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Sizing - Medium			
1000	Designation	Water	
1004	Formula	H2O	
1005	Density	$\rho$	998 kg/m <sup>3</sup>
1006	Viscosity	$\mu$ or $\eta$	

Sizing - Service condition			
1100	Maximum allowable working pressure		
1101	Set pressure	$p$	100 bar-g
1102	Constant superimposed back pressure	$p_{af}$	
2102	Variable superimposed back pressure		
1103	Built up back pressure	$p_{ae}$	
1104	Backpressure		
1105	Overpressure	$dp$	10,00 %
1106	Environmental pressure	$p_u$	1,013 bar
1107	Relieving Temperature	$T$	20 °C
1111	Operating Temperature		
1108	Required massflow	$q_{m,ab}$	17.964 kg/h
1109	Volume flow to be discharged (working condition)	$q_{vb,ab}$	18 m <sup>3</sup> /h
1120	Rupture disc correction factor	$K_c$	1,000

Sizing - Calculation			
1200	Certified massflow	$q_{m,zu}$	40.062,771 kg/h
1201	Certified volume flow (operating condition)	$q_{vb,zu}$	40,143 m <sup>3</sup> /h
1203	Certified volume flow (standard condition)	$q_{vn,zu}$	
1204	Maximum mass flow	$q_{m,max}$	44.514,19 kg/h
1205	Maximum volume flow (working condition)	$q_{vb,max}$	44,603 m <sup>3</sup> /h
1206	Maximum volume flow (standard condition)	$q_{vn,max}$	
1207	Capacity exceed		123,02 %

Valve - General			
1500	Article number		4624.2202
1512	Reseller article number		
1513	Quantity of safety valve		1
1501	Certified coefficient of discharge for steam and gases	$K_{DG}$	0,811
1502	Certified coefficient of discharge for liquid	$K_F$	0,566
1453	Orifice		D
1505	Bonnet / Lifting device		Cap H2
1506	Body-/ Inlet base material		1.4404 / 316L
1511	Bonnet		Closed Bonnet
1514	Order code	4624.2202-100 bar_g-V55V66J22-3.2	

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Inlet connection		
1307	Thread standard	G - Male thread acc. to DIN ISO 228-1
1308	DN	G 3/4"

Outlet connection		
1357	Thread standard	G - Female thread acc. to DIN ISO 228-1
1358	DN	G 1"


Valve - Dimensions				
1400	Discharge area	Ao	132,732	mm <sup>2</sup>
1401	Discharge diameter	do	13	mm
1402	Centre to Face dimensions	a	52	mm
1403	Centre to Face dimensions	b	75	mm
1405	Height	H	298	mm
1406	Weight	M	2,6	kg
1413	Thread length	C	16	mm

Lift				
1507	Standard		3	mm

Valve - Calculation				
1200	Certified massflow	qm,zu	40.062,771	kg/h
1201	Certified volumeflow (operating condition)	qvb,zu	40,143	m <sup>3</sup> /h
1203	Certified volumeflow (standard condition)	qvn,zu		
1204	Maximum mass flow	qm,max	44.514,19	kg/h
1205	Maximum volume flow (working condition)	qvb,max	44,603	m <sup>3</sup> /h
1206	Maximum volume flow (standard condition)	qvn,max		
1207	Capacity exceed		123,02	%
1600	Required actual discharge area	Ao, req	59,517	mm <sup>2</sup>
1601	Required discharge diameter	do,req	8,705	mm
1611	Reaction force (acc. to API 520)	Fr		
1618	Cold differential test pressure	CDTP		
1620	Cold differential test pressure, manually	CDTP		

Valve - Accessories	
J22	O-ring disc: "D", EPDM (Dutral, Keltan, Vistalon)

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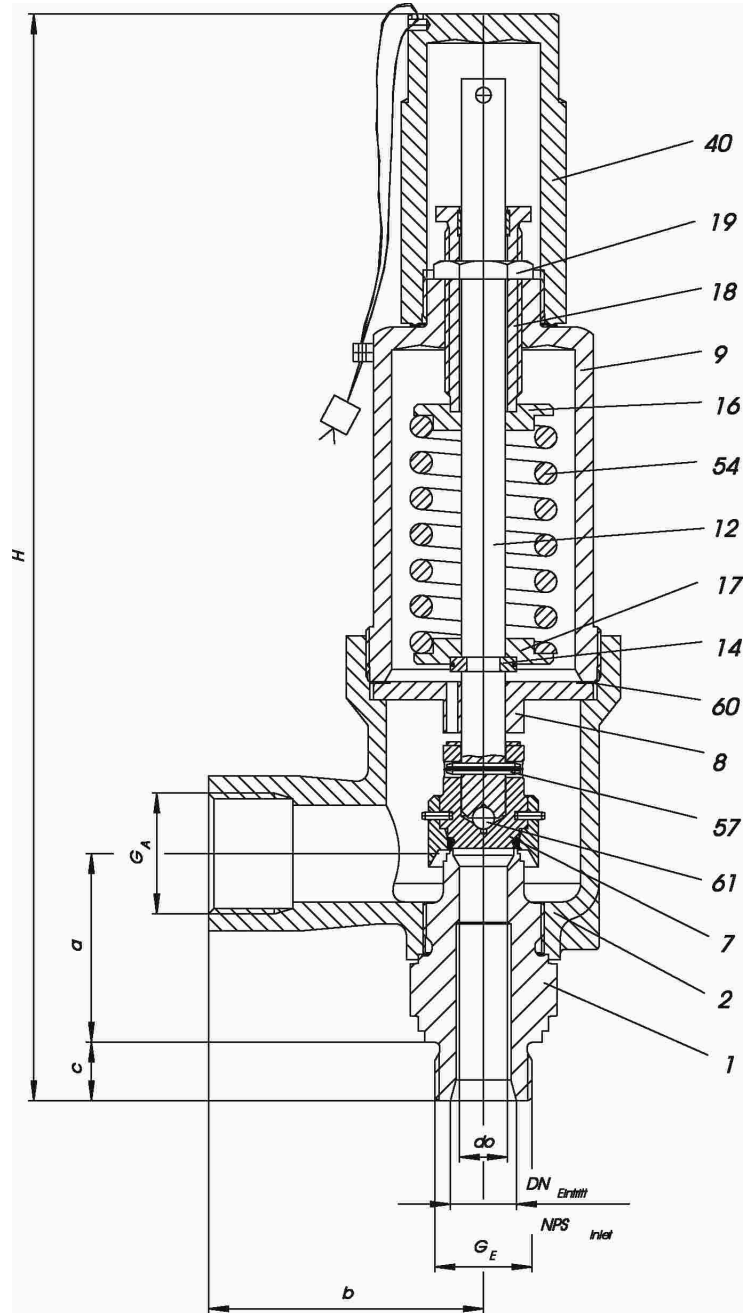
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Valve - Part list					
	PosNo	Denomination	Q	Material ASME	Material DIN
12010	1	Inlet body	1	316L	1.4404
12020	2	Outlet body	1	SA 351 CF8M	1.4408
12070	7	O-ring-disc	1	316L/EPDM [D]	1.4404/EPDM [D]
12080	8	Guide	1	316L	1.4404
12090	9	Bonnet	1	316L	1.4404
12120	12	Spindle	1	316L	1.4404
12140	14	Split ring	2	316L	1.4404
12160	16	Spring plate	1	316L	1.4404
12170	17	Spring plate	1	316L	1.4404
12180	18	Adjusting screw	1	316L	1.4404
12190	19	Lock nut	1	316L	1.4404
12400	40	Cap H2	1	316L	1.4404
12540	54	Spring	1	Stainless steel	1.4310
12570	57	Pin	1	Stainless steel	1.4310
12590	59	Securing ring	1	316Ti	1.4571
12600	60	Gasket	2	Graphite/1.4401	Reingraphit + 1.4401
12610	61	Ball washer	1	Hardened Stainless steel/316	1.3541/1.4401

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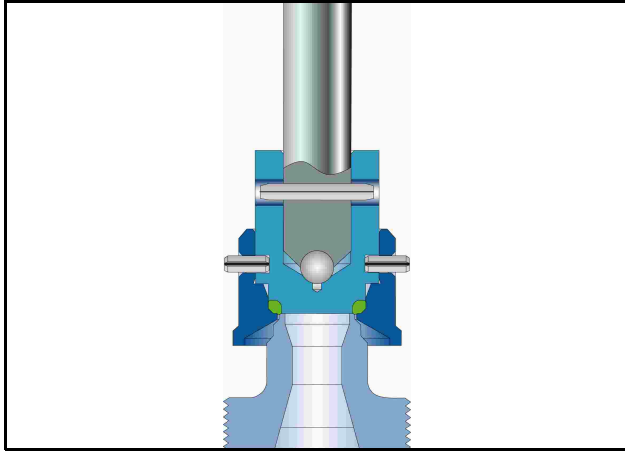
**Drawing**



Drawing is a view; the effective geometry could deviate from this view.

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**Option drawing**



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