

Normal safety valve with spring loading. (AN)

Model 494



EN



EP

AP

ES

CP

The valve works as an automatic pressure releasing regulator activated by the static pressure existing at the entrance to the valve and is characterized by its ability to open, at the first proportional to the pressure increase, and after instantly and totally.

Design in accordance with "International Standard ISO 4126 -1 Safety Valves".

In accordance with the requirements of the pressure equipment directive 2014/68/EU.

EC valve verification certified by: TÜV Rheinland Industrie Service GmbH, Notified Body for Pressure Equipment ID-No. 0035.

Type (Module B) EC examination report nº 33530455 certified by: TÜV Rheinland Ibérica ICT, S.A.

In compliance with the ATEX 2014/34/EU directive "Protective equipment and systems for use in potentially explosive atmospheres".

Other authorisations: ISCIR, ITI, NASTHOL, EAC,...etc.

Specifications

- 90° angular flow.
- Activated by direct action helicoid spring.
- Simplicity of construction ensuring minimum maintenance.
- Materials carefully selected for their resistance to corrosion. With the exception of washers and couplings, the valves are free of non-ferric materials.
- Internal body designed to offer favourable flow profile.
- Sealing surfaces treated and balanced, making them extremely tightness, even exceeding EN 12266-1 requirements.
- Great discharge capacity. For liquids typically used with openings similar to proportional safety valves.
- Equipped with draining screws for removing condensation.
- Auto-centering plug.
- Threaded shaft with lever positioner facilitating immediate manual action.
- Elevator, independent of the seal, designed facilitate sudden opening when the steam expands and, with any fluid, guarantees absolute opening and closing precision.
- All the valves are supplied sealed at the set pressure requested, simulating operational conditions, and are vigorously tested.
- All components are numbered, registered and checked. If requested in advance, material, casting, test and efficiency certificates will be enclosed with the valve, and the instruction manual, in accordance with P.E.D. 2014/68/EU.

IMPORTANT

Depending on demand:

- 1.- Blocking screw which facilitates hydrostatic testing of the container which to be protected.
- 2.- Rapid limiter to reduce the coefficient of discharge.
- 3.- Fluorelastomer (Viton) seals, Silicone's rubber, PTFE (Teflón)... etc., achieving leakage levels less than:

$$0.3 \times 10^{-3} \text{ Pa cm}^3 \text{ seg.}$$

The ranges of application allow certain flexibility although we recommend limiting them to:

		RANGE OF APPLICATION FOR THE SEALS						
		SET PRESSURE IN bar						
FLUID		0,2	1,8	4,0	4,8	7,0	30	40,0
Saturated steam		S	V	T				
Liquids and gases		S	V	T				
SEALS		ACCORDING TO MANUFACTURERS		RECOMMENDED BY VYC				
		MINIMUM	MAXIMUM	MINIMUM	MAXIMUM			
Silicone's rubber	S	-60	+200	-50	+115			
Fluorelastomer (Viton)	V	-40	+250	-30	+150			
PTFE (Teflón)	T	-265	+260	-80	+230 (1)			

(1) For temperatures exceeding 230°C apply metallic seal only

- 4.- Fluorelastomer (Viton) membrane and O-ring isolating the rotating or sliding parts from the working fluid.
- 5.- Electrical contact indicating open/closed.

- 6.- Balance bellows to:

 - Protect the spring from atmospheric influences.
 - Ensure outside of valve body is totally tightness.
 - Level out external or self-generated back pressure.

- 7.- Possibility of manufacture in other types of material, for special operating conditions (high temperatures, fluids, etc.).
- 8.- Totally free of oil and grease, to work with oxygen, avoiding possible fire risks (UV-Oxygen-VBG 62).

- 9.- Special springs for critical temperatures.

Nº PIECE	PIECE	MATERIAL							
		CAST IRON		NODULAR IRON		CAST STEEL		STAINLESS STEEL	
1	Body	Cast iron (EN-5.1301)	Nodular iron (EN-5.3106)	Cast steel (EN-1.0619+N)	Stainless steel (EN-1.4408)				
2	Closed bell	Cast iron (EN-5.1301)	Nodular iron (EN-5.3106)	Nodular iron (EN-5.3106)	Stainless steel (EN-1.4408)				
3	Open bell	Cast iron (EN-5.1301)	Nodular iron (EN-5.3106)	Cast steel (EN-1.0619+N)	Stainless steel (EN-1.4408)				
4, 5, 6	Hood	Nodular iron (EN-5.3106)	Nodular iron (EN-5.3106)	Nodular iron (EN-5.3106)	Stainless steel (EN-1.4408)				
7	Elevator	Nodular iron (EN-5.3106)(1)	Nodular iron (EN-5.3106)(1)	Nodular iron (EN-5.3106)(1)	Stainless steel (EN-1.4408)(5)				
8	Cam	Carbon steel (EN-1.0037 St-37.2)(4)	Carbon steel (EN-1.0037 St-37.2)(4)	Carbon steel (EN-1.0037 St-37.2)(4)	Stainless steel (EN-1.4408)(5)				
9, 10	Lever	Carbon steel (EN-1.0037 St-37.2)	Carbon steel (EN-1.0037 St-37.2)	Carbon steel (EN-1.0037 St-37.2)	Stainless steel (EN-1.4408)				
11	Seating	Stainless steel (EN-1.4028)	Stainless steel (EN-1.4028)	Stainless steel (EN-1.4028)	Stainless steel (EN-1.4542)				
12	Plug	Stainless steel (EN-1.4028)	Stainless steel (EN-1.4028)	Stainless steel (EN-1.4028)	Stainless steel (EN-1.4542)				
13	Lead	Stainless steel (EN-1.4028)	Stainless steel (EN-1.4028)	Stainless steel (EN-1.4028)	Stainless steel (EN-1.4401)				
14	Spring press	Carbon steel (EN-1.1191)	Carbon steel (EN-1.1191)	Carbon steel (EN-1.1191)	Stainless steel (EN-1.4305)				
15	Separator	Stainless steel (EN-1.4028)	Stainless steel (EN-1.4028)	Stainless steel (EN-1.4028)	Stainless steel (EN-1.4401)				
16	Rod	Stainless steel (EN-1.4028)	Stainless steel (EN-1.4028)	Stainless steel (EN-1.4028)	Stainless steel (EN-1.4401)				
17	Lever shaft	Carbon steel (EN-1.1191)	Carbon steel (EN-1.1191)	Carbon steel (EN-1.1191)	Stainless steel (EN-1.4305)				
18	Gudgeon	Carbon steel (EN-1.1231)	Carbon steel (EN-1.1231)	Carbon steel (EN-1.1231)	Stainless steel (EN-1.4310)				
19	Ring	Stainless steel (EN-1.4028)	Stainless steel (EN-1.4028)	Stainless steel (EN-1.4028)	Stainless steel (EN-1.4401)				
20, 21	Safety ring	Stainless steel (EN-1.4310)	Stainless steel (EN-1.4310)	Stainless steel (EN-1.4310)	Stainless steel (EN-1.4310)				
22	Spring	Vanadium-chrome steel (EN-1.8159)(2)	Vanadium-chrome steel (EN-1.8159)(2)	Vanadium-chrome steel (EN-1.8159)(2)	Stainless steel (EN-1.4310) (3)				
23	Gland	Carbon steel (EN-1.1191)	Carbon steel (EN-1.1191)	Carbon steel (EN-1.1191)	Stainless steel (EN-1.4305)				
24	Hollow screw	Stainless steel (EN-1.4305)	Stainless steel (EN-1.4305)	Stainless steel (EN-1.4305)	Stainless steel (EN-1.4305)				
25	Hollow screw nut	Stainless steel (EN-1.4305)	Stainless steel (EN-1.4305)	Stainless steel (EN-1.4305)	Stainless steel (EN-1.4305)				
26	Buffer nut	Stainless steel (EN-1.4305)	Stainless steel (EN-1.4305)	Stainless steel (EN-1.4305)	Stainless steel (EN-1.4305)				
27	Rod check nut	Carbon steel (EN-1.1141)	Carbon steel (EN-1.1141)	Carbon steel (EN-1.1141)	Stainless steel (EN-1.4401)				
28, 29, 48	Nut	Carbon steel (EN-1.1141)	Carbon steel (EN-1.1141)	Carbon steel (EN-1.1141)	Stainless steel (EN-1.4401)				
30, 31	Washer	Carbon steel (EN-1.1141)	Carbon steel (EN-1.1141)	Carbon steel (EN-1.1141)	Stainless steel (EN-1.4401)				
32	Stud	Carbon steel (EN-1.1181)	Carbon steel (EN-1.1181)	Carbon steel (EN-1.1181)	Stainless steel (EN-1.4401)				
33, 34, 35	Screw	Carbon steel (EN-1.1191)	Carbon steel (EN-1.1191)	Carbon steel (EN-1.1191)	Stainless steel (EN-1.4401)				
36	Cap	Carbon steel (EN-1.1181)	Carbon steel (EN-1.1181)	Carbon steel (EN-1.1181)	Stainless steel (EN-1.4401)				
38	Coupling	Graphite	Graphite	Graphite	PTFE (Teflon)				
39	Coupling	PTFE (Teflon)	PTFE (Teflon)	PTFE (Teflon)	PTFE (Teflon)				
40	Seal	Graphite	Graphite	Graphite	PTFE (Teflon)				
41	Seal	Plastic	Plastic	Plastic	Plastic				
42	Sealing wire	Sealing wire	Sealing wire	Sealing wire	Sealing wire				
43	Characteristic plate	Stainless steel (EN-1.4301)	Stainless steel (EN-1.4301)	Stainless steel (EN-1.4301)	Stainless steel (EN-1.4301)				
45	Plug	Stainless steel (EN-1.4401)	Stainless steel (EN-1.4401)	Stainless steel (EN-1.4401)	Stainless steel (EN-1.4401)				
46	Sealing disk	PTFE (Teflon)	PTFE (Teflon)	PTFE (Teflon)	PTFE (Teflon)				
		Silicone's rubber	Silicone's rubber	Silicone's rubber	Silicone's rubber				
		Fluorelastomer (Viton)	Fluorelastomer (Viton)	Fluorelastomer (Viton)	Fluorelastomer (Viton)				
47	Washer	Stainless steel (EN-1.4401)	Stainless steel (EN-1.4401)	Stainless steel (EN-1.4401)	Stainless steel (EN-1.4401)				
49	Coupling	Copper	Copper	Copper	PTFE (Teflon)				
50	Limiter	Stainless steel (EN-1.4028)	Stainless steel (EN-1.4028)	Stainless steel (EN-1.4028)	Stainless steel (EN-1.4401)				
51	Membrane	Fluorelastomer (Viton)	Fluorelastomer (Viton)	Fluorelastomer (Viton)	Fluorelastomer (Viton)				
52	O-ring	Fluorelastomer (Viton)	Fluorelastomer (Viton)	Fluorelastomer (Viton)	Fluorelastomer (Viton)				
	DN, x DN ₂	20 x 25 to 200 x 200							
	PN	16		40		40		40	
OPERATING CONDITIONS	PRESSURE IN bar	16	13	13	13	40	35	32	28
	MAX. TEMP. IN °C	120	200	250	300	120	200	250	300
	MIN. TEMP. IN °C	-10		-10		-10		-60	

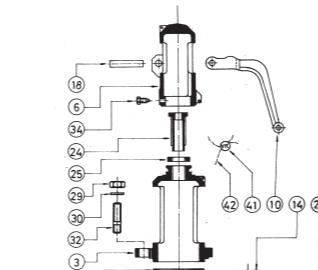
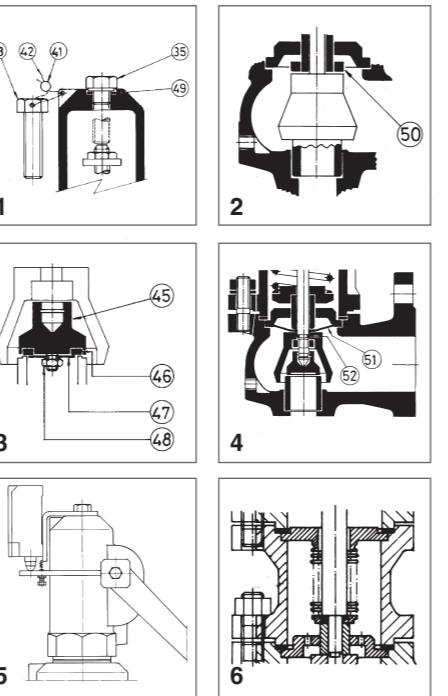
(1) DN-25x25 in stainless steel (EN-1.4408).

(2) Spring steel (EN-10270-1-SH) for wire spring Ø < 10 mm. Maximum temperature EP, ES and CP 250°C / AP 400°C.

(3) Vanadium chrome steel (EN-1.8159) for wire spring Ø > 10 mm.

(4) DN-25 x 25 in stainless steel (EN-1.4301).

(5) DN-32 x 32 to DN-65x65 in stainless steel (EN-1.4401).



Normal safety valve with spring loading (AN) model 494 - AP and CP.

1. Disassembly and assembly.

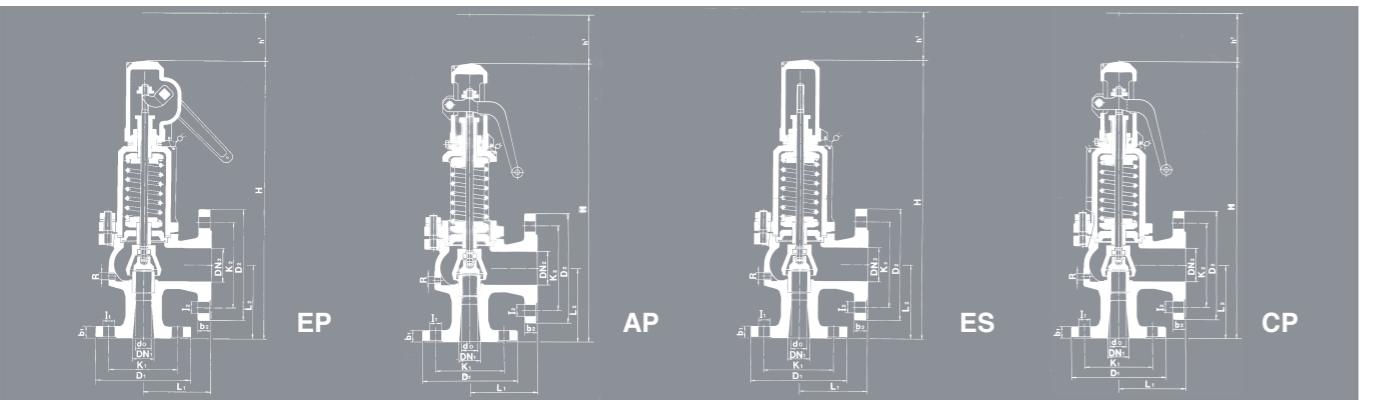
1.1 Disassembly.

To replace the spring (22) or clean any of the internal components of the valve, proceed in the following manner:

- A - Withdraw the clip (18), using a punching tool, until the lever (10) comes free.

- B - Loosen the screws (34) and take the cap (6) off.

DN1 x DN2	25 x 25	32 x 32	40 x 40	50 x 50	65 x 65	80 x 80	100 x 100	125 x 125	150 x 150	200 x 200			
do	16	20	25	32	40	50	63	77	93	110			
Ao = $\frac{\pi \cdot d_0^2}{4}$	201	314	491	804	1257	1964	3117	4657	6793	9503			
H	350	390	420	495	550	655	705	810	850	990			
h ₁	112	129	129	148	148	191	191	191	191	223			
L ₁	100	105	115	125	145	155	175	200	225	225			
L ₂	100	105	115	125	145	155	175	200	225	250			
R	1/4"	1/4"	1/4"	1/4"	3/8"	3/8"	3/8"	1/2"	1/2"	1/2"			
Whitworth gas-tight cylindrical female thread ISO 228/1 (DIN-259)													
INTAKE FLANGE	PN-10/16 EN-1092-2 (2)	EN-1092-2 (3)	EN-1092-1 (3)	EN-1092-1 (3)	PN-25/40	EN-1092-2 (2)	EN-1092-1 (3)	EN-1092-1 (3)	EN-1092-1 (3)	EN-1092-1 (3)			
D ₁	115	140	150	165	185	200	220	250	285	340			
K ₁	85	100	110	125	145	160	180	210	240	295			
I ₁	14	19	19	19	19	19	19	19	23	23			
b ₁	16	18	18	20	20	22	24	26	26	26			
DRILLS N. ^o	4	4	4	4	4	8	8	8	8	8			
D ₁	115	140	150	165	185	200	235	270	300	360			
K ₁	85	100	110	125	145	160	190	220	250	310			
I ₁	14	19(18)*	19(18)*	19(18)*	19(18)*	19(18)*	23(22)*	28(26)*	28(26)*	28(26)*			
b ₁	18(16)*	18	18(20)*	20	22	24	24	26	28	30			
DRILLS N. ^o	4	4	4	4	8	8	8	8	8	12			
ESCAPE FLANGE	EN-1092-2 (1)	EN-1092-2 (1)	EN-1092-1 (1)	EN-1092-1 (1)	EN-1092-1 (1)	D ₂	115	140	150	165			
D ₂	85	100	110	125	145	160	180	210	240	295			
K ₂	14	19(18)*	19(18)*	19(18)*	19(18)*	19(18)*	19(18)*	19(18)*	19(18)*	19(18)*			
b ₂	16	18	18	20	20(18)*	22(20)*	24(22)*(20)*	26(22)*	26(24)*(22)*	26(24)*			
DRILLS N. ^o	4	4	4	4	4	8	8	8	8	8			
MODEL	EP	AP	ES	CP	EP	AP	ES	CP	EP	AP	ES	CP	
WEIGHT (kg)	CAST IRON	8,00	7,40	7,60	7,80	9,60	8,88	9,12	9,38	13,87	12,82	13,17	13,43
CODE	NODULAR IRON	8,73	8,07	8,29	8,49	10,47	9,68	9,94	10,20	15,13	13,99	14,37	14,63
	CAST STEEL STAINLESS STEEL	8,50	7,86	8,07	8,27	10,60	9,80	10,07	10,33	14,87	13,75	14,12	14,38
	CAST IRON 2002-494.	8,102	8,104	8,106	8,108	8,1061	8,1062	8,1063	8,1064	8,1065	8,1066	8,1067	8,1068
	NODULAR IRON 2002-494.	8,1021	8,1041	8,1061	8,1062	8,1063	8,1064	8,1065	8,1066	8,1067	8,1068	8,1069	8,1070
	CAST STEEL 2002-494.	8,1022	8,1042	8,1062	8,1064	8,1065	8,1066	8,1067	8,1068	8,1069	8,1070	8,1071	8,1072
	STAINLESS STEEL 2002-494.	8,1023	8,1043	8,1063	8,1065	8,1066	8,1067	8,1068	8,1069	8,1070	8,1071	8,1072	8,1073



RECOMMENDED RANGES OF APPLICATION					
MODEL		EP	AP(1)	ES	CP(1)
FLUID	SATURATED STEAM	*	*	*	*
	GASES	*		*	
	LIQUIDS	*		*	
INTERNAL OR GENERATED	SATURATED STEAM GASES		15		
	LIQUIDS		—		
EXTERNAL VARIABLE (1)	SATURATED STEAM GASES		—		
	LIQUIDS		—		
EXTERNAL CONSTANT (1)(2)(3)	SATURATED STEAM GASES		50		
	LIQUIDS		90		
% OVERPRESSURE		SATURATED STEAM GASES	10		
		LIQUIDS	25		

OPEN AND CLOSED PRESSURES IN % OF SET PRESSURE			
FLUIDO	PRESSURE IN bar	OPENING PRESSURE	CLOSING PRESSURE
SATURATED STEAM GASES	< 3	+ 10 %	- 0,3 bar
	≥ 3	+ 10 %	- 10 %
LIQUIDS	< 3	+ 10 %	- 0,6 bar
	≥ 3	+ 10 %	- 20 %

- If external backpressure exists, the AP and CP model cannot be used.
 - With external constant backpressure, the spring is adjusted deducting the backpressure from the set pressure.
 - If the set pressure < 3 bar we must consider the total atmospheric pressure (1 bar) as external constant backpressure being freely released.
- If $p_a > 0,25p$, we must limit plug speed with the consequent reduction of the α_d coefficient of discharge. With the new reduced coefficient we determine the d_0 , in order to remove the necessary volume..

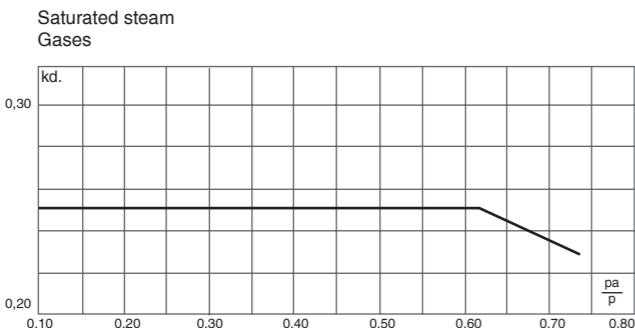
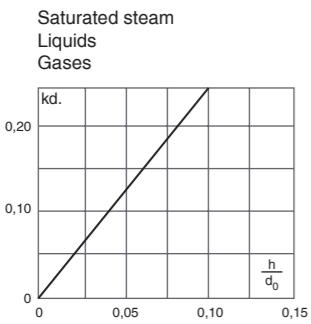
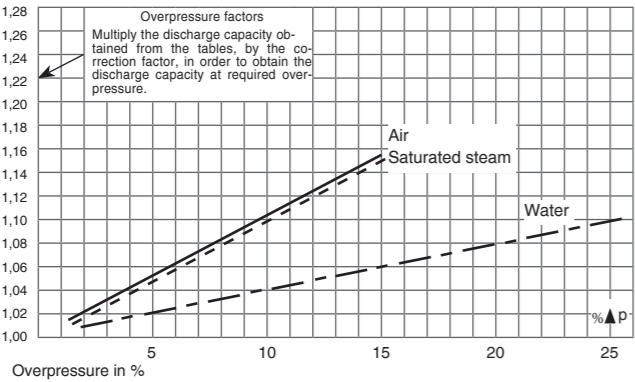
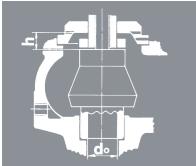
p_a = Backpressure permitted [bar] absolute.
 p = Set pressure [bar] absolute.
 α_d = Coefficient of discharge.

(1) From DN200x200 PN-10.
 (2) DN-200x200 PN-10.
 (3) DN-200x200 PN-25.

* Cast steel (EN-1.0619) and Stainless (EN-1.4408).
 • Nodular Iron (EN-JS1030).

SET PRESSURES AND REGULATING RANGES											
DN ₁ x DN ₂		25 x 25	32 x 32	40 x 40	50 x 50	65 x 65	80 x 80	100 x 100	125 x 125	150 x 150	200x200
SET PRESSURES IN bar		MAXIMUM (LIQUIDS AND GASES)	PN-16	16	16	16	16	16	16	16	10
		PN-40		40	40	40	32	32	32	25	20
SET PRESSURES IN bar		MAXIMUM (SATURATED STEAM)	PN-16	13	13	13	13	13	13	13	10
		PN-40		32	32	30	24	22	24	20	18
SPRING REGULATING RANGE IN bar		MINIMUM	STEAM AND GASES	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5
		LIQUIDS	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2
SPRING REGULATING RANGE IN bar											
		0,20 to 0,68	CODE	56210 56390	56226 56406	56242 56422	56258 56438	56273 56453	56288 56468	56303 56483	56317 56497
		0,66 to 1,00	CODE	56211 56391	56227 56407	56243 56423	56259 56439	56274 56454	56289 56469	56304 56484	563

COEFFICIENT OF DISCHARGE											
DN1 x DN2		25 x 25	32 x 32	40 x 40	50 x 50	65 x 65	80 x 80	100 x 100	125x 125	150x150	200x200
do		16	20	25	32	40	50	63	77	93	110
h		2,00	2,00	2,50	3,50	4,00	5,00	6,50	8,00	9,50	11,00
h/do		0,12	0,10	0,10	0,10	0,10	0,10	0,10	0,10	0,10	0,10
COEFFICIENT OF DISCHARGE	SATURATED STEAM GASES	0,25									
kd	LIQUIDS	0,25									



DN1 x DN2	25 x 25	32 x 32
do	16	20
h	2,00	2,00

Ao = $\frac{\pi \cdot do^2}{4}$	201	314

p [bar]	SET PRESSURE IN bar					
	I	II	III	I	II	III
0,5	43	49	1804	66	77	2829
1,0	56	68	2551	87	107	4001
1,5	69	86	3124	108	134	4900
2,0	82	103	3607	128	160	5658
2,5	95	120	4033	148	187	6326
3,0	108	137	4418	169	214	6930
3,5	121	154	4772	189	241	7485
4,0	134	171	5102	209	267	8002
4,5	147	188	5411	229	294	8487
5,0	159	205	5704	249	321	8946
6,0	185	239	6248	289	374	9800
7,0	211	274	6749	329	428	10585
8,0	236	308	7215	369	481	11316
9,0	261	342	7652	408	535	12002
10,0	287	376	8066	448	588	12652
12,0	337	445	8836	527	695	13859
14,0	388	513	9544	606	802	14969
16,0	439	582	10203	685	909	16003
18,0	489	650	10822	764	1016	16974
20,0	539	718	11407	842	1123	17892
22,0	590	787	11964	921	1230	18765
24,0	640	855	12496	1000	1337	19600
26,0	691	924	13006	1080	1444	20400
28,0	742	992	13497	1160	1551	21170
30,0	794	1060	13971	1240	1658	21913
32,0	845	1129	14429	1320	1764	22632
34,0	1197	14873		1871	23328	
36,0	1266	15305		1978	24005	
38,0	1334	15724		2085	24662	
40,0	1403	16132		2192	25303	

DISCHARGE CAPACITY

40 x 40	50 x 50	65 x 65	80 x 80	100 x 100	125 x 125	150 x 150	200 x 200
25	32	40	50	63	77	93	110
491	804	1257	1964	3117	4657	6793	9503

For other, not so dense liquids, other than water at 20°C apply:

$$\sqrt{\frac{Q_A}{Q_L}} \cdot V_A \propto V_L \cdot \sqrt{\frac{Q_L}{Q_A}}$$

V_A = Water flow according to table.
 V_L = Liquid flow.
 Q_A = Water density at a 20°C.
($Q_A = 998 \text{ kg/m}^3$)
 Q_L = Liquid density.

III - Water at 20°C in l/h

I	II	III	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III
104	120	4424	170	196	7244	266	307	11325	416	480	17695	660	762	28082	986	1138	41957	1438	2148	60957
136	167	6256	223	274	10244	349	428	16016	545	669	25024	864	1062	39715	1291	1586	59336	1884	2994	86206
168	209	7662	275	342	12546	431	535	19615	673	836	30648	1068	1327	48640	1596	1983	72672	2328	3743	105580
200	251	8847	328	411	14487	513	642	22650	801	1003	35389	1271	1592	56165	1899	2379	83914	2770	4492	121913
232	293	9892	380	479	16197	594	749	25323	928	1171	39566	1473	1858	62794	2200	2776	93819	3209	5240	136303
264	334	10836	432	548	17743	675	856	27740	1055	1338	43343	1674	2123	68788	2501	3172	102773	3648	5989	149313
295	376	11704	483	616	19165	756	963	29963	1181	1505	46815	1874	2388	74299	2800	3569	111008	4		

FACT LIST FOR SAFETY VALVE CALCULS				Customer: Theme: Leaf: Of:																			
1	Calculus acording to ISO-4126-1:2004 "Safety valves" 1)																						
2	Position N°.																						
3	N°. of units																						
4	Regulation																						
5	SERVICE CONDITIONS																						
6										Fluid													
7										Calculation temperature °C													
8										State at moment of dischar. l = liquid, s = steam, g = gas		<input type="checkbox"/> l		<input type="checkbox"/> s		<input type="checkbox"/> g		<input type="checkbox"/> l		<input type="checkbox"/> s		<input type="checkbox"/> g	
9										Molecular mass kg/kmol													
10										Adiabatic exponent æ Compressibility coe. Z													
11										Density at moment of discharge kg/m³													
12										Coefficients ψ max χ													
13										Viscosity cSt cPs													
14										Working pressure abs. bar													
15										Set pressure abs. bar													
16										External back pressure abs. constant variable bar													
17										Rated pressure abs. bar													
18										Discharge capacity Required: kg/h, Nm³/h, l/h													
19										Possible: 1) Kg/h, Nm³/h, l/h													
20										Opening: Full lift / Normal / Progressive													
21										Manufacturer type													
22										Materials		Body											
23	Seat																						
24	Plug																						
25	Spring																						
26	Joint																						
27	Manual discharge action yes / no																						
28	Cover Closed / Open																						
29	Bellows si / no																						
30	Body with drainage si / no																						
31	Diameter of narrowest flow do mm																						
32	Section of narrowest flow Ao		Necessary Ao mm²																				
33			Chosen Ao mm²																				
34	CONNECTIONS		Allowed discharge coefficient αd																				
35			Input / Output		Flange mm																		
36					Thread inch																		
37					Welding (soldering) ends																		
38			DN		PN bar																		
					Shape of joint surfaces (DIN-2526)																		
39	OBSERVA-TIONS		Unit weight approx. Kg																				
40																							
41																							
42																							
43	ACCEP-TANCE		Certificate according to EN-10204 2.2																				
44			Certificate according to EN-10204 3.2																				
45																							
Date: _____																							
Department: _____																							
Name: _____																							