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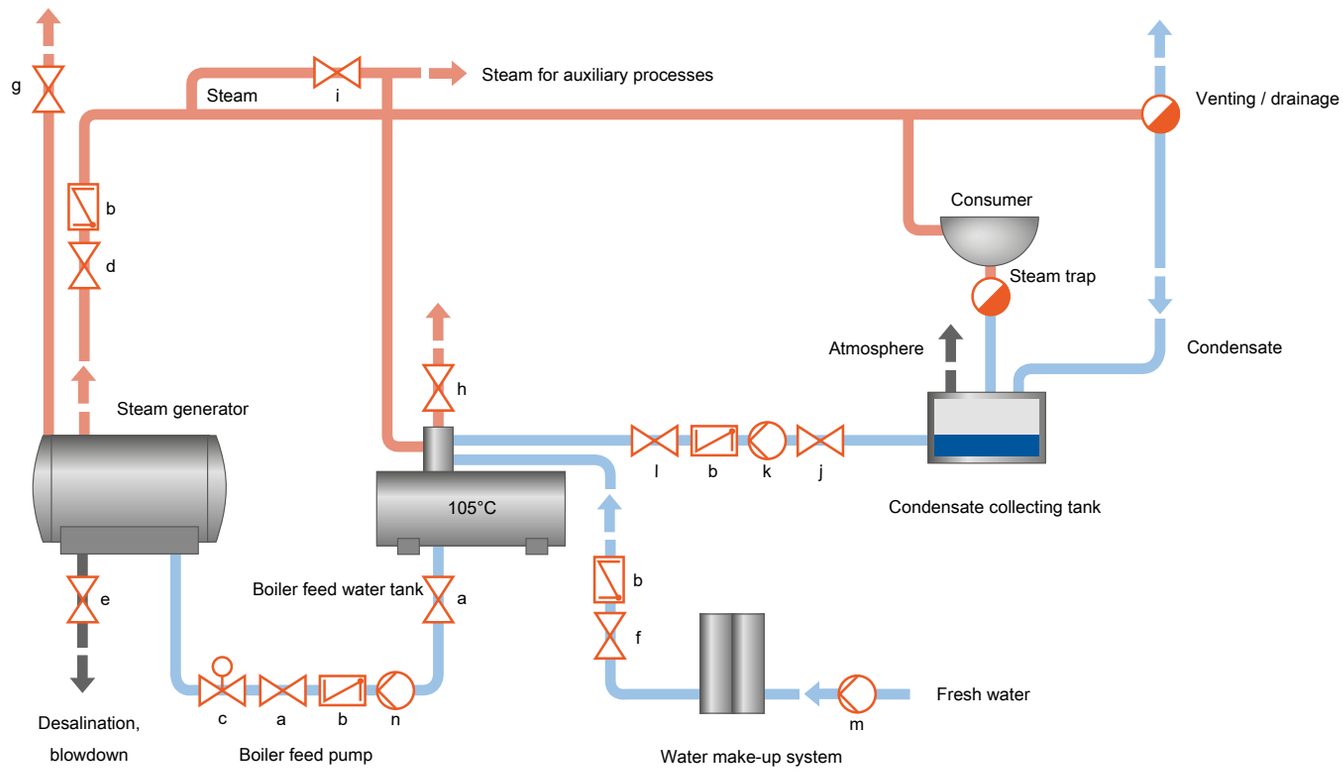
KSB

Product Portfolio

Valves for Process Steam Systems

Schematic



Code	Design/Description	Type series
a	Gate valve	ECOLINE GT 40
a	Gate valve	STAAL 40 AKD/AKDS
b	Swing check valve	SERIE 2000
b	Lift check valve	BOA-R
b	Swing check valve	STAAL 40 AKK/AKKS
c	Control valve for volume flow rate control	BOA-CVE H
c	Control valve for volume flow rate control	BOA-CVP H
d	Globe valve	< DN 100: BOA-H
d	Gate valve	≥ DN 100: ECOLINE GT 40
d	Gate valve	≥ DN 100: STAAL 40 AKD/AKDS
e	Motorised On/Off valve	E.g. Gestra PA 46
f	Butterfly valve for deionised water	BOAX-B
f	Butterfly valve for deionised water	BOAX-S/SF
f	Butterfly valve for deionised water	ISORIA 10/16
g	Exhaust vapour line (from boiler start-up) for discharge above the roof	Valve combination NORI 40 ZXL/ZXS
g	Exhaust vapour line (from boiler start-up) for discharge above the roof	BOA-CVP H with perforated plug
h	Shut-off valve for exhaust vapour	BOACHEM- ZXA
i	Pressure control valve	BOA-CVE H
i	Pressure control valve	BOA-CVP H
j	Butterfly valve	DANAIS 150
j	Butterfly valve	KE
k	Pump	Movitec (low NPSH)
l	Globe valve	BOA-H
m	Pump	Movitec
m	Pump	Etachrom B
m	Pump	Etachrom L
n	Pump	Movitec
n	Pump	Multitec

Code	Type series		PN	DN	Temperature	
					Min. [°C]	Max. [°C]
b	**Swing check valve or lift check valve**					
b		SERIE 2000 (⇨ Page 10)	16/25/Class 150	50 - 600	≥ -196	≤ +538
b		BOA-R (⇨ Page 9)	15 - 300	6/16	≥ -10	≤ +350
b		STAAL 40 AKK/AKKS (⇨ Page 10)	10 - 40	80 - 400	≥ -10	≤ +450
j	**Butterfly valve**					
j		DANAIS 150 (⇨ Page 11)	≤ 25	50 - 1200	≥ -50	≤ +260
j		KE (⇨ Page 11)	10	40 - 600	≥ -20	≤ +200
k	**Pump (low NPSH)**					
k		Movitec (⇨ Page 13)	-	25 - 125	≥ -20	≤ +140
l	**Globe valve**					
l		BOA-H (⇨ Page 8)	16/25	15 - 350	≥ -10	≤ +350

Code	Type series		PN	DN	Temperature	
					Min. [°C]	Max. [°C]
b	**Swing check valve or lift check valve**					
b		SERIE 2000 (⇨ Page 10)	16/25/Class 150	50 - 600	≥ -196	≤ +538
b		BOA-R (⇨ Page 9)	15 - 300	6/16	≥ -10	≤ +350
b		STAAL 40 AKK/AKKS (⇨ Page 10)	10 - 40	80 - 400	≥ -10	≤ +450
f	**Butterfly valve for deionised water**					
f		BOAX-B (⇨ Page 10)	10/16	40 - 1000	≥ -10	≤ +110
f		BOAX-S/SF (⇨ Page 10)	6/10/16	20 - 600	≥ -10	≤ +130
f		ISORIA 10/16 (⇨ Page 11)	10/16	40 - 1000	≥ -10	≤ +200
m	**Pump**					
m		Etachrom B (⇨ Page 12)	-	25 - 80	≤ +110	≥ -30
m		Etachrom L (⇨ Page 12)	-	25 - 80	≥ -30	≤ +110
m		Movitec (⇨ Page 13)	-	25 - 125	≥ -20	≤ +140

Code	Type series		PN	DN	Temperature	
					Min.	Max.
					[°C]	[°C]
a	**Gate valve**					
a		ECOLINE GT 40 (⇨ Page 9)	10 - 40	50 - 600	≥ -10	≤ +400
a		STAAL 40 AKD/AKDS (⇨ Page 9)	10 - 40	50 - 900	≥ -10	≤ +530
b	**Swing check valve or lift check valve**					
b		SERIE 2000 (⇨ Page 10)	16/25/Class 150	50 - 600	≥ -196	≤ +538
b		BOA-R (⇨ Page 9)	15 - 300	6/16	≥ -10	≤ +350
b		STAAL 40 AKK/AKKS (⇨ Page 10)	10 - 40	80 - 400	≥ -10	≤ +450
c	**Control valve for volume flow rate control**					
c		BOA-CVE H (⇨ Page 8)	16/25/40	15 - 200	≥ -10	≤ +450
c		BOA-CVP H (⇨ Page 9)	16/25/40	15 - 200	≥ -10	≤ +450
n	**Pump**					
n		Multitec (⇨ Page 13)	-	32 - 250	-	≤ +200
n		Movitec (⇨ Page 13)	-	25 - 125	≥ -20	≤ +140

Code	Type series		PN	DN	Temperature	
					Min. [°C]	Max. [°C]
b	**Swing check valve or lift check valve**					
b		SERIE 2000 (⇨ Page 10)	16/25/Class 150	50 - 600	≥ -196	≤ +538
b		BOA-R (⇨ Page 9)	6/16	15 - 300	≥ -10	≤ +350
b		STAAL 40 AKK/AKKS (⇨ Page 10)	10 - 40	80 - 400	≥ -10	≤ +450
d	**Globe valve or gate valve**					
d		BOA-H (⇨ Page 8)	16/25	15 - 350	≥ -10	≤ +350
d		ECOLINE GT 40 (⇨ Page 9)	10 - 40	50 - 600	≥ -10	≤ +400
d		STAAL 40 AKD/AKDS (⇨ Page 9)	10 - 40	50 - 900	≥ -10	≤ +530
g	**Shut-off valve or control valve**					
g		NORI 40 ZXL/ZXS Valve combination (⇨ Page 8)	25/40	10 - 400	≥ -10	≤ +450
g		BOA-CVP H with perforated plug (⇨ Page 9)	16/25/40	15 - 200	≥ -10	≤ +450
h	**Globe valve**					
h		BOACHEM ZXA (⇨ Page 8)	10 - 40	25 - 150	≥ -30	≤ +140
i	**Pressure control valve**					
i		BOA-CVE H (⇨ Page 8)	16/25/40	15 - 200	≥ -10	≤ +450
i		BOA-CVP H (⇨ Page 9)	16/25/40	15 - 200	≥ -10	≤ +450

Code	Type series	PN	DN	Temperature	
				Min.	Max.
				[°C]	[°C]
e	**Motorised On/Off valve**				
e	E.g. Gestra MPA 46	10/16/25/40 Class 150/300	20-50	≥ 20	≤ 300

Bellows-type globe valves to DIN/EN

BOA-H

PN	16/25
DN	15 - 350
T [°C]	≥ -10 - ≤ +350

Description
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.

Applications
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.

m https://www.ksb.com/en-gb/lc/B08A

Globe valves to DIN/EN with gland packing

NORI 40 ZXL/ZXS

PN	25/40
DN	10 - 400
T [°C]	≥ -10 - ≤ +450

Description
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.

Applications
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

BOACHEM-ZXA

PN	10 - 40
DN	15 - 400
T [°C]	≥ -10 - ≤ +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

Control valves to DIN/EN

BOA-CVE H

PN	16/25/40
DN	15 - 200
T [°C]	≥ -10 - ≤ +450

Description
Service-friendly control valve to DIN/EN with flanged ends, either with linear or equal-percentage control characteristic at Kvs values of 0.1 to 630 m^3/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.

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

e https://www.ksb.com/en-gb/lc/B26A

BOA-CVP H

PN	16/25/40
DN	15 - 200
T [°C]	≥ -10 - ≤ +450

Description
Service-friendly control valve to DIN/EN with flanged ends, either with linear or equal-percentage control characteristic at Kvs values of 0.1 to 630 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.

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

p

https://www.ksb.com/en-gb/lc/B72A

Gate valves to DIN/EN

ECOLINE GT 40

PN	10 - 40
DN	50 - 600
T [°C]	≥ -10 - ≤ +400

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

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

m, e

https://www.ksb.com/en-gb/lc/EF2A

STAAL 40 AKD/AKDS

PN	10 - 40
DN	50 - 900
T [°C]	≥ -10 - ≤ +530

Description
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.

Applications
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

https://www.ksb.com/en-gb/lc/S16A

Lift check valves to DIN/EN

BOA-R

PN	6/16
DN	15 - 350
T [°C]	≥ -10 - ≤ +350

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

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

https://www.ksb.com/en-gb/lc/B10A

Swing check valves to DIN/EN

STAAL 40 AKK/AKKS

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

Description
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.

Applications
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/S34A

SERIE 2000

PN	16/25
Class	150/300
DN	50 - 600
T [°C]	≥ -196 - ≤ +538

Description
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.

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

https://www.ksb.com/en-gb/lc/S51A

Centred-disc butterfly valves

BOAX-S/SF

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

Description
Centred-disc butterfly valve, 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.

Applications
Building services, heating, ventilation, air-conditioning systems, for drinking water.

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

https://www.ksb.com/en-gb/lc/B12A

BOAX-B

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

Description
Centred-disc butterfly valve, 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.

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

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

https://www.ksb.com/en-gb/lc/B16A

ISORIA 10/16

PN	10/16
DN	40 - 1000
T [°C]	≥ -10 - ≤ +200

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

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

m, e, h, p + AMTROBOX/AMTRONIC U/SMARTRONIC U https://www.ksb.com/en-gb/lc/I00A

KE

PN	10
DN	40 - 600
T [°C]	≥ -20 - ≤ +200

Description
Centred-disc butterfly valve with 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.

Applications
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.

m, e, h, p + AMTROBOX/AMTRONIC U/SMARTRONIC U https://www.ksb.com/en-gb/lc/K02A

Double-offset butterfly valves

DANAÏS 150

PN	≤ 25
Class	150
DN	50 - 1200
T [°C]	≥ -50 - ≤ +260

Description
Double-offset butterfly valve, with plastomer 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.

Applications
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 https://www.ksb.com/en-gb/lc/D01A

Standardised / close-coupled pumps

Etachrom B

DN	25 - 80
Q [m³/h]	≤ 260
H [m]	≤ 105
p [bar]	≤ 12
T [°C]	≥ -30 - ≤ +110
Data for 50 Hz operation	
Also available for 60 Hz	

Description
Horizontal single-stage close-coupled circular casing pump, with ratings and main dimensions to EN 733, with replaceable casing wear rings and motor-mounted variable speed system. With KSB SuPremE, a magnetless synchronous reluctance motor (exception: motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets) of efficiency class IE4/IE5 to IEC TS 60034-30-2:2016, for operation on a KSB PumpDrive 2 or KSB PumpDrive 2 Eco variable speed system without rotor position sensors. Motor mounting points in accordance with EN 50347, envelope dimensions in accordance with DIN V 42673 (07-2011). ATEX-compliant version available.

Applications
Cleaning systems (bottle rinsing, crate washing, etc.), water treatment plants, water supply systems, fire-fighting systems, spray irrigation systems, general irrigation systems, drainage systems, hot-water heating systems, air-conditioning systems, industrial washing plants, general industry, disposal of paint sludge, surface treatment

https://www.ksb.com/en-gb/lc/E02A

Etachrom L

DN	25 - 80
Q [m³/h]	≤ 260
H [m]	≤ 105
p [bar]	≤ 12
T [°C]	≥ -30 - ≤ +110
Data for 50 Hz operation	
Also available for 60 Hz	

Description
Horizontal single-stage circular casing pump, with ratings and main dimensions to EN 733, with replaceable casing wear rings and motor-mounted variable speed system. With KSB SuPremE, a magnetless synchronous reluctance motor (exception: motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets) of efficiency class IE4/IE5 to IEC TS 60034-30-2:2016, for operation on a KSB PumpDrive 2 or KSB PumpDrive 2 Eco variable speed system without rotor position sensors. Motor mounting points in accordance with EN 50347, envelope dimensions in accordance with DIN V 42673 (07-2011). ATEX-compliant version available.

Applications
Cleaning systems (bottle rinsing, crate washing, etc.), water treatment plants, water supply systems, fire-fighting systems, spray irrigation systems, general irrigation systems, drainage systems, hot-water heating systems, air-conditioning systems, industrial washing plants, general industry, disposal of paint sludge, surface treatment

https://www.ksb.com/en-gb/lc/E08A

High-pressure pumps

Movitec

Rp	1 - 2
DN	25 - 125
Q [m³/h]	≤ 160
H [m]	≤ 401
p [bar]	≤ 40
T [°C]	≥ -20 - ≤ +140
n [rpm]	≤ 2900

Data for 50 Hz operation

Also available for 60 Hz

Description

Multistage vertical high-pressure centrifugal pump in ring-section design with suction and discharge nozzles of identical nominal diameters arranged opposite to each other (in-line design), close-coupled. With KSB SuPremE, a magnetless synchronous reluctance motor (exception: motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets) of efficiency class IE4/IE5 to IEC TS 60034-30-2:2016, for operation on a KSB PumpDrive 2 or KSB PumpDrive 2 Eco variable speed system without rotor position sensors. Motor mounting points in accordance with EN 50347, envelope dimensions in accordance with DIN V 42673 (07-2011). ATEX-compliant version available.

Applications

Spray irrigation, general irrigation, washing, water treatment, fire-fighting and pressure booster systems, hot water and cooling water recirculation, boiler feed systems, etc.

KSB SuPremE, PumpDrive, PumpMeter https://www.ksb.com/en-gb/lc/M12A

Multitec

DN	32 - 250
Q [m³/h]	≤ 1500
H [m]	≤ 1000
p [bar]	≤ 100
T [°C]	≥ -10 - ≤ +200
n [rpm]	≤ 3500

Description

Multistage horizontal or vertical centrifugal pump in ring-section design, long-coupled or close-coupled, with axial or radial suction nozzle, cast radial impellers and motor-mounted variable speed system. ATEX-compliant version available.

Applications

Water supply, drinking water supply, industry, pressure boosting, irrigation, power stations, heating systems, filtering systems, fire-fighting systems, reverse osmosis systems, snow-making systems and washing plants, and geothermal systems (re-injection of geothermal water into the aquifer).

KSB SuPremE, PumpDrive, PumpMeter https://www.ksb.com/en-gb/lc/M07A

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Product Portfolio Valves for Process Steam Systems

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