



Our tradition: Competence since 1871

We have supplied generations of customers worldwide with pumps, valves, automation products and services. A company with that kind of experience knows that success is a process based on a stream of innovations. A process made possible by a close working alliance between developer and user, between production and practice.

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

- Over 140 years' experience
- Present in more than 100 countries
- More than 16,000 employees
- More than 160 service centres worldwide
- Approximately 2,600 service specialists



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Our spare parts and services: Dependability at your call

We tailor our services to enable new ways of individually optimising 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.

In addition to spare parts, we offer our customers a plethora of services around pumps, valves, and other rotating equipment - also for non-KSB products:

- Technical consultancy
- Services provided on-site and in our service centres
- Maintenance inspection management
- Reverse engineering / retrofit
- TPM[®] Total Pump Management
- SES System Efficiency Services

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

Ready where you are. KSB runs more than 160 service centres around the world. Some 3,000 highly trained KSB specialists are on call to install, commission and maintain your equipment. So you can plan for a future free of unwanted surprises. And we also provide on-site training sessions. They ensure that operators can use KSB pumps and valves and systems efficiently and profitably, day in, day out.



Introduction



Our mission: Certified quality assurance

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

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

Our five key goals:

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

In addition to quality, energy efficiency also plays an important role at KSB. Our products already fulfil the statutory minimum efficiency values of the ErP regulations for 2015, making a valuable contribution at the component level. You can potentially save even more energy by optimising your entire plant with the FluidFuture[®] energy efficiency concept.





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

Pumps			FluidFuture®		Factory-automated	Automation possible	Water Transport and Treatment	Industry	Energy Conversion	Building Services	Solids Transport
Type / Application	Type series	Page	Flu	ErP	Fac	Αu	Wa Tre	lnd	Ē	Bu	Sol
Circulator / hot water service pumps, fixed speed	Riotherm	24									
Drinking water circulator pumps, fixed speed	Rio-Therm N	24								•	
Drinking water circulator pumps,	Rio-Eco Therm N	24									
variable speed	Calio Therm S	25									
	Calio S	25									
Circulator pumps, variable speed	Calio	25									
	Rio-Eco Z N	25									
	Etaline / Etaline Z	26									
	Etaline PumpDrive	26									
In-line pumps with fixed /	Etaline Z PumpDrive	26									
variable speed drive	Etaline-R	26									
	ILN / ILNE / ILNS	27									
	ILNC / ILNCE / ILNCS	27									
	Etanorm / Etanorm-R	28									
	Etanorm PumpDrive	28									
	Etabloc	28									
	Etabloc PumpDrive	28									
Standardised / close-coupled pumps, fixed / variable speed	Etachrom BC	28									
pumps, incer variable speed	Etachrom BC PumpDrive	29									
	Etachrom NC	29									
	Etachrom NC PumpDrive	29									
	Etanorm GPV / CPV	29									
Hot water pumps	HPK-L / HPK / HPH	30									
	Etanorm SYT / RSY	31									
Hot water / thermal oil pumps	Etabloc SYT / Etaline SYT	31									
Thermal oil pumps with magnetic	HX (Nikkiso-KSB)	31									
drive or canned motor	HY (Nikkiso-KSB)	31									
	MegaCPK	32									
Standardised chemical pumps	MegaCPK PumpDrive / PumpMeter	32									
	CPKN	32									
	Magnochem	32									
	Magnochem-Bloc	33									
Seal-less pumps	Etaseco / Etaseco-I	33									
	Etaseco RVP	33									
	Secochem Ex / Secochem Ex K	33									

Pumps			Fluid Future®	0	Factory-automated	Automation possible	Water Transport and Treatment	Industry	Energy Conversion	Building Services	Solids Transport
Type / Application	Type series	Page	Η̈́	ErP	Fa	Au	N T	Ine	En	Bu	So
	HN (Nikkiso-KSB)	34									
	HT (Nikkiso-KSB)	34									
Seal-less pumps	HK (Nikkiso-KSB)	34									
	VN (Nikkiso-KSB)	34									
	DN (Nikkiso-KSB)	34									
	RPH	35									
	RPHb	35									
	RPH-V	35									
	RPHmdp	35									
	CTN	35									
	API series (Nikkiso-KSB)	36									
Process pumps	CHTR	36									
	YNKR	36									
	CINCP / CINCN	36									
	INVCP / INVCN	36									
	RWCP / RWCN	37									
	WKTR	37									
Deline set an hanne stimm and set	Hya-Rain / Hya-Rain N	37									
Rainwater harvesting systems	Hya-Rain Eco	37									
	Multi Eco	38									
	Multi Eco-Pro	38									
Domestic water supply /	Multi Eco-Top	38									
swimming pools	Movitec VME	38									
	Ixo	38									
	Filtra N	39									
	Hya-Solo EV	39									
	Hya-Solo D	39									
	Hya-Solo DV	39									
	Hya-Compact K	40								•	
.	Hya-Compact VP	40									
Pressure booster systems	Hya-Eco VP	40									
	Hyamat K	40									
	Hyamat V	40									
	Hyamat VP	41									
	Hyamat IK, IV, IVP	41									

Pumps			FluidFuture®		Factory-automated	Automation possible	Water Transport and Treatment	Industry	Energy Conversion	Building Services	Solids Transport
Type / Application	Type series	Page	Flui	ErP	Fac	Aut	Wa	Ind	Ene	Bui	Soli
	Ama-Drainer N 301, 302, 303, 358	41									
	Ama-Drainer 400/10 400/35 500/10/11	41									
Drainage pumps /	Ama-Drainer 80, 100	42									
waste water pumps	Ama-Porter F / S	42									
	Rotex	42									
	MK / MKY	42									
	AmaDS ³	43									
	Ama-Drainer-Box	43									
	Ama-Drainer-Box Mini	43									
	mini-Compacta	43									
Lifting units / pump stations	Compacta	43									
	CK 800-Eu Pump Station	44									
	Ama-Porter CK Pump Station	44									
	Amarex N CK Pump Station	44									
	Evamatic-Box	44									
	Amarex N S32	45									
	Amarex N	45									
Submersible motor pumps	Amarex KRT	45									
	Amarex KRT dry-installed	45									
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	Amacan K	46									
Submersible pumps in discharge tubes	Amacan P	46									
	Amacan S	46									
	Amamix	47									
Mixers / agitators /	Amaprop	47									
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	Sewatec / Sewabloc	48									
Pumps for solids-laden fluids	KWP / KWP-Bloc	48									
	WBC	48									
	LSA-S	48									
	LCC-M	49									
Slurry pumps	LCC-R	49									
	ТВС	49									
	LCV	49									
	FGD	49									
	Mega	50									

Pumps	Turno corrier	Page	FluidFuture [®]	ErP	Factory-automated	Automation possible	Water Transport and Treatment	Industry	Energy Conversion	Building Services	Solids Transport
Type / Application	Type series	Page	<u> </u>		ш.	4	>+	-			
	HHD	50									
Slurry pumps	MHD	50									
siury pumps	LHD	50						_			-
	MDX	50									
	ZW	51						_	_		-
	HVF	51							-		
	Etaprime L	51									
Self-priming pumps	Etaprime B / BN	51									
	MZ	52							-	_	
	S 100D / UPA 100C	52									
	UPA 150C	52								-	
Submersible borehole pumps	UPA 200, 200B, 250C	52									
	UPA 300, 350	53									
	UPZ, BSX-BSF	53									
	BEV	53									
	Movitec V / LHS / VS / VC	54									
	Movitec VCI	54									
High-pressure pumps, fixed / variable speed	Movitec PumpDrive	54									
·	Multitec	54									
	Multitec PumpDrive	54									
	Omega	55									
Axially split pumps	RDLO	55									
	RDLP	55									
	Vitachrom	56									
	Vitacast	56									
Hygienic pumps	Vitaprime	56									
	Vitastage	56									
	Vitalobe	56									
	CHTA / CHTC / CHTD	57									
	HGB / HGC / HGD	57									
	HGM	57									
	YNK	57									
Pumps for power station	LUV / LUVA	57									
conventional islands	WKTB	58									
	SEZ / SEZT / PHZ / PNZ	58									
	SNW / PNW	58									
	Beveron	58									
	SPY	58									

FluidFuture® ErP Factory-automated Automation possible

Pumps			FluidFuture®	ErP	Factory-automated	Automation possible	Water Transport and Treatment	Industry	Energy Conversion	Building Services	Solids Transport
Type / Application	Type series	Page	Ē	ū	ů.	٩	5 ⊨	2		8	Ň
	RER	59							•		
	RSR	59									
	RUV	59									
	PSR	59									
Dumps for nuclear neuror plants	RHD	59									
Pumps for nuclear power plants	LUV Nuclear	60									
	RHM	60									
	RVM	60									
	RHR	60									
	RVR	60									
	RPH-RO	61									
Pumps for desalination	HGM-RO	61									
by reverse osmosis	Multitec-RO	61									
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Berlift of Parlian and a second	RC / RCV	62									
Positive displacement pumps	IPR	62									
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Fire-fighting systems	FFU	62									

Automation and drives Type / Application	Type series	Page	FluidFuture [®]	ErP	Water Transport and Treatment	Industry	Energy Conversion	Building Services	Solids Transport
Automation and drives	SuPremE	63							
	Controlmatic E	63							
	Controlmatic E.2	63							
Constant units	Cervomatic EDP.2	63							
Control units	LevelControl Basic 2	64							
	UPA Control	64							
	hyatronic N	64							
	PumpDrive	65							
	hyatronic spc	65							
Speed control systems	Hyamaster ISB	65							
	Hyamaster SPS	65							
	PumpMeter	66							
Monitoring and diagnostic systems	Amacontrol	66							
Control system	BOA-Systronic	66							

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luids	Riotherm		Rio-Therm N	i i i	Kio-Eco Iherm N Calio Therm S		Calio S	Calio Rio-Eco Z N	_	Etaline	Etaline Z	Etaline PumpDrive	Etaline Z PumpDrive	Etaline-R	ILLN / ILLNE / ILLNS	ILINC / ILINCE / ILINCS	Etanorm / Etanorm-R	Etanorm PumpDrive	Etabloc	Etabloc PumpDrive	Etachrom BC	Etachrom BC PumpDrive	Etachrom NC	Etachrom NC PumpDrive Etanorm GPV / CPV	_	_	НРН	НРК	Etanorm SYT / RS	Etabloc SYT / Etaline SYT
Activated sludge	Circulator / hot water service pumps, fixed speed	beed	'	leed		leed	_		e speed drive					_		chood	naar		_		_				bumps		_	_	HOT WATER / THEIMAI OIL PUMPS	
Aggressive liquids Brackish water	_ds	= pa	Η.	le sp		variable speed	-		eed o	, 	-	-	_	-						-	-	_					-	-,	B	
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Cleaning agents	mps	mps		s, va		s, va			variable	20															Hot					
Condensate	nd a	r pu		dun		culator pumps,			/ var							- ive													2_	
Coolant		lato		or pi		or pi	_		ed ,			_		_			<u>8</u>		_		_				-			_ '	vate	
Cooling lubricant	er se	- ica	_	ulat		ulat	-		ith fixed		_	_	_	-					-	_	-	_		_	-	-	_	- 1	101-	
Cooling water Corrosive liquids	wate	ter	₽.	circ		Circ			- 3	_		-				- 2	- u			-		-							-	
Digested sludge	hot v	wa	\square	ater					samna	2				-					-		-					\vdash				
Dipping paints	or / I	Drinking water circulator pumps, fixed speed		w B					le pl	2																				
Distillate	ulati	Drin		nkin _					In-line							-	-													
Drinking water	Circl			Dri					_																					
Explosive liquids	_	_		_	_		_			_		_		_		Ctandard			_		_		4		-			_	_	
Feed water	-	_	_	-			-	_	-	-		_		_				_	_		_		-		-		-		-	
Filtered water	-	-	-	-	-	-	-	_	-	-	_	_	_	-		-	_		-	-	-	_	-	-	-		_	-		-
Fire-fighting water Flammable liquids		-	—	-	_		-	-	-		_	-		-	-		E		-	-	-	_	-	-	-	-	_	-	-	
Fuels		-										-	-	-		-			-		-	-			-		-			
Gas-containing liquids																			-											
Harmful liquids																														
Heating water		-					-		-	<u>-</u>				_			E				_		4		-			_	-	
High-temperature hot water	-	-	_	-		-	-		-	-		_		-		-	-		-		-			-	-		-	-		
Highly aggressive liquids Hot water		-				-	- 1		-		-		-						-	-	-	-			-					
Industrial service water		-	H	_			- 1				-	H	-	7			F		F.	-	7		ŧ,		-	-	-			
Inorganic liquids		-				-				-		_	_	-		-				_	-	_			-					
Liquefied gas																														
Liquids in food and beverage production																														
Lubricants	_	_		-		_	_	_	_	-				_		_	_		_		_				-				-	
Oils		-		-			_			-		_	_	_		_	E		-	-	-				-		_			
Organic liquids Pharmaceutical fluids	_		$\left - \right $	-	-		-			-		-		-		-	-		-		_		-						-	
Polymerizing liquids				-			_			H		-	-	-		-	-		-		-	_	-			\vdash	_	-	-	
Rainwater / stormwater																	-		-		-					\vdash				
Raw sludge																														
River, lake and ground water																														
Seawater							_			_				_		_	_		-	_	_								-	
Service water							_			P							ŀ		-	-					-			_	-	
Sewage with faeces Sewage without faeces	-	-		-			-			H		-		-		-	-		-		-		-			-	_	-	-	
Sewage without laeces				-						H				-		-	-		-		-	-				_			-	
Slurries (ore, sand, gravel, ash)							-			F							F		-							_	-			
Solvents																														
Swimming-pool water																														
Thermal oil							_			-				_			L		_		_							-		
Toxic liquids	_									L		_		_		_	-		-		_		_			\square			-	
Valuable liquids	_	-		-			-	_	-	-		-	_	-		-	-		-		-		-		-	\vdash		-	-	
Volatile liquids Wash water	_		$\left - \right $		-		-	_		-		-		-			-		-		-	-	-			\vdash	_	-	-	
Wash water Waste water		-		-	-	-	-	_	-	-	-	_		-	-		-		-		-	_	-		-	\vdash	-	-	-	-

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	MegaCPK MegaCPK Pumpdrive CPKN	-	RPH RPHb RPHuv RPHmdp RPHmdp API series (Nikkiso-KSB) CHTR CHTR TNKR CHTR TNVCP / INVCN RWCP / RWCN WWCTR	Hya-Rain / Hya-Rain N Hya-Rain Eco
(SB)	mpdi	Magnochem Magnochem-Bloc Etaseco / Etaseco-I Etaseco RYP Secochem Ex K HN (Nikkiso-KSB) HT (Nikkiso-KSB) VN (Nikkiso-KSB) DN (Nikkiso-KSB)	N N N N	/a-R¢
HX (Nikkiso-KSB) HY (Nikkiso-KSB)	K K Pu	Magnochem Magnochem-Bloo Etaseco / Etaseco Etaseco RVP Secochem Ex Secochem Ex K HN (Nikkiso-KSB) HK (Nikkiso-KSB) VN (Nikkiso-KSB) DN (Nikkiso-KSB)	RPH RPHJ RPHJb RPHJdp CTN API Series (Nik) CHR CHR CHR CHCP / CINCN INVCP / INVCN WKTR WKTR	Eco H
Nikk	laCP N	Magnochem Magnochem Etaseco / Eta Secochem Ex Secochem Ex HN (Nikkiso- HT (Nikkiso- VN (Nikkiso- VN (Nikkiso- DN (Nikkiso-	b 	Rair
) XH Н	Mega(Mega(CPKN	Mag Mag Etas Secc Secc HN (HH (VN (VN (DN (RPH RPHb RPH-V CTN API serie: YNKR YNKR CHTCP / C INVCP / I NVCP / N WKTR	Hya
tor		<u>s</u>		
motor	sdund			Aggressive liquids
canned				Brackish water
				Brine Cleaning agents
ve or				Condensate
c dri	ardis			Coolant
magnetic drive	Standardised			Activated sludge Aggressive liquids Brackish water Cleaning agents Condensate Cooling lubricant Cooling lubricant Cooling uster
with	• •			Corrosive liquids
 dund				Digested sludge Dipping paints
– n –				Distillate
				Drinking water
ermal				Explosive liquids
_£				Feed water
-				Filtered water
				Fire-fighting water Flammable liquids
				Fuels
				Gas-containing liquids
				Harmful liquids
				Heating water
				High-temperature hot water Highly aggressive liquids
				Hot water
_				Industrial service water
				Inorganic liquids
_	_			Liquefied gas
				Liquids in food and beverage production Lubricants
				Oils
				Organic liquids
				Pharmaceutical fluids
				Polymerizing liquids
_			· · · · · · · · · · · · · · · · · · ·	Rainwater / stormwater 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
_				Wash water

Fluids		Multi Eco	Multi Eco-Pro	Multi Eco-Top	Movitec VME	lxo	Filtra N		Hya-Solo EV	Hya-Solo D	Hya-Solo DV	Hya-Compact K	Hya-Compact VP	Hya-Eco VP	Hyamat K	HyamatV	HyamatVP	Hyamat IK, IV, IVP		Ama-Drainer N 301, 302, 303, 358	Ama-Drainer 400/10 400/35 500/10/11	Ama-Drainer 80, 100	Ama-Porter F / S	Rotex	MK / MKY													
Activated sludge	sloc	_					_			_	_	_	_	_	_		_		nps		_		_			_			_							-		
Aggressive liquids		-		_		-	_	syste	-		-		-	_	-			_	nd .	-	_	-		-		_	-	-		-	_	-	-	_	-	-	-	-
Brackish water Brine	- uim	-		-		-		Pressure booster systems	+		-		-	_	-			—	waste water pumps	-	_	+		-			-	+		-	_		+	-	-	-	-	-
Cleaning agents	wim		-	-		-	- 3	500C	1	-	-	_	-	-	-	_		—	tew	-	-	-	-	-		-	t		-	-		t	1		-	r		-
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Cooling lubricant	ter s	_				_	_ ^	<u> </u>	4		-		_		_				mnd	_		-		_														_
Cooling water	Domestic water supply / swimming pools	-				_	_	-	_		_		_		_				Drainage pumps	_		_		_					-	_		-	_			-		-
Corrosive liquids Digested sludge	estic	-		_		-	-	-	-		-		-	_	-			_	raina	-		-		-			_	-		-		-	-	_	-	-		-
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Distillate				_														_								-											-	
Drinking water								Ī																														
Explosive liquids		_				_					_		_		_					_				_														
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Filtered water		-	_	_	-	-	-	-	-		-		-	_	-			_		-	_	-		-		_	-	-		-	_	-	-	_	-	-	_	-
Flammable liquids	-			-	-	-		-		_			-		-	_		-		-			_	-		-	-		_	-	-	-	-	-	-	-	-	-
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Gas-containing liquids																																						
Harmful liquids	_	_		_		_	-	-	-		_		_		_					-		_		_		_	_					_	_	_	_	_		_
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Hot water			-									_				_		_								-			_			E				1		-
Industrial service water				_				ī																								Г						
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Pharmaceutical fluids																																						
Polymerizing liquids																																						
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Cooling lubricant						-			-	-		-	Sub						pumps,		_						-		_			-
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Filtered water	-	_			-	-		-	-					-						-		_		_	E	-			_			-
Fire-fighting water			-	_	-	-	-	-	-	-	-	-		-								_		_			-		_			-
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Harmful liquids					_	-		-			-			-						_	-	-					-		_			_
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Polymerizing liquids						_				_																	_					_
Rainwater / stormwater					_	_		_	-	_				_		_						_		_	-		_					_
Raw sludge						-				-												_			-							_
River, lake and ground water			-	_	_	-		_	-	-			-							_	-	_		_					_			-
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Service water	-	_	-		-	-		_	-	-		_	1									_		-								-
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Slurries Slurries (ore, sand, gravel, ash)									-	-		_	-	-		-	-	-		_		-	-	-	-		-		_		-	-
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Solvens Swimming-pool water				-		-		-		-		-	-	-		-				_	-	-		-			-		-			-
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Volatile liquids						-				-			-	-						_	-	-		-								-

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Volatile liquids

Wash water Waste water

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	HGB / HGC / HGD	HGM	YNK	LUV / LUVA WKTB	SEZ / SEZT / PHZ / PNZ	SNW / PNW	Beveron	SPY	_	RER	RUV	PSR	RHD	LUV nuclear	RHM	RVM	RVR	_		HGM-RO	Multitec-RO		_	RC / RCV IPB	_	FFS			SuPreme		PumpMeter	
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																																Raw sludge
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Domestic water supply	_		_	_		_			_	-		_			_			_			_		-	_		_	-	_			_
Drainage Drainage of pits, shafts, etc.	-		-	-	_	-	_	-	-	-		_	-	-	-		-	-	_	_	+	_	-	-	_	-	-	_		-	-
Drainage of pics, sharts, etc.				-					-		_				-							-			-	-		-		-	-
Fire-fighting systems																				l											
Flood control / coast protection (stormwater)	_	_	_	-	_		_		-			_	H	_	-					_		_	-	-	_	-		_	_		-
Flue gas desulphurization Food and beverages industry	-	-	-	-	_	-	-	-	-	-		-			-		-	-		_	t.	-	-	H	-	÷	-	-	- 1		
Fountains				-	-				r		-	-							-									-			-
Heat recovery systems																															
Heavy oil and coal upgrading	_	_		-	_	_	_	-	-			_	-	_	-		-		_			_	-	-	_	-		_		-	-
Homogenization Hot water heating systems		-	-	-	_			-	-			-		-	-			-	_	-					-	-		-	_	-	-
Hydraulic solids transport																															
Industrial recirculation systems	_			_		_			_				_		_								_	_		_					_
Irrigation Keeping in suspension	-		_	-		-	_		-	-		_	H		-	-		-	-					P		-	-	-	_	-	
Lowering ground water levels			-	-	-		-		r										_	-	1	-				-		-			-
Maintaining ground water levels																															
Mining				-						-		_			-			-			-	_	-	-	_	-	-	_		-	-
Mixing Nuclear power plants				-		-	-		-			-		-	-				_	-	-	-	-	-	-	-		-		-	-
Offshore platforms																															
Paint shops				_					_						_																
Paper and cellulose industry Petrochemical industry	-		-	-	-	+	-	-	÷	-		-	-	-	-		-	-	-		۰.					-	-	-			1
Pharmaceutical industry		-	-	-	-		-		r					-	-		-		_	-	T,			E		-		-		T	_
Pipelines and tank farms																															
Pressure boosting			_	_		-				-					-		_	_			_		_	-		-		_			_
Process engineering Rainwater harvesting		-	-	-	-	-		-	÷	-		-			-			-			÷			H	-	÷		-	_	-	-
Recirculation									1			-	E	-	-			-			1					-		-			-
Refineries																															
Seawater desalination / reverse osmosis Sewage treatment plants	-		_	-			_	_	-	-		_	H	_	-		-	-		_				P		-		_		-	-
Sewage treatment plans			-	-					-		_			_	-				_	_						-		-			-
Sludge disposal																															
Sludge processing				-		-				-		_	-	_	-	_	_	-	_			_		-	_	_	-	_		-	-
Snow guns Solar thermal energy	-			H		-			-			_			F	-			_			-		H	_	-		-			-
Spray irrigation													E																		
Sugar industry															•									_		_					
Swimming pools	-			-		-			-			_			-								-	H		-		-			-
Thermal oil circulation Thickening												_	F						_				-	H				-			-
Washing plants																					I)										
Water extraction					_	_			_										_										_		<u> </u>
Water supply Water treatment systems	-					_			-					Η								÷	_			÷					-
water neament systems												-																-			_

	e Center						
CHTA / CHTC / CHTD HGB / HGC / HGD HGM VNK LUV / LUVA WKTB SEZ / SEZT / PHZ / PNZ SWW / PNW Beveron SPY SR RUV PSR RUV	RPH-RO HGM-RO Multitec-RO SALINO Pressure Center	RC / RCV IPR		_	SupPremE		PumpMeter
					_	_	
iai	desalination by reverse osmosis	sdund	fighting systems	drives	H	and diagnostic systems	Air-conditioning systems Aquaculture
tional is	e osr	nt pi	g sys	and c		c sys	Boiler circulation
	wers	displacement	lhtin	ion		nosti	Boiler feed applications
		splac	Fire-fic	Automation	H	diag	Chemical industry Cleaning of stormwater tanks / storage sewers
	tio	/e di	_ III	Auto	H	and	Condensate transport
	lina'	Positive		_	Ξ.	ring	Cooling circuits
	desa	4				Monitoring	Descaling units
	or		-	_		Š_	Dewatering
	Pumps f		-	_	H		Disposal
	_ d			-			Dock facilities
							Domestic water supply
	_						Drainage
			-	_	9		Drainage of pits, shafts, etc.
						ŀ	Dredging Fire-fighting systems
				-			Flood control / coast protection (stormwater)
							Flue gas desulphurization
	_	_	_	_			Food and beverages industry
	-		-	_	H		Fountains
			-	-			Heat recovery systems Heavy oil and coal upgrading
				_			Homogenization
							Hot water heating systems
	_	-		_			Hydraulic solids transport
		-		_	H		Industrial recirculation systems Irrigation
				-	H.		Keeping in suspension
							Lowering ground water levels
	_		_			4	Maintaining ground water levels
	-	-	-	_		ŀ	Mining Mixing
			_	_			Nuclear power plants
							Offshore platforms
	_		_				Paint shops
			-	_	9		Paper and cellulose industry Petrochemical industry
			-	_		ŀ	Petrochemical industry Pharmaceutical industry
			-				Pipelines and tank farms
							Pressure boosting
			-	_	멾.		Process engineering
			-	_	H		Rainwater harvesting Recirculation
			-		F		Refineries
							Seawater desalination / reverse osmosis
			_				Sewage treatment plants
			-	_	$\left - \right $	ŀ	Shipbuilding Sludge disposal
			-			ŀ	Sludge processing
							Snow guns
			_		닏		Solar thermal energy
			-	_	H		Spray irrigation Sugar industry
			-		H		Sugar industry Swimming pools
							Thermal oil circulation
			_				Thickening
	_		-	_	H	_	Washing plants
			-	_	H		Water extraction Water supply
			-		Ħ.		Water supply Water treatment systems
					-		

Pumps

Switchgears

Riotherm[®] Hot water service pump

7	Rp Q [m³/h] H [m]	1-1¼ max. 10 max. 6	De: Ap
b	H [m] p [bar] T [°C] Data for 50 Hz operation	max. 6 max. 10 -2 to +110	

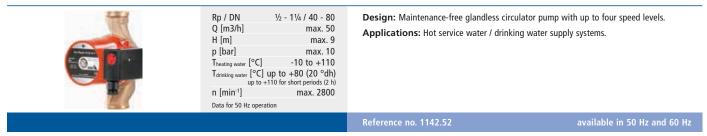
Design: Screw-ended glanded pump with mechanical seal and fixed speed. **Applications:** Swimming pools, cooling circuits and industrial plants.

eference no. 1118.5

also available in 60 Hz

Drinking water circulator pumps, fixed speed

Rio®-Therm N Glandless circulator pump with up to 4 speed levels



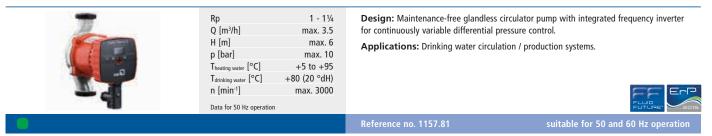
Drinking water circulator pumps, variable speed

Rio-Eco® Therm N High-efficiency glandless circulator pump with continuously variable differential pressure control

Rp / DN Q [m ³ /h] H [m] p [bar] T _{heating water} [°C] T _{drinking water} [°C] n [min ⁻¹] Data for 50 Hz operation	1-1¼ / 32 - 80 max. 38 max. 12 max. 10 -10 to +110 +80 (20 °dH) max. 3700	Design: Maintenance-free glandless circi for continuously variable differential press Applications: Hot service water / drinki	
		Reference no. 1142.51	suitable for 50 and 60 Hz operation

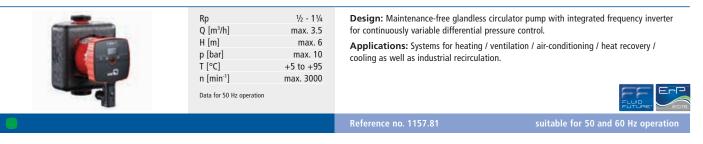
Drinking water circulator pumps, variable speed

Calio Therm S High-efficiency glandless circulator pump with continuously variable differential pressure control



Circulator pumps, variable speed

Calio S High-efficiency glandless circulator pump with continuously variable differential pressure control



Calio High-efficiency glandless circulator pump with continuously variable differential pressure control

Rp / DN Q [m ³ /h] H [m] p [bar] T [°C] n [min ⁻¹] Data for 50 Hz ope	1 - 1¼ / 32 - 100 max. 70 max. 18 max. 16 -10 to +110 max. 3660	for continuously variable differential	/ ventilation / air-conditioning / heat recovery /
		Reference no. 1157.82	suitable for 50 and 60 Hz operation

Rio-Eco[®] Z N High-efficiency glandless twin circulator pump with continuously variable differential pressure control

DN Q [m ³ /h] H [m] p [bar] T [°C] n [min ⁻¹] Data for 50 Hz operation	32 - 80 max. 46 max. 14 max. 10 -10 to +110 max. 3550	Design: Maintenance-free glandless circulate for continuously variable differential pressure Applications: Systems for heating/ventilation well as industrial recirculation.	control.
		Reference no. 1140.51	suitable for 50 and 60 Hz operation

Factory-automated

In-line pumps with fixed / variable speed drive

Etaline® In-line pump

	DN Q [m³/h] H [m] p [bar] T [°C] Data for 50 Hz opera	32 - 200 max. 700 max. 95 max. 16 -30 to +140	Design: Close-coupled, in-line circulator pum motor. Applications: Hot water heating systems, co service water supply systems, industrial recircu	, poling circuits, air-conditioning, water and
PumpMeter, Hyamaster, LevelControl, Sw	itchgears		Reference no. 1159.5	also available in 60 Hz
Etaline [®] Z In-line twin pump	DN	22 200	Decise: Close coupled in line twin circulated	www.europelaft.cod.w.eta.ch.ft.com

	DN	32 - 200	Design: Close-coupled, in-line twin circulator p	ump; pump shaft and motor shaft are	
In-state II III	Q [m ³ /h]	max. 1120	rigidly coupled.		
	H [m]	max. 38	Applications: Hot water heating systems, cooling circuits, air-conditioning system		
	p [bar]	max. 16	water and service water supply systems, industria		
a. all	T [°C]	-30 to +140	frater and service frater suppry systems, massing		
	Data for 50 Hz ope	ration			
PumpMeter, Hyamaster, LevelControl, Swi	tchgears		Reference no. 1148.5	also available in 60 Hz	

Etaline® PumpDrive In-line pump with motor-mounted variable speed system

	DN Q [m ³ /h] H [m] p [bar] T [°C] n [min ⁻¹]	32 - 200 max. 788 max. 100 max. 16 -10 to +140 max. 4200	system; pump shaft and motor shaft are	ms, cooling circuits, air-conditioning systems,
😸 🛑 PumpMeter, BOA-Systronic			Reference no. 1149.52	also suitable for 60 Hz operation

Etaline® Z PumpDrive In-line pump with motor-mounted variable speed system

	DN Q [m³/h] H [m] p [bar] T [°C] n [min ⁻¹]	32 - 200 max. 990 max. 38 max. 16 -10 to +140 max. 2100	Design: Close-coupled in-line circulator pump, in variable speed system; pump shaft and motor shaf modules (accessories) enable redundant operation level controller. Applications: Hot water heating systems, coolin air-conditioning systems, water and service water industrial recirculation systems.	ft are rigidly coupled. Dual pump 1 of Etaline Z without a higher- ng circuits,
🚯 🛑 PumpMeter, BOA-Systronic			Reference no. 1154.51	also suitable for 60 Hz operation

Etaline®-R In-line pump

	DN Q [m ³ /h] H [m] p [bar] T [°C] Data for 50 Hz operat	150 - 350 max. 1900 max. 93 max. 25 -30 to +140	Design: Vertical close-coupled, in-line circulator pu standardised motor. Applications: Hot water heating systems, cooling service water supply systems, industrial recirculation	circuits, air-conditioning, water and
PumpMeter, PumpDrive, Hyamaster, Switchgears		Reference no. 1146.51	also available in 60 Hz	

In-line pumps with fixed / variable speed drive

ILN / ILNE / ILNS In-line pump

	DN Q [m ³ /h] H [m] p [bar] T [°C] n [min ⁻¹] Data for 50 Hz operation	65 - 400 max. 3100 max. 112 max. 16 -20 to +70 max. 3000	 Design: Vertical in-line centrifugal pump with closed impeller and mechanical seal. ILNS fitted with an auxiliary vacuum pump and ILNE with ejector. Process design allows removal of the impeller without removing the pipes and the motor. Applications: Hot water heating systems, cooling circuits, air-conditioning, marine applications, water and service water supply systems, cleaning systems, industrial recirculation systems.
PumpMeter, PumpDrive, Hyamaster, Switch	igear		also suitable for 60 Hz operation

ILNC / ILNCE / ILNCS In-line pump

	DN Q [m³/h] H [m] p [bar] T [°C] n [min ⁻¹] Data for 50 Hz operat	32 - 125 max. 370 max. 112 max. 16 -20 to +70 max. 3000	 Design: Closed-coupled vertical in-line centrifugal pump with electric motor, closed impeller and mechanical seal. ILNCS fitted with an auxiliary vacuum pump and ILNCE with ejector. Standardised IEC motor. Applications: Hot water heating systems, cooling circuits, air-conditioning, marine applications, water and service water supply systems, cleaning systems, industrial recirculation systems.
PumpMeter, PumpDrive, Hyamaste	er, Switchgear		also suitable for 60 Hz operation

Standardised/close-coupled pumps, fixed/var. speed

Etanorm[®] / Etanorm[®]-R Standardised pump

	DN Q [m³/h] H [m] p [bar] T [°C] Data for 50 Hz operation	32 - 300 max. 1900 max. 102 max. 16 max. +140	 Design: Horizontal, long-coupled, single-stage volute casing pump (pump size 125 - 500 with two stages) with ratings and main dimensions to EN 733, in back pull-out design, with replaceable shaft sleeves / shaft protecting sleeves and casing wear rings. ATEX-compliant version available. 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.
PumpMeter, Hyamaster			Reference no. 1311.5 (Etanorm) + 1211.5 also available in 60 Hz

Etanorm[®] PumpDrive Standardised pump with motor-mounted variable speed system

	DN Q [m³/h] H [m] p [bar] T [°C] n [min ⁻¹]	25 - 150 max. 660 max. 160 max. 16 max. +140 max. 4200	 Design: Horizontal, long-coupled, single-stage volute casing pump in back pull-out design, with replaceable shaft sleeves / shaft protecting sleeves and casing wear rings and motor-mounted variable speed system. 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.
🚯 🛑 PumpMeter			Reference no. 1311.5 (Etanorm) + 4070.5

Etabloc[®] Close-coupled pump

	DN Q [m³/h] H [m] p [bar] T [°C] Data for 50 Hz operation	25 - 150 max. 612 max. 102 max. 16 max. +140	Design: Close-coupled, single-stage volute casing pump, rat replaceable shaft sleeve and casing wear rings. ATEX-complia Applications: Spray irrigation, irrigation, drainage and wat and air-conditioning systems, condensate transport, swimmin water, cooling water, fire-fighting water, seawater, oil, brine, c agents, brackish water, service water, etc.	ant version available. ter supply systems, heating 1g pools, handling of hot
PumpMeter, Hyamaster			Reference no. 1167.5	also available in 60 Hz

Etabloc® PumpDrive Close-coupled pump with motor-mounted variable speed system

	DN Q [m³/h] H [m] p [bar] T [°C] n [min ^{.1}]	25 - 150 max. 660 max. 101 max. 16 max. +110 max. 4200	 Design: Close-coupled, single-stage volute casing pump, ratings to EN 733, with replaceable shaft sleeve and casing wear rings and motor-mounted variable speed system. 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.
🙁 🛑 PumpMeter			Reference no. 1167.5 + 4070.5

Etachrom[®] BC Close-coupled chrome steel pump

	DN Q [m ³ /h] H [m] p [bar] T [°C] Data for 50 Hz operation	25 - 80 max. 260 max. 106 max. 12 max. +110	 Design: Close-coupled, horizontal, single-stage annular casin main dimensions to EN 733, with replaceable casing wear ring available. Applications: Spray irrigation, irrigation, drainage and wate and air-conditioning systems, fire-fighting systems, condensate pools, handling of hot water, cooling water, fire-fighting water, drinking water, cleaning agents, service water. 	s. ATEX-compliant version r supply systems, heating transport, swimming
PumpMeter Hyamaster			Reference no. 1213 5	also available in 60 Hz

Standardised/close-coupled pumps, fixed/var. speed

Etachrom[®] BC PumpDrive Close-coupled chrome steel pump with motor-mounted variable speed system

	DN Q [m³/h] H [m] p [bar] T [°C] n [min ⁻¹]	25 - 80 max. 260 max. 106 max. 12 max. +110 max. 3600	 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. Applications: Spray irrigation, irrigation, drainage and water supply systems, heating and air-conditioning systems, fire-fighting systems, condensate transport, swimming pools, handling of hot water, cooling water, fire-fighting water, oil, drinking water, cleaning agents, service water.
🕐 🛑 PumpMeter			Reference no. 1213.5 + 4070.5

Etachrom[®] NC Standardised chrome steel pump

	DN Q [m³/h] H [m] p [bar] T [°C] Data for 50 Hz operatio	25 - 80 max. 260 max. 106 max. 12 max. +110	Design: Horizontal, single-stage annular casing pur to EN 733, with replaceable casing wear rings. ATEX Applications: Water supply, spray irrigation, irriga and air-conditioning systems, fire-fighting systems, h water, hot water, cooling water, swimming pool wate and cleaning agents.	compliant version available. tion and drainage systems, heating andling of drinking water, service
PumpMeter, Hyamaster			Reference no. 1212.5	also available in 60 Hz

Etachrom[®] NC PumpDrive Standardised chrome steel pump with motor-mounted variable speed system

Ser Ste	DN Q [m³/h] H [m] p [bar] T [°C] n [min ⁻¹]	25 - 80 max. 260 max. 106 max. 12 max. +110 max. 3600	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. Applications: Water supply, spray irrigation, irrigation and drainage systems, heating and air-conditioning systems, fire-fighting systems, handling of drinking water, service water, hot water, cooling water, swimming pool water, fire-fighting water, condensate, oil and cleaning agents.
💮 🛑 PumpMeter			Reference no. 1212.5 + 4070.5

Etanorm[®] GPV / CPV Vertical low-pressure pump

t	DN Q [m³/h] H [m] p [bar] T [°C] Data for 50 Hz operation	32 - 150 max. 660 max. 102 max. 16 max. +95	Design: Single-stage volute casing pump, ratings to I closed tanks under atmospheric pressure. Up to an imi Applications: Handling of neutral degreasing and p with degreasing agents, dipping paints, etc.	mersion depth of 2000 mm.
			Reference no. 1214.5	also available in 60 Hz

Hot water pumps

HPK-L[®] Heat transfer liquid / hot water recirculation pump without external cooling

Data for 50 Hz operation

Ju.D.	DN Q [m³/h] H [m] p [bar] T [°C] max. Data for 50 Hz operation	25 - 250 max. 1130 max. 155 max. 40 +240 / +400	Design: Horizontal, radially split volute casing p ISO 2858 / ISO 5199, single-stage, single-entry, w Equipped with heat barrier, seal chamber air-cool external cooling. ATEX-compliant version availabl Applications: Handling of hot water and therm particularly in medium-sized and large hot water boilers, district heating systems, etc.	ith radial impeller. ed by integrated fan impeller, no e. al oil in piping or tank systems,
PumpDrive, Hyamaster			Reference no. 1136.5	also available in 60 Hz
IPK® Heat transfer liquid / hc	t water recircula	tion pump		
	DN Q [m³/h] H [m] p [bar] T [°C] Data for 50 Hz operation	150 - 400 max. 4150 max. 185 max. 40 max. +400	Design: Horizontal, radially split volute casing p ISO 2858 / ISO 5199, single-stage, single-entry, w TÜV certification to TRD on option. ATEX-complia Applications: Handling of hot water and therm particularly in medium-sized and large hot water boilers, district heating systems, etc.	ith radial impeller. nt version available. nal oil in piping or tank systems,
PumpDrive, Hyamaster			Reference no. 1121.51	also available in 60 Hz
IPH [®] Hot water recirculation	pump			
	DN Q [m ³ /h] H [m] p [bar] T [°C]	40 - 350 max. 2350 max. 225 max. 110 max. +320	Design: Horizontal, radially split volute casing p single-stage, single-entry, with centreline pump fe to TRD on option. ATEX-compliant version availab Applications: Handling of hot water in high-pro- for use as boiler feed or recirculation pump.	eet and radial impeller. TÜV certification le.

Hyamaster

Reference no. 1122.5

also available in 60 Hz

Hot water / thermal oil pumps

Etanorm[®] SYT / RSY Hot water / thermal oil pump

JAD	DN Q [m³/h] H [m] p [bar] T [°C] Data for 50 Hz opera	32 - 300 max. 1900 max. 102 max. 16 max. +350	Design: Horizontal, long-coupled volute cas ratings and main dimensions to EN 733, sing ATEX-compliant version available. Applications: Heat transfer systems (DIN 4 (DIN 4752).	gle-stage, with replaceable casing wear rings.
Hyamaster			Reference no. 1220.5	also available in 60 Hz
Etabloc [®] SYT / Etaline [®] S	YT Hot was	ter / thermal o 32 - 100	· ·	ing pump in back pull-out design with ratings

Hyamaster			Reference no. 1172.5	also available in 60 Hz
	Q [m ³ /h] H [m] p [bar] T [°C] Data for 50 Hz operation	max. 280 max. 67 max. 16 max. +350	and main dimensions to EN 733, or in in-line design Applications: Heat transfer systems (DIN 4754) of	n, with replaceable casing wear rings.

Thermal oil pumps with mag-drive or canned motor

HX (Nikkiso-KSB)* Thermal oil pump with explosion protection

HY (Nikkiso-KSB)* Thermal oil pump with explosion protection



DN	32 - 80
Q [m ³ /h]	max. 150
H [m]	max. 100
p [bar]	max. 40
T [°C]	max. +250
Data for 50 Hz operation	

Design: Horizontal, seal-less, single-stage pump with fully enclosed canned motor, uncooled, coolable or heatable. ATEX-compliant version available. Applications: Handling of thermal oils and other hot fluids in heat transfer systems to DIN 4754. Pumps

Standardised chemical pumps

MegaCPK Standardised chemical pump with two bearing bracket variants

	DN Q [m³/h] H [m] p [bar] T [°C] Data for 50 Hz operation	25 - 250 max. 1160 max. 162 max. 25 max. +400	Design: Horizontal, radially split volute casing pump impeller, single-entry, single-stage, to ISO 2858 / ISO "wet" shaft and conical seal chamber. ATEX-complian Applications: Handling of aggressive liquids in the industries as well as in refineries.	5199. Also available as variant with t version available.
PumpMeter, PumpDrive			Reference no. 2731.5	also available in 60 Hz
MegaCPK PumpDrive / Pu		Standardise	d chemical pump with two bearing b Design: Horizontal, radially split volute casing pump	
B.	Q [m³/h]	max. 1150	impeller, single-entry, single-stage, to ISO 2858 / ISO 5	199. Also available as variant with
	H [m] p [bar]	max. 162 max. 25	"wet" shaft and conical seal chamber. ATEX-complian Applications: Handling of aggressive liquids in the	
	T [°C]	max. +140	industries as well as in refineries.	
	n [min-1]	max. 3600		
	Data for 50 Hz operation			FLUID FUTURE
			Reference no. 2731.5 + 4070.5	also available in 60 Hz

CPKN Standardised chemical pump with reinforced bearing bracket

	DN Q [m ³ /h] H [m] p [bar] T [°C] Data for 50 Hz opera	150 - 400 1160 - max. 4150 162 - max. 185 max. 25 max. +400	5	ids in the chemical and petrochemical
PumpMeter, PumpDrive			Reference no. 2730.5	also available in 60 Hz

Seal-less pumps

Magnochem[®] Standardised chemical pump with mag-drive

	DN Q [m³/h] H [m] p [bar] T [°C] Data for 50 Hz opera	25 - 160 max. 1160 max. 162 max. 40 -90 to +300	Design: Horizontal, seal-less, mag-drive volute o to ISO 2858 / ISO 5199, single-stage, single-entry version available. Applications: Handling of aggressive, toxic, ex or harmful liquids in the chemical, petrochemical	, with radial impeller. ATEX-compliant plosive, valuable, flammable, malodorous
Hyamaster			Reference no. 2739.5	also available in 60 Hz

Seal-less pumps

Magnochem[®]-Bloc Close-coupled chemical pump with mag-drive

	DN Q [m³/h] H [m] p [bar] T [°C] Data for 50 Hz operat	25 - 160 max. 754 max. 162 max. 25 max. +250	Design: Horizontal, seal-less, close-coupled, ISO 2858 / ISO 5199, single-stage, single-entry version available. Applications: Handling of aggressive, toxic, or harmful liquids in the chemical, petrochemi	r, with radial impeller. ATEX-compliant explosive, valuable, flammable, malodorous
Hyamaster			Reference no. 2749.5	also available in 60 Hz

Etaseco[®] / Etaseco[®]-I Standardised water pumps with canned motor

	DN Q [m ³ /h] H [m] p [bar] T [°C] Data for 50 Hz operation	32 - 100 max. 250 max. 162 max. 16 max. +140	Design: Horizontal / vertical, seal-less volute casing pump in with fully enclosed canned motor, low noise emission, with rar single-entry, pump casing connecting dimensions to EN 733. Applications: Handling of aggressive, flammable, toxic, vola the chemical and petrochemical industry, in environmental en- industry.	dial impeller, single-stage, atile, or valuable liquids in
PumpMeter, Hyamaster, PumpDrive			Reference no. 2935.5	also available in 60 Hz

Etaseco[®] RVP Cooling circuit pump with canned motor

0.	DN Q [m³/h] H [m] p [bar] T [°C]	32 max. 20 max. 25 max. 10 max. +85	Design: Horizontal / vertical seal-less volute casing p with fully enclosed canned motor, low noise emission, single-entry. Applications: Pump for handling toxic, volatile or v and industrial engineering and for use as a coolant pu vehicles, environmental and industrial engineering; ap emission, smooth running or long service intervals are	, with radial impeller, single-stage, valuable fluids in environmental ump in cooling systems. Transport oplications where low noise
PumpMeter, PumpDrive			Reference no. 2935.17	also available in 60 Hz

Secochem[®] Ex Standardised chemical pump with canned motor and explosion protection

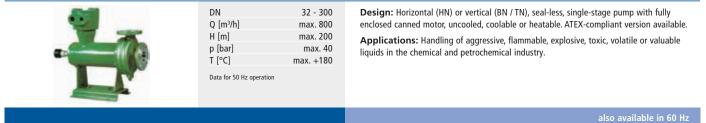
	DN Q [m³/h] H [m] p [bar] T [°C] Data for 50 Hz operation	25 - 100 max. 300 max. 150 max. 25 max. +130	Design: Horizontal, seal-less volute casing pump enclosed canned motor, low noise emission, with r entry, casing connecting dimensions to ISO 2858. I Applications: Handling of aggressive, flammable liquids in the chemical and petrochemical industry, general industry.	adial impeller, single-stage, single- Design to ATEX. e, explosive, toxic, volatile or valuable
Hyamaster			Reference no. 2939.5	also available in 60 Hz

Secochem[®] Ex K Standardised chemical pump with canned motor and explosion protection

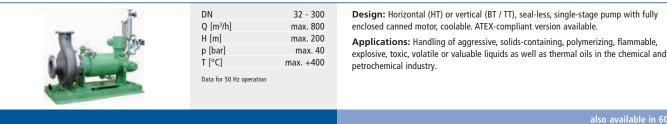
	DN Q [m³/h] H [m] p [bar] T [°C] Data for 50 Hz operation	25 - 100 max. 300 max. 150 max. 25 max. +400	Design: Horizontal, seal-less volute casing pump in back pul enclosed canned motor, low noise emission, with radial impel entry, pump casing connecting dimensions to ISO 2858, with ATEX. Applications: Handling of aggressive, flammable, explosive liquids in the chemical and petrochemical industry, in environ general industry.	ler, single-stage, single- external cooler. Design to , toxic, volatile or valuable
Hyamaster			Reference no. 2939.51	also available in 60 Hz

Seal-less pumps

HN (Nikkiso-KSB)* Chemical canned motor pump with explosion protection



HT (Nikkiso-KSB)* Chemical canned motor pump with explosion protection for special applications



HK (Nikkiso-KSB)* Two-stage canned motor pump with explosion protection



DN	25 - 40
Q [m ³ /h]	max. 10
H [m]	max. 300
p [bar]	max. 40
T [°C]	max. +150
n [min ⁻¹]	max. 8400
Data for $n = 8400 \text{ min}^{-1}$	

Design: Horizontal, seal-less pump with fully enclosed canned motor, two-stage design in tandem arrangement. ATEX-compliant version available.

Applications: Handling of aggressive, flammable, explosive, toxic, volatile or valuable liquids in the chemical and petrochemical industry. For small flow rates, high discharge heads and low NPSH_R.

high speed, up to 130 Hz

VN (Nikkiso-KSB)* Multistage canned motor pump with explosion protection



also available in 60 Hz

DN (Nikkiso-KSB)* Self-priming canned motor pump with explosion protection



DN	32 - 50
Q [m ³ /h]	max. 40
H [m]	max. 60
p [bar]	max. 40
T [°C]	max. +180
Data for 50 Hz operation	

Design: Horizontal, seal-less pump with fully enclosed canned motor, single-stage, self-priming. ATEX-compliant version available.

Applications: Handling of aggressive, flammable, explosive, toxic, volatile or valuable liquids in the chemical and petrochemical industry. Self-priming pump for draining of tanks and unloading of tanks and tank trucks.

also available in 60 Hz

Process pumps

RPH[®] OH2 process pump to API 610

	Q [m ³ /h] H [m] p [bar] T [°C] Data for 50 Hz operation	25 - 400 max. 4150 max. 270 max. 51 max. +450	Design: Horizontal, radially split volute casing pu API 610, ISO 13709 (heavy-duty), with radial impe centreline pump feet; with inducer, if required. ATI Applications: Refineries, petrochemical and che	eller, single-stage, single-entry, EX-compliant version available.
Hyamaster			Reference no. 1312.5 / 1316.51	also available in 60 Hz

RPHb BB2 process pump to API 610

DN Q [m³/h] H [m] p [bar] T [°C] Data for 50 Hz operation	50 - 150 max. 450 max. 400 max. 100 max. +450	 Design: Horizontal, radially split volute casing pump in back pull-out design to API 610 and / or VDMA 24 297, Class A (heavy-duty), with radial impeller, single-entry, two-stage design, back-to-back impeller arrangement, centreline pump feet. Applications: Refineries, petrochemical and chemical industry.
		also available in 60 Hz

RPH-V VS4 process pump to API 610

DN Q [m ³ /h] H [m] p [bar] T [°C] Data for 50 Hz operation	40 - 150 max. 80 max. 240 max. 35 max. +230	Design: Vertical, radially split volute casing pump to API 610 and ISO 13709 (heavy-duty), with radial impeller, single-entry, single-stage. Applications: Refineries, petrochemical and chemical industry.
		also available in 60 Hz

RPHmdp Standardised chemical pump with mag-drive to API 685

DN Q [m ³ /h] H [m] p [bar] T [°C] Data for 50 Hz opera suitable for 50 and 60	Design: Horizontal, radially split volute casing pump in back pull-out design to API 685, ISO 13709 (heavy-duty), single-stage, single-entry, with radial impeller and centreline pump feet; with inducer, if required. ATEX-compliant. Applications: Refineries, petrochemical and chemical industry, power stations.
	Reference no. 1316.27/01/1316.8017/01/1316.57/01 available in 50 Hz and 60 Hz

CTN Chemical vertical shaft submersible pump

DN Q [m³/h] H [m] p [bar] T [°C] Data for 50 Hz o suitable for 50 a	25 - 250 / 250 - 400 max. 950 max. 115 max. 16 max. +300 peration, nd 60 Hz operation	dry installation, single- or double-stage, si available. ATEX-compliant version availabl	gressive liquids, also slightly contaminated or
		Reference no. 2711.5	available in 50 Hz and 60 Hz

Process pumps

API series (Nikkiso-KSB)* Refinery pump

DN	1½ - 6
Q [m ³ /h]	max. 360
H [m]	max. 220
p [bar]	max. 40
T [°C]	max. +450
Data for 50 Hz operation	

Design: Horizontal or vertical canned motor pump to API 685, single-stage, with centreline pump feet; also available with inducer.

Applications: HNP: for clean liquids; HTP: for hot fluids; HSP / HMP: for contaminated or polymerising fluids; HRP: for fluids with a steep vapour pressure curve such as liquefied gases.

also available in 60 Hz

CHTR BB5 high-pressure pump to API 610

DN Q [m ³ /h] H [m] p [bar] T [°C] n [min ⁻¹] Data for 50 Hz operat higher values availab	Design: Horizontal, high-pressure barrel-type double-entry, multistage, with flanges / weld e Applications: In refineries, in the petrochem plants.	end nozzles to DIN, API 610 and ANSI.
	Reference no. 2701	also available in 60 Hz

YNKR BB2 process pump to API 610

DN Q [m³/h] H [m] p [bar] T [°C] n [min ⁻¹] Data for 50 Hz operat higher values availabl	Design: Horizontal, radially split, single-stage, doul volute casing made of cast steel, in accordance with Applications: In refineries, in the petrochemical ir and in steam generation plants.	API 610.
	Reference no. 1139.21	also available in 60 Hz

CINCP / CINCN Vertical immersion pump for sumps and tanks

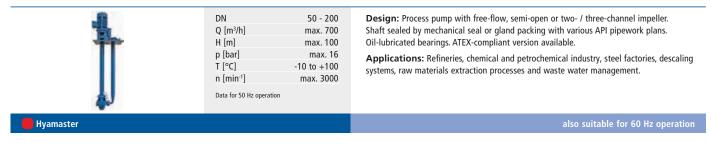
IJ	DN 32 - 200 Q [m³/h] max. 780 H [m] max. 105 p [bar] max. 10 T [°C] -10 to +100 n [min ⁻¹] max. 3000 Data for 50 Hz operation	Design: Centrifugal vertical sump pump in cantilever design, for wet or dry well installation. Semi-open impeller, pump shaft without guide bearing, supported by ball bearings in the upper section. Supplied with discharge pipe extending above the baseplate (CINCP) or without discharge pipe (CINCN). ATEX-compliant version available. Applications: Chemical and petrochemical industry, raw materials extraction processes and waste water management.
Hyamaster		also suitable for 60 Hz operation

INVCP / INVCN Vertical immersion pump for sumps and tanks

IJ	DN Q [m ³ /h] H [m] p [bar] T [°C] n [min ⁻¹] Data for 50 Hz operat	32 - 300 max. 1600 max. 116 max. 10 -10 to +100 max. 3000	Design: Centrifugal vertical sump pump, for wet or dry well installation, available with closed or semi-open impeller. Supplied with discharge pipe extending above the baseplate (INVCP) or without discharge pipe (INVCN). ATEX-compliant version available. Applications: Handling of chemically aggressive, slightly contaminated or solids-laden fluids in the chemical and petrochemical industries.
🦲 Hyamaster			also suitable for 60 Hz operation

Process pumps

RWCP / RWCN Vertical immersion pump for sumps and tanks



WKTR VS6 condensate pump to API 610

DN Q [m ³ /h] H [m] p [bar] Install. depth [m] T [°C] n [min ⁻¹] Data for 50 Hz operation	40 - 150 max. 400 max. 500 max. 51 1.6 max. 200 max. 3000	Design: Vertical can-type ring-section pump. Type VS6 multistage, first-stage impeller designed as suction imp ATEX-compliant version available. Applications: Pumping of condensate and other NPS systems, particularly in refineries and petrochemical pla	eller, radial impellers. H critical products in industrial
		Reference no. 1765.11	also available in 60 Hz

Rainwater harvesting systems

Hya-Rain[®] / Hya-Rain[®] N Rainwater harvesting system with one pump

 Rp Q [m ³ /h] H [m] p [bar] T [°C] Data for 50 Hz operation	1 max. 4 max. 43 max. 6 max. +35	Design: Ready-to-connect package rainwater harvesting system. Automatic mains water back-up if the rain water storage tank is empty, with integrated dry-running protection. Automated with automatic control unit. Applications: Rainwater and service water utilization, irrigation and spray irrigation systems.
		Reference no. 5602.51

Hya-Rain[®] Eco Rainwater harvesting system with one pump

Rp Q [m ³ /h] H [m] p [bar] T [°C] Data for 50 Hz operation	1 max. 4 max. 43 max. 6 max. +35	Design: Ready-to-connect package rainwater harvesting system. Automatic mains water back-up function if the rain water storage tank is empty, with integrated dry-running protection. Applications: Rainwater and service water utilization, irrigation and spray irrigation systems.
		Reference no. 5605.5

Pumps

Domestic water supply / swimming pools

Multi Eco[®] Multistage, self-priming centrifugal pump

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

Multi Eco®-Pro Multistage, self-priming centrifugal pump with automatic control unit

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

Multi Eco[®]-Top Domestic water supply system

	Rp	1 - 1¼	Design: Multistage, self-priming centrifugal pump in close-coupled design incl.
	Q [m³/h]	max. 8	accumulator with replaceable membrane in drinking water quality, total volume 20 or
	H [m]	max. 54	50 l, pressure switch for automatic pump operation and 1.5 m power cable. Automated
	p [bar]	max. 7	with automatic control unit.
	T [°C]	max. +50	Applications: Single- or two-family houses, agricultural facilities, spray irrigation and
	n [min ⁻¹]	max. 2800	irrigation systems, washing plants, water supply and rainwater harvesting systems.
(B)			Reference no. 5181.5

Movitec[®] VME High-pressure in-line pump in close-coupled design

	Rp Q [m ³ /h] H [m] p [bar] T [°C] n [min ⁻¹] Data for 50 Hz operation	1½ max. 9 max. 48 max. 16 max. +60 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. 	P
PumpMeter, Hyamaster			Reference no. 1798.5 also available in 60 l	Hz

IXO Submersible motor pump

	Rp Q [m³/h] H [m] T [°C] n [min ⁻¹]	1¼ max. 8 max. 65 max. +35 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.
Switchgears, Cervomatic			Reference no. 2146.5

Domestic water supply / swimming pools

Filtra N 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 ‰.

Pressure booster systems

Hya®-Solo EV Pressure booster system, 1 pump, with continuously variable speed control

Rp Q [m³/h] H [m] p [bar] T [°C] Data for 50 Hz operat	1¼ / 1½ max. 6 max. 50 max. 10 max. +60	Design: Fully automatic package pressure booster system, with 1 vertical high-pressure pump and continuously variable speed adjustment. Configuration and function to DIN 1988-500. Applications: Residential buildings, hospitals, office buildings, hotels, department stores, industry, and other applications.
		Reference no. 1951.53

Hya[®]-Solo D Pressure booster system, 1 pump

Rp / DN Q [m ³ /h] H [m] p [bar] T [°C] Data for 50 Hz operation	1¼ / 100 max. 110 max. 150 max. 16 max. +70	 Design: Fully automatic package single-pump system with 8 l membrane-type accumulator, pressure-controlled starting and stopping. 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 booster system, 1 pump

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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 system with PumpDrive, pressure-controlled starting and flow-controlled stopping. Automated with PumpDrive. 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.

Pumps

Pressure booster systems

Hya®-Compact K Pressure booster system, 2 pumps

Rp / DN 1¼ / 40 Q [m³/h] max. 10 H [m] max. 100 p [bar] max. 10 T [°C] max. +40 Data for 50 Hz operation, data for 2900 min ⁺	 Design: Fully automatic package pressure booster system with integrated standby pump. Two vertical high-pressure pumps in cascade operation, automated with BoosterControl Advanced. Integrated pressure transmitter for the suction and discharge side, respectively. Two standard volt-free changeover contacts for fault indication as standard. Configuration and function to DIN 1988-500. Stationary floor-mounted or wall-mounted installation. 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.

Hya®-Compact VP Pressure booster system, 2 pumps

Rp / DN Q [m ³ /h] H [m] p [bar] T [°C] Data for 50 Hz opera	1¼ / 40 max. 10 max. 100 max. 10 max. +40 tion, data for 2900 min ¹	Design: Fully automatic package pressure booster system with integrated standby pump. Two vertical high-pressure pumps with continuously variable speed adjustment by BoosterControl Advanced. Two standard volt-free changeover contacts integrated for fault indication. Configuration and function to DIN 1988-500. Stationary floor-mounted or wall-mounted installation. Applications: For industrial plants, water supply systems for residential and office buildings, irrigation / spray irrigation and rainwater harvesting systems, service water sup-
		ply systems in trade and industry.
		Reference no. 1972.5

Hya[®]-Eco VP Pressure booster system with continuously variable speed control of each pump

Rp / DN Q [m³/h] H [m] p [bar] T [°C] Data for 3500 min ⁻¹	2 / 80 max. 70 max. 120 max. 16 max. +70	Design: Fully automatic package pressure booster system, with 2 or 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 function to DIN 1988-500. Automated with BoosterControl Advanced. Applications: Residential buildings, hospitals, office buildings, hotels, department stores, industry, and other applications.
		Reference no. 1967.52

Hyamat[®] K Pressure booster system, 2 to 6 pumps

Rp / DN Q [m³/h] H [m] p [bar] T [°C]	1½ / 250 max. 660 max. 160 max. 16 max. +70	Design: Fully automatic package pressure booster system, with 2 to 6 vertical high-pressure pumps, fully electronic control to ensure the required supply pressure, with volt-free changeover contact for general fault indication and live-zero monitoring of the connected sensors, configuration and functions to DIN 1988-500. Automated with BoosterControl Advanced.
Data for 50 Hz operation		Applications: Residential buildings, hospitals, office buildings, hotels, department stores, industry, etc.
		Reference no. 1952.5

Hyamat[®] V Pressure booster system with continuously variable speed adjustment of one pump

	Rp / DN Q [m ³ /h] H [m] p [bar] T [°C] Data for 2900 min ³	1½ / 250 max. 660 max. 150 max. 16 max. +70	Design: Fully automatic package pressure booster system, 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 1988-500. Automated with BoosterControl Advanced. Applications: Pressure boosting in residential buildings, hospitals, office buildings, hotels, department stores, industry, etc.
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Reference no. 1953.51

Pressure booster systems

Hyamat[®] VP Pressure booster system with continuously variable speed control of each pump

Rp / DN Q [m ³ /h] H [m] p [bar] T [°C] Data for 2900 min ⁻¹	1½ / 250 max. 660 max. 150 max. 16 max. +70	 Design: Fully automatic package pressure booster system, 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 1988-500. Automated with BoosterControl Advanced and PumpDrive. Applications: Pressure boosting in residential buildings, hospitals, office buildings, hotels, department stores, industry, etc.
		Reference no. 1953.52

Hyamat[®] IK, IV, IVP Pressure booster system for industrial applications

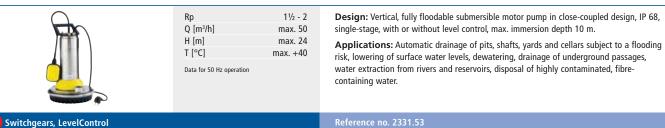
DN Q [m³/h] H [m] p [bar] T [°C] Data for 50 Hz operation	100 - 200 max. 640 max. 160 max. 16 max. +70	Design: Fully automatic package pressure booster system, with 2 to 4 vertical high- pressure pumps and fully electronic control to ensure the required supply pressure, configuration and functions to DIN 1988-500. Automated with PLC. Applications: Handling of service water and cooling water not chemically or mechanically aggressive to the pump materials in industry, etc.
		Reference no. 1950.5

Drainage pumps / waste water pumps

Ama-Drainer[®] N 301, 302, 303, 358 Submersible motor pump

	Rp 1¼ - 1½ Q [m³/h] max. 16.5 H [m] max. 12 T [°C] max. +50 (301, 302, 303) max. +35 (358) mata 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.
Switchgears, LevelControl		Reference no. 2331.51 / 2331.52

Ama-Drainer® 400/10 400/35 500/10/11 Submersible motor pump



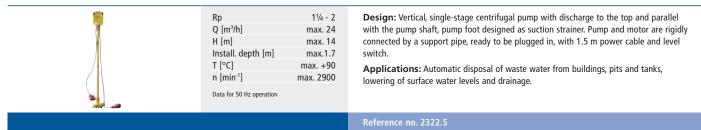
Drainage pumps / waste water pumps

Ama-Drainer[®] 80, 100 Submersible motor pump

	Rp / DN Q [m³/h] H [m] T [°C] Data for 50 Hz operation	2½ / 100 max. 130 max. 26 max. +50	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.
Switchgears, LevelControl			Reference no. 2331.54

Ama-Porter[®] F / S Submersible motor pump

	DN Q [m³/h] H [m] T [°C] Data for 50 Hz operation	50 - 65 max. 40 max. 21 max. +40	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.
Switchgears, LevelControl			Reference no. 2539.51
Rotex [®] Waste water pump			



MK / MKY Waste water, condensate and heat transfer liquid pump

	Rp / DN Q [m ³ /h] H [m] Install. depth [m] T [°C] n [min ⁻¹] Data for 50 Hz operation	2 / 50 max. 36 max. 19 max. 2.8 max. +200 max. 3500	Design: Vertical submersible pump with three-channel impeller, volute casing designed as suction strainer. 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).
Switchgears, LevelControl			Reference no. 2324.5

Lifting units / pump stations

AmaDS³ Waste water pump station with solids separation system

	Inflow rate [m³/h] 6 - 200 H [m] max. 85 T [°C] depending on pump n [min ⁻¹] depending on pump Viscosity [cP] depending on pump Higher values available upon request	Design: Waste water pump station with solids separation system. Indirect hydraulic transport of waste water, with solids separators upstream of the pumps, for maximum economic efficiency, operating reliability and ease of maintenance. Applications: Municipal and industrial waste water transport. Applications with special drainage requirements, e.g. hotels, hospitals, campgrounds, etc.
EvelControl		Reference no. 2581 / 2567.021

Ama-Drainer-Box Automatic waste water lifting unit

DN Q [m ³ /h] H [m] T [°C] Data for 50 Hz operation	40 - 50 max. 46 max. 24 max. +40	 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. Automated with switchgear and LevelControl. Volumetric tank content: 100 or 200 litres. To EN 12050. Applications: Washbasins, showers, washing machines, garage gateways, basements, rooms at risk of flooding, etc.
		Reference no. 2336.51

Ama-Drainer-Box Mini Automatic waste water lifting unit

DN Q [m ³ /h] H [m] T [°C] Data for 50 Hz operation	40 max. 10 max. 6.5 max. +35	Design: Reliable and compact waste water lifting unit in a modern design with activated carbon filter meeting hygiene requirements and with shower connection as a standard. To EN 12050-2. Applications: Automatic drainage of washbasins, showers, washing machines, dishwashers, etc.
		Reference no. 2336.52

mini-Compacta Floodable sewage lifting unit

DN Q [m³/h] H [m] T [°C] Data for 50 Hz op	32 - 100 max. 36 max. 25 max. +40 up to +65 for short periods eration	Design: Floodable single-pump or dual-pump sewage lifting unit for automatic disposal of domestic sewage and faeces below the flood level. Automated with LevelControl. Applications: Basement flats, bars, basement party rooms and saunas, cinemas and theatres, department stores and hospitals, hotels, restaurants, schools, etc.
		Reference no. 2317.54

Compacta[®] Floodable sewage lifting unit

and a	DN 80 - 1 Q [m³/h] max. 1 H [m] max. T [°C] max. 4 up to +65 for short per Data for 50 Hz operation	 of sewage and faeces below the flood level. Automated with LevelControl. Applications: Basement flats, bars, basement party rooms and saunas, cinemas and theatres, department stores and bosnitals, botels, restaurants, schools, public, buildings
		Reference no. 2317.55

Pumps

Lifting units / pump stations

CK 800-Eu Pump Station Pump station, plastic collecting tank with Amarex N S and Ama-Porter S

DN Q [m³/h] H [m] T [°C] Data for 50 Hz operation	32 - 50 max. 22 max. 49 max. +40	 Design: Ready-to-connect package single or dual pump station with PE-LLD (polyethylene) collecting tank for underground installation. Equipped with one or two Amarex N S and Ama-Porter S submersible waste water pumps without explosion protection. Collecting tank design to DIN 1986-100 and EN 752 / EN 476. Automated with LevelControl. Applications: Renovation of premises, sewage disposal in various sectors, joint sewage disposal for several residential units, pumped drainage.
		Reference no. 2334.543

Ama-Porter CK Pump Station Pump station, plastic collecting tank with Ama-Porter F

-1.	DN Q [m ³ /h] H [m] T [°C] Data for 50 Hz operation	50 - 65 max. 40 max. 21 max. +40	Design: Ready-to-connect package single or dual pump station with PE-LLD (polyethyl- ene) collecting tank for underground installation. Equipped with one or two Ama-Porter F submersible waste water pumps without explosion protection. Collecting tank design to DIN 1986-100 and EN 752 / EN 476. Automated with switchgears and LevelControl. Applications: Renovation of premises, sewage disposal in various sectors, joint sewage disposal for several residential units, pumped drainage.
			Reference no. 2334.51

Amarex N CK Pump Station Pump station, plastic collecting tank with Amarex N F

1.	DN Q [m³/h] H [m] T [°C] Data for 50 Hz operation	50 - 65 max. 50 max. 39 max. +40	Design: Ready-to-connect package single or dual pump station with PE-LLD (polyethyl- ene) collecting tank for underground installation. Equipped with one or two Amarex N F submersible waste water pumps, also available with explosion protection. Collecting tank design to DIN 1986-100 and EN 752 / EN 476. Automated with LevelControl. Applications: Renovation of premises, sewage disposal in various sectors, joint sewage disposal for several residential units, pumped drainage.
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Evamatic-Box Sewage lifting unit



DN	50 - 65
Q [m ³ /h]	max. 40
H [m]	max. 21
T [°C]	max. +40
Data for 50 Hz operation	

Design: Single-pump or dual-pump sewage lifting unit with one or two 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



Submersible motor pumps

Amarex[®] N S32 Submersible motor pump DN 32

	DN Q [m³/h] H [m] T [°C] Data for 50 Hz operation	32 max. 16.5 max. 29.5 max. +40	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. ATEX-compliant version available. 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.
Switchgears, LevelControl			Reference no. 2563.51

Amarex[®] N Submersible motor pump DN 50 to 100

	DN Q [m³/h] H [m] T [°C] Data for 50 Hz operation	50 - 100 max. 190 max. 49 max. +60	Design: Vertical, single-stage submersible motor pump or transportable design. Amarex N pumps are floodable, close-coupled units which are not self-priming. ATEX-con Applications: Handling of all types of waste water, esp containing long fibres and solid substances, fluids contai activated and digested sludge, dewatering / water extract surfaces subject to a flooding risk.	single-stage, single-entry npliant version available. pecially untreated sewage ning gas / air, as well as raw,
Switchgears, LevelControl			Reference no. 2563.5	also available in 60 Hz

Amarex[®] KRT[®] Submersible motor pump DN 40 to DN 700

	DN Q [m ³ /h] H [m] T [°C] n [min ⁻¹] Data for 50 Hz operation	40 - 700 max. 10080 max. 120 max. +60 max. 2900	Design: Vertical, single-stage submersible motor pump in c impeller types, for wet or dry installation, stationary and trar ATEX-compliant version available. Applications: Handling of all types of abrasive or aggress waste water engineering as well as industry, especially untre fibres and solid substances, fluids containing gas / air, as we and digested sludge; seawater desalination.	nsportable version. ive waste water in water and eated sewage containing long
PumpDrive, Hyamaster, Amacontrol, Switchgears, LevelControl			Reference no. 2553.5	also available in 60 Hz

Amarex[®] KRT[®] dry-installed, with cooling jacket Submersible motor pump DN 100 to DN 700

	DN Q [m ³ /h] H [m] p [bar] T [°C] n [min ⁻¹] Data for 50 Hz opera	100 - 700 max. 10080 max. 120 max. 10 max. +40 max. 1450	Design: Vertical, single-stage submersible mimpeller types, dry installation. Applications: Handling of all types of wast industry, especially sewage containing long fil gas / air, as well as raw, activated and digeste	e water in waste water engineering and bres and solid substances, fluids containing
PumpDrive, Hyamaster, Amacontrol, Switchgears, LevelControl			Reference no. 2553.5	also available in 60 Hz

Amarex[®] KRT[®] wet / dry, with energy-saving motor Submersible motor pump DN 80 to DN 200

	DN Q [m ³ /h] H [m] T [°C] n [min ⁻¹] Data for 50 Hz operation	80 - 200 max. 550 max. 25 max. +40 max. 1450	Design: Horizontal or vertical single-stage submersible design, with various impeller types, for wet or dry instal transportable version, with energy-saving motor. Applications: Handling of all types of waste water in industry, especially sewage containing long fibres and s gas / air, as well as raw, activated and digested sludge.	llation, stationary and waste water engineering and olid substances, fluids containing
PumpDrive, Hyamaster, Amacontrol, Switchgears, LevelControl			Reference no. 2553.5	also available in 60 Hz

Submersible pumps in discharge tubes

Amacan[®] K Submersible motor pump with non-clogging impeller

	DN Q [m ³ /h] H [m] T [°C] n [min ⁻¹] Data for 50 Hz operation	700 - 1400 max. 7200 max. 30 max. +40 max. 980	Applications: Handling of pre-cleaned, che effluents and sewage, fluids not containing a and sills, as waste water, mixed water and ac plants, irrigation and drainage pumping syste	mically neutral waste water, industrial ny stringy substances pretreated by screens tivated sludge pump in effluent treatment
🛑 Hyamaster, Amacontrol			Reference no. 1579.5	also available in 60 Hz

Amacan[®] P Submersible motor pump with axial propeller

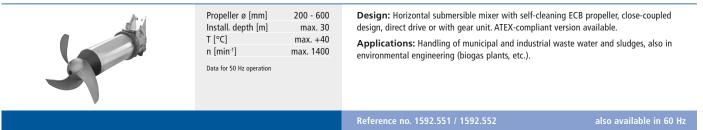
	DN Q [m³/h] H [m] T [°C] n [min ^{.1}] Data for 50 Hz operation	500 - 1500 max. 25200 max. 12 max. +40 max. 1450	Design: Wet-installed, submersible motor pump v for installation in discharge tubes, single-stage, sin available. Applications: Irrigation and drainage pumping s handling of raw and clean water in water and efflu in power stations and industrial plants, industrial v and flood control systems, aquaculture.	ngle-entry. ATEX-compliant version stations, stormwater pumping stations, uent treatment plants, of cooling water
Hyamaster, Amacontrol			Reference no. 1580.5	also available in 60 Hz

Amacan[®] S Submersible motor pump with mixed flow impeller

	DN Q [m ³ /h] H [m] T [°C] n [min ⁻¹] Data for 50 Hz operation	650 - 1300 max. 10800 max. 40 max. +30 max. 1450	Design: Wet-installed submersible motor pump with for installation in discharge tubes. ATEX-compliant ver Applications: Handling of water without stringy sub drainage pumping systems, general water supply syste flood control systems.	sion available. Instances in irrigation and
Hyamaster, Amacontrol			Reference no. 1589.5	also available in 60 Hz

Mixers / agitators / tank cleaning units

Amamix Submersible mixer



Amaprop Submersible agitator

R	Propeller ø [mm] Install. depth [m] T [°C] n [min ^{.1}]	1000 - 2500 max. 30 max. +40 max. 109	Design: Horizontal submersible agitator with self-cleaning ECB propeller, close-coupled design, equipped with coaxial spur gear. ATEX-compliant version available. Applications: In environmental engineering, particulary for circulating, keeping in suspension and inducing flow in municipal and industrial waste water and sludges; in nitrification and denitrification tanks, activated sludge tanks, mixing tanks, final storage tanks, biological phosphate elimination tanks, flocculation tanks and in biogas applications.
			Reference no. 1592.505

Amajet Cleaning system

DN	100 - 150	Design: Stationary or portable unit with horizontal or vertical submersible motor
Q [m³/h]	max. 195	propulsive jet pump with non-clogging free-flow impeller. Motor rating 5.5 to 27 kW.
T [°C]	max. +40	Available variants: Amajet, SewerAmajet, SwingAmajet, MultiAmajet.
n [min ⁻¹]	max. 1450	Applications: Cleaning of stormwater tanks and storage sewers.

Amaline Submersible motor recirculation pump

DN Q [m³/h] H [m] T [°C] n [min ⁻¹]	300 - 800 max. 5400 max. 2 max. +40 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, bolt-free connection to the discharge pipe. ATEX-compliant version available. Applications: Recirculation of activated sludge in waste water treatment systems.
		Reference no. 1594.5

Pumps

Pumps for solids-laden fluids

Sewatec[®] / Sewabloc Dry-installed volute casing pump

	DN Q [m ³ /h] H [m] p [bar] T [°C] n [min ⁻¹] Data for 50 Hz operation	50 - 700 60 - 10000 max. 95 max. 10 max. +70 max. 2900	Design: Horizontal or vertical volute casing pump with free- multi-channel (K) and diagonal single vane (D) impellers, disc ANSI standards. ATEX-compliant version available. Applications: Handling of sewage and all types of waste w management and industry.	harge flange to DIN and
🛑 Hyamaster, PumpDrive, LevelControl			Reference no. 2580.5 / 2580.45 / 2580.35	also available in 60 Hz

KWP® / KWP®-Bloc Non-clogging impeller centrifugal pump / close-coupled unit

O	DN Q [m³/h] H [m] p [bar] T [°C] n [min ⁻¹] Data for 50 Hz op also available in 6	 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-channel impeller, free-flow impeller. ATEX-compliant version available. Applications: Handling of pre-treated sewage, waste water, all types of slurries without stringy substances and pulps up to 5 % bone dry.
Hyamaster		Reference no. 2361.5 / 2362.5 / 2361.450 / 2361.453 / 2361.460

Slurry pumps

WBC Slurry pump



Q [m³/h]	max. 13600
H [m]	max. 80
o [bar]	max. 40
[°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



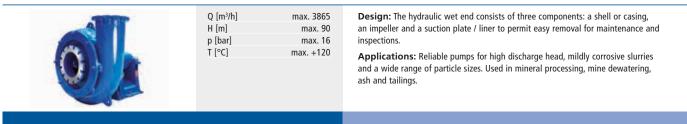
Q [m³/h]	max. 14000
H [m]	max. 90
p [bar]	max. 16
T [°C]	max. +120

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.

Slurry pumps

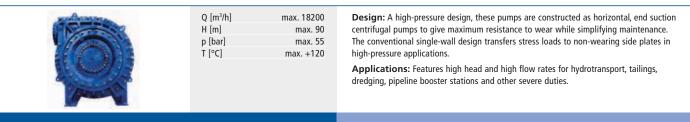
LCC-M Slurry pump



LCC-R Slurry pump

Q (m³/h) H (m) p (bar) T (°C)	max. 3865 max. 90 max. 16 max. +120	Design: Interchangeable rubber and metal design allows 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



LCV Slurry pump

Q [m ³ /h] H [m] p [bar] T [°C]	max. 1360 max. 38 max. 14 max. +120	Design: Vertical cantilever, rugged hard metal sump pump with bottom suction and no submerged bearings. Replaceable wet end parts in metal alloys with a durable mechanical end. Applications: Ideal for industrial process pumping, tailings disposal in mining and pit use.

FGD Slurry pump

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

Slurry 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 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.

MHD Slurry pump



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

Design: Designed to provide high flow / medium head with high efficiency for high volume transportation in long pipelines.

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 over short distance.

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

MDX Slurry pump



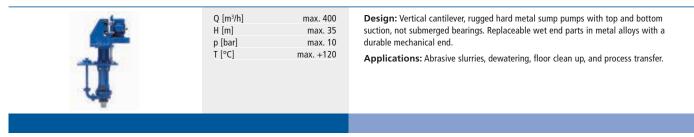
Q [m³/h]	max. 14000
H [m]	max. 90
p [bar]	max. 16
T [°C]	max. +120

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.

Slurry pumps

ZW Slurry pump



HVF Slurry pump

Q [m³/h] H [m] p [bar] T [°C]	max. 400 max. 35 max. 10 max. +120	Design: Provides continuous operation without shutdown or operator intervention. The new hydraulic design removes air from the impeller eye while the pump is running, and the pump can be retrofitted into any existing operation. Applications: For use in all froth pumping applications in both the mineral processing and industrial minerals industries.

Self-priming pumps

Etaprime[®] L Self-priming pump for pure or contaminated liquids

DN Q [m³/h] H [m] p [bar] T [°C] Data for 50 Hz operation	25 - 125 max. 180 max. 85 max. 10 max. +90	Design: Horizontal, long-coupled, self-priming volute casing design, single-stage, with open multi-vane impeller. ATEX-com Applications: Handling of pure, contaminated or aggressive abrasive substances and / or solids.	pliant version available.
		Reference no. 2745.5	also available in 60 Hz

Etaprime[®] B / BN Self-priming close-coupled pump for pure or contaminated liquids

DN Q [m ³ /h] H [m] p [bar] T [°C] Data for 50 Hz operation	25 - 100 max. 130 max. 72 max. 10 max. +90	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). ATEX-compliant version available. Applications: Handling of pure, contaminated or aggressive liquids not containing abrasive substances and / or solids.

Reference no. 2746.5

Pumps

Self-priming pumps

MZ Self-priming multistage liquid ring pump

8	DN	20 - 50
7	Q [m ³ /h]	max. 21
100	H [m]	max. 140
	p [bar]	max. 16
-	T [°C]	-5 to +120
	n [min ⁻¹]	max. 1500
	Data for 50 Hz operation	

Design: Self-priming multistage liquid ring pump in close-coupled design, with mechanical seal or gland packing.

Applications: Boiler feed, sanitary hot water, hydrophore systems for fresh and seawater, and fresh water pre-heating.

also available in 60 Hz

Submersible borehole pumps

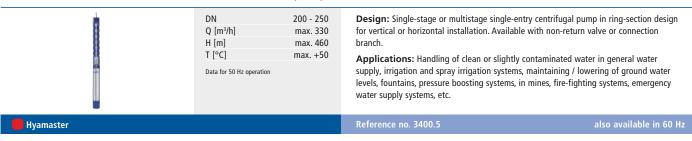
S 100D / UPA 100C Submersible borehole pump

	DN Q [m ³ /h] H [m] T [°C] Data for 50 Hz operation	100 max. 16 max. 400 max. +30	Design: Multistage centrifugal pump in ring-section design, for installation, impellers made of plastic (S 100D) or stainless stee diameters of 100 mm (4 inches) and above, available with sing three-phase motor with motor lead. Applications: Domestic water supply, irrigation and spray irr of ground water levels, fire-fighting systems, cooling circuits, fountains, pressure boosting and air-conditioning systems.	el (UPA 100C) for well le-phase a.c. motor or
Switchgears, Cervomatic			Reference no. 3400.5	also available in 60 Hz



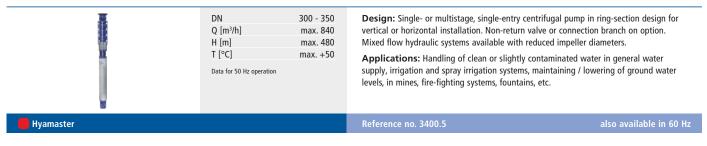


UPA 200, 200B, 250C Submersible borehole pump



Submersible borehole pumps

UPA 300, 350 Submersible borehole pump



UPZ, BSX-BSF Submersible borehole pump

DN Q [m³/h] H [m] T [°C] Data for 50 Hz operation	> 350 max. 2200 max. 1500 max. +50	Design: Single- or multistage, single-entry (BSX-E pump in ring-section design for vertical or horizon Applications: Handling of clean or slightly conta of ground water levels, in mines.	tal installation.
		Reference no. 3470.021	also available in 60 Hz

BEV Deep-well vertical turbine pump

Q H T T	80 - 400 Q [m³/h] max. 2200 H [m] max. 350 D [bar] max. 40 T [°C] +5 to +75 n [min ⁻¹] max. 3000	 Design: Vertical multistage deep-well turbine pump with closed impellers. Column section with bearing, shaft sleeve; shaft sealed by gland packing. Driven by electric motor or diesel engine. ATEX-compliant version available. Applications: Handling of clean water, agriculture, irrigation and collection, public water supply, industry, fire-fighting, etc.
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also available in 60 Hz

High-pressure pumps, fixed / variable speed

Movitec[®] V / LHS / VS / VC High-pressure in-line pump

	Rp / DN Q [m ³ /h] H [m] p [bar] T [°C] n [min ⁻¹] Data for 50 Hz opera	1 - 2 / 25 - 100 max. 113 max. 401 max. 40 max. +140 max. 2900	Design: Multistage, vertical high-pressure centrifuga suction and discharge nozzles of identical nominal dia other (in-line design), close-coupled. ATEX-compliant v Applications: Spray irrigation, irrigation, washing, v pressure boosting systems, hot water and cooling wat etc.	weters arranged opposite to each version available. water treatment, fire-fighting and
PumpMeter, Hyamaster			Reference no. 1798.5	also available in 60 Hz

Movitec® VCI High-pressure in-line pump

	Rp / DN Q [m ³ /h] H [m] p [bar] T [°C] n [min ⁻¹] Data for 50 Hz oper	1¼ - 2 / 32 - 45 max. 27 max. 250 max. 40 max. +120 max. 2900	Design: Multistage, vertical high-pressure imm on a tank or platform. Applications: Machine tools, industrial machi painting systems.	
PumpMeter, Hyamaster			Reference no. 1798.54	also available in 60 Hz

Movitec[®] PumpDrive High-pressure in-line pump with motor-mounted variable speed system

	DN Q [m³/h] H [m] p [bar] T [°C] n [min ⁻¹]	25 - 100 max. 113 max. 401 max. 40 max. +140 max. 2900	Design: Multistage, vertical high-pressure of suction and discharge nozzles of identical no other (in-line design), close-coupled and mot Applications: Spray irrigation, irrigation, w pressure boosting systems, hot water and con etc.	minal diameters arranged opposite to each or-mounted variable speed system. vashing, water treatment, fire-fighting and
📳 🛑 PumpMeter			Reference no. 1798.5 + 4070.5	also suitable for 60 Hz operation

Multitec[®] High-pressure pump in ring-section design

	DN Q [m ³ /h] H [m] p [bar] T [°C] n [min ⁻¹] Data for 50 Hz and	32 - 150 max. 850 max. 630 (1000) max. 63 (100) -10 to +200 max. 4000	Design: Multistage horizontal or vertical cer long-coupled or close-coupled, with axial or r turned in steps of 90°, cast radial impellers. A Applications: Water and drinking water su boosting systems, irrigation systems, in powe reverse osmosis and washing plants, snow gu	radial suction nozzle, discharge nozzle can be NTEX-compliant version available. pply systems, general industry, pressure r stations, heating, filter, fire-fighting,
🛑 PumpMeter, Hyamaster, PumpDrive			Reference no. 1777.5	available in 50 Hz and 60 Hz

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

	DN Q [m ³ /h] H [m] p [bar] T [°C] n [min ⁻¹]	32 - 125 max. 180 max. 630 max. 63 max. +140 max. 4000	Design: Multistage horizontal or vertical cen long-coupled and close-coupled variant, with a impellers and motor-mounted variable speed s Applications: Water and drinking water sup boosting systems, irrigation systems, in power reverse osmosis and washing plants, snow gu	axial or radial suction nozzle, cast radial ystem. ply systems, general industry, pressure stations, heating, filter, fire-fighting,
🛞 🛑 PumpMeter			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 Q [m ³ /h] H [m] p [bar] Tstandard model [°C] Thot water model [°C] n [min ¹] Data for 50 Hz operation, higher values available upc	80 - 350 max. 2880 max. 210 max. 25 max. +80 max. +140 max. 2900	Design: Single-stage, axially split volute casing pun installation, with double-entry radial impeller, mating Applications: For handling water with a low solid irrigation and drainage pumping stations, desalinatic power plants, fire-fighting systems, shipbuilding, dist	flanges to DIN, EN or ASME. s content, e.g. in waterworks, on systems for water extraction,
📕 Hyamaster, PumpMeter			Reference no. 1384.5 / 1384.3940	also available in 60 Hz

RDLO Axially split volute casing pump DN 350-700

DN Q [m ³ /h] H [m] p [bar] Tstandard model [°C] Thot water model [°C] n [min ⁻¹] Data for 50 Hz operation, higher values available up	350 - 700 max. 10000 max. 240 max. 25 max. +80 max. +140 max. 1500	Design: Single-stage, axially split volute casing pump installation with double-entry radial impeller, mating f Applications: For handling water with a low solids irrigation and drainage pumping stations, desalination power plants, fire-fighting systems, shipbuilding, distri	flanges to DIN, EN or ASME. content, e.g. in waterworks, n systems for water extraction,
		Reference no. 1387.5 / 1387.391	also available in 60 Hz

RDLP Axially split volute casing pump DN 350-1200

DN Q [m ³ /h] H [m] p [bar] T _{standard model} [°C] n [min ⁻¹]	350 - 1200 max. 18000 max. 550 max. 64 max. +80 max. 1500	Design: Single-, two- or three-stage, axially split volute casing pump for horizontal installation with double-entry radial impeller, mating flanges to DIN, ISO or ANSI. Applications: For handling water with a low solids content in water works and long-distance water supply systems.
Data for 50 Hz operation, higher values available up		

also available in 60 Hz

Hygienic pumps

Vitachrom[®] Rolled steel centrifugal pump

	DN Q [m³/h] H [m] p [bar] T [°C] Data for 50 Hz operation	50 - 125 max. 340 max. 100 max. 12 max. +140	Design: Maintenance-free, non-priming, close-coupled back pull-out design. The pump features a semi-open in surfaces. It is very easy to clean by CIP and SIP thanks volume or narrow clearances. Its wetted components a (AISI 316L/CF3M) stainless steel. Vitachrom is EHEDG-c with FDA standards. Applications: Hygienic handling of fluids in the food industries as well as in the chemical industry.	mpeller and electropolished to its almost complete lack of dead re made of 1.4404/1.4409 ertified and its materials comply
Hyamaster, PumpDrive			Reference no. 1966.5	also available in 60 Hz

Vitacast[®] Investment cast centrifugal pump

and a	DN Q [m³/h] H [m] p [bar] T [°C] Data for 50 Hz operatio other values available to	 Design: Maintenance-friendly volute casing pump components made of 1.4404/1.4409 (AISI 316L/CF3I little dead volume; open impeller, electropolished su design for the highest requirements on cleanability (TNO Nutrition and Food Research Institute to EHEDC trolley (accessory). Applications: Hygienic handling of fluids in the foc industries as well as in the chemical industry. 	M) stainless steel. Designed with very rface, excellent efficiency. Hygienic (CIP/SIP-compatible), certified by the G standards. Also available with a
PumpDrive		Reference no. 1969.51	also available in 60 Hz

Vitaprime[®] Self-priming centrifugal pump

-	DN Q [m ³ /h] H [m] p [bar] T [°C] Data for 50 Hz operatio other values available u	Design: Maintenance-friendly self-priming s all wetted components made of 1.4404/1.440 design for the highest requirements on cleana with a trolley (accessory). Applications: Hygienic handling of fluids ir industries as well as in the chemical industry.	9 (AISI 316L/CF3M) stainless steel. Hygienic ability (CIP/SIP-compatible). Also available n the food, beverage and pharmaceutical
PumpDrive		Reference no. 1969.54	also available in 60 Hz

Vitastage[®] Multistage centrifugal pump

H [P [l T [' Date	bar] max. 16	Design: Multistage centrifugal pump in close-coupled installation. All wetted components made of 1.4401/1 steel. Versatile, robust and especially energy-efficient. Applications: Processes in the food and beverage in industry with moderate hygienic requirements.	.4408 (AISI 316/CF8M) stainless
PumpDrive PumpDrive		Reference no. 1969.55	also available in 60 Hz

Vitalobe[®] Rotary lobe pump

	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Design: Sturdy rotary lobe pump in hygienic design, bi-dire horizontal and vertical orientation of connections. Hygienic d wetted components made of 1.4404/1.4409 (AISI 316L/CF3M rotor types and process connections available. Pump set with with a trolley (accessory). Applications: Hygienic and gentle handling of sensitive or food, beverage and pharmaceutical industries as well as in th general process engineering.	lesign, CIP/SIP-compatible, all 1) stainless steel; various 1 geared motor. Also available 1 high-viscosity fluids in the
Frequency inverter		Reference no. 1969.53	also available in 60 Hz

Pumps for power station conventional islands

CHTA / CHTC / CHTD Boiler feed pump

DN Q [m ³ /h] H [m] p [bar] T [°C] n [min ⁻¹] Data for 50 Hz operation higher values available u	Design: Horizontal, high-pressure barrel-type pump double-entry, multistage, with flanges / weld end no Applications: Handling of feed water and condens facilities, generation of pressurized water for bark pe equipment.	zzles to DIN and ANSI. sate in power stations and industrial
	Reference no. 1860.1	also available in 60 Hz

HGB / HGC[®] / HGD Boiler feed pump

DN Q [m ³ /h] H [m] p [bar] T [°C] n [min ⁻¹] Data for 50 Hz operat higher values availabl	Design: Horizontal, radially split, multistage ring single- or double-entry. Applications: Handling of feed water and conc facilities, generation of pressurized water for barl snow guns, etc.	lensate in power stations and industrial
	Reference no. 1850.02	also available in 60 Hz

HGM[®] Boiler feed pump

DN Q [m³/h] H [m] p [bar] T [°C] n [min ⁻¹] Data for 50 Hz operation higher values available	Design: Horizontal, radially split, product-lubricated radial impellers, axial and radial single-entry inlet. Applications: Handling of feed water in power sta condensate in industrial facilities.	
	Reference no. 1856.02	also available in 60 Hz

YNK Boiler feed booster pump

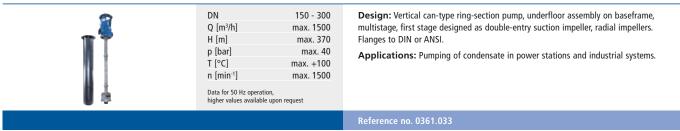
DN Q [m ³ /h] H [m] p [bar] T [°C] n [min ⁻¹] Data for 50 Hz operation, higher values available up	125 - 600 max. 3700 max. 280 max. 40 max. +210 max. 1800	Design: Horizontal, radially split, single-stage, double-en (booster system) with single or double cast steel volute ca Applications: Handling of feed water in power stations	asing.
		Reference no. 1135.021	also available in 60 Hz

LUV[®] / LUVA Boiler recirculation pump

DN Q [m ³ /h] H [m] p [bar] T [°C] n [min ⁻¹] Higher values available u	100 - 550 max. 7000 max. 300 max. 350 max. +380 max. 3600	stage. Suitable for very high inlet pressures motor to VDE. Product-lubricated bearings, ASME or IBR.	no need for oil supply systems. Design to TRD, forced-circulation, forced-flow and combined-
		Reference no. 1128.023	available in 50 Hz and 60 Hz

Pumps for power station conventional islands

WKTB Condensate pump



SEZ / SEZT / PHZ / PNZ Tubular casing pump

Q [m ³ /h] H [m] T [°C] n [min ⁻¹] Data for 50 Hz opera higher values availab	propeller (PHZ) or axial propeller (PNZ). F	
	Reference no. 1471.02	available in 50 Hz and 60 Hz

SNW / PNW Tubular casing pump

DN Q [m ³ /h] H [m] p [bar] T [°C] n [min ⁻¹] Data for 50 Hz operation, higher values available upo	350 - 800 max. 9000 max. 50 max. 10 max. +60 max. 1500	Design: Vertical tubular casing pump with mixed fi (PNW), single-stage, with maintenance-free Residur arranged above or below floor. Applications: Irrigation and drainage systems, sto of raw and pure water, water supply systems, handli	shaft bearings, discharge nozzle rmwater pumping stations, handling
		Reference no. 1481.5 / 1591.5	available in 50 Hz and 60 Hz

Beveron Concrete volute casing pump

Q [m³/s] H [m] Data for 50 Hz operat higher values availabl	Design: Concrete volute casing pump w with maintenance and lubricant-free Resi Applications: Coast protection and floc low-lift pumping stations, reservoir filling, raw and pure water.	dur bearings. od control, irrigation and drainage,
	Reference no. 1.471.021	available in 50 Hz and 60 Hz

SPY Cooling water pump

	DN Q [m ³ /h] H [m] p [bar] T [°C] n [min ⁻¹] Data for 50 Hz operation, higher values available up	350 - 1200 max. 21600 max. 50 max. 10 max. +105 max. 1480	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.
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Reference no. 2834.02

Pumps for nuclear power plants

RER Reactor coolant pump

DN Q [m³/h] H [m] p [bar] T [°C] n [min ⁻¹] Higher values availabl	max. 800 max. 40000 max. 140 max. 175 max. +350 max. 1800 e upon request	Design: Vertical, single-stage reactor coolant p plated on the inside, with diffuser; either with ir supported by motor bearing. Applications: Reactor coolant recirculation in	ntegrated pump thrust bearing or shaft
		Reference no. 1682.021	available in 50 Hz and 60 Hz

RSR Reactor coolant pump

DN Q [m ³ /h] H [m] p [bar] T [°C] n [min ⁻¹] Higher values available upor	max. 750 max. 24000 max. 215 max. 175 max. +350 max. 1800	Design: Vertical, single-stage reactor coolant pu supported by motor bearing. Applications: Reactor coolant recirculation in r BWR).	
		Reference no. 1665.021	available in 50 Hz and 60 Hz

RUV Reactor coolant pump

DN Q [m ³ /h] H [m] p [bar] T [°C] n [min ¹] Higher values available	max. 650 max. 22000 max. 111 max. 155 max. +350 max. 1800 e upon request	Design: Vertical, single-stage reactor coola wet winding motor and integrated flywheel. systems required. Applications: Reactor coolant recirculatio (PWR).	
		Reference no. 1669.021	available in 50 Hz and 60 Hz

PSR Reactor internal pump

Sector	DN Q [m ³ /h] H [m] p [bar] T [°C] n [min'1] Higher values available	max. 600 max. 9000 max. 45 max. 75 max. +300 max. 2000 upon request	Design: Vertical pump set integrated in the <i>r</i> with leak-free, low-maintenance wet winding Applications: Reactor coolant recirculation	motor.
			Reference no. 1576.021	available in 50 Hz and 60 Hz

\boldsymbol{RHD} Feed water pump

DN Q [m³/h] H [m] p [bar] T [°C] n [min ⁻¹] Higher values available upp	125 - 500 max. 6500 max. 1000 max. 150 max. +210 max. 6500	Design: Horizontal, single-stage, double-entry ma forged variant. Applications: Main feed water supply (MFWS) i power plants.	
		Reference no. 1668.023	available in 50 Hz and 60 Hz

Pumps for nuclear power plants

LUV® Nuclear Reactor coolant / reactor water clean-up pump

DN Q [m³/h] H [m] p [bar] T [°C] Higher values available	40 - 600 max. 7000 max. 300 max. 320 max. +430	Design: Vertical pump with integrated moto for very high inlet pressures and temperature Product-lubricated bearings, no need for oil s KTA, etc. Applications: As reactor water clean-up pu coolant pump RCP in boiling water and press pump in test facilities.	s. Integrated wet winding motor to VDE. upply systems. Design to ASME Section 3, ump RWCP in boiling water reactors, reactor
		Reference no. 1128.022	available in 50 Hz and 60 Hz

RHM Pump for safety-related and auxiliary systems

DN Q [m ³ /h] H [m] p [bar] T [°C] n [min ⁻¹] Higher values availab	max. 150 max. 300 max. 2100 max. 220 max. +180 max. 8000	Design: Horizontal, multistage barrel pull-ou Applications: Core flooding, emergency cod RHRS, chemical and volume control systems C and medium-pressure safety injection systems water systems EFWS, start-up and shutdown f charging.	, ing and residual heat removal systems VCS, control rod drive systems CRDS, high- HPSI / LPSI / MHSI / LHSI, emergency feed
		Reference no. 1666 021	available in 50 Hz and 60 Hz

RVM Pump for safety-related and auxiliary systems

DN Q [m ³ /h] H [m] p [bar] T [°C] n [min ⁻¹] Higher values availabl	max. 85 max. 50 max. 200 max. 200 max. +100 max. 6000 e upon request	Design: Vertical, multistage barrel pull-out pump. Applications: Core flooding, emergency cooling and residual heat removal systems RHRS, chemical and volume control systems CVCS, high- and medium-pressure safety injection systems HPSI / LPSI.

RHR Pump for safety-related and auxiliary systems

.	DN Q [m³/h] H [m] p [bar] T [°C]	max. 500 max. 6000 max. 190 max. 63 max. +200	Design: Horizontal annular casing pump with forged or cast pressure boundary and diffuser. Applications: Core flooding, emergency cooling and residual heat removal systems RHRS, ancillary systems, acid feed system and low-pressure injection system LPSI, component cooling water system CCWS, essential service water system ESWS.
	n [min ⁻¹]	max. 3600	

RVR Pump for safety-related and auxiliary systems

125	

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: Vertical annular casing pump with forged or cast pressure boundary and diffuser.

Applications: Core flooding, emergency cooling and residual heat removal systems RHRS / RNS, ancillary systems, acid feed system and low-pressure injection system LPSI, component cooling water system CCWS, essential service water system ESWS.

Reference no. 1662.021

available in 50 Hz and 60 Hz

Pumps for desalination by reverse osmosis

RPH®-RO Booster pump



HGM[®]-RO High-pressure pump

DN Q [m ³ /h] H [m] p [bar] T [°C] n [min ⁻¹] Data for 50 Hz opera higher values availab	Design: Horizontal, radially-split, product-lub radial impellers and plain bearings. Axial and r super-duplex stainless steel variant also suitab Applications: High-pressure pump for RO se	adial single-entry inlet. Duplex and le for chilled water applications.
	Reference no. 1582.12	also available in 60 Hz

Multitec[®]-RO High-pressure pump in ring-section design

50 Hz and 60 Hz

Salino **Pressure Center** High-pressure pump with integrated energy recovery device

	Q [m ³ /h] p [bar] T [°C] n [min ⁻¹] Data for 50 Hz and 60	max. 23 max. 100 max. +50 max. 1750 Hz operation	Design: Axial piston pump with integrated e super-duplex stainless steel. Product-lubricate Applications: RO seawater desalination for	ed (oil-free).
Hyamaster, PumpDrive			Reference no. 1859.81	available in 50 Hz and 60 Hz

Positive displacement pumps

RC / RCV Helical gear pump

DN	20 - 100
 Q [m³/h]	max. 78
H [m]	max. 100
p [bar]	max. 10
T [°C]	+5 to +80
n [min ⁻¹]	max. 1500
Data for 50 Hz operation	

Design: Helical gear pump, self priming, with by-pass valve, available in close-coupled design, horizontal design with baseplate, or vertical design. With mechanical seal. **Applications:** Fuel feed, fuel, lube oil and viscous fluids transfer, lubrication systems.

also suitable for 60 Hz operation

IPR Reciprocating piston pump

DN Q [m ³ /h] H [m] p [bar] T [°C] n [min ⁻¹] Data for 50 Hz operation	80 - 150 max. 150 max. 70 max. 10 +5 to +50 max. 1500	Design: Reciprocating piston pump. Vertical installation, with gearbox to reduce crankshaft speed to below 270 rpm. Applications: Bilge, deck washing and fire-fighting.
		also suitable for 60 Hz operation

Fire-fighting systems

FFS Fire-fighting system

12.0000	DN	32 - 300
Survey Distances	Q [m³/h]	max. 840
	H [m]	max. 140
State A TAL	p [bar]	max. 16
	T [°C]	+5 to +50
The second second second	n [min ⁻¹]	max. 3000
A MERICAN CONTRACT	Data for 50 Hz operation	

Design: Automatic fire-fighting system, consisting of jockey pump and one or several duty pumps, with electric motor or diesel engine. Includes manifold, valves, accessories and control unit. To EN 12845, CEA 4001, UNE-23500, NFPA-20, FM, etc.

Applications: Office buildings, hotels, industry, shopping malls, etc.

also suitable for 60 Hz operation

FFU Fire-fighting system

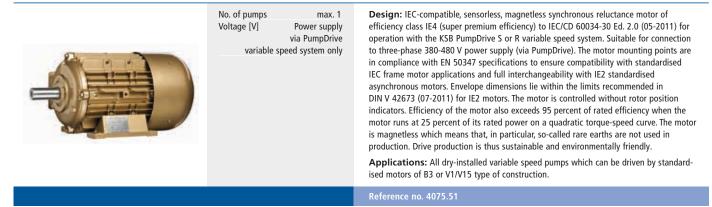


DN	32 - 350
Q [m³/h]	max. 2500
H [m]	max. 150
p [bar]	max. 25
T [°C]	+5 to +50
n [min ⁻¹]	max. 3000
Data for 50 Hz operation	

Design: Automatic fire-fighting system, consisting of pumps with electric motor or diesel engine and control unit. To EN 12845, CEA 4001, UNE-23500, NFPA-20, FM, etc. Applications: Office buildings, hotels, industry, shopping malls, etc.

Automation and drives

SuPremE® Magnetless synchronous reluctance motor of efficiency class IE4 to IEC/CD 60034-30 Ed. 2.0



Control units

Controlmatic E Automatic control unit

No. of pumps Voltage [V]	max. 1 1~230	Design: Single-pump control system for starting, stopping and monitoring pumps. Applications: Water supply systems, in combination with pump types Multi Eco, Multichrom S, Ixo, S 100D, etc.
		Reference no. 5125.53

Controlmatic E.2 Automatic control unit

No. of pumps Voltage [V]	max. 1 1~230	Design: Single-pump control system for starting, stopping and monitoring pumps. Applications: Water supply systems, in combination with pump types Multi Eco, Multichrom S, Ixo, S 100D, etc.
		Reference no. 5125.1785

Cervomatic EDP.2 Automatic control unit

No. of pumps Voltage [V]	max. 1 1~230 / 3~400	Design: Single-pump control unit for pressure-controlled starting and either pressure-controlled or flow-controlled stopping as well as monitoring pumps. Applications: In water supply systems using, for example, Multi Eco, Ixo, S 100D and UPA 150C.
		Reference no. 5125.178

Control units

LevelControl Basic 2 Level control unit



 No. of pumps
 max. 2

 [kW]
 max. 22

 Voltage [V]
 1~230 / 3~400

 Higher values available upon request

 $\mbox{Design:}$ 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.

Reference no. 4041.5

UPA Control Control system for submersible borehole pumps



No. of pumps	max. 1
[kW]	3
Voltage [V]	1~230 / 3~400

Design: Single-pump control unit for submersible borehole pumps, submersible motor
pumps and dry-installed pumps.
Applications: Water supply systems, in combination with pump types S 100D,
UPA 150S, etc.

Reference no. 3465.1

hyatronic N Pump control system for cascade starting and stopping



 No. of pumps
 max. 6

 [kW]
 22

 Voltage [V]
 3~400

 Higher values available upon request

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

Applications: Water supply systems.

Reference no. 0543.5026

Speed control systems

PumpDrive Self-cooling, motor-independent variable-speed system

No. of pumps FI 1 [kW] Voltage [V]	max. 6 per pump / motor 45 3~380 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 the 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

hyatronic spc Pump control system for continuously variable speed adjustment

······································	No. of pumps Fl [kW] Voltage [V]	max. 1 max. 1 7.5 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

Hyamaster ISB Pump control system for continuously variable speed adjustment

No. of pumps FI [kW] Voltage [V]	max. 8 max. 2 200 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

Hyamaster SPS Pump control system for continuously variable speed adjustment

No. of pumps FI [kW] Voltage [V]	max. 4 1 per pump 650 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

Monitoring and diagnostic systems

PumpMeter Intelligent pressure transmitter



No. of pumps max. 1 Type see pump type series Installation factory-mounted, IP65 Voltage 24 V DC

Design: The PumpMeter device is an intelligent pressure transmitter for pumps, with on-site display of measured values and operating data. The device consists of two pressure sensors and a display unit. It records the load profile of the pump in order to indicate any potential for optimising energy efficiency and availability. **Applications:** For monitoring the operation of a centrifugal pump.



Amacontrol Monitoring system for submersible waste water pumps



No. of pumps max. 1 Type Amacan Installation mounting plate IP20 Voltage 230 V AC Design: Monitoring system for submersible waste water pumps with shutdown.

Reference no. 2316.5

Control system

BOA-Systronic®



No. of pumps	max. 1
PN	6 / 10 / 16
DN	20 - 200
Voltage [V]	24 VAC
T [°C]	+20 to +120

Higher values available upon request

Design: Energy-saving system for the coordinated operation of pump and control valve. The system provides an all-in solution designed to access untapped hydraulic savings potential. Irrespective of the pump technology used, it allows savings of 50 % in pump electricity while also reducing primary energy costs thanks to lower return flow temperatures. The system can be combined with all control systems and pumps with a 0-10 V control input. Straightforward integration in automation systems with optional BACnet gateway.

Applications: Supply temperature control in HVAC installations with volume flow rates of 0.5 to 185 m³/h and temperature differentials of 3 to 30 °K. Threaded (DN20) or flanged (DN25-DN200) line connections; suitable for upgrading installed systems and for new systems, for connection to all types of heat generators (boiler or district heating), all main feed manifolds, all control systems, all supply temperatures.

Reference no. 7540.1

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