

**Safety Valves, brass,
 type tested TÜV-SV.1090 D/G**

Standard safety valve
 with FPM valve seal, open bonnet, with discharge holes
 Inlet: male thread type G (BSPP) acc. to ISO 228/1

Part No. 06216.X.0000
Part No. 06217.X.0000

with lifting device

Available options - on request only:

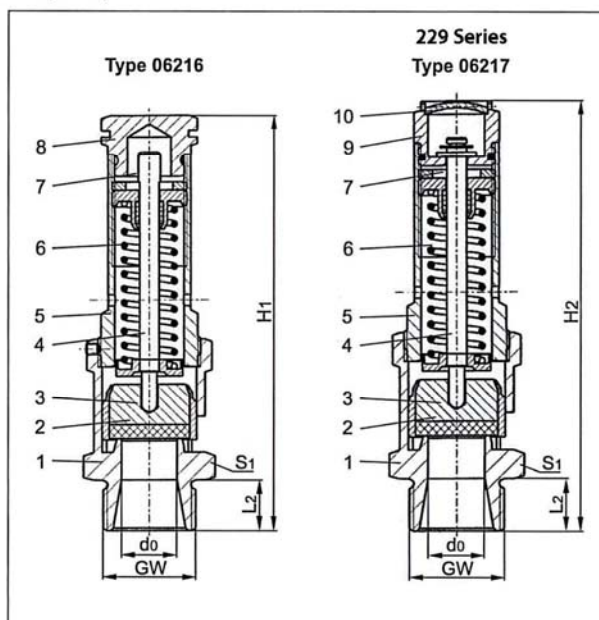
- discharge holes with protection cap
- stainless steel spring - material 1.4571
- external parts nickel plated


Applications:

Provided as safety device for protection against excessive pressure in stationary and moveable pressure vessels. Approved for air and similar gases.

Working temperature: -40°C / -40°F (233K) up to +200°C / +392°F (473K)

Materials	DIN EN	ASME Code Case 1750-20
1 Body	CW617N	EN 12165
2 Valve seal	FPM (Viton-GLT)	
3 Disc	CW614N	EN 12164
4 Stem	CW614N	EN 12164
5 Bonnet	CW614N	EN 12164
6 Spring	1.1200	A 576 Grade 1045
7 Stem guide	PTFE	
8 Cap	CW614N	EN 12164
9 Lifting device	CW614N	EN 12164
10 Closing cap	CW507L	B 30 UNS C26800



Essential: Valves are delivered at a set pressure, therefore when ordering please confirm set pressure, medium and temperature.

Standard marking acc. to Pressure Equipment Directive 97/23/EG (PED).



Marking acc. to ASME Code Section VIII will only be carried out by written notice on purchase order.



Seat tightness test shall be carried out at 95% of set pressure for a time of 10 seconds by audible discharge test method. No audible discharge shall be determined.

Type 06216, Type 06217	Technical data						
Nominal size	GW	1/2	3/4	1	1-1/4	1-1/2	2
Orifice	d ₀	12	15	20	25	32	40
Dimension code	.X.	0400	0600	1000	1200	1400	2000
Set pressure range	bar	0.2-25	0.2-30	0.2-30	0.2-22	0.2-16	0.2-12
Height	H	109	126	153	175	202	230
Length	L ₂	14	16	18	20	22	25
Wrench size across flats	S ₁	27	32	41	50	55	70
Weight	ca. kg	0.25	0.41	0.72	1.23	1.73	3.09
Coeff. of discharge from 3.0 bar	α _w	0.82	0.83	0.73	0.71	0.69	0.66

Dimensions in mm.

Discharge capacities

Calculation of mass flow acc. to AD2000-Merkblatt A2

Medium:

Air in m³/h at 0°C and 1013.25 mbar

The capacity indicated below is for a fully opened valve.

d₀ - orifice

A₀ - flow area

Set pressure in bar (ü)	GW	1/2	3/4	1	1-1/4	1-1/2	2
	d ₀ (mm) A ₀ (mm ²) Medium	12.0 113.1	15.0 176.7	20.0 314.2	25.0 490.9	32.0 804.3	40.0 1256.6
		Air					
0.2		62	92	158	239	385	594
0.5		84	135	241	314	497	722
1.0		124	296	307	459	741	1058
2.0		200	317	495	752	1205	1746
3.0		276	431	674	1024	1630	2436
4.0		346	541	846	1285	2046	3057
5.0		416	650	1017	1546	2461	3678
6.0		487	760	1189	1807	2877	4300
7.0		557	870	1361	2068	3293	4921
8.0		627	980	1533	2329	3709	5542
9.0		698	1090	1705	2590	4124	6164
10.0		768	1200	1876	2851	4540	6785
12.0		909	1420	2220	3374	5372	8027
14.0		1049	1639	2564	3896	6203	-
16.0		1190	1859	2907	4418	7034	-
18.0		1331	2079	3251	4940	-	-
20.0		1471	2298	3595	5462	-	-
22.0		1612	2518	3938	5984	-	-
24.0		1752	2738	4282	-	-	-
25.0		1823	2848	4454	-	-	-
26.0		-	2958	4625	-	-	-
28.0		-	3177	4969	-	-	-
30.0		-	3397	5313	-	-	-

The safety valves are set with a tolerance of $\pm 3\%$, 10 % of the set pressure is fully opened and closed 10 % below the pressure again.

Seal material:

Farbe	Shore hardness	Pressure range
Green	70°	0.2 to 5.49 bar
Black	80°	5.0 to 14.9 bar
Orange	90°	from 15.0 bar