

### **Product Portfolio 2019**

### Valves I Actuators I Automation



# **Type Series Index**

ACTAIR NG	62	ECOLINE GTV 150-300	39	SISTO-VentNA
	61	ECOLINE PTF 150-600	43	SMARTRONIC AS-i
ACTELEC (AUMA)				
ACTELEC (BERNARD CONTROLS)	61	ECOLINE PTF 800	43	SMARTRONIC MA
AKG-A/AKGS-A	37	ECOLINE SCC 150-600	46	SMARTRONIC PC
	45		46	
AKR/AKRS		ECOLINE SCF 150-600		STAAL 100 AKD/AKDS
AMTROBOX	64	ECOLINE SCF 800	47	STAAL 100 AKK/AKKS
AMTROBOX ATEX Zone 22	64	ECOLINE SCV 150-300	47	STAAL 40 AKD/AKDS
AMTROBOX EEx ia	64	ECOLINE SP/SO	37	STAAL 40 AKK/AKKS
AMTROBOX F	64	ECOLINE VA 16	29	
AMTROBOX M	64	ECOLINE WT/WTI	45	TRIODIS 150
		ECOLINE WI/WII	73	
AMTROBOX R	65			TRIODIS 300
AMTROBOX R EEx ia	65	HERA-BD	40	TRIODIS 600
AMTROBOX R Ex d	65	HERA-BDS	41	
AMTRONIC	65	HERA-BHT	41	UGS
AMTRONIC Ex ia	66	HERA-SH	41	
				14/4 D.A. CL. 150
APORIS	52	HQ	61	WADA GL 150
				WADA GT 150
BOACHEM-FSA	49	ISORIA 10/16	51	WADA LC 150
BOACHEM-RXA	43	ISORIA 20 UL	51	WADA SC 150
BOACHEM-ZXA	29	ISORIA 20/25	51	
BOACHEM-ZXAB	27			ZJSVM/RJSVM
		I/F		
BOA-Compact	25	KE	52	ZRN
BOA-Compact EKB	25			ZRS
BOA-Control SAR	33	MAMMOUTH	51	ZTN
BOA-Control/BOA-Control IMS	33	MN	60	ZTS
BOA-CVE C/CS/W/IMS/EKB	32	MP-CI/MP-II	54	ZXNB
BOA-CVE H	32		60	
		MR	00	ZXNVB
BOA-CVP H	33			ZYNB/ZYN
BOA-H	26	NORI 160 RXL/RXS	42	
BOA-H Mat E	32	NORI 160 ZXL/ZXS	28	
BOA-H Mat P	32	NORI 160 ZXLF/ZXSF	28	
BOA-H/HE/HV/HEV	26	NORI 320 ZXSV	28	
BOA-R	42	NORI 40 FSL/FSS	49	
BOA-RFV	42	NORI 40 RXL/RXS	42	
	41		27	
BOA-RPL		NORI 40 ZXL/ZXS		
BOA-RVK	42	NORI 40 ZXLB/ZXSB	26	
BOA-S	48	NORI 40 ZXLBV/ZXSBV	26	
BOA-SuperCompact	25	NORI 40 ZXLF/ZXSF	28	
BOAVENT-AVF	35	NORI 40 ZYLB/ZYSB	26	
BOAVENT-SIF	35	NORI 500 ZXSV	28	
BOAVENT-SVA	35	NUCA/-A/-ES, Type V	44	
BOAVENT-SVF	35	NUCA/-A/-ES, Types I, II, IV	31	
BOA-W	25			
BOAX-B	50	PROFIN-SI3FIT/-SI3IT/-SI3LIT	55	
BOAX-B DVGW	51	PROFIN-VT1	54	
BOAX-B Gaz	50	PROFIN-VT2L	55	
BOAX-CBV13	50	PROFIN-VT3/-VT3L/-VT3F/-VT33L	56	
BOAX-S/SF	50			
BOAX-S/SF Gaz	50	RGS	43	
DOAX-3/31 Gaz	50			
		RJN	44	
CLOSSIA	54	RMD	63	
COBRA-SCBS	45		44	
		RYN	44	
COBRA-SGP/SGO/SGF	36			
COBRA-SMP	36	S/SR/SP	60	
COBRA-TDC01/03	48	SERIE 2000	46	
CONDA-VLC	34	SICCA 150-600 GLC	30	
CONDA-VRC	34	SICCA 150-600 GTC	39	
CONDA-VSM	34		47	
		SICCA 150-600 SCC		
CR/CM	60	SICCA 800-2500 GTF	39	
		SICCA 800-4500 GLF	30	
DANAÏS 150	E2			
DANAÏS 150	52	SICCA 800-4500 PCF	43	
DANAÏS MTII	52	SICCA 900-2500 GLC	30	
DANAÏS TBTII	53	SICCA 900-3600 GTC	39	
DUALIS	54	SICCA 900-3600 SCC	47	
DYNACTAIR NG	62	SISTO-10	56	
		SISTO-10M	57	
ECOLINE DI C 1000				
ECOLINE BLC 1000	55	SISTO-16	57	
ECOLINE BLT 150-300	55	SISTO-16RGA	57	
ECOLINE FYC 150-600	49		57	
		SISTO-16S		
ECOLINE FYF 800	49	SISTO-16TWA/HWA/DLU	57	
ECOLINE GE1/GE2/GE3	59	SISTO-20	58	
ECOLINE GE4	59	SISTO-20NA	58	
ECOLINE GLB 150-600	27	SISTO-C	58	
ECOLINE GLB 800	27	SISTO-C LAP	63	
ECOLINE GLC 150-600	29	SISTO-DrainNA	58	
ECOLINE GLF 150-600	29	SISTO-KB	56	
ECOLINE GLF 800	29	SISTO-KBS	56	
ECOLINE GLV 150-300	30	SISTO-KRVNA	36	
ECOLINE GT 40	37	SISTO-LAD	62	
ECOLINE GTB 800	38	SISTO-LAE	61	
ECOLINE GTC 150-600	38	SISTO-LAP	62	
ECOLINE GTF 150-600	38	SISTO-RSK/RSKS	46	
ECOLINE GTF 800	38	SISTO-RSKNA	48	
LCCLINE GII 000	20	WAINCH-O I CIC	40	

### **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 170 service centres worldwide
- Approximately 3,000 service specialists





# Single-source supplier: your partner for pumps, valves and service

A comprehensive product range, short response times and tailored service and spare parts solutions – no other competitor offers a comparable range of products and services. In all phases of the product life cycle, we are on hand to ensure that our customers secure long-term value from their systems. We offer our customers a variety of services and spare parts solutions around pumps, valves, and other rotating equipment – also for non-KSB products:

- Technical consultancy
- Installation and commissioning
- Services provided on-site and in our service centres
- Inspection and maintenance
- Maintenance inspection management
- Framework agreements such as TPM® Total Pump Management
- Reverse engineering

- Efficiency analysis with SES System
   Efficiency Service or Pump Operation Check
- Retrofitting as an alternative to buying a new product
- Spare parts in manufacturer's quality
- On-site training sessions
- Refurbishment and decommissioning
- Inventory management

Ready wherever you are: with a global service network and a 24-hour emergency service.





### Our mission:

### **Certified quality assurance**

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

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

#### Our five key goals:

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



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





Industry 4.0: we have experience with the future

Digital networking of production systems is one of the key challenges ahead. An expert in engineering with long-standing experience in developing Industry 4.0 solutions, KSB is your ideal partner to achieve:

- Resource efficiency and optimised use of materials
- Availability and operating reliability
- Flexibility through short-term reconfigurability
- Reduction of time to market

Increase your system's productivity already today with KSB's smart products and services: Use our intelligent technologies designed to communicate, such as PumpDrive and PumpMeter, to lay a foundation for your smart factory. Find out more about our future-driven solutions at www.ksb.com/industry40



### **KSB Trademarks**

Apart from the KSB umbrella brand, the following brand names identify quality products and services by the KSB Group:



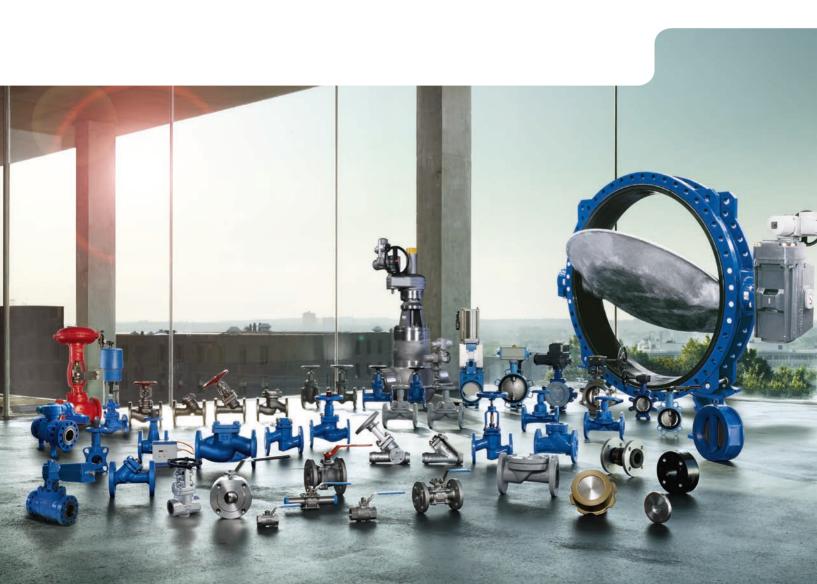
#### **Butterfly valves**

Under the AMRI brand, KSB sells its butterfly valves. They are used in building services, industry, water engineering and power generation applications. AMRI products include pneumatic, hydraulic and electric valve actuators as well as control systems.



#### Diaphragm valves

Under the SISTO brand, KSB sells its diaphragm valves. They perform shut-off duties in building services, industrial, water management and power generation applications. Under this brand name, KSB offers special valves for sterile processes including biotech applications.



### **General Information**

Regional products	Not all depicted products are available for sale in every country. Products only available in individual regions are indicated accordingly. Please contact your sales representative for details.
Key to actuators	In the Products section from page 25 the symbol ■ in conjunction with the relevant letter indicates the actuator type(s) available.  ■ m = manual (lever, handwheel, etc.) ■ e = electric actuator ■ p = pneumatic actuator ■ h = hydraulic actuator
Trademark rights	All trademarks or company logos shown in the catalogue are protected by trademark rights owned by KSB SE & Co. KGaA and/or a KSB Group company. The absence of the "®" symbol should not be interpreted to mean that the term is not a registered trademark.

### **Valves**

				t t				ort	als/
			Automation	Water Transport and Treatment	Industry	Energy Conversion	<b>Building</b> Services	Solids Transport	Pharmaceuticals/ Food
Design/Application	Type series	Page	Aut	Wa	Ind	Cor	Bui	Soli	Pha Foo
	BOA-SuperCompact	25							
Soft-seated globe valves to DIN/EN	BOA-Compact	25							
Soft scatca globe valves to blively	BOA-Compact EKB	25							
	BOA-W	25							
	BOA-H	26							
	BOA-H/HE/HV/HEV	26							
Bellows-type globe valves to DIN/EN	NORI 40 ZXLBV/ZXSBV	26				•			
	NORI 40 ZXLB/ZXSB	26							
	NORI 40 ZYLB/ZYSB	26				•			
	BOACHEM-ZXAB	27					_		
Bellows-type globe valves to ANSI/ASME	ECOLINE GLB 150-600	27							
	ECOLINE GLB 800	27							
	NORI 40 ZXL/ZXS	27							
	NORI 40 ZXLF/ZXSF	28							
	NORI 160 ZXL/ZXS	28							
Globe valves to DIN/EN with gland packing	NORI 160 ZXLF/ZXSF	28							
Globe valves to blively with gland packing	NORI 320 ZXSV	28							
	NORI 500 ZXSV	28							
	BOACHEM-ZXA	29							
	ECOLINE VA 16	29							
	ECOLINE GLC 150-600	29							
	ECOLINE GLF 150-600	29							
	ECOLINE GLF 800	29				•			
Globe valves to ANSI/ASME with gland packing	ECOLINE GLV 150-300	30				•			
Globe valves to / 11/5/1/ 15/1/12 With gland packing	SICCA 150-600 GLC	30							
	SICCA 900-2500 GLC	30							
	SICCA 800-4500 GLF	30							
	WADA GL 150	30							
	NUCA/-A/-ES, Types I, II, IV	31							
Globe valves for nuclear applications	ZXNB	31				•			
diose valves for fluctear applications	ZXNVB	31							
	ZYNB/ZYN	31							
Automated globe valves to DIN/EN	BOA-H Mat E	32							
	BOA-H Mat P	32							
	BOA-CVE C/CS/W/IMS/EKB	32							
Control valves to DIN/EN	BOA-CVE H	32							
	BOA-CVP H	33							
Balancing and shut-off valves to DIN/EN	BOA-Control/BOA-Control IMS	33							
	BOA-Control SAR	33							
Level control valves to DIN/EN	CONDA-VLC	34							
Pressure reducing valves to DIN/EN	CONDA-VRC	34							
Pressure sustaining valves to DIN/EN	CONDA-VSM	34							
	BOAVENT-AVF	35							
Air valves to DIN/EN	BOAVENT-SIF	35							
	BOAVENT-SVA	35							
	BOAVENT-SVF	35							
Vent valves for nuclear applications	SISTO-VentNA	36							
	SISTO-KRVNA	36							

				port				port	icals/
			Automation	Water Transport and Treatment	Industry	Energy Conversion	<b>Building</b> Services	Solids Transport	Pharmaceuticals/ Food
Design/Application	Type series	Page	Aut	Wat	Indu	Ene Con	Buil	Soli	Pha Foo
	COBRA-SGP/SGO/SGF	36							
	COBRA-SMP	36							
	ECOLINE SP/SO	37							
Gate valves to DIN/EN	ECOLINE GT 40	37							
date valves to blively	STAAL 40 AKD/AKDS	37							
	STAAL 100 AKD/AKDS	37							
	AKG-A/AKGS-A	37				_			
	ZTS	38							
	ECOLINE GTB 800	38							
	ECOLINE GTC 150-600	38				_			
	ECOLINE GTF 150-600	38			_	-			
C ANGUAGNE	ECOLINE GTF 800	38				-			
Gate valves to ANSI/ASME	ECOLINE GTV 150-300	39				-			
	SICCA 150-600 GTC	39		_	+	-			
	SICCA 900-3600 GTC SICCA 800-2500 GTF	39 39			-	-			
	WADA GT 150	39		_	-	_			
Gate valves for nuclear applications	ZTN	40			_				
Body pressure relief valve	UGS	40	_						
Knife gate valves to DIN/EN	HERA-BD	40		-					
Killie gate valves to bliv/Liv	HERA-BDS	41					-		
Knife gate valves to ANSI/ASME	HERA-BHT	41							
Table gate valves to , was , is in a	HERA-SH	41							
	BOA-RPL	41							
	BOA-RFV	42							
	BOA-RVK	42		_		•			
	BOA-R	42							
Lift check valves to DIN/EN	NORI 40 RXL/RXS	42							
	NORI 160 RXL/RXS	42							
	RGS	43							
	BOACHEM-RXA	43							
	ECOLINE PTF 150-600	43							
Life also also also also ANGUAGNE	ECOLINE PTF 800	43							
Lift check valves to ANSI/ASME	SICCA 800-4500 PCF	43							
	WADA LC 150	44							
	NUCA/-A/-ES, Type V	44							
Lift check valves for nuclear applications	RJN	44							
	RYN	44							
	COBRA-SCBS	45		_					
	ECOLINE WT/WTI	45							
	STAAL 40 AKK/AKKS	45							
Swing check valves to DIN/EN	STAAL 100 AKK/AKKS	45							
9	AKR/AKRS	45				_			
	ZRS	46				_			
	SISTO-RSK/RSKS	46		_	_				
	SERIE 2000	46							
	ECOLINE SCC 150-600	46				_			
	ECOLINE SCF 150-600	46				-			
	ECOLINE SCF 800	47				-			
Swing check valves to ANSI/ASME	ECOLINE SCV 150-300	47				-			
	SICCA 150-600 SCC	47			_	-			
	SICCA 900-3600 SCC	47				-			
	WADA SC 150	47							
Swing check valves for nuclear applications	SISTO-RSKNA	48				-			
	ZRN	48							

Design/Application	Type series	Page	Automation	Water Transport and Treatment	Industry	Energy Conversion	Building Services	Solids Transport	Pharmaceuticals/ Food
Tilting disc check valves to DIN/EN	COBRA-TDC01/03	48							
	BOA-S	48							
Strainers to DIN/EN	NORI 40 FSL/FSS	49					-		
	BOACHEM-FSA	49							
Strainers to ANSI/ASME	ECOLINE FYC 150-600	49							
Strainers to ANSI/ASIVIE	ECOLINE FYF 800	49							
	BOAX-CBV13	50					-		
	BOAX-S/SF	50					-		
	BOAX-S/SF Gaz	50							
	BOAX-B	50							
	BOAX-B Gaz	50							
Centred-disc butterfly valves	BOAX-B DVGW	51							
	ISORIA 10/16	51							
	ISORIA 20/25	51							
	ISORIA 20 UL	51							
	MAMMOUTH	51							
	KE	52							
	APORIS	52							
Double offeet buttoufly velves	DANAÏS 150	52							
Double-offset butterfly valves	DANAÏS MTII	52							
	DANAÏS TBTII	53							
	TRIODIS 150	53							
Triple-offset butterfly valves	TRIODIS 300	53							
	TRIODIS 600	53							
Butterfly valves for nuclear applications	CLOSSIA	54							
Combined butterfly/check valves	DUALIS	54							
Circle gives hall solves	MP-CI/MP-II	54							
Single-piece ball valves	PROFIN-VT1	54							
Two piece hell values	ECOLINE BLT 150-300	55							
Two-piece ball valves	PROFIN-VT2L	55					-		
	ECOLINE BLC 1000	55							
Three-piece ball valves	PROFIN-SI3FIT/-SI3IT/-SI3LIT	55							
	PROFIN-VT3/-VT3L/-VT3F/-VT33L	56							
	SISTO-KB	56							
	SISTO-KBS	56							
	SISTO-10	56							
	SISTO-10M	57							
Coft and discharge we have to DINIEN	SISTO-16	57							
Soft-seated diaphragm valves to DIN/EN	SISTO-16S	57							
	SISTO-16RGA	57							
	SISTO-16TWA/HWA/DLU	57							
	SISTO-20	58							
	SISTO-C	58							
Diaphragm values for muslage services	SISTO-20NA	58							
Diaphragm valves for nuclear applications	SISTO-DrainNA	58							
Feed water bypass valves	ZJSVM/RJSVM	59							
Europeian and anti-disease : 1	ECOLINE GE1/GE2/GE3	59							
Expansion and anti-vibration joints	ECOLINE GE4	59							

### **Actuators**

Design/Application	Type series	Page	Water Transport and Treatment	Industry	Energy Conversion	Building Services	Solids Transport	Pharmaceuticals/ Food
Levers	CR/CM	60						
Levers	S/SR/SP	60						
Manual gearbox	MN	60						
Mariual gearbox	MR	60						
	ACTELEC (AUMA)	61						
Electric actuators	ACTELEC (BERNARD CONTROLS)	61						
	SISTO-LAE	61						
Hydraulic actuators	HQ	61						
	ACTAIR NG	62						
	DYNACTAIR NG	62						
Pneumatic actuators	SISTO-LAD	62						
	SISTO-LAP	62						
	SISTO-C LAP	63						
Control accessories	RMD	63						

KSB offers a wide range of actuators. Just contact our specialists.

### **Automation**

Design/Application	Type series	Page	Water Transport and Treatment	Industry	Energy Conversion	Building Services	Solids Transport	Pharmaceuticals/ Food
	AMTROBOX	64						
	AMTROBOX EEx ia	64						
	AMTROBOX ATEX Zone 22	64						
N. A. a. a. i. a. a. i. a.	AMTROBOX F	64						
Monitoring	AMTROBOX M	64						
	AMTROBOX R	65						
	AMTROBOX R EEx ia	65						
	AMTROBOX R Ex d	65						
ON/OFF reduce as at well as	AMTRONIC	65						
ON/OFF valve controllers	AMTRONIC Ex ia	66						
Pariti	SMARTRONIC MA	66						
Positioners	SMARTRONIC AS-i	66						
Intelligent positioners	SMARTRONIC PC	67						

		BOA-SuperCompact	BOA-Compact	BOA-Compact EKB	BOA-W		воа-н	BOA-H/HE/HV/HEV	NORI 40 ZXLBV/ZXSBV	NORI 40 ZXLB/ZXSB	NORI 40 ZYLB/ZYSB	BOACHEM-ZXAB		ECOLINE GLB 150-600	ECOLINE GLB 800		NORI 40 ZXL/ZXS	NORI 40 ZXLF/ZXSF	NORI 160 ZXL/ZXS	NORI 160 ZXLF/ZXSF	NORI 320 ZXSV	NORI 500 ZXSV	BOACHEM-ZXA	ECOLINE VA 16		SICCA 150-600 GLC	SICCA 900-2500 GLC	SICCA 800-4500 GLF	<b>ECOLINE GLC 150-600</b>	ECOLINE GLF 150-600	<b>ECOLINE GLF 800</b>	ECOLINE GLV 150-300	WADA GL 150			
Abrasive fluids	z				-	z							Щ			<u>g</u>	,								ور											_
Waste water with faeces	N												ASR			packing	Г								Ŕ									П		_
Waste water without faeces	0				(	ם כ							1SI/			pa									pa											
Aggressive fluids	es t					es							A			gland									and							$\Box$		Ш		
Inorganic fluids	/alv			4		globe valves to DIN/EN	4				_		s tc			lg c	_	╙							lg c	_		Ш			Ш	<u> </u>	Ш	Ш		_
Activated sludge	be \			$\perp$		oe	4	4			_		alve	_	L	Mit	L	╄	_	_	L				Wit	_		$\square$			Ш	<u> </u>	Ш	$\square$	_	_
Brackish water	glol			_	_ -	<u> </u>	_	4	_	_	_		e V	_	L	ä	L	-	-	_			_		NE.	_					Ш	<u> </u>	Ш	$\square$	_	_
Service water	be	H			-	be	_	_	_	_		_	dole	L	L		L	+_	+	-	L	_	_		ASI	-	<u> </u>		_	_	H	<u> </u>	$\square$	$\vdash \vdash$	-	_
Steam Distillate	Soft-seated globe valves to DIN/EN	H	_	+	-1	Bellows-type		_		-		_	Bellows-type globe valves to ANSI/ASME	_		Globe valves to DIN/EN with				-	-		•		Globe valves to ANSI/ASME with gland packing	_	-		_	-			$\vdash\vdash$	$\vdash$	$\dashv$	_
Explosive fluids	off-	Н		+	-12	<u></u>	$\dashv$					_	s-ty			ves									O A	<u> </u>	_	$\vdash$	_	H	H	$\vdash$	$\vdash\vdash$	$\vdash$	$\dashv$	—
Digested sludge	Ň	H		+	-	Be -		_	-	-	-	-	O.W.	-	-	val	F	Ι-	-	-	-	-	-		es t	_		H	_		Н	$\vdash$	H	$\vdash$	$\dashv$	—
Solids-laden fluids				+	$\exists$	-	+	$\dashv$	$\dashv$	$\dashv$	$\dashv$		Bell		H	ppe	H	+	+	1					valv	-		H	_		H		H	H	$\dashv$	—
Solids (ore, sand, gravel, ash)				$\dashv$	-	-	$\dashv$	$\dashv$	$\dashv$		$\dashv$			Н	H	ਰੱ	H	$\vdash$	+						pe	$\vdash$		М			Н		Н	Н	$\dashv$	_
Flammable fluids																									응						П		П	П	$\exists$	_
River, lake and groundwater				$\dashv$			$\neg$										Г	$\top$										П					П	$\Box$		_
Liquefied gas																																		П		_
Fluids containing gas																																				
Gases																	Ŀ																	Ш		
Harmful fluids				_		H											L	_								L		$\square$			Ш	<u></u>	Ш	$\square$		
Toxic fluids				_	4	H		=+									L	+_	-	<u> </u>	L	_	_	L		L	_	$\vdash$	_	_	H	<u> </u>	Ш	$\vdash$	_	_
High-temperature hot water		H	_	٠.		H	_	4			Ц			▝		_	Ŀ									Ŀ		-					$\vdash\vdash$	$\vdash \vdash$	$\dashv$	
Heating water Highly aggressive fluids			_		4	-		$\dashv$			$\dashv$	_				-	H	+	-	-								Ц			H	$\vdash$	$\vdash\vdash$	$\vdash$	$\dashv$	—
Condensate				+	-	H		=								-				-								H	_		H	$\vdash$	$\vdash$	Н	$\dashv$	—
Corrosive fluids				+	-	H	-	_	-	-		Ŧ					H	<del>-</del>	-				Ħ	-		-		$\vdash$	_	-	$\vdash$	$\vdash$	$\vdash$	$\vdash$	$\dashv$	—
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Cleaning agents		H		+	-		+	$\dashv$	$\dashv$		$\dashv$			_	$\vdash$		-	+	+					Н		_		Н			Н	$\vdash$	Н	$\vdash$	$\dashv$	—
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		NUCA/-A/-ES, Types I, II, IV	ZYNB/ZYN	ZXNB	ZXNVB		BOA-H Mat E	BOA-H Mat P		BOA-CVE C/CS/W/IMS/EKB	BOA-CVE H	BOA-CVP H		BOA-Control /BOA-Control IMS	BOA-Control SAR		CONDA-VLC		CONDA-VRC		CONDA-VSM		BOAVENT-AVF	BOAVENT-SVF	BOAVENT-SIF	BOAVENT-SVA		SISTO-VentNA	SISTO-KRVNA						
Abrasive fluids	S		Ι.	1	Τ,		F	_	7	_	_			_	-				_				$\overline{}$	_	_	_		•	<u>.</u>	$\top$	$\top$		$\top$	$\top$	
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Waste water without faeces	icat			$\top$	$\top$	ੂਰ			₫			Н	≧		$\exists$		$\exists$	ੂ		ā		Air valves					icat		$\dashv$	$\top$	+	$\top$	+	$\top$	
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Brackish water	וי		Т			go			tro				t-of			otro		cini		- Ei							r n		$\neg$	$\top$	$\top$		$\top$		
Service water	P P		İ	T		o o			Ç				shu			CO		edu		stai							o to			T	$\top$		T		
Steam	Globe valves for nuclear applications					Automated globe valves to							Balancing and shut-off valves to DIN/EN			Level control		Pressure reducing valves to DIN/EN		Pressure sustaining valves to						П	Vent valves for nuclear				$\top$				
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Solids-laden fluids													ĕ																						
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Seawater	-	-	-	+	+		Н				_	Н	-		-		-		-	-	-	-	-						_	+	+	+	+	+	-
Fluids containing mineral oils	-	-	┢	+	+					_		П	-		$\dashv$		$\dashv$		-	-	-	-	$\dashv$							+	+	+	+	+	-
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Polymerising/crystallising fluids		-		+	+	-	$\vdash$					Н	-				-		-	-	-	-	-				-		-	+	+	+	+	+	-
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Grey water		-	+	+	+		-	$\vdash$				Н		-	-				T					П	_	П				+	+	+	+	+	+
Brine	-	-	+	+	+		-	$\vdash$				Н		$\dashv$	$\dashv$		-1		-						_				-	+	+	+	+	+	+
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		COBRA-SGP/SGO/SGF				STAAL 40 AKD/AKDS	STAAL 100 AKD/AKDS				0	<b>ECOLINE GTC 150-600</b>	<b>ECOLINE GTF 150-600</b>	0	<b>ECOLINE GTV 150-300</b>	TC	GTC	GTF																	ξ.	XS
		%ed	۵	/20	т 40	KD/	AKD	AKG-A/AKGS-A			<b>ECOLINE GTB 800</b>	TC 15	TF 15	<b>ECOLINE GTF 800</b>	IV 15	SICCA 150-600 GTC	SICCA 900-3600 GTC	SICCA 800-2500 GTF	150																NORI 40 RXL/RXS	NORI 160 RXL/RXS
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		OBR/	COBRA-SMP	<b>ECOLINE SP/SO</b>	<b>ECOLINE GT 40</b>	AAL	IAAL	KG-∆	ZTS		00 100 100 100 100 100 100 100 100 100	100 100 100 100 100 100 100 100 100 100		SOLII	100 100 100 100 100 100 100 100 100 100	S	S	Ą	WADA GT 150		ZTN		HERA-BD		HERA-BDS	HERA-BHT	HERA-SH		NGS		BOA-RPL	<b>BOA-RFV</b>	BOA-RVK	BOA-R	ORI 4	ORI 1
Abrasive fluids		ŏ	ŏ	ш	Ж	N.	2	₹	7		Ж	ш	ш	ш	ш	S	S	S	>		7	_	Ξ		Ī	豆	포	10	Ď		×	ă	ĕ	<u>~</u>	ž	Ž
Waste water with faeces	Gate valves to DIN/EN						$\dashv$	$\dashv$	_	Gate valves to ANSI/ASME	_						_	$\vdash$	+	Gate valves for nuclear applications		Knife gate valves to DIN/EN		Knife gate valves to ANSI/ASME	H			Body pressure relief valves	$\vdash$	Lift check valves to DIN/EN			H	Н	$\vdash$	_
Waste water without faeces	5						$\dashv$	$\dashv$	_	¥ N								$\vdash$	+	icat		5	Ħ	N/S				f va	$\vdash$	5			H	Н	$\Box$	_
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Service water				П			$\neg$	$\neg$		ate									$\top$	for		fe ç	П	ate				þ	П	t c			П	$\Box$	$\Box$	_
Steam										Ü									-	ves	d	Kni		e g	$\Box$			ВС	П	=			П			
Distillate							$\neg$	$\neg$										$\vdash$	$\top$	val				nif	$\Box$								П	П	$\Box$	_
Explosive fluids				П	П	П			┰		П							$\vdash$	$\top$	ate				×	$\Box$				П				П	$\Box$		
Digested sludge							$\neg$	$\neg$											$\top$	G			П										П	П	$\Box$	_
Solids-laden fluids								$\neg$											$\top$				П										П	П	$\Box$	_
Solids (ore, sand, gravel, ash)				П														T											П				П	П	П	_
Flammable fluids				П														T											П				П			
River, lake and groundwater								$\neg$															П											П	$\Box$	_
Liquefied gas				П																													П	П	П	_
Fluids containing gas				П																													П			
Gases				П																																
Harmful fluids				П																													П			
Toxic fluids																		$\vdash$															П			
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Volatile fluids																																				
Fire-fighting water																																				
Solvents																																				
Seawater																																				
Fluids containing mineral oils																																				
Oils																																				
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Polymerising/crystallising fluids																																	Ш			
Radioactive fluids																			_		П								Ш				Ш		Ш	
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Grey water				Ш			_	_						_	_				_								ш		Ш				Ш	$\vdash$	Ш	_
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vvasn water				ш																	ш		Ш		Ш				Ш		ш		Ш	ш		—

		KGS	BOACHEM-RXA		ECOLINE PTF 150-600	ECOLINE PTF 800	SICCA 800-4500 PCF	WADA LC 150		NUCA/-A/-ES, Type V	RJN	RYN		COBRA-SCBS	ECOLINE WT/WTI	STAAL 40 AKK/AKKS	STAAL 100 AKK/AKKS	AKR/AKRS	ZRS	SISTO-RSK/RSKS	SERIE 2000		ECOLINE SCC 150-600	<b>ECOLINE SCF 150-600</b>	<b>ECOLINE SCF 800</b>	ECOLINE SCV 150-300	SICCA 150-600 SCC	SICCA 900-3600 SCC	WADA SC 150		SISTO-RSKNA	ZRN		COBRA-TDC01/03		
Abrasive fluids	z		П	ш					SL				z						Π			ш								SC			z			$\top$
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Waste water without faeces				SII					lica					П				Г				SI/								lica						$\top$
Aggressive fluids	ift check valves to			Lift check valves to ANSI/ASME					Lift check valves for nuclear applications				Swing check valves to	П				Г				Swing check valves to ANSI/ASME								Swing check valves for nuclear applications			Tilting disc check valves to DIN/EN			$\top$
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Activated sludge	×			lves					alor				k V	П				Г				lves								rcle			×			$\top$
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Solids-laden fluids									=																					vin						
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Flammable fluids																																				
River, lake and groundwater																																				
Liquefied gas																																				
Fluids containing gas																																				
Gases																																				
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Mining	Gate valves to DIN/EN									Gate valves to ANSI/ASME										Gate valves for nuclear applications		Knife gate valves to DIN/EN		Knife gate valves to ANSI/ASME				Body pressure relief valves		Lift check valves to DIN/EN			$\Box$	$\Box$		
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### Soft-seated globe valves to DIN/EN

#### **BOA-SuperCompact**



DN ≥ -10 - ≤ +120 T [°C]

6/10/16 Description:

20 - 200 Globe valve to DIN/EN with wafer-type body, super-compact DN face-to-face length to EN 558/94, slanted seat, bonnetless; with flange alignment holes for centring, dead-end service and downstream dismantling; insulating cap with anticondensation feature as standard, position indicator, locking device, travel stop, soft main and back seat; maintenance-free, full insulation possible.

Hot-water heating systems up to 120 °C. Air-conditioning systems. Not suitable for fluids containing mineral oils, steam or fluids liable to attack EPDM and grey cast

iron. Other fluids on request.

http://shop.ksb.com/catalog/k0/en/product/ES000312

#### **BOA-Compact**



DN 15 - 200 T [°C] ≥ -10 - ≤ +120

6/16 Description:

Globe valve to DIN/EN with flanged ends, short face-to-face length to EN 558/14, slanted seat, bonnetless, EPDM-encapsulated throttling plug, soft main and back seat, position indicator, locking device, travel stop, insulating cap with anticondensation feature; maintenance-free, full insulation possible.

Applications:

Hot-water heating systems up to 120 °C. Air-conditioning systems. Not suitable for fluids containing mineral oils, steam or fluids liable to attack EPDM and grey cast iron. Other fluids on request,

http://shop.ksb.com/catalog/k0/en/product/ES000310

#### **BOA-Compact EKB**



DN T [°C] 10/16 Description:

≥ -10 - ≤ +80

15 - 200 Globe valve to DIN/EN with flanged ends, compact face-to-face length for drinking water supply systems, with electrostatic plastic coating inside and outside, slanted seat, bonnetless, EPDM-encapsulated throttling plug, position indicator, locking device, travel stop, soft main and back seat; maintenance-free (PN 10 DVGWapproved).



Water supply systems, drinking water, air-conditioning systems. Cooling circuits. Suitable for installation in copper pipes as per installation instructions (operating manual). Not suitable for fluids containing mineral oils, steam or fluids liable to attack EPDM and the electrostatic plastic coating. Other fluids on request.

http://shop.ksb.com/catalog/k0/en/product/ES000311



**BOA-W** 

e, m



ΡN DN T [°C] 15 - 200

 $\geq$  -10 -  $\leq$  +120

6/16 Description:

Globe valve to DIN/EN with flanged ends, standard face-to-face length to EN 558/1, slanted seat, bonnetless, EPDM-encapsulated throttling plug, soft main and back seat, position indicator, locking device, travel stop, insulating cap with anticondensation feature; maintenance-free; full insulation possible.

Hot-water heating systems up to 120 °C. Air-conditioning systems. Not suitable for fluids containing mineral oils, steam or fluids liable to attack EPDM and grey cast iron. Other fluids on request



### Bellows-type globe valves to DIN/EN

#### **BOA-H**



 $\geq$  -10 -  $\leq$  +350

16/25 Description:

15 - 350 Bellows-type globe valve to DIN/EN with flanged ends, with on/off disc or throttling plug, standard position indicator with colour coding for identification of valve design, replaceable valve disc; bellows protected when valve is in fully open position; seat/disc interface made of wear and corrosion resistant chrome steel or chrome nickel steel.



Hot-water heating systems, high-temperature hot water heating systems, cooling circuits, heat transfer systems, general steam applications in building services and industry. Other fluids on request.



#### **BOA-H/HE/HV/HEV**



PN

10 - 350

≥ -10 - ≤ +450

25/40 Description:

Bellows-type globe valve to DIN/EN with flanged, butt weld or socket weld ends, with on/off disc or throttling plug, seat/disc interface made of wear and corrosion resistant chrome steel or chrome nickel steel.

Industrial plants, building services, power stations and shipbuilding. For water and steam. Other non-aggressive fluids such as gas or oil on request.



http://shop.ksb.com/catalog/k0/en/product/ES000329

#### **NORI 40 ZXLBV/ZXSBV**



DN

10 - 200 > -10 - < +450

Bellows-type globe valve to DIN/EN with flanged, butt weld or socket weld ends, tapered on/off disc or throttling plug, two-piece stem, integrated position indicator, seat/disc interface made of wear and corrosion resistant chrome steel or chrome nickel steel.



Industrial plants, power stations, process engineering and shipbuilding. For water and steam. Other non-aggressive fluids such as gas or oil on request.

http://shop.ksb.com/catalog/k0/en/product/ES000334

#### **NORI 40 ZXLB/ZXSB**



10 - 200

≥ -10 - ≤ +450

Bellows-type globe valve to DIN/EN with flanged, butt weld or socket weld ends, tapered on/off disc or throttling plug, two-piece stem, integrated position indicator, seat/disc interface made of wear and corrosion resistant chrome steel or chrome nickel steel.



Industrial plants, power stations, process engineering and shipbuilding. For water and steam. Other non-aggressive fluids such as gas or oil on request.



http://shop.ksb.com/catalog/k0/en/product/ES000332

#### NORI 40 ZYLB/ZYSB



T [°C]

15 - 300  $\geq -10 - \leq +450$ 

25/40 Description:

Bellows-type globe valve to DIN/EN with flanged or butt weld ends, Y-valve, with replaceable throttling plug (up to DN 100) or on/off disc (DN 125 and above), single-piece non-rotating stem, position indicator, travel stop, locking device; seat/ disc interface made of wear and corrosion resistant chrome steel or chrome nickel steel.



Heat transfer systems, industrial plants, building services and shipbuilding. For thermal oils, water, steam, gas and other non-aggressive fluids. Other fluids on



#### **BOACHEM-ZXAB**



DN T [°C] ≥ -10 - ≤ +400

15 - 400 Bellows-type globe valve to DIN/EN with flanged ends, body made of stainless steel, with replaceable on/off disc or throttling plug.

#### Applications:

Process engineering, industry, building services, food and beverage industries, for aggressive fluids. Other fluids on request.



27

http://shop.ksb.com/catalog/k0/en/product/ES000337

### Bellows-type globe valves to ANSI/ASME

#### **ECOLINE GLB 150-600**



NPS [inch] T [°C]

150 - 600 Description:

2 - 12 Globe valve to ANSI/ASME with flanged ends, cast steel/stainless steel body, trim  $\geq$  0 -  $\leq$  +427 and bellows made of stainless steel, with bolted bonnet, outside screw and yoke, sealed by graphite gland packing and metal bellows, stainless steel/graphite



Petrochemical plants, chemical plants, power stations, process engineering and general industrial applications; for thermal oil, steam, toxic and volatile fluids. Other fluids on request

http://shop.ksb.com/catalog/k0/en/product/ES000901



e, m

#### **ECOLINE GLB 800**



NPS [inch] T [°C]

150 - 800 Description:

1/2 - 2 Globe valve to ANSI/ASME with threaded sockets (NPT) or socket weld ends (SW), cast steel/stainless steel body, trim and bellows made of stainless steel, outside screw and yoke, sealed by graphite gland packing and metal bellows, stainless steel/graphite gaskets.

Applications:

Petrochemical plants, chemical plants, power stations, process engineering and general industrial applications; for thermal oil, steam, toxic and volatile fluids.

Other fluids on request.



### Globe valves to DIN/EN with gland packing

#### **NORI 40 ZXL/ZXS**



T [°C]

10 - 400 ≥ -10 - ≤ +450

25/40 Description:

Globe valve to DIN/EN with flanged, butt weld or socket weld ends, with gland packing, with on/off disc or throttling plug, rotating stem, seat/disc interface made of wear and corrosion resistant chrome steel or chrome nickel steel.

Industrial plants, power stations, process engineering and shipbuilding. For water and steam. Other non-aggressive fluids such as gas or oil on request.



#### NORI 40 ZXLF/ZXSF



DN T [°C]

25/40 Description: 10 - 200

≥ -10 - ≤ +450

Globe valve to DIN/EN with flanged, butt weld or socket weld ends, with gland packing, with on/off disc or throttling plug, non-rotating stem, integrated position indicator, seat/disc interface made of wear and corrosion resistant chrome steel or

Industrial plants, power stations, process engineering and shipbuilding. For water



and steam. Other non-aggressive fluids such as gas or oil on request.

#### **NORI 160 ZXL/ZXS**



DN T [°C]

Globe valve to DIN/EN with flanged, butt weld or socket weld ends, with gland 10 - 200 packing, with on/off disc or throttling plug, rotating stem, seat/disc interface made ≥ -10 - ≤ +550 of wear and corrosion resistant 17 % chrome steel or Stellite.



Applications:

Industrial plants, power stations, process engineering and shipbuilding. For water and steam. Other non-aggressive fluids such as gas or oil on request.



http://shop.ksb.com/catalog/k0/en/product/ES000343

http://shop.ksb.com/catalog/k0/en/product/ES000341

#### **NORI 160 ZXLF/ZXSF**



ΡN DN T [°C] 63 - 160 Description: 10 - 200

Globe valve to DIN/EN with flanged, butt weld or socket weld ends, with gland packing, with on/off disc or throttling plug, non-rotating stem, integrated position ≥ -10 - ≤ +550 indicator, seat/disc interface made of wear and corrosion resistant 17 % chrome steel or Stellite.



Industrial plants, power stations, process engineering and shipbuilding. For water and steam. Other non-aggressive fluids such as gas or oil on request.



e, m, p

http://shop.ksb.com/catalog/k0/en/product/ES000345

#### **NORI 320 ZXSV**



DN T [°C]

10 - 50  $\geq$  -10 -  $\leq$  +580

250 - 320 Description:

Globe valve to DIN/EN with flanged, butt weld or socket weld ends, gland packing, throttling plug, non-rotating stem, bayonet-type body/yoke connection, integrated position indicator, seat/disc interface made of Stellite.



Industrial plants, power stations, process engineering and shipbuilding. For water and steam. Other non-aggressive fluids such as gas or oil on request.



e, m, p

http://shop.ksb.com/catalog/k0/en/product/ES000347

#### **NORI 500 ZXSV**



ΡN DN T [°C]

10 - 65

 $\geq$  -10 -  $\leq$  +650

250 - 500 Description:

Globe valve to DIN/EN with butt weld or socket weld ends, gland packing, throttling plug, non-rotating stem, bayonet-type body/yoke connection, integrated position indicator, seat/disc interface made of Stellite.



Industrial plants, power stations, process engineering and shipbuilding. For water and steam. Other non-aggressive fluids such as gas or oil on request.



e, m, p

Valves 29

#### **BOACHEM-ZXA**



DN 15 - 400 T [°C] ≥ -10 - ≤ +400

10 - 40 Description:

Globe valve to DIN/EN with flanged ends, body made of stainless steel, gland packing, rotating stem, with on/off disc or throttling plug.

Applications:

Process engineering, industry, building services, food and beverage industries, for aggressive fluids. Other fluids on request.



http://shop.ksb.com/catalog/k0/en/product/ES000354

#### **ECOLINE VA 16**



PN DN T [°C] ≥ -10 - ≤ +300

Description:

15 - 250 Globe valve to DIN/EN with flanged ends, body made of cast iron, with gland packing, rotating stem, with on/off disc or throttling plug.

Applications:

District heating, domestic water supply, air-conditioning systems, cooling circuits, high-temperature hot water heating systems, water supply.



e, m

http://shop.ksb.com/catalog/k0/en/product/ES000673

### Globe valves to ANSI/ASME with gland packing

#### **ECOLINE GLC 150-600**



NPS [inch] T [°C]

150 - 600 Description:

≥ 0 - ≤ +816

2 - 12 Globe valve to ANSI/ASME with flanged ends, cast steel A216 WCB, Trim 8 (Stellite/13 % chrome steel) for Class 150/300/600, Trim 5 (Stellite/Stellite) for Class 600, with bolted bonnet, outside screw and yoke, graphite gland packing, stainless steel/graphite gaskets.



Refineries, power stations, process engineering and general industrial applications; water, steam, oil, gas. Other fluids on request.





#### **ECOLINE GLF 150-600**



Class NPS [inch] T [°C]

≥ 0 - ≤ +816

150 - 600 Description:

 $\frac{1}{12}$  Globe valve to ANSI/ASME with flanged ends, forged steel A105, Trim 8 (Stellite/13 % chrome steel), with bolted bonnet, outside screw and yoke, graphite gland packing, stainless steel/graphite gaskets, reduced bore.



Industrial plants, power stations, process engineering, refineries, oil and marine applications; for water, steam, gas, oil and other non-aggressive fluids.



http://shop.ksb.com/catalog/k0/en/product/ES000426

#### **ECOLINE GLF 800**



Class NPS [inch] T [°C]

≥ 0 - ≤ +593

800 Description:

1/2 - 2 Globe valve to ANSI/ASME with threaded sockets (NPT), butt weld ends (BW) or socket weld ends (SW), Trim 8 (Stellite/13 % chrome steel), with bolted bonnet (Class 800) or welded bonnet (Class 1500 and 2500), outside screw and yoke, graphite gland packing, stainless steel/graphite gaskets, available in carbon steel and alloy steel.



Industrial plants, power stations, process engineering, refineries, oil and marine applications; for water, steam, gas, oil and other non-aggressive fluids.

http://shop.ksb.com/catalog/k0/en/product/ES000796



e. m

#### **ECOLINE GLV 150-300**



Class NPS [inch] T [°C]

150 - 300 Description: 1/2 - 12

≥ 0 - ≤ +816

Globe valve to ANSI/ASME with flanged ends, cast steel A351 CF8/CF8M, Trim 2 (304/304) and Trim 10 (316/316) for Class 150/300, with bolted bonnet, outside screw and yoke, integral seat, graphite gland packing, stainless steel/graphite

Fine chemicals, food industry, general industry. For water, steam, gas and other



fluids. Other fluids on request.

#### SICCA 150-600 GLC



NPS [inch] T [°C]

150 - 600 Description:

≥ 0 - ≤ +593

2 - 10 Globe valve to ANSI/ASME with flanged or butt weld ends, bolted bonnet, outside screw and yoke. Rotating, rising stem, Stellite hard-faced seat/disc interface made of 13 % chrome steel, with graphite gasket and gland packing, available in carbon steel, low-alloy steel and stainless steel.



Applications:

Applications:

Refineries, power stations, general industry and process engineering. For water, steam, oil, gas and non-aggressive fluids. Other fluids on request.

e, m

http://shop.ksb.com/catalog/k0/en/product/ES000484

http://shop.ksb.com/catalog/k0/en/product/ES000584

#### SICCA 900-2500 GLC



NPS [inch] T [°C]

900 - 2500 Description:

2 - 8 Globe valve to ANSI/ASME with butt weld ends, Y-pattern, pressure seal design, ≥ 0 - ≤ +650 outside screw and yoke, rising stem and non-rising handwheel, Stellite hard-faced seat/disc interface and back seat, with graphite gasket and gland packing. Available in carbon steel and alloy steel.



Power stations, general industry and process engineering. For water, steam, oil, gas and non-aggressive fluids. Other fluids on request.



http://shop.ksb.com/catalog/k0/en/product/ES000485

#### SICCA 800-4500 GLF



NPS [inch] T [°C]

800 - 4500 Description: 1/4 - 2

 $\geq 0 - \leq +816$ 

Globe valve to ANSI/ASME with NPT (F) threaded ends or socket weld ends, with bolted bonnet (Class 800) or welded bonnet (Class 1500/2500/4500), outside screw and yoke, Stellite hard-faced body seat, disc seating face made of Stellite hardfaced 13 % chrome steel, with graphite gaskets and gland packing. Available in carbon steel and alloy steel.



**Applications:** 

Refineries, power stations, general industry and process engineering. For water, steam, oil, gas and non-aggressive fluids. Other fluids on request.

http://shop.ksb.com/catalog/k0/en/product/ES000480

#### **WADA GL 150**

e, m

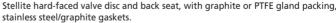


Class NPS [inch] T [°C]

150 Description: 1/2 - 24

 $\geq$  -196 -  $\leq$  +100

Globe valve to ANSI/ASME with flanged, butt weld or socket weld ends, made of cast steel A351 CF3M/CF8M, with bolted bonnet, outside screw and yoke,





Natural gas liquefaction and other liquefied gases.



e, m, p, h

Valves

### Globe valves for nuclear applications

#### NUCA/-A/-ES, Types I, II, IV



PN DN T [°C]

≥ -29 - ≤ +365

≤ 320 Description:

10 - 50 Globe valve with butt weld or socket weld ends, for nuclear applications, with gland packing or bellows, replaceable seat (NUCA-ES), straight-way pattern, made of steel, stainless steel or nickel.

Applications:

Reactor cooling, moderator, safety feed, feed water, live steam and cleaning

systems.



e, m, p

http://shop.ksb.com/catalog/k0/en/product/ES000452

#### **ZXNB**



PN DN T [°C]

≤ 210 Description:

65 - 300 Bellows-type globe valve with butt weld ends, for nuclear applications with safety-≥ -29 - ≤ +365 related requirements, in straight-way or angle pattern, or as a two-way valve, made of steel or stainless steel.

Reactor cooling, moderator, safety feed, feed water, live steam and cleaning systems.



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http://shop.ksb.com/catalog/k0/en/product/ES000458

#### **ZXNVB**



PN DN T [°C]

 $\geq$  -29 -  $\leq$  +365

≤ 210 Description:

4 - 25 Globe valve with butt weld or socket weld ends, for nuclear applications, with gland packing or bellows, straight-way pattern, made of steel or stainless steel.

Applications:

Reactor cooling, moderator, safety feed, feed water, live steam and cleaning systems.



http://shop.ksb.com/catalog/k0/en/product/ES000457

#### **ZYNB/ZYN**



PN DN T [°C]

300 - 400  $\geq$  -29 -  $\leq$  +365

≤ 62 Description:

Globe valve with butt weld ends, for nuclear applications with safety-related requirements, with gland packing or bellows, Y-valve, made of cast stainless steel.

Applications:

Residual heat removal systems in nuclear applications.



### Automated globe valves to DIN/EN

#### **BOA-H Mat E**



PN DN T [°C] ≥ -10 - ≤ +350

16/25 Description:

20 - 150 Automated globe valve to DIN/EN with flanged ends, with electric actuator and 3point actuation, actuating forces from 2000 N to 14,000 N, stem sealed by maintenance-free PTFE V-packing (up to 250 °C) or graphite gland packing (up to 350 °C).

General industrial facilities, process engineering, plant engineering, cooling circuits, heating systems.

http://shop.ksb.com/catalog/k0/en/product/ES000801



#### **BOA-H Mat P**



ΡN DN T [°C]

 $\geq$  -10 -  $\leq$  +350

16/25 Description:

20 - 150 Automated globe valve to DIN/EN with flanged ends, with pneumatic actuator in spring-to-open or spring-to-close design on option, actuating forces from 1500 N to 26,000 N, stem sealed by maintenance-free PTFE V-packing (up to 250 °C) or graphite gland packing (up to 350 °C).

General industrial facilities, process engineering, plant engineering, cooling circuits, heating systems.

http://shop.ksb.com/catalog/k0/en/product/ES000885



### Control valves to DIN/EN

#### **BOA-CVE C/CS/W/IMS/EKB**



DN

15 - 200  $\geq$  -10 -  $\leq$  +120

Control valve to DIN/EN based on standard type series BOA-Compact, BOA-SuperCompact, BOA-W, BOA-Compact EKB, BOA-Control IMS and BOA-Control IMS EKB, bonnetless pressure-retaining body, soft-seated. Leakage rate selectable from 0.05 % to drop-tight, Kvs values between 6.3 and 700 m³/h and closing pressures of up to 16 bar. With intelligent microprocessor-controlled and pre-set electric actuators providing actuating forces from 1000 N to 14,000 N; electronic configuration of flow characteristic, Kvs value, actuating signal and actuating time using PC tool or manual parameterisation unit. Customised configuration can be



Hot-water heating systems up to 120 °C. Ventilation and air-conditioning systems. Water supply systems, drinking water. Not suitable for fluids containing mineral oils, steam or fluids liable to attack EPDM and uncoated cast iron. Other fluids on

implemented at the KSB factory on request.



**BOA-CVE H** 



PΝ DN T [°C]  $\geq$  -10 -  $\leq$  +450

16/25/40 Description:

Service-friendly control valve to DIN/EN with flanged ends, either with linear or equal-percentage control characteristic at Kvs values of 0.1 to 630 m<sup>3</sup>/h and closing pressures of up to 40 bar; all internal parts are easy to replace without special tools, including the reversible seat; noise level reduced by standard two-stage pressure reduction combining a parabolic plug and multi-hole cage; with electric



Applications:

General industrial facilities, process engineering, plant engineering, cooling circuits, heating systems

Valves

#### **BOA-CVP H**



PN DN T [°C] ≥ -10 - ≤ +450

16/25/40 Description:

15 - 200 Service-friendly control valve to DIN/EN with flanged ends, either with linear or equal-percentage control characteristic at Kvs values of 0.1 to 630 m<sup>3</sup>/h and closing pressures of up to 40 bar; all internal parts are easy to replace without special tools, including the reversible seat; noise level reduced by standard two-stage pressure reduction combining a parabolic plug and multi-hole cage; with pneumatic actuator.



33

Applications:

General industrial facilities, process engineering, plant engineering, cooling

circuits, heating systems.

http://shop.ksb.com/catalog/k0/en/product/ES000662

### Balancing and shut-off valves to DIN/EN

#### **BOA-Control/BOA-Control IMS**



15 - 350 BOA-Control IMS:

16 Description:

≥ -10 - ≤ +120 Balancing valve to DIN/EN with flanged ends, bonnetless, with throttling plug, scaled position indicator, travel stop and insulating cap with anti-condensation feature, maintenance-free; full insulation possible; suitable for measuring flow rate with ultrasonic sensors and for temperature measurement, sensors not in contact with fluid handled, mobile measurements in combination with BOATRONIC MS measuring computer, permanent measurement set-up with BOATRONIC MS-420 measuring computer, constant accuracy independent of differential pressures. Also available with electrostatic plastic coating and DVGWcertified for drinking water (BOA-Control IMS EKB; up to DN 200). BOA-Control:



Balancing valve to DIN/EN with flanged ends, bonnetless, with throttling plug, scaled position indicator, travel stop and insulating cap with anti-condensation feature, maintenance-free; full insulation possible; suitable for measuring flow rate with ultrasonic sensors and for temperature measurement, sensors not in contact with fluid handled, mobile measurements in combination with BOATRONIC MS measuring computer, constant accuracy independent of differential pressures. Also available with electrostatic plastic coating and DVGWcertified for drinking water (BOA-Control EKB; up to DN 200).

Hot-water heating systems up to 120 °C (BOA-Control and BOA-Control IMS), airconditioning systems and cooling systems, and for permanent measurement set-ups (BOA-Control IMS), drinking water systems and industrial cooling circuits (EKB model). Not suitable for fluids containing mineral oils, steam or fluids liable to attack EPDM and uncoated grey cast iron.

http://shop.ksb.com/catalog/k0/en/product/ES000323

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#### **BOA-Control SAR**



DN T [°C] ≥ -25 - ≤ +150

16 Description:

10 - 50 Balancing valve to DIN/EN with female screwed ends; differential pressure measurement for flow metering with PFM 2000 measuring computer; digital travel position indicator with 40 settings, locking device and travel stop, maintenance



Hot-water heating systems up to 150 °C. Air-conditioning systems. Other fluids on



#### Level control valves to DIN/EN

#### **CONDA-VLC**



T [°C] ≥ -10 - ≤ +70

16 Description:

25 - 300 Float valve to DIN/EN for controlling maximum and minimum liquid levels in tanks, with flanged ends (DN 40-300) or threaded ends (DN 25-32), body made of nodular cast iron; valve disc, stem, float and seat made of stainless steel.

Applications:

Water supply systems, industry and building services. For controlling water levels.



http://shop.ksb.com/catalog/k0/en/product/ES000835

### Pressure reducing valves to DIN/EN

#### **CONDA-VRC**



PN DN T [°C]

16/25/40/63 Description:

15 - 150 Direct-acting pressure reducing valve to DIN/EN with flanged ends (DN 50-150) or  $\geq$  -10 -  $\leq$  +70 threaded ends (DN 15-50), body made of nodular cast iron; valve disc, stem and seat made of stainless steel.

**Applications:** 

In water supply systems for controlling downstream pressure, in fire-fighting systems for reducing excess pressure caused by pumps, in irrigation systems, industry and building services as an efficient protection against water hammer.



http://shop.ksb.com/catalog/k0/en/product/ES000834

### Pressure sustaining valves to DIN/EN

#### **CONDA-VSM**



PN DN T [°C] ≥ -10 - ≤ +70

16/25/40 Description:

50 - 150 Direct-acting pressure sustaining valve to DIN/EN with flanged ends, body made of nodular cast iron, valve disc, stem and seat made of stainless steel.

Applications:

Controlling upstream pressure in water supply systems, irrigation systems or firefighting systems, in industry and building services.



Valves

#### Air valves to DIN/EN

#### **BOAVENT-AVF**



PN DN T [°C] ≥ -10 - ≤ +120

16 Description:

50 - 300 Automatic air valve with two floats and three functions. Flanged ends, body made of nodular cast iron, double-chamber design with ABS floats. The air valve ensures proper operation of piping systems. It is specially designed to allow the entry and discharge of large volumes of air and the release of air pockets in working conditions.

Applications:

Water supply, clean water, irrigation.

http://shop.ksb.com/catalog/k0/en/product/ES000831



#### **BOAVENT-SIF**



PN DN T [°C] 16 Description:

 $\geq$  -10 -  $\leq$  +70

25 - 200 Automatic air valve with one float and three functions. With flanged ends (DN 25-300R) or threaded ends (DN 25-150), body made of stainless steel, singlechamber design with polypropylene float. The air valve ensures proper operation of piping systems. It is specially designed to allow the entry and discharge of large volumes of air and the release of air pockets in working conditions.

Applications:

Water supply, clean water, irrigation.





PN DN T [°C]

16 Description:

≥ -10 - ≤ +60

50 - 200 Automatic air valve with one float and three functions. With flanged or threaded ends, body made of nodular cast iron, single-chamber design with polypropylene float. The air valve ensures proper operation of piping systems. It is specially designed to allow the entry and discharge of large volumes of air and the release

of air pockets in working conditions.

Applications:

Water supply, waste water, untreated waste water.

http://shop.ksb.com/catalog/k0/en/product/ES000833



#### **BOAVENT-SVF**



PN DN T [°C]

25 - 300 ≥ -10 - ≤ +70

16/25/40 Description:

Automatic air valve with one float and three functions. With flanged ends (DN 25-300R) or threaded ends (DN 25-150), body made of nodular cast iron (PN 16-40) or carbon steel (PN 64), single-chamber design with polypropylene float. The air valve ensures proper operation of piping systems. It is specially designed to allow the entry and discharge of large volumes of air and the release of air pockets in working conditions.



Applications:

Water supply, clean water, irrigation

### Vent valves for nuclear applications

#### SISTO-VentNA



16 Description:

15 Vent valve for nuclear applications, with butt weld ends, soft-seated.

 $\geq$  -20 -  $\leq$  +100 Applications:

Heating systems, air-conditioning systems.



http://shop.ksb.com/catalog/k0/en/product/ES000842

#### SISTO-KRVNA



PN T [°C]

≥ -20 - ≤ +100

16 Description:

25 - 100 Vent valve with flanged or butt weld ends, for nuclear applications, soft-seated, with floating ball.

Applications:

Tank venting, drainage systems.



http://shop.ksb.com/catalog/k0/en/product/ES000839

#### Gate valves to DIN/EN

#### COBRA-SGP/SGO/SGF



PN T [°C]  $\geq$  -10 -  $\leq$  +110

16 Description:

25 - 600 Gate valve to DIN/EN with flanged ends, elastomer-coated wedge, bolted bonnet, rotating stem, inside screw, body made of nodular cast iron.

Water supply systems, water treatment systems, air-conditioning systems.



#### **COBRA-SMP**



PN DN T [°C]

 $\geq$  -10 -  $\leq$  +110

40 - 300 Gate valve to DIN/EN with flanged ends, bolted bonnet, metal-seated, rotating stem, inside screw, body and flexible wedge made of nodular cast iron, stem and seats made of stainless steel.



Water supply systems, heating systems, air-conditioning systems, general industrial applications, building services.



#### **ECOLINE SP/SO**



PN 10/16/25 DN 40 - 600 T [°C]  $\geq$  -10 -  $\leq$  +110

10/16/25 Description:

Gate valve to DIN/EN with flanged ends, bolted bonnet, metal-seated, rotating stem, inside screw, body made of cast iron, seats made of brass.

Applications:

Water supply systems, heating systems, air-conditioning systems, general industrial applications, water engineering, building services.



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http://shop.ksb.com/catalog/k0/en/product/ES000654

#### **ECOLINE GT 40**



PN DN T [°C]

10 - 40 **De** 50 - 800 Ga

≥ -10 - ≤ +400

≥ -10 - ≤ +450

Gate valve to DIN/EN with flanged ends or butt weld ends, bolted bonnet, body made of cast steel, non-rotating stem, with flexible wedge, seat/disc interface made of wear and corrosion resistant 13 % chrome steel or Stellite.

Applications:

Industrial plants, process engineering and shipbuilding. For water and steam. Other non-aggressive fluids such as gas or oil on request.



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http://shop.ksb.com/catalog/k0/en/product/ES000676

## **STAAL 40 AKD/AKDS**



PN DN T [°C]

10 - 40 50 - 600

10 - 40 Description:

Gate valve to DIN/EN with flanged or butt weld ends, with bolted bonnet, body of forged or welded construction, non-rotating stem, split wedge with flexibly mounted discs for precise alignment with the body seats. Seat/disc interface made of wear and corrosion resistant 17 % chrome steel.



Industrial plants, power stations, process engineering and shipbuilding. For water and steam. Other non-aggressive fluids such as gas or oil on request.



http://shop.ksb.com/catalog/k0/en/product/ES000469

#### STAAL 100 AKD/AKDS



PN DN T [°C]

63 - 100 50 - 500 ≥ -10 - ≤ +530

63 - 100 Description:

Gate valve to DIN/EN with flanged or butt weld ends, with bolted bonnet, body of forged or welded construction, non-rotating stem, split wedge with flexibly mounted discs for precise alignment with the body seats. Seat/disc interface made of wear and corrosion resistant 17 % chrome steel or Stellite.



Industrial plants, power stations, process engineering and shipbuilding. For water and steam. Other non-aggressive fluids such as gas or oil on request.



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http://shop.ksb.com/catalog/k0/en/product/ES000369

#### **AKG-A/AKGS-A**



PN DN T [°C] 63 - 160 80 - 300

≥ -10 - ≤ +550

Description:

Gate valve to DIN/EN with flanged or butt weld ends, pressure seal design, body of forged or welded construction, non-rotating stem, split wedge with flexibly mounted discs for precise alignment with the body seats. Seat/disc interface made of wear and corrosion resistant 17 % chrome steel or Stellite.



Industrial plants, power stations, process engineering and shipbuilding. For water and steam. Other non-aggressive fluids such as gas or oil on request.



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#### **ZTS**



ΡN Class 4500 DN 50 - 800 NPS [inch] 2 - 32 T [°C] ≥ -10 - ≤ +650

Description:

Gate valve to DIN/EN or ANSI/ASME with butt weld ends, pressure seal design, billet-forged body, seat/disc interface made of wear and corrosion resistant Stellite, split wedge with flexibly mounted discs for precise alignment with the Applications:

and steam. Other non-aggressive fluids such as gas or oil on request.

Industrial plants, power stations, process engineering and shipbuilding. For water



http://shop.ksb.com/catalog/k0/en/product/ES000375

#### Gate valves to ANSI/ASME

#### **ECOLINE GTB 800**



NPS [inch] T [°C]

150-800 Description:

1/2 - 2 Gate valve to ANSI/ASME with threaded sockets (NPT) or socket weld ends (SW),  $\geq$  0 -  $\leq$  +427 cast steel/stainless steel body, trim and bellows made of stainless steel, bolted bonnet, outside screw and yoke, sealed by graphite gland packing and metal bellows, stainless steel/graphite gaskets.



Petrochemical plants, chemical plants, power stations, process engineering and general industrial applications; for thermal oil, steam, toxic and volatile fluids. Other fluids on request.



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http://shop.ksb.com/catalog/k0/en/product/ES000903

#### **ECOLINE GTC 150-600**



NPS [inch] T [°C]

150 - 600 Description: 2 - 36

 $\geq 0 - \leq +816$ 

Gate valve to ANSI/ASME with flanged ends, cast steel A216 WCB, Trim 8 (Stellite/13 % chrome steel) for Class 150/300/600, Trim 5 (Stellite/Stellite) for Class 600, with bolted bonnet, outside screw and yoke, non-rotating stem, flexible

wedge, graphite gland packing, stainless steel/graphite gaskets.



Industrial plants, power stations, process engineering, refineries, oil and marine applications; for water, steam, gas, oil and other non-aggressive fluids.



http://shop.ksb.com/catalog/k0/en/product/ES000774

#### **ECOLINE GTF 150-600**



NPS [inch] T [°C]

 $\geq 0 - \leq +816$ 

150 - 600 Description:

1/2 - 2 Gate valve to ANSI/ASME with flanged ends, forged steel A105, Trim 8 (Stellite/13 % chrome steel), with bolted bonnet, outside screw and yoke, nonrotating stem, single-piece wedge, graphite gland packing, stainless steel/graphite gaskets, reduced bore.



Industrial applications, power stations, process engineering, refineries, oil and marine applications; water, steam, gas, oil and other non-aggressive fluids.



http://shop.ksb.com/catalog/k0/en/product/ES000611

#### **ECOLINE GTF 800**



NPS [inch] T [°C]

800 Description:

 $\geq 0 - \leq +593$ 

1/2 - 2 Gate valve to ANSI/ASME with threaded sockets (NPT), butt weld ends (BW) or socket weld ends (SW), Trim 8 (Stellite/13 % chrome steel), with bolted bonnet (Class 800) or welded bonnet (Class 1500 and 2500), outside screw and yoke, singlepiece wedge, graphite gland packing, stainless steel/graphite gaskets, available in carbon steel and alloy steel.



Industrial applications, power stations, process engineering, refineries, oil and marine applications; water, steam, gas, oil and other non-aggressive fluids.



#### **ECOLINE GTV 150-300**



Class NPS [inch] T [°C]

150 - 300 Description: 1/2 - 12

Gate valve to ANSI/ASME with flanged ends, cast steel A351 CF8/CF8M, Trim 2 (304/304) and Trim 10 (316/316) for Class 150/300, with bolted bonnet, outside ≥ 0 - ≤ +816 screw and yoke, non-rotating stem, flexible wedge, integral seat, graphite gland packing, stainless steel/graphite gaskets.

Applications:

Fine chemicals, food industry, general industry; water, steam, gas and other fluids.



http://shop.ksb.com/catalog/k0/en/product/ES000373

#### SICCA 150-600 GTC



NPS [inch] T [°C]

150 - 600 Description: 2 - 24

Gate valve to ANSI/ASME with flanged or butt weld ends, with bolted bonnet, outside screw and yoke, flexible wedge, non-rising or rising stem and non-rising handwheel, Stellite hard-faced seat/disc interface made of 13 % chrome steel, with graphite gasket and gland packing, available in carbon steel, low-alloy steel and



Power stations, general industry and process engineering. For water, steam, oil,

gas and non-aggressive fluids. Other fluids on request. http://shop.ksb.com/catalog/k0/en/product/ES000482



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≥ 0 - ≤ +593

#### SICCA 900-3600 GTC



Class NPS [inch] T [°C]

900 - 3600 Description:

Gate valve to ANSI/ASME with butt weld ends, pressure seal design, split wedge, 2 - 28 outside screw and yoke, rising stem and non-rising handwheel, Stellite hard-faced ≥ 0 - ≤ +650 seat/disc interface and back seat, with graphite gasket and gland packing.



Power stations, general industry and process engineering. For water, steam, oil, gas and non-aggressive fluids. Other fluids on request.



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http://shop.ksb.com/catalog/k0/en/product/ES000483

Available in carbon steel and alloy steel.

#### SICCA 800-2500 GTF



Class NPS [inch] T [°C]

800 - 2500 Description:

≥ 0 - ≤ +816

1/4 - 2

Gate valve to ANSI/ASME with NPT (F) threaded ends or socket weld ends, with bolted bonnet (Class 800) or welded bonnet (Class 1500/2500), solid wedge, outside screw and yoke, Stellite hard-faced seat/disc interface made of 13 % chrome steel, with graphite gasket and gland packing. Available in carbon steel, low-alloy steel and stainless steel.



Refineries, power stations, general industry and process engineering. For water,

steam, oil, gas and non-aggressive fluids. Other fluids on request.



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http://shop.ksb.com/catalog/k0/en/product/ES000479

#### **WADA GT 150**



Class NPS [inch] T [°C]

≥ -196 - ≤ +100

150 Description:

 $\frac{1}{2}$  - 18 Gate valve to ANSI/ASME with flanged, butt weld or socket weld ends, made of cast steel A351 CF3M/CF8/CF8M, with bolted bonnet, outside screw and yoke, flexible wedge, graphite or PTFE gland packing, stainless steel/graphite gaskets.



Natural gas liquefaction and other liquefied gases.



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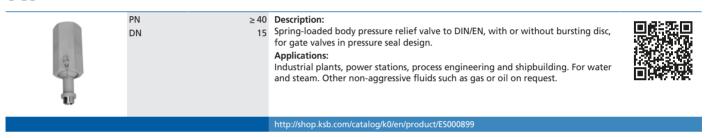
# Gate valves for nuclear applications

#### **ZTN**



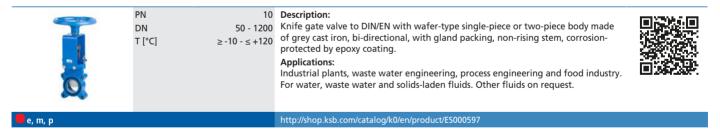
# **Body pressure relief valves**

#### UGS



# Knife gate valves to DIN/EN

#### **HERA-BD**



# Knife gate valves to ANSI/ASME

#### **HERA-BDS**



Class T [°C] 150 Description:

50 - 600 Knife gate valve to ANSI/ASME with full-lug body made of carbon steel or stainless steel; bi-directional, with gland packing, rubber-lined, rising stem, non-rising ≥ -10 - ≤ +120 handwheel.

Applications:

Primarily in mining for handling slurries, abrasive fluids and high-density fluids; also in pulp applications, cement plants, sewage treatment plants and the chemical

industry. Other fluids on request.

http://shop.ksb.com/catalog/k0/en/product/ES000895





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#### **HERA-BHT**



Class DN T [°C]

150 Description:

80 - 600 Knife gate valve to ANSI/ASME with semi-lug body made of carbon steel or  $\geq$  -10 -  $\leq$  +100 stainless steel, bi-directional, with gland packing, through-going blade, rising stem, non-rising handwheel, robust yoke for actuator mounting as standard.

Primarily in mining for handling slurries and high-density fluids; excellent flow characteristic due to through-going blade; also in pulp applications and water applications. Other fluids on request.





e. m. p

http://shop.ksb.com/catalog/k0/en/product/ES000891

#### **HERA-SH**



Class DN T [°C]

50 - 1000  $\geq$  -10 -  $\leq$  +180

150 Description:

Knife gate valve to ANSI/ASME with full-lug single-piece body made of carbon steel or stainless steel; uni-directional, with gland packing, rising stem, non-rising handwheel.

Applications:

Industrial plants and waste water engineering, pulp and paper industry, food and beverage industry, chemical industry. For water, waste water and solids-laden fluids. Other fluids on request.



http://shop.ksb.com/catalog/k0/en/product/ES000844

#### Lift check valves to DIN/EN

#### **BOA-RPL**



DN T [°C] ≥ -10 - ≤ +70

25 - 400 Ball check valve to DIN/EN with flanged or female/female-threaded ends, made of nodular cast iron, NBR-coated ball, bolted cover, suitable for installation in vertical or horizontal pipes.

#### Applications:

Water supply systems, water treatment systems, waste water.



#### **BOA-RFV**



PN DN T [°C] 10/16/25/40/63

≥ -10 - ≤ +90

Description:

40 - 600 Nozzle check valve to DIN/EN with flanged ends, Venturi-type body, max. flow velocity 2.5 m/s. Body made of cast iron, check disc made of brass and cast iron, seat made of stainless steel. Suitable for installation in horizontal or vertical pipes Rapid closure without surge pressures.

Applications:

Water supply systems, heating systems, air-conditioning systems.



http://shop.ksb.com/catalog/k0/en/product/ES000653

#### **BOA-RVK**



PN DN T [°C]

 $\geq$  -20 -  $\leq$  +250

15 - 200 Lift check valve to DIN/EN with wafer-type body, centring aided by the body shape, shut-off by spring-loaded plate or valve disc guided by three stainless steel guiding pins. Low-noise designs with plastic plate (DN 15-100) or valve disc with O-ring (DN 125-200), maintenance-free.

Applications:

Industrial plants and heating systems, liquids and gases, hot-water heating systems, high-temperature hot water heating systems, heat transfer systems. Any limits given in the technical codes must be complied with. Not suitable for fluids liable to attack the materials used. Other fluids on request.



#### **BOA-R**



PN DN T [°C]

≥ -10 - ≤ +350

6/16 Description:

15 - 350 Lift check valve to DIN/EN with flanged ends, spring-loaded valve disc, maintenance-free

Applications:

Hot-water heating systems, high-temperature hot water heating systems, heat transfer systems. General steam applications in building services and industry. Other fluids on request.



#### **NORI 40 RXL/RXS**



ΡN DN T [°C]

≥ -10 - ≤ +450

25/40 Description:

10 - 300 Lift check valve to DIN/EN with flanged, butt weld or socket weld ends, check disc with closing spring, seat/disc interface made of wear and corrosion resistant chrome steel or chrome nickel steel.

Applications:

Industrial plants, power stations, process engineering and shipbuilding. For water and steam. Other non-aggressive fluids such as gas or oil on request.



http://shop.ksb.com/catalog/k0/en/product/ES000358

#### **NORI 160 RXL/RXS**



DN T [°C]

≥ -10 - ≤ +550

63 - 160 Description:

10 - 200 Lift check valve to DIN/EN with flanged, butt weld or socket weld ends, check disc with closing spring, seat/disc interface made of wear and corrosion resistant 17 % chrome steel or Stellite.

Applications:

Industrial plants, power stations, process engineering and shipbuilding. For water and steam. Other non-aggressive fluids such as gas or oil on request.



#### **RGS**



PN DN 10 - 50 T [°C] ≥ -10 - ≤ +580

250 - 500 Description:

Lift check valve to DIN/EN with butt weld or socket weld ends, Y-pattern, check disc with closing spring, pressure seal design, Hastelloy-faced body seats.

Applications:

Industrial plants, power stations, process engineering and shipbuilding. For water and steam. Other non-aggressive fluids such as gas or oil on request.



http://shop.ksb.com/catalog/k0/en/product/ES000364

#### **BOACHEM-RXA**



PN DN T [°C] 10 - 40 Description:

≥ -10 - ≤ +400

15 - 400 Lift check valve to DIN/EN with flanged ends, body made of stainless steel, check disc with closing spring, lapped seat/disc interface.

Applications:

Process engineering, industry, building services, food and beverage industries, for aggressive fluids. Other fluids on request.



http://shop.ksb.com/catalog/k0/en/product/ES000366

#### Lift check valves to ANSI/ASME

#### **ECOLINE PTF 150-600**



NPS [inch] T [°C]

1/2 - 2

≥ 0 - ≤ +816

150 - 600 Description:

Lift check valve to ANSI/ASME with flanged ends, forged steel A105, Trim 8 (Stellite/13 % chrome steel), reduced bore, with bolted cover, spring-loaded valve

Applications:

Industrial plants, power stations, process engineering, refineries, oil and marine applications; for water, steam, gas, oil and other non-aggressive fluids.



#### **ECOLINE PTF 800**



Class NPS [inch] T [°C]

 $\geq 0 - \leq +593$ 

800 Description:

 $\frac{1}{12}$  Lift check valve to ANSI/ASME with threaded sockets (NPT), butt weld ends (BW) or socket weld ends (SW), Trim 8 (Stellite/13 % chrome steel), with bolted cover (Class 800) or welded cover (Class 1500 and 2500), spring-loaded valve disc, available in carbon steel and alloy steel.

Applications:

Industrial plants, power stations, process engineering, refineries, oil and marine applications; for water, steam, gas, oil and other non-aggressive fluids.



http://shop.ksb.com/catalog/k0/en/product/ES000374

#### SICCA 800-4500 PCF



NPS [inch] T [°C]

800 - 4500 Description:

1/4 - 2 Lift check valve to ANSI/ASME with NPT (F) threaded ends or socket weld ends, with spring-loaded valve disc, bolted cover (Class 800) or welded cover ≥ 0 - ≤ +816 (Class 1500/2500/4500), Stellite hard-faced body seat, disc seating face made of Stellite hard-faced 13 % chrome steel, with graphite gasket. Available in carbon steel and alloy steel.



Refineries, power stations, general industry and process engineering. For water, steam, oil, gas and non-aggressive fluids. Other fluids on request.



#### **WADA LC 150**



Class NPS [inch] T [°C]

150 Description:

 $\frac{1}{2}$  - 8 Lift check valve to ANSI/ASME with flanged, butt weld or socket weld ends, made ≥ -196 - ≤ +100 of cast steel A351 CF3M/CF8/CF8M, with bolted cover, dash-pot function, graphite or stainless steel/graphite gaskets.

Natural gas liquefaction and other liquefied gases.

# Lift check valves for nuclear applications

#### NUCA/-A/-ES, Type V



DN T [°C]

10 - 50 Lift check valve for nuclear applications, with butt weld ends, replaceable seat (NUCA-ES), straight-way pattern, made of steel or stainless steel.

Applications:

Feed water and live steam systems.



http://shop.ksb.com/catalog/k0/en/product/ES000455

#### **RJN**



PN DN T [°C]  $\geq$  -29 -  $\leq$  +300

≥ -29 - ≤ +365

80 - 600 Damped lift check valve with butt weld ends, for nuclear applications, individually selectable damping characteristic, made of steel or stainless steel.

Applications:

Feed water and live steam systems.



http://shop.ksb.com/catalog/k0/en/product/ES000459

#### **RYN**



PN DN T [°C]

≤ 210 Description:

65 - 300 Combined lift check/shut-off valve with butt weld ends, for nuclear applications, Y- $\geq$  -29 -  $\leq$  +365 pattern, with gland packing or bellows, made of steel or stainless steel.

Applications:

Feed water and live steam systems.



# Swing check valves to DIN/EN

#### **COBRA-SCBS**



DN 50 - 300 T [°C] ≥ -10 - ≤ +300

16 Description:

50 - 300 Swing check valve to British standards, with flanged ends, metal-seated, body and valve disc made of nodular cast iron, with bolted cover, stainless steel/graphite gaskets.

Applications:

Water supply systems, water treatment systems and water distribution systems, waste water, irrigation, drinking water, seawater, air, gas, oil.



45

http://shop.ksb.com/catalog/k0/en/product/ES000827

#### **ECOLINE WT/WTI**



PN 16 DN 50 - 300 T [°C]  $\geq$  -10 -  $\leq$  +110

16 Description:

50 - 300 Swing check valve to DIN/EN with wafer-type body; body and valve disc made of carbon steel (WT) or stainless steel (WTI), O-ring made of Viton.

Applications:

Irrigation systems, district heating, domestic water supply, sewage treatment plants, air-conditioning systems, cooling circuits, water supply systems.



http://shop.ksb.com/catalog/k0/en/product/ES000638

#### STAAL 40 AKK/AKKS



DN T [°

PN 10 - 40 DN 80 - 400 T [°C] ≥ -10 - ≤ +450

10 - 40 Description:

Swing check valve to DIN/EN with flanged or butt weld ends, with bolted cover, internally mounted hinge pin, body of welded construction, seat/disc interface made of wear and corrosion resistant 17 % chrome steel.

Applications:

Industrial plants, power stations, process engineering and shipbuilding. For water and steam. Other non-aggressive fluids such as gas or oil on request.



http://shop.ksb.com/catalog/k0/en/product/ES000471

#### **STAAL 100 AKK/AKKS**





PN DN T [°C] 63 - 100 80 - 400 ≥ -10 - ≤ +530

63 - 100 Description:

Swing check valve to DIN/EN with flanged or butt weld ends, with bolted cover, internally mounted hinge pin, body of forged or welded construction, seat/disc interface made of wear and corrosion resistant 17 % chrome steel or Stellite.

Applications:

Industrial plants, power stations, process engineering and shipbuilding. For water and steam. Other non-aggressive fluids such as gas or oil on request.



http://shop.ksb.com/catalog/k0/en/product/ES00039

#### **AKR/AKRS**



PN DN T [°C]

63 - 160 80 - 300 ≥ -10 - ≤ +550

Description

Swing check valve to DIN/EN with flanged or butt weld ends, pressure seal design, internally mounted hinge pin, body of forged and welded construction, seat/disc interface made of wear and corrosion resistant 17% chrome steel or Stellite.

Applications

Industrial plants, power stations, process engineering and shipbuilding. For water and steam. Other non-aggressive fluids such as gas or oil on request.



#### **ZRS**



PN DN T [°C]

50 - 800 ≥ -10 - ≤ +650

Swing check valve to DIN/EN with butt weld ends, pressure seal design, internally mounted hinge pin, billet-forged body; seat/disc interface made of wear and corrosion resistant Stellite.

Industrial plants, power stations, process engineering and shipbuilding. For water and steam. Other non-aggressive fluids such as gas or oil on request.



http://shop.ksb.com/catalog/k0/en/product/ES000396

#### SISTO-RSK/RSKS



DN T [°C]

 $\geq$  -20 -  $\leq$  +140

25 - 300 Swing check valve to DIN/EN with flanged ends, body with or without lining, softseated, no dead volumes, straight-way pattern, full bore, slanted seat, static sealing to atmosphere; with soft rubber encapsulated pre-loaded valve disc featuring short travel to closure.

#### Applications:

Building services, industry and power stations; suitable for drinking water, service water, fluids handled in the food and beverage industry, abrasive and aggressive products in chemical engineering and process engineering.





#### **SERIE 2000**



ΡN Class DN T [°C]

50 - 600 ≥ -196 - ≤ +538

#### 16/25 Description:

150/300 Dual-plate check valve with single-piece, wafer-type body made of lamellar graphite cast iron, nodular cast iron, steel, stainless steel or copper aluminium alloy, metal/elastomer-seated or metal/metal-seated, maintenance-free, connections to EN, ASME or JIS.

#### Applications:

Building services: heating, air-conditioning, water supply, irrigation, water treatment. General processes: water, air, gas. Process engineering, chemical and petrochemical industry, sugar industry, paper industry, water supply, desalination, marine applications: water, air, gas, hydrocarbons.

http://shop.ksb.com/catalog/k0/en/product/ES000393



# Swing check valves to ANSI/ASME

#### **ECOLINE SCC 150-600**



NPS [inch] T [°C]

 $\geq 0 - \leq +816$ 

#### 150 - 600 Description:

2 - 24 Swing check valve to ANSI/ASME with flanged ends, cast steel A216 WCB, Trim 8 (Stellite/13 % chrome steel) for Class 150/300/600, Trim 5 (Stellite/Stellite) for Class 600, with bolted cover, internally mounted hinge pin (2"-12"), stainless steel/ graphite gaskets.

#### Applications:

Refineries, power stations, process engineering and general industry; water, steam, oil, gas. Other fluids on request.



http://shop.ksb.com/catalog/k0/en/product/ES000776

#### **ECOLINE SCF 150-600**



NPS [inch] T [°C]

 $\frac{1}{2}$  - 2  $\geq 0 - \leq +816$ 

150 - 600 Description:

Swing check valve to ANSI/ASME with flanged ends, forged steel A105, Trim 8 (Stellite/13 % chrome steel), reduced bore, with bolted cover, internally mounted

#### Applications:

Industrial plants, power stations, process engineering, refineries, oil and marine applications; for water, steam, gas, oil and other non-aggressive fluids.



#### **ECOLINE SCF 800**



Class NPS [inch] T [°C]

800 Description:

≥ 0 - ≤ +593

1/2 - 2 Swing check valve to ANSI/ASME with threaded sockets (NPT), butt weld ends (BW) or socket weld ends (SW), Trim 8 (Stellite/13 % chrome steel), with bolted cover (Class 800) or welded cover (Class 1500 and 2500), internally mounted hinge pin, available in carbon steel and alloy steel.

Applications:

Industrial plants, power stations, process engineering, refineries, oil and marine applications; for water, steam, gas, oil and other non-aggressive fluids.

http://shop.ksb.com/catalog/k0/en/product/ES000798



#### **ECOLINE SCV 150-300**



NPS [inch] T [°C]

150 - 300 Description:

Swing check valve to ANSI/ASME with flanged ends, cast steel A351 CF8/CF8M, 1/2 - 12 Trim 2 (304/304) and Trim 10 (316/316) for Class 150/300, with bolted cover, ≥ 0 - ≤ +816 integral seat, stainless steel/graphite gaskets.

Applications:

Fine chemicals, food industry and general industry. For water, steam, gas and other fluids. Other fluids on request.



http://shop.ksb.com/catalog/k0/en/product/ES000335

#### **SICCA 150-600 SCC**



NPS [inch] T [°C]

150 - 600 Description:

2 - 24 Swing check valve to ANSI/ASME with flanged or butt weld ends, with bolted  $\geq$  0 -  $\leq$  +593 cover, internally mounted hinge pin. Bigger nominal sizes with anti-slam/dash pot arrangement (optional), graphite gaskets. Stellite hard-faced seat/disc interface made of 13 % chrome steel. Available in carbon steel, low-alloy steel and stainless



Power stations, general industry and process engineering. For water, steam, oil, gas and non-aggressive fluids. Other fluids on request.

http://shop.ksb.com/catalog/k0/en/product/ES000486



#### SICCA 900-3600 SCC



Class NPS [inch] T [°C]

2 - 28 ≥ 0 - ≤ +650

900 - 3600 Description:

Swing check valve to ANSI/ASME with butt weld ends, pressure seal design, internally mounted hinge pin, Stellite hard-faced seat/disc interface, with graphite gasket. Available in carbon steel and alloy steel.



Power stations, general industry and process engineering. For water, steam, oil, gas and non-aggressive fluids. Other fluids on request.



http://shop.ksb.com/catalog/k0/en/product/ES000487

#### **WADA SC 150**



Class NPS [inch] T [°C]

150 1 - 24

≥ -196 - ≤ +100

Description:

Swing check valve to ANSI/ASME with flanged, butt weld or socket weld ends, made of cast steel A351 CF3M/CF8/CF8M, with bolted cover, dash-pot function, graphite or stainless steel/graphite gaskets.

Applications:

Natural gas liquefaction and other liquefied gases.



# Swing check valves for nuclear applications

#### SISTO-RSKNA



PN DN T [°C] 16 Description:

25 - 300 Swing check valve with flanged ends, body with or without lining, soft-seated, no dead volumes, straight-way pattern, full bore, slanted seat, static sealing to atmosphere; with soft rubber encapsulated pre-loaded valve disc featuring short travel to closure.

Applications:

Waste water systems, pump systems.



http://shop.ksb.com/catalog/k0/en/product/ES000838

#### **ZRN**



PN DN T [°C]

 $\geq$  -29 -  $\leq$  +365

 $\geq$  -20 -  $\leq$  +100

≤ 320 Description:

Swing check valve for nuclear applications, with butt weld ends, with bolted cover, internally mounted hinge pin, forged body made of steel or stainless steel.

Safety feed, feed water, live steam and condensate systems.



http://shop.ksb.com/catalog/k0/en/product/ES000399

# Tilting disc check valves to DIN/EN

#### COBRA-TDC01/03



T [°C]

100 - 1000

10/16/25 Description:

Tilting disc check valve to DIN/EN with flanged ends, with lever and counterweight/hydraulic damper, body and valve disc made of nodular cast iron, ≥ -10 - ≤ +70

body seats made of stainless steel. Applications:

Water supply systems

## Strainers to DIN/EN

# **BOA-S**



PN DN T [°C]  $\geq -10 - \leq +350$ 

6/16/25 Description:

15 - 400 Strainer to DIN/EN with flanged ends, with standard or fine screen; all nominal sizes with drain plug in the cover.

#### Applications:

Hot-water heating systems, high-temperature hot water heating systems, heat transfer systems. General steam applications in building services and industry. Other fluids on request.



#### **NORI 40 FSL/FSS**



PN DN T [°C] ≥ -10 - ≤ +450

25/40 Description:

15 - 300 Strainer to DIN/EN with flanged or butt weld ends, body made of cast steel, with standard or fine screen; all nominal sizes with drain plug in the cover, optional magnetic insert.

Applications:

Heat transfer systems, industrial plants, building services and shipbuilding. For thermal oils, water, steam, gas and other non-aggressive fluids. Other fluids on request.

http://shop.ksb.com/catalog/k0/en/product/ES000523



49

#### **BOACHEM-FSA**



PN DN T [°C]

10 - 40 Description:

15 - 400 Strainer to DIN/EN with flanged ends, body made of stainless steel, with standard  $\geq$  -10 -  $\leq$  +400 or fine screen; all nominal sizes with drain plug in the cover.

Applications:

Process engineering, industry, building services, food and beverage industries, for aggressive fluids. Other fluids on request.



http://shop.ksb.com/catalog/k0/en/product/ES000402

#### Strainers to ANSI/ASME

#### **ECOLINE FYC 150-600**



NPS [inch] T [°C]

150 - 600 Description:

2 - 12 Strainer to ANSI/ASME with flanged ends, Y-pattern, bolted cover, cast steel  $\geq$  0 -  $\leq$  +816 A216 WCB, screen made of stainless steel 304, mesh width 1.5 mm.

Applications:

Refineries, power stations, process engineering and general industry; water, steam, oil, gas. Other fluids on request.



#### **ECOLINE FYF 800**



Class NPS [inch] T [°C]

800 Description:

1/2 - 2 Strainer to ANSI/ASME with threaded sockets (NPT) or socket weld ends (SW), Y-≥ 0 - ≤ +816 pattern, with bolted cover, forged steel A105, screen made of stainless steel 304. Mesh width 0.8 to 0.9 mm.

Industrial plants, power stations, process engineering, refineries, oil and marine applications; for water, steam, gas, oil and other non-aggressive fluids.



# Centred-disc butterfly valves

#### **BOAX-CBV13**



PN 10/16 DN 50 - 1200 T [°C]  $\geq$  -10 -  $\leq$  +115

10/16 Description:

50 - 1200 Centred-disc butterfly valve with epoxy coating. Perfect shut-off in either flow direction. Flanged ends to EN standards, body made of nodular cast iron, valve disc made of stainless steel.

Applications:

Shut-off or control duties, drinking water, seawater, water supply systems, water treatment systems and water distribution systems, waste water, irrigation, ultra-

pure water, air, oil.

http://shop.ksb.com/catalog/k0/en/product/ES000825



#### **BOAX-S/SF**



PN 6/10/16 DN 20 - 600 T [°C] ≥ -10 - ≤ +130

6/10/16 Description:

20 - 600
- ≤ +130

Centred-disc butterfly valve for building services, with heat barrier and elastomer liner (EPDM XU or nitrile K), with lever, manual gearbox or electric actuator (BOAXMAT-S and BOAXMAT-SF models); semi-lug body (T2) or full-lug body (T4) suitable for downstream dismantling and dead-end service. Valve disc made of stainless steel 1.4308, connections to EN.

Applications

Heating, ventilation, air-conditioning systems, for drinking water.

e, m, p + AMTROBOX/AMTRONIC/SMARTRONIC

http://shop.ksb.com/catalog/k0/en/product/ES000388

# **BOAX-S/SF Gaz**



PN DN T [°C]

 $\leq 10$  D 20 - 600 C  $\geq -20 - \leq +60$  (0)

≤ 10 Description:

Centred-disc butterfly valve for gas lines, with elastomer liner (epichlorohydrin EG), with yellow lever; semi-lug body (T2), full-lug body (T4). Valve disc made of stainless steel 1.4308, connections to EN.

Applications:

Gas lines



http://shop.ksb.com/catalog/k0/en/product/ES000388

#### **BOAX-B**



PN DN T [°C] 10/16 40 - 1000 ≥ -10 - ≤ +110

10/16 Description:

Centred-disc butterfly valve, sealed by elastomer liner (EPDM XC or nitrile K), with lever, manual gearbox, pneumatic or electric actuator; wafer-type body (T1), semilug body (T2), full-lug body (T4) or U-section body with flat faces (T5). Body types T2, T4 and T5 are suitable for downstream dismantling and dead-end service. Valve disc made of nodular cast iron or stainless steel. Connections to EN, ASME or JIS.



Engineering contractors. General water circuits, fuel oil, oil. Shut-off and control duties in water management, for water supply and water treatment, drainage and irrigation.

irrigation.

http://shop.ksb.com/catalog/k0/en/product/ES000573



BOAX-B Gaz



PN DN T [°C]

e, m, p + AMTROBOX/AMTRONIC/SMARTRONIC

10/16 40 - 300 ≥ -20 - ≤ +90

10/16 Description:

Centred-disc butterfly valve, sealed by elastomer liner (epichlorohydrin EG or nitrile K), with lever; semi-lug body (T2) or full-lug body (T4), valve disc made of nodular cast iron. Connections to EN.

Applications:

Gas pipes to NF ROB.GAZ N°095.00



m

#### 51

#### **BOAX-B DVGW**



PN DN 40 - 300 T [°C] ≥ -20 - ≤ +60

10 Description:

Centred-disc butterfly valve, sealed by elastomer liner (epichlorohydrin EG), with lever; semi-lug body (T2) or full-lug body (T4), valve disc made of nodular cast iron or stainless steel. Connections to EN.

Applications:

Gas lines and biogas plants.



http://shop.ksb.com/catalog/k0/en/product/ES000574

#### **ISORIA 10/16**



PN DN 40 - 1000 T [°C] ≥ -10 - ≤ +200

Description:

Centred-disc butterfly valve, sealed by elastomer liner, with lever or manual gearbox, pneumatic, electric or hydraulic actuator. Wafer-type body (T1), semi-lug body (T2), full-lug body (T4) or U-section body with flat faces (T5). Body types T2 and T4 are suitable for downstream dismantling and dead-end service with counterflange. Connections to EN, ASME, JIS.

Applications:

Shut-off and control duties in all industrial and energy sectors.



e, m, h, p + AMTROBOX/AMTRONIC/SMARTRONIC

http://shop.ksb.com/catalog/k0/en/product/ES000377

#### **ISORIA 20/25**



ΡN DN T [°C]

32 - 1000 ≥ -10 - ≤ +200

20/25 Description:

Centred-disc butterfly valve, sealed by elastomer liner, with lever or manual gearbox, pneumatic, electric or hydraulic actuator. Semi-lug body (T2), full-lug body (T4) or U-section body with flat faces (T5). Body types T2, T4 and T5 are suitable for downstream dismantling and dead-end service with counterflange. Connections to EN, ASME, JIS.

Applications:

Shut-off and control duties in all industrial and energy sectors.



e, m, h, p + AMTROBOX/AMTRONIC/SMARTRONIC

http://shop.ksb.com/catalog/k0/en/product/ES000379

#### **ISORIA 20 UL**



PN DN T [°C] 40 - 700

≥ -10 - ≤ +200

16 Description:

Centred-disc butterfly valve, sealed by elastomer liner, with manual gearbox; semilug body (T2), full-lug body (T4). Body types T2 and T4 are suitable for downstream dismantling and dead-end service with counterflange. Connections to EN, ASME or JIS. Underwriter Laboratories (UL) approved.





Fire protection

http://shop.ksb.com/catalog/k0/en/product/ES000379



## **MAMMOUTH**



ΡN DN T [°C] 6/10/16/20/25 1050 - 4000

≥ 0 - ≤ +80

Description:

Centred-disc butterfly valve, sealed by elastomer liner, with manual gearbox, electric, hydraulic or counterweight actuator, U-section body with flat faces (T5), connections to EN, ASME or JIS.

Applications:

Water supply, water treatment, irrigation, drainage, desalination (reverse osmosis, multi-stage flash), industry. Cooling circuits and fire protection. Shipbuilding, steel industry and power stations (hydraulic, thermal, nuclear). Shut-off and control duties in all industrial sectors.



e, m, p + AMTROBOX/AMTRONIC/SMARTRONIC

#### KE



ΡN DN T [°C]

40 - 600 ≥ -20 - ≤ +200

#### 10 Description:

Applications:

Centred-disc butterfly valve with PFA liner for the chemical industry. With lever, manual gearbox, pneumatic or electric actuator. With wafer-type body (T1), fulllug body (T4) or U-section body with raised faces (T6). Connections to EN, ASME or

Highly corrosive fluids: toxic and highly corrosive fluids which cannot be handled by metals or elastomers, thus requiring the sole use of PFA. Moderately corrosive and aggressive fluids allowing the use of a PFA liner in combination with a stainless steel valve disc. Fluids requiring absolutely safe handling.



e, m, h, p + AMTROBOX/AMTRONIC/SMARTRONIC

http://shop.ksb.com/catalog/k0/en/product/ES000380

# **Double-offset butterfly valves**

#### **APORIS**



ΡN DN T [°C]

100 - 2000 ≥ -10 - ≤ +85

#### 10/16/25 Description:

Double-offset butterfly valve with epoxy coating. Perfect shut-off in either flow direction. Flanged ends to EN standards, body and valve disc made of nodular cast

Shut-off or control duties; drinking water, seawater, air, water engineering.



#### **DANAÏS 150**



ΡN Class DN T [°C]

≥ -50 - ≤ +260

150 Double-offset butterfly valve, with plastomer seat (also in fire-safe design), metal 50 - 1200 seat or elastomer seat (FKM [VITON R] or NBR [nitrile]). Lever or manual gearbox, pneumatic, electric or hydraulic actuator. Body made of nodular cast iron, cast steel, stainless steel, aluminium bronze or duplex stainless steel (254 SMO). Wafertype body (T1), full-lug body (T4), T4 suitable for downstream dismantling and dead-end service with counterflange. Connections to EN, ASME or JIS. Fire-safe  $\,$ design tested and certified to API 607. Fugitive emissions performance tested and certified to EN ISO 15848-1. ATEX-compliant version in accordance with Directive 2014/34/FU



Petroleum, gas, chemical and petrochemical industry, marine applications, transport of petroleum products and chemicals, sugar industry, geothermal energy, shipbuilding, low-pressure steam, vacuum service, mining, corrosive fluids, cleaning agents, highly aggressive fluids, brine, paper and pulp industry, fertilisers. All applications requiring offset-disc butterfly valves.

e, m, h, p + AMTROBOX/AMTRONIC/SMARTRONIC

#### **DANAÏS MTII**



PN Class DN T [°C] 50 - 600

 $\geq -50 - \leq +260$ 

#### 25/50 Description:

150/300 Double-offset butterfly valve with plastomer seat or metal seat (fire-safe), without gland packing, maintenance-free, with lever or manual gearbox, pneumatic, electric or hydraulic actuator, body made of steel or stainless steel. Wafer-type body (T1), full-lug body (T4) or flanged body (T7) with flat or raised faces. Body types T4 and T7 are suitable for dead-end service. Connections to EN, ASME or JIS. Certified to German TA-Luft Technical Guidelines on Air Quality Control.



Applications:

Petroleum, gas, chemical and petrochemical industry, nuclear power stations, onshore and offshore plants. Steam, vacuum and all applications requiring offsetdisc butterfly valves.

e, m, h, p + AMTROBOX/AMTRONIC/SMARTRONIC

#### **DANAÏS TBTII**



Class DN 50 - 1200 T [°C] ≥ -196 - ≤ +200

10/20 Description:

150 Double-offset butterfly valve for cryogenic applications; full-lug body (T4), flanged body (T7) with flat or raised faces, or body with butt weld ends made of stainless steel to ASME Class 150, JIS, fire-safe design. On request degreased for oxygen service. Manual gearbox, pneumatic, electric or hydraulic actuator.

Applications:

Natural gas liquefaction, onshore and offshore plants. All liquefied gases.



e, m, h, p + AMTROBOX/AMTRONIC/SMARTRONIC

http://shop.ksb.com/catalog/k0/en/product/ES000815

# **Triple-offset butterfly valves**

#### **TRIODIS 150**



Class DN 50 - 1500 T [°C] ≥ -196 - ≤ +450

150 Triple-offset butterfly valve, metal-seated (fire-safe), without gland packing, maintenance-free, with lever or manual gearbox, pneumatic, electric or hydraulic actuator. Body made of steel or stainless steel, full-lug body (T4), flanged body (T7) with flat or raised faces, body with butt weld ends (BWSE). Body types T4 and T7 are suitable for dead-end service. Connections to EN, ASME or JIS. Connections to ASME: Schedule 10S, 10, STD and XS to NPS for valves with butt weld ends (other connections on request). Fugitive emissions performance tested and certified to EN ISO 15848-1. Certified to German TA Luft Technical Guidelines on Air Quality Control. Fire-safe design tested and certified to EN ISO 10497 (BS 6755 - API 6FA). ATEX-compliant version in accordance with Directive 2014/34/EU. In compliance with NACE MR0175 / ISO 15156 and MR 0103.



Applications

Natural gas liquefaction. All liquefied gases. Heat transfer fluids, oil, gas, petrochemical industry, tank farms, refineries, onshore and offshore plants.

e, m, h, p + AMTROBOX/AMTRONIC/SMARTRONIC

http://shop.ksb.com/catalog/k0/en/product/ES000816

#### **TRIODIS 300**



ΡN Class DN 80 - 1200 T [°C] ≥ -196 - ≤ +450

Triple-offset butterfly valve, metal-seated (fire-safe), without gland packing, maintenance-free, with lever or manual gearbox, pneumatic, electric or hydraulic actuator. Body made of steel or stainless steel, full-lug body (T4), flanged body (T7) with flat or raised faces, body with butt weld ends (BWSE). Body types T4 and T7 are suitable for dead-end service. Connections to EN, ASME or JIS. Connections to ASME: Schedule 40S and STD to NPS for valves with butt weld ends (other connections on request). Fugitive emissions performance tested and certified to EN ISO 15848-1. Certified to German TA Luft Technical Guidelines on Air Quality Control. Fire-safe design tested and certified to EN ISO 10497 (BS 6755 - API 6FA). ATEX-compliant version in accordance with Directive 2014/34/EU. In compliance with NACE MR0175 / ISO 15156 and MR 0103.



Applications:

Natural gas liquefaction. All liquefied gases. Heat transfer fluids, aggressive fluids, oil, gas, petrochemical industry, tank farms, refineries, onshore and offshore plants.

m, p + AMTROBOX/AMTRONIC/SMARTRONIC

#### **TRIODIS 600**



PΝ Class DN 150 - 1000 T [°C]  $\geq$  -196 -  $\leq$  +450

≤ 100 Description:

Triple-offset butterfly valve, metal-seated (fire-safe), without gland packing, maintenance-free, with lever or manual gearbox, pneumatic, electric or hydraulic actuator. Body made of steel or stainless steel, full-lug body (T4), flanged body (T7) with flat or raised faces. Body types T4 and T7 are suitable for dead-end service. Connections to EN, ASME or JIS (other connections on request). Fugitive emissions performance tested and certified to EN ISO 15848-1. Certified to German TA Luft Technical Guidelines on Air Quality Control. Fire-safe design tested and certified to BS 6775-2. ATEX-compliant in accordance with Directive 2014/34/EU. In compliance with NACE MR0175 / ISO 15156 and MR 0103.



Natural gas liquefaction. All liquefied gases. Heat transfer fluids, aggressive fluids, oil, gas, petrochemical industry, tank farms, refineries, onshore and offshore plants.

m, p + AMTROBOX/AMTRONIC/SMARTRONIC



# **Butterfly valves for nuclear applications**

#### **CLOSSIA**



PN DN T [°C]

 $\geq$  -20 -  $\leq$  +170

≤ 5,5 Description:

250/500/750/1000 Double-offset butterfly valve, metal-seated, maintenance-free. Steel body with one flanged and one weld end connection. With safety actuator with manual, pneumatic or electric actuation.

Applications:

In the containment of nuclear power stations.



e, m, p

http://shop.ksb.com/catalog/k0/en/product/ES000907

# Combined butterfly/check valve

#### **DUALIS**



DN T [°C] ≥ -10 - ≤ +65

500 - 1400 Description:

Combined butterfly/check valve with single-acting hydraulically controlled counterweight actuator. For mounting on valves with DN 500 to 1400.

For installation in the pump discharge lines of pumping stations. Power station cooling circuits. Protects pipelines and turbines.



# Single-piece ball valves

#### MP-CI/MP-II



PN DN T [°C]

≥ -10 - ≤ +200

15 - 150 Ball valve to DIN/EN with wafer-type body made of Kanigen-treated carbon steel (MP/CI) or stainless steel (MP/II), stainless steel ball, PTFE/graphite seat.

Applications:

Irrigation and fire-fighting systems, domestic water supply, air-conditioning systems, cooling circuits, water supply systems.



m, p + AMTROBOX/AMTRONIC

http://shop.ksb.com/catalog/k0/en/product/ES000625

#### **PROFIN-VT1**



ΡN DN T [°C]

≥ -10 - ≤ +150

8 - 50 Ball valve to ANSI/ASME with threaded ends (BSP), single-piece body, reduced bore, solid ball, blowout-proof stem, body made of stainless steel.

#### Applications:

In spray irrigation systems, general irrigation systems, fire-fighting systems, airconditioning systems, paint shops, snow-making systems, washing plants, water supply systems, mining, pressure boosting, chemical industry, process engineering, paper and pulp industry, domestic water supply, heating, ventilation and airconditioning applications. For cleaning agents, condensate, cooling water, corrosive fluids, drinking water, fire-fighting water, lubricants, oil, river water, seawater, groundwater, service water, wash water and solvents.



# Two-piece ball valves

DI

#### **ECOLINE BLT 150-300**



455	.507500
N	15 - 300
[°C]	≥ -10 - ≤ +200

#### 150 / 300 Description:

Ball valve to ANSI/ASME with flanged ends, two-piece body, full bore, floating ball, plastomer sealing (also in fire-safe design).

#### Applications

General industry, power stations, chemical industry, petrochemical industry and all related branches of industry, paper industry, food industry and pharmaceutical industry.



e, m, p

http://shop.ksb.com/catalog/k0/en/product/ES000795

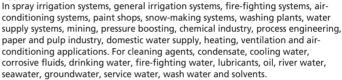
#### **PROFIN-VT2L**



PN DN T [°C] 40 Description:

8 - 80 Ball valve to ANSI/ASME with threaded ends (BSP), two-piece body, full bore, solid ball, anti-static design, blowout-proof stem, body made of stainless steel.

#### Applications:





http://chap.kch.com/catalog/k0/ap/product/E500090/

# Three-piece ball valves

#### **ECOLINE BLC 1000**



Class DN T [°C] 1000 WOG 8 - 100 ≥ -10 - ≤ +200

 $\geq$  -10 -  $\leq$  +150

#### 1000 WOG Description:

Ball valve to ANSI/ASME with threaded ends (NPT), butt weld or socket weld ends, three-piece body, full bore, floating ball. Plastomer sealing (also in fire-safe design).



General industry, power stations, chemical industry, petrochemical industry and all related branches of industry, paper industry, food industry and pharmaceutical industry



m, p

http://shop.ksb.com/catalog/k0/en/product/ES000794

#### PROFIN-SI3FIT/-SI3IT/-SI3LIT



PN DN T [°C] 16/40 15 - 100 ≥ -10 - ≤ +150

16/40 Description:

15 - 100
- ≤ +150
Ball valve to ANSI/ASME with flanged ends, threaded ends (BSP) or long butt weld ends, three-piece body, full bore, solid ball, top flange to ISO 5211, anti-static design, blowout-proof stem, spring-loaded stem seal, body made of stainless steel.

#### Applications

Spray irrigation systems, irrigation systems, fire-fighting systems, air-conditioning systems, paint shops, artificial snow-making systems, washing plants, water supply systems, mining, pressure boosting, chemical industry and process engineering, paper and pulp industry, domestic water supply, heating, ventilation and air-conditioning systems. For cleaning agents, condensate, cooling water, corrosive fluids, drinking water, fire-fighting water, lubricants, oil, river water, seawater, groundwater, service water, wash water and solvents.



m. r

#### PROFIN-VT3/-VT3L/-VT3F/-VT33L



T [°C] ≥ -10 - ≤ +150

8 - 100 Ball valve to ANSI/ASME with flanged ends, threaded ends (BSP) or long butt weld ends, three-piece body, full bore, solid ball, blowout-proof stem, body made of

Spray irrigation systems, irrigation systems, fire-fighting systems, air-conditioning systems, paint shops, artificial snow-making systems, washing plants, water supply systems, mining, pressure boosting, chemical industry and process engineering, paper and pulp industry, domestic water supply, heating, ventilation and airconditioning systems. For cleaning agents, condensate, cooling water, corrosive fluids, drinking water, fire-fighting water, lubricants, oil, river water, seawater, groundwater, service water, wash water and solvents.

http://shop.ksb.com/catalog/k0/en/product/ES000894



# Soft-seated diaphragm valves to DIN/EN

#### SISTO-KB



ΡN DN T [°C]

 $\geq$  -20 -  $\leq$  +140

Applications:

15 - 200 Diaphragm valve to DIN/EN with flanged ends; shut-off and sealing to atmosphere by diaphragm; hydraulically favourable body with or without lining, position indicator with integrated stem protection. DN 125 to DN 200 with threaded bush. All moving parts are separated from the fluid by the diaphragm. Maintenance-

> Building services, industry, power stations; suitable for abrasive and aggressive products such as service water, waste water, acids, alkaline solutions, sludges and



http://shop.ksb.com/catalog/k0/en/product/ES000314

#### SISTO-KBS

e, m, p



PN DN T [°C]

≥ -20 - ≤ +140

10 Description:

Diaphragm valve to DIN/EN with flanged ends, short face-to-face length; shut-off and sealing to atmosphere by diaphragm; hydraulically favourable body with or without lining, position indicator with integrated stem protection. DN 125 to DN 200 with threaded bush. All moving parts are separated from the fluid by the diaphragm. Maintenance-free.



Applications:

Building services, industry, power stations; suitable for abrasive and aggressive products such as service water, waste water, acids, alkaline solutions, sludges and

http://shop.ksb.com/catalog/k0/en/product/ES000526

#### SISTO-10

e, m, p



PΝ DN T [°C] 10 Description:

≥ -20 - ≤ +160

15 - 300 Diaphragm valve to DIN/EN with flanged ends; shut-off and sealing to atmosphere by spiral-supported diaphragm (DN 65 and above); body with or without lining, position indicator with integrated stem protection. All moving parts are separated from the fluid by the diaphragm. Maintenance-free.



Industrial plants, chemical engineering, process engineering, for service water, air, oil, abrasive and aggressive fluids.

e, m, p

#### SISTO-10M



PN DN T [°C] ≥ -10 - ≤ +140

10 Description:

15 - 80 Diaphragm valve to DIN/EN with threaded sockets; shut-off and sealing to atmosphere by spiral-supported diaphragm (DN 65 and above); position indicator with integrated stem protection. All moving parts are separated from the fluid by the diaphragm. Maintenance-free.

Applications:

Industrial plants, chemical engineering, process engineering, for service water, air,

oil, abrasive and aggressive fluids.

e, m, p

http://shop.ksb.com/catalog/k0/en/product/ES000513

≥ -10 - ≤ +160

#### SISTO-16



PN DN T [°C]

15 - 200

Diaphragm valve to DIN/EN with flanged ends; shut-off and sealing to atmosphere by completely enclosed spiral-supported diaphragm; body with or without lining, position indicator with integrated stem protection. All moving parts are separated from the fluid by the diaphragm. Maintenance-free.

Applications:

Building services, industry and power stations; suitable for drinking water, service water, air, oil, technical gases, fluids handled in the food and beverage industry, abrasive and aggressive products in chemical engineering and process engineering.

http://shop.ksb.com/catalog/k0/en/product/ES000316



e, m, p

#### SISTO-16S



PΝ DN T [°C]

15 - 200  $\geq$  -20 -  $\leq$  +160

#### 16 Description:

Diaphragm valve to DIN/EN with flanged ends, short face-to-face length; shut-off and sealing to atmosphere by completely enclosed spiral-supported diaphragm; body with or without lining, position indicator with integrated stem protection. All moving parts are separated from the fluid by the diaphragm. Maintenance-



Applications:

Building services, industry and power stations; suitable for drinking water, service water, air, oil, technical gases, fluids handled in the food and beverage industry, abrasive and aggressive products in chemical engineering and process engineering.

http://shop.ksb.com/catalog/k0/en/product/ES000514

### SISTO-16RGA

<mark>в</mark>, т, р



ΡN DN T [°C] > -10 - < +90

#### 16 Description:

15 - 80 Diaphragm valve to DIN/EN with gunmetal body and threaded sockets for drinking water installations in building services to DIN 1988, DIN-DVGW-approved for water acc. to test W 270, in compliance with KTW recommendations (use of elastomers in drinking water applications); shut-off and sealing to atmosphere by completely enclosed diaphragm; position indicator with integrated stem protection. All moving parts are separated from the fluid by the diaphragm. Maintenance-free.



Applications:

Drinking water, particularly drinking water installations to DIN 1988, seawater, all service water qualities.

http://shop.ksb.com/catalog/k0/en/product/ES000319

#### SISTO-16TWA/HWA/DLU



DN T [°C]

 $\geq$  -10 -  $\leq$  +140

16 Description:

15 - 200 Diaphragm valve to DIN/EN with flanged ends, for drinking water installations to DIN 1988, DIN-DVGW-approved for water acc. to test W 270, in compliance with KTW recommendations (use of elastomers in drinking water applications); shut-off and sealing to atmosphere by completely enclosed diaphragm; position indicator with integrated stem protection. All moving parts are separated from the fluid by the diaphragm. Maintenance-free.



SISTO-16TWA (drinking water up to 90 °C): drinking water, particularly drinking water installations to DIN 1988, water containing chlorine, seawater, etc. SISTO-16HWA (hot water up to 140 °C): all service water qualities. SISTO-16 DLU (compressed air up to 90 °C): compressed air with oil content, oils and technical



e, m, p

#### SISTO-20



15 - 200 T [°C] ≥ -20 - ≤ +160

DN

Applications:

Diaphragm valve to DIN/EN with flanged ends; shut-off and sealing to atmosphere by completely enclosed spiral-supported diaphragm; body with or without lining, position indicator with integrated stem protection. All moving parts are separated from the fluid by the diaphragm. Maintenance-free.



Building services, industry and power stations; suitable for drinking water, service water, air, oil, technical gases, fluids handled in the food and beverage industry, abrasive and aggressive products in chemical engineering and process engineering.

http://shop.ksb.com/catalog/k0/en/product/ES000317

#### SISTO-C



ΡN DN T [°C]  $\geq$  -20 -  $\leq$  +160

16 Description:

6 - 100 Diaphragm valve with butt weld ends or clamps; straight-way, Y or T pattern, or as a multi-port valve; shut-off and sealing to atmosphere by completely enclosed diaphragm. No dead volumes, suitable for sterilisation, SIP/CIP-compliant design, position indicator. All moving parts are separated from the fluid by the diaphragm. Maintenance-free.



Applications:

Biotechnology, pharmaceutical industry, sterile processes, food and beverage

http://shop.ksb.com/catalog/k0/en/product/ES000320

# Diaphragm valves for nuclear applications

#### SISTO-20NA



PN T [°C]

20 Description:  $\geq$  -20 -  $\leq$  +100

8 - 150 Diaphragm valve with butt weld ends, for nuclear applications, shut-off and sealing to atmosphere by completely enclosed spiral-supported diaphragm. All moving parts are separated from the fluid by the diaphragm. Maintenance-free.



Cleaning systems, condensate and cooling water systems, waste water systems, auxiliary systems.



e, m, p

http://shop.ksb.com/catalog/k0/en/product/ES000840

#### SISTO-DrainNA



T [°C]

 $\geq -20 - \leq +100$ 

16 Description:

15 - 25 Diaphragm valve with butt weld ends, for nuclear applications; shut-off and sealing to atmosphere by completely enclosed spiral-supported diaphragm. All moving parts are separated from the fluid by the diaphragm. Maintenance-free.

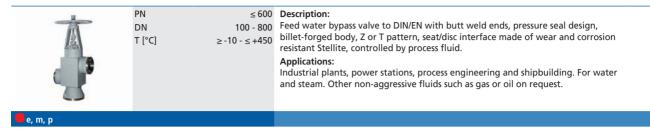


Heating systems, air-conditioning systems, auxiliary systems.



# Feed water bypass valves

#### **ZJSVM/RJSVM**

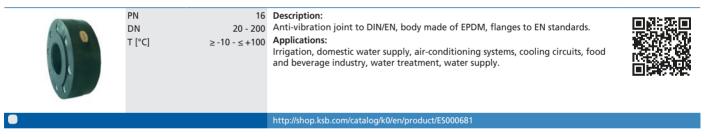


# **Expansion and anti-vibration joints**

#### **ECOLINE GE1/GE2/GE3**



#### **ECOLINE GE4**



#### Levers

#### CR/CM



T [°C]  $\geq$  -20 -  $\leq$  +80 Description:

Lever made of ductile cast iron. CR type series: locks in 10 positions (open, closed and 8 evenly spaced intermediate positions) and CM type series: same as CR, with special coating.

Applications:

All applications in building services, water engineering, energy engineering, and industry.



http://shop.ksb.com/catalog/k0/en/product/ES000501

#### S/SR/SP



T [°C]  $\geq$  -20 -  $\leq$  +80 Description:

Lever made of light metal alloy; type series S: locks in limit positions (open and closed), type series SR: locks in 9 positions (open, closed and 7 evenly spaced intermediate positions), type series SP: locks in any position.

All applications in water engineering, energy engineering, and industry.



http://shop.ksb.com/catalog/k0/en/product/ES000501

# Manual gearboxes

#### MN



Output torque [Nm] Enclosure T [°C]

≤ 250 Description:

Manual actuator for operating quarter-turn valves. MN range manual gearbox, irreversible worm gear kinematics, handwheel- $\geq$  -20 -  $\leq$  +80 operated.

Building services, general industrial applications, water and industrial processes in non-corrosive and non-saline environments.



#### **MR**



Output torque [Nm] Enclosure T [°C]

≥ -20 - ≤ +80

≤ 16000 Description:

IP67/IP68 Heavy-duty manual actuator for operating quarter-turn valves. MR range manual gearbox, irreversible worm gear or patented AMRI yoke kinematics. Handwheel-operated as standard. Models MR 400 to 1600 can be fitted with actuators. Options include alternative operating mechanisms, limit switch box, low-temperature version, etc.



Building services, industry and process engineering, water management, waste water management, energy, petroleum and natural gas, mining, dredgers and shipbuilding

http://shop.ksb.com/catalog/k0/en/product/ES000504



AMTROBOX

## **Electric actuators**

#### **ACTELEC (BERNARD CONTROLS)**



Ouarter-turn actuator Multi-turn actuator **Enclosure** Output torque [Nm] T [°C]

AQ1L - SQ120 Description:

31 - 800 Electric actuators by BERNARD CONTROLS for direct mounting on quarter-turn valves (actuator flange to ISO 5211) with a manual gearbox of the MR type series (actuator flange to ISO 5210). Power supply: single-phase AC, three-phase or direct current. Torque ≥ -20 - ≤ +80 switch, travel stop and limit switch box as standard. For on/off or control duties. Integrated local control or remote control.



Applications:

All applications in water engineering, energy engineering, and

http://shop.ksb.com/catalog/k0/en/product/ES000407

#### **ACTELEC (AUMA)**



Quarter-turn actuator Multi-turn actuator Enclosure Output torque [Nm]

SQ 05.2 - SQ 12 Description:

≤ 16000

31 - 1600 Electric actuators by AUMA for direct mounting on quarter-turn valves (actuator flange to ISO 5211) with a manual gearbox of the MR type series (actuator flange to ISO 5210). Power supply: singlephase AC, three-phase or direct current. Torque switch, travel stop and limit switch box as standard. For on/off or control duties. Integrated local control or remote control.



All applications in water engineering, energy engineering, and industry.



#### SISTO-LAE



Multi-turn actuator Enclosure Output torque [Nm] AUMA Description:

Multi-turn actuators for valves with rising stem, max. closing force 60,000 N, configurable as a function of flow characteristics and valve travel; open/closed-position feedback; factory-mounted.

Applications:

Building services, industry, power stations, food industry, chemical industry.



http://shop.ksb.com/catalog/k0/en/product/ES000405

# **Hydraulic actuators**

## HQ



Output torque [Nm] Enclosure T [°C]

IP68 Single-acting or double-acting hydraulic actuator (gas cartridge or  $\geq$  -45 -  $\leq$  +100 spring) for mounting on quarter-turn valves (butterfly valves or ball valves). Actuator flange to ISO 5211. Control pressure up to 160 bar. Mounts on valve stems with square end or flat end. Force transmission via rack-and-pinion or scotch-yoke kinematics provides output torques of up to 55,000 Nm which are ideal for actuating quarter-turn valves. Equipped with a visual position indicator and adjustable travel stops for open/closed position as standard. Optional manual override. Can be equipped with a hydraulic power unit: for shut-off, as a safety block, ESD block, as a bypass device enabling manual override. Can be combined with all limit switch boxes of the AMTROBOX/AMTROBOX R type series.



AMTROBOX



#### Pneumatic actuators

#### **ACTAIR NG**



Output torque [Nm] at a control pressure of 6 bar Enclosure T [°C]

≤ 8000 Description:

≥ -50 - ≤ +150

Double-acting pneumatic actuator for mounting on quarter-turn valves (butterfly valves or ball valves). Actuator flange to ISO 5211. Control pressure up to 8 bar. Mounts on valve stems with square end or flat end. Force transmission via scotch-yoke kinematics provides output torques of up to 8000 Nm which are ideal for actuating quarter-turn valves. Equipped with a visual position indicator and, depending on the actuator size, adjustable travel stops for open/closed position or closed position as standard. Optional separate or integrated manual override. Suitable for mounting control unit type series AMTROBOX, AMTRONIC, SMARTRONIC or any other device with an interface to VDI/ VDE 3845.



Applications:

All applications in water engineering, energy engineering, and industry.

AMTROBOX, AMTRONIC, SMARTRONIC

#### **DYNACTAIR NG**



Output torque [Nm] at a control pressure of 6 bar Enclosure T [°C]

≤ 4000 Description:

 $\geq$  -50 -  $\leq$  +150

Single-acting pneumatic actuator for mounting on quarter-turn valves (butterfly valves or ball valves). Actuator flange to ISO 5211. Control pressure up to 8 bar. Mounts on valve stems with square end or flat end. Force transmission via scotch-yoke kinematics provides output torques of up to 4000 Nm which are ideal for actuating quarter-turn valves. Reset to fail-safe position in case of control air failure is effected by means of spring assemblies. Equipped with a visual position indicator and, depending on the actuator size, adjustable travel stops for open/closed position or closed position as standard. Optional separate or integrated manual override. Suitable for mounting control unit type series AMTROBOX, AMTRONIC, SMARTRONIC or any other device with an interface to VDI/VDE 3845.

Applications:

All applications in water engineering, energy engineering, and industry.

AMTROBOX, AMTRONIC, SMARTRONIC

http://shop.ksb.com/catalog/k0/en/product/ES000412

#### SISTO-LAD



Control air pressure [bar] Closing force [N]

≤ 6 Description:

≤ 20000 Diaphragm actuator in compact design for mounting on valves with a linear stem movement (globe valves, diaphragm valves and gate valves). Available in single-acting spring-to-close or spring-to-open design, or double-acting air-to-open/air-to-close design; suitable for mounting limit switches or positioners to suit customer requirements, factory-mounted. Settings are adjusted during factory test run.



Applications:

Building services, industry, power stations; suitable for abrasive and aggressive products such as service water, waste water, acids, alkaline solutions, sludges and suspensions.

http://shop.ksb.com/catalog/k0/en/product/ES00080

#### SISTO-LAP



Control air pressure [bar] Closing force [N]

< 250000

5,5 - 10 Description:

Piston actuator in heavy-duty design for mounting on valves with a linear stem movement (globe valves, diaphragm valves and gate valves). Actuator flange to DIN/ISO 5210. Available in single-acting spring-to-close or spring-to-open design, or double-acting air-toopen/air-to-close design; suitable for mounting limit switches or positioners to suit customer requirements, factory-mounted. Settings are adjusted during factory test run.



Building services, industry, power stations, the food and beverage industries and the chemical industry. The pneumatic actuators can also be used in potentially explosive atmospheres.



Actuators

## **SISTO-C LAP**



Control air pressure [bar]	5,5 - 7	Description:	
Closing force [N]	≤ 20000	Piston actuator in high-grade stainless steel design for use on SISTO-C diaphragm valves. Available in single-acting spring-to-close or spring-to-open design, or double-acting air-to-open/air-to-close design; suitable for mounting limit switches or positioners to suit customer requirements, factory-mounted. Settings are adjusted during factory test run.	
		Applications: Biotechnology, pharmaceutical industry, sterile processes, food and beverage industry.	

63

# **Actuator accessories**

# **RMD**



Enclosure T [°C] ≥ -2	IP65 20 - ≤ +80	Description:  Manual override using a declutchable gear operator with handwheel for mounting on ACTAIR NG double-acting pneumatic actuators, DYNACTAIR NG single-acting pneumatic actuators and HQ single-acting or double-acting hydraulic actuators. The manual override is fitted between the valve and the actuator. The manual override has priority over the pneumatic or hydraulic actuator and is locked either in clutched or declutched position using the locking device.  Applications:  All applications in water engineering, energy engineering, and industry.	
		http://shop.ksh.com/catalog/k0/en/product/FS000906	

# **Monitoring**

#### **AMTROBOX**



Enclosure T [°C]

IP67 Description:

 $\geq$  -20 -  $\leq$  +80 Multi-functional AMTROBOX limit switch box. For open/closed position signalling via mechanical limit switches or proximity sensors. AMTROBOX (R1149) mounts on MR manual gearboxes, ACTAIR NG pneumatic actuators and HQ hydraulic actuators.

All applications in water engineering, building services and energy engineering.



http://shop.ksb.com/catalog/k0/en/product/ES000463

#### **AMTROBOX EEx ia**



Enclosure T [°C]

IP67 Description:

 $\geq$  -10 -  $\leq$  +50 Multi-functional AMTROBOX limit switch box. For open/closed position signalling via mechanical limit switches or proximity sensors. AMTROBOX EEx ia (R1172): intrinsically safe version for potentially explosive atmospheres.

Applications:

All applications in water engineering, building services and energy

engineering.

http://shop.ksb.com/catalog/k0/en/product/ES000463



#### **AMTROBOX ATEX Zone 22**



Enclosure T [°C]

IP67 Description:

 $\geq$  -10 -  $\leq$  +60 Multi-functional AMTROBOX limit switch box. For open/closed position signalling via mechanical limit switches or proximity sensors. AMTROBOX ATEX (X1140, X1149): ATEX-compliant version for potentially explosive dust atmospheres (Zone 22).

Applications:

All applications in water engineering, building services and energy

engineering.

http://shop.ksb.com/catalog/k0/en/product/ES000463



#### **AMTROBOX F**



Enclosure T [°C]

≥ -20 - ≤ +80

IP67 Description:

Amtrobox F is a limit switch box specially designed for levers and all actuators with ISO 5211 interface for signalling open or closed position via proximity sensors. It can be used with S or C levers and ACTAIR NG/ DYNACTAIR NG pneumatic actuators. Thanks to its key feature, a particularly low height (< 5 mm), it can be mounted between any valve and actuator with ISO 5211 interface.



All applications in water engineering, building services and energy engineering.

http://shop.ksb.com/catalog/k0/en/product/ES000463



#### **AMTROBOX M**



Enclosure T [°C]

IP65 Description:

 $\geq$  -20 -  $\leq$  +80 Limit switch box specially designed for manual actuation. For open/ closed position signalling via mechanical limit switches or proximity sensors. AMTROBOX M mounts on the S series of quarter-turn levers (R1020) and manual gearbox types MA 12 and MA 25 (R1021).



All applications in water engineering, building services and energy engineering



Automation 65

#### **AMTROBOX R**



Enclosure T [°C]

IP68 Description:

 $\geq$  -45 -  $\leq$  +80 Sturdy and multi-functional. For open/closed position signalling via mechanical limit switches or proximity sensors. AMTROBOX R (R1187) mounts on MR manual gearboxes, ACTAIR NG pneumatic actuators, HQ hydraulic actuators and any actuators with VDI/VDE interface.

Applications:

All applications in water engineering, energy engineering, offshore

and heavy industry.

http://shop.ksb.com/catalog/k0/en/product/ES000463



#### **AMTROBOX R EEx ia**



Enclosure T [°C]

≥ -25 - ≤ +80

IP68 Description:

Sturdy and multi-functional. For open/closed position signalling via mechanical limit switches or proximity sensors. AMTROBOX R EEx ia (R1188): intrinsically safe version for potentially explosive atmospheres (Zones 0 + 20).

Applications:

All applications in water engineering, energy engineering, offshore

and heavy industry.

http://shop.ksb.com/catalog/k0/en/product/ES000463



#### **AMTROBOX R Ex d**



Enclosure T [°C]

IP68 Description:

 $\geq$  -25 -  $\leq$  +70 Sturdy and multi-functional. For open/closed position signalling via mechanical limit switches or proximity sensors. AMTROBOX R Exd (R1189): intrinsically safe version for potentially explosive atmospheres.



All applications in water engineering, energy engineering, offshore and heavy industry.



http://shop.ksb.com/catalog/k0/en/product/ES000463

## ON/OFF valve controllers

#### **AMTRONIC**



Enclosure Control air pressure [bar] T [°C]

IP67 Description:

3 - 8 On/off control of pneumatic quarter-turn actuators and open/closed  $\geq$  -20 -  $\leq$  +80 position signalling. Mounts directly on ACTAIR NG actuators with no need for a bracket, providing a rugged, compact and integrated solution. Its integrated directional control valve eliminates the need for any pneumatic lines between AMTRONIC and the actuator. The actuating time of the actuator can be set via AMTRONIC's air flow reducer. AMTRONIC can be connected to Profibus DP and AS-i field buses. AMTRONIC has been specially developed to reduce control unit cabling. Connection via field bus enables both power supply and control information exchange with the process control system. AMTRONIC can be integrated in field bus environments with Profibus DP protocol and especially AS-i protocol.



All applications in water engineering, energy engineering, and industry.



#### **AMTRONIC Ex ia**



Enclosure Control air pressure [bar] T [°C]

IP67 Description:

3 - 8 On/off control of pneumatic quarter-turn actuators and open/closed  $\geq$  -10 -  $\leq$  +50 position signalling. Mounts directly on ACTAIR NG actuators with no need for a bracket, providing a rugged, compact and integrated solution. Its integrated directional control valve eliminates the need for any pneumatic lines between AMTRONIC and the actuator. The actuating time of the actuator can be set via AMTRONIC's air flow reducer. The intrinsically safe AMTRONIC Ex ia can be operated in potentially explosive atmospheres. It complies with Directive 2014/34/EC and is marked in accordance with CE 0081 Ex II 1 G. Type of protection Ex ia IIC T6 Ga in accordance with EN 60079-0 and FN 60079-11



Applications:

All applications in water engineering, energy engineering, and industry.

http://shop.ksb.com/catalog/k0/en/product/ES000462

#### **Positioners**

#### **SMARTRONIC MA**



Enclosure Control air pressure [bar] T [°C]

IP67 Description:

≥ -20 - ≤ +80

2 - 7 SMARTRONIC MA (R1310) is an electro-pneumatic digital positioner powered via the 4-20 mA signal. Mounts on ACTAIR NG/ DYNACTAIR NG actuators with direct compressed air supply, or on any type of quarter-turn actuator with VDI/VDE 3845 interface and linear actuators with NAMUR interface. SMARTRONIC MA reduces investment, commissioning and operating costs as the unit consumes no air while idle.



Applications:

All applications in water engineering, energy engineering, and

industry.

http://shop.ksb.com/catalog/k0/en/product/ES000461

#### **SMARTRONIC AS-i**



Control air pressure [bar]

≥ -20 - ≤ +80

3 - 8 SMARTRONIC AS-i is an electro-pneumatic digital positioner for connection to an AS-i field bus. Certified by AS International. Mounts on ACTAIR NG/DYNACTAIR NG actuators with direct compressed air supply, or on any type of quarter-turn actuator with VDI/VDE 3845 interface and linear actuators with NAMUR interface.



Applications:

All applications in water engineering, energy engineering, and

industry.

Automation 67

# **Intelligent positioners**

#### **SMARTRONIC PC**



Enclosure
Control air pressure [bar]
T [°C]

IP67 Description:

3 - 8 SMARTRONIC PC (R1312) is an intelligent, compact and innovative positioner. The integrated control offered by this multi-functional control unit represents the latest in open-loop and closed-loop control technology for valves. The unit attaches directly to ACTAIR NG and DYNACTAIR NG actuators with no need for a bracket or external piping, providing a rugged, compact and integrated solution. SMARTRONIC PC offers four functions: programmable characteristic curves for valve opening and closing, intelligent positioning, process monitoring and control. SMARTRONIC PC is PC programmable and can be connected to a Profibus DP field bus.



Applications:

All applications in water engineering, energy engineering, and industry.

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