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## Product Portfolio 2023

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ECOLINE GLB 800	26	SICCA 150-600 SCC	48		
ECOLINE GLC 150-600	28	SICCA 900-2500 GLC	29		
ECOLINE GLF 150-600	28	SICCA 900-3600 GTC	41		
ECOLINE GLF 800	28	SICCA 900-3600 SCC	48		
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# Our goal:

## Quality down to the smallest detail

At KSB, customer satisfaction, safety and reliability take top priority when it comes to quality assurance. Besides ensuring compliance with international quality standards, all KSB pumps and valves have to fulfil even higher internal quality standards.

Our integrated quality management system includes a detailed evaluation process for our production sites and suppliers worldwide. As a KSB customer, you can therefore rest assured that no matter where or when you order, you will always experience consistently high quality. Thanks to our continuous improvement process, we produce pumps and valves with a long service life, excellent efficiency and low wear – as guaranteed by our internal certification system and the “Made by KSB” quality seal.

### How KSB puts quality into daily practice

- Quality is when our customers are satisfied: We focus all of our efforts on our customers. Our global customer satisfaction analysis shows us how well we're doing.
- Quality is what every employee delivers: Everyone at KSB plays a part in creating a positive customer experience. To ensure the best results, all employees undergo continuous professional development.
- Quality is how processes interlock: We continuously check and improve work processes and the working environment.
- Quality is what our supply chain contributes: We set our quality targets in cooperation with our partners. This helps us raise quality across the entire supply chain to the highest level.
- Quality is how mistakes are dealt with: If we detect quality deviations, we determine the causes in order to eliminate them permanently.



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



# Acting responsibly – producing sustainably

From energy-efficient products to resource-efficient production, we protect the environment with a wide range of measures while also helping our customers to reduce their CO<sub>2</sub> emissions.



We aim to minimise our impact on the environment and to reduce our energy consumption and carbon dioxide emissions to a minimum when manufacturing our pumps and valves. At the same time, KSB's products make a direct contribution towards protecting the environment, for example by saving energy.

Sustainability has two aspects: protecting the environment during the production of our products, and the ecological footprint of our products and services during their life cycle. At KSB, we attach great importance to both.

In order to lessen the environmental impact of our manufacturing, we ensure that our production processes minimise energy and material consumption. We take ecological aspects into account right from the beginning of every new development and comply with international standards to measure and continuously improve our environmental performance. Our sustainability principles are binding for all Group locations and companies. All KSB factories are certified to the ISO 14001 environmental standard.

Our products are increasingly produced using recyclable materials, making it easy for our pumps and valves to be recycled in an environmentally conscious way.

When in operation, our energy-efficient products help save large amounts of electricity and thus greenhouse gases. This makes them attractive to our customers from both an environmental and a financial point of view – especially as around 30 percent of the electricity consumed by industry is still related to the use of pumps.

There is also high potential for savings by combining pumps and valves with digital components. For example, variable speed water pumps are particularly energy-efficient and reduce annual CO<sub>2</sub> emissions by 850,000 tonnes in Europe alone.

As a holistic and sustainable company, we tap into our engineering skills to develop products that are particularly energy-efficient and reliable. Minimal downtime and low energy consumption are key factors for ensuring economical operation – strong reasons for choosing KSB pumps and valves. At KSB, combining economic and ecological goals is not just a goal but reality in practice.

# KSB valve brands

In addition to the KSB umbrella brand, the Group offers valves under the following brands:



## Butterfly valves

The AMRI brand is used in building services, industry, water applications and power stations. AMRI products include pneumatic, hydraulic and electric actuators as well as control systems.



## Diaphragm valves

The SISTO brand handles shut-off tasks in building services, industry, water applications and power stations. Under the SISTO brand name, KSB offers specialised valves for sterile processes including biotech applications.



## Control valves

The MIL brand is used in nuclear and fossil-fuelled power plants, refineries and the petrochemicals and chemicals industry. MIL products include pneumatic actuators and control systems.



## General Information

<b>Regional products</b>	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.
<b>Key to actuators</b>	In the Products section the symbol  in conjunction with the relevant letter indicates the actuator type(s) available. <ul style="list-style-type: none"><li> m = manual (lever, handwheel, etc.)</li><li> e = electric actuator</li><li> p = pneumatic actuator</li><li> h = hydraulic actuator</li></ul>
<b>Trademark rights</b>	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.
<b>Product information</b>	 For information as per chemicals Regulation (EC) No. 1907/2006 (REACH), see <a href="https://www.ksb.com/en-global/company/corporate-responsibility/reach">https://www.ksb.com/en-global/company/corporate-responsibility/reach</a> .
<b>Digital product catalogue</b>	 <a href="https://www.ksb.com/en-gb/global-search">https://www.ksb.com/en-gb/global-search</a>
<b>CAD portal</b>	 <a href="http://ksb.partcommunity.com">http://ksb.partcommunity.com</a>
<b>BIM</b>	 <a href="https://www.ksb.com/en-gb/software-and-know-how/configuration-tools">https://www.ksb.com/en-gb/software-and-know-how/configuration-tools</a>

# Valves

Design/Application	Type series	Page	Automation	Water Transport and Water Treatment	Industry	Energy Conversion	Building Services	Solids Transport	Pharmaceuticals / Food
Soft-seated globe valves to DIN/EN	BOA-SuperCompact	24	■		■		■		
	BOA-Compact	24	■		■		■		
	BOA-Compact EKB	24	■	■	■		■		
	BOA-W	24	■		■		■		
Bellows-type globe valves to DIN/EN	BOA-H	25		■	■	■	■		
	BOA-H/HE/HV/HEV	25	■		■	■	■		
	NORI 40 ZXLB/ZXSBV	25		■	■	■	■		
	NORI 40 ZXLB/ZXSB	25	■		■	■	■		
	NORI 40 ZYLB/ZYSB	25		■	■	■	■		
Bellows-type globe valves to ANSI/ASME	BOACHEM-ZXAB/ZYAB	26	■		■	■	■		
	ECOLINE GLB 150-600	26	■		■	■		■	
	ECOLINE GLB 800	26	■		■	■		■	
Globe valves to DIN/EN with gland packing	NORI 40 ZXL/ZXS	26		■	■	■	■		
	NORI 40 ZXLF/ZXSF	27	■		■	■	■		
	NORI 160 ZXL/ZXS	27		■	■	■			
	NORI 160 ZXLF/ZXSF	27	■		■	■			
	NORI 320 ZXSV	27		■	■	■			
	NORI 500 ZXSV	27	■		■	■			
	BOACHEM-ZXA	28		■	■		■		
	ECOLINE VA16	28		■	■		■		
Globe valves to ANSI/ASME with gland packing	ECOLINE GLC 150-600	28	■		■	■			
	ECOLINE GLF 150-600	28	■		■	■			
	ECOLINE GLF 800	28	■		■	■			
	ECOLINE GLV 150-300	29	■		■	■			
	SICCA 150-600 GLC	29	■		■	■			
	SICCA 900-2500 GLC	29	■		■	■			
Globe valves for nuclear applications	SICCA 150-4500 GLF	29	■		■	■			
	NUCA globe valves	29	■			■			
	ZXNB	30	■			■			
	ZXNVB	30	■			■			
Control valves to DIN/EN	ZYNB/ZYN	30	■			■			
	BOA-CVE C/CS/W/IMS/EKB/IMS EKB	30	■	■	■		■		
	BOA-CVE H	31	■		■	■	■		
	BOA-CVP H	31	■		■	■	■		
	MIL 10000	31	■		■				
	MIL 21000	31	■	■	■	■	■		■
	MIL 27000	31	■	■	■	■		■	
	MIL 29000	32	■		■	■			■
	MIL 41000	32	■	■	■	■			■
	MIL 50000	32	■		■				
Control valves to ANSI/ASME	MIL 70000	32	■		■	■			
	MIL 71000	32	■		■	■			
	MIL 76000	33	■		■	■			
	MIL 77000	33	■		■				
	MIL 78000	33	■		■	■			
	MIL 81000	33	■		■	■			
	MIL 91000	33	■		■	■			
	MIL 90000	34			■	■			
	BOA-Control/BOA-Control IMS	34	■	■	■		■		
	BOA-Control PIC	34	■		■		■		
Balancing and shut-off valves to DIN/EN	BOA-Control SBV	35			■		■		
	BOA-Control DPR	35			■		■		

Design/Application	Type series	Page	Automation	Water Transport and Water Treatment	Industry	Energy Conversion	Building Services	Solids Transport	Pharmaceuticals / Food
Level control valves to DIN/EN	CONDA-VLC	35		■					
Pressure reducing valves to DIN/EN	CONDA-VRC	35	■						
Pressure sustaining valves to DIN/EN	CONDA-VSM	36	■						
Air valves to DIN/EN	BOAVENT-AVF	36	■						
	BOAVENT-SIF	36	■						
	BOAVENT-SVA	36	■						
	BOAVENT-SVF	37	■						
Vent valves for nuclear applications	SISTO-VentNA	37				■	■		
	SISTO-KRVNA	37				■			
Start and stop control valves to DIN/EN	ZJSVA/ZXSPA	37	■		■	■			
Gate valves to DIN/EN	COBRA-SGP/SGO	38	■		■		■		
	COBRA-SMP	38	■		■		■		
	ECOLINE SP	38	■		■		■		
	ECOLINE GT 40	38	■		■				
	STAAL 40 AKD/AKDS	38	■		■		■		
	STAAL 100 AKD/AKDS	39	■		■		■		
	AKG-A/AKGS-A	39	■		■		■		
	ZTS	39	■		■		■		
Gate valves to ANSI/ASME	ECOLINE GTB 150-600	39	■		■		■		■
	ECOLINE GTB 800	39	■		■		■		■
	ECOLINE GTC 150-600	40	■		■		■		
	ECOLINE GTF 150-600	40	■		■		■		
	ECOLINE GTF 800	40	■		■		■		
	ECOLINE GTV 150-300	40	■		■		■		
	SICCA 150-600 GTC	40	■		■		■		
	SICCA 900-3600 GTC	41	■		■		■		
	SICCA 150-2500 GTF	41	■		■		■		
Gate valves for nuclear applications	ZTN	41	■			■			
Body pressure relief valve	UGS	41			■		■		
Knife gate valves to DIN/EN	HERA-BD	42	■	■	■		■	■	
Knife gate valves to ANSI/ASME	HERA-BDS	42	■	■	■				
	HERA-BHT	42	■	■	■				
	HERA-SH	42	■	■	■				
Lift check valves to DIN/EN	BOA-RPL/RPL F-F	43		■				■	
	BOA-RFV	43		■				■	
	BOA-RVK	43			■		■	■	
	BOA-R	43			■		■	■	
	NORI 40 RXL/RXS	43			■		■	■	
	NORI 160 RXL/RXS	44			■		■	■	
	RGS	44			■		■	■	
	BOACHEM-RXA	44			■			■	
Lift check valves to ANSI/ASME	ECOLINE PTF 150-600	44			■		■		
	ECOLINE PTF 800	44			■		■		
	SICCA 150-4500 PCF	45			■		■		
Lift check valves for nuclear applications	NUCA lift check valves	45					■		
	RJN	45					■		
	RYN	45	■				■		
Swing check valves to DIN/EN	ECOLINE WT/WTI	46			■			■	
	STAAL 40 AKK/AKKS	46			■		■		
	STAAL 100 AKK/AKKS	46			■		■		
	AKR/AKRS	46			■		■		
	ZRS	46			■		■		
	SISTO-RSK/RSKS	47	■		■		■	■	■
	SERIE 2000	47	■		■			■	

Design/Application	Type series	Page	Automation	Water Transport and Water Treatment	Industry	Energy Conversion	Building Services	Solids Transport	Pharmaceuticals / Food
Swing check valves to ANSI/ASME	ECOLINE SCC 150-600	47			■	■			
	ECOLINE SCF 150-600	47			■	■			
	ECOLINE SCF 800	47			■	■			
	ECOLINE SCV 150-300	48			■	■			
	SICCA 150-600 SCC	48			■	■			
	SICCA 900-3600 SCC	48			■	■			
Swing check valves for nuclear applications	SISTO-RSKNA	48			■				
	ZRN	48			■				
Tilting disc check valves to DIN/EN	COBRA-TDC01/03	49	■	■	■				
Strainers to DIN/EN	BOA-S	49			■	■		■	
	NORI 40 FSL/FSS	49			■	■		■	
	BOACHEM-FSA	49			■			■	
Strainers to ANSI/ASME	ECOLINE FYC 150-600	50			■	■			
	ECOLINE FYF 800	50			■	■			
Centred-disc butterfly valves	BOAX-CBV13	50	■	■	■			■	
	BOAX-S/SF	50	■					■	
	BOAX-B	51	■	■	■			■	
	ISORIA 10/16	51	■	■	■	■			■
	ISORIA 20/25	51	■	■	■	■		■	
	MAMMOUTH	51	■	■	■	■			
Double-offset butterfly valves	KE	51	■	■	■				■
	APORIS-DEB02	52		■	■	■			
	DANAÏS 150	52	■	■	■	■	■	■	■
	DANAÏS MTII	52	■		■	■		■	
	DANAÏS CRYO	52	■			■			
Triple-offset butterfly valves	DANAÏS CRYO AIR	52	■			■			
	TRIODIS 150	53	■		■	■			
	TRIODIS 300	53	■		■	■			
Butterfly valves for nuclear applications	TRIODIS 600	53	■		■	■			
	CLOSSIA	53	■			■			
	Combined butterfly/check valves	54		■					
Single-piece ball valves	DUALIS	54		■					
	MP-CI/MP-II	54	■	■					
	PROFIN VT1	54	■	■	■		■		
Two-piece ball valves	ECOLINE BLT 150-300	54	■		■	■			■
	PROFIN VT2L	55		■	■			■	
Three-piece ball valves	ECOLINE BLC 1000	55	■		■	■			■
	PROFIN SI3	55	■	■	■			■	
	PROFIN VT3	55	■	■	■			■	
Soft-seated diaphragm valves to DIN/EN	SISTO-KB	56	■	■	■	■			■
	SISTO-16	56	■	■	■	■			
	SISTO-16S	56	■	■	■	■			
	SISTO-16RGAMaXX	56		■				■	
	SISTO-16TWA	56	■	■				■	
	SISTO-20	57	■		■	■			■
Diaphragm valves for nuclear applications	SISTO-C	57	■	■					■
	SISTO-20NA	57	■						
Feed water bypass valves	SISTO-DrainNA	57							
	ZJSVM/RJSVM	58	■		■	■			
Expansion and anti-vibration joints	ECOLINE GE1/GE2/GE3	58			■			■	
	ECOLINE GE4	58			■			■	

## Actuators

Design/Application	Type series	Page	Water Transport and Water Treatment	Industry	Energy Conversion	Building Services	Solids Transport	Pharmaceuticals / Food
Levers	CR/CM	59	■	■	■	■		
	S/SR/SP	59	■	■	■	■		
Manual gearboxes	MS	59	■	■		■		
	MC	59	■	■	■	■	■	
Electric actuators	MultiTurn SA+GS / SAR+GS	60	■	■	■	■	■	
	QuarterTurn AQ, AQL / SQ	60	■	■	■	■	■	
	SISTO-LAE	60	■	■	■	■	■	■
Hydraulic actuators	HQ EVO	60	■	■	■			
	ACTAIR EVO	61	■	■	■			
Pneumatic actuators	DYNACTAIR EVO	61	■	■	■			
	SISTO-LAD	61	■	■	■	■	■	■
	SISTO-LAP	61	■	■	■	■	■	■
	SISTO-C LAP	62	■	■	■	■		■
	MIL 37-38	62	■	■	■	■	■	
	MIL 67-68	62	■	■	■	■		
	Control accessories	EMO	62	■	■	■	■	

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

## Automation

Design/Application	Type series	Page	Water Transport and Water Treatment	Industry	Energy Conversion	Building Services	Solids Transport	Pharmaceuticals / Food
Monitoring	AMTROBOX	63	■	■	■			
	AMTROBOX Ex ia	63	■	■	■			
	AMTROBOX ATEX Zone 22	63	■	■	■			
	AMTROBOX M	63	■	■	■	■		
	AMTROBOX R	63	■	■	■			
	AMTROBOX R Ex ia	64	■	■	■			
ON/OFF valve controllers	AMTRONIC U	64	■	■	■			
	AMTRONIC U Ex ia	64	■	■	■			
Positioners	SMARTRONIC U MA	64	■	■	■			
	SMARTRONIC U AS-i	65	■	■	■			
Intelligent positioners	SMARTRONIC U PC	65	■	■	■			

## Fluids handled

## Fluids handled

## Fluids handled

## Fluids handled

	Lift check valves to DINEN	RGS BOACHEM-RXA	ECOLINE PTF 150-600 ECOLINE PTF 800 SICCA 150-4500 PCF	NUCA lift check valves RJN RYN	ECOLINE WT/WTI STAAL 40 AKK/AKKs STAAL 100 AKK/AKKs AKR/AKRS ZRS	SISTO-RSK/RSKS SERIE 2000	ECOLINE SCC 150-600 ECOLINE SCF 150-600 ECOLINE SCF 800 ECOLINE SCV 150-300 SICCA 150-600 SCC SICCA 900-3600 SCC	ECOLINE SCC 150-600 ECOLINE SCF 150-600 ECOLINE SCF 800 ECOLINE SCV 150-300 SICCA 150-600 SCC SICCA 900-3600 SCC	SISTO-RSKNA ZRN	COBRA-TDC01/03
Abrasive fluids										
Waste water with faeces										
Waste water without faeces		■								
Aggressive fluids										
Inorganic fluids										
Activated sludge										
Brackish water										
Service water										
Steam	■	■								
Distillate	■	■								
Explosive fluids	■	■								
Digested sludge			■	■						
Solids-laden fluids										
Solids (ore, sand, gravel, ash)										
Flammable fluids	■	■								
River, lake and groundwater										
Liquefied gas										
Fluids containing gas	■	■								
Gases	■	■								
Harmful fluids	■	■								
Toxic fluids	■	■								
High-temperature hot water	■	■								
Heating water			■							
Highly aggressive fluids		■								
Condensate		■								
Corrosive fluids		■								
Valuable fluids	■	■								
Fuels										
Cooling water			■							
Volatile fluids	■	■		■	■					
Fire-fighting water			■							
Solvents				■						
Seawater					■					
Fluids containing mineral oils	■	■				■				
Oils	■	■				■				
Organic fluids			■			■				
Polymerising/crystallising fluids	■	■				■				
Radioactive fluids						■				
Cleaning agents						■				
Raw sludge						■				
Lubricants						■				
Grey water						■				
Brine						■				
Feed water	■	■				■				
Dipping paints						■				
Drinking water						■				
Vacuum						■				
Thermal oils		■				■				
Wash water						■				

## Fluids handled

## Fluids handled

## Applications

## Applications

	Globe valves for nuclear applications	Control valves to DIN/EN	Balancing and shut-off valves to DIN/EN	Level control valves to DIN/EN	Pressure reducing valves to DIN/EN	Pressure sustaining valves to DIN/EN	Air valves	Vent valves for nuclear applications	Start and stop control valves to DIN/EN
Spray irrigation									
Mining									
General irrigation									
Chemical industry									
Pressure boosting									
Disposal									
Drainage									
Descaling units									
District heating									
Solids transport									
Fire-fighting systems									
Gas pipelines									
Gas storage facilities									
Maintenance of groundwater levels									
Domestic water supply									
HVAC systems									
Homogenisation									
Industrial recirculation systems									
Nuclear power stations	■ ■ ■ ■								
Boiler feed applications		■ ■ ■							
Boiler recirculation		■ ■ ■							
Waste water treatment plants		■ ■ ■							
Air-conditioning systems		■ ■ ■							
Condensate transport		■ ■ ■							
Fossil-fuelled power stations		■ ■ ■							
Cooling circuits		■ ■ ■							
Paint shops		■ ■ ■							
Food and beverage industry									
Seawater desalination / reverse osmosis									
Mixing									
Pulp and paper industry									
Petrochemical industry									
Pharmaceutical industry									
Pipelines and tank farms									
Refineries									
Flue gas desulphurisation			■						
Rainwater harvesting									
Recirculation									
Shipbuilding									
Sludge disposal									
Sludge processing									
Snow-making systems									
Swimming pools									
Keeping in suspension									
Thermal oil circulation									
Process engineering									
Heat recovery systems									
Hot-water heating systems									
Washing plants									
Water treatment			■						
Water extraction			■ ■ ■						
Water supply			■ ■ ■ ■						
Sugar industry			■ ■ ■ ■						

## Applications

	Gate valves to DIN/EN	COBRA-SGP/SGO COBRA-SMP ECOLINE SP ECOLINE GT 40 STAAL 40 AKD/AKDS STAAL 100 AKD/AKDS AKG-A/AKGS-A ZTS	Gate valves to ANSI/ASME	ECOLINE GTB 150-600 ECOLINE GTB 800 ECOLINE GTC 150-600 ECOLINE GTF 150-600 ECOLINE GTF 800 ECOLINE GTV 150-300 SICCA 150-600 GTC SICCA 900-3600 GTC SICCA 150-2500 GTF	ZTN	Knife gate valves to DIN/EN	HERA-BD HERA-BDS HERA-BHT HERA-SH	Body pressure relief valves	UGS	Lift check valves to DIN/EN	BOA-RPL/RPL F-F BOA-RFV BOA-RVK BOA-R NORI 40 RXL/RXS NORI 160 RXL/RXS	
Spray irrigation												
Mining	■											
General irrigation		■										
Chemical industry		■	■	■								
Pressure boosting	■				■							
Disposal												
Drainage												
Descaling units		■	■	■	■							
District heating		■	■	■	■							
Solids transport												
Fire-fighting systems												
Gas pipelines												
Gas storage facilities												
Maintenance of groundwater levels												
Domestic water supply	■	■	■									
HVAC systems												
Homogenisation												
Industrial recirculation systems												
Nuclear power stations		■	■	■	■							
Boiler feed applications		■	■	■	■							
Boiler recirculation		■	■	■	■							
Waste water treatment plants		■	■	■	■							
Air-conditioning systems		■	■	■	■							
Condensate transport			■	■	■							
Fossil-fuelled power stations			■	■	■							
Cooling circuits		■	■	■	■							
Paint shops												
Food and beverage industry												
Seawater desalination / reverse osmosis												
Mixing												
Pulp and paper industry		■	■	■	■							
Petrochemical industry		■	■	■	■							
Pharmaceutical industry												
Pipelines and tank farms												
Refineries												
Flue gas desulphurisation												
Rainwater harvesting												
Recirculation												
Shipbuilding		■	■	■	■							
Sludge disposal												
Sludge processing												
Snow-making systems		■	■	■	■							
Swimming pools												
Keeping in suspension												
Thermal oil circulation		■	■	■	■							
Process engineering		■	■	■	■							
Heat recovery systems												
Hot-water heating systems		■	■									
Washing plants												
Water treatment		■	■	■	■							
Water extraction		■	■	■	■							
Water supply		■	■	■	■							
Sugar industry		■	■	■	■							

## Applications

	RGS BOACHEM-RXA	ECOLINE PTF 150-600 ECOLINE PTF 800 SICCA '50-4500 PCF	NUCA lift check valves RJN RYN	ECOLINE WT/WTI STAAL 40 AKK/AKKs STAAL 100 AKK/AKKs AKR/AKRS ZRS	SISTO-RSK/RSKS SERIE 2000	ECOLINE SCC 150-600 ECOLINE SCF 150-600 ECOLINE SCF 800 ECOLINE SCV 150-300 SICCA '50-600 SCC SICCA 900-3600 SCC	SISTO-RSKNA ZRN	COBRA-TDC01/03
Spray irrigation								
Mining	■							
General irrigation	■ ■							
Chemical industry								
Pressure boosting								
Disposal								
Drainage	■ ■							
Descaling units								
District heating								
Solids transport								
Fire-fighting systems								
Gas pipelines								
Gas storage facilities								
Maintenance of groundwater levels								
Domestic water supply								
HVAC systems								
Homogenisation								
Industrial recirculation systems								
Nuclear power stations	■							
Boiler feed applications	■ ■							
Boiler recirculation	■							
Waste water treatment plants								
Air-conditioning systems								
Condensate transport	■							
Fossil-fuelled power stations	■ ■							
Cooling circuits								
Paint shops								
Food and beverage industry								
Seawater desalination / reverse osmosis								
Mixing								
Pulp and paper industry	■ ■							
Petrochemical industry	■ ■							
Pharmaceutical industry								
Pipelines and tank farms								
Refineries								
Flue gas desulphurisation								
Rainwater harvesting								
Recirculation								
Shipbuilding	■ ■							
Sludge disposal								
Sludge processing								
Snow-making systems								
Swimming pools								
Keeping in suspension								
Thermal oil circulation								
Process engineering	■ ■							
Heat recovery systems								
Hot-water heating systems								
Washing plants								
Water treatment								
Water extraction								
Water supply								
Sugar industry	■ ■							

## Applications

## Applications

## Soft-seated globe valves to DIN/EN

### BOA-SuperCompact

	PN DN T [°C]	6/16 20 - 200 $\geq -10 - \leq +120$	<b>Description</b> Globe valve to DIN/EN with wafer-type body, super-compact DN face-to-face length to EN 558/94, slanted seat design with vertical bonnet, with flange alignment holes for centring, dead-end service and downstream dismantling; single-piece body, insulating cap with anti-condensation feature as standard, position indicator, locking device, travel stop, soft main and back seat; maintenance-free, full insulation possible. <b>Applications</b> 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.
<span style="color: red;">■</span> m, e	<a href="https://www.ksb.com/en-gb/lc/B03A">https://www.ksb.com/en-gb/lc/B03A</a>		

### BOA-Compact

	PN DN T [°C]	6/16 15 - 200 $\geq -10 - \leq +120$	<b>Description</b> Globe valve to DIN/EN with flanged ends, short face-to-face length to EN 558/14, slanted seat design with vertical bonnet, single-piece body, EPDM-encapsulated throttling plug, soft main and back seat, position indicator, locking device, travel stop, insulating cap with anti-condensation feature; maintenance-free, full insulation possible. <b>Applications</b> 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 cast iron. Other fluids on request.
<span style="color: red;">■</span> m, e	<a href="https://www.ksb.com/en-gb/lc/B01A">https://www.ksb.com/en-gb/lc/B01A</a>		

### BOA-Compact EKB

	PN DN T [°C]	10/16 15 - 200 $\geq -10 - \leq +80$	<b>Description</b> 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 design with vertical bonnet, EPDM-encapsulated throttling plug, single-piece body, position indicator, locking device, travel stop, soft main and back seat; maintenance-free, (PN 10 DVGW-approved). <b>Applications</b> 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.
<span style="color: red;">■</span> m, e	<a href="https://www.ksb.com/en-gb/lc/B02A">https://www.ksb.com/en-gb/lc/B02A</a>		

### BOA-W

	PN DN T [°C]	6/16 15 - 200 $\geq -10 - \leq +120$	<b>Description</b> Globe valve to DIN/EN with flanged ends, standard face-to-face length to EN 558/1, slanted seat design with vertical bonnet, single-piece body, EPDM-encapsulated throttling plug, soft main and back seat, position indicator, locking device, travel stop, insulating cap with anti-condensation feature; maintenance-free; full insulation possible. <b>Applications</b> 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.
<span style="color: red;">■</span> m, e	<a href="https://www.ksb.com/en-gb/lc/B07B">https://www.ksb.com/en-gb/lc/B07B</a>		

## Bellows-type globe valves to DIN/EN

### BOA-H

	PN DN T [°C]	16/25 15 - 350 ≥ -10 - ≤ +350	<p><b>Description</b>            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.</p> <p><b>Applications</b>            Hot-water heating systems, high-temperature hot water systems, cooling circuits, heat transfer systems, general steam applications in building services and industry. Other fluids on request.</p>
 m			<a href="https://www.ksb.com/en-gb/lc/B08A">https://www.ksb.com/en-gb/lc/B08A</a>

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

	PN DN T [°C]	25/40 10 - 350 ≥ -10 - ≤ +450	<p><b>Description</b>            Bellows-type globe valve to DIN/EN with flanged ends (BOA-H and BOA-HV), butt weld ends or socket weld ends (BOA-HE and BOA-HEV), with on/off disc or throttling plug, seat/disc interface made of wear and corrosion resistant chrome steel or chrome nickel steel.</p> <p><b>Applications</b>            Industrial plants, building services, power stations and shipbuilding. For water, steam, thermal oils, gas and other non-aggressive fluids. Other fluids on request.</p>
 m, e, p			<a href="https://www.ksb.com/en-gb/lc/B19A">https://www.ksb.com/en-gb/lc/B19A</a>

### NORI 40 ZXLBV/ZXSBV

	PN DN T [°C]	25/40 10 - 200 ≥ -10 - ≤ +450	<p><b>Description</b>            Bellows-type globe valve to DIN/EN with flanged ends (ZXLBV), butt weld ends or socket weld ends (ZXSBV), 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.</p> <p><b>Applications</b>            Industrial plants, power stations, process engineering and shipbuilding. For water, steam, thermal oils, gas and other non-aggressive fluids. Other fluids on request.</p>
 m			<a href="https://www.ksb.com/en-gb/lc/N04A">https://www.ksb.com/en-gb/lc/N04A</a>

### NORI 40 ZXLB/ZXSB

	PN DN T [°C]	25/40 10 - 200 ≥ -10 - ≤ +450	<p><b>Description</b>            Bellows-type globe valve to DIN/EN with flanged ends (ZXLB), butt weld ends or socket weld ends (ZXSB), replaceable 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.</p> <p><b>Applications</b>            Industrial plants, power stations, process engineering and shipbuilding. For water, steam, thermal oils, gas and other non-aggressive fluids. Other fluids on request.</p>
 m, e, p			<a href="https://www.ksb.com/en-gb/lc/N03A">https://www.ksb.com/en-gb/lc/N03A</a>

### NORI 40 ZYLB/ZYSB

	PN DN T [°C]	25/40 15 - 300 ≥ -10 - ≤ +450	<p><b>Description</b>            Bellows-type globe valve to DIN/EN with flanged ends (ZYLB) or butt weld ends (ZYSB), 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.</p> <p><b>Applications</b>            Heat transfer systems, industrial plants, building services and shipbuilding. For thermal oils, water, steam, gas and other non-aggressive fluids. Other fluids on request.</p>
 m			<a href="https://www.ksb.com/en-gb/lc/N51A">https://www.ksb.com/en-gb/lc/N51A</a>

## BOACHEM-ZXAB/ZYAB



PN	10 - 40	<b>Description</b>
DN	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.
T [°C]	≥ -10 - ≤ +400	<b>Applications</b> Process engineering, industry, building services, food and beverage industries, for aggressive fluids. Other fluids on request.

■ m, e, p

<https://www.ksb.com/en-gb/lc/B39B>

## Bellows-type globe valves to ANSI/ASME

### ECOLINE GLB 150-600



Class	150 - 600	<b>Description</b>
NPS [inch]	2 - 12	Globe valve to ANSI/ASME with flanged ends, cast steel/stainless steel body, trim and bellows made of stainless steel, with bolted bonnet, outside screw and yoke, sealed by graphite gland packing and metal bellows, stainless steel/graphite gaskets.
T [°C]	≥ 0 - ≤ +427	<b>Applications</b> 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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<https://www.ksb.com/en-gb/lc/E14A>

### ECOLINE GLB 800



Class	150 - 800	<b>Description</b>
NPS [inch]	½ - 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.
T [°C]	≥ 0 - ≤ +427	<b>Applications</b> 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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<https://www.ksb.com/en-gb/lc/E17A>

## Globe valves to DIN/EN with gland packing

### NORI 40 ZXL/ZXS



PN	25/40	<b>Description</b>
DN	10 - 400	Globe valve to DIN/EN with flanged ends (ZXL), butt weld ends or socket weld ends (ZXS), 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.
T [°C]	≥ -10 - ≤ +450	<b>Applications</b> Industrial plants, power stations, process engineering and shipbuilding. For water and steam. Other non-aggressive fluids such as gas or oil on request.

■ m

<https://www.ksb.com/en-gb/lc/N02A>

## NORI 40 ZXLF/ZXSF

	PN	25/40	<b>Description</b> Globe valve to DIN/EN with flanged ends (ZXLF), butt weld ends or socket weld ends (ZXSF), 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 chrome nickel steel.
	DN	10 - 200	
	T [°C]	≥ -10 - ≤ +450	<b>Applications</b> Industrial plants, power stations, process engineering and shipbuilding. For water and steam. Other non-aggressive fluids such as gas or oil on request.

 m, e, p

<https://www.ksb.com/en-gb/lc/N05A>

## NORI 160 ZXL/ZXS

	PN	63 - 160	<b>Description</b> Globe valve to DIN/EN with flanged ends (ZXL), butt weld ends or socket weld ends (ZXS), with gland packing, with on/off disc or throttling plug, rotating stem, seat/disc interface made of wear and corrosion resistant 17 % chrome steel or Stellite.
	DN	10 - 200	
	T [°C]	≥ -10 - ≤ +550	<b>Applications</b> 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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<https://www.ksb.com/en-gb/lc/N12A>

## NORI 160 ZXLF/ZXSF

	PN	63 - 160	<b>Description</b> Globe valve to DIN/EN with flanged ends (ZXLF), butt weld ends or socket weld ends (ZXSF), 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 17 % chrome steel or Stellite.
	DN	10 - 200	
	T [°C]	≥ -10 - ≤ +550	<b>Applications</b> Industrial plants, power stations, process engineering and shipbuilding. For water and steam. Other non-aggressive fluids such as gas or oil on request.

 m, e, p

<https://www.ksb.com/en-gb/lc/N13A>

## NORI 320 ZXSV

	PN	250 - 320	<b>Description</b> 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.
	DN	10 - 50	
	T [°C]	≥ -10 - ≤ +580	<b>Applications</b> Industrial plants, power stations, process engineering and shipbuilding. For water and steam. Other non-aggressive fluids such as gas or oil on request.

 m, e, p

<https://www.ksb.com/en-gb/lc/N20A>

## NORI 500 ZXSV

	PN	250 - 500	<b>Description</b> 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.
	DN	10 - 65	
	T [°C]	≥ -10 - ≤ +650	<b>Applications</b> Industrial plants, power stations, process engineering and shipbuilding. For water and steam. Other non-aggressive fluids such as gas or oil on request.

 m, e, p

<https://www.ksb.com/en-gb/lc/N21A>

## BOACHEM-ZXA



PN 10 - 40  
DN 15 - 400  
T [°C]  $\geq -10 - \leq +400$

**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.

m

<https://www.ksb.com/en-gb/lc/B38B>

## ECOLINE VA16



PN 16  
DN 15 - 250  
T [°C]  $\geq -10 - \leq +300$

**Description**  
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.

m, e

<https://www.ksb.com/en-gb/lc/E72A>

## Globe valves to ANSI/ASME with gland packing

### ECOLINE GLC 150-600



Class 150 - 600  
NPS [inch] 2 - 10  
T [°C]  $\geq 0 - \leq +649$

**Description**  
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.

**Applications**

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

m, e

<https://www.ksb.com/en-gb/lc/E56A>

### ECOLINE GLF 150-600



Class 150 - 600  
NPS [inch]  $\frac{1}{2} - 2$   
T [°C]  $\geq 0 - \leq +816$

**Description**  
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.

**Applications**

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

m, e

<https://www.ksb.com/en-gb/lc/EF5A>

### ECOLINE GLF 800



Class 800  
NPS [inch]  $\frac{1}{2} - 2$   
T [°C]  $\geq 0 - \leq +593$

**Description**  
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, outside screw and yoke, graphite gland packing, stainless steel/graphite gaskets, 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.

m, e

<https://www.ksb.com/en-gb/lc/E57A>

## ECOLINE GLV 150-300

	<b>Class</b> NPS [inch] T [°C]	150 - 300 2 - 12 $\geq -29 - \leq +427$	<b>Description</b> Globe valve to ANSI/ASME with flanged ends, cast steel A216 WCB, A351 CF8/CF8M/CN7M, Trims 2/8/10/13 for Class 150/300, with bolted bonnet, outside screw and yoke, graphite gland packing, stainless steel / graphite gasket. <b>Applications</b> Fine chemicals, food industry, general industry. For water, steam, gas and other fluids. Other fluids on request.
<span style="color: red;">●</span> m, e	<a href="https://www.ksb.com/en-gb/lc/EF3B">https://www.ksb.com/en-gb/lc/EF3B</a>		

## SICCA 150-600 GLC

	<b>Class</b> NPS [inch] T [°C]	150 - 600 2 - 10 $\geq 0 - \leq +593$	<b>Description</b> Globe valve to ANSI/ASME with flanged or butt weld ends, bolted bonnet, outside screw and yoke. 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. <b>Applications</b> Refineries, power stations, general industry and process engineering. For water, steam, oil, gas and non-aggressive fluids. Other fluids on request.
<span style="color: red;">●</span> m, e	<a href="https://www.ksb.com/en-gb/lc/S76A">https://www.ksb.com/en-gb/lc/S76A</a>		

## SICCA 900-2500 GLC

	<b>Class</b> NPS [inch] T [°C]	900 - 2500 2 - 10 $\geq 0 - \leq +650$	<b>Description</b> Globe valve to ANSI/ASME with butt weld ends, Y-pattern, pressure seal design, 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. <b>Applications</b> Power stations, general industry and process engineering. For water, steam, oil, gas and non-aggressive fluids. Other fluids on request.
<span style="color: red;">●</span> m, e	<a href="https://www.ksb.com/en-gb/lc/S82A">https://www.ksb.com/en-gb/lc/S82A</a>		

## SICCA 150-4500 GLF

	<b>Class</b> NPS [inch] T [°C]	150 - 4500 $\frac{1}{4} - 2\frac{1}{2}$ $\geq 0 - \leq +816$	<b>Description</b> Globe valve to ANSI/ASME with NPT (F) threaded ends or socket weld ends, or integral flange (Class 150 - 600) with bolted bonnet (Class 150 - 800) or welded bonnet (Class 1500/2500/4500), outside screw and yoke, Stellite hard-faced body seat, disc seating face made of Stellite hard-faced 13 % chrome steel, with graphite gaskets and gland packing. Available in carbon steel, low-alloy steel and stainless steel. <b>Applications</b> Refineries, power stations, general industry and process engineering. For water, steam, oil, gas and non-aggressive fluids. Other fluids on request.
<span style="color: red;">●</span> m, e	<a href="https://www.ksb.com/en-gb/lc/S80A">https://www.ksb.com/en-gb/lc/S80A</a>		

## Globe valves for nuclear applications

### NUCA globe valves

	<b>PN</b> <b>DN</b> T [°C]	$\leq 210$ 10 - 50 $\geq -29 - \leq +365$	<b>Description</b> 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 or stainless steel. <b>Applications</b> Reactor cooling, moderator, safety feed, feed water, live steam and cleaning systems.
<span style="color: red;">●</span> m, e, p	<a href="https://www.ksb.com/en-gb/lc/N71A">https://www.ksb.com/en-gb/lc/N71A</a>		

**ZXNB**

PN	$\leq 210$	<b>Description</b>
DN	65 - 400	Bellows-type globe valve with butt weld ends, for nuclear applications with safety-related requirements, in straight-way or angle pattern, or as a two-way valve, made of steel or stainless steel.
T [°C]	$\geq -29 - \leq +365$	<b>Applications</b> Reactor cooling, moderator, safety feed, feed water, live steam and cleaning systems.

■ m, e, p

<https://www.ksb.com/en-gb/lc/Z18A>
**ZXNVB**

PN	$\leq 210$	<b>Description</b>
DN	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.
T [°C]	$\geq -29 - \leq +365$	<b>Applications</b> Reactor cooling, moderator, safety feed, feed water, live steam and cleaning systems.

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<https://www.ksb.com/en-gb/lc/Z19A>
**ZYNB/ZYN**

PN	$\leq 50$	<b>Description</b>
DN	300 - 400	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.
T [°C]	$\geq -29 - \leq +200$	<b>Applications</b> Residual heat removal systems in nuclear applications.

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<https://www.ksb.com/en-gb/lc/Z18A>
**Control valves to DIN/EN****BOA-CVE C/CS/W/IMS/EKB/IMS EKB**

PN	6/10/16	<b>Description</b>
DN	15 - 200	Control valve to DIN/EN based on standard type series BOA-Compact, BOA-SuperCompact, BOA-W, BOA-Compact EKB, BOA-Compact IMS 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 implemented at the KSB factory on request.
T [°C]	$\geq -10 - \leq +120$	<b>Applications</b> 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 request.

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<https://www.ksb.com/en-gb/lc/B04A>

## BOA-CVE H

	PN DN T [°C]	16/25/40 15 - 200 $\geq -10 - \leq +450$	<b>Description</b> 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 m³/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 actuator. <b>Applications</b> General industrial facilities, process engineering, plant engineering, cooling circuits, heating systems.
 e	<a href="https://www.ksb.com/en-gb/lc/B26A">https://www.ksb.com/en-gb/lc/B26A</a>		

## BOA-CVP H

	PN DN T [°C]	16/25/40 15 - 200 $\geq -10 - \leq +450$	<b>Description</b> 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 m³/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. <b>Applications</b> General industrial facilities, process engineering, plant engineering, cooling circuits, heating systems.
 p	<a href="https://www.ksb.com/en-gb/lc/B72A">https://www.ksb.com/en-gb/lc/B72A</a>		

## Control valves to ANSI/ASME

### MIL 10000

	Class NPS [inch] T [°C]	150 - 1500 $\frac{3}{4} - 16$ $\geq -29 - \leq +454$	<b>Description</b> The top- and bottom-guided double-ported control valve is characterised by a high permissible pressure drop across the valve. The high flow capacity typical of this design is attained with low pressure recovery. Bi-directional flow is permitted; wide flow passage, suitable for viscous fluids. <b>Applications</b> Industry, power stations, process engineering.
 e, h, p	<a href="https://www.ksb.com/en-gb/lc/M15A">https://www.ksb.com/en-gb/lc/M15A</a>		

### MIL 21000

	Class NPS [inch] T [°C]	150 - 2500 $\frac{1}{2} - 10$ $\geq -100 - \leq +566$	<b>Description</b> Top-guided single-ported heavy post-guided control valve for a wide temperature range. <b>Applications</b> Industry, power stations, process engineering.
 e, h, p	<a href="https://www.ksb.com/en-gb/lc/M57A">https://www.ksb.com/en-gb/lc/M57A</a>		

### MIL 27000

	Class NPS [inch] T [°C]	150 - 300 $\frac{1}{2} - 2$ $\geq -27 - \leq +427$	<b>Description</b> Compact and light-weight construction, rugged stem guiding, field-reversible actuator, tight shut-off. <b>Applications</b> The globe valve is used in industrial segments with moderate pressure drop for handling fluids with a low solids content, viscous fluids in refineries, and fluids in the petrochemical, pharmaceutical, chemical, and bio-medical industries where accurate monitoring and control of the valve position is critical as it affects product quality.
 p	<a href="https://www.ksb.com/en-gb/lc/M31A">https://www.ksb.com/en-gb/lc/M31A</a>		

## MIL 29000

	<b>Class</b> NPS [inch] T [°C]	150 - 1500 ½ - 1 $\geq -100 - \leq +343$	<b>Description</b> Compact microflow globe valves with high rangeability (500:1), quick-change trim for on-site adjustment of flow coefficient, rugged cage-style plug guide; anti-cavitation design available. <b>Applications</b> Industry, power stations, process engineering (e.g. fine control of spray water), chemical, petrochemical and pharmaceutical engineering.
 p	<a href="https://www.ksb.com/en-gb/lc/M32A">https://www.ksb.com/en-gb/lc/M32A</a>		

## MIL 41000

	<b>Class</b> NPS [inch] T [°C]	150 - 4500 ½ - 36 $\geq -196 - \leq +566$	<b>Description</b> Cage-guided single-ported heavy-duty control valves, high pressure drop capability; noise reduction and anti-cavitation solution available by replacing the standard cage. <b>Applications</b> Industry, power stations, process engineering, chemical and petrochemical engineering.
 e, h, p	<a href="https://www.ksb.com/en-gb/lc/M37A">https://www.ksb.com/en-gb/lc/M37A</a>		

## MIL 50000

	<b>Class</b> NPS [inch] T [°C]	150 - 2500 ½ - 4 $\geq -250 - \leq -27$	<b>Description</b> Cryogenic control valves with extended body, rugged guided extended valve plug, body-bonnet bolting outside the cold box. <b>Applications</b> Used in LNG terminals, storage tanks during transport and storage, bench testing of cryogenic engines for rockets and space shuttles, LPG production and processing plants, etc.
 e, h, p	<a href="https://www.ksb.com/en-gb/lc/M38A">https://www.ksb.com/en-gb/lc/M38A</a>		

## MIL 70000

	<b>Class</b> NPS [inch] T [°C]	150 - 2500 ½ - 10 $\geq -100 - \leq +566$	<b>Description</b> Top-guided single-ported heavy-duty control valves in angle pattern. <b>Applications</b> Industry, power stations, process engineering, chemical and petrochemical engineering
 e, h, p	<a href="https://www.ksb.com/en-gb/lc/M40A">https://www.ksb.com/en-gb/lc/M40A</a>		

## MIL 71000

	<b>Class</b> NPS [inch] T [°C]	150 - 4500 ½ - 36 $\geq -196 - \leq +566$	<b>Description</b> Cage-guided single-ported high-performance angle valve. <b>Applications</b> Industry, power stations, process engineering, chemical and petrochemical engineering.
 e, h, p	<a href="https://www.ksb.com/en-gb/lc/M53A">https://www.ksb.com/en-gb/lc/M53A</a>		

## MIL 76000



Class NPS [inch] T [°C]	150 - 2500 1 - 2 $\geq -27 - \leq +566$	<b>Description</b> The letdown control valves in angle pattern are designed for all applications where flashing (flash evaporation) or two-phase (liquid and gaseous) flows may occur; no body/trim erosion, vibration or noise. Due to its angle pattern, the globe valve is self-draining.
		<b>Applications</b> Industry, power stations, process engineering, chemical and petrochemical engineering.

<https://www.ksb.com/en-gb/lc/M54A>

## MIL 77000



Class NPS [inch] T [°C]	600 - 2500 2 - 8 $\geq -27 - \leq +566$	<b>Description</b> Multi-stage low-noise control valve with labyrinth trim. <b>Applications</b> Industry, power stations (e.g. start/bypass valve), process engineering, chemical and petrochemical engineering (e.g. control valve at hot high-pressure separators (HPPS)).
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<https://www.ksb.com/en-gb/lc/M60A>

## MIL 78000



Class NPS [inch] T [°C]	150 - 2500 $\frac{1}{2} - 6$ $\geq -29 - \leq +260$	<b>Description</b> Multistage control valve in anti-cavitation design with wear-resistant multistage trim and detachable flow bush / spacer. <b>Applications</b> Industry, power stations, process engineering, chemical and petrochemical engineering.
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<https://www.ksb.com/en-gb/lc/M64A>

## MIL 81000



Class NPS [inch] T [°C]	150 - 2500 $\frac{3}{4} - 12$ $\geq -30 - \leq +454$	<b>Description</b> Three-way combining and diverting control valves. <b>Applications</b> Building services, industry, power stations.
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<https://www.ksb.com/en-gb/lc/M65A>

## MIL 91000



Class NPS [inch] T [°C]	150 - 4500 $\frac{3}{4} - 20$ $\geq -29 - \leq +566$	<b>Description</b> Multistage multi-path control valve with Matrix trim; pressures of up to 420 bar can be reduced by up to 50 pressure reduction stages, preventing cavitation and greatly reducing fluid velocity. <b>Applications</b> Industry, power stations, process engineering, chemical and petrochemical engineering.
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<https://www.ksb.com/en-gb/lc/M76A>

## Automatic recirculation valves

### MIL 90000

	Class NPS [inch] T [°C]	150 - 2500 1,5 - 12 $\geq -29 - \leq +260$	<b>Description</b> The automatic recirculation valve (ARV) is a multifunctional valve whose primary function is to ensure a pre-determined minimum flow through the centrifugal pump at all times. <b>Applications</b> Power stations, refineries, petrochemical industry.
<span style="color: red;">■</span> e, h, p	<a href="https://www.ksb.com/en-gb/lc/M74A">https://www.ksb.com/en-gb/lc/M74A</a>		

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

### BOA-Control/BOA-Control IMS

	PN DN T [°C]	16 15 - 350 $\geq -10 - \leq +120$	<b>Description</b> <b>BOA-Control IMS:</b> Balancing valve to DIN/EN with flanged ends, single-piece body, 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 DVGW-certified for drinking water (BOA-Control IMS EKB; up to DN 200). <b>BOA-Control:</b> Balancing valve to DIN/EN with flanged ends, single-piece body, 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 DVGW-certified for drinking water (BOA-Control EKB; up to DN 200). <b>Applications</b> Hot-water heating systems up to 120 °C (BOA-Control and BOA-Control IMS), air-conditioning 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.
<span style="color: red;">■</span> m, e	<a href="https://www.ksb.com/en-gb/lc/B05B">https://www.ksb.com/en-gb/lc/B05B</a>		

### BOA-Control PIC

	PN DN T [°C]	16/25 10 - 150 $\geq -10 - \leq +120$	<b>Description</b> Pressure-independent combination valve, comprising a continuously adjustable flow controller and a control valve for hydraulic balancing and dynamic volume flow control at constant valve authority, with threaded ends (DN 10 - 50) or flanged ends (DN 65 - 150). Continuously variable adjustment of the volume flow rate setpoint directly at the valve thanks to the digital scale, with mechanical locking function. With measurement ports for checking the pressure and minimum differential pressure. Available in various volume flow rate control ranges (LF/HF) from 43 to 8586 l/h (valve with threaded ends) and from 4.4 to 160 m³/h (valve with flanged ends). With actuator mounting option (M 30 x 1.5) for the electrical control of an additional variable such as room temperature by adjusting the volume flow.
<span style="color: red;">■</span> m, e	<a href="https://www.ksb.com/en-gb/lc/B75A">https://www.ksb.com/en-gb/lc/B75A</a>		

## BOA-Control SBV

	PN	25	<b>Description</b>
	DN	15 - 50	Maintenance-free balancing and measurement valve with female threaded ends, Y-pattern, continuous presetting, with position indicator readable from all angles (360°). Includes travel stop and 2 measurement ports with fixed measuring orifice (tolerance +/- 5 %) for measuring pressure, differential pressure and flow. Minimum space requirements thanks to non-rising handwheel and all functional parts being positioned on the same side as the handwheel.
	T [°C]	≥ -10 - ≤ +120	<b>Applications</b> Heating, air-conditioning and refrigerating systems, and industrial plants.

<https://www.ksb.com/en-gb/lc/B79A>

## BOA-Control DPR

	PN	16/25	<b>Description</b>
	DN	15 - 100	Differential pressure control valve / proportional control valve for the constant control of an adjustable differential pressure setpoint without auxiliary energy, with threaded ends (DN 15 - 50) or flanged ends (DN 65 - 100). Setpoint can be adjusted continuously and read from the outside at any time. The valve closes automatically with rising pressure. Includes quick-measurement ports for measuring pressure loss. Available in various pressure control ranges (LP/HP) from 5 to 80 kPa (threaded ends) and from 80 to 160 kPa (flanged ends).
	T [°C]	≥ -10 - ≤ +120	<b>Applications</b> Heating, air-conditioning and refrigerating systems, and industrial plants.

<https://www.ksb.com/en-gb/lc/B66A>

## Level control valves to DIN/EN

### CONDA-VLC

	PN	16	<b>Description</b>
	DN	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 and seat made of stainless steel.
	T [°C]	≥ -10 - ≤ +70	<b>Applications</b> Water supply systems, industry and building services. For controlling water levels.

<https://www.ksb.com/en-gb/lc/C52A>

## Pressure reducing valves to DIN/EN

### CONDA-VRC

	PN	16/25/40/63	<b>Description</b>
	DN	15 - 150	Direct-acting pressure reducing valve to DIN/EN with flanged ends (DN 50-150) or threaded ends (DN 15-50), body made of nodular cast iron; valve disc, stem and seat made of stainless steel.
	T [°C]	≥ -10 - ≤ +70	<b>Applications</b> 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.

<https://www.ksb.com/en-gb/lc/C53A>

## Pressure sustaining valves to DIN/EN

### CONDA-VSM

	PN DN T [°C]	16/25/40 50 - 150 ≥ -10 - ≤ +70	<b>Description</b> 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. <b>Applications</b> Controlling upstream pressure in water supply systems, irrigation systems or fire-fighting systems, in industry and building services.
<a href="https://www.ksb.com/en-gb/lc/C53A">https://www.ksb.com/en-gb/lc/C53A</a>			

## Air valves to DIN/EN

### BOAVENT-AVF

	PN DN T [°C]	16 50 - 300 ≥ -10 - ≤ +120	<b>Description</b> 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. <b>Applications</b> Water supply, clean water, irrigation.
<a href="https://www.ksb.com/en-gb/lc/B45A">https://www.ksb.com/en-gb/lc/B45A</a>			

### BOAVENT-SIF

	PN DN T [°C]	16 25 - 200 ≥ -10 - ≤ +70	<b>Description</b> 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, 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. <b>Applications</b> Water supply, clean water, irrigation.
<a href="https://www.ksb.com/en-gb/lc/B47A">https://www.ksb.com/en-gb/lc/B47A</a>			

### BOAVENT-SVA

	PN DN T [°C]	16 50 - 200 ≥ -10 - ≤ +60	<b>Description</b> Automatic air valve with one float and three functions. With flanged ends 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. <b>Applications</b> Water supply, waste water, untreated waste water.
<a href="https://www.ksb.com/en-gb/lc/B46A">https://www.ksb.com/en-gb/lc/B46A</a>			

## BOAVENT-SVF

	<b>PN</b> 16/25/40 <b>DN</b> 25 - 300 <b>T [°C]</b> $\geq -10 - \leq +70$	<b>Description</b> 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. <b>Applications</b> Water supply, clean water, irrigation.
<a href="https://www.ksb.com/en-gb/lc/B47A">https://www.ksb.com/en-gb/lc/B47A</a>		

## Vent valves for nuclear applications

### SISTO-VentNA

	<b>PN</b> 16 <b>DN</b> 15 <b>T [°C]</b> $\geq -20 - \leq +100$	<b>Description</b> Soft-seated vent valve with butt weld ends, for nuclear applications <b>Applications</b> Heating systems, air-conditioning systems.
<a href="https://www.ksb.com/en-gb/lc/S53A">https://www.ksb.com/en-gb/lc/S53A</a>		

### SISTO-KRVNA

	<b>PN</b> 16 <b>DN</b> 25 - 100 <b>T [°C]</b> $\geq -20 - \leq +100$	<b>Description</b> Vent valve with flanged or butt weld ends, for nuclear applications, soft-seated, with floating ball. <b>Applications</b> Tank venting, drainage systems.
<a href="https://www.ksb.com/en-gb/lc/S35A">https://www.ksb.com/en-gb/lc/S35A</a>		

## Start and stop control valves to DIN/EN

### ZJSVA/ZXSVA

	<b>PN</b> $\leq 600$ <b>DN</b> 65/60 - 250/125 <b>T [°C]</b> $\geq -10 - \leq +650$	<b>Description</b> Start and stop control valve to DIN/EN, with butt weld ends, pressure seal design, billet-forged body, seat/disc interface made of wear and corrosion resistant Stellite, single-piece stem and throttling plug assembly for high differential pressures. <b>Applications</b> In industrial plants, power stations, process engineering and shipbuilding. For water and steam. Other non-aggressive fluids such as gas or oil on request.
<span style="color: red;">m</span> , e, p		

<https://www.ksb.com/en-gb/lc/Z06A>

## Gate valves to DIN/EN

### COBRA-SGP/SGO

	PN DN T [°C]	10/16 40 - 600 $\geq -10 - \leq +110$	<b>Description</b> Gate valve to DIN/EN with flanged ends, elastomer-coated wedge, bolted bonnet, rotating stem, inside screw, body made of nodular cast iron. <b>Applications</b> Water supply systems, water treatment systems, air-conditioning systems.
<span style="color: red;">■</span> m, e	<a href="https://www.ksb.com/en-gb/lc/C50A">https://www.ksb.com/en-gb/lc/C50A</a>		

### COBRA-SMP

	PN DN T [°C]	16 40 - 300 $\geq -10 - \leq +110$	<b>Description</b> 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. <b>Applications</b> Water supply systems, heating systems, air-conditioning systems, general industrial applications, building services.
<span style="color: red;">■</span> m, e	<a href="https://www.ksb.com/en-gb/lc/C47A">https://www.ksb.com/en-gb/lc/C47A</a>		

### ECOLINE SP

	PN DN T [°C]	10/16/25 40 - 600 $\geq -10 - \leq +110$	<b>Description</b> 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. <b>Applications</b> Water supply systems, heating systems, air-conditioning systems, general industrial applications, water engineering, building services.
<span style="color: red;">■</span> m, e	<a href="https://www.ksb.com/en-gb/lc/E71A">https://www.ksb.com/en-gb/lc/E71A</a>		

### ECOLINE GT 40

	PN DN T [°C]	10 - 40 50 - 600 $\geq -10 - \leq +400$	<b>Description</b> 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. <b>Applications</b> Industrial plants, process engineering and shipbuilding. For water and steam. Other non-aggressive fluids such as gas or oil on request.
<span style="color: red;">■</span> m, e	<a href="https://www.ksb.com/en-gb/lc/EF2A">https://www.ksb.com/en-gb/lc/EF2A</a>		

### STAAL 40 AKD/AKDS

	PN DN T [°C]	10 - 40 50 - 900 $\geq -10 - \leq +530$	<b>Description</b> Gate valve to DIN/EN with flanged ends (AKD) or butt weld ends (AKDS), 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. <b>Applications</b> Industrial plants, power stations, process engineering and shipbuilding. For water and steam. Other non-aggressive fluids such as gas or oil on request.
<span style="color: red;">■</span> m, e	<a href="https://www.ksb.com/en-gb/lc/S16A">https://www.ksb.com/en-gb/lc/S16A</a>		

## STAAL 100 AKD/AKDS

	<b>PN</b> 63 - 100 <b>DN</b> 50 - 600 <b>T [°C]</b> $\geq -10 - \leq +530$	<b>Description</b> Gate valve to DIN/EN with flanged ends (AKD) or butt weld ends (AKDS), 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. <b>Applications</b> Industrial plants, power stations, process engineering and shipbuilding. For water and steam. Other non-aggressive fluids such as gas or oil on request.
<span style="font-size: 1.5em;">●</span> m, e, p	<a href="https://www.ksb.com/en-gb/lc/S32A">https://www.ksb.com/en-gb/lc/S32A</a>	

## AKG-A/AKGS-A

	<b>PN</b> 63 - 160 <b>DN</b> 65 - 300 <b>T [°C]</b> $\geq -10 - \leq +550$	<b>Description</b> Gate valve to DIN/EN with flanged ends (AKG-A) or butt weld ends (AKGS-A), 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. <b>Applications</b> Industrial plants, power stations, process engineering and shipbuilding. For water and steam. Other non-aggressive fluids such as gas or oil on request.
<span style="font-size: 1.5em;">●</span> m, e, p	<a href="https://www.ksb.com/en-gb/lc/A01A">https://www.ksb.com/en-gb/lc/A01A</a>	

## ZTS

	<b>PN</b> ≤ 600 <b>Class</b> 4500 <b>DN</b> 50 - 800 <b>NPS [inch]</b> 2 - 32 <b>T [°C]</b> $\geq -10 - \leq +650$	<b>Description</b> 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 body seats. <b>Applications</b> Industrial plants, power stations, process engineering and shipbuilding. For water and steam. Other non-aggressive fluids such as gas or oil on request.
<span style="font-size: 1.5em;">●</span> m, e, p	<a href="https://www.ksb.com/en-gb/lc/Z05A">https://www.ksb.com/en-gb/lc/Z05A</a>	

## Gate valves to ANSI/ASME

### ECOLINE GTB 150-600

	<b>Class</b> 150 - 600 <b>NPS [inch]</b> 2 - 12 <b>T [°C]</b> $\geq 0 - \leq +427$	<b>Description</b> Gate valve to ANSI/ASME with flanged ends or butt weld ends, cast steel/stainless steel body, trim and bellows made of stainless steel, with bolted bonnet, outside screw and yoke, sealed by graphite gland packing and metal bellows, stainless steel/graphite gaskets. <b>Applications</b> Petrochemical plants, chemical plants, power stations, process engineering and general industrial applications; for thermal oil, steam, toxic and volatile fluids. Other fluids on request.
<span style="font-size: 1.5em;">●</span> m, e	<a href="https://www.ksb.com/en-gb/lc/EH7A">https://www.ksb.com/en-gb/lc/EH7A</a>	

### ECOLINE GTB 800

	<b>Class</b> 150 - 800 <b>NPS [inch]</b> $\frac{1}{2} - 2$ <b>T [°C]</b> $\geq 0 - \leq +427$	<b>Description</b> Gate 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, bolted bonnet, outside screw and yoke, sealed by graphite gland packing and metal bellows, stainless steel/graphite gaskets. <b>Applications</b> Petrochemical plants, chemical plants, power stations, process engineering and general industrial applications; for thermal oil, steam, toxic and volatile fluids. Other fluids on request.
<span style="font-size: 1.5em;">●</span> m, e	<a href="https://www.ksb.com/en-gb/lc/E20A">https://www.ksb.com/en-gb/lc/E20A</a>	

## ECOLINE GTC 150-600



Class NPS [inch] T [°C]	150 - 600 2 - 24 $\geq 0 - \leq +649$	<b>Description</b> 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.
		<b>Applications</b> Industrial plants, power stations, process engineering, refineries, oil and marine applications; for water, steam, gas, oil and other non-aggressive fluids.

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<https://www.ksb.com/en-gb/lc/E59A>

## ECOLINE GTF 150-600



Class NPS [inch] T [°C]	150 - 600 $\frac{1}{2} - 2$ $\geq 0 - \leq +816$	<b>Description</b> Gate valve to ANSI/ASME with flanged ends, forged steel A105, Trim 8 (Stellite/13 % chrome steel), with bolted bonnet, outside screw and yoke, non-rotating stem, single-piece wedge, graphite gland packing, stainless steel/graphite gaskets, reduced bore.
		<b>Applications</b> Industrial applications, power stations, process engineering, refineries, oil and marine applications; water, steam, gas, oil and other non-aggressive fluids.

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<https://www.ksb.com/en-gb/lc/EF6A>

## ECOLINE GTF 800



Class NPS [inch] T [°C]	800 $\frac{1}{2} - 2$ $\geq 0 - \leq +593$	<b>Description</b> 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, outside screw and yoke, single-piece wedge, graphite gland packing, stainless steel/graphite gaskets, available in carbon steel and alloy steel.
		<b>Applications</b> Industrial applications, power stations, process engineering, refineries, oil and marine applications; water, steam, gas, oil and other non-aggressive fluids.

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<https://www.ksb.com/en-gb/lc/E61A>

## ECOLINE GTV 150-300



Class NPS [inch] T [°C]	150 - 300 2 - 12 $\geq -29 - \leq +427$	<b>Description</b> Gate valve to ANSI/ASME with flanged ends, cast steel A216 WCB, A351 CF8/CF8M/CN7M, Trims 2/8/10/13 for Class 150/300, with bolted bonnet, outside screw and yoke, non-rotating stem, flexible wedge, graphite gland packing, stainless steel / graphite gasket.
		<b>Applications</b> Fine chemicals, food industry, general industry; water, steam, gas and other fluids.

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<https://www.ksb.com/en-gb/lc/EE9B>

## SICCA 150-600 GTC



Class NPS [inch] T [°C]	150 - 600 2 - 24 $\geq 0 - \leq +593$	<b>Description</b> Gate valve to ANSI/ASME with flanged or butt weld ends, with bolted bonnet, outside screw and yoke, flexible wedge, rising stem, 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 stainless steel.
		<b>Applications</b> Power stations, general industry and process engineering. For water, steam, oil, gas and non-aggressive fluids. Other fluids on request.

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<https://www.ksb.com/en-gb/lc/S77A>

## SICCA 900-3600 GTC

	<b>Class</b> NPS [inch] T [°C]	<b>900 - 3600</b> 2 - 32 $\geq 0 - \leq +650$	<b>Description</b> Gate valve to ANSI/ASME with butt weld ends, pressure seal design, split wedge, 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. <b>Applications</b> Power stations, general industry and process engineering. For water, steam, oil, gas and non-aggressive fluids. Other fluids on request.
<span style="font-size: 1em;">m, e</span>	<a href="https://www.ksb.com/en-gb/lc/S83A">https://www.ksb.com/en-gb/lc/S83A</a>		

## SICCA 150-2500 GTF

	<b>Class</b> NPS [inch] T [°C]	<b>150 - 2500</b> ¼ - 2½ $\geq 0 - \leq +816$	<b>Description</b> Gate valve to ANSI/ASME with NPT (F) threaded ends or socket weld ends, or integral flange (Class 150 - 600) with bolted bonnet (Class 150 - 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 gaskets and gland packing. Available in carbon steel, low-alloy steel and stainless steel. <b>Applications</b> Refineries, power stations, general industry and process engineering. For water, steam, oil, gas and non-aggressive fluids. Other fluids on request.
<span style="font-size: 1em;">m, e</span>	<a href="https://www.ksb.com/en-gb/lc/S79A">https://www.ksb.com/en-gb/lc/S79A</a>		

## Gate valves for nuclear applications

### ZTN

	<b>PN</b> DN T [°C]	<b><math>\leq 320</math></b> 80 - 700 $\geq -29 - \leq +365$	<b>Description</b> Gate valve with butt weld ends, for nuclear applications, with bolted or pressure seal bonnet, forged or welded body, non-rotating stem, in split-wedge or parallel-disc design, made of steel or stainless steel. <b>Applications</b> Reactor cooling, safety feed, feed water, live steam, cleaning and condensate systems.
<span style="font-size: 1em;">m, e, p</span>	<a href="https://www.ksb.com/en-gb/lc/Z14A">https://www.ksb.com/en-gb/lc/Z14A</a>		

## Body pressure relief valves

### UGS

	<b>PN</b> DN	<b><math>\geq 10</math></b> 10 - 15	<b>Description</b> Spring-loaded body pressure relief valve to DIN/EN, with or without bursting disc, for gate valves in pressure seal design. <b>Applications</b> Industrial plants, power stations, process engineering and shipbuilding. For water and steam. Other non-aggressive fluids such as gas or oil on request.
<span style="font-size: 1em;"></span>	<a href="https://www.ksb.com/en-gb/lc/U18A">https://www.ksb.com/en-gb/lc/U18A</a>		

## Knife gate valves to DIN/EN

### HERA-BD

	PN 10 DN 50 - 1200 T [°C] $\geq -10 - \leq +120$	<b>Description</b> Knife gate valve to DIN/EN with wafer-type single-piece or two-piece body made of nodular cast iron, bi-directional, with gland packing, non-rising stem, corrosion-protected by epoxy coating. <b>Applications</b> Industrial plants, waste water engineering, process engineering and food industry. For water, waste water and solids-laden fluids. Other fluids on request.
<input checked="" type="checkbox"/> m, e, p	<a href="https://www.ksb.com/en-gb/lc/H62A">https://www.ksb.com/en-gb/lc/H62A</a>	

## Knife gate valves to ANSI/ASME

### HERA-BDS

	Class 150 DN 50 - 600 T [°C] $\geq -10 - \leq +120$	<b>Description</b> 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 handwheel. <b>Applications</b> Primarily in mining for handling slurries, abrasive fluids and high-density fluids; also in pulp applications, cement plants, waste water treatment plants and the chemical industry. Other fluids on request.
<input checked="" type="checkbox"/> m, e, p	<a href="https://www.ksb.com/en-gb/lc/H10A">https://www.ksb.com/en-gb/lc/H10A</a>	

### HERA-BHT

	Class 150 DN 80 - 600 T [°C] $\geq -10 - \leq +100$	<b>Description</b> Knife gate valve to ANSI/ASME with semi-lug body made of carbon steel or stainless steel, bi-directional, with gland packing, through-going blade, rising stem, non-rising handwheel, robust yoke for actuator mounting as standard. <b>Applications</b> 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.
<input checked="" type="checkbox"/> m, e, p	<a href="https://www.ksb.com/en-gb/lc/H09A">https://www.ksb.com/en-gb/lc/H09A</a>	

### HERA-SH

	Class 150 DN 50 - 1000 T [°C] $\geq -10 - \leq +180$	<b>Description</b> 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. <b>Applications</b> 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.
<input checked="" type="checkbox"/> m, e, p	<a href="https://www.ksb.com/en-gb/lc/HB5A">https://www.ksb.com/en-gb/lc/HB5A</a>	

## Lift check valves to DIN/EN

### BOA-RPL/RPL F-F

	PN DN T [°C]	10/16 25 - 400 ≥ -10 - ≤ +70	<b>Description</b> 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. <b>Applications</b> Water supply systems, water treatment systems, waste water.
<a href="https://www.ksb.com/en-gb/lc/B44A">https://www.ksb.com/en-gb/lc/B44A</a>			

### BOA-RFV

	PN DN T [°C]	10/16/25/40/63 40 - 600 ≥ -10 - ≤ +90	<b>Description</b> 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. <b>Applications</b> Water supply systems, heating systems, air-conditioning systems.
<a href="https://www.ksb.com/en-gb/lc/B43A">https://www.ksb.com/en-gb/lc/B43A</a>			

### BOA-RVK

	PN DN T [°C]	6/10/16 15 - 200 ≥ -20 - ≤ +250	<b>Description</b> 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. <b>Applications</b> 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.
<a href="https://www.ksb.com/en-gb/lc/B11A">https://www.ksb.com/en-gb/lc/B11A</a>			

### BOA-R

	PN DN T [°C]	6/16 15 - 350 ≥ -10 - ≤ +350	<b>Description</b> Lift check valve to DIN/EN with flanged ends, spring-loaded valve disc, maintenance-free. <b>Applications</b> 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.
<a href="https://www.ksb.com/en-gb/lc/B10A">https://www.ksb.com/en-gb/lc/B10A</a>			

### NORI 40 RXL/RXS

	PN DN T [°C]	25/40 10 - 300 ≥ -10 - ≤ +450	<b>Description</b> Lift check valve to DIN/EN with flanged ends (RXL), butt weld ends or socket weld ends (RXS), check disc with closing spring, seat/disc interface made of wear and corrosion resistant chrome steel or chrome nickel steel. <b>Applications</b> Industrial plants, power stations, process engineering and shipbuilding. For water and steam. Other non-aggressive fluids such as gas or oil on request.
<a href="https://www.ksb.com/en-gb/lc/N00A">https://www.ksb.com/en-gb/lc/N00A</a>			

## NORI 160 RXL/RXS

	PN	63 - 160	<b>Description</b>
	DN	10 - 200	Lift check valve to DIN/EN with flanged ends (RXL), butt weld ends or socket weld ends (RXS), check disc with closing spring, seat/disc interface made of wear and corrosion resistant 17 % chrome steel or Stellite.
	T [°C]	≥ -10 - ≤ +550	<b>Applications</b> Industrial plants, power stations, process engineering and shipbuilding. For water and steam. Other non-aggressive fluids such as gas or oil on request.

<https://www.ksb.com/en-gb/lc/N10A>

## RGS

	PN	250 - 500	<b>Description</b>
	DN	10 - 50	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.
	T [°C]	≥ -10 - ≤ +580	<b>Applications</b> Industrial plants, power stations, process engineering and shipbuilding. For water and steam. Other non-aggressive fluids such as gas or oil on request.

<https://www.ksb.com/en-gb/lc/R01A>

## BOACHEM-RXA

	PN	10 - 40	<b>Description</b>
	DN	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.
	T [°C]	≥ -10 - ≤ +400	<b>Applications</b> Process engineering, industry, building services, food and beverage industries, for aggressive fluids. Other fluids on request.

<https://www.ksb.com/en-gb/lc/B37B>

## Lift check valves to ANSI/ASME

### ECOLINE PTF 150-600

	Class	150 - 600	<b>Description</b>
	NPS [inch]	½ - 2	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 disc.
	T [°C]	≥ 0 - ≤ +816	<b>Applications</b> Industrial plants, power stations, process engineering, refineries, oil and marine applications; for water, steam, gas, oil and other non-aggressive fluids.

<https://www.ksb.com/en-gb/lc/E63A>

### ECOLINE PTF 800

	Class	800	<b>Description</b>
	NPS [inch]	½ - 2	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, spring-loaded valve disc, available in carbon steel and alloy steel.
	T [°C]	≥ 0 - ≤ +593	<b>Applications</b> Industrial plants, power stations, process engineering, refineries, oil and marine applications; for water, steam, gas, oil and other non-aggressive fluids.

<https://www.ksb.com/en-gb/lc/E64A>

## SICCA 150-4500 PCF



Class	150 - 4500	<b>Description</b>
NPS [inch]	½ - 2½	Lift check valve to ANSI/ASME with threaded sockets (NPT), butt weld ends (BW) or socket weld ends (SW) or integral flange (Class 150 - 600), Trim 8 (Stellite/13 % chrome steel), with bolted cover (Class 150 - 800) or welded cover (Class 1500/2500/4500), spring-loaded check disc, available in carbon steel, low-alloy steel and stainless steel.
T [°C]	≥ 0 - ≤ +816	<b>Applications</b> Refineries, power stations, general industry and process engineering. For water, steam, oil, gas and non-aggressive fluids. Other fluids on request.

<https://www.ksb.com/en-gb/lc/S81A>

## Lift check valves for nuclear applications

### NUCA lift check valves



PN	≤ 210	<b>Description</b>
DN	10 - 50	Lift check valve with butt weld ends or socket weld ends, for nuclear applications, with replaceable seat (NUCA-ES), straight-way pattern, made of steel or stainless steel.
T [°C]	≥ -29 - ≤ +365	<b>Applications</b> Reactor cooling, moderator, safety feed, feed water, live steam and cleaning systems.

<https://www.ksb.com/en-gb/lc/N74A>

### RJN



PN	≤ 140	<b>Description</b>
DN	80 - 600	Damped lift check valve with butt weld ends, for nuclear applications, individually selectable damping characteristic, made of steel or stainless steel.
T [°C]	≥ -29 - ≤ +300	<b>Applications</b> Feed water and live steam systems.

### RYN



PN	≤ 210	<b>Description</b>
DN	65 - 300	Combined lift check/shut-off valve with butt weld ends, for nuclear applications, Y-pattern, with gland packing or bellows, made of steel or stainless steel.
T [°C]	≥ -29 - ≤ +365	<b>Applications</b> Feed water and live steam systems.

<https://www.ksb.com/en-gb/lc/R67A>

## Swing check valves to DIN/EN

### ECOLINE WT/WTI

	PN DN T [°C]	16 50 - 300 $\geq -10 - \leq +110$	<b>Description</b> 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. <b>Applications</b> Irrigation systems, district heating, domestic water supply, waste water treatment plants, air-conditioning systems, cooling circuits, water supply systems.
<a href="https://www.ksb.com/en-gb/lc/E80A">https://www.ksb.com/en-gb/lc/E80A</a>			

### STAAL 40 AKK/AKKS

	PN DN T [°C]	10 - 40 80 - 400 $\geq -10 - \leq +450$	<b>Description</b> Swing check valve to DIN/EN with flanged ends (AKK) or butt weld ends (AKKS), with bolted cover, internally mounted hinge pin, body of welded construction, seat/disc interface made of wear and corrosion resistant 17 % chrome steel. <b>Applications</b> Industrial plants, power stations, process engineering and shipbuilding. For water and steam. Other non-aggressive fluids such as gas or oil on request.
<a href="https://www.ksb.com/en-gb/lc/S34A">https://www.ksb.com/en-gb/lc/S34A</a>			

### STAAL 100 AKK/AKKS

	PN DN T [°C]	63 - 100 80 - 400 $\geq -10 - \leq +530$	<b>Description</b> Swing check valve to DIN/EN with flanged ends (AKK) or butt weld ends (AKKS), 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. <b>Applications</b> Industrial plants, power stations, process engineering and shipbuilding. For water and steam. Other non-aggressive fluids such as gas or oil on request.
<a href="https://www.ksb.com/en-gb/lc/S36A">https://www.ksb.com/en-gb/lc/S36A</a>			

### AKR/AKRS

	PN DN T [°C]	63 - 160 80 - 300 $\geq -10 - \leq +550$	<b>Description</b> Swing check valve to DIN/EN with flanged ends (AKR) or butt weld ends (AKRS), 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. <b>Applications</b> Industrial plants, power stations, process engineering and shipbuilding. For water and steam. Other non-aggressive fluids such as gas or oil on request.
<a href="https://www.ksb.com/en-gb/lc/A03A">https://www.ksb.com/en-gb/lc/A03A</a>			

### ZRS

	PN DN T [°C]	$\leq 600$ 50 - 800 $\geq -10 - \leq +650$	<b>Description</b> 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. <b>Applications</b> Industrial plants, power stations, process engineering and shipbuilding. For water and steam. Other non-aggressive fluids such as gas or oil on request.
<a href="https://www.ksb.com/en-gb/lc/Z01A">https://www.ksb.com/en-gb/lc/Z01A</a>			

## SISTO-RSK/RSKS

	PN 16 DN 25 - 300 T [°C] ≥ -20 - ≤ +140	<b>Description</b> Swing check valve to DIN/EN with flanged ends, in straight-way pattern, full bore, body with coating or lining, slanted-seat design, static sealing to atmosphere; with soft rubber encapsulated pre-loaded valve disc featuring short travel to closure. <b>Applications</b> 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.
<a href="https://www.ksb.com/en-gb/lc/S65A">https://www.ksb.com/en-gb/lc/S65A</a>		

## SERIE 2000

	PN 16 Class 150/300 DN 50 - 600 T [°C] ≥ -196 - ≤ +538	<b>Description</b> Dual-plate check valve with single-piece, wafer-type body made of lamellar graphite cast iron, nodular cast iron, steel or stainless steel; metal/elastomer-seated or metal/metal-seated, maintenance-free, connections to EN, ASME or JIS. <b>Applications</b> 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.
<a href="https://www.ksb.com/en-gb/lc/S51A">https://www.ksb.com/en-gb/lc/S51A</a>		

## Swing check valves to ANSI/ASME

### ECOLINE SCC 150-600

	Class 150 - 600 NPS [inch] 2 - 24 T [°C] ≥ 0 - ≤ +816	<b>Description</b> 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. <b>Applications</b> Refineries, power stations, process engineering and general industry; water, steam, oil, gas. Other fluids on request.
<a href="https://www.ksb.com/en-gb/lc/E68A">https://www.ksb.com/en-gb/lc/E68A</a>		

### ECOLINE SCF 150-600

	Class 150 - 600 NPS [inch] ½ - 2 T [°C] ≥ 0 - ≤ +816	<b>Description</b> 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 hinge pin. <b>Applications</b> Industrial plants, power stations, process engineering, refineries, oil and marine applications; for water, steam, gas, oil and other non-aggressive fluids.
<a href="https://www.ksb.com/en-gb/lc/EF7A">https://www.ksb.com/en-gb/lc/EF7A</a>		

### ECOLINE SCF 800

	Class 800 NPS [inch] ½ - 2 T [°C] ≥ 0 - ≤ +593	<b>Description</b> 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. <b>Applications</b> Industrial plants, power stations, process engineering, refineries, oil and marine applications; for water, steam, gas, oil and other non-aggressive fluids.
<a href="https://www.ksb.com/en-gb/lc/E70A">https://www.ksb.com/en-gb/lc/E70A</a>		

## ECOLINE SCV 150-300

	<b>Class</b> NPS [inch] T [°C]	150 - 300 2 - 12 $\geq -29 - \leq +427$	<b>Description</b> Swing check valve to ANSI/ASME with flanged ends, cast steel A216 WCB, A351 CF8/CF8M/CN7M, Trims 2/8/10/13 for Class 150/300, with bolted cover and stainless steel / graphite gasket. <b>Applications</b> Fine chemicals, food industry and general industry. For water, steam, gas and other fluids. Other fluids on request.
<a href="https://www.ksb.com/en-gb/lc/EF4B">https://www.ksb.com/en-gb/lc/EF4B</a>			

## SICCA 150-600 SCC

	<b>Class</b> NPS [inch] T [°C]	150 - 600 2 - 24 $\geq 0 - \leq +593$	<b>Description</b> Swing check valve to ANSI/ASME with flanged or butt weld ends, with bolted cover, internally bracket-mounted hinge pin (up to NPS 12) and body-mounted hinge pin (NPS > 12). 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 steel. <b>Applications</b> Power stations, general industry and process engineering. For water, steam, oil, gas and non-aggressive fluids. Other fluids on request.
<a href="https://www.ksb.com/en-gb/lc/S78A">https://www.ksb.com/en-gb/lc/S78A</a>			

## SICCA 900-3600 SCC

	<b>Class</b> NPS [inch] T [°C]	900 - 3600 2 - 28 $\geq 0 - \leq +650$	<b>Description</b> 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. <b>Applications</b> Power stations, general industry and process engineering. For water, steam, oil, gas and non-aggressive fluids. Other fluids on request.
<a href="https://www.ksb.com/en-gb/lc/S84A">https://www.ksb.com/en-gb/lc/S84A</a>			

## Swing check valves for nuclear applications

### SISTO-RSKNA

	<b>PN</b> DN T [°C]	16 25 - 300 $\geq -20 - \leq +100$	<b>Description</b> 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. <b>Applications</b> Waste water systems, pump systems.
<a href="https://www.ksb.com/en-gb/lc/S52A">https://www.ksb.com/en-gb/lc/S52A</a>			

### ZRN

	<b>PN</b> DN T [°C]	≤ 210 80 - 700 $\geq -29 - \leq +365$	<b>Description</b> 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. <b>Applications</b> Safety feed, feed water, live steam and condensate systems.
<a href="https://www.ksb.com/en-gb/lc/Z13A">https://www.ksb.com/en-gb/lc/Z13A</a>			

## Tilting disc check valves to DIN/EN

### COBRA-TDC01/03

	PN DN T [°C]	10/16/25/40 150 - 1400 $\geq -10 - \leq +80$	<p><b>Description</b> 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, body seats made of stainless steel.</p> <p><b>Applications</b> Water supply systems</p>
<a href="https://www.ksb.com/en-gb/lc/C51A">https://www.ksb.com/en-gb/lc/C51A</a>			

## Strainers to DIN/EN

### BOA-S

	PN DN T [°C]	6/16/25 15 - 400 $\geq -10 - \leq +350$	<p><b>Description</b> Strainer to DIN/EN with flanged ends, with standard or fine screen; all nominal sizes with drain plug in the cover. Made of grey cast iron or nodular cast iron.</p> <p><b>Applications</b> 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.</p>
<a href="https://www.ksb.com/en-gb/lc/B09A">https://www.ksb.com/en-gb/lc/B09A</a>			

## NORI 40 FSL/FSS

	PN DN T [°C]	25/40 15 - 300 $\geq -10 - \leq +450$	<p><b>Description</b> Strainer to DIN/EN with flanged ends (FSL) or butt weld ends (FSS), made of cast steel, with standard or fine screen; all nominal sizes with drain plug in the cover, optional magnetic insert.</p> <p><b>Applications</b> Heat transfer systems, industrial plants, building services and shipbuilding. For thermal oils, water, steam, gas and other non-aggressive fluids. Other fluids on request.</p>
<a href="https://www.ksb.com/en-gb/lc/N33A">https://www.ksb.com/en-gb/lc/N33A</a>			

## BOACHEM-FSA

	PN DN T [°C]	10 - 40 15 - 400 $\geq -10 - \leq +400$	<p><b>Description</b> Strainer to DIN/EN with flanged ends, body made of stainless steel, with standard or fine screen; all nominal sizes with drain plug in the cover.</p> <p><b>Applications</b> Process engineering, industry, building services, food and beverage industries, for aggressive fluids. Other fluids on request.</p>
<a href="https://www.ksb.com/en-gb/lc/B36B">https://www.ksb.com/en-gb/lc/B36B</a>			

## Strainers to ANSI/ASME

### ECOLINE FYC 150-600

	<p>Class NPS [inch] T [°C]</p> <p>150 - 600 2 - 12 <math>\geq 0 - \leq +816</math></p>	<p><b>Description</b> Strainer to ANSI/ASME with flanged ends, Y-pattern, bolted cover, cast steel A216 WCB, screen made of stainless steel 304, mesh width 1.5 mm.</p> <p><b>Applications</b> Refineries, power stations, process engineering and general industry; water, steam, oil, gas. Other fluids on request.</p>
<a href="https://www.ksb.com/en-gb/lc/E53A">https://www.ksb.com/en-gb/lc/E53A</a>		

### ECOLINE FYF 800

	<p>Class NPS [inch] T [°C]</p> <p>800 ½ - 2 <math>\geq 0 - \leq +816</math></p>	<p><b>Description</b> Strainer to ANSI/ASME with threaded sockets (NPT) or socket weld ends (SW), Y-pattern, with bolted cover, forged steel A105, screen made of stainless steel 304. Mesh width 0.8 to 0.9 mm.</p> <p><b>Applications</b> Industrial plants, power stations, process engineering, refineries, oil and marine applications; for water, steam, gas, oil and other non-aggressive fluids.</p>
<a href="https://www.ksb.com/en-gb/lc/EG1A">https://www.ksb.com/en-gb/lc/EG1A</a>		

## Centred-disc butterfly valves

### BOAX-CBV13

	<p>PN DN T [°C]</p> <p>10/16 50 - 1200 <math>\geq -10 - \leq +70</math></p>	<p><b>Description</b> 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.</p> <p><b>Applications</b> 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.</p>
<a href="https://www.ksb.com/en-gb/lc/B49A">https://www.ksb.com/en-gb/lc/B49A</a>		

### BOAX-S/SF

	<p>PN DN T [°C]</p> <p>6/10/16 20 - 600 <math>\geq -10 - \leq +130</math></p>	<p><b>Description</b> Centred-disc butterfly valve with ISO 5211 compliant square shaft end for butterfly valves from DN 350, with heat barrier and elastomer liner (EPDM XU or nitrile K), with lever, manual gearbox or electric actuator (BOAXMAT-S and BOAXMAT-SF); semi-lug body (T2) or full-lug body (T4) for downstream dismantling and dead-end service. Valve disc made of stainless steel 1.4308, connections to EN.</p> <p><b>Applications</b> Building services, heating, ventilation, air-conditioning systems, for drinking water.</p>
<a href="https://www.ksb.com/en-gb/lc/B12A">https://www.ksb.com/en-gb/lc/B12A</a>		

## BOAX-B

	<b>PN</b> 10/16  <b>DN</b> 40 - 1000  <b>T [°C]</b> ≥ -10 - ≤ +110	<b>Description</b> Centred-disc butterfly valve with ISO 5211 compliant square shaft end, sealed by elastomer liner (EPDM XC / XU or nitrile K), with lever, manual gearbox, pneumatic or electric actuator; semi-lug body (T2), full-lug body (T4). Body types T2 and T4 are suitable for downstream dismantling and dead-end service. Valve disc made of nodular cast iron or stainless steel. Connections to EN. <b>Applications</b> Engineering contractors. General water circuits, fuel oil, oil. Shut-off and control duties in water management, water supply and water treatment, drainage and irrigation.
<span style="color: white; background-color: #00529F; padding: 2px 5px;">m, e, p + AMTROBOX/AMTRONIC U/SMARTRONIC U</span>		<a href="https://www.ksb.com/en-gb/lc/B16A">https://www.ksb.com/en-gb/lc/B16A</a>

## ISORIA 10/16

	<b>PN</b> 10/16  <b>DN</b> 40 - 1000  <b>T [°C]</b> ≥ -10 - ≤ +200	<b>Description</b> Centred-disc butterfly valve with ISO 5211 compliant square shaft end, 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. <b>Applications</b> Shut-off and control duties in all industrial and energy sectors.
<span style="color: white; background-color: #00529F; padding: 2px 5px;">m, e, h, p + AMTROBOX/AMTRONIC U/SMARTRONIC U</span>		<a href="https://www.ksb.com/en-gb/lc/I00A">https://www.ksb.com/en-gb/lc/I00A</a>

## ISORIA 20/25

	<b>PN</b> 20/25  <b>DN</b> 32 - 1000  <b>T [°C]</b> ≥ -10 - ≤ +200	<b>Description</b> Centred-disc butterfly valve with ISO 5211 compliant square shaft end, 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. <b>Applications</b> Shut-off and control duties in all industrial and energy sectors.
<span style="color: white; background-color: #00529F; padding: 2px 5px;">m, e, h, p + AMTROBOX/AMTRONIC U/SMARTRONIC U</span>		<a href="https://www.ksb.com/en-gb/lc/I02A">https://www.ksb.com/en-gb/lc/I02A</a>

## MAMMOUTH

	<b>PN</b> 6/10/16/20/25  <b>DN</b> 1050 - 4000  <b>T [°C]</b> ≥ 0 - ≤ +80	<b>Description</b> 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. <b>Applications</b> 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.
<span style="color: white; background-color: #00529F; padding: 2px 5px;">m, e, p + AMTROBOX/AMTRONIC U/SMARTRONIC U</span>		<a href="https://www.ksb.com/en-gb/lc/M01A">https://www.ksb.com/en-gb/lc/M01A</a>

## KE

	<b>PN</b> 10  <b>DN</b> 40 - 600  <b>T [°C]</b> ≥ -20 - ≤ +200	<b>Description</b> Centred-disc butterfly valve with ISO 5211 compliant square shaft end and PFA liner. With lever, manual gearbox, pneumatic or electric actuator. With wafer-type body (T1), full-lug body (T4) or U-section body with raised faces (T6). EN, ASME, JIS connections possible. <b>Applications</b> In the chemical industry, 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 with a stainless steel valve disc. Fluids requiring absolutely safe handling.
<span style="color: white; background-color: #00529F; padding: 2px 5px;">m, e, h, p + AMTROBOX/AMTRONIC U/SMARTRONIC U</span>		<a href="https://www.ksb.com/en-gb/lc/K02A">https://www.ksb.com/en-gb/lc/K02A</a>

## Double-offset butterfly valves

### APORIS-DEB02

	PN DN T [°C]	10/16/25/40 100 - 2200 ≥ -10 - ≤ +80	<b>Description</b> 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 iron. <b>Applications</b> Shut-off or control duties; drinking water, seawater, air, water engineering.
 m, e, p			<a href="https://www.ksb.com/en-gb/lc/A80A">https://www.ksb.com/en-gb/lc/A80A</a>

### DANAÏS 150

	PN Class DN T [°C]	≤ 25 150 50 - 1200 ≥ -50 - ≤ +260	<b>Description</b> Double-offset butterfly valve with ISO 5211 compliant square shaft end, with elastomer seat (also in fire-safe design), metal 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 or duplex stainless steel (254 SMO). Wafer-type 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/EU. <b>Applications</b> 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.
 m, e, h, p + AMTROBOX/AMTRONIC U/SMARTRONIC U			<a href="https://www.ksb.com/en-gb/lc/D01A">https://www.ksb.com/en-gb/lc/D01A</a>

### DANAÏS MTII

	PN Class DN T [°C]	25/50 150/300 50 - 600 ≥ -50 - ≤ +260	<b>Description</b> Double-offset butterfly valve with ISO 5211 compliant square shaft end, with elastomer 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. <b>Applications</b> Petroleum, gas, chemical and petrochemical industry, nuclear power stations, onshore and offshore plants; steam, vacuum and all applications requiring offset-disc butterfly valves; industrial gases (air separation units, GOX and LOX)
 m, e, h, p + AMTROBOX/AMTRONIC U/SMARTRONIC U			<a href="https://www.ksb.com/en-gb/lc/D02A">https://www.ksb.com/en-gb/lc/D02A</a>

### DANAÏS CRYO

	PN Class DN T [°C]	≤ 25 150 80 - 1200 ≥ -253 - ≤ +200	<b>Description</b> Double-offset butterfly valve for cryogenic applications; body with flanged ends (T7) with raised faces, or body with butt weld ends made of stainless steel to ASME Class 150, JIS, fire-safe design. <b>Applications</b> Liquefied natural gas (LNG) in LNG terminals and LNG tank farms, for marine transport. Supply of liquefied natural gas, hydrogen or ammonia.
 m, e, h, p + AMTROBOX/AMTRONIC U/SMARTRONIC U			<a href="https://www.ksb.com/en-gb/lc/D40A">https://www.ksb.com/en-gb/lc/D40A</a>

### DANAÏS CRYO AIR

	PN Class DN T [°C]	10/16 150 50 - 600 ≥ -253 - ≤ +200	<b>Description</b> Double-offset butterfly valve for cryogenic applications, wafer-type body (T1), full-lug body (T4). <b>Applications</b> Air separation units (nitrogen, oxygen, argon, etc.), hydrogen, helium, Teisan Compact Nitrogen (TCN).
 m, e, h, p + AMTROBOX/AMTRONIC U/SMARTRONIC U			<a href="https://www.ksb.com/en-gb/lc/D16A">https://www.ksb.com/en-gb/lc/D16A</a>

## Triple-offset butterfly valves

### TRIODIS 150

	<table border="1"> <tr> <td>PN</td><td><math>\leq 25</math></td><td><b>Description</b></td></tr> <tr> <td>Class</td><td>150</td><td>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.</td></tr> <tr> <td>DN</td><td>50 - 1200</td><td></td></tr> <tr> <td>T [°C]</td><td><math>\geq -196 - \leq +450</math></td><td></td></tr> </table>	PN	$\leq 25$	<b>Description</b>	Class	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.	DN	50 - 1200		T [°C]	$\geq -196 - \leq +450$		
PN	$\leq 25$	<b>Description</b>												
Class	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.												
DN	50 - 1200													
T [°C]	$\geq -196 - \leq +450$													
 m, e, h, p + AMTROBOX/AMTRONIC U/SMARTRONIC U	<a href="https://www.ksb.com/en-gb/lc/T09A">https://www.ksb.com/en-gb/lc/T09A</a>													

### TRIODIS 300

	<table border="1"> <tr> <td>PN</td><td><math>\leq 50</math></td><td><b>Description</b></td></tr> <tr> <td>Class</td><td>300</td><td>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.</td></tr> <tr> <td>DN</td><td>80 - 1200</td><td></td></tr> <tr> <td>T [°C]</td><td><math>\geq -196 - \leq +450</math></td><td></td></tr> </table>	PN	$\leq 50$	<b>Description</b>	Class	300	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.	DN	80 - 1200		T [°C]	$\geq -196 - \leq +450$		
PN	$\leq 50$	<b>Description</b>												
Class	300	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.												
DN	80 - 1200													
T [°C]	$\geq -196 - \leq +450$													
 m, p + AMTROBOX/AMTRONIC U/SMARTRONIC U	<a href="https://www.ksb.com/en-gb/lc/T11A">https://www.ksb.com/en-gb/lc/T11A</a>													

### TRIODIS 600

	<table border="1"> <tr> <td>PN</td><td><math>\leq 100</math></td><td><b>Description</b></td></tr> <tr> <td>Class</td><td>600</td><td>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.</td></tr> <tr> <td>DN</td><td>150 - 1000</td><td></td></tr> <tr> <td>T [°C]</td><td><math>\geq -196 - \leq +450</math></td><td></td></tr> </table>	PN	$\leq 100$	<b>Description</b>	Class	600	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.	DN	150 - 1000		T [°C]	$\geq -196 - \leq +450$		
PN	$\leq 100$	<b>Description</b>												
Class	600	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.												
DN	150 - 1000													
T [°C]	$\geq -196 - \leq +450$													
 m, p + AMTROBOX/AMTRONIC U/SMARTRONIC U	<a href="https://www.ksb.com/en-gb/lc/T12A">https://www.ksb.com/en-gb/lc/T12A</a>													

## Butterfly valves for nuclear applications

### CLOSSIA

	<table border="1"> <tr> <td>PN</td><td><math>\leq 5,5</math></td><td><b>Description</b></td></tr> <tr> <td>DN</td><td>250/500/750/1000</td><td>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.</td></tr> <tr> <td>T [°C]</td><td><math>\geq -20 - \leq +170</math></td><td></td></tr> </table>	PN	$\leq 5,5$	<b>Description</b>	DN	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.	T [°C]	$\geq -20 - \leq +170$		
PN	$\leq 5,5$	<b>Description</b>									
DN	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.									
T [°C]	$\geq -20 - \leq +170$										
 m, e, p	<a href="https://www.ksb.com/en-gb/lc/C71A">https://www.ksb.com/en-gb/lc/C71A</a>										

## Combined butterfly/check valve

### DUALIS

	DN T [°C]	500 - 1400 ≥ -10 - ≤ +65	<b>Description</b> Combined butterfly/check valve with single-acting hydraulically controlled counterweight actuator. For mounting on valves with DN 500 to 1400. <b>Applications</b> For installation in the pump discharge lines of pumping stations. Power station cooling circuits. Protects pipelines and turbines.
<a href="https://www.ksb.com/en-gb/lc/D03A">https://www.ksb.com/en-gb/lc/D03A</a>			

## Single-piece ball valves

### MP-CI/MP-II

	PN DN T [°C]	16 15 - 150 ≥ -10 - ≤ +200	<b>Description</b> 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. <b>Applications</b> Irrigation and fire-fighting systems, domestic water supply, air-conditioning systems, cooling circuits, water supply systems.
  m, p + AMTROBOX/AMTRONIC U <a href="https://www.ksb.com/en-gb/lc/M77A">https://www.ksb.com/en-gb/lc/M77A</a>			

### PROFIN VT1

	PN DN T [°C]	40 8 - 50 ≥ -20 - ≤ +150	<b>Description</b> Ball valve to ANSI/ASME with threaded ends (BSP), single-piece body, reduced bore, solid ball, blowout-proof shaft, body made of stainless steel. <b>Applications</b> Spray irrigation systems, general irrigation systems, fire-fighting systems, air-conditioning 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 air-conditioning 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.
  m <a href="https://www.ksb.com/en-gb/lc/P03A">https://www.ksb.com/en-gb/lc/P03A</a>			

## Two-piece ball valves

### ECOLINE BLT 150-300

	Class DN T [°C]	150 / 300 15 - 300 ≥ -10 - ≤ +200	<b>Description</b> Ball valve to ANSI/ASME with flanged ends, two-piece body, full bore, floating ball, plastomer sealing (also in fire-safe design). <b>Applications</b> General industry, power stations, chemical industry, petrochemical industry and all related branches of industry, paper industry, food industry and pharmaceutical industry.
 m, e, p <a href="https://www.ksb.com/en-gb/lc/E48A">https://www.ksb.com/en-gb/lc/E48A</a>			

## PROFIN VT2L

	PN	40	<b>Description</b>
	DN	8 - 80	Ball valve to ANSI/ASME with threaded ends (BSP), two-piece body, full bore, solid ball, anti-static design, blowout-proof shaft, body made of stainless steel.
	T [°C]	≥ -20 - ≤ +150	<b>Applications</b> Spray irrigation systems, general irrigation systems, fire-fighting systems, air-conditioning 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 air-conditioning 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.
			<a href="https://www.ksb.com/en-gb/lc/P12A">https://www.ksb.com/en-gb/lc/P12A</a>

## Three-piece ball valves

### ECOLINE BLC 1000

	Class	1000 WOG	<b>Description</b>
	DN	8 - 100	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).
	T [°C]	≥ -10 - ≤ +200	<b>Applications</b> General industry, power stations, chemical industry, petrochemical industry and all related branches of industry, paper industry, food industry and pharmaceutical industry.
			<a href="https://www.ksb.com/en-gb/lc/E47A">https://www.ksb.com/en-gb/lc/E47A</a>

### PROFIN SI3

	PN	16/40	<b>Description</b>
	DN	15 - 100	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 shaft, spring-loaded shaft seal, body made of stainless steel.
	T [°C]	≥ -20 - ≤ +150	<b>Applications</b> Spray irrigation systems, general irrigation systems, fire-fighting systems, air-conditioning systems, paint shops, 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.
			<a href="https://www.ksb.com/en-gb/lc/P14A">https://www.ksb.com/en-gb/lc/P14A</a>

### PROFIN VT3

	PN	40	<b>Description</b>
	DN	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 shaft, body made of stainless steel.
	T [°C]	≥ -20 - ≤ +150	<b>Applications</b> Spray irrigation systems, general irrigation systems, fire-fighting systems, air-conditioning systems, paint shops, 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.
			<a href="https://www.ksb.com/en-gb/lc/P13A">https://www.ksb.com/en-gb/lc/P13A</a>

## Soft-seated diaphragm valves to DIN/EN

### SISTO-KB

	PN DN T [°C]	10 15 - 200 ≥ -20 - ≤ +140	<b>Description</b> Diaphragm valve to DIN/EN with flanged ends, in straight-way pattern; shut-off and sealing to atmosphere by diaphragm; hydraulically favourable full bore body with coating or lining, position indicator with integrated stem protection. From DN 125 with threaded bush. All moving parts are separated from the fluid by the diaphragm. Maintenance-free. <b>Applications</b> Building services, industry, power stations; suitable for abrasive and aggressive products such as service water, waste water, acids, alkaline solutions, sludges and suspensions.
 <a href="https://www.ksb.com/en-gb/lc/S47A">https://www.ksb.com/en-gb/lc/S47A</a>			

### SISTO-16

	PN DN T [°C]	16 15 - 300 ≥ -10 - ≤ +160	<b>Description</b> Diaphragm valve to DIN/EN with flanged ends or threaded socket ends, in straight-way pattern; shut-off and sealing to atmosphere by supported and confined diaphragm; body with coating or lining, position indicator with integrated stem protection. All moving parts are separated from the fluid by the diaphragm. Maintenance-free. <b>Applications</b> 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.
 <a href="https://www.ksb.com/en-gb/lc/S40A">https://www.ksb.com/en-gb/lc/S40A</a>			

### SISTO-16S

	PN DN T [°C]	16 15 - 200 ≥ -20 - ≤ +160	<b>Description</b> Diaphragm valve to DIN/EN with flanged ends, short face-to-face length, in straight-way pattern; shut-off and sealing to atmosphere by supported and confined 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. <b>Applications</b> 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.
 <a href="https://www.ksb.com/en-gb/lc/S42A">https://www.ksb.com/en-gb/lc/S42A</a>			

### SISTO-16RGAMaXX

	PN DN T [°C]	16 15 - 80 ≥ -10 - ≤ +90	<b>Description</b> Diaphragm valve to DIN/EN with threaded socket ends, straight-way pattern, body made of stainless steel for drinking water installations to DIN 1988, DIN-DVGW-approved for water acc. to test W 270, in compliance with the latest German Environment Agency guideline; shut-off and sealing to atmosphere by confined and supported SISTOMaXX diaphragm; position indicator with integrated stem protection. All moving parts are separated from the fluid by the diaphragm. Maintenance-free. <b>Applications</b> Drinking water, particularly drinking water installations to DIN 1988, seawater, all service water qualities.
 <a href="https://www.ksb.com/en-gb/lc/S41A">https://www.ksb.com/en-gb/lc/S41A</a>			

### SISTO-16TWA

	PN DN T [°C]	16 15 - 200 ≥ -10 - ≤ +140	<b>Description</b> Diaphragm valve to DIN/EN with flanged ends, straight-way pattern, for drinking water installations to DIN 1988, DIN-DVGW-approved for water acc. to test W 270, in compliance with the latest elastomers guideline of the German Environment Agency; shut-off and sealing to atmosphere by confined and supported SISTOMaXX diaphragm; position indicator with integrated stem protection. All moving parts are separated from the fluid by the diaphragm. Maintenance-free. <b>Applications</b> 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-16DLU (compressed air up to 90 °C): compressed air with oil content, oils and technical gases.
 <a href="https://www.ksb.com/en-gb/lc/S43A">https://www.ksb.com/en-gb/lc/S43A</a>			

## SISTO-20

	PN 16 DN 15 - 300 T [°C] ≥ -20 - ≤ +160	<b>Description</b> Diaphragm valve to DIN/EN with flanged ends, threaded socket ends or socket weld ends, in straight-way pattern; shut-off and sealing to atmosphere by supported and confined diaphragm; body with coating or lining, position indicator with integrated stem protection. All moving parts are separated from the fluid by the diaphragm. Maintenance-free. <b>Applications</b> 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.
<span style="color: red;">●</span> m, e, p		<a href="https://www.ksb.com/en-gb/lc/S44A">https://www.ksb.com/en-gb/lc/S44A</a>

## SISTO-C

	PN 16 DN 6 - 200 T [°C] ≥ -20 - ≤ +160	<b>Description</b> Diaphragm valve with butt weld ends or clamps; in straight-way, Y or T pattern, or as a multi-port valve; shut-off and sealing to atmosphere by confined and supported 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. <b>Applications</b> Biotechnology, pharmaceutical industry, sterile processes, food and beverage industry.
<span style="color: red;">●</span> m, p		<a href="https://www.ksb.com/en-gb/lc/S46A">https://www.ksb.com/en-gb/lc/S46A</a>

## Diaphragm valves for nuclear applications

### SISTO-20NA

	PN 20 DN 8 - 150 T [°C] ≥ -20 - ≤ +100	<b>Description</b> Diaphragm valve with butt weld ends, for nuclear applications, shut-off and sealing to atmosphere by supported and confined diaphragm. All moving parts are separated from the fluid by the diaphragm. Maintenance-free. <b>Applications</b> Cleaning systems, condensate and cooling water systems, waste water systems, auxiliary systems.
<span style="color: red;">●</span> m, e, p		<a href="https://www.ksb.com/en-gb/lc/S49A">https://www.ksb.com/en-gb/lc/S49A</a>

### SISTO-DrainNA

	PN 16 DN 15 - 25 T [°C] ≥ -20 - ≤ +100	<b>Description</b> Diaphragm valve with butt weld ends, for nuclear applications; shut-off and sealing to atmosphere by confined diaphragm. All moving parts are separated from the fluid by the diaphragm. Maintenance-free. <b>Applications</b> Heating systems, air-conditioning systems, auxiliary systems.
<span style="color: red;">●</span> m		<a href="https://www.ksb.com/en-gb/lc/S33A">https://www.ksb.com/en-gb/lc/S33A</a>

## Feed water bypass valves

### ZJSVM/RJSVM

	PN DN T [°C]	≤ 600 100 - 800 ≥ -10 - ≤ +450	<b>Description</b> Feed water bypass valve to DIN/EN with butt weld ends, pressure seal design, billet-forged body, Z or T pattern, seat/disc interface made of wear and corrosion resistant Stellite, controlled by process fluid. <b>Applications</b> Industrial plants, power stations, process engineering and shipbuilding. For water and steam. Other non-aggressive fluids such as gas or oil on request.
<span style="color: red;">■</span> m, e, p <span style="float: right;"><a href="https://www.ksb.com/en-gb/lc/Z08A">https://www.ksb.com/en-gb/lc/Z08A</a></span>			

## Expansion and anti-vibration joints

### ECOLINE GE1/GE2/GE3

	PN DN T [°C]	16 15 - 300 ≥ -10 - ≤ +105	<b>Description</b> Expansion joint to DIN/EN with flanged or threaded ends, made of EPDM elastomer or NBR, flanges made of nickel-coated carbon steel. <b>Applications</b> Irrigation, domestic water supply, air-conditioning systems, cooling circuits, food and beverage industry, water treatment, water supply.
<span style="color: blue;">■</span> <span style="float: right;"><a href="https://www.ksb.com/en-gb/lc/E55A">https://www.ksb.com/en-gb/lc/E55A</a></span>			

### ECOLINE GE4

	PN DN T [°C]	16 20 - 200 ≥ -10 - ≤ +100	<b>Description</b> Anti-vibration joint to DIN/EN, body made of EPDM, flanges to EN standards. <b>Applications</b> Irrigation, domestic water supply, air-conditioning systems, cooling circuits, food and beverage industry, water treatment, water supply.
<span style="color: blue;">■</span> <span style="float: right;"><a href="https://www.ksb.com/en-gb/lc/E55A">https://www.ksb.com/en-gb/lc/E55A</a></span>			

## Levers

### CR/CM

	T [°C]	≥ -20 - ≤ +80	<b>Description</b> Two lever versions: flat shaft end or square shaft end to ISO 5211, made of cast iron. CR type series: locks in 10 positions (open, closed and 8 evenly spaced intermediate positions). CM type series: same as CR, with special coating. <b>Applications</b> Building services, water engineering, energy engineering and industry.
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### S/SR/SP

	T [°C]	≥ -20 - ≤ +80	<b>Description</b> Two lever versions: flat shaft end or square shaft end to ISO 5211, made of light metal alloy; S type series: locks in limit positions (open and closed), SR type series: locks in 9 positions (open, closed and 7 evenly spaced intermediate positions), SP type series: locks in any position. <b>Applications</b> Water engineering, energy engineering and industry
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## Manual gearboxes

### MS

	Output torque [Nm] Enclosure T [°C]	150-16000 IP67 ≥ -40 - ≤ +120	<b>Description</b> Manual actuator for operating quarter-turn valves. MS range manual gearbox, irreversible worm gear, handwheel-operated. <b>Applications</b> Building services, general industrial applications, water and industrial processes in non-corrosive and non-saline environments.
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<https://www.ksb.com/en-gb/lc/M26A>

### MC

	Output torque [Nm] Enclosure T [°C]	150-63000 IP66/IP68 ≥ -40 - ≤ +120	<b>Description</b> Heavy-duty manual actuator for operating quarter-turn valves. MC range manual gearbox, irreversible worm gear, handwheel-operated. Optional: other actuation methods, limit switch boxes, etc. <b>Applications</b> Building services, industry and process engineering, water management, waste water management, energy, petroleum and natural gas, mining, dredgers and shipbuilding.
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AMTROBOX

<https://www.ksb.com/en-gb/lc/M26A>

## Electric actuators

### QuarterTurn AQ, AQL / SQ

	Quarter-turn actuator Enclosure Output torque [Nm] T [°C]	AQ, AQL / SQ IP68 ≤ 1200 ≥ -30 - ≤ +70	<b>Description</b> BERNARD CONTROLS or AUMA electric quarter-turn actuators for direct mounting on quarter-turn valves (actuator flange to ISO 5211). For on/off or control duties. <b>Applications</b> Water engineering, energy engineering and industry
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<https://www.ksb.com/en-gb/lc/A35A>

### MultiTurn SA+GS / SAR+GS

	Quarter-turn actuator Multi-turn actuator Enclosure Output torque [Nm] T [°C]	SA, SAR 100 - 400 IP68 ≤ 18000 ≥ -30 - ≤ +70	<b>Description</b> AUMA electric multi-turn actuators with manual gearbox for direct mounting on quarter-turn valves (actuator flange to ISO 5211). For on/off or control duties. <b>Applications</b> Water engineering, energy engineering and industry
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<https://www.ksb.com/en-gb/lc/A35A>

### SISTO-LAE

	Type Multi-turn actuator Enclosure Output torque [Nm]	AUMA IP67 ≤ 250	<b>Description</b> 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. <b>Applications</b> Building services, industry, power stations, food industry, chemical industry.
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<https://www.ksb.com/en-gb/lc/S62A>

## Hydraulic actuators

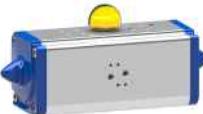
### HQ EVO

	Output torque [Nm] Enclosure T [°C]	≤ 55000 IP68 ≥ -45 - ≤ +100	<b>Description</b> Single-acting or double-acting hydraulic actuator (gas cartridge or 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 valves with square or flat shaft 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. <b>Applications</b> Marine
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<https://www.ksb.com/en-gb/lc/H15B>

## Pneumatic actuators

### ACTAIR EVO

	<p>Output torque [Nm] at a control pressure of 6 bar</p> <p>Enclosure T [°C]</p>	<p><math>\leq 8000</math></p> <p>IP68</p> <p><math>\geq -50 - \leq +150</math></p>	<p><b>Description</b> Double-acting pneumatic actuator for mounting on quarter-turn valves with ISO 5211 compliant shaft ends (butterfly valves or ball valves). Actuator flange to ISO 5211. Control pressure up to 8 bar. 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 U, SMARTRONIC U or any other device with an interface to VDI/VDE 3845.</p> <p><b>Applications</b> Water engineering, energy engineering and industry</p>
<span style="font-size: 1.5em;">●</span> AMTROBOX, AMTRONIC U, SMARTRONIC U	<a href="https://www.ksb.com/en-gb/lc/A59C">https://www.ksb.com/en-gb/lc/A59C</a>		

### DYNACTAIR EVO

	<p>Output torque [Nm] at a control pressure of 6 bar</p> <p>Enclosure T [°C]</p>	<p><math>\leq 4000</math></p> <p>IP68</p> <p><math>\geq -50 - \leq +150</math></p>	<p><b>Description</b> Single-acting pneumatic actuator for mounting on quarter-turn valves with ISO 5211 compliant shaft ends (butterfly valves or ball valves). Actuator flange to ISO 5211. Control pressure up to 8 bar. 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 closed position or open/closed position as standard. Optional separate or integrated manual override. Suitable for mounting control unit type series AMTROBOX, AMTRONIC U, SMARTRONIC U or any other device with an interface to VDI/VDE 3845.</p> <p><b>Applications</b> Water engineering, energy engineering and industry</p>
<span style="font-size: 1.5em;">●</span> AMTROBOX, AMTRONIC U, SMARTRONIC U	<a href="https://www.ksb.com/en-gb/lc/D09C">https://www.ksb.com/en-gb/lc/D09C</a>		

### SISTO-LAD

	<p>Control air pressure [bar]</p> <p>Closing force [N]</p>	<p><math>\leq 6</math></p> <p><math>\leq 20000</math></p>	<p><b>Description</b> 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.</p> <p><b>Applications</b> Building services, industry, power stations; suitable for abrasive and aggressive products such as service water, waste water, acids, alkaline solutions, sludges and suspensions.</p>
<a href="https://www.ksb.com/en-gb/lc/S64A">https://www.ksb.com/en-gb/lc/S64A</a>			

### SISTO-LAP

	<p>Control air pressure [bar]</p> <p>Closing force [N]</p>	<p><math>5,5 - 10</math></p> <p><math>\leq 250000</math></p>	<p><b>Description</b> 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-to-open/air-to-close design; suitable for mounting limit switches or positioners to suit customer requirements.</p> <p><b>Applications</b> Building services, industry, power stations, food and beverage industries, and chemical industry. The pneumatic actuators can be used in potentially explosive atmospheres.</p>
<a href="https://www.ksb.com/en-gb/lc/S63A">https://www.ksb.com/en-gb/lc/S63A</a>			

## SISTO-C LAP



Control air pressure [bar]	5,5 - 7	<b>Description</b>
Closing force [N]	$\leq 20000$	Piston actuator made of high-grade stainless steel for use on 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.
<b>Applications</b>		
Biotechnology, pharmaceutical industry, sterile processes, food and beverage industry.		

## MIL 37-38



Permissible pressure [psi]	65	<b>Description</b>
Stroke [inch]	$\leq 4$	MIL 37 (fail-safe position: spring-to-close) and MIL 38 (fail-safe position: spring-to-open) are pneumatic single-spring diaphragm actuators for linear valves.
NPS	11 - 24	<b>Applications</b>
Ideally suited for all KSB MIL control valves with travels ranging from 0.125 to 4 inches; shut-off and control duties in industry, power stations, process engineering, chemical and petrochemical engineering.		

<https://www.ksb.com/en-gb/lc/M79A>

## MIL 67-68



Permissible pressure [psi]	100	<b>Description</b>
Stroke [inch]	$< 12$	High-power high-performance double-acting piston actuator suitable for high supply air pressures (up to 100 psi; system air, natural gas or other non-corrosive gaseous fluids can be used).
NPS	6 - 24	<b>Applications</b>
Ideally suited for all KSB MIL control valves requiring greater power or stroke. Shut-off and control duties in industry, power stations, process engineering, chemical and petrochemical engineering.		

<https://www.ksb.com/en-gb/lc/M80A>

## Actuator accessories

### EMO



Enclosure	IP65	<b>Description</b>
T [°C]	$\geq -20 - \leq +80$	Emergency manual override using a declutchable manual gearbox with handwheel for mounting on ACTAIR EVO double-acting pneumatic actuators, DYNACTAIR EVO single-acting pneumatic actuators and 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.
<b>Applications</b>		
Water engineering, energy engineering and industry		

<https://www.ksb.com/en-gb/lc/R39A>

## Monitoring

### AMTROBOX

	Enclosure T [°C]	IP67 ≥ -20 - ≤ +80	<p><b>Description</b></p> <p>Multi-functional AMTROBOX limit switch box. For open/closed position signalling via mechanical limit switches or proximity sensors. AMTROBOX mounts on KSB manual gearboxes, pneumatic actuators and hydraulic actuators.</p> <p><b>Applications</b></p> <p>Water engineering, building services and energy engineering</p>
<a href="https://www.ksb.com/en-gb/lc/A34A">https://www.ksb.com/en-gb/lc/A34A</a>			

### AMTROBOX Ex ia

	Enclosure T [°C]	IP67 ≥ -10 - ≤ +50	<p><b>Description</b></p> <p>Multi-functional AMTROBOX limit switch box. For open/closed position signalling via mechanical limit switches or proximity sensors. AMTROBOX Ex ia: intrinsically safe version for potentially explosive atmospheres.</p> <p><b>Applications</b></p> <p>Water engineering, building services and energy engineering</p>
<a href="https://www.ksb.com/en-gb/lc/A34A">https://www.ksb.com/en-gb/lc/A34A</a>			

### AMTROBOX ATEX Zone 22

	Enclosure T [°C]	IP67 ≥ -10 - ≤ +60	<p><b>Description</b></p> <p>Multi-functional AMTROBOX limit switch box. For open/closed position signalling via mechanical limit switches or proximity sensors. AMTROBOX ATEX Zone 22: ATEX-compliant version for potentially explosive dust atmospheres (Zone 22).</p> <p><b>Applications</b></p> <p>Water engineering, building services and energy engineering</p>
<a href="https://www.ksb.com/en-gb/lc/A34A">https://www.ksb.com/en-gb/lc/A34A</a>			

### AMTROBOX M

	Enclosure T [°C]	IP65 ≥ -20 - ≤ +80	<p><b>Description</b></p> <p>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).</p> <p><b>Applications</b></p> <p>Water engineering, building services and energy engineering</p>
<a href="https://www.ksb.com/en-gb/lc/A46A">https://www.ksb.com/en-gb/lc/A46A</a>			

### AMTROBOX R

	Enclosure T [°C]	IP68 ≥ -45 - ≤ +80	<p><b>Description</b></p> <p>Sturdy and multi-functional. For open/closed position signalling via mechanical limit switches or proximity sensors. AMTROBOX R mounts on KSB manual gearboxes, pneumatic actuators, hydraulic actuators and any actuators with VDI/VDE interface.</p> <p><b>Applications</b></p> <p>Water engineering, energy engineering, offshore plants and heavy industry</p>
<a href="https://www.ksb.com/en-gb/lc/A47A">https://www.ksb.com/en-gb/lc/A47A</a>			

## AMTROBOX R Ex ia

	<b>Enclosure</b> T [°C]	<b>IP68</b> $\geq -25 - \leq +80$	<b>Description</b> Sturdy and multi-functional. For open/closed position signalling via mechanical limit switches or proximity sensors. AMTROBOX R Ex ia: intrinsically safe version for potentially explosive atmospheres (Zones 0 + 21). <b>Applications</b> Water engineering, energy engineering, offshore plants and heavy industry
<a href="https://www.ksb.com/en-gb/lc/A47A">https://www.ksb.com/en-gb/lc/A47A</a>			

## ON/OFF valve controllers

### AMTRONIC U

	<b>Enclosure</b> Control air pressure [bar] T [°C]	<b>IP67</b> 3 - 8 $\geq -20 - \leq +80$	<b>Description</b> On/off control of pneumatic quarter-turn actuators and open/closed position signalling. Mounts directly on ACTAIR EVO / DYNACTAIR EVO actuators with a universal baseplate, providing a rugged, compact and integrated solution. Its integrated directional control valve eliminates the need for any pneumatic lines between AMTRONIC U and the actuator. The actuating time of the actuator can be set via AMTRONIC U's air flow reducer. AMTRONIC U 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. <b>Applications</b> Water engineering, energy engineering and industry
<a href="https://www.ksb.com/en-gb/lc/A63B">https://www.ksb.com/en-gb/lc/A63B</a>			

### AMTRONIC U Ex ia

	<b>Enclosure</b> Control air pressure [bar] T [°C]	<b>IP67</b> 3 - 8 $\geq -20 - \leq +80$	<b>Description</b> On/off control of pneumatic quarter-turn actuators and open/closed position signalling. Mounts directly on ACTAIR EVO / DYNACTAIR EVO actuators with a universal baseplate, providing a rugged, compact and integrated solution. Its integrated directional control valve eliminates the need for any pneumatic lines between AMTRONIC U and the actuator. The actuating time of the actuator can be set via AMTRONIC U's air flow reducer. The intrinsically safe AMTRONIC U version Ex ia can be operated in potentially explosive atmospheres. It complies with Directive 2014/34/EU 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 EN 60079-11. <b>Applications</b> Water engineering, energy engineering and industry
<a href="https://www.ksb.com/en-gb/lc/A63B">https://www.ksb.com/en-gb/lc/A63B</a>			

## Positioners

### SMARTRONIC U MA

	<b>Enclosure</b> Control air pressure [bar] T [°C]	<b>IP67</b> 2 - 7 $\geq -20 - \leq +80$	<b>Description</b> Digital electro-pneumatic positioner powered via the 4-20 mA signal. Mounts on ACTAIR EVO / DYNACTAIR EVO 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 U MA reduces investment, commissioning and operating costs as no air is consumed in idle state. <b>Applications</b> Water engineering, energy engineering and industry
<a href="https://www.ksb.com/en-gb/lc/S05B">https://www.ksb.com/en-gb/lc/S05B</a>			

## SMARTRONIC U AS-i



Enclosure	IP67	<b>Description</b>
Control air pressure [bar]	3 - 8	Digital electro-pneumatic positioner for connection to an AS-i field bus. Certified by AS International. Mounts on ACTAIR EVO / DYNACTAIR EVO 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.
T [°C]	≥ -20 - ≤ +80	
		<b>Applications</b>
		Water engineering, energy engineering and industry

<https://www.ksb.com/en-gb/lc/503B>

## Intelligent positioners

### SMARTRONIC U PC



Enclosure	IP67	<b>Description</b>
Control air pressure [bar]	3 - 8	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 EVO and DYNACTAIR EVO actuators with no need for a bracket or external piping, providing a rugged, compact overall solution. SMARTRONIC U PC offers four functions: programmable characteristic curves for valve opening and closing, intelligent positioning, process monitoring and control. SMARTRONIC U PC is PC programmable and can be connected to a Profibus DP field bus.
T [°C]	≥ -20 - ≤ +80	
		<b>Applications</b>
		Water engineering, energy engineering and industry

<https://www.ksb.com/en-gb/lc/506B>

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