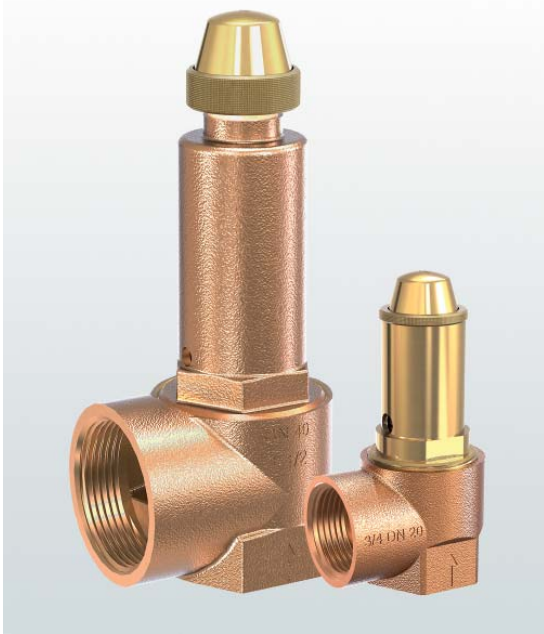


→ Series 652



■ SUITABLE FOR

Liquids	neutral	
Air, gases and vapours	neutral	
Steam		

■ EXAMPLES OF USE

For the protection of:

- pressure tanks and systems for water and neutral liquids
- pressure tanks and systems for air, neutral gases and vapours
- steam boiler Cat.I < 10 liter up to 3 bar

Please observe plant-specific regulations and use of appropriate valve version and sealing material.

- pump protection
- pressure booster plants water/air-side
- cooling-/chilling-systems
- mini steam generators

**Safety valves are set and sealed at the factory.**



■ MATERIAL



■ SPECIFICATION



1/2" – 2"



– 60°C to + 200°C  
depending on version



1,0 – 16 bar

■ APPROVALS

TÜV-Type test approval 293, 312	F, D/G
EC type examination	L, S/G
TR ZU 032/2013 - TR ZU 010/2011	F (L), D/G (S/G)

Requirements

AD 2000 Data sheet A2  
TRD 421  
DIN EN ISO 4126-1  
PED 2014/68/EU

Classification society

Germanischer Lloyd	GL
Lloyd's Register EMEA	LR EMEA
American Bureau of Shipping	ABS
Det Norske Veritas	DNV
Bureau Veritas	BV
Russian Maritime Register of Shipping	RS

■ MATERIALS

Component	Material	DIN EN	ASME
Inlet body	Gunmetal	CC499K	CC499K
Outlet body	Gunmetal	CC499K	CC499K
Internal parts	Brass	CW617N	CW617N
Spring	Spring steel with anti-rust protection	1.1200	ASTM A228

### ■ VALVE VERSION

<b>s</b>	non-gastight version of spring housing	for neutral, gaseous media without counter pressure.
<b>m</b>	with diaphragm	for neutral liquids and liquids in cooling circuits without counter pressure. Spring, moving parts and the environment are protected from being affected by the medium.

### ■ MEDIUM

<b>F</b>	liquid	The temperature of the medium under atmospheric pressure must not reach boiling point
<b>G</b>	gaseous	Air, vapours, gases and - depending on safety valve version and seal - also for steam

### ■ 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 DN		15	20	25	32	40	50
Inlet		1/2" (15)	3/4" (20)	1" (25)	1 1/4" (32)	1 1/2" (40)	2" (50)
Outlet	1/2" (15)	■					
	3/4" (20)		■				
	1" (25)			■			
	1 1/4" (32)				■		
	1 1/2" (40)					■	
	2" (50)						■

### ■ TYPE OF CONNECTION INLET / OUTLET THREADED CONNECTIONS

<b>f/f</b>	Standard	Female thread BSP-P / Female thread BSP-P	DIN EN ISO 228-1 / DIN EN ISO 228-1
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### ■ SEALS

<b>NBR</b>	Nitrile rubber (Standard)	Elastomere flat seal (up to 30% glycol)	-30°C to +130°C
<b>EPDM</b>	Ethylene propylene diene	Elastomere flat seal (up to 100% Glykol)	-50°C to +150°C
For type 652mFK against surcharge			
<b>FKM</b>	Fluorcarbon	Elastomere flat seal	-20°C to +200°C
Only for type 652sGK for air, neutral vapours			

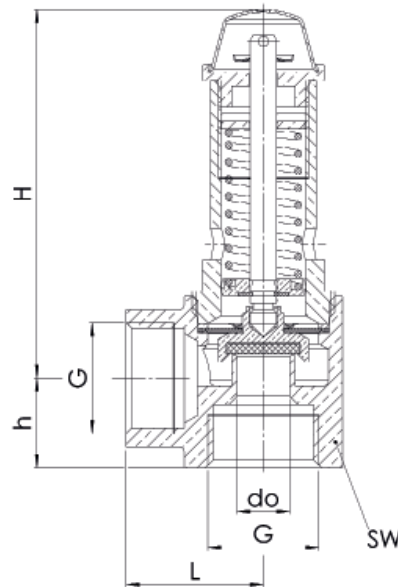
### ■ OPTIONS

Special versions on request.	
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■ NOMINAL DIAMETERS, CONNECTIONS, INSTALLATION DIMENSIONS

Series 652: Connection, installation dimensions, ranges of adjustment							
Nominal diameter	DN	15	20	25	32	40	50
Connection DIN EN ISO 228	G	1/2" (15)	3/4" (20)	1" (25)	1 1/4" (32)	1 1/2" (40)	2" (50)
Outlet DIN EN ISO 228	G	1/2" (15)	3/4" (20)	1" (25)	1 1/4" (32)	1 1/2" (40)	2" (50)
Installation dimensions in mm	L	26	31	35	40	46	54
	H	70	70	80	100	140	155
	h	17	18	22	25	28	34
	SW	27	32	40	49	56	68
	do	10	13	16	18	22	25
Weight	kg	0,2	0,3	0,5	0,7	1,2	1,6
Range of adjustment	bar	1-16	1-16	1-16	1-16	1-16	1-16

■ 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				
652	m	F	K	15	f	f	15	15	NBR		5,5	2
652	s	G	K	25	f	f	25	25	FKM		3,5	4
652			K		f	f						
652			K		f	f						

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 652: Blowing-off rates at 10% above set pressure																				
Nominal diameter DN		15			20			25			32			40			50			
Set pressure bar		I	II	III	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III	
Air I	1	31	25	1,51	53	42	2,55	80	64	3,87	102	81	4,89	152	121	7,31	196	157	9,44	
	1,5	40	32	1,85	67	53	3,13	102	81	4,73	128	102	5,99	192	152	8,95	248	197	11,56	
	Nm <sup>3</sup> /h	2	48	38	2,14	81	64	3,61	123	97	5,47	155	122	6,92	232	183	10,33	299	236	13,35
Steam II	2,5	56	44	2,39	95	74	4,03	144	113	6,11	182	143	7,73	272	213	11,55	351	275	14,92	
	kg/h	3	64	50	2,62	109	85	4,42	165	129	6,69	208	163	8,47	311	243	12,66	402	314	16,34
	3,5	73	-	2,82	123	-	4,77	186	-	7,23	235	-	9,15	351	-	13,67	454	-	17,65	
Water III	4	81	-	3,02	137	-	5,10	207	-	7,73	262	-	9,78	391	-	14,62	505	-	18,87	
	m <sup>3</sup> /h	4,5	89	-	3,20	150	-	5,41	228	-	8,20	288	-	10,38	431	-	15,50	556	-	20,02
	5	97	-	3,38	164	-	5,71	249	-	8,64	315	-	10,94	471	-	16,34	608	-	21,10	
	5,5	105	-	3,54	178	-	5,98	270	-	9,06	342	-	11,47	511	-	17,14	659	-	22,13	
	6	114	-	3,70	192	-	6,25	291	-	9,47	368	-	11,98	550	-	17,90	711	-	23,11	
	6,5	122	-	3,85	206	-	6,51	312	-	9,85	395	-	12,47	590	-	18,63	762	-	24,06	
	7	130	-	3,99	220	-	6,75	333	-	10,23	422	-	12,94	630	-	19,33	814	-	24,97	
	7,5	138	-	4,13	234	-	6,99	354	-	10,59	448	-	13,40	670	-	20,01	865	-	25,84	
	8	147	-	4,27	248	-	7,22	375	-	10,93	475	-	13,84	710	-	20,67	917	-	26,69	
	8,5	155	-	4,40	262	-	7,44	396	-	11,27	502	-	14,26	750	-	21,30	968	-	27,51	
	9	163	-	4,53	276	-	7,65	418	-	11,60	528	-	14,68	789	-	21,92	1019	-	28,31	
	9,5	171	-	4,65	290	-	7,86	439	-	11,91	555	-	15,08	829	-	22,52	1071	-	29,08	
	10	180	-	4,77	303	-	8,07	460	-	12,22	582	-	15,47	869	-	23,11	1122	-	29,84	
	11	196	-	2,78	331	-	6,82	502	-	12,82	635	-	14,42	949	-	23,56	1225	-	31,30	
	12	212	-	2,91	359	-	7,12	544	-	13,39	688	-	15,06	1028	-	24,61	1328	-	32,69	
	13	229	-	3,02	387	-	7,41	586	-	13,94	742	-	15,68	1108	-	25,62	1431	-	34,02	
14	245	-	3,14	415	-	7,69	628	-	14,46	795	-	16,27	1188	-	26,58	1534	-	35,31		
15	262	-	3,25	443	-	7,96	670	-	14,97	848	-	16,84	1267	-	27,52	1637	-	36,55		
16	278	-	3,36	470	-	8,22	713	-	15,46	902	-	17,39	1347	-	28,42	1740	-	37,75		