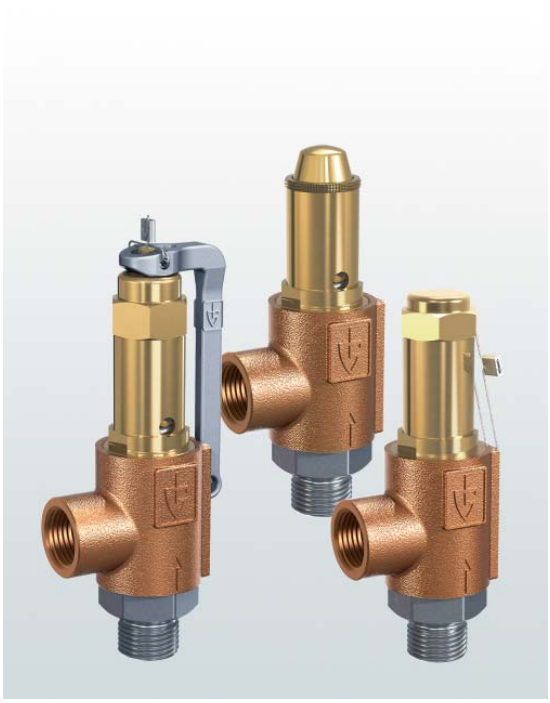
→ Series 861

861

Safety valves made of gunmetal, angle-type with threaded connections



SUITABLE FOR

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

EXAMPLES OF USE

For the protection of:
- pressure tanks and -systems for neutral / non-neutral vapours, gases and liquids
- steam boilers and steam plants

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

- mechanical engineering
- pump protection
- process equipment construction and medical technology (sterilizers, autoclaves)
- shipbuilding industry and marine equipment
- pressure booster plants water-/ air-side
- steam- and industrial boiler plants

Safety valves are set and sealed at the factory.

MATERIAL

SPECIFICATION

1/4“ – 1/2“	– 60°C to + 225°C depending on version	0,5 – 50 bar

APPROVALS

TÜV-Type test approval 2061	**D/G, F**
EC type examination	**S/G, L**
GOST-R	**D/G (S/G), F (L)**

Requirements

AD 2000 Data sheet A2
TRD 421
DIN EN ISO 4126-1
PED 97/23/EC

Classification society

Germanischer Lloyd	GL
Lloyd’s Register EMEA	LR EMEA
American Bureau of Shipping	ABS
Det Norske Veritas	DNV
Bureau Veritas	BV

MATERIALS

Component	Material	DIN EN	ASME
Inlet body	Stainless steel	1.4404	316 L
Outlet body	Gunmetal	CC499K	CC499K
Internal parts	Brass	CW614N	CW614N
Spring	Stainless steel	1.4310	302

VALVE VERSION

s	Standard, non-gastight version of the spring housing	for neutral media without counter pressure.
t	gastight version of spring housing	for neutral and non-neutral media, not counter pressure compensated. The environment is protected from being affected by the medium.

MEDIUM

G	gaseous	Air, vapours, gases and steam
F	liquid	The temperature of the medium under atmospheric pressure must not reach boiling point
GF	gaseous and liquid	Air, vapours, gases, steam and liquids

TYPE OF LIFTING MECHANISM

K	Standard with twist-type lifting mechanism
L	Lifting lever
O	without lifting device, standard for gastight versions

AVAILABLE NOMINAL DIAMETERS AND CONNECTION SIZES

Nominal diameter DN		**8**	**10**	**15**
Inlet		1/4“ (8)	3/8“ (10)	1/2“ (15)
Outlet	1/2“ (15)	■	■	■

TYPE OF CONNECTION INLET / OUTLET THREADED CONNECTIONS

m / f	Standard	Male thread BSP-P / Female thread BSP-P	DIN EN ISO 228-1 / DIN EN ISO 228-1

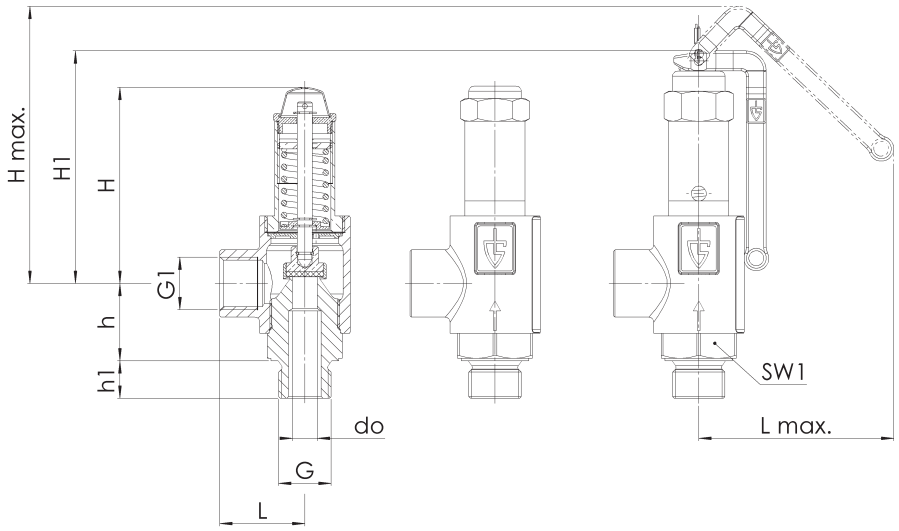
SEALS

PTFE	Polytetrafluoroethylene	Flat seal up to 22 bar	–60°C to +225°C
PTFE+Kohle	Polytetrafluoroethylene + carbon	Flat seal from 22,1 bar	–60°C to +225°C

NOMINAL DIAMETERS, CONNECTIONS, INSTALLATION DIMENSIONS

Series 861: Connection, installation dimensions, ranges of adjustment				
Nominal diameter	**DN**	**8**	**10**	**15**
Connection DIN EN ISO 228	**G**	1/4" (8)	3/8" (10)	1/2" (15)
Outlet DIN EN ISO 228	**G1**	1/2" (15)	1/2" (15)	1/2" (15)
Installation dimensions in mm	**L**	34	34	34
	Lmax	78	78	78
	H	79	79	79
	H1	93	93	93
	Hmax	111	111	111
	h	31	31	31
	h1	12	12	15
	SW	30	30	30
	do	6	8	10
Weight	**kg**	0,5	0,5	0,6
Range of adjustment	**bar**	0,5-50	0,5-50	0,5-50

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				
861	*t*	*G*	*0*	*8*	**m**	**f**	*8*	**15**	*PTFE*		*12,3*	*2*
861					**m**	**f**		**15**				
861					**m**	**f**		**15**				
861					**m**	**f**		**15**				

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 861: Blowing-off rates at approx. 10% above set pressure

Nominal diameter DN		8			10			15		
Set pressure bar		I	II	III	I	II	III	I	II	III
	0,5	6	4	0,54	24	18	0,86	44	34	1,62
Air l	1	10	8	0,70	35	28	1,13	67	54	2,24
Nm³/h	1,5	14	11	0,89	46	37	1,38	91	72	2,70
	2	18	15	1,00	57	45	1,62	113	89	3,13
Steam II	2,5	22	17	1,11	68	53	1,78	132	104	3,49
kg/h	3	26	20	1,24	78	61	1,94	154	120	3,83
	3,5	29	22	1,30	88	68	2,11	174	135	4,10
Water III	4	32	25	1,40	98	76	2,24	196	152	4,40
m³/h	4,5	35	27	1,46	110	85	2,38	216	167	4,67
	5	39	30	1,51	120	93	2,48	236	182	4,91
	5,5	42	32	1,59	130	100	2,57	256	197	5,16
	6	45	35	1,67	140	108	2,67	276	213	5,40
	6,5	49	37	1,73	151	116	2,81	296	227	5,62
	7	52	40	1,78	161	123	2,89	316	242	5,86
	7,5	55	42	1,84	171	131	3,00	336	257	6,10
	8	58	45	1,92	181	138	3,08	356	272	6,32
	8,5	62	47	1,97	191	146	3,19	376	287	6,48
	9	65	49	2,00	201	153	3,29	396	302	6,70
	9,5	68	52	2,05	211	161	3,38	416	316	6,88
	10	72	54	2,11	222	168	3,46	436	331	7,07
	11	78	59	2,16	242	183	3,62	476	361	7,43
	12	85	64	2,27	262	198	3,78	516	390	7,72
	13	94	71	2,35	283	213	3,94	556	419	8,10
	14	101	76	2,43	303	228	4,08	596	449	8,37
	15	108	81	2,54	323	243	4,21	636	479	8,75
	16	114	86	2,62	344	258	4,37	676	508	9,05
	17	121	91	2,70	364	273	4,51	716	537	9,32
	18	128	96	2,78	384	288	4,62	756	566	9,56
	19	135	101	2,86	420	314	4,81	796	596	9,87
	20	142	106	2,90	441	330	4,93	836	625	10,13
	21	153	114	2,97	470	351	5,05	876	655	10,38
	22	160	120	3,04	491	367	5,17	916	684	10,62
	23	167	125	3,11	513	383	5,29	956	714	10,86
	24	174	130	3,18	534	399	5,40	996	743	11,09
	25	181	135	3,25	556	415	5,51	1036	773	11,32
	26	188	-	3,31	577	-	5,62	1076	-	11,55
	27	195	-	3,37	599	-	5,73	1116	-	11,77
	28	202	-	3,43	620	-	5,83	1156	-	11,98
	29	209	-	3,50	641	-	5,94	1196	-	12,20
	30	216	-	3,56	663	-	6,04	1236	-	12,40
	32	230	-	3,67	706	-	6,24	1316	-	12,81
	34	244	-	3,79	749	-	6,43	1396	-	13,21
	36	258	-	3,89	792	-	6,62	1475	-	13,59
	38	272	-	4,00	835	-	6,80	1555	-	13,96
	40	286	-	4,11	877	-	6,97	1635	-	14,32
	42	300	-	4,21	920	-	7,15	1715	-	14,68
	44	314	-	4,31	963	-	7,31	1795	-	15,02
	46	328	-	4,40	1006	-	7,48	1875	-	15,36
	48	342	-	4,50	1049	-	7,64	1955	-	15,69
	50	355	-	4,59	1092	-	7,80	2035	-	16,01