

The Range of Valves **2013**



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Our tradition:

Competence since 1871.

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

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

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

Type series index

for valves and automation

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BOA-Compact EKB	22	ECOLINE PTF 800	39	SICCA 800-2500 PCF	39
BOA-Control IMS	29	ECOLINE SCC 150-600	42	SICCA 900-2500 GLC	27
BOA-Control SAR	29	ECOLINE SCF 150-600	42	SICCA 900-2500 GTC	34
BOA-CVE C/CS/IMS/EKB	28	ECOLINE SCF 800	42	SICCA 900-2500 SCC	42
BOA-CVE H / BOA-CVP H	29	ECOLINE SCV 150-300	43	SISTO-10 / SISTO-10S	65
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BOA-RVK	37	ISO F14 A/AC	69	SISTO-KB / SISTO-KBS	65
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BOAX-S / BOAX-SF	49			SMARTRONIC MA	63
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Body safety valve UGS	33	Manual override	61	STAAL 100 AKD/AKDS	33
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CLOSSIA	47	MN	57	STAAL 40 AKD/AKDS	32
COBRA-ELA / ELA-K	39	MP-CI/MP-II	69	STAAL 40 AKK/AKKS	40
COBRA-SCBS	40	MR	57		
COBRA-SGP / SGO / SGF	32	MXN	46	TRIODIS 150	55
COBRA-SMP	32			TRIODIS 300	55
COBRA-TDC01/03	41	NORI 160 RXL/RXS	38	TRIODIS 600	55
CONDA-VRS/VSM/VLC	30	NORI 160 ZXL/ZXS	25		
CONDA-NCV	30	NORI 160 ZXL/ZXS	25	VTS	36
Counterweight actuator	61	NORI 160 ZXL/ZXS	25		
		NORI 320 RXL/RXS	38	ZJSVA/ZXSVA	31
DANAIS 150	53	NORI 320 ZXL/ZXS	25	ZJSVM/RJSVM	31
DANAIS 150C	53	NORI 320 ZXS	25	ZRN	47
DANAIS 150D	54	NORI 40 FSL/FSS	43	ZRS	41
DANAIS 150T (Marine)	53	NORI 40 RXL/RXS	37	ZTN	46
DANAIS 300T	54	NORI 40 ZXL/ZXS	24	ZTS	33
DANAIS MTII Class 150	53	NORI 40 ZXL/ZXS	23	ZXNB	46
DANAIS MTII Class 300	53	NORI 40 ZXL/ZXS	23	ZXNVB	45
DANAIS TBTH (Cryogenic) AL	55	NORI 40 ZXL/ZXS	24	ZYNB / ZYN	46
DANAIS TBTH (Cryogenic)	54	NORI 500 RXLR/RXSR	38		
Flanged	54	NORI 500 ZXS	25		



Our spare parts and services: **Dependability at your call.**

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

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

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

Ready where you are. KSB runs more than 160 service centres around the world. Some 2,600 highly trained KSB specialists are on call to install, commission and maintain your equipment. So you can plan for a future free of unwanted surprises. And we also provide on-site training sessions. They ensure that operators can use KSB products and systems efficiently and profitably, day in, day out.



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



Our mission: **Certified quality assurance.**

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

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

Our five key goals:

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

Please note:

Not all depicted products are available for sale in every country. Please contact your sales representative for details.



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

Type / Application	Type series	Page	FluidFuture®	Automation	Water Transport and Treatment	Industry	Energy Conversion	Building Services	Solids Transport	Pharmaceuticals
				A						
EN globe valves with soft seat	BOA-SuperCompact	22		■		■		■		
	BOA-Compact	22		■		■		■		
	BOA-Compact EKB	22		■		■		■		
	BOA-W	22				■		■		
EN globe valves with bellows	BOA-H (JL1040)	23	■			■	■	■		
	BOA-H (JL1025)	23	■			■	■	■		
	BOA-H/HE/HV/HEV	23	■	■		■	■	■		
	NORI 40 ZXLBV/ZXSBV	23	■			■	■	■		
	NORI 40 ZXLB / ZXSB	23	■	■		■	■	■		
	NORI 40 ZYLB / ZYSB	24	■			■	■	■		
	BOACHEM-ZXAB/ZYAB	24		■		■		■		
EN globe valves with gland packing	NORI 40 ZXL / ZXS	24	■			■	■	■		
	NORI 40 ZXLF / ZXSF	24	■	■		■	■	■		
	NORI 160 ZXL / ZXS	25	■			■	■			
	NORI 160 ZXLF / ZXSF	25	■	■		■	■			
	NORI 320 ZXL / ZXSF	25	■	■		■	■			
	NORI 320 ZXSV	25	■	■		■	■			
	NORI 500 ZXSV	25	■	■		■	■			
	NORI 500 ZXLR / ZXSR	26	■	■		■	■			
	BOACHEM-ZXA/ZYA	26				■		■		
	ECOLINE VA 16	26				■		■		
ASME/ANSI globe valves	SICCA 150-600 GLC	26		■		■	■			
	SICCA 900-2500 GLC	27		■		■	■			
	SICCA 800-2500 GLF	27		■		■	■			
	ECOLINE GLC 150-600	27		■		■	■			
	ECOLINE GLF 150-600	27		■		■	■			
	ECOLINE GLF 800	27		■		■	■			
	ECOLINE GLV 150-300	28		■		■	■			
Control system	BOA-Systronic	28	■	■				■		
EN control and balancing valves	BOA-CVE C/CS/IMS/EKB	28		■		■		■		
	BOA-CVE H / BOA-CVP H	29		■		■	■	■		
	BOA-H Mat E	29		■		■	■	■		
	BOA-H Mat P	29		■		■	■	■		
	BOA-Control IMS	29		■		■		■		
	BOA-Control SAR	29				■		■		
	CONDA-VRC/VSM/VLC	30			■					
CONDA-NCV	30			■						
Air valves	BOAVENT-AVF/SVF/SIF/SVA	30			■					
Start and stop control valve	ZJSVA / ZXSVVA	31		■		■	■			
Feedwater bypass valve	ZJSVM / RJSVM	31		■		■	■			
EN gate valves	COBRA-SGP/SGO/SGF	32			■	■		■		
	COBRA-SMP	32			■	■		■		
	ECOLINE SP/SO	32			■	■		■		
	STAAL 40 AKD / AKDS	32		■		■	■			
	ECOLINE GT 40	32		■		■	■			
	STAAL 100 AKD / AKDS	33		■		■	■			
	AKG-A / AKGS-A	33		■		■	■			
	ZTS	33		■		■	■			
Body safety valve UGS	33				■	■				
ASME/ANSI gate valves	SICCA 150-600 GTC	34		■		■	■			
	SICCA 900-2500 GTC	34		■		■	■			
	SICCA 800-1500 GTF	34		■		■	■			
	ECOLINE GTC 150-600	34		■		■	■			
	ECOLINE GTF 150-600	34		■		■	■			
	ECOLINE GTF 800	35		■		■	■			
ECOLINE GTV 150-300	35		■		■	■				
EN knife gate valve	HERA-BD	35		■	■	■		■		
ASME/ANSI knife gate valve	HERA-SDH	36		■	■	■			■	
EN line blind valve	VTS	36				■	■			

Type / Application	Type series	Page	FluidFuture®	Automation	Water Transport and Treatment	Industry	Energy Conversion	Building Services	Solids Transport	Pharmaceuticals
				A						
EN non-return valves	BOA-RPL/RPL F-F	37			■			■		
	BOA-RFV	37			■	■		■		
	BOA-RVK	37				■	■	■		
	BOA-R	37				■	■	■		
	NORI 40 RXL / RXS	37	■			■	■	■		
	NORI 160 RXL / RXS	38	■			■	■			
	NORI 320 RXL / RXS	38	■			■	■			
	NORI 500 RXLR/RXSR	38	■			■	■			
	RGS	38				■	■			
	BOACHEM-RXA	38				■		■		
ASME/ANSI non-return valve	SICCA 800-2500 PCF	39				■	■			
	ECOLINE PTF 150-600	39				■	■			
	ECOLINE PTF 800	39				■	■			
EN swing check valves	COBRA-ELA/ELA-K	39			■	■		■		
	COBRA-SCBS	40			■	■		■		
	ECOLINE WT/WTI	40				■		■		
	STAAL 40 AKK/AKKS	40				■	■			
	STAAL 100 AKK/AKKS	40				■	■			
	AKR/AKRS	40				■	■			
	ZRS	41				■	■			
EN tilting disc check valve	COBRA-TDC01/03	41			■	■	■			
ASME/ANSI swing check valves	SICCA 150-600 SCC	42				■	■			
	SICCA 900-2500 SCC	42				■	■			
	ECOLINE SCC 150-600	42				■	■			
	ECOLINE SCF 150-600	42				■	■			
	ECOLINE SCF 800	42				■	■			
	ECOLINE SCV 150-300	43				■	■			
EN strainers	ECOLINE FY	43			■	■		■		
	BOA-S	43				■	■	■		
	NORI 40 FSL/FSS	43	■			■	■	■		
	BOACHEM-FSA	44				■		■		
ASME/ANSI strainers	ECOLINE FYC 150-600	44				■	■			
	ECOLINE FYF 800	44				■	■			
Valves for nuclear power plants	Small globe valves: ZXNVB	45		■			■			
	Globe valves: NUCA/-A/-ES, type I, II, IV	45		■			■			
	Globe valves: NUCA-B (safety-related)	45		■			■			
	Globe valves: NUCA-F (safety-related)	45		■			■			
	Globe valves: NUCA-S (safety-related)	45		■			■			
	Globe valves with slanted seat: ZYNB / ZYN	46		■			■			
	Bellows-type globe valves: ZXNB	46		■			■			
	Diaphragm valves: MXN	46		■			■			
	Gate valves: ZTN	46		■			■			
	Gate valves: AKDN/AKDSN	46		■			■			
	Non-return valves: NUCA/-A/-ES, type V	47		■			■			
	Lockable non-return Y-type valves: RYN	47		■			■			
	Non-return valves, damped: RJN	47					■			
	Swing check valves: ZRN	47					■			
	CLOSSIA	47		■			■			
	SISTO-20NA	48		■			■			
	SISTO-DrainNA	48					■			
	SISTO-VentNA	48					■			
	SISTO-KRVNA	48					■			
	SISTO-RSKNA	48					■			

Type / Application	Type series	Page	FluidFuture®	Automation	Water Transport and Treatment	Industry	Energy Conversion	Building Services	Solids Transport	Pharmaceuticals
				A						
AMRI centered disc butterfly valves	BOAX-S / BOAX-SF	49	■	■				■		
	BOAXMAT-S / BOAXMAT-SF	49		■				■		
	BOAX-S Gaz / BOAX-SF Gaz	49	■					■		
	BOAX-B	49	■	■	■	■		■		
	BOAX-B APSAD	49	■			■		■		
	BOAX-B Mat P	50	■	■	■	■		■		
	BOAX-B Mat E	50	■	■	■	■		■		
	ISORIA 10	50	■	■	■	■	■		■	
	ISORIA 16	50	■	■	■	■	■		■	
	ISORIA 20	50	■	■	■	■	■			
	ISORIA 20 UL	51	■	■		■				
	ISORIA 25	51	■	■	■	■	■	■		
MAMMOUTH	51		■	■	■	■				
AMRI centered disc butterfly valves for process engineering	KE PLASTOMER	52		■	■	■				
	KE ELASTOMER	52		■	■	■				
Centered disc butterfly valve	BOAX-CBV13	52			■	■	■	■		
AMRI high-performance offset disc butterfly valves	DANAIS 150	53		■	■	■	■	■	■	
	DANAIS 150C	53		■			■			
	DANAIS 150T (Marine)	53		■		■				
	DANAIS MTII Class 150	53		■		■	■		■	
	DANAIS MTII Class 300	53		■		■	■		■	
	DANAIS 150D	54		■	■	■				
	DANAIS 300T	54		■		■				
AMRI cryogenic offset disc butterfly valves	DANAIS TBII (Cryogenic) Side Entry	54		■		■				
	DANAIS TBII (Cryogenic) Flanged	54		■		■				
	DANAIS TBII (Cryogenic) AL	55		■		■				
	TRIODIS 150	55		■		■				
	TRIODIS 300	55		■		■				
	TRIODIS 600	55		■		■				
Double-offset butterfly valves	APORIS-DEB02 / APORIS-DEB02R	56			■	■	■			
AMRI swing check valves	SERIE 2000 PN 16	56	■		■	■		■		
	SERIE 2000 PN 25	56			■	■		■		
	SERIE 2000 Class 150	56			■	■				
	SERIE 2000 Class 300	57			■	■				
SISTO diaphragm valves	SISTO-KB / SISTO-KBS	65		■	■	■	■		■	
	SISTO-10 / SISTO-10S	65		■	■	■	■			
	SISTO-10M	65		■	■	■	■			
	SISTO-16 / SISTO-16S	65		■	■	■	■			
	SISTO-16 RGA	65			■			■		
	SISTO-16 TWA/HWA/DLU	66		■	■			■		
	SISTO-20	66		■		■	■			
	SISTO-C	66		■	■					■
SISTO check valve	SISTO-RSK / SISTO-RSKS	66			■	■	■		■	
Ball valves	PSA-KHG	68			■	■	■		■	
	PSA-KHG W	68			■	■	■		■	
	PSA-KHG M	68			■	■	■		■	
	ECOLINE BLC 1000	68		■		■	■			■
	ECOLINE BLT 150-300	68		■		■	■			■
	ISO F14 A/AC	69		■		■	■			■
	ISO F14 D	69		■		■	■			■
	ISO VU	69		■		■	■			■
	MP-CI/MP-II	69			■					
Accessories	ECOLINE GE1/GE2/GE3	70				■		■		
	ECOLINE GE4	70				■		■		
	DJ03	70			■					

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			Water Transport and Treatment	Industry	Energy Conversion	Building Services	Solids Transport	Pharmaceuticals
Type / Application	Type series	Page						
Gearboxes for 1/4-turn valves	MA	57		■			■	
	MN	57	■	■		■		
	MR	57	■	■	■	■	■	
Pneumatic actuators for 1/4-turn valves	ACTAIR	58	■	■	■			
	ACTAIR-B	58	■	■		■		
	DYNACTAIR	58	■	■	■			
	DYNACTAIR-B	58	■	■		■		
Hydraulic actuators for 1/4-turn valves	ACTO	59	■	■	■			
	DYNACTO	59	■	■	■			
	ENNACTO	59	■	■	■			
Electric actuators for 1/4-turn valves	ACTELEC actuator SD series	60	■	■	■			
	ACTELEC actuator LE series	60	■	■	■			
	ACTELEC actuator SG series	60	■	■	■			
	ACTELEC multi-turn actuator	60	■	■	■			
	ACTELEC multi-turn actuator (AUMA)	60	■	■	■			
Control accessories for 1/4-turn valves	Manual override	61	■	■	■	■		
	Counterweight actuator	61	■		■			
Pneumatic actuators for linear valves	SISTOMAT-PC	67	■	■	■	■	■	
	MAT-P	67	■	■	■	■	■	
	SISTOMAT-P type LAP for SISTO-C	67						■
Electric actuators for SISTO diaphragm valves	SISTOMAT-E	67	■	■	■	■	■	
Type / Application	Type series	Page						
Valve automation: monitoring	AMTROBOX M	62	■	■	■	■		
	AMTROBOX C	62	■	■	■	■		
	AMTROBOX / AMTROBOX EEx-ia	62	■	■	■			
	AMTROBOX R / AMTROBOX R EEx ia / AMTROBOX R Exd	62	■	■	■			
	AMTROBOX S	62	■	■	■			
Valve automation: ON/OFF controllers	AMTRONIC	63	■	■	■			
	AMTRONIC Ex ia	63	■	■	■			
Valve automation: positioners	SMARTRONIC MA	63	■	■	■			
	SMARTRONIC Ex ia	63	■	■	■			
	SMARTRONIC AS-I	64	■	■	■			
Valve automation: smart controller	SMARTRONIC PC	64	■	■	■			

KSB offers a wide range of valve actuators. Please contact us with your exact requirements.

Key to actuator codes (see product descriptions on page 22 ff.):

m = manual

e = electric

p = pneumatic

h = hydraulic

Valves

Fluids

	BOA-SuperCompact	BOA-Compact	BOA-Compact EKB	BOA-W	BOA-H (J11040)	BOA-H (J1025)	BOA-H / HE / HV / HEV	NORI 40 ZXLBV / ZXSbv	NORI 40 ZXLB / ZXSb	NORI 40 ZYLB / ZYSb	BOACHEM-ZXB/ZYAB	NORI 40 ZXL / ZXS	NORI 40 ZXL / ZXSf	NORI 160 ZXL / ZXS	NORI 160 ZXL / ZXSf	NORI 320 ZXL / ZXSf	NORI 320 ZXSv	NORI 500 ZXSv	NORI 500 ZXL / ZXSr	BOACHEM-ZXA/ZYA	ECOLINE VA 16	SICCA 150-600 GLC	SICCA 900-2500 GLC	SICCA 800-2500 GLF	ECOLINE GLC 150-600	ECOLINE GLF 150-600	ECOLINE GLF 800	ECOLINE GLV 150-300	BOA-Systemic	
Abrasive fluids																														
Activated sludge																														
Aggressive fluids																														
Air ventilation																														
Brackish water																														
Brine																														
Cleaning agents																														
Condensate																														
Cooling water	■	■	■																											
Corrosive fluids																														
Distillate																														
Digested sludge																														
Dipping paints																														
Drinking water			■																											
Explosive fluids																														
Feed water																														
Fire-fighting water																														
Fluids containing gas																														
Fluids containing mineral oil																														
Fluids containing solids																														
Fuels																														
Gas																														
Harmful fluids																														
Heating water	■	■		■																										
Highly aggressive fluids																														
Hot water																														
Inflammable fluids																														
Inorganic fluids																														
Liquefied gas																														
Lubricants																														
Oils																														
Organic fluids																														
Polymerizing / Crystallizing fluids																														
Radioactive fluids																														
Raw sludge																														
River, lake and ground water																														
Seawater																														
Service water			■																											
Sewage with faeces																														
Sewage without faeces																														
Slurries (ore, sand, gravel, ash)																														
Solvents																														
Steam																														
Thermal oil																														
Tonic fluids																														
Vacuum																														
Valuable fluids																														
Volatile fluids																														
Wash water			■																											
Waste water																														

EN globe valves with soft seat

EN globe valves with bellows

EN globe valves with gland packing

ASME/ANSI globe valves

Control system

Fluids

Valves

	KE PLASTOMER	KE ELASTOMER	BOAX-CBV13	DANAIS 150	DANAIS 150C	DANAIS 150T (Marine)	DANAIS MTII Class 150	DANAIS MTII Class 300	DANAIS 150D	DANAIS 300T	DANAIS TBTH (Cryogenic) Side Entry	DANAIS TBTH (Cryogenic) Flanged	DANAIS TBTH (Cryogenic) AL	TRIODIS 150	TRIODIS 300	TRIODIS 600	APORIS-DEB02 / APORIS-DEB02R	SERIE 2000 PN 16/25	SERIE 2000 Class 150/300
Abrasive fluids																			
Activated sludge																			
Aggressive fluids																			
Air ventilation																			
Brackish water																			
Brine																			
Cleaning agents																			
Condensate																			
Cooling water																			
Corrosive fluids																			
Distillate																			
Digested sludge																			
Dipping paints																			
Drinking water																			
Explosive fluids																			
Feed water																			
Fire-fighting water																			
Fluids containing gas																			
Fluids containing mineral oil																			
Fluids containing solids																			
Fuels																			
Gas																			
Harmful fluids																			
Heating water																			
Highly aggressive fluids																			
Hot water																			
Inflammable fluids																			
Inorganic fluids																			
Liquefied gas																			
Lubricants																			
Oils																			
Organic fluids																			
Polymerizing / Crystallizing fluids																			
Radioactive fluids																			
Raw sludge																			
River, lake and ground water																			
Seawater																			
Service water																			
Sewage with faeces																			
Sewage without faeces																			
Slurries (ore, sand, gravel, ash)																			
Solvents																			
Steam																			
Thermal oil																			
Tonic fluids																			
Vacuum																			
Valuable fluids																			
Volatile fluids																			
Wash water																			
Waste water																			

AMRI centered disc butterfly valves for process engineering

Centered disc butterfly valve

AMRI high-performance offset disc butterfly valves

AMRI cryogenic offset disc butterfly valves

Double-offset butterfly valves

AMRI swing check valves

Valve Model	Air valves	Start and stop control valve	Feedwater bypass valve	EN gate valves	ASME/ANSI gate valves	EN knife gate valve	ASME/ANSI knife gate valve	EN line blind valve	Applications
BOA-CVE C/CS/IMS/EKB	■								
BOA-CVE H / BOA-CVP H	■								
BOA-H Mat E	■								
BOA- H Mat P	■								
BOA-Control IMS	■								
BOA-Control SAR	■								
CONDA-YRCVSM/VLC									
CONDA-NCV									
BOAVENT-AVF/VSF/IS/ISVA	■								
ZJSVA / ZXSVVA		■							
ZJSVM / RJSVM			■						
COBRA-SGP/SGO/SGF				■					
COBRA-SMP				■					
ECOLINE SP/SO				■					
STAAL 40 AKD / AKDS				■					
ECOLINE GT 40				■					
STAAL 100 AKD / AKDS				■					
AKG-A / AKGS-A				■					
ZTS				■					
Body safety valve UGS				■					
SICCA 150-600 GTC					■				
SICCA 900-2500 GTC					■				
SICCA 800-1500 GTF					■				
ECOLINE GTC 150-600					■				
ECOLINE GTF 150-600					■				
ECOLINE GTF 800					■				
ECOLINE GTV 150-300					■				
HERA-BD						■			
HERA-SDH							■		
VTS								■	

- Air-conditioning systems
- Boiler circulation
- Boiler feed applications
- Chemical industry
- Condensate transport
- Conventional power stations
- Cooling circuits
- Descaling units
- Dewatering
- Disposal
- District heating
- Domestic water supply
- Fire-fighting systems
- Flue gas desulphurization
- Food and beverages industry
- Gas pipelines
- Gas storage facilities
- Heat recovery systems
- Homogenization
- Hot water heating systems
- HVAC installations
- Hydraulic solids transport
- Industrial recirculation systems
- Irrigation
- Keeping in suspension
- Maintaining ground water levels
- Mining
- Mixing
- Nuclear power stations
- Paint shops
- Paper and cellulose industry
- Petrochemical industry
- Pharmaceutical industry
- Pipelines and tank farms
- Pressure boosting
- Process engineering
- Rainwater harvesting
- Recirculation
- Refineries
- Seawater desalination / Reverse osmosis
- Sewage treatment plants
- Shipbuilding
- Sludge disposal
- Sludge processing
- Snow guns
- Spray irrigation
- Sugar industry
- Swimming pools
- Thermal oil circulation
- Washing plants
- Water extraction
- Water supply
- Water treatment systems

ASME/ANSI strainers		Valves for nuclear power plants		AMRI centered disc butterfly valves		
ECOLINE FYC 150-600	■					
ECOLINE FYF 800	■					
Small globe valves ZXNVB		■				
Globe valves: NUCA / -A / -ES, types I, II, IV		■				
Globe valves: NUCA-B (safety-related)		■				
Globe valves: NUCA-F (safety-related)		■				
Globe valves: NUCA-S (safety-related)		■				
Globe valves with slanted seat: ZYNB / ZYN		■				
Bellows-type globe valves: ZXNB		■				
Diaphragm valves: MXN		■				
Gate valves: ZTN		■				
Gate valves: STAAL-AKDN/AKDSN		■				
Non-return valves: NUCA / -A / -ES, type V		■				
Lockable non-return Y-type valves: RYN		■				
Non-return valves damped: RJN		■				
Swing check valves: ZRN		■				
CLOSSIA		■				
SISTO-ZONA		■				
SISTO-DrainNA		■				
SISTO-VentNA		■				
SISTO-KRVNA		■				
SISTO-RSK-NA		■				
BOAX-S / BOAX-SF		■		■		Air-conditioning systems
BOAXMAT-S / BOAXMAT-SF		■		■		Boiler circulation
BOAX-S Gaz / BOAX-SF Gaz		■		■		Boiler feed applications
BOAX-B		■		■		Chemical industry
BOAX-B APSAD		■		■		Condensate transport
BOAX-B Mat P		■		■		Conventional power stations
BOAX-B Mat E		■		■		Cooling circuits
ISORIA 10		■		■		Descaling units
ISORIA 16		■		■		Dewatering
ISORIA 20		■		■		Disposal
ISORIA 20 UL		■		■		District heating
ISORIA 25		■		■		Domestic water supply
MAMMOUTH		■		■		Fire-fighting systems
						Flue gas desulphurization
						Food and beverages industry
						Gas pipelines
						Gas storage facilities
						Heat recovery systems
						Homogenization
						Hot water heating systems
						HVAC installations
						Hydraulic solids transport
						Industrial recirculation systems
						Irrigation
						Keeping in suspension
						Maintaining ground water levels
						Mining
						Mixing
						Nuclear power stations
						Paint shops
						Paper and cellulose industry
						Petrochemical industry
						Pharmaceutical industry
						Pipelines and tank farms
						Pressure boosting
						Process engineering
						Rainwater harvesting
						Recirculation
						Refineries
						Seawater desalination / Reverse osmosis
						Sewage treatment plants
						Shipbuilding
						Sludge disposal
						Sludge processing
						Snow guns
						Spray irrigation
						Sugar industry
						Swimming pools
						Thermal oil circulation
						Washing plants
						Water extraction
						Water supply
						Water treatment systems

EN globe valves with soft seat

BOA-SuperCompact®



PN _____ 6 / 10 / 16
 DN _____ 20 - 200
 T [°C] _____ -10 to +120

Design: Wafer-type globe valve in super compact face-to-face length to EN 558/94, slanted seat, bonnetless, with flange alignment holes for centering, dead-end service and downstream dismantling, insulating cap with anti-condensation feature as standard, position indicator, travel stop, soft main and back seat; maintenance-free, full insulation possible.

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

A m, e

Type series booklet 7113.1

BOA-Compact®



PN _____ 6 / 16
 DN _____ 15 - 200
 T [°C] _____ -10 to +120

Design: Flanged end globe valve with short face-to-face length to EN 558/14, slanted seat, bonnetless, EPDM coated throttling valve plug, soft main and back seat, position indicator, locking device, travel stop, insulating cap with anti-condensation feature; maintenance-free, full insulation possible.

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

A m, e

Type series booklet 7112.1

BOA-Compact® EKB



PN _____ 16
 DN _____ 15 - 200
 T [°C] _____ -10 to +80

Design: Flanged end globe valve with compact face-to-face length for drinking water supply systems; electrostatic plastic coating inside and outside, slanted seat, bonnetless, EPDM coated throttling valve plug, position indicator, locking device, travel stop, soft main and back seat; maintenance-free, (DVGW-approved PN 10).

Applications: Water supply systems, drinking water. Air-conditioning systems. Cooling circuits. For installation in copper pipelines the installation instructions must be complied with. Not suitable for fluids containing mineral oils, for steam or fluids liable to attack EPDM and the electrostatic plastic coating. Other fluids on request.

A m, e

Type series booklet 7112.11

BOA®-W



PN _____ 6 / 16
 DN _____ 15 - 200
 T [°C] _____ -10 to +120

Design: Flanged end globe valve in horizontal seat design with standard face-to-face length, EPDM coated compact valve plug, soft main and back seat; maintenance-free, full insulation possible.

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

A m

Type series booklet 7111.1

EN globe valves with bellows

BOA®-H (JL1040)



PN _____ 16
 DN _____ 15 - 300
 T [°C] _____ -10 to +300

Design: Flanged end bellows-type globe valve with shut-off or throttling valve plug, standard position indicator with colour coding for identification of valve design, replaceable valve plug; bellows protected when valve is in fully open position; seats made of wear and corrosion resistant Cr steel or CrNi steel.

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.



A m

Type series booklet 7150.1

BOA®-H (JS1025)



PN _____ 16 / 25
 DN _____ 15 - 350
 T [°C] _____ -10 to +350

Design: Flanged end bellows-type globe valve with shut-off or throttling valve plug, standard position indicator with colour coding for identification of valve design, replaceable valve plug; bellows protected when valve is in fully open position; seats made of wear and corrosion resistant Cr steel or CrNi steel.

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.



A m

Type series booklet 7150.1

BOA®-H/HE/HV/HEV



PN _____ 25 / 40
 DN _____ 10 - 350
 T [°C] _____ -10 to +450

Design: Flanged or weld end bellows-type globe valve with shut-off or throttling valve plug; seats made of wear and corrosion resistant Cr steel or CrNi steel.

Applications: In industrial plants, building services, power stations and shipbuilding. For water, steam, gas and other non-aggressive fluids. Other fluids on request.



A m, e, p

Type series booklet 7161.1

NORI® 40 ZXLBV/ZXSBV



PN _____ 25 / 40
 DN _____ 10 - 200
 T [°C] _____ -10 to +450

Design: Flanged or weld end bellows-type globe valve with shut-off or throttling valve plug, 2-piece stem; seats made of wear and corrosion resistant Cr steel or CrNi steel.

Applications: In industrial plants, building services, power stations and shipbuilding. For water, steam, gas and other non-aggressive fluids. Other fluids on request.



A m

Type series booklet 7168.1

NORI® 40 ZXLB/ZXSB



PN _____ 25 / 40
 DN _____ 10 - 200
 T [°C] _____ -10 to +450

Design: Flanged or weld end bellows-type globe valve with replaceable shut-off or throttling valve plug, 2-piece stem; seats made of wear and corrosion resistant Cr steel or CrNi steel.

Applications: In industrial plants, building services, power stations and shipbuilding. For water, steam, gas and other non-aggressive fluids. Other fluids on request.



A m

Type series booklet 7165.1

EN globe valves with bellows

NORI® 40 ZYLB/ZYSB



PN _____ 25 / 40
 DN _____ 15 - 300
 T [°C] _____ -10 to +450

Design: Flanged or weld end bellows-type globe valve, Y-valve, with replaceable throttling valve plug (up to DN 100) or shut-off plug (DN 125 and above), single-piece non-rotating stem; with position indicator, travel stop, locking device; seats made of wear and corrosion resistant Cr or CrNi steel.

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



A m

Type series booklet 7160.1

BOACHEM®-ZXAB/ZYAB



PN _____ 10 - 40
 DN _____ 15 - 200
 T [°C] _____ -10 to +400

Design: Flanged bellows-type globe valve in stainless steel, in conventional or Y-valve design, with replaceable shut-off or throttling valve plug.

Applications: Process engineering, industry, building services, food and beverages industry, for aggressive fluids. Other fluids on request.

A m, e, p

Type series booklet 8146.1 / 8151.1

EN globe valves with gland packing

NORI® 40 ZXL/ZXS



PN _____ 25 / 40
 DN _____ 10 - 400
 T [°C] _____ -10 to +450

Design: Flanged or weld end globe valve with gland packing, shut-off or throttling valve plug, rotating stem; seats made of wear and corrosion resistant Cr steel or CrNi steel.

Applications: In industrial plants, building services, power stations and shipbuilding. For water, steam, gas and other non-aggressive fluids. Other fluids on request.



A m

Type series booklet 7621.1

NORI® 40 ZXLZ/ZXSZ



PN _____ 25 / 40
 DN _____ 10 - 200
 T [°C] _____ -10 to +450

Design: Flanged or weld end globe valve with gland packing, shut-off or throttling valve plug, non-rotating stem, integrated position indicator; seats made of wear and corrosion resistant Cr steel or CrNi steel.

Applications: In industrial plants, building services, power stations and shipbuilding. For water, steam, gas and other non-aggressive fluids. Other fluids on request.



A m, e, p

Type series booklet 7622.1

EN globe valves with gland packing

NORI® 160 ZXL/ZXS



PN _____ 63 - 160
 DN _____ 10 - 200
 T [°C] _____ -10 to +550

Design: Flanged or weld end globe valve with gland packing, shut-off or throttling valve plug, rotating stem; seats made of wear and corrosion resistant 17 % Cr steel or stellite.

Applications: In industrial plants, power stations, process engineering and shipbuilding. For water, steam, gas, oil and other non-aggressive fluids. Other fluids on request.



A m

Type series booklet 7633.1

NORI® 160 ZXLF/ZXSF



PN _____ 63 - 160
 DN _____ 10 - 200
 T [°C] _____ -10 to +550

Design: Flanged or weld end globe valve with gland packing, shut-off or throttling valve plug, non-rotating stem, integrated position indicator; seats made of wear and corrosion resistant 17 % Cr steel or stellite.

Applications: In industrial plants, power stations, process engineering and shipbuilding. For water, steam, gas, oil and other non-aggressive fluids. Other fluids on request.



A m, e, p

Type series booklet 7633.1

NORI® 320 ZXLF/ZXSF



PN _____ 250 - 320
 DN _____ 65 - 200
 T [°C] _____ -10 to +550

Design: Flanged or weld end globe valve with gland packing, shut-off or throttling valve plug, non-rotating stem, integrated position indicator; seats made of wear and corrosion resistant 17 % Cr steel or stellite.

Applications: In industrial plants, power stations, process engineering and shipbuilding. For water, steam, gas, oil and other non-aggressive fluids. Other fluids on request.



A m, e, p

Type series booklet 7653.1

NORI® 320 ZXSV



PN _____ 250 - 320
 DN _____ 10 - 50
 T [°C] _____ -10 to +580

Design: Weld end globe valve with gland packing, throttling valve plug, non-rotating stem, bayonet-type body / yoke connection, integrated position indicator, stellite seats.

Applications: In industrial plants, power stations, process engineering and shipbuilding. For water, steam, gas, oil and other non-aggressive fluids. Other fluids on request.



A m, e, p

Type series booklet 7640.1

NORI® 500 ZXSV



PN _____ 250 - 500
 DN _____ 10 - 65
 T [°C] _____ -10 to +650

Design: Weld end globe valve with gland packing, throttling valve plug, non-rotating stem, bayonet-type body / yoke connection, integrated position indicator, stellite seats.

Applications: In industrial plants, power stations, process engineering and shipbuilding. For water, steam, gas, oil and other non-aggressive fluids. Other fluids on request.



A m, e, p

Type series booklet 7641.1

EN globe valves with gland packing

NORI® 500 ZXLR/ZXSR



PN _____ 250 - 500
 DN _____ 10 - 50
 T [°C] _____ -10 to +580

Design: Flanged or weld end globe valve with gland packing, throttling valve plug, non-rotating stem, integrated position indicator, back seat, stellite seats.

Applications: In industrial plants, power stations, process engineering and shipbuilding. For water, steam, gas, oil and other non-aggressive fluids. Other fluids on request.



A m, e, p

Type series booklet 7655.1

BOACHEM®-ZXA/ZYA



PN _____ 10 - 40
 DN _____ 15 - 300
 T [°C] _____ -10 to +400

Design: Flanged globe valve with gland packing, in stainless steel, conventional or Y-valve design, rotating stem, with shut-off or throttling valve plug.

Applications: Process engineering, industry, building services, food and beverages industry, for aggressive fluids. Other fluids on request.

A m

Type series booklet 8149.1 / 8148.1

ECOLINE VA 16



PN _____ 16
 DN _____ 15 - 250
 T [°C] _____ -10 to +300

Design: Flanged globe valve with gland packing, made of cast iron. Straight-way pattern, rotating stem, with on/off or throttling valve plug. Flanged ends to EN standards.

Applications: District heating, domestic water supply, air-conditioning systems, cooling circuits, hot water heating systems, water supply systems.

Type series booklet 7251.1

ASME/ANSI globe valves

SICCA® 150-600 GLC



Class _____ 150 / 300 / 600
 NPS _____ 2" - 10"
 T [°C] _____ 0 to +593

Design: Cast globe valve to BS 1873 with bolted bonnet. Outside screw and yoke. Rotating, rising stem. Seating surfaces 13% Cr steel/stellite hard-faced. With graphite gasket and gland packing. Pressure/temperature ratings to ASME B16.34. Flanged/butt weld ends to ASME B16.5/ASME B16.25 standards. Face-to-face length to ASME B16.10, valve testing in compliance with API 598. Available in carbon steel, low-alloy and stainless steel.

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

A m, e

Type series booklet 7245.2

ASME/ANSI globe valves

SICCA® 900-2500 GLC



Class _____ 900 / 1500 / 2500
 NPS _____ 2" - 8"
 T [°C] _____ 0 to +650

Design: Cast Y-pattern globe valve to ASME B16.34 with pressure seal bonnet. Outside screw and yoke. Rising stem and non-rising handwheel. Stellite hard-faced seating surfaces, incl. back seat. With graphite gasket and gland packing. Pressure/temperature ratings to ASME B16.34. Butt weld ends to ASME B16.25 standard. Face-to-face length to ASME B16.10, valve testing in compliance with API 598. Available in carbon steel and alloy steel.

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

A m, e

Type series booklet 7242.2

SICCA® 800-2500 GLF



Class _____ 800 / 1500 / 2500
 NPS _____ ½" - 2"
 T [°C] _____ 0 to +593

Design: Die-forged globe valve as per API 602 (800/1500)/ASME B16.34 (2500). Bolted bonnet (800) or welded bonnet (1500/2500). Outside screw and yoke. Integral stellite hard-faced body seat, disc seating face 13% Cr steel/stellite hard-faced. With graphite gasket and gland packing. Pressure/temperature ratings to ASME B16.34. Line connection: threaded NPT (F) as per ASME B1.20.1. Socket weld ends to ASME B16.11. Face-to-face length to manufacturer's standard. Valve testing in compliance with API 598. Available in carbon steel and alloy steel.

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

A m, e (Class 1500 / 2500 only)

Type series booklet 7240.1

ECOLINE GLC 150-600



Class _____ 150 / 300 / 600
 NPS _____ 2" - 10"
 T [°C] _____ max. +427

Design: Globe valve designed to BS 1873. Cast steel A216 WCB, trim 8 (stellite/13%Cr) for class 150/300/600, trim 5 (stellite/stellite) for class 600. Pressure/temperature ratings to ASME B16.34. Face-to-face length to ASME B16.10. Flange dimensions to ASME B16.5. Testing to API 598. Bolted bonnet. Outside screw and yoke. Graphite packing. Stainless steel / graphite gaskets.

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

A m, e

Type series booklet 7362.12

ECOLINE GLF 150-600



Class _____ 150 / 300 / 600
 NPS _____ ½" - 2"
 T [°C] _____ max. +425

Design: Globe valve to API 602. Forged steel A105 Trim 8 (Stellite/13%Cr). Pressure/temperature ratings to ASME B16.34. Flanged ends to ASME B16.5. Face-to-face length to ASME B16.10. Testing to API 598. Bolted bonnet. Outside screw and yoke. Graphite packing. Stainless steel/graphite gaskets. Reduced bore.

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

A m, e

Type series booklet 7361.13

ECOLINE GLF 800



Class _____ 800
 NPS _____ ½" - 2"
 T [°C] _____ max. +425

Design: Globe valve designed to API 602. Forged steel A105 trim 8 (stellite/13%Cr). Pressure/temperature ratings to ASME B16.34. Threaded ends (NPT) to ASME B1.20.1. Socket weld ends (SW) to ASME B 16.11. Testing to API 598. Bolted bonnet. Outside screw and yoke. Graphite packing. Stainless steel and graphite gaskets. Reduced bore.

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

A m, e

Type series booklet 7361.14

ASME/ANSI globe valves

ECOLINE GLV 150-300



Class _____ 150 / 300
 NPS _____ 2" - 12"
 T [°C] _____ max. +816

Design: Globe valve to ASME B16.34. Cast steel A351 CF8/CF8M, Trim 2 (304/304) and Trim 10 (316/316) for Class 150/300. Pressure/temperature ratings to ASME B16.34. Flange dimensions to ASME B16.5. Face-to-face length to ASME B16.10. Testing to API 598. Bolted bonnet. Outside screw and yoke. Integral seating surface. Graphite packing. Stainless steel/graphite gaskets.

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

A m, e

Control system

BOA-Systronic®



PN _____ 6 / 10 / 16
 DN _____ 20 - 200
 T [°C] _____ +20 to +120

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

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



Type series booklet 7540.1

EN control and balancing valves

BOA-CVE C/CS/IMS/EKB



PN _____ 6 / 10 / 16
 DN _____ 15 - 200
 T [°C] _____ -10 to +120

Design: Control valve based on standard type series BOA-C, BOA-CS, BOA-C EKB, BOA-Control IMS, single-piece pressure-retaining body with soft seat. Leakage rate selectable from 0.05 % to drop-tight at K_{vs} values between 6.3 and 700 m³/h and closing pressures up to 16 bar. With intelligent microprocessor controlled electric actuators with actuating forces from 1200 N up to 14000 N, electronic configuration of valve characteristics, K_{vs} value, control signal and time through PC tool or manual device. Customised configurations can be implemented by qualified KSB personnel at the factory.

Applications: Hot water heating systems up to 120 °C. Venting 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. IMS not suitable for open circuits. Other fluids on request.

A e

Type series booklet 7520.1

EN control and balancing valves

BOA®-CVE H / BOA®-CVP H



PN _____ 16 / 25
 DN _____ 20 - 150
 T [°C] _____ -10 to +350

Design: Service-friendly control valve with linear or equal-percentage control characteristic at K_{vs} values of 2.5 to 340 m³/h and closing pressures of up to 25 bar; all internal parts are easy to replace without special tools, including the reversible seat; reduced noise level by standard two-stage pressure reduction combining a parabolic plug and multi-hole cage; available with electric (BOA-CVE H) or pneumatic (BOA-CVP H) actuator.

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

A e (BOA-CVE H), p (BOA-CVP H)

Type series booklet 7525.1

BOA®-H Mat E



PN _____ 16 / 25
 DN _____ 20 - 150
 T [°C] _____ -10 to +350

Design: Automated globe valve with electric actuators and 3-point actuation, actuating forces from 2,000 N to 14,000 N, stem sealed by maintenance-free PTFE V-rings with spring (up to 250 °C) or graphite gland packing (up to 350 °C).

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

A e

Type series booklet 7135.1

BOA®-H Mat P



PN _____ 16 / 25
 DN _____ 20 - 150
 T [°C] _____ -10 to +350

Design: Automated globe valve with pneumatic actuators in spring-to-open or spring-to-close design on option, actuating torques from 1200 N to 26,000 N, stem sealed by maintenance-free V-packing (up to 250 °C) or graphite gland packing (up to 350 °C).

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

A p

Type series booklet 7136.1

BOA-Control® IMS



PN _____ 16
 DN _____ 15 - 350
 T [°C] _____ -10 to +120

Design: Balancing valve with electronic sensor for flow and fluid temperature measurement with BOATRONIC M-2 measuring computer for hydraulic balancing with short-term measurement, with BOATRONIC M-420 for analog signal transfer, e.g. to a control room. Independent of minimum differential pressures; constant accuracy across the entire range of valve travel. Standard: locking device and travel stop. Maintenance-free, full insulation possible.

Applications: Hot water heating systems up to 120 °C. Cold water for air-conditioning systems. Not suitable for fluids containing mineral oils, steam or fluids liable to attack EPDM and uncoated cast iron, for example in open cooling circuits.

A m, e

Type series booklet 7128.1

BOA-Control® SAR



PN _____ 16
 DN _____ 10 - 50
 T [°C] _____ -25 to +150

Design: Balancing valve; differential pressure measurement for flow measurement with PFM 2000 measuring computer; digital travel position indicator with 40 settings, locking device and travel stop. Maintenance-free.

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

A m

Type series booklet 7129.1

EN control and balancing valves

CONDA-VRC/VSM/VLC



PN _____ 16 / 40 / 64
 DN _____ 25 - 150
 T [°C] _____ -10 to +70

Design: Direct-acting pressure reducing/sustaining valve to ISO 5752-1, DIN 3202, NF 29305-1. Body made of nodular cast iron; piston, stem and seat made of stainless steel. Flanged ends to EN standards.

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

Type leaflets 9193.51 / 9194.51 / 9195.51

CONDA-NCV



PN _____ 10 / 16 / 25 / 40 / 64
 DN _____ 100 - 2000
 T [°C] _____ -10 to +70

Design: Needle control valve, piston-type, axial flow. Body, cylinder and piston in epoxy-coated nodular cast iron. Seat in stainless steel, ring in NBR or EPDM. Flanged ends to EN standards.

Applications: For controlling and shutting off flow in water supply systems and pumping stations.

Air valve

BOAVENT®-AVF/SVF/SIF/SVA



PN _____ 16 / 40
 DN _____ 25 - 300
 T [°C] _____ -10 to +70

Design: Three-function automatic air valve with one or two floats. Body made of nodular cast iron. Single-chamber design with polypropylene float, double-chamber design with stainless steel floats. Flanged ends to EN standards. The air valve will ensure proper operation of the piping system, allowing the entry and discharge of large volumes of air and release of air pockets in working conditions.

Applications: Water supply systems, clean or waste water, irrigation, raw sewage.

Type leaflets 9166.51 / 9167.51 / 9168.51 / 9169.51

Start and stop control valves

ZJSVA/ZXSVA



PN _____ max. 600 bar
 DN _____ 65 - 250
 T [°C] _____ -10 to +650

Design: Start and stop control valve with pressure seal bonnet, billet forged body, seats made of wear and corrosion resistant stellite, rigid throttling plug / stem connection for high differential pressures.

Applications: In industrial plants, power stations, process engineering and shipbuilding. For water, steam, gas, oil and other non-aggressive fluids. Other fluids on request.

A m, e, p

Type series booklet 7253.1

Feedwater bypass valve

ZJSVM / RJSVM



PN _____ max. 600 bar
 DN _____ 100 - 800
 T [°C] _____ -10 to +450

Design: 2-port globe valve with pressure seal bonnet, billet forged body, in Z or T pattern, seats made of wear and corrosion resistant stellite, process fluid controlled.

Applications: In industrial plants, power stations, process engineering. For water, steam, gas, oil and other non-aggressive fluids. Other fluids on request.

A m, e, p

EN gate valves

COBRA-SGP/SGO/SGF



PN _____ 16 / 25
 DN _____ 40 - 600
 NPS _____ 1" - 2"
 T [°C] _____ -10 to +70

Design: Wedge gate valve with bolted bonnet, elastomer-coated wedge, inside screw, rotating stem. Flanged ends to EN standards. Face-to-face length to EN 558/14 and EN 558/15. Body made of nodular cast iron.

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

Type leaflet 8191.51

COBRA-SMP



PN _____ 16
 DN _____ 40 - 600
 T [°C] _____ -10 to +110

Design: Metal-seated gate valve with bolted bonnet, inside screw, rotating stem. Flanged ends to EN standards. Face-to-face length to EN 558/14. Body and flexible wedge made of nodular cast iron, stainless steel stem and seats.

Applications: Water supply systems, heating systems, air-conditioning systems, general industry, building services.

Type leaflet 8193.52

ECOLINE SP/SO



PN _____ 10 / 16 / 25
 DN _____ 40 - 600
 T [°C] _____ -10 to +110

Design: Metal-seated gate valve with bolted bonnet, inside screw, rotating stem. Flanged ends to EN standards. Face-to-face length to EN 558/14 and EN 558/15. Body made of cast iron, brass seats.

Applications: Water supply systems, heating systems, air-conditioning systems, general industry, water engineering, building services.

Type leaflet 8192.51

STAAL 40 AKD/AKDS



PN _____ 10 - 40
 DN _____ 50 - 800
 T [°C] _____ -10 to +400

Design: Flanged or weld end gate valve with bolted bonnet, body of forged or welded steel construction, non-rotating stem, flexible wedges for exact adaptation to seats. Seats made of wear and corrosion resistant 17 % Cr steel.

Applications: In industrial plants, power stations, process engineering and shipbuilding. For water, steam, gas, oil and other non-aggressive fluids. Other fluids on request.

A m, e, p

Type series booklet 7364.1

ECOLINE GT 40



PN _____ 10 - 40
 DN _____ 50 - 600
 T [°C] _____ -10 to +400

Design: Flanged gate valve with bolted bonnet, body made of cast steel, non-rotating stem, flexible wedge design. Seat/disc interface made of wear and corrosion resistant 17 % Cr steel or stellite.

Applications: In industrial plants, process engineering and shipbuilding. For water, steam, gas, oil and other non-aggressive fluids. Other fluids on request.

A m, e

Type series booklet 7367.1

EN gate valves

STAAL 100 AKD/AKDS



PN _____ 63 - 100
 DN _____ 50 - 500
 T [°C] _____ -10 to +550

Design: Flanged or weld end gate valve with bolted bonnet, body of forged or welded steel construction, non-rotating stem, flexible wedges for exact adaptation to seats. Seats made of wear and corrosion resistant 17 % Cr steel or stellite.

Applications: In industrial plants, power stations, process engineering and shipbuilding. For water, steam, gas, oil and other non-aggressive fluids. Other fluids on request.

A m, e, p

Type series booklet 7331.1

AKG-A/AKGS-A



PN _____ 63 - 160
 DN _____ 80 - 300
 T [°C] _____ -10 to +550

Design: Flanged or weld end gate valve with pressure seal bonnet, forged or welded body, non-rotating stem, flexible wedges for exact adaptation to seats. Seats made of wear and corrosion resistant 17 % Cr steel or stellite.

Applications: In industrial plants, power stations, process engineering and shipbuilding. For water, steam, gas, oil and other non-aggressive fluids. Other fluids on request.

A m, e, p

Type series booklet 7338.1

ZTS



PN _____ max. 600 bar
 DN _____ 50 - 800
 T [°C] _____ -10 to +650

Design: Butt weld end gate valve with pressure seal bonnet, billet forged body, seats made of wear and corrosion resistant stellite, flexible wedges for exact adaptation to valve seats.

Applications: In industrial plants, power stations, process engineering and shipbuilding. For water, steam, gas, oil and other non-aggressive fluids. Other fluids on request.

A m, e, p

Type series booklet 7451.1

Body safety valve UGS



PN _____ \geq 63
 DN _____ 15

Design: Spring-loaded pressure relief valve with or without bursting disc, for gate valves in pressure seal design.

Type series booklet 7300.1

ASME/ANSI gate valves

SICCA 150-600 GTC



Class _____ 150 / 300 / 600
 NPS _____ 2" - 24"
 T [°C] _____ 0 to +593

Design: Cast gate valve to API 600 with bolted bonnet. Outside screw and yoke. Flexible wedge design, non-rotating rising stem and non-rising handwheel. Seating surfaces 13% Cr steel/stellite hard-faced. With graphite gasket and gland packing. Pressure/temperature ratings to ASME B16.34. Flanged/butt weld ends to ASME B16.5/ASME B16.25 standards. Face-to-face length to ASME B16.10, valve testing in compliance with API 598. Available in carbon steel, low-alloy and stainless steel.

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

A m, e

Type series booklet 7244.2

SICCA 900-2500 GTC



Class _____ 900 / 1500 / 2500
 NPS _____ 2" - 24"
 T [°C] _____ 0 to +650

Design: Cast gate valve to ASME B16.34. Pressure seal bonnet, double-disc wedge design. Outside screw and yoke. Rising stem, non-rising handwheel. Stellite hard-faced seating surfaces, incl. back seat. With graphite gasket and gland packing. Pressure/temperature ratings to ASME B16.34. Butt weld ends to ASME B16.25 standard. Face-to-face length to ASME B16.10, valve testing in compliance with API 598. Available in carbon steel and alloy steel.

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

A m, e

Type series booklet 7241.2

SICCA 800-1500 GTF



Class _____ 800 / 1500
 NPS _____ ½" - 2"
 T [°C] _____ 0 to +593

Design: Die-forged gate valve to API 602. Bolted bonnet (800) or welded bonnet (1500). Solid wedge design. Outside screw and yoke, seating surfaces 13%Cr steel/stellite hard-faced. With graphite gasket and gland packing. Pressure/temperature ratings to ASME B16.34. Line connection: threaded NPT (F) as per ASME B1.20.1. Socket weld ends to ASME B16.11. Face-to-face length to manufacturer's standard. Valve testing in compliance with API 598. Available in carbon steel and alloy steel.

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

A m, e (Class 1500 only)

Type series booklet 7240.1

ECOLINE GTC 150-600



Class _____ 150 / 300 / 600
 NPS _____ 2" - 24"
 T [°C] _____ max. +427

Design: Gate valve designed to ANSI/ASME. Cast steel A 216 WCB, trim 8 (stellite/ 13 % Cr) for class 150 /300/600; trim 5 (stellite/stellite) for class 600. Pressure/ temperature ratings to ASME B16.34. Flange dimensions to ASME B 16.5. Face-to-face length to ASME B 16.10. Testing to API 598. Bolted bonnet. Outside screw and yoke. Non-rotating stem. Flexible wedge. Graphite packing. Stainless steel/graphite gaskets.

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

A m, e

Type series booklet 7362.11

ECOLINE GTF 150-600



Class _____ 150 / 300 / 600
 NPS _____ ½" - 2"
 T [°C] _____ max. +425

Design: Gate valve designed to ANSI/ASME. Forged steel A105 trim 8 (stellite/ 13% Cr). Pressure/temperature ratings to ASME B16.34. Flanged end per ASME B16.5. Face-to-face length to ASME B16.10. Testing to API 598. Bolted bonnet. Outside screw and yoke. Non-rotating stem. Solid wedge. Graphite packing. Stainless steel and graphite gaskets. Reduced bore.

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

A m, e

Type series booklet 7361.11

ASME/ANSI gate valves

ECOLINE GTF 800



Class _____ 800
 NPS _____ 1/2" - 2"
 T [°C] _____ max. +425

Design: Gate valve designed to ANSI/ASME. Forged steel A105 trim 8 (stellite / 13 % Cr). Pressure/temperature ratings to ASME B16.34. Threaded ends (NPT) to ASME B1.20.1. Socket weld ends (SW) to ASME B 16.11. Testing to API 598. Bolted bonnet. Outside screw and yoke. Non-rotating stem, solid wedge. Graphite packing. Stainless steel and graphite gaskets. Reduced bore.

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

A m, e

Type series booklet 7361.12

ECOLINE GTV 150-300



Class _____ 150 / 300
 NPS _____ 2" - 12"
 T [°C] _____ max. +816

Design: Gate valve designed to ASME B16.34. Cast steel A351 CF8/CF8M, trim 2 (304/304) and trim 10 (316/316) for class 150/300. Pressure/temperature ratings to ASME B16.34. Face-to-face length to ASME B16.10. Flange dimensions to ASME B16.5. Testing to API 598. Bolted bonnet. Outside screw and yoke. Non-rotating stem. Flexible wedge. Integral seating surface. Graphite packing. Stainless steel / graphite gaskets.

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

A m, e

EN knife gate valve

HERA-BD



PN _____ max. 10 bar
 DN _____ 50 - 1200
 T [°C] _____ -10 to +120

Design: Wafer-type knife gate valve made of grey cast iron, single or two-piece body, bi-directional, with gland packing, non-rising stem, corrosion protected by epoxy coating.

Applications: In industrial plants, waste water and process engineering, food industry. For water, waste water and solids-laded fluids. Other fluids on request.

A m, e, p

Type series booklet 7328.1

ASME/ANSI knife gate valve

HERA®-SDH



PN _____ max. 10 bar
 Class _____ 150
 DN _____ 50 - 600
 T [°C] _____ -10 to +180

Design: MSS SP 81 knife gate valve made of carbon steel and stainless steel, uni-directional design with gland packing, suitable for ANSI and EN connections.

Applications: In industrial plants, the pulp and paper, food and beverages, as well as chemical industry, waste water engineering. For water, waste water and solids-laden fluids. Other fluids on request.

A m, e, p

Type series booklet 7329.1

EN line blind valve

VTS



PN _____ max. 600 bar
 DN _____ 200 - 800
 T [°C] _____ -10 to +650

Design: Butt weld end line blind valve in pressure seal design, billet-forged body, seats made of wear and corrosion-resistant stellite.

Applications: In industrial plants, power stations, process engineering and shipbuilding. For water, steam, gas, oil and other non-aggressive fluids. Other fluids on request.

Type series booklet 7510.1

EN non-return valves

BOA-RPL/RPL F-F



PN _____ 10 / 16
 DN _____ 25 - 300
 T [°C] _____ -10 to +70

Design: Ball check valve made of grey cast iron or nodular cast iron. Flanged ends to EN standards, or F-F threaded ends to ISO 7/1. Face-to-face length to EN 558/48. NBR-coated ball. Bolted cover. Suitable for horizontal and vertical installation.

Applications: Water supply systems, water treatment systems, waste water.

Type leaflet 8116.51

BOA-RFV



PN _____ 10 / 16 / 25 / 40 / 64
 DN _____ 40 - 600
 T [°C] _____ -10 to +90

Design: Non-slam, Venturi-type non-return valve. Flanged ends to EN standards. Max. flow velocity 2.5 m/s. Body made of cast iron, check disc made of brass and cast iron. Stainless steel seat. Suitable for horizontal and vertical installation. Rapid closure for water hammer protection.

Applications: Water supply systems, heating and air-conditioning systems.

Type leaflet 8117.52

BOA-RVK



PN _____ 6 / 10 / 16
 DN _____ 15 - 200
 T [°C] _____ -30 to +250

Design: Wafer-type non-return valve; centering aided by the body shape, shut-off by spring loaded check disc or plug guided by three stainless steel guiding pins. Low-noise variants with plastic check disc (DN 15-100) or plug with O-ring (DN 125-200), maintenance-free.

Applications: Industrial 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 shall be complied with. Not suitable for fluids liable to attack the valve materials. Other fluids on request.

Type series booklet 7119.1

BOA-R



PN _____ 6 / 16
 DN _____ 10 - 350
 T [°C] _____ -10 to +350

Design: Flanged end non-return valve with spring-loaded check 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.

Type series booklet 7117.1

NORI® 40 RXL/RXS



PN _____ 25 / 40
 DN _____ 10 - 300
 T [°C] _____ -10 to +450

Design: Flanged or weld end non-return valve, check disc with closing spring; seats made of wear and corrosion resistant Cr steel or CrNi steel.

Applications: In industrial plants, building services, power stations and shipbuilding. For water, steam, gas and other non-aggressive fluids. Other fluids on request.



Type series booklet 7673.1

EN non-return valves

NORI 160 RXL/RXS



PN _____ 63 - 160
 DN _____ 10 - 200
 T [°C] _____ -10 to +550

Design: Flanged or weld end non-return valve, check disc with closing spring; seats made of wear and corrosion resistant 17 % Cr steel or stellite.

Applications: In industrial plants, power stations, process engineering and shipbuilding. For water, steam, gas, oil and other non-aggressive fluids. Other fluids on request.



Type series booklet 7681.1

NORI 320 RXL/RXS



PN _____ 250 - 320
 DN _____ 65 - 200
 T [°C] _____ -10 to +550

Design: Flanged or weld end non-return valve, check disc with closing spring; seats made of wear and corrosion resistant 17 % Cr steel or stellite.

Applications: In industrial plants, power stations, process engineering and shipbuilding. For water, steam, gas, oil and other non-aggressive fluids. Other fluids on request.



Type series booklet 7657.1

NORI 500 RXLR/RXSR



PN _____ 250 - 500
 DN _____ 10 - 50
 T [°C] _____ -10 to +580

Design: Flanged or weld end non-return valve, check disc with closing spring; seats made of wear and corrosion resistant stellite.

Applications: In industrial plants, power stations, process engineering and shipbuilding. For water, steam, gas, oil and other non-aggressive fluids. Other fluids on request.



Type series booklet 7693.1

RGS



PN _____ 250 - 500
 DN _____ 10 - 50
 T [°C] _____ -10 to +580

Design: Weld end non-return valve, Y-pattern, check disc with closing spring, pressure seal design, Hastelloy-faced body seats.

Applications: In industrial plants, power stations, process engineering and shipbuilding. For water, steam, gas, oil and other non-aggressive fluids. Other fluids on request.

Type series booklet 7692.1

BOACHEM-RXA



PN _____ 10 - 40
 DN _____ 15 - 300
 T [°C] _____ -10 to +400

Design: Flanged non-return valve made of stainless steel, check disc with closing spring, lapped seats.

Applications: Process engineering, industry, building services, food and beverages industry, for aggressive fluids. Other fluids on request.

Type series booklet 8147.1

ASME/ANSI non-return valves

SICCA 800-2500 PCF



Class _____ 800 / 1500 / 2500
 NPS _____ 1/2" - 2"
 T [°C] _____ 0 to +593

Design: Die-forged piston type lift valves as per API 602 (800/1500)/ASME B16.34 (2500). Bolted cover (800) or welded cover (1500/2500). Integral stellite hard-faced body seat, disc seating face 13% Cr steel/stellite hard-faced. Graphite gasket. Pressure/temperature ratings to ASME B16.34. Line connection: threaded NPT (F) as per ASME B1.20.1. Socket weld ends to ASME B16.11. Face-to-face length to manufacturer's standard. Valve testing in compliance with API 598. Available in carbon steel and alloy steel.

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

Type series booklet 7240.1

ECOLINE PTF 150-600



Class _____ 150 / 300 / 600
 NPS _____ 1/2" - 2"
 T [°C] _____ max. +425

Design: Piston check valve to ANSI/ASME. Forged steel A105 Trim 8 (Stellite / 13 % Cr). Pressure/temperature ratings to ASME B16.34. Flanged ends to ASME B16.5. Face-to-face length to ASME B16.10. Testing to API 598. Reduced bore. Bolted cover. Internally mounted spring-loaded disc.

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

Type series booklet 7361.17

ECOLINE PTF 800



Class _____ 800
 NPS _____ 1/2" - 2"
 T [°C] _____ 0 to +425

Design: Piston check valve to ANSI/ASME. Forged steel A105 Trim 8 (Stellite / 13% Cr). Pressure/temperature ratings to ASME B16.34. Threaded ends (NPT) to ASME B1.20.1. Socket weld ends (SW) to ASME B16.11. Testing to API 598. Reduced bore. Bolted cover. Internally mounted spring-loaded disc.

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

Type series booklet 7361.18

EN swing check valve

COBRA-ELA/ELA-K



PN _____ 10 / 16
 DN _____ 40 - 300
 T [°C] _____ -10 to +60

Design: Swing check valve with elastomer-coated check disc. Flanged ends to EN standards. Face-to-face length to EN 558/48 (COBRA-ELA) or EN 558/20 (COBRA-ELA-K). Body made of cast iron, elastomer-coated check disc. Bolted cover, drain plug; easy replacement of check disc.

Applications: Water supply systems and waste water applications.

Type leaflet 8196.51

EN swing check valves

COBRA-SCBS



PN _____ 16
 DN _____ 50 - 300
 T [°C] _____ -10 to +300

Design: Swing check valve to British standards, metal-seated. Flanged ends to EN standards. Face-to-face length to BS 5153. Body and check disc made of nodular cast iron. Bolted cover, stainless steel/graphite gaskets.

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

Type leaflet 8197.51

ECOLINE WT/WTI



PN _____ 16
 DN _____ 50 - 300
 T [°C] _____ -10 to +110

Design: Wafer-type swing check valve, body and disc made of carbon steel (WT) or stainless steel (WTI), O-ring made of Viton.

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

Type leaflet 7252.1

STAAL 40 AKK/AKKS



PN _____ 10 - 40
 DN _____ 80 - 400
 T [°C] _____ -10 to +400

Design: Flanged or weld end swing check valve, with bolted cover, internal hinge pin body of forged or welded steel construction; seats made of wear and corrosion resistant 17 % Cr steel.

Applications: In industrial plants, power stations, process engineering and shipbuilding. For water, steam, gas, oil and other non-aggressive fluids. Other fluids on request.

Type series booklet 7365.1

STAAL 100 AKK/AKKS



PN _____ 63 - 100
 DN _____ 80 - 400
 T [°C] _____ -10 to +550

Design: Flanged or weld end swing check valve, with bolted cover, internal hinge pin body of forged or welded steel construction; seats made of wear and corrosion resistant 17 % Cr steel or stellite.

Applications: In industrial plants, power stations, process engineering and shipbuilding. For water, steam, gas, oil and other non-aggressive fluids. Other fluids on request.

Type series booklet 7371.1

AKR/AKRS



PN _____ 63 - 160
 DN _____ 80 - 300
 T [°C] _____ -10 to +550

Design: Flanged or weld end swing check valve in pressure seal design, with internal hinge pin forged / welded body; seats made of wear and corrosion resistant 17 % Cr steel or stellite.

Applications: In industrial plants, power stations, process engineering and shipbuilding. For water, steam, gas, oil and other non-aggressive fluids. Other fluids on request.

Type series booklet 7373.1

EN swing check valves

ZRS



PN _____ max. 600 bar
 DN _____ 50 - 800
 T [°C] _____ -10 to +650

Design: Weld end swing check valve in pressure seal design, with internal hinge pin, billet forged body; seats made of wear and corrosion resistant stellite.

Applications: In industrial plants, power stations, process engineering and shipbuilding. For water, steam, gas, oil and other non-aggressive fluids. Other fluids on request.

Type series booklet 7278.1

EN tilting disc check valve

COBRA-TDC01/03



PN _____ 10 / 16 / 25 / 40
 DN _____ 100 - 2200
 T [°C] _____ -10 to +70

Design: Tilting disc check valve with lever and counterweight/hydraulic damper. Flanged ends to EN standards. Face-to-face length to EN 558/14. Body and check disc made of nodular cast iron, body seats made of stainless steel.

Applications: Water supply systems.

Type leaflet 8194.51

ASME/ANSI swing check valves

SICCA 150-600 SCC



Class _____ 150 / 300 / 600
 NPS _____ 2" - 24"
 T [°C] _____ 0 to +593

Design: Cast swing check valve to BS 1868 with bolted cover. Internal hinge pin mounted design. Bigger sizes with anti-slam/dash pot arrangement (optional). With graphite gasket. Seating surfaces 13% Cr steel/stellite hard-faced. Pressure/temperature ratings to ASME B16.34. Flanged/butt weld ends to ASME B16.5/ASME B16.25 standards. Face-to-face length to ASME B16.10, valve testing in compliance with API 598. Available in carbon steel, low-alloy and stainless steel.

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

Type series booklet 7246.2

SICCA 900-2500 SCC



Class _____ 900 / 1500 / 2500
 NPS _____ 2" - 24"
 T [°C] _____ 0 to +650

Design: Cast swing check valve to ASME B16.34. Pressure seal cover. Internal hinge pin mounted design. Stellite hard-faced seating surfaces, graphite gasket. Pressure/temperature ratings to ASME B16.34. Butt weld ends to ASME B16.25 standard. Face-to-face length to ASME B16.10, valve testing in compliance with API 598. Available in carbon steel and alloy steel.

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

Type series booklet 7243.2

ECOLINE SCC 150-600



Class _____ 150 / 300 / 600
 NPS _____ 2" - 24"
 T [°C] _____ max. +427

Design: Swing check valve to BS 1868. Cast steel A216 WCB, Trim 8 (Stellite / 13 %Cr) for Class 150/300/600, Trim 5 (Stellite/Stellite) for Class 600. Pressure/temperature ratings to ASME B16.34. Face-to-face length to ASME B16.10. Flange dimensions to ASME B16.5. Testing to API 598. Bolted cover. Internally mounted hinge pin (2"-12"). Stainless steel/graphite gaskets.

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

Type series booklet 7362.13

ECOLINE SCF 150-600



Class _____ 150 / 300 / 600
 NPS _____ 1/2" - 2"
 T [°C] _____ max. +425

Design: Swing check valve to ANSI/ASME. Forged steel A105 Trim 8 (Stellite / 13 % Cr). Pressure/temperature ratings to ASME B16.34. Flanged ends to ASME B16.5. Face-to-face length to ASME B 16.10. Reduced bore. Testing to API 598. Bolted cover. Internally mounted hinge pin.

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

Type series booklet 7361.15

ECOLINE SCF 800



Class _____ 800
 NPS _____ 1/2" - 2"
 T [°C] _____ max. +425

Design: Swing check valve to ANSI/ASME. Forged steel A105 Trim 8 (Stellite / 13 % Cr). Pressure/temperature ratings to ASME B16.34. Threaded ends (NPT) to ASME B1.20.1. Socket weld ends (SW) to ASME B 16.11. Reduced bore. Testing to API 598. Bolted cover. Internally mounted hinge pin.

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

Type series booklet 7361.16

ASME/ANSI swing check valves

ECOLINE SCV 150-300



Class _____ 150 / 300
 NPS _____ 2" - 12"
 T [°C] _____ max. +816

Design: Swing check valve to ASME B16.34. Cast steel A351 CF8/CF8M, Trim 2 (304/304) and Trim 10 (316/316) for Class 150/300. Pressure/temperature ratings to ASME B16.34. Face-to-face length to ASME B16.10. Flange dimensions to ASME B16.5. Testing to API 598. Bolted cover. Integral seating surface. Stainless steel/graphite gaskets.

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

EN strainers

ECOLINE FY



PN _____ 16 / 40
 DN _____ 15 - 600
 T [°C] _____ -10 to +400

Design: Flanged Y-strainer with standard or fine mesh. All sizes with drain plug in the cover. Body made of grey cast iron or nodular cast iron, stainless steel strainer insert. Flanged ends to EN standards.

Applications: Hot water and high-temperature hot water heating systems, low-pressure steam systems, heat transfer systems, boiler equipment and/or pressure vessels, general industry and process engineering, building services, thermal oils.

Type leaflet 9197.52 / 9198.52

BOA-S



PN _____ 6 / 16 / 25
 DN _____ 15 - 300
 T [°C] _____ -10 to +350

Design: Flanged end strainer made of grey cast iron or nodular cast iron, with standard or fine mesh; all nominal sizes with drain plug in the cover.

Applications: Hot water heating systems. High-temperature hot water heating systems. Heat transfer systems. General steam applications in building services and industry. Other fluids on request.

Type series booklet 7125.1

NORI 40 FSL/FSS



PN _____ 25 / 40
 DN _____ 15 - 300
 T [°C] _____ -10 to +450

Design: Flanged or weld end strainer made of cast steel, with standard or fine mesh; all nominal diameters with drain plug in the cover; optional magnetic inserts.

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



Type series booklet 7127.1

EN strainers

BOACHEM-FSA



PN _____ 10 - 40
 DN _____ 15 - 400
 T [°C] _____ -10 to +400

Design: Flanged stainless steel strainer, with standard or fine mesh; all nominal sizes with drain plug in the cover.

Applications: Process engineering, industry, building services, food and beverages industry, for aggressive fluids. Other fluids on request.

Type series booklet 8150.1

ASME/ANSI strainers

ECOLINE FYC 150-600



Class _____ 150 / 300 / 600
 NPS _____ 2" - 12"
 T [°C] _____ max. +427

Design: Y-pattern strainer designed to ANSI/ASME. Cast steel A216 WCB. Pressure/temperature ratings to ASME B16.34. Face-to-face length to ASME B16.10. Flange dimensions to ASME B16.5. Testing to API 598. Screen in stainless steel 304. Mesh width 1.5 mm. Bolted cover.

Applications: Refineries, power plants, process engineering and general industry; water, steam, oil, gas. Other applications on request.

Type series booklet 7362.14

ECOLINE FYF 800



Class _____ 800
 NPS _____ 1/2" - 2"
 T [°C] _____ max. +425

Design: Y-pattern strainer designed to ANSI/ASME. Forged steel A105. Pressure/temperature ratings to ASME B16.34. Threaded ends (NPT) to ASME B1.20.1. Socket weld ends (SW) to ASME B 16.11. Testing to API 598. Screen made of stainless steel 304. Mesh width 0.8-0.9 mm. Threaded cover.

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

Type series booklet 7361.19

Valves for nuclear power plants

Small globe valves: ZXNVB



P_{\max} [bar] _____ max. 210
 DN _____ 4 - 25
 T [°C] _____ max. +365

Design: Butt weld / socket weld end globe valve with gland packing or bellows, straight-way pattern, made of steel or stainless steel.

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

A m

Globe valves: NUCA / -A, / -ES, types I, II, IV



P_{\max} [bar] _____ max. 320
 DN _____ 10 - 50
 T [°C] _____ max. +400

Design: Butt weld / socket weld end globe valve with gland packing or bellows, with replaceable seat (NUCA-ES), straight-way pattern, made of steel, stainless steel or nickel.

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

A m, e, p

Globe valves: NUCA-B (safety-related)



P_{\max} [bar] _____ max. 120
 DN _____ 10 - 50
 T [°C] _____ max. +300

Design: Weld end bellows-type globe valve designed to meet safety-related requirements, straight-way pattern, made of steel or stainless steel; integrity maintained after limit switch failure.

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

A e

Globe valves: NUCA-F (safety-related)



P_{\max} [bar] _____ max. 210
 DN _____ 10 - 50
 T [°C] _____ max. +365

Design: Butt weld / socket weld end bellows-type globe valve designed to meet safety-related requirements, straight-way pattern, made of steel or stainless steel; integrity maintained after limit switch failure of actuator.

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

A e

Globe valves: NUCA-S (safety-related)



P_{\max} [bar] _____ max. 210
 DN _____ 10 - 50
 T [°C] _____ max. +365

Design: Weld end bellows-type globe valve designed to meet safety-related requirements, straight-way pattern, made of steel or stainless steel; operability maintained after limit switch failure of actuator.

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

A e

Valves for nuclear power plants

Globe valves with slanted seat: ZYNB / ZYN



P_{max} [bar] _____ max. 62
 DN _____ 300 - 400
 T [°C] _____ max. +365

Design: Weld end globe valve with gland packing or bellows designed to meet safety-related requirements, Y-type valve, made of cast stainless steel.

Applications: Residual heat removal systems in nuclear applications.

A e

Bellows-type globe valves: ZXNB



P_{max} [bar] _____ max. 210
 DN _____ 65 - 300
 T [°C] _____ max. +365

Design: Weld end bellows-type globe valve designed to meet safety-related requirements, in straight-way / angle / two-way pattern, made of steel or stainless steel.

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

A m, e, p

Diaphragm valves: MXN



P_{max} [bar] _____ max. 12
 DN _____ 10 - 200
 T [°C] _____ max. +100

Design: EPDM rubber soft-seated flanged or weld end diaphragm valve made of steel, stainless steel or rubber-lined nodular cast iron.

Applications: Cleaning systems, condensate and cooling water systems, auxiliary systems.

A m, e, p

Gate valves: ZTN



P_{max} [bar] _____ max. 320
 DN _____ 80 - 700
 T [°C] _____ max. +400

Design: Weld end gate valve with bolted or pressure seal bonnet, forged or welded body, non-rotating stem, wedge-type or with parallel discs, made of steel or stainless steel.

Applications: Reactor cooling, safety feed, feed water, live steam, cleaning and condensate systems.

A m, e, p

Gate valves: STAAL AKDN/AKDSN



P_{max} [bar] _____ max. 40
 DN _____ 80 - 1000
 T [°C] _____ max. +200

Design: Flanged or weld end gate valve with bolted bonnet, low-weight-die-forged or forged, welded body, non-rotating stem, wedge-type or with parallel discs, made of steel or stainless steel.

Applications: Auxiliary systems, safety feed, feed water, live steam, cleaning and condensate systems.

A m, e

Valves for nuclear power plants

Non-return valves: NUCA / -A, / -ES, type V



P_{\max} [bar] _____ max. 410
 DN _____ 10 - 50
 T [°C] _____ max. +400

Design: Weld end non-return valve with replaceable seat (NUCA-ES), in straight-way pattern, made of steel or stainless steel.

Applications: Feed water and live steam systems.

Lockable non-return Y-type valves: RYN



P_{\max} [bar] _____ max. 210
 DN _____ 65 - 300
 T [°C] _____ max. +365

Design: Weld end non-return Y-type valve with gland packing or bellows, made of steel or stainless steel.

Applications: Feed water and live steam systems.

A m, e, p

Non-return valves, damped: RJN



P_{\max} [bar] _____ max. 140
 DN _____ 80 - 600
 T [°C] _____ max. +300

Design: Weld end non-return valve with individually selectable damping characteristic, made of steel or stainless steel.

Applications: Feed water and live steam systems.

Swing check valves: ZRN



P_{\max} [bar] _____ max. 320
 DN _____ 50 - 600
 T [°C] _____ max. +400

Design: Weld end swing check valve with bolted cover, internal hinge pin, forged body, made of steel or stainless steel.

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

CLOSSIA



P_N [bar] _____ max. 10
 DN _____ 250 / 500 / 750 / 1000
 T [°C] _____ -20 to +170

Design: Double-offset butterfly valve, metal/metal-seated, maintenance-free. Steel body with one flanged and one weld end connection. Safety actuator with manual, pneumatic or electric actuation.

Applications: Nuclear power stations, reactor containment.

A m, p, e

Valves for nuclear power plants

SISTO-20NA



PN _____ 20
 DN _____ 08 - 150
 T [°C] _____ max. 100

Design: Diaphragm valve with weld ends; shut-off and sealing to atmosphere by diaphragm. All moving parts are separated from the fluid by the diaphragm. Maintenance-free.

Applications: Cleaning systems, condensate and cooling water systems, waste water systems.

A m, e, p

SISTO-DrainNA



PN _____ 16
 DN _____ 15 - 25
 T [°C] _____ max. 100

Design: Diaphragm valve with weld ends; shut-off and sealing to atmosphere by diaphragm. All moving parts are separated from the fluid by the diaphragm. Maintenance-free.

Applications: Heating systems.

SISTO-VentNA



PN _____ 16
 DN _____ 15
 T [°C] _____ max. 100

Design: Soft-seated vent valve with weld ends.

Applications: Heating systems.

SISTO-KRVNA



PN _____ 16
 DN _____ 25 - 100
 T [°C] _____ max. 100

Design: Vent valve, soft-seated floating ball valve with weld ends or flanges.

Applications: Tank ventilation.

SISTO-RSKNA



PN _____ 16
 DN _____ 25 - 300
 T [°C] _____ max. 100

Design: Flanged end swing check valve with or without lining, soft-seated, no dead volumes; in straight-way pattern with slanted seat; with internal hinge pin and soft rubber coated disc.

Applications: Waste water systems.

AMRI centered disc butterfly valves

BOAX-S / BOAX-SF



PN [bar] _____ 10 / 16
 DN _____ 20 - 600
 T [°C] _____ -10 to +130

Design: Butterfly valve for building services, with anti-condensation feature, elastomer liner (EPDM XU or Nitrile K). With lever, manual gearbox or pneumatic actuator.

BOAX-S: semi-lug type body (T2),

BOAX-SF: full-lug type body (T4), suitable for downstream dismantling and dead-end service. Valve disc made of stainless steel 1.4308. Connections to EN possible.

Applications: Heating, ventilation, air-conditioning, for drinking water.



A m, p + AMTROBOX / AMTRONIC / SMARTRONIC

Type series booklet 8417.1 / 8415.12

BOAXMAT-S / BOAXMAT-SF



Enclosure _____ IP65
 PN [bar] _____ 10 / 16
 DN _____ 20 - 600
 T [°C] _____ -10 to +130

Design: Butterfly valve for building services, with anti-condensation feature, elastomer liner (EPDM XU or Nitrile K). Spherically machined valve disc made of stainless steel (6g). With electric actuator.

BOAX-S: semi-lug type body (T2)

BOAX-SF: full-lug type body (T4), suitable for downstream dismantling and dead-end service. Valve disc made of stainless steel 1.4308. Connections to EN possible.

Electric actuator by BERNARD CONTROLS: LE / SD type series for on/off control.

Applications: Heating, ventilation, air-conditioning, for drinking water.

A e

Type series booklet 8417.1 / 8415.12

BOAX-S Gaz / BOAX-SF Gaz



PN [bar] _____ 10
 DN _____ 20 - 600
 T [°C] _____ -20 to +60

Design: Centered disc butterfly valve for gas installations; with elastomer liner (epichlorohydrin (EG)), and yellow lever.

BOAX-S: semi-lug type body (T2)

BOAX-SF: full-lug type body (T4). Spherically machined valve disc made of stainless steel (6g).

Connections to EN.

Applications: Gas circuits.



A m

Type series booklet 8417.1/17 / 8415.12/14

BOAX-B



PN [bar] _____ 10 / 16
 DN _____ 40 - 1000
 T [°C] _____ -10 to +110

Design: Centered disc butterfly valve with elastomer liner (EPDM XC or Nitrile K). With lever, manual gearbox, electric or pneumatic actuator. Wafer-type body (T1), semi-lug type body (T2), full-lug type body (T4), U-section body with flat faces (T5). Body types T2, T4 and T5 are suitable for downstream dismantling and dead-end service. Valve disc made of nodular cast iron or stainless steel. EN, ASME, JIS connections possible.

Applications: Engineering contractors, for water, crude oil and oils.

Shut-off and control duties in water management, water supply, water treatment, drainage and irrigation.



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

Type series booklets 8409.11 / 8412.11

BOAX-B APSAD



PN [bar] _____ max. 16
 DN _____ 40 - 300
 T [°C] _____ -10 to +110

Design: Centered disc butterfly valve with elastomer liner (EPDM XC). Manual gearbox to APSAD. Semi-lug type body (T2) suitable for downstream dismantling. Valve disc made of nodular cast iron. Connections to EN.

Applications: Fire-fighting systems.



A m

Type series booklets 8409.11

AMRI centered disc butterfly valves

BOAX-B Mat P



Enclosure	IP 67
PN [bar]	10 / 16
DN	40 - 300
T [°C]	-10 to +110
Actuator:	
Enclosure	IP 67
T [°C]	-20 to +80
Air pressure [bar]	3, 5, 6 max. 8

Design: Centered disc butterfly valve with elastomer liner (EPDM XC or Nitrile K). With pneumatic actuator. Semi-lug type body (T2), full-lug type body (T4), U-section body with flat faces (T5). Body types T2, T4 and T5 are suitable for downstream dismantling and dead-end service. Valve disc made of nodular cast iron or stainless steel. EN, ASME connections possible. Pneumatic scotch-yoke actuator with VDI/VDE interface for open/closed position signalling via AMTROBOX C and Namur interface for control air supply.

Applications: Engineering contractors, for water, crude oil and oils. Shut-off and control duties in water management, water supply, water treatment, drainage and irrigation.



A p + AMTROBOX C

Type series booklets 8409.11 / 8412.11

BOAX-B Mat E



Enclosure	IP65
PN [bar]	10 / 16
DN	40 - 300
T [°C]	-10 to +110
Actuator:	
Power supply	230 V 50 Hz / 24 V DC

Design: Centered disc butterfly valve with elastomer liner (EPDM XC or Nitrile K). With electric actuator. Semi-lug type body (T2), full-lug type body (T4), U-section body with flat faces (T5). Body types T2, T4 and T5 are suitable for downstream dismantling and dead-end service. Valve disc made of nodular cast iron or stainless steel. EN, ASME connections possible.

Electric actuator by BERNARD CONTROLS: LE/SD type series for on/off control or positioning through proportional control (4-20 mA).

Applications: Engineering contractors, for water, crude oil and oils. Shut-off and control duties in water management, water supply, water treatment, drainage and irrigation.



A e

Type series booklets 8409.11 / 8412.11

ISORIA 10



PN [bar]	max. 10
DN	40 - 1000
T [°C]	-10 to +200

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

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



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

Type series booklets 8444.1 / 8444.11

ISORIA 16



PN [bar]	max. 16
DN	40 - 1000
T [°C]	-10 to +200

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

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



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

Type series booklets 8445.1 / 8445.11

ISORIA 20



PN [bar]	max. 20
DN	32 - 600
T [°C]	-10 to +80

Design: Centered disc butterfly valve with elastomer liner. With lever, manual gearbox, pneumatic, electric or hydraulic actuator. Semi-lug type body (T2) or full-lug type body (T4). Body types T2 and T4 are suitable for downstream dismantling and dead-end service with counterflange. EN, ASME, JIS connections possible.

Applications: Shut-off and control functions in all industrial and energy applications.



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

Type series booklets 8446.1 / 8446.11

AMRI centered disc butterfly valves

ISORIA 20 UL



PN [bar] _____ max. 16
 DN _____ 40 - 700
 T [°C] _____ -10 to +80

Design: Centered disc butterfly valve with elastomer liner, with manual gearbox, semi-lug type body (type T2) or full-lug type body (type T4). Body types T2 and T4 are suitable for downstream dismantling and dead-end service with counterflange. EN, ASME, JIS connections possible. Underwriter Laboratories (UL) approved.

Applications: Fire protection.



A m

ISORIA 25



PN [bar] _____ max. 25
 DN _____ 32 - 1000
 T [°C] _____ -10 to +60

Design: Centered disc butterfly valve with elastomer liner. With lever, manual gearbox, pneumatic, electric or hydraulic actuator. Semi-lug type body (T2) or U-section body with flat faces (T5). Body types T2 and T5 are suitable for downstream dismantling and dead-end service with counterflange. EN, ASME, JIS connections possible.

Applications: Shut-off service for liquids only.



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

Type series booklets 8447.1 / 8447.11

MAMMOUTH



PN [bar] _____ 6 / 10 / 16 / 20 / 25
 DN _____ 1050 - 4000
 T [°C] _____ 0 to +65

Design: Centered disc butterfly valve with elastomer liner. With manual gearbox, electric, hydraulic actuator or counter weight. U-section / double flanged body with flat faces (T5). EN, ASME, JIS connections possible.

Applications: Water supply, water treatment, irrigation, disposal, desalination (reverse osmosis, MSF), industry. Cooling circuits, fire fighting systems, ship-building, steel industry, power stations (water, thermal, nuclear). Shut-off and control duties in all industrial applications.

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

Type series booklets 8612.12 / 8612.178

AMRI centered disc butterfly valves for process engineering

KE PLASTOMER



PN [bar] _____ 10
 DN _____ 40 - 600
 T [°C] _____ -20 to +200

Design: Centered disc butterfly valve with PFA liner. With lever, manual gearbox, pneumatic, electric actuator. Wafer type body (T1), full-lug type body (T4) or U-section body with raised faces (T6). EN, ASME, JIS connections possible.

Applications: 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.

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

Type series booklets 0166.1 / 0166.11

KE ELASTOMER



PN [bar] _____ 10
 DN _____ 40 - 300
 T [°C] _____ -20 to +150

Design: Centered disc butterfly valve with elastomer liner. With lever, manual gearbox, pneumatic, electric or hydraulic actuator. Wafer type body (T1), full-lug type body (T4) or U-section body with raised faces (T6). EN, ASME, JIS connections possible.

Applications: Moderately corrosive and / or abrasive industrial fluids; production of powder products.

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

Type series booklets 0167.1 / 0167.11

Centered disc butterfly valve

BOAX-CBV13



PN _____ 10 / 16
 DN _____ 50 - 1200
 T [°C] _____ -10 to +80

Design: Centered disc butterfly valve, with epoxy or elastomer coated valve disc. Perfect shut-off in either flow direction. Flanged ends to EN standards. Face-to-face length to EN 558/14. Body and valve disc made of nodular cast iron.

Applications: Shut-off or control duties, drinking water, seawater, water supply, treatment, distribution, waste water, irrigation, high-purity water, air, oil.

Type leaflet 8408.51

AMRI high-performance offset disc butterfly valves

DANAIS 150



PN [bar] _____ max. 25
 or Class _____ 150
 DN _____ 50 - 1200
 T [°C] _____ -50 to +260

Design: Double-offset butterfly valve with elastomer seat ring (also in fire-safe design) or metal seat ring. With lever or gearbox, pneumatic or electric or hydraulic actuator. Body made of cast steel or stainless steel. Wafer type body (T1) or full-lug type body (T4). Body type T4 is suitable for dead-end service and downstream dismantling. EN, ASME, JIS connections.

Applications: Petroleum, gas, chemical and petrochemical industry, nuclear power stations, sugar industry, paper industry, geothermal energy, shipbuilding, low-pressure steam, vacuum service. All applications requiring offset disc butterfly valves.

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

Type series booklets 8460.11 / 8460.15

DANAIS 150C



PN [bar] _____ max. 25
 or Class _____ 150
 DN _____ 80 - 800
 T [°C] _____ -5 to +100

Design: Double-offset butterfly valve for marine applications and petroleum products. Elastomer seat ring (FKM VITON R and NBR Nitrile), body made of cast iron or carbon steel. Wafer-type body (T1) or full-lug type body (T4). Body type T4 is suitable for downstream dismantling and dead-end service with counterflange. EN, ASME, JIS connections possible.

Applications: Marine applications, petroleum products.

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

Type series booklet 8460.1215

DANAIS 150T (Marine)



PN [bar] _____ max. 25
 or Class _____ 150
 DN _____ 50 - 450
 T [°C] _____ -50 to +150

Design: Double-offset butterfly valve with elastomer seat ring (also in fire-safe design). With gearbox or hydraulic actuator. Body made of stainless steel. Wafer type body (T1) or full-lug type body (T4). Body type T4 is suitable for dead-end service and downstream dismantling. EN, ASME, JIS connections. Added protection against aggressive environments.

Applications: Shipbuilding, chemical tankers, petroleum, gas, chemical and petrochemical industry. Low-pressure steam, vacuum service. All applications requiring offset disc butterfly valves.

A m, h + AMTROBOX

Type series booklets 8460.12 / 8460.353

DANAIS MTII Class 150



PN [bar] _____ max. 25
 or Class _____ 150
 DN _____ 50 - 600
 T [°C] _____ -50 to +260
 _____ (+380 in HT version)

Design: Double-offset butterfly valve with elastomer or metal seat ring (fire-safe design); without gland follower, maintenance-free. With lever or gearbox, pneumatic, electric or hydraulic actuator. Body made of cast steel or stainless steel. With wafer-type body (T1), full-lug type body (T4) or single-piece double-flanged body (T7) with flat or raised faces. Body types T4 and T7 can be used for dead-end service. EN, ASME, JIS connections. Certification to TA-Luft.

Applications: Petroleum, gas, chemical and petrochemical industry, nuclear power stations, steam, vacuum service. All applications requiring offset disc butterfly valves.

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

Type series booklets 8460.132 / 8460.332

DANAIS MTII Class 300



PN [bar] _____ max. 50
 or Class _____ 300
 DN _____ 50 - 600
 T [°C] _____ -50 to +260
 _____ (+380 in HT version)

Design: Double-offset butterfly valve with elastomer or metal seat ring (fire-safe design); without gland follower, maintenance-free. With lever or gearbox, pneumatic, electric or hydraulic actuator. Body made of cast steel or stainless steel. With wafer type body (T1), full-lug type body (T4) or single-piece double-flanged body (T7) with flat or raised faces. Body types T4 and T7 can be used for dead-end service. EN, ASME, JIS connections. Certification to TA-Luft.

Applications: Petroleum, gas, chemical and petrochemical industry, nuclear power stations, steam, vacuum service. All applications requiring offset disc butterfly valves.

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

Type series booklets 8460.132-10 / 8460.332-90

AMRI high-performance offset disc butterfly valves

DANAIS® 150D



PN [bar] _____ max. 25
 or Class _____ 150
 DN _____ 65 - 600
 T [°C] _____ -29 to +220

Design: Double-offset butterfly valve with plastomer seat ring. Without gland follower; maintenance-free in corrosive fluids. With lever or gearbox, pneumatic, electric or hydraulic actuator. Made of duplex steel (254 SMO). Wafer-type body (T1) or full-lug type body (T4). EN or ASME connections.

Applications: Mining, corrosive fluids, cleaning agents, highly aggressive fluids, brine, paper and pulp industry, fertilisers.

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

Type series booklet 8460.13

DANAIS® 300T



PN [bar] _____ max. 50
 or Class _____ 300
 DN _____ 150 - 400
 T [°C] _____ -50 to +150

Design: Double-offset butterfly valve with plastomer seat ring (also in fire-safe design). With gearbox or hydraulic actuator. Body made of stainless steel. Wafer-type body (T1). ASME connections. Added protection against aggressive environments.

Applications: Shipbuilding, chemical tankers, petroleum, gas, chemical and petrochemical industry. Low-pressure steam, vacuum service. All applications requiring offset disc butterfly valves.

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

Type series booklet 8460.1216

AMRI cryogenic offset disc butterfly valves

DANAIS TBT II (Cryogenic) Side Entry



PN [bar] _____ 10 / 20
 DN _____ 200 - 1050
 T [°C] _____ -250 to +200

Design: Double-offset butterfly valve for cryogenic applications. Stainless steel body with weld ends to ASME. Schedule 40S or STD to NPS. Fire-safe design. Gearbox, pneumatic, electric or hydraulic actuator.

Applications: Liquefied natural gas process chain, all liquefied gases.

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

Type series booklet 8460.1221

DANAIS TBT II (Cryogenic) Flanged



PN [bar] _____ max. 20
 or Class _____ 150
 DN _____ 50 - 1200
 T [°C] _____ -250 to +200

Design: Double-offset butterfly valve for cryogenic applications. Flanged body (T7) made of stainless steel, with raised or flat faces. ASME Class 150, JIS. Fire-safe design. Gearbox, pneumatic, electric or hydraulic actuator.

Applications: Liquefied natural gas process chain, all liquefied gases.

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

Type series booklet 8460.1211

AMRI cryogenic offset disc butterfly valves

DANAÏS TBT II (Cryogenic) AL



PN [bar] _____ 10 / 16
 DN _____ 80 - 600
 T [°C] _____ -200 to +200

Design: Double-offset butterfly valve for cryogenic applications. Full-lug (T4) or flanged (T7) body made of stainless steel, with raised or flat faces. ASME Class 150. Oxygen degreasing. Fire-safe design. Gearbox or pneumatic actuator.

Applications: All liquefied gases.

A m, p + AMTROBOX / AMTRONIC / SMARTRONIC

Type series booklet 8460.1231

TRIODIS® 150



PN [bar] _____ max. 20
 or Class _____ 150
 DN _____ 200 - 1200
 T [°C] _____ -250 to +200

Design: Triple-offset butterfly valve for cryogenic applications. Side entry valve (BWSE) with weld ends to ASME or flanged body (T7) with raised/flat faces. Body made of stainless steel. Connections to ASME schedules 10S, 10, 40S, STD and XS to NPS for weld end butterfly valves, Class 150 for flanged butterfly valves. Fire-safe approval. With gearbox, pneumatic, electric or hydraulic actuator.

Applications: LNG processes. All liquefied gases.

A m, p + AMTROBOX / AMTRONIC / SMARTRONIC

Type series booklet 8465.51

TRIODIS® 300



PN [bar] _____ max. 50
 or Class _____ 300
 DN _____ 150 - 900
 T [°C] _____ -196 to +260

Design: Triple-offset butterfly valve for liquefied natural gas (LNG) transport. Butterfly valve with flanged body (T7) or full-lug type body (T4), with raised/flat faces. Body made of carbon steel or stainless steel. EN or ASME connections. Fire-safe approval.

Applications: LNG processes. All liquefied gases.

A m, p + AMTROBOX / AMTRONIC / SMARTRONIC

Type series booklet 8613.1783

TRIODIS® 600



PN [bar] _____ max. 100
 or Class _____ 600
 DN _____ 200 - 600
 T [°C] _____ -196 to +260

Design: Triple-offset butterfly valve for liquefied natural gas (LNG) transport. With flanged body (T7) or full-lug type body (T4), with raised face. Body made of carbon steel or stainless steel. EN or ASME connections. Fire-safe approval.

Applications: LNG processes. All liquefied gases.

A m, p + AMTROBOX / AMTRONIC / SMARTRONIC

Type series booklet 8613.1786

Double-offset butterfly valves

APORIS-DEB02 / APORIS-DEB02R



PN _____ 10 / 16 / 25 / 40
 DN _____ 150 - 2200
 T [°C] _____ -10 to +80

Design: Double-offset butterfly valve, with epoxy coating or fully vulcanised elastomer coating. Perfect shut-off in either flow direction. Flanged ends to EN standards. Face-to-face length to EN 558/14. Body and valve disc made of nodular cast iron.

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

Type leaflets 8118.51 / 8119.51

AMRI swing check valves

SERIE 2000 - PN 16



PN [bar] _____ max. 16
 DN _____ 50 - 600
 T [°C] _____ -5 to +200

Design: Twin plate check valve, Pressure class PN 16. One-piece body made of grey cast iron. Metal/elastomer seated. Maintenance-free. EN, ANSI, JIS connections possible.

Applications: Heating, air-conditioning, water supply, irrigation, water treatment, etc. Industry: water, air, gas, etc.



Type series booklet 8480.16

SERIE 2000 - PN 25



PN [bar] _____ max. 25
 DN _____ 50 - 600
 T [°C] _____ -18 to +343

Design: Twin plate check valve, Pressure class PN 25. One-piece body made of ductile iron. Metal/elastomer or metal/metal seated. Maintenance-free. EN, ANSI, JIS connections possible.

Applications: Heating, air-conditioning, water supply, irrigation, water treatment, etc. Industry: water, air, gas, etc.

Type series booklet 8480.12

SERIE 2000 - Class 150



PN [bar] _____ max. 20
 or Class _____ 150
 DN _____ 50 - 600
 T [°C] _____ -196 to +538

Design: Twin plate check valve, Pressure class Class 150. One-piece body made of carbon steel, stainless steel or aluminium-bronze. Metal/elastomer or metal/metal seated. Maintenance-free. EN, ANSI, JIS connections possible.

Applications: In process engineering, chemical and petrochemical industry, sugar industry, paper industry, water supply, seawater desalination. Shipbuilding and marine applications: water, air, gas, hydrocarbons, etc. General industrial circuits: water, compressed air, gas, etc.

Type series booklet 8485.15

AMRI swing check valves

SERIE 2000 - Class 300



PN [bar] _____ max. 50
 or Class _____ 300
 DN _____ 50 - 300
 T [°C] _____ -196 to +538

Design: Twin plate check valve, Pressure class Class 300. One-piece body made of carbon steel, stainless steel or aluminium-bronze. Metal/elastomer or metal/metal seated. Maintenance-free. EN, ANSI, JIS connections possible.

Applications: In process engineering, chemical and petrochemical industry, sugar industry, paper industry; water supply, seawater desalination.
 Shipbuilding and marine applications: water, air, gas, hydrocarbons, etc. General industrial circuits: water, compressed air, gas, etc.

Type series booklet 8485.13

Gearboxes for 1/4-turn valves

MA



Output torques _____ max. 250 Nm
 Enclosure _____ IP65

Design: Manual actuators for the operation of quarter-turn valves. MA range manual gearbox, irreversible planetary gear kinematics, operation by handwheel.

Applications: Building services, industrial processes.

A

Type series booklet 8505.13

MN



Output torques _____ max. 800 Nm
 Enclosure _____ IP65

Design: Manual actuators for the operation of quarter-turn valves. MN range manual gearbox, worm gear kinematics, operation by handwheel.

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

A

Type series booklet 7290.1

MR



Output torques _____ max. 16000 Nm
 Enclosure _____ IP68
 T [°C] _____ -20 to -80
 Low-temperature version: -50

Design: Heavy-duty manual actuators for the operation of quarter-turn valves. MR range manual gearbox, irreversible worm gear or scotch-yoke kinematics. Standard operation by handwheel. Models MR 400 to 1600 can be retrofitted with electric actuators. Options include alternative operating mechanisms, limit switches, low-temperature version, etc.

Applications: Building services, industry and process engineering, water, waste water, energy, oil and gas, mining and dredging, shipbuilding.

A AMTROBOX

Type series booklet 8505.12

Pneumatic actuators for 1/4-turn valves

ACTAIR



Output torques — max. 17600 Nm
at a control pressure of 6 bar
Enclosure — IP67
T [°C] — -20 to +80
Low-temperature version: -40°C

Design: Double-acting pneumatic actuator for mounting on quarter-turn valves (butterfly valves or ball valves). Top flange to ISO 5211. Control pressure up to 8 bar. Can be mounted on various types of valve stem ends (square end, flat end or key). Force transmission via rack-and-pinion, scotch-yoke or patented Amri yoke kinematics provides output torques of up to 17600 Nm which are ideal for actuating quarter-turn valves. ACTAIR is equipped with a visual position indicator and adjustable travel stops for open/closed position as standard. Manual override can be provided on request. For automated valve actuation, ACTAIR can be combined with AMTROBOX, AMTRONIC, SMARTRONIC or any other control unit with VDI/VDE 3845 interface.

Applications: All applications in water, energy and industrial engineering.

A AMTROBOX / AMTRONIC / SMARTRONIC

Type series booklet 8515.1

ACTAIR-B



Output torques — max. 400 Nm
at a control pressure of 6 bar
Enclosure — IP67

Design: Double-acting pneumatic scotch-yoke actuator for mounting on BOAX-B DN 40-300 butterfly valves. Visual position indicator and travel stop for closed position as standard. For automated valve actuation, ACTAIR-B can be combined with AMTROBOX, AMTRONIC, SMARTRONIC or any other control unit with VDI/VDE 3845 interface.

Applications: Water, general industry.

A AMTROBOX C / AMTRONIC / SMARTRONIC

DYNACTAIR



Output torques — max. 8800 Nm
at a control pressure of 6 bar
Enclosure — IP65
T [°C] — -20 to +80
Low-temperature version: -40 °C

Design: Single-acting pneumatic actuator for mounting on quarter-turn valves (butterfly valves or ball valves). Top flange to ISO 5211. Control pressure up to 8 bar. Can be mounted on various types of valve stem ends (square end, flat end or key). Force transmission via rack-and-pinion, scotch-yoke or patented Amri yoke kinematics provides output torques of up to 8800 Nm which are ideal for actuating quarter-turn valves. Reset to fail-safe position is effected by means of spring assemblies if control air supply is interrupted. DYNACTAIR is equipped with a visual position indicator and adjustable travel stops for open/closed position as standard. Manual override can be provided on request (up to DYNACTAIR 100). For automated valve actuation, DYNACTAIR can be combined with AMTROBOX, AMTRONIC, SMARTRONIC or any other control unit with VDI/VDE 3845 interface.

Applications: All applications in water, energy and industrial engineering.

A AMTROBOX / AMTRONIC / SMARTRONIC

Type series booklet 8511.1

DYNACTAIR-B



Output torques — max. 400 Nm
at a control pressure of 6 bar
Enclosure — IP67

Design: Single-acting pneumatic scotch-yoke actuator for mounting on BOAX-B DN 40-300 butterfly valves. Visual position indicator and travel stop for closed position as standard.

For automated valve actuation, DYNACTAIR-B can be combined with AMTROBOX, AMTRONIC, SMARTRONIC or any other control unit with VDI/VDE 3845 interface.

Applications: Water, general industry.

A AMTROBOX C / AMTRONIC / SMARTRONIC

Hydraulic actuators for 1/4-turn valves

ACTO



Output torques — max. 125000 Nm
 Enclosure — IP68
 T [°C] — -20 to +80
 Low-temperature version: -50 °C

Design: Double-acting hydraulic actuator for mounting on quarter-turn valves (butterfly valves or ball valves). Top flange to ISO 5211. Control pressure up to 120 bar. Can be mounted on various types of valve stem ends (square end, flat end or key). Force transmission via rack-and-pinion, scotch-yoke or patented Amri yoke kinematics provides output torques of up to 125000 Nm which are ideal for actuating quarter-turn valves. ACTO is equipped with a visual position indicator and adjustable travel stops for open/closed position as standard. Manual override can be provided on request. The following accessories are available for hydraulic control: - Shut-off valve - Hydraulic locking - Emergency shutdown (ESD)
 ACTO can be combined with all AMTROBOX control units.

Applications: All applications in water, energy and industrial engineering.

A AMTROBOX

Type series booklet 8506.1

DYNACTO



Output torques — max. 4000 Nm
 Enclosure — IP68

Design: Single-acting hydraulic actuator for mounting on quarter-turn valves (butterfly valves or ball valves). Top flange to ISO 5211. Control pressure up to 120 bar. Can be mounted on various types of valve stem ends (square end, flat end or key). Force transmission via rack-and-pinion, scotch-yoke or patented Amri yoke kinematics provides output torques of up to 4000 Nm which are ideal for actuating quarter-turn valves. Reset to fail-safe position is effected by means of spring assemblies if control fluid supply is interrupted. DYNACTO is equipped with a visual position indicator and adjustable travel stops for open/closed position as standard. Manual override can be provided on request (up to DYNACTO 100). The following accessories are available for hydraulic control: - Shut-off valve - Hydraulic locking - Emergency shutdown (ESD) - Hydraulic hand pump
 DYNACTO can be combined with all AMTROBOX control units.

Applications: All applications in water, energy and industrial engineering.

A AMTROBOX

Type series booklet 8556.11

ENNACTO



Output torques — max. 16000 Nm

Design: Single-acting hydraulic actuator for mounting on quarter-turn valves (butterfly valves or ball valves). Top flange to ISO 5211. Control pressure up to 120 bar. Can be mounted on various types of valve stem ends (square end, flat end or key). Force transmission via rack-and-pinion, scotch-yoke or patented Amri yoke kinematics provides output torques of up to 16000 Nm which are ideal for actuating quarter-turn valves. Reset to fail-safe position is effected by means of a pressurised nitrogen cartridge if control fluid supply is interrupted. ENNACTO is equipped with a visual position indicator and adjustable travel stops for open/closed position as standard. The following accessories are available for hydraulic control: - Hydraulic hand pump
 ENNACTO can be combined with all AMTROBOX control units.

Applications: All applications in water, energy and industrial engineering.

A AMTROBOX

Type series booklet 8560.11

Electric actuators for 1/4-turn valves

ACTELEC quarter-turn actuator (BERNARD CONTROLS, SD series)



Type _____ OA3 - BS100
 direct 1/4-turn
 Output torques _____ max. 1000 Nm
 Enclosure _____ IP67

Design: Electric quarter-turn actuator by BERNARD CONTROLS for direct mounting on butterfly valves or ball valves. Top flange to ISO 5211. Power supply: single-phase a.c., three-phase or d.c. With torque limitation, travel stop and open/closed position signalling as standard. For On/Off control and throttling duties. With integrated local control or remote control.

Applications: All applications in water, energy and industrial engineering.

A

Type series booklet 8521.12

ACTELEC quarter-turn actuator (BERNARD CONTROLS, LE series)



Type _____ LEA LEB
 direct 1/4-turn
 Output torques _____ max. 100 Nm
 Enclosure _____ IP65

Design: Electric quarter-turn LE series actuator by BERNARD CONTROLS for direct mounting on butterfly valves or ball valves. Top flange to ISO 5211. Power supply: single-phase a.c. With torque limitation, travel stop and open/closed position signalling as standard. For On/Off control. With integrated local control or remote control.

Applications: All applications in water, energy and industrial engineering.

A

Type series booklet 8521.16

ACTELEC quarter-turn actuator (AUMA, SG series)



Type _____ SG05.1 - SG12.1
 direct 1/4-turn
 Output torques _____ max. 1200 Nm
 Enclosure _____ IP67

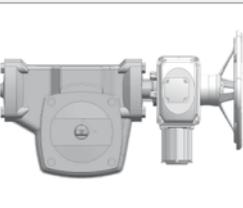
Design: Electric quarter-turn actuator by AUMA for direct mounting on butterfly valves or ball valves. Top flange to ISO 5211. Power supply: single-phase a.c., three-phase or d.c. With torque limitation, travel stop and open/closed position signalling as standard. For On/Off control and throttling duties. With integrated local control or remote control.

Applications: All applications in water, energy and industrial engineering.

A

Type series booklet 8521.14

ACTELEC multi-turn actuator (BERNARD CONTROLS)



Type _____ 31 - 800
 multiturn
 Output torques _____ max. 8000 Nm
 Enclosure _____ IP67

Design: Electric multi-turn actuator by BERNARD CONTROLS with MR reducer for direct mounting on butterfly valves or ball valves. Top flange to ISO 5211. Power supply: single-phase a.c., three-phase or d.c. With torque limitation, travel stop and open/closed position signalling as standard. For On/Off control and throttling duties. With integrated local control or remote control.

Applications: All applications in water, energy and industrial engineering.

A

Type series booklet 8521.15

ACTELEC multi-turn actuator (AUMA)



Type _____ 31-1600
 multiturn
 Output torques _____ max. 16000 Nm
 Enclosure _____ IP67

Design: Electric multi-turn actuator by AUMA with MR reducer for direct mounting on butterfly valves or ball valves. Top flange to ISO 5211. Power supply: single-phase a.c., three-phase or d.c. With torque limitation, travel stop and open/closed position signalling as standard. For On/Off control and throttling duties. With integrated local control or remote control.

Applications: All applications in water, energy and industrial engineering.

A

Type series booklet 8521.13

Control accessories for 1/4-turn valves

Manual override



Enclosure _____ IP65
T [°C] _____ -20 to +80

Design: ACTAIR 3 to 1600 double-acting pneumatic actuators and DYNACTAIR 1.5 to 100 spring-return pneumatic actuators, as well as ACTO 25 to 1600 double-acting and DYNACTO 12 to 100 spring-return hydraulic actuators can be fitted with a manual override using a declutchable gear operator with handwheel. The manual override is mounted between the valve and the actuator. It has priority over the pneumatic or hydraulic actuator and is locked either in clutched or declutched position using the locking device.

A

Type series booklet 5350.1

Counterweight actuator



DN _____ 600 - 3000

Design: Single-acting, hydraulically operated counterweight actuator. Remote control via hydraulic system and electric control cabinet. For actuating valves from DN 600 to DN 3000.

Applications: Pumping stations, power station cooling circuits, protection of pipelines and turbines.

A

Type series booklet 8901.1

Valve automation: monitoring

AMTROBOX M



Enclosure _____ IP65
T [°C] _____ -20 to +80

Design: Specially designed for manual actuation. For open/closed position signalling on on/off valves via mechanical limit switches or proximity sensors.

AMTROBOX M is mounted directly on the S series of quarter-turn levers (R1020) and manual reducer types MA 12 and MA 25 (R1021).

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

A

Type series booklet 8523.1

AMTROBOX C



Enclosure _____ IP65
T [°C] _____ -20 to +80

Design: Cost-effective solution for open/closed position signalling on on/off valves via mechanical limit switches or proximity sensors.

AMTROBOX C (RA01290) is mounted directly on the pneumatic actuators of the ACTAIR / ACTAIR-B series, on reducer type MR VDI/VDE and BOAX-B Mat P.

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

A

Type series booklet 8525.178

AMTROBOX / AMTROBOX EEx-ia



Enclosure _____ IP67
T [°C] _____ -20 to +80

Design: Multi-functional control unit for open/closed position signalling on on/off valves via mechanical limit switches or proximity sensors.

AMTROBOX (R1149) is mounted directly on reducer type MR, the pneumatic actuators of the ACTAIR series and the hydraulic actuators of the ACTO series.

AMTROBOX EEx ia (R1172): intrinsically safe version for potentially explosive atmospheres.

AMTROBOX ATEX (X1140, X1149): ATEX version for potentially explosive dust atmospheres (Zone 22).

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

A

Type series booklet 8526.12

AMTROBOX R / AMTROBOX R EEx-ia / AMTROBOX R Exd



Enclosure _____ IP68
T [°C] _____ -20 to +80
Low-temperature version: -50 °C

Design: Heavy-duty multi-functional monitoring unit for position signalling on valves via mechanical limit switches or proximity sensors.

AMTROBOX R (R1187) mounts directly on reducer type MR, pneumatic actuators of the ACTAIR series and hydraulic actuators of the ACTO series, and on any type of actuator with VDI/VDE interface.

AMTROBOX R EEx ia (R1188): intrinsically safe version, for potentially explosive atmospheres (Zone 0.20). AMTROBOX R Exd (R1189): explosion-proof model for potentially explosive atmospheres.

Applications: Water and energy engineering, offshore applications and heavy industries.

A

Type series booklet 8525.11

AMTROBOX S



Enclosure _____ IP67 / IP65
T [°C] _____ -20 to +80

Design: Robust control unit with manual override for pneumatic actuators (max. 250 Nm). Open/closed position signalling on on/off valves via mechanical limit switches.

AMTROBOX S is mounted directly on the pneumatic actuators of the ACTAIR series and the hydraulic actuators of the ACTO series.

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

A

Type series booklet 8525.13

Valve automation: ON/OFF controllers

AMTRONIC



Enclosure _____ IP67
 Service air pressure _____ 8 bar
 T [°C] _____ -20 to +80

Design: AMTRONIC is an ON/OFF valve controller suitable for mounting to ACTAIR/DYNACTAIR pneumatic actuators from KSB with direct compressed air supply, or to any type of quarter-turn actuator with VDI/VDE 3845 interface and linear actuators with NAMUR interface. It offers integrated position signalling and compressed air supply, providing a rugged, compact and integrated solution. Its integrated directional control valve eliminates the need for any pneumatic piping between AMTRONIC and the actuator. The actuating times are set via AMTRONIC's air flow reducer. AMTRONIC can be connected to Profibus DP or AS-i field buses.

Applications: All applications in water, energy and industrial engineering.

A

Type series booklet 8514.837

AMTRONIC Ex ia



Enclosure _____ IP67
 Service air pressure _____ 8 bar
 T [°C] _____ -10 to +50

Design: AMTRONIC Ex ia (R1301) is an ON/OFF valve controller suitable for mounting to ACTAIR/DYNACTAIR pneumatic actuators from KSB with direct compressed air supply, or to any type of quarter-turn actuator with VDI/VDE 3845 interface and linear actuators with NAMUR interface. It offers integrated position signalling and compressed air supply, providing a rugged, compact and integrated solution. Owing to its intrinsically safe design, AMTRONIC Ex ia can be operated in potentially explosive atmospheres. It complies with ATEX directive 94/9/EC and is CE-marked to CE 0081 Ex II 1 G. The unit is certified to EEx ia IIC T6 as per the EN 50014 and EN 50020 standards.

Applications: All applications in water, energy and industrial engineering.

A

Type series booklet 8514.838

Valve automation: positioners

SMARTRONIC MA



Enclosure _____ IP67
 Service air pressure _____ 8 bar
 T [°C] _____ -20 to +80

Design: SMARTRONIC MA (R1310) is a digital electro-pneumatic positioner powered via the 4-20 mA signal. It is suitable for mounting to ACTAIR / DYNACTAIR actuators from KSB with direct compressed air supply, or to any type of quarter-turn actuator with VDI/VDE 3845 interface and linear actuators with NAMUR interface. SMARTRONIC MA reduces investment, commissioning and operating costs as the unit consumes no air while idle.

Applications: All applications in water, energy and industrial engineering.

A

Type series booklet 8520.803

SMARTRONIC Ex ia



Enclosure _____ IP67
 Service air pressure _____ 8 bar
 T [°C] _____ -10 to +50

Design: SMARTRONIC MA (R1311) is a digital electro-pneumatic positioner powered via the 4-20 mA signal. It is suitable for mounting to ACTAIR / DYNACTAIR actuators from KSB with direct compressed air supply, or to any type of quarter-turn actuator with VDI/VDE 3845 interface and linear actuators with NAMUR interface. Owing to its intrinsically safe design, SMARTRONIC Ex ia can be operated in potentially explosive atmospheres. It complies with ATEX directive 94/9/EC and is CE-marked to CE 0081 Ex II 1 G. The unit is certified to EEx ia IIC T6 as per the EN 50014 and EN 50020 standards.

Applications: All applications in water, energy and industrial engineering.

A

Type series booklet 8520.804

Valve automation: positioners

SMARTRONIC AS-I



Enclosure _____ IP67
 Service air pressure _____ 8 bar
 T [°C] _____ -20 to +80

Design: SMARTRONIC AS-I (R1313) is a digital electro-pneumatic positioner for connection to an AS-i field bus. It is certified by AS International. The unit is suitable for mounting to ACTAIR/DYNACTAIR actuators from KSB with direct compressed air supply or to any type of quarter-turn actuator with VDI/VDE 3845 interface and linear actuators to NAMUR.

Applications: All applications in water, energy and industrial engineering.

A

Type series booklet 8520.806

Valve automation: smart controller

SMARTRONIC PC



Enclosure _____ IP67
 Service air pressure _____ 8 bar
 T [°C] _____ -20 to +80

Design: SMARTRONIC PC (R1312) is an intelligent, compact and innovative positioner. The integrated control functions offered by this multi-functional control unit enable the latest in open and closed-loop control technology for valves. The unit attaches directly to an ACTAIR or DYNACTAIR actuator with no need for a bracket or external piping, providing a rugged, compact and integrated solution.

SMARTRONIC PC offers four functions: - Programmable curves for valve opening and closing - Intelligent positioning - Process monitoring - Closed-loop control

SMARTRONIC PC is PC programmable and can be connected to a Profibus DP field bus.

Applications: All applications in water, energy and industrial engineering.

A

Type series booklet 8520.805

SISTO diaphragm valves

SISTO-KB / SISTO-KBS



PN _____ 10
 DN _____ 15 - 200
 T [°C] _____ -20 to +140
 S = short face-to-face length

Design: Flanged end diaphragm valve; shut-off and sealing to atmosphere by diaphragm; straight-way pattern, body with or without lining, position indicator with integrated stem protection. DN125-200 with threaded bush. All moving parts are separated from the fluid by the diaphragm. Maintenance-free.

Applications: In building services, industrial plants, power stations; suitable for abrasive and aggressive products such as service water, waste water, acids, alkaline solutions, sludges and suspensions.

A m, e, p

Type series booklets 8651.1 / 8651.101

SISTO-10 / SISTO-10S



PN _____ 10
 DN _____ 15 - 300
 T [°C] _____ -20 to +140
 S = short face-to-face length
 (DN 15 / 200)

Design: Flanged end diaphragm valve; shut-off and sealing to atmosphere by spiral-supported diaphragm (DN 65 and above). Body with or without lining. Position indicator with integrated stem protection. All moving parts are separated from the fluid by the diaphragm. Maintenance-free.

Applications: In industrial and chemical plants, in process engineering. Suitable for service water, air, oil as well as abrasive and aggressive fluids.

A m, e, p

Type series booklets 8641.1 / 8641.101

SISTO-10M



PN _____ 10
 DN _____ 15 - 80
 T [°C] _____ -10 to +140
 M = threaded sockets

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

Applications: In industrial and chemical plants, in process engineering. Suitable for service water, air, oil as well as abrasive and aggressive fluids.

A m, e, p

Type series booklet 8641.102

SISTO-16 / SISTO-16S



PN _____ 16
 DN _____ 15 - 200
 T [°C] _____ -20 to +160
 S = short face-to-face length

Design: Flanged end diaphragm valve; shut-off and sealing to atmosphere by completely enclosed spring-supported diaphragm. Body with or without lining. Position indicator with integrated stem protection. All moving parts are separated from the fluid by the diaphragm. Maintenance-free.

Applications: In building services, industrial plants and power stations; suitable for drinking water, service water, air, oil, technical gases, from fluids handled in the food and beverages industry to abrasive and aggressive products in chemical and process engineering.

A m, e, p

Type series booklets 88635.1 / 8635.101

SISTO-16RGA



PN _____ 16
 DN _____ 15 - 80
 NPS _____ 1/2"-3"
 T [°C] _____ -10 to +90

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

Applications: Drinking water, particularly drinking water installations to DIN 1988, seawater, service water of any quality.

A m

Type series booklet 8638.1

SISTO diaphragm valves

SISTO-16TWA/HWA/DLU



PN _____ 16
 DN _____ 15 - 200
 T [°C] _____ -10 to +90

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

Applications: 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): service water of any quality. SISTO-16DLU (compressed air up to 90°C): compressed air with oil content, oils and technical gases.

A m, e, p

Type series booklet 8635.33

SISTO-20



PN _____ 16
 DN _____ 15 - 200
 T [°C] _____ -20 to +160

Design: Flanged end diaphragm valve; shut-off and sealing to atmosphere by completely enclosed spiral-supported diaphragm. Body with or without lining. Position indicator with integrated stem protection. All moving parts are separated from the fluid by the diaphragm. Maintenance-free.

Applications: In building services, industrial plants and power stations; suitable for drinking water, service water, air, oil, technical gases, from fluids handled in the food and beverages industry to abrasive and aggressive products in chemical and process engineering.

A m, e, p

Type series booklet 8643.1

SISTO-C



PN _____ 16
 DN _____ 6 - 100
 T [°C] _____ -10 to +160

Design: Diaphragm valve with weld ends or clamps; straight-way, Y- or T-pattern, manually or pneumatically operated; shut-off and sealing to atmosphere by completely enclosed diaphragm. No dead volumes, suitable for sterilisation, CIP and SIP compliant design, visual position indicator. All moving parts are separated from the fluid by the diaphragm. Maintenance-free.

Applications: Biotechnology, pharmaceutical industry, sterile processes, food and beverage industry.

A m, p

Type series booklet 8644.1

SISTO check valve

SISTO-RSK / SISTO-RSKS



PN _____ 16
 DN _____ 25 - 150
 T [°C] _____ -20 to +120

Design: Flanged end swing check valve with or without lining, soft-seated, no dead volumes; in straight-way pattern with slanted seat; with internal hinge pin and soft rubber coated disc.

Applications: In building services, industrial plants and power stations; suitable for drinking water, service water, from fluids handled in the food and beverages industry to abrasive and aggressive products in chemical and process engineering.

Type series booklet 8675.1

Pneumatic actuators for SISTO diaphragm valves

SISTOMAT-PC



Service air pressure — max. 6 bar
Closing force — max. 20000 N

Design: SISTOMAT-PC type LAD

Pneumatic diaphragm actuator, compact design, for direct installation on valves. Available in single-acting design with opening / closing spring or in double-acting design; suitable for mounting limit switches or positioners to suit customer requirements, factory-mounted. Settings are adjusted during factory test run.

Applications: In building services, industrial plants, power stations; suitable for abrasive and aggressive products such as service water, waste water, acids, alkaline solutions, sludges and suspensions.

A

Type series booklets 8651.1 PC / 8641.1 PC / 8635.1 PC

MAT-P



Service air pressure — max. 10 bar
Closing force — max. 100000 N

Design: MAT-P type LAP

Pneumatic piston actuator in heavy duty design for industrial use on globe and gate valves, DIN/ISO 5210 mounting flange. Available in single-acting design with opening / closing spring or in double-acting design; suitable for mounting limit switches or positioners to suit customer requirements, factory-mounted. Settings are adjusted during factory test run.

Applications: Pneumatic piston actuators are designed for valves with a linear stem movement (globe, diaphragm and gate valves). They are suitable for building services, industrial plants, power stations, the food and beverages industries and the chemical industry. Pneumatic actuators can also be used in potentially explosive atmospheres.

A

Type series booklet 9210.1

SISTOMAT-P type LAP for SISTO-C



Service air pressure — max. 10 bar
Closing force — max. 20000 N

Design: SISTOMAT-P type LAP

Pneumatic piston actuator, in high-grade stainless steel design for use on SISTO-C diaphragm valves, available in single-acting design with opening/closing spring or in double-acting design. Suitable for mounting limit switches or positioners to suit customer requirements, factory-mounted. Settings adjusted during factory test run.

Applications: Biotechnology, pharmaceutical industry, sterile processes, food and beverage industry.

A

Type series booklet 8644.1

Electric actuators for SISTO diaphragm valves

SISTOMAT-E



Type — AUMA
Output torques — max. 250 Nm
Enclosure — IP67

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

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

A

Type series booklet 8644.1

Ball valves

PSA-KHG



PN 16/25/40/63/100/160/250
 DN 15 - 1200
 T [°C] -60 to +250

Design: Flanges (DIN/ASME), butt weld ends, socket weld or threaded ends, metal-seated primary seal, soft secondary seal, double block and bleed, fully welded design, with lever or gearbox.

Optional: Polyurethane coating, emergency seal, pneumatic or electric actuators, split body (bolted).

Applications: Gases to DVGW Worksheet G260/I and II and combustible liquids, general industry, petrochemical industry and all related industries, power stations, gas lines and gas plants, refineries, pipelines, gas storage facilities, tank farms.

Type series booklets 8301.11 - 8301.15

PSA-KHG W



PN 16 / 25 / 40
 DN 15 - 500
 T [°C] -60 to +250

Design: Flanges (DIN/ASME), butt weld ends, socket weld or threaded ends, seat rings made of PTFE, sealing on the downstream side, fully welded design, with lever or gearbox.

Optional: Polyurethane coating, pneumatic or electric actuators.

Applications: Gases to DVGW Worksheet G260/I and II and combustible liquids, general industry, power stations, gas lines and gas plants, gas storage facilities.

Type series booklet 8301.16

PSA-KHG M



PN 16 / 25 / 40 / 63 /
 100 / 160 / 250
 DN 15 - 500
 T [°C] -60 to +250

Design: Flanges (DIN/ASME), all-metal seated, sealing on the upstream and downstream side, with lever or gearbox.

Optional: Polyurethane coating, pneumatic or electric actuators.

Applications: Gases to DVGW Worksheet G260/I and II and combustible liquids, general industry, petrochemical industry and all related industries, power stations, gas lines and gas plants, refineries, pipelines, gas storage facilities, tank farms.

Type series booklet 8301.17

ECOLINE BLC 1000



Pressure class 1000 WOG
 DN ¼" - 4"
 8 - 100
 T [°C] -10 to +200

Design: 3-piece body, full bore, floating ball concept, threaded ends (NPT), butt or socket weld ends, plastomer sealing (also in fire-safe variant). Design as per ASME B 16.34 / ISO 17292.

Applications: General industry, power stations, chemical and petrochemical industry and all associated branches of industry. Paper industry, food industry, pharmaceutical industry.

A m, p

Type series booklet 8222.53

ECOLINE BLT 150-300



Class 150 / 300
 DN ½" - 12"
 15 - 300
 T [°C] -10 to +200

Design: 2-piece body, full bore, floating ball concept, flanged (RF), plastomer sealing (also in fire-safe variant). With lever or gearbox, pneumatic or electric actuator. Design as per ASME B 16.34.

Applications: General industry, power stations, chemical and petrochemical industry and all associated branches of industry. Paper industry, food industry, pharmaceutical industry.

A m, p

Type series booklet 8222.51

Ball valves

ISO F14 A/AC (available in selected countries only)



PN _____ 20/50/100
 DN _____ 1/2"-12"
 T [°C] _____ -29 to +250

Design: Two-piece ANSI ball valve with full bore. Flanged end long or short body, plastomer sealing (also in fire-safe variant). With lever or gearbox, pneumatic or electric actuator. ASME Class 150, Class 300, Class 600 connections possible.

Applications: General industry, power stations, chemical and petrochemical industry and all associated branches of industry. Paper industry, food industry, pharmaceutical industry.

A m, p + AMTROBOX / AMTRONIC

Type series booklets 8227.1 / 8226.21

ISO F14 D (available in selected countries only)



PN _____ 10 / 16 / 25 / 40 / 63 / 100
 DN _____ 15 - 300
 T [°C] _____ -10 to +250

Design: Two-piece DIN ball valve with full bore. Flanged end long or short body, plastomer sealing (also in fire-safe variant). With lever or gearbox, pneumatic or electric actuator.

Applications: General industry, power stations, chemical and petrochemical industry and all associated branches of industry. Paper industry, food industry, pharmaceutical industry.

A m, p + AMTROBOX / AMTRONIC

Type series booklets 8226.1 / 8226.21

ISO VU (available in selected countries only)



PN _____ 16 / 70
 DN _____ 1/4"-4"
 T [°C] _____ -10 to +250

Design: Three-piece ball valve with full or reduced bore, plastomer sealing. With lever or gearbox, pneumatic or electric actuator. Connection options: BSP or NPT thread, socket or butt weld ends.

Applications: General industry, power stations, chemical, paper, food, pharmaceutical industries.

A m, p + AMTROBOX / AMTRONIC

Type series booklets 8224.1 / 8226.21

MP-CI / MP-II



PN _____ 16
 DN _____ 15 - 150
 T [°C] _____ -10 to +200

Design: Ball valve, wafer-type body made of Kanigen-treated carbon steel (MP/CI) or all-stainless steel (MP/II), stainless steel ball and PTFE+graphite seat.

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

Type leaflet 7254.1-10

Accessories

ECOLINE GE1/GE2/GE3



PN _____ 16
 DN _____ 1" - 300
 T [°C] _____ -10 to +100

Design: Expansion and anti-vibration joint made of EPDM rubber (GE2) or NBR (GE3) with nickel-plated carbon steel flanges, EPDM body with threaded ends (GE1).

Applications: Irrigation systems, domestic water supply, air-conditioning systems, cooling circuits, food and beverages industry, water treatment, water supply systems.

Type leaflet 7249.1-10

ECOLINE GE4



PN _____ 16
 DN _____ 20 - 200
 T [°C] _____ -10 to +100

Design: Anti-vibration joint with EPDM body. Flanges to EN standards.

Applications: Irrigation systems, domestic water supply, air-conditioning systems, cooling circuits, food and beverages industry, water treatment, water supply systems.

Type leaflet 7250.1-10

DJ03



PN _____ 10 / 16 / 25
 DN _____ 40 - 1600
 T [°C] _____ -10 to +70

Design: Dismantling joint, three flanges, body made of nodular cast iron, bolting made of galvanised carbon steel.

Applications: For water plants, clean water, drinking water.

Type leaflet 9200.52-10



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