [°C]	max. +140
n [min⁻¹]	max. 2900

Design: Multistage, vertical high-pressure centrifugal pump in ring-section design with suction and discharge nozzles of identical nominal diameters arranged opposite to each other (in-line design), close-coupled. Design to ATEX.

Applications: Spray irrigation, irrigation, washing, water treatment, fire-fighting and pressure boosting systems, hot water and cooling water recirculation, boiler feed systems, etc.

A PumpDrive • Hyamaster • hyatronic

Reference no. 1798.5

also available in 60 Hz

Movitec PumpDrive

High-pressure in-line pump with motor-mounted variable speed system



DN	32 - 100
Q [m³/h]	max. 102
H [m]	max. 401
p [bar]	max. 40
T [°C]	max. +140
n [min⁻¹]	max. 2900

Design: Multistage, vertical high-pressure centrifugal pump in ring-section design with suction and discharge nozzles of identical nominal diameters arranged opposite to each other (in-line design), close-coupled and motor-mounted variable speed system

Applications: Spray irrigation, irrigation, washing, water treatment, fire-fighting and pressure boosting systems, hot water and cooling water recirculation, boiler feed systems, etc.

A PumpDrive

Reference no. 1798.5 + 4070.5

also suitable for 60 Hz operation

Multitec

High-pressure pump in ring-section design



DN	32 - 150
Q [m³/h]	max. 850
H [m]	max. 630
p [bar]	max. 63
T [°C]	max. +200
n [min⁻¹]	max. 2900
higher values available upon request	

Design: Multistage horizontal centrifugal pump in ring-section design, long-coupled and close-coupled variant, with axial or radial suction nozzle, cast radial impellers. Design to ATEX.

Applications: Water and drinking water supply systems, general industry, pressure boosting systems, irrigation systems, in power stations, heating, filter, fire-fighting, reverse osmosis and washing plants, snow guns, etc.

A PumpExpert • PumpDrive • Hyamaster • hyatronic

Reference no. 1777.5

also available in 60 Hz

Multitec PumpDrive

High-pressure pump in ring-section design with motor-mounted variable speed system



DN	32 - 50
Q [m³/h]	max. 51
H [m]	max. 630
p [bar]	max. 63
T [°C]	max. +110
n [min⁻¹]	max. 2900
higher values available upon request	

Design: Multistage horizontal centrifugal pump in ring-section design, long-coupled and close-coupled variant, with axial or radial suction nozzle, cast radial impellers and motor-mounted variable speed system.


Applications: Water and drinking water supply systems, general industry, pressure boosting systems, irrigation systems, in power stations, heating, filter, fire-fighting, reverse osmosis and washing plants, snow guns, etc.


A PumpDrive

Reference no. 1777.5 + 4070.5


also suitable for 60 Hz operation

Axially split pumps

Omega		Axially split volute casing pump DN 80-350
	DN	80 - 350
	Q [m³/h]	max. 2880
	H [m]	max. 170
	p [bar]	max. 25
	T [°C]	max. +70
	n [min⁻¹]	max. 2900
	higher values available upon request	
Design: Single-stage, axially split volute casing pump for horizontal or vertical installation, with double-entry radial impeller, mating flanges to DIN, ISO, BS or ANSI. Applications: Handling of raw, pure and service water as well as seawater in water treatment plants, irrigation and drainage pumping stations, power stations, fire-fighting systems, shipbuilding and the petrochemical industry.		
A PumpExpert • Hyamaster		Reference no. 1384.5 also available in 60 Hz

RDLO		Axially split volute casing pump DN 350-700
	DN	350 - 700
	Q [m³/h]	max. 10000
	H [m]	max. 240
	p [bar]	max. 25
	T [°C]	max. +70
	n [min⁻¹]	max. 1450
	higher values available upon request	
Design: Single-stage, axially split volute casing pump for horizontal or vertical installation with double-entry radial impeller, mating flanges to DIN, ISO, BS or ANSI. Applications: Handling of raw, pure and service water as well as seawater in water treatment plants, irrigation and drainage pumping stations, in power stations, fire-fighting systems, shipbuilding and the petrochemical industry.		
A PumpExpert • Hyamaster		Doku-Nr. 1385.51/1387.5 also available in 60 Hz

Stainless steel pumps for the food industry

Vitachrom		Hygienic pump in close-coupled design
	DN	50 - 125
	Q [m³/h]	max. 340
	H [m]	max. 100
	p [bar]	max. 12
	T [°C]	max. +110
	Data for 50 Hz operation	
Design: Easy-to-service annular casing pump, close-coupled design with standardized motor, all wetted pump parts made of stainless steel, suitability for handling foodstuffs certified by TNO according to EHEDG requirements (TNO G96-143 certificate). Applications: Hygienic handling of fluids in the food and beverages industry and in the chemical industry.		
A Hyamaster • hyatronic		Reference no. 1966.5 also available in 60 Hz

Pumps for power station conventional islands

CHTA / CHTC / CHTD

Boiler feed pump



DN	100 - 500
Q [m³/h]	max. 3700
H [m]	max. 5300
p [bar]	max. 560
T [°C]	max. +210
n [min⁻¹]	max. 6750
higher values available upon request	

Design: Horizontal, high-pressure barrel-type pump with radial impellers, single- and double-entry, multistage, with flanges / weld end nozzles to DIN and ANSI.
Applications: Handling of feed water and condensate in power stations and industrial facilities, generation of pressurized water for bark peeling machines and descaling equipment.

Reference no. 1860.1

also available in 60 Hz

CHTR

Boiler feed pump



DN	50 - 150
Q [m³/h]	max. 900
H [m]	max. 2500
p [bar]	max. 250
T [°C]	max. +400
n [min⁻¹]	max. 7000
higher values available upon request	

Design: Horizontal, high-pressure barrel-type pump with radial impellers, single- and double-entry, multistage, with flanges / weld end nozzles to DIN, API 610 and ANSI.

Applications: In refineries, in the petrochemical industry and in steam generation plants.

Reference no. 2701

also available in 60 Hz

HGB / HGC / HGD

Boiler feed pump



DN	40 - 400
Q [m³/h]	max. 2300
H [m]	max. 5300
p [bar]	max. 560
T [°C]	max. +210
n [min⁻¹]	max. 7000
higher values available upon request	

Design: Horizontal, radially split, multistage ring-section pump with radial impellers, single- or double-entry.

Applications: Handling of feed water and condensate in power stations and industrial facilities, generation of pressurized water for bark peeling machines, descaling equipment, snow guns, etc.

Reference no. 1850.02

also available in 60 Hz

HGM

Boiler feed pump



DN	25 - 100
Q [m³/h]	max. 274
H [m]	max. 1400
p [bar]	max. 140
T [°C]	max. +160
n [min⁻¹]	max. 3600
higher values available upon request	

Design: Horizontal, radially split, product-lubricated, multistage ring-section pump with radial impellers, axial and radial single-entry inlet.

Applications: Handling of feed water in power stations, boiler feed water and condensate in industrial facilities.

A PumpExpert

Reference no. 1856.02

also available in 60 Hz

YNK / KRHA

Booster pump



DN	125 - 600
Q [m³/h]	max. 3700
H [m]	max. 280
p [bar]	max. 40
T [°C]	max. +210
n [min⁻¹]	max. 1800
higher values available upon request	

Design: Horizontal, radially split, single-stage, double-entry boiler feed booster pump (booster system) with single or double cast steel volute casing.

Applications: Handling of feed water in power stations and industrial facilities.


Reference no. 1130.5


also available in 60 Hz

Pumps for power station conventional islands


RHD		Feed water pump
	DN 250 - 400 Q [m³/h] max. 6500 H [m] max. 1000 p [bar] max. 150 T [°C] max. +210 n [min⁻¹] max. 6500 higher values available upon request	Design: Horizontal, single-stage, double-entry feed water pump, cast and forged variant. Applications: Handling of feed water in steam generation systems of nuclear power stations.
		also available in 60 Hz
LUV / LUVA / LUVB		Boiler recirculation pump
	DN 100 - 550 Q [m³/h] max. 7000 H [m] max. 275 p [bar] max. 320 T [°C] max. +420 n [min⁻¹] max. 3600 higher values available upon request	Design: Vertical spherical casing pump, radial impellers, single-entry, single- to three-stage. Suitable for very high inlet pressures and temperatures. Integrated wet rotor motor to VDE. Product-lubricated bearings, no need for oil supply systems. Design to TRD or ASME. Applications: Hot water recirculation in forced-circulation, forced-flow and combined-circulation boilers for very high pressures.
		Reference no. 0361.033 also available in 60 Hz
WKT / WKTA / WKTB		Condensate pump
	DN 40 - 300 Q [m³/h] max. 1800 H [m] max. 340 p [bar] max. 40 T [°C] max. +100 n [min⁻¹] max. 1800 higher values available upon request	Design: Vertical, multistage, can-type ring-section pump with radial and mixed flow impellers. Single- and double-entry suction impellers, flanges to DIN or ANSI. The can is arranged in a pit below the installation floor. The pump is connected with the structure by means of a baseplate. Applications: Handling of condensate in power stations and energy systems.
		Reference no. 0361.033 also available in 60 Hz
SEZ / PHZ / PNZ		Cooling water pump
	DN 700 - 2400 Q [m³/h] max. 65000 H [m] max. 48 p [bar] max. 10 T [°C] max. +40 n [min⁻¹] max. 980 higher values available upon request	Design: Vertical tubular casing pump with open mixed flow impeller (SEZ), mixed flow propeller (PHZ) or axial propeller (PNZ). Pump inlet with bellmouth or suction elbow, pull-out design available, discharge nozzle arranged above or below floor, flanges to DIN or ANSI standards available. Applications: Handling of raw, pure, service and cooling water in industry, water supply systems, in power stations and seawater desalination plants.
		Reference no. 1471.02 also available in 60 Hz


Pumps for power station conventional islands

SNW / PNW		Cooling water pump
	DN	350 - 800
	Q [m³/h]	max. 9000
	H [m]	max. 50
	p [bar]	max. 10
	T [°C]	max. +60
	n [min⁻¹]	max. 1500
	higher values available upon request	
Design: Vertical tubular casing pump with mixed flow impeller (SNW) or axial propeller (PNW), with maintenance-free Residur® shaft bearings, discharge nozzle arranged above or below floor.		Applications: Irrigation and drainage systems, stormwater pumping stations, handling of raw and pure water, water supply systems, handling of cooling water.
Reference no. 1481.5/1591.5		
		also available in 60 Hz

SPY		Cooling water pump
	DN	350 - 1200
	Q [m³/h]	max. 21600
	H [m]	max. 50
	p [bar]	max. 10
	T [°C]	max. +105
	n [min⁻¹]	max. 1480
	higher values available upon request	
Design: Long-coupled, single-stage volute casing pump in back pull-out design.		Applications: Drainage, irrigation and water supply systems, handling of condensate, cooling water, service water, etc.
Reference no. 2384.51		
		also available in 60 Hz

Pumps for power station nuclear islands

RER		Reactor coolant pump
	DN	max. 800
	Q [m³/h]	max. 40000
	H [m]	max. 140
	p [bar]	max. 175
	T [°C]	max. +350
	n [min⁻¹]	max. 1800
	higher values available upon request	
Design: Vertical, single-stage reactor coolant pump with forged annular casing plated on the inside, with diffuser, either with own pump thrust bearing or supported by motor bearing.		Applications: Reactor coolant recirculation in nuclear power stations (PWR).
		also available in 60 Hz

RSR		Reactor coolant pump
	DN	max. 600
	Q [m³/h]	max. 9000
	H [m]	max. 215
	p [bar]	max. 125
	T [°C]	max. +310
	n [min⁻¹]	max. 1800
	higher values available upon request	
Design: Vertical, single-stage reactor coolant pump, with cast double volute casing, supported by motor bearing.		Applications: Reactor coolant recirculation in nuclear power stations (PWR, PHWR).

Pumps for power station nuclear islands

PSR

Reactor internal pump



DN	max. 600
Q [m³/h]	max. 9000
H [m]	max. 45
p [bar]	max. 75
T [°C]	max. +300
n [min⁻¹]	max. 2000
higher values available upon request	

Design: Vertical pump set integrated in the reactor pressure vessel, glandless pump with leak-free, low-maintenance wet motor.

Applications: Reactor coolant recirculation in boiling water reactors (BWR).

also available in 60 Hz

LUV Nuklear

Reactor coolant / reactor water clean-up pump



DN	40 - 600
Q [m³/h]	max. 7000
H [m]	max. 300
p [bar]	max. 320
T [°C]	max. +430
higher values available upon request	

Design: Vertical pump with integrated motor, single-entry, one to three stages. Suitable for very high inlet pressures and temperatures. Integrated wet rotor motor to VDE. Product-lubricated bearings, no need for oil supply systems. Design to ASME Section 3, KTA, etc.

Applications: As reactor water clean-up pump in boiling water reactors, reactor coolant pump in boiling water and pressurized water reactors, and as recirculation pump in test facilities.

also available in 60 Hz

RHM

Pump for safety-related and auxiliary systems



DN	max. 150
Q [m³/h]	max. 300
H [m]	max. 2100
p [bar]	max. 220
T [°C]	max. +180
n [min⁻¹]	max. 8000
higher values available upon request	

Design: Horizontal, multistage barrel pull-out pump.

Applications: Core flooding, emergency cooling and residual heat removal systems, volume control systems, high-pressure charging, control rod drive systems, high- and medium-pressure safety injection systems, auxiliary feed water systems, start-up and shutdown feed water systems.

also available in 60 Hz

RVM

Pump for safety-related and auxiliary systems



DN	max. 85
Q [m³/h]	max. 50
H [m]	max. 2000
p [bar]	max. 200
T [°C]	max. +100
n [min⁻¹]	max. 6000
higher values available upon request	

Design: Vertical, multistage barrel pull-out pump.

Applications: Core flooding, emergency cooling and residual heat removal systems, volume control systems, high-pressure safety injection systems.

also available in 60 Hz

RHR / RVR

Pump for safety-related and auxiliary systems



DN	max. 500
Q [m³/h]	max. 6000
H [m]	max. 190
p [bar]	max. 63
T [°C]	max. +200
n [min⁻¹]	max. 3600

Design: Horizontal or vertical annular casing pump with forged pressure boundary and diffuser.

Applications: Core flooding, emergency cooling and residual heat removal systems, ancillary systems, acid feed systems and low-pressure feed systems.

also available in 60 Hz

Slurry pumps

WBC

Slurry Pump



Q [m³/h] _____ max. 13600
H [m] _____ max. 80
p [bar] _____ max. 40
T [°C] _____ max. +120

Design: Patented design incorporates state-of-the art hydraulic and wear technologies for heavy duty, high pressure applications. The pump shell is designed to reduce stresses that can cause a structural failure during a pressure surge.

Applications: Ideal for ore and tailings transport to minimize the effect of sudden pressure spikes.

LSA-S

Slurry Pump



Q [m³/h] _____ max. 14000
H [m] _____ max. 90
p [bar] _____ max. 16
T [°C] _____ max. +120

Design: Premium design hard iron pumps for long wear life pumping severe slurries. The basic, single wall construction and heavy section, hard metal wet end combined with the cartridge bearing assembly provides maximum reliability and ease of maintenance.

Applications: Pumps are widely used in ore transport, mill discharge, cyclone feed, tailings and plant process.

LCC-M

Slurry Pump



Q [m³/h] _____ max. 3865
H [m] _____ max. 90
p [bar] _____ max. 16
T [°C] _____ max. +120

Design: The hydraulic wet end consists of three components: a shell or casing, an impeller and a suction plate/liner to permit easy removal for maintenance and inspections.

Applications: Reliable pumps for high discharge head, mildly corrosive slurries and a wide range of particle sizes. Used in mineral processing, mine dewatering, ash and tailings.

LCC-R

Slurry Pump



Q [m³/h] _____ max. 3200
H [m] _____ max. 50
p [bar] _____ max. 16
T [°C] _____ max. +120

Design: Interchangeable rubber and metal design allow best material choice for any application. Easy wet end change can adapt existing pumps to new applications.

Applications: Pumps are suitable for moderate discharge heads, fine particles and highly corrosive slurries.

TBC

Slurry Pump



Q [m³/h] _____ max. 18200
H [m] _____ max. 90
p [bar] _____ max. 55
T [°C] _____ max. +120

Design: High pressure design horizontal, end suction centrifugal pumps to give maximum resistance to wear while simplifying maintenance. The conventional single-wall design transfers stress loads to non-wearing side plates in high pressure applications.

Applications: Features high head and high flow rates for hydrotransport, tailings, dredging, pipeline booster stations and other severe duties.

Slurry pumps

LSR

Slurry Pump



Q [m³/h] _____ max. 9000
H [m] _____ max. 60
p [bar] _____ max. 14
T [°C] _____ max. +120

Design: Extra heavy duty pumps with a high grade rubber lining for hard wearing applications. The key to the LSR's success is its endurance.

Applications: Designed for heavy duty mill circuit and fine grind slurries; specifically copper, iron ore, gold, aggregate and other abrasive applications.

LCV

Slurry Pump



Q [m³/h] _____ max. 1360
H [m] _____ max. 38
p [bar] _____ max. 14
T [°C] _____ max. +120

Design: Vertical cantilever, rugged hard metal sump pump with bottom suction and no submerged bearings. Replaceable wet end parts in metal alloys and elastomer liners with a durable mechanical end.

Applications: Ideal for industrial process pumping, tailings disposal in mining and pit use.

FGD

Slurry Pump



Q [m³/h] _____ max. 22700
H [m] _____ max. 45
p [bar] _____ max. 17
T [°C] _____ max. +120

Design: High-flow/low-head hard metal pumps with a single-wall shell design. High-efficiency impeller. Suction-side liner is equipped with integrated mounting plates.

Applications: Absorber recirculation and ancillary process pumps.

Mega

Slurry Pump



Q [m³/h] _____ max. 45
H [m] _____ max. 30
p [bar] _____ max. 24
T [°C] _____ max. +120

Design: Horizontal, end suction, modified volute casing pump includes 3 vane open design impeller for large solids passage.

Applications: High-performance, low maintenance slurry pump recommended for coarse or fine particles from solids laden waste water to aggressive slurries of an abrasive and/or corrosive nature.

HHD

Slurry Pump



Q [m³/h] _____ max. 14400
H [m] _____ max. 90
p [bar] _____ max. 29
T [°C] _____ max. +120

Design: Best suited for high flow, high head pumping where high production requires the reduction in the number of pumps.

Applications: Ideal for pipeline booster stations and severe mining duties. Also, as booster or main hull pump on cutter suction dredges.

Slurry pumps

MHD

Slurry Pump



Q [m³/h] _____ max. 32000
H [m] _____ max. 80
p [bar] _____ max. 28
T [°C] _____ max. +120

Design: Pump for efficient pumping in a balanced range of head and flow conditions.

Applications: Ideal for pipeline booster stations and severe mining duties. Also for hopper dredges or as main pump on cutter dredges.

LHD

Slurry Pump



Q [m³/h] _____ max. 21600
H [m] _____ max. 65
p [bar] _____ max. 17
T [°C] _____ max. +120

Design: High flow/low head design with balanced NPSHR and sphere passage for high volume transportation.

Applications: Ideal for sand & gravel, severe mining, dredge ladder and booster pumps.

MDX

Slurry Pump





Q [m³/h] _____ max. 14000
H [m] _____ max. 90
p [bar] _____ max. 16
T [°C] _____ max. +120


Design: The latest technology from GIW provides superior wear life and increased up-time handling your most aggressive slurry applications.


Applications: Designed for SAG and ball mill discharge duties as well as cyclone feed and screen feed applications in ore mining.


Pumps and pressure exchangers for seawater desalination by reverse osmosis

SalTec® System		Hydraulic system
	<p>Q [m³/Tag] _____ max. 20000 p [bar] _____ max. 80 T [°C] _____ max. +40</p>	<p>Design: Hydraulic system for pressure boosting and energy recovery in reverse osmosis processes for seawater desalination.</p> <p>Components: SalTec® DT pressure exchanger, HGM-RO high-pressure pump, RPH-RO booster pump and control unit.</p> <p>Applications: Seawater desalination by reverse osmosis.</p>
	Reference no. 1858.11	

SalTec® DT		Pressure exchanger
	<p>Q [m³/h] _____ max. 280 p [bar] _____ max. 80 T [°C] _____ max. +40</p>	<p>Description: Pressure exchanger specially developed for use in RO seawater desalination systems, in duplex stainless steel (standard) or super duplex stainless steel (on request).</p>
	Reference no. 1858.1	

RPH-RO		Booster pump
	<p>DN _____ 25 - 400 Q [m³/h] _____ max. 4150 H [m] _____ max. 270 p [bar] _____ max. 104 T [°C] _____ max. +50 Data for 50 Hz operation</p>	<p>Design: Horizontal, radially split volute casing pump, dry-installed, made of duplex stainless steel (standard) or super duplex stainless steel (on request).</p> <p>Applications: Booster pump for RO seawater desalination systems.</p>
	also available in 60 Hz	

HGM-RO		High pressure pump
	<p>DN _____ 65 - 250 Q [m³/h] _____ max. 1500 H [m] _____ max. 950 p [bar] _____ max. 120 T [°C] _____ max. +40 n [min⁻¹] _____ max. 3600 higher values available upon request</p>	<p>Design: Horizontal, radially-split, product-lubricated, multistage ring-section pump with radial impellers and plain bearings. Axial and radial single-entry inlet. Duplex stainless steel variant also suitable for chilled water applications.</p> <p>Applications: High-pressure pump for RO seawater desalination systems.</p>
	Reference no. 1582.12	also available in 60 Hz

Multitec-RO		High pressure pump
	<p>DN _____ 50 - 150 Q [m³/h] _____ max. 850 H [m] _____ max. 630 p [bar] _____ max. 63 T [°C] _____ max. +40 n [min⁻¹] _____ max. 3500</p>	<p>Design: Horizontal, multistage pump in ring-section design. Axial suction nozzle, discharge nozzle can be turned in steps of 90°. Closed radial impellers. Duplex stainless steel variant also suitable for chilled water applications.</p> <p>Applications: High-pressure pump for RO seawater desalination systems.</p>
	Reference no. 1777.13	also available in 60 Hz

Control systems

hyatronic K / N

Pump control system for cascade starting and stopping



Max. no. of pumps _____ 6
[kW] _____ 22
Voltage [V] _____ 3–400

Design: Pump control system in control cabinet for cascade starting and stopping of up to 6 pumps run on the mains.

Applications: Water supply systems.

Reference no. 0543.5026

hyatronic S

Pump control system for continuously variable speed adjustment



Max. no. of pumps _____ 6
FI _____ max. 1
[kW] _____ 22
Voltage [V] _____ 3–400

Design: Pump control system in control cabinet for continuously variable speed adjustment of each pump with up to 4 pumps (6 pumps upon request) and one frequency inverter.

Applications: Heating, ventilation, air-conditioning and water supply systems.

Reference no. 0973.5

hyatronic SP

Pump control system for continuously variable speed adjustment



Max. no. of pumps _____ 6
FI _____ 1 per pump
[kW] _____ 22
Voltage [V] _____ 3–400

Design: Pump control system in control cabinet for continuously variable speed adjustment of each pump with up to 4 pumps (6 pumps upon request) and frequency inverters.

Applications: Heating, ventilation, air-conditioning and water supply systems.

Reference no. 0973.5

hyatronic mb

Pump control system for continuously variable speed adjustment



Max. no. of pumps _____ 8
FI _____ max. 2
[kW] _____ 200
Voltage [V] _____ 3–400

Design: Pump control system in control cabinet for asynchronous motors of all types and makes for controlling and monitoring hydraulic systems.

Applications: Heating, ventilation and air-conditioning systems, water supply and drainage systems.

Reference no. 0974.5

Hyamaster ISB

Pump control system for continuously variable speed adjustment



Max. no. of pumps _____ 8
FI _____ max. 2
[kW] _____ 200
Voltage [V] _____ 3–400

Design: Control system for pumps with three-phase motors of all types and makes, consisting of a KSB controller with display and control panel and all required power components.

Applications: Industrial and process engineering circuits, service water supply, cooling and lubrication, energy supply in cogeneration plants, heat transfer and district heating stations, water extraction and treatment, water supply and waste water disposal.

Reference no. 1961.5

Control systems

Hyamaster SPS

Pump control system for continuously variable speed adjustment



Max. no. of pumps _____ 4
FI _____ 1 per pump
[kW] _____ 650
Voltage [V] _____ 3~400

Design: Control system for pumps with three-phase motors of all types and makes, consisting of a programmable logic controller (PLC) with display and control panel and all required power components housed in a control cabinet.

Applications: Process engineering circuits, service water supply, cooling and lubrication systems, cogeneration plants, heat transfer and district heating stations, water extraction and treatment, water supply and waste water disposal.

Reference no. 1964.5

hyatronic spc

Pump control system for continuously variable speed adjustment



Max. no. of pumps _____ 1
FI _____ max. 1
[kW] _____ 7.5
Voltage [V] _____ 3~400

Design: Single-pump control system for continuously variable speed adjustment with integrated frequency inverter.

Applications: Heating, ventilation, air-conditioning, water supply and drainage systems.

Reference no. 0973.5

PumpDrive

Self-cooling, motor-independent frequency inverter



Max. no. of pumps _____ 6
FI _____ 1 per pump/motor
[kW] _____ 45
Voltage [V] _____ 3~380 up to 480

Design: Self-cooling frequency inverter which allows the motor speed to be varied continuously by means of standard signals and a field bus. Because PumpDrive is self-cooling, it can be mounted on a motor, on the wall or in a cabinet. Control of up to 6 pumps without an additional controller (with PumpDrive Advanced).

Applications: Cooling circuits, filters, water supply systems, heating, ventilation and air-conditioning systems, spray irrigation systems, boiler feed systems, steam generation plants, process engineering circuits, cooling lubricant supply systems, service water supply systems and other process engineering applications.

Reference no. 4070.5

UPA Control

Control system for submersible borehole pumps



Max. no. of pumps _____ 1
[kW] _____ 3
Voltage [V] _____ 1~230 / 3~400

Design: Single-pump control of submersible borehole pumps, submersible motor pumps and dry-installed pumps.

Applications: Water supply systems, in combination with pumps like S 100D, UPA 150S, etc.

Reference no. 3465.1

LevelControl

Level control unit



Max. no. of pumps _____ 2
[kW] _____ max. 22
Voltage [V] _____ 230 / 400

Design: Level control unit for controlling up to two pumps. Direct starting up to 4 kW, star-delta starting up to 22 kW.

Applications: Tank drainage via float switches, pneumatic or bubbler control in building services and waste water applications.

higher values available upon request

Reference no. 4040.5, 4041.5

Control systems

Controlmatic E.2

Automatic control unit



Max. no. of pumps ____ 1
Voltage [V] ____ 1~230

Design: Single-pump control system for starting, stopping and monitoring pumps.
Applications: Water supply systems, in combination with pumps like Multi Eco, Multichrom S, Ixo, S 100D, etc.

Reference no. 5125.1785

Cervomatic EDP

Automatic control unit



Max. no. of pumps ____ 1
Voltage [V] ____ 1~230 / 3~400

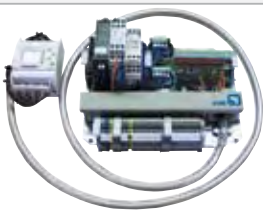
Design: Single-pump control system for pressure-controlled starting, flow-controlled stopping and monitoring of pumps.
Applications: Water supply systems, in combination with pumps like Multi Eco, Multichrom S, Ixo, S 100D, UPA 150S, etc.

Reference no. 5125.178

Monitoring and diagnostic systems

Amacontrol

Monitoring system for submersible waste water pumps



Max. no. of pumps ____ 1
Pumps ____ Amacan
Installation ____ Mounting
plate IP20
Voltage ____ 230 VAC

Design: Monitoring system for submersible waste water pumps with shutdown.

Reference no. 2316.178

PumpExpert

Pump diagnostic system



Max. no. of pumps ____ 1
Pumps see type series booklet
Installation ____ steel housing IP54;
Compact CPU module
Voltage ____ 24 VDC /
110/230 VAC

Design: Modular diagnostic system with memory.

Reference no. 4050.5



SÜDZUCKER

Alternative Fuel Production



Südzucker Bioethanol GmbH Zeitz/Germany

Scope of supply and technical data:

130 pumps, some 600 butterfly valves with manual actuators and some 400 with pneumatic actuators, 150 globe and gate valves.

Pumps:

KWP O 250-560

Fluid pumped: fermented mash

Q = 906 m³/h H = 53.3 m
d = 1.045 kg/dm³ t = 34 °C

CPKN/C1 250-400

decanted vinasse

Q = 600 m³/h H = 17.5 m
d = 1.087 kg/dm³ t = 52 °C

Valves:

ISORIA 10

DN 50 – 900, PN 10, body in JS 1030,
disc in stainless steel, EPDM liner

KE

DN 50 – 600, PN 10, body in JS 1025,
disc in stainless steel, PFA liner

DANAIS MT II

DN 50 – 1000, PN 16+25, stainless steel, metal-seated, leakage rate 1

All butterfly valves as per ATEX directive

Commissioned:

Beginning of 2005

Having built the biggest bioethanol facility in Europe, Südzucker Bioethanol GmbH is set to become a major player in the production of alternative fuels. This impressive plant located in Zeitz, Germany, has been equipped with pumps and valves produced by KSB. The customer's very positive experience with KSB products as well as KSB's renown as a well-established full-range supplier of pumps and valves tipped the balance in favour of KSB. Not shying away from a project of this size and complexity, our experts were once again able to demonstrate their excellent problem solving skills. As a result, roughly 130 pumps of our KWP, CPKN, Magnochem, Secochem-Ex, Etanorm and Tyamagno series as well as some 1,200 valves have been installed to smoothly handle fermented mash and decanted vinasse in the bioethanol process. Highly efficient products carefully tuned to the customer's requirements on site are our strength – a fact borne out by the intensive customer dialogue during the project phase, which rounded off our quotation. Unnecessary and cost-intensive delays could be prevented already in the project phase. A good example of KSB's excellent all-in solutions.

Should you need more information, please do not hesitate to contact me:

Reinhold Höller, +49 9241 71-5200, reinhold.hoeller@ksb.com or www.ksb.com.



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Type series literature order

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Yes, I am also interested in the KSB range of valves. Please send me the relevant literature. (You can also download this literature via the Internet.)



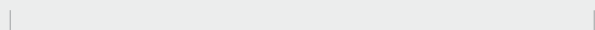
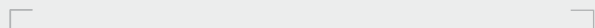
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☐

I have some specific questions and would therefore appreciate if a member of your field staff contacted me by phone.

Date	Signature
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Your local KSB representative:



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