

**Hygienic 400**

Safety valve made of stainless steel, angle type, with stainless steel spring

→ **Series Hygienic 400**



■ SUITABLE FOR

Liquids	neutral and non-neutral	
Air, gases and vapours	neutral and non-neutral	
Steam		

■ EXAMPLES OF USE

For the protection of:

- processes, plants and containers in the food and pharmaceutical industry for air, neutral and non-neutral vapours and gases, steam and liquids taking into account the operation- and plant-specific regulations and making use of the suitable valve version and sealing material.

- food industry
- breweries and beverage industry
- pharmaceutical industry
- cosmetic industry
- medical technology
- clean Service applications

■ FEATURES

- Smooth and faultless surface finish optimized for cleaning process
- Minimal dead space in inlet area and no gaps in the valve
- Exposed and rinsed o-ring seals
- Shape of valve body avoids forming of puddles in the valve after it has opened
- Possible to carry-out CIP/SIP by lifting the disc from the seat
- Gap-free installation of seals
- Surface roughness standard Ra<0,8 um
- Option: mechanically polished and/or electro-polished

■ APPROVALS

TÜV Type test approval 2062	D/G, F, F/K/S
EC type examination	S/G, L, F/K/S
EHEDG	
DGUV Test	
<b>Requirements</b>	
DIN EN ISO 4126-1	TRD 421
PED 97/23/EC	AD 2000 Data sheet A2
TRB 801 No. 22 and 23	
<b>Additional hygienic requirements</b>	
EG No. 852/2004	GS-NG 2 and 5
DIN EN 1672-2	EHEDG Aseptik
9. GPSGV	

■ MATERIAL



■ SPECIFICATION



-40°C to + 200°C



0,4–16bar

Special connections  
DN 20 – DN 32

■ MATERIALS

Component	Material	DIN EN	ASTM / AISI
Body	Stainless steel	1.4435	AISI 316L
Inner parts, wetted	Stainless steel	1.4435	AISI 316L
Upper section, other inner parts	Stainless steel	1.4571	AISI 316Ti
Spring	Stainless steel	1.4310	AISI 301
Bellows	Stainless steel	1.4571	AISI 316Ti

## ■ VALVE VERSION

<b>b</b>	Standard with bellows	for neutral and non-neutral media and/or counter pressure up to 4 bar. Spring, moving parts and the environment are protected from being affected by the medium.
Parts which are difficult to clean in the guide, the spring housing and the spindle / disc combination are protected against soiling by stainless steel bellows		

## ■ MEDIUM

<b>GF</b>	gaseous and liquid	Air, vapours, gases, liquids and - depending on safety valve version and seal - also for steam
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## ■ TYPE OF LIFTING MECHANISM

<b>K</b>	Standard with twist-type lifting mechanism
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## ■ AVAILABLE NOMINAL DIAMETERS AND CONNECTION SIZES

Nominal diameter		20									
Connection type		Clamp connection						Threaded ferrule connection			
		DIN 11864-3 / DIN 11853-3			DIN 32676			DIN 11864-1 / DIN 11853-1		DIN 11851	
Inlet		DN 20	DN 25	DN 32	DN 20	DN 25	DN 32	DN 20	DN 25	DN 20	DN 25
Outlet	DN 25	■	■	■	■	■	■	■	■	■	■
	DN 32	■	■	■	■	■	■				

## ■ TYPE OF CONNECTION INLET / OUTLET Special connections

<b>A / A</b>	Standard	Aseptic collar clamp connection / Aseptic collar clamp connection	DIN 11864-3 / DIN 11864-3 DIN 11853-3 / DIN 11853-3	Pipe Standard DIN 11850
<b>KLSDIN / KLSIN</b>	On request	Clamp connection / Clamp connection	DIN 32676 / DIN 32676	Pipe Standard DIN 11850
<b>Against surcharge</b>				
<b>N / N</b>		Aseptic-Threaded ferrule connection A/ Aseptic-Threaded ferrule connection A	DIN 11864-1 / DIN 11864-1 DIN 11853-1 / DIN 11853-1	Pipe Standard DIN 11850
<b>GSDIN / GSDIN</b>		Threaded ferrule connection / Threaded ferrule connection	DIN 11851 / DIN 11851	Pipe Standard DIN 11850

Further connection types available on request

## ■ SEALS

<b>FKM</b>	Fluorcarbon	Elastomere moulded seal	FDA, USP, 3-A, ADI-free	-20°C to +200°C
<b>EPDM</b>	Ethylene propylene diene	Elastomere moulded seal	FDA	-40°C to +170°C

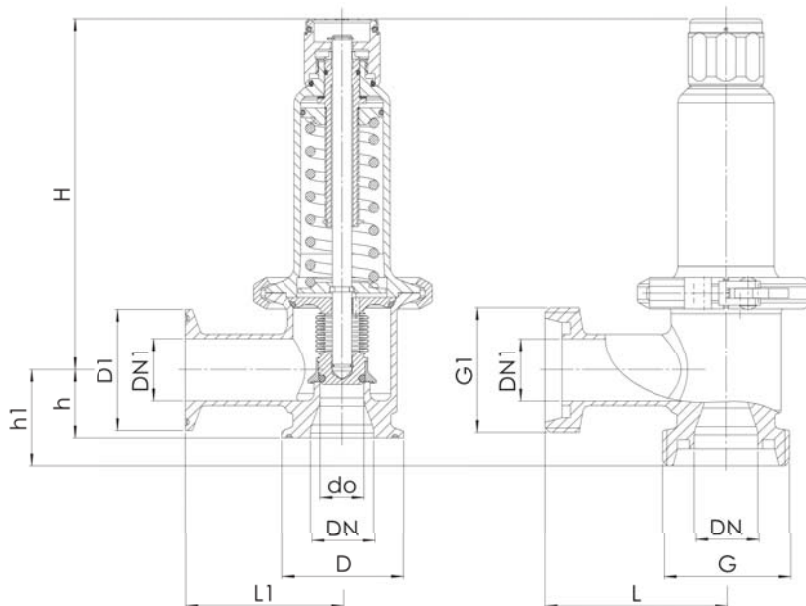
## ■ OPTIONS

Surface mechanically polished	<b>MP</b>
Surface mechanically polished and electro-polished	<b>MEP</b>
Special versions on request.	

■ NOMINAL DIAMETERS, CONNECTIONS, INSTALLATION DIMENSIONS

Series Hygienic 400: Connection, installation dimensions, ranges of adjustment							
Nominal diameter	DN	20					
Connection		Aseptic collar clamp connection DIN 11864-3 / DIN 11853-1 Clamp connection DIN 32676			Aseptic-Threaded ferrule connection A DIN 11864-1 / DIN 11853-1 Threaded ferrule connection DIN 11851		
Inlet	DN	20	25	32	20	25	
	G	-	-	-	20 (Rd 44 x 1/6")	25 (Rd 52 x 1/6")	
Outlet	DN1	25, 32	25, 32	32	25	25	
	G1	-	-	-	25 (Rd 52 x 1/6")	25 (Rd 52 x 1/6")	
Installation dimensions in mm	L	-	-	-	75	75	
	L1	65	65	65	-	-	
	H	145	145	145	145	145	
	h	29	29	29	-	-	
	h1	-	-	-	40	40	
	D	34	50,5	50,5	-	-	
	D1	50,5	50,5	50,5	-	-	
	do	18	18	18	18	18	
	Weight	kr	1,3	1,3	1,3	1,4	1,4
	Range of adjustment	бap	0,4-16	0,4-16	0,4-16	0,4-16	0,4-16

■ MAIN DIMENSIONS, INSTALLATION DIMENSIONS



■ INDIVIDUAL SELECTION / VALVE CONFIGURATION

Series	Valve version	Medium	Lifting device	Nominal diameter DN	Connection type		Connection size		Seal	Options	Set pressure	Quantity
					Inlet	Outlet	Inlet	Outlet				
400	b	GF	K	20	A	A	25	25	FKM	MEP	2,5	2
400	b	GF	K	20	KLSDIN	KLSDIN	20	25	EPDM	MP	3,2	1
400	b	GF	K	20								
400	b	GF	K	20								
400	b	GF	K	20								

In this table you can configure a valve according to your individual requirements (similar to the *example* shown, which should be deleted before you enter your own data). Please complete the table by hand using the abbreviations in this datasheet and then fax it to: +49(0)7141.4889488  
Please do not forget to add your personal data so that our sales team can contact you.

Name

First Name

Company

Telephone

E-Mail

■ CAPACITY TABLE

Series Hygienic 400: Blowing-off rates at 10% above set pressure

Nominal diameter DN		20		
Set pressure bar		I	II	III
	0,5	127	96	3,1
	1	189	151	4,5
	1,5	257	204	6,7
	2	332	262	7,7
<b>Air I</b>	2,5	390	305	8,6
Nm <sup>3</sup> /h	3	447	349	9,4
	3,5	504	392	10,2
	4	561	435	10,9
<b>Steam II</b>	4,5	618	478	11,5
kg/h	5	675	521	12,2
	5,5	732	564	14,0
	6	790	608	14,6
<b>Water III</b>	6,5	847	650	15,2
m <sup>3</sup> /h	7	904	692	15,8
	7,5	961	735	16,4
	8	1018	777	16,9
	8,5	1075	820	17,4
	9	1132	862	17,9
	9,5	1190	905	18,4
	10	1247	947	18,9
	11	1361	1031	19,8
	12	1475	1115	20,7
	13	1590	1199	21,6
	14	1704	1284	23,4
	15	1818	1368	24,2
	16	1932	1453	25,0

Subject to technical modifications.