

→ Series 612

612

Pressure relief valves made
of gunmetal, with double
lever and weights, angle-type
with threaded connections

■ SUITABLE FOR

Liquids	neutral	
Air, gases and vapours	neutral	
Steam		

■ EXAMPLES OF USE

For the protection of:

- pressure tanks/-systems for neutral vapours, gases and liquids
- steam boilers and steam plants

if proportional opening characteristics and only small blow-off volumes are required (i.e. protection in the case of expansion due to heating-up). Please observe plant-specific regulations and use of appropriate valve version and sealing material.

- low pressure steam systems
- low pressure industrial- and commercial boiler plants

■ APPROVALS

European Pressure Equipment Directive

TR ZU 032/2013 - TR ZU 010/2011

Requirements

PED 2014/68/EU

CE EAC

■ MATERIAL



■ SPECIFICATION



1/2" – 2"



– 60°C to + 225°C
depending on version



0,1 – 4 bar

■ MATERIALS

Component	Material	DIN EN	ASME
Inlet body	Gunmetal	CC499K	CC499K
Outlet body	Gunmetal	CC499K	CC499K
Internal parts	Brass / Gunmetal	CW617N / CC499K	CW617N / CC499K
Lever	Stainless steel	1.4301	304

Series 612 ■ VALVE VERSION

s	Standard, non-gastight version	for neutral media without counter pressure. With double lever and 2 weights for exact adjustment and functioning within a small pressure range.
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■ MEDIUM

GF	gaseous and liquid	Air, vapours, gases, liquids and - depending on seal - also for steam
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■ TYPE OF LIFTING MECHANISM

L	Lifting by lever. Disc can be lifted and turned.
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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

f / f	Standard	Female thread BSP-P / Female thread BSP-P	DIN EN ISO 228-1 / DIN EN ISO 228-1
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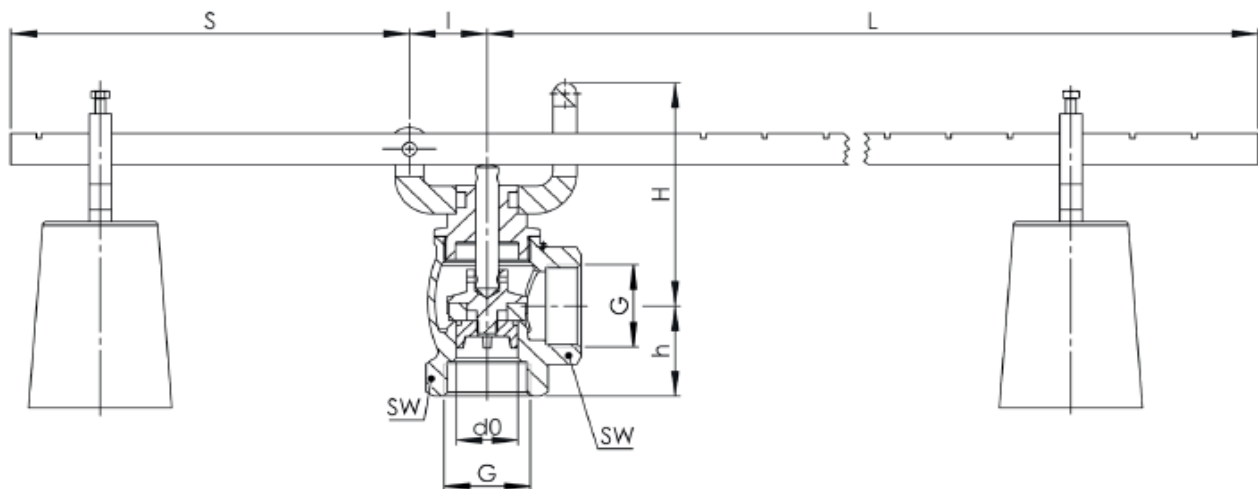
■ SEALS

NBR	Nitrile rubber	Elastomere flat seal	-30°C to +130°C
PTFE	Polytetrafluoroethylene	Flat seal	-60°C to +225°C

■ NOMINAL DIAMETERS, CONNECTIONS, INSTALLATION DIMENSIONS

Series 612: 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	330	325	430	625	640	765
	I	20	23	30	38	38	50
	H	74	85	100	115	120	150
	h	30	35	41	45	51	60
	S	120	130	165	195	180	245
	SW	28	34	41	52	58	70
	d0	13	19	25	30	38	50
Weight of the valve	kg	0,6	0,73	1,3	2,1	2,6	4,2
Counterweight	kg	2x0,67	2x1,36	2x2,2	2x2,2	2x3,55	2x6,5
Range of adjustment	bar	0,1 - 4	0,1 - 4	0,1 - 4	0,1 - 4	0,1 - 4	0,1 - 4

■ MAIN DIMENSIONS, INSTALLATION DIMENSIONS



■ INDIVIDUAL SELECTION / VALVE CONFIGURATION

Series	Valve version	Medium	Lifting device	Nominal diameter DN	Connection type		Connection size		Seal	Options	Pressure range / set pressure	Quantity
					Inlet	Outlet	Inlet	Outlet				
612	s	GF	L	25	f	f	25	25	NBR		0,1 - 4,0	3
612	s	GF	L		f	f						
612	s	GF	L		f	f						
612	s	GF	L		f	f						

■ **CAPACITY TABLE**

Series 612: Blowing-off rates at approx. 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	0,1	4	4	0,1	10	15	0,2	18	14	0,4	24	20	0,5	40	32	0,8	72	57	1,5
	0,5	6	5	0,2	13	21	0,5	24	19	0,8	33	27	1,1	54	44	1,9	98	77	3,3
	1	8	6	0,3	18	28	0,6	32	26	1,2	44	36	1,6	72	58	2,6	130	102	4,7
Steam II	1,5	10	8	0,4	22	34	0,8	40	32	1,4	55	45	2,0	90	72	3,2	163	127	5,8
	2	24	19	0,8	52	41	1,8	96	75	3,3	132	100	4,6	217	170	7,4	390	300	13,3
	2,5	28	22	0,9	61	48	2,0	112	87	3,7	154	116	5,1	253	197	8,3	455	348	14,9
Water III	3	32	25	1,0	70	54	2,2	128	99	4,0	176	132	5,6	289	225	9,1	520	397	16,3
	3,5	36	28	1,1	79	61	2,4	144	111	4,4	198	148	6,0	325	252	9,8	585	444	17,6
	4	40	31	1,2	87	67	2,6	160	123	4,7	220	164	6,4	362	279	10,5	650	492	18,8