



More than just a supplier.



## Check Valves

## Versions

# Siekmann Econosto – product excellence and much more

We are a highly motivated, experienced team that sees itself as a manufacturer and problem solver with a focus on 100% precision. Relationship based on partnership and fair treatment of customers, employees and other business partners is a top priority for us. We advise our domestic and international customers and supply them with our high-quality valves for plant, pipeline and boiler construction. Our customers include operators of power plants, oil and gas plants and chemical plants. We also offer flexible, reliable and sustainable solutions for special customer requirements.

### DIN Valves

The series of DIN Valves developed by Siekmann Econosto also includes high-quality Check Valves. These are available in a wide range of variants and designs and conform to the Pressure Equipment Directive (PED), AD 2000 Merkblätter, TA-Luft & DIN EN ISO 15848 as well as the factory standards and technical regulations of plant operators and construction companies.



with Lever & Weight

with Lever & Weight

Steel

2[66]

Stainless steel

2[66]

## Product description

# Applications, approvals and descriptions

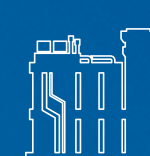
From the selection and use of materials to production, testing and inspection, the Check valves conform to the European Pressure Equipment Directive and applicable standards.



Power plants



Oil and  
gas plants



Petrochemical and  
chemical plants

The requirements of the European Pressure Equipment Directive (PED) 2014/68/EU and the German AD 2000-A4 Merkblatt, including the manufacturer certification in accordance with AD 2000-HPO, as well as approval of the semi-

finished manufacturer in accordance with AD 2000-WO are complied with in full. The gas-gaskets and gland packings are certified in accordance with TA-Luft & DIN EN ISO 15848.



Pressure Equipment Directive  
Module H1

DIN EN ISO 9001:2015

AD 2000-HPO & DIN EN 3834

AD 2000-WO



## Idea & Engineering

# We provide solutions Always innovative. Always tailor-made.

The Siekmann Econosto product series of DIN Check Valves was developed to meet the highest requirements for applications in industrial process plants, oil and gas systems and the petrochemical, chemical and power plant technology.

## Check Valves

### Production and testing



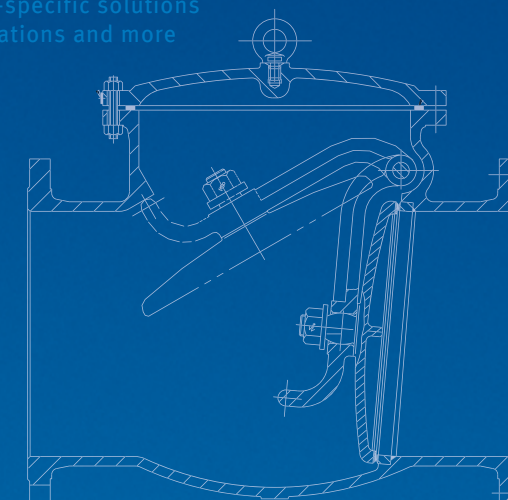
The pressure bearing components made from cast steel, such as the body and bonnet, comply with the requirements for the casting process in accordance with AD 2000-A4 Merkblatt. The casting quality is certified and documented in accordance with DIN 1690 T10.

## Check Valves

### Design and special features



The Valves are designed and constructed in accordance with the current European regulations and the specific requirements of the AD 2000 Merkblätter. The construction is designed in accordance with DIN EN 12516. The face-to-face dimension has been specified in accordance with DIN EN 588 and DIN EN 1092 has been implemented for the flange dimensions.



## Customer-specific solutions

# Modifications and more

Thanks to our qualified employees and modern, flexible production and testing equipment, we can materialize all types of modifications on our valves. In short: We adapt our valves to meet the customer's requirements. The high level of quality and flexibility assure a tailor-made, reliable and finely tuned result. Special solutions / modifications include:

- > Product engineering
- > CAD development
- > Work preparation
- > Inspection and test plans
- > Production control
- > As-built documentation

Our quality management and our comprehensive range of inspection and testing devices ensure that your modified valves conform with all applicable standards and statutory regulations. Our special solutions include:

- > Special machining of welding ends
- > Production and conditioning of valves for use in pure oxygen

In addition, we offer comprehensive, professional testing services, such as:

- > Shell, tightness and functional testing
- > Spectroscopic analysis of alloy elements (PMI test)
- > Testing of surface characteristics with magnetic particle and liquid penetrant inspection (MT & PT)
- > Volumetric testing by means of ultrasonic and X-ray (UT & RT)
- > Hardness and roughness testing on surfaces of functionally relevant components

For inspections, maintenance, repairs and other services on site, our professional service team is available to you quickly and at any time with state-of-the-art, mobile special equipment.



## Technical data Materials

### Note

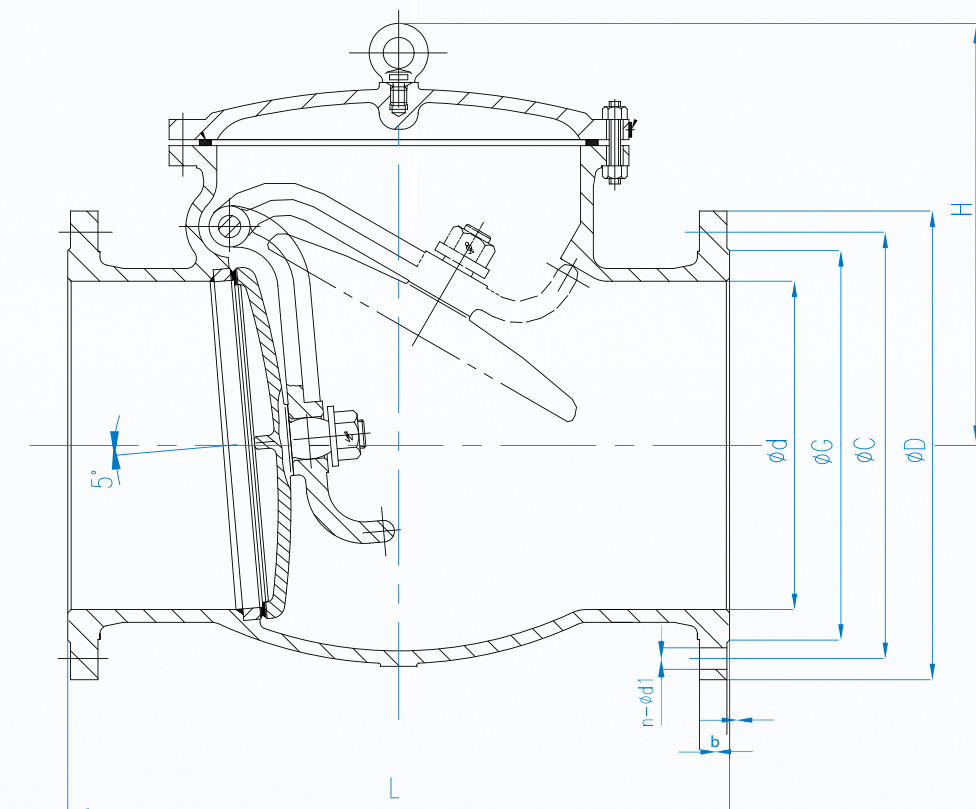
The table below shows standard material combinations.  
Other materials and material combinations can be supplied  
on request!

Name	Carbon steel	Stainless steel
Body	1.0619	1.4408
Body Seat	Stellite 6	Stellite 6
Bonnet	1.0619	1.4408
Gasket	Spiralwound graphite	Spiralwound graphite
Bolt	1.7218	A4-70
Nut	1.7218	A4
Disc	1.0619	1.4408
Shaft	13Cr	Stainless Steel
Hinge	1.0619	1.4408
Name Plate	Stainless steel	Stainless steel
Rivet	Stainless steel	Stainless steel
Gland Flange	1.0460	1.4571
Gland	Stainless steel	Stainless steel
Gland Packing	Graphite	Graphite

\*) Only for „Lever and Weight“

## Technical data

## Sectional drawing





Nominal sizes | dimensions | weights

Check Valve PN 10

DN	L (RF)	d	D	G	C	b	n-ød1	H	Weight
	mm	mm	mm	mm	mm	mm	mm	mm	kg
50	230	51	165	102	125	18	4-ø18	160	17
65	290	64	185	122	145	18	8-ø18	175	20
80	310	78	200	138	160	20	8-ø18	185	28
100	350	102	220	158	180	20	8-ø18	220	40
125	400	127	250	188	210	22	8-ø18	248	61
150	480	152	285	212	240	22	8-ø22	297	85
200	600	203	340	268	295	24	8-ø22	352	152
250	730	254	395	320	350	26	12-ø22	391	216
300	850	305	445	370	400	26	12-ø22	439	306
350	980	343	505	430	460	26	16-ø22	480	495
400	1100	394	565	482	515	26	16-ø26	529	640
450	1200	445	615	532	565	28	20-ø26	586	786
500	1250	495	670	585	620	28	20-ø26	630	1077
600	1450	597	780	685	725	34	20-ø30	746	1315

\* Flange connection in accordance with EN 1092-1 Form B1

Nominal sizes | dimensions | weights

Check Valve PN 16

DN	L (RF)	d	D	G	C	b	n-ød1	H	Weight
	mm	mm	mm	mm	mm	mm	mm	mm	kg
50	230	51	165	102	125	18	4-ø18	160	17
65	290	64	185	122	145	18	8-ø18	175	20
80	310	78	200	138	160	20	8-ø18	185	28
100	350	102	220	158	180	20	8-ø18	220	40
125	400	127	250	188	210	22	8-ø18	248	61
150	480	152	285	212	240	22	8-ø22	297	85
200	600	203	340	268	295	24	12-ø22	352	152
250	730	254	405	320	355	26	12-ø26	391	216
300	850	305	460	378	410	28	12-ø26	439	306
350	980	343	520	438	470	30	16-ø26	480	495
400	1100	394	580	490	525	32	16-ø30	529	640
450	1200	445	640	550	585	34	20-ø30	586	786
500	1250	495	715	610	650	36	20-ø33	630	1077
600	1450	597	840	720	770	40	20-ø36	746	1315

\* Flange connection in accordance with EN 1092-1 Form B1

Nominal sizes | dimensions | weights

Check Valve PN 25

DN	L (RF)	d	D	G	C	b	n-ød1	H	Weight
	mm	mm	mm	mm	mm	mm	mm	mm	kg
50	230	51	165	102	125	20	4-ø18	160	17
65	290	64	185	122	145	22	8-ø18	175	20
80	310	78	200	138	160	24	8-ø18	185	28
100	350	102	235	162	190	24	8-ø22	220	40
125	400	127	270	188	220	26	8-ø26	248	61
150	480	152	300	218	250	28	8-ø26	297	85
200	600	203	360	278	310	30	12-ø26	352	152
250	730	254	425	335	370	32	12-ø30	410	216
300	850	300	485	395	430	34	16-ø30	430	306
350	980	343	555	450	490	38	16-ø33	511	495
400	1100	387	620	505	550	40	16-ø36	552	640
450	1200	445	670	555	600	46	20-ø36	600	786
500	1250	489	730	615	660	48	20-ø36	679	1077
600	1450	590	845	720	770	58	20-ø39	734	1315

\* Flange connection in accordance with EN 1092-1 Form B1

Nominal sizes | dimensions | weights

Check Valve PN 40

DN	L (RF)	d	D	G	C	b	n-ød1	H	Weight
	mm	mm	mm	mm	mm	mm	mm	mm	kg
50	230	51	165	102	125	20	4-ø18	176	20
65	290	64	185	122	145	22	8-ø18	185	27
80	310	78	200	138	160	24	8-ø18	216	32
100	350	102	235	162	190	24	8-ø22	259	48
125	400	127	270	188	220	26	8-ø26	259	68
150	480	152	300	218	250	28	8-ø26	317	100
200	600	203	375	285	320	34	12-ø30	380	210
250	730	250	450	345	385	38	12-ø33	440	240
300	850	300	515	410	450	42	16-ø33	511	438
350	980	337	580	465	510	46	16-ø36	552	702
400	1100	387	660	535	585	50	16-ø39	600	882
450	1200	432	685	560	610	57	20-ø39	679	1102
500	1250	483	755	615	670	57	20-ø42	734	1360
600	1450	584	890	735	795	72	20-ø48	863	2100

\* Flange connection in accordance with EN 1092-1 Form B1



# Product portfolio

Design code:

→ DIN, AD 2000, ASME, API, BS, JIS, GOST, AFNOR

End connections:

→ Flanged Ends, Butt weld Ends, Socket Weld Ends, Threaded Ends, special connections

Certification:

→ ISO 9001, PED 2014/68/EU, EAC (TR-CU 032 & TR-CU 010) AD2000-HP0 / -W0, API- & ISO Industrial standards

		Nominal size			Nom. pressure		Options and variants					
		DN 15 – 50 / NPS 1/2" – 2"	DN 50 – 600 / NPS 2" – 24"	> DN 600 / NPS > 24"	PN10 – 100 / CL 150 – 600	PN160 – 640 / CL 600 – 4500	Actuated valves (Electrical, pneumatic and hydraulic) Cryo (BS6364; ISO)	Bellow seal: TA-Luft & DIN EN ISO 15848;; API 622	Heating jacket	Pressure seal design	Bypass	Fire-Safe (API 6FA, API 607, ISO 10497)
Gate Valves	Small Gate Valve forged	√			√	√	√	√	√			
	Gate Valve casted		√	√	√	√	√	√	√	√	√	√
	Gate Valve forged		√	√	√	√	√	√	√	√	√	
	Pipeline Through Conduit Gate Valve API 6D		√	√	√	√	√				√	
Globe Valves	Small Globe Valve forged	√	√	√	√	√	√	√	√	√	√	
	Globe Valve casted	√	√	√	√	√	√	√	√	√	√	√
	Globe Valve forged	√	√		√	√	√	√	√	√	√	
	3-way Globe Valves	√	√		√	√	√		√	√		
Check Valves	Small Check Valve forged	√			√	√						
	Check Valves wafer type	√	√		√	√			√	√		
	Swing Check Valves forged	√	√	√	√	√			√	√		
	Swing Check Valves casted	√	√	√	√	√			√			
Ball Valves	Ball Valves soft seated	√	√		√		√	√	√			√
	3-way Ball Valves	√	√		√		√	√				
	Ball Valves split body	√	√	√	√	√	√	√			√	√
	Ball Valves fully welded	√	√	√	√	√	√	√			√	√
	Ball Valves metal seated	√	√	√	√	√	√	√			√	√
	Top entry Ball Valves		√	√	√	√	√	√			√	√
Butterfly Valves	Butterfly Valve concentric	√	√	√	√		√	√	√			
	Butterfly Valve excentric		√	√	√		√	√	√			√
	Butterfly Valve triple excentric		√	√	√	√	√	√	√			√
Special Valves	Piggable Valves		√	√	√	√	√					
	Blow-down Valves	√			√	√	√					
	Nozzle-type Check Valves	√	√	√	√	√			√			
	Safety Valves	√	√	√	√	√		√	√			
	Sight Glasses	√	√	√	√				√			
	Steam Traps	√	√		√							
	Strainer	√	√	√	√	√				√		
	Control Valves	√	√	√	√	√	√	√	√			√

# Warehouse, logistics, service



For [Siekmann Econosto](#), close proximity to the customer means delivery of our products as quickly as if we were on site. Our customer-specific deliveries are realized via our logistics centre in Zwenkau near Leipzig. With [one of the largest valve warehouses in Europe](#) (approx. 4,000 m²), we stock an assortment of industrial valves to match our customers' requirements.

Notes

→ Material:

Non-alloy steel; highly heat-resistant steel; stainless steel; Duplex steel; Super Duplex steel; special materials (e.g. Ni-alloys; bronze)

→ Areas of application:

Oil and gas; refineries and petrochemical applications; liquefied gas applications and cryogenic technology; chemical and process technology; power plants

→ Specifics:

Extensive warehouse, inspection and consulting with troubleshooting, development of customer-specific solutions, special valves designed and produced according to customer needs

Over 80,000 m<sup>2</sup>  
of valve storage area



More than 60 years  
in the market



Locations  
Siekmann Econosto



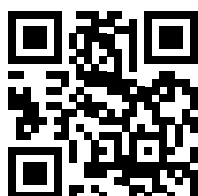
Locations of the  
corporate group

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