

Safety Valve, TÜV Type Tested
Type VSE 2 · VSR 2 · VSE 4, Closed Bonnet
Seat Code Letter SKB A – R DN 25 – 200

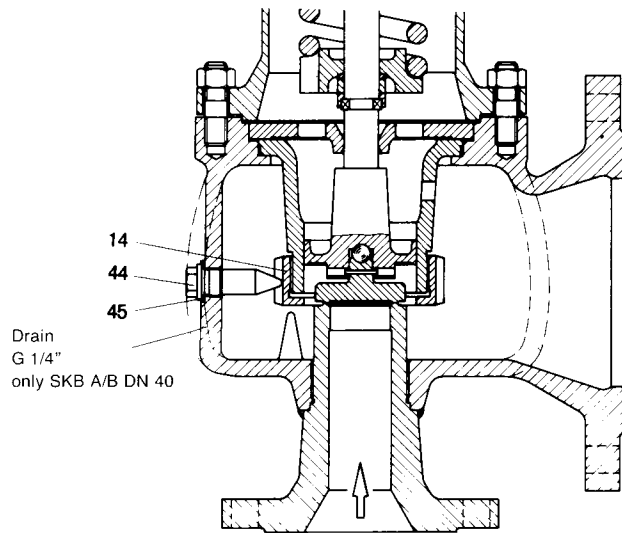
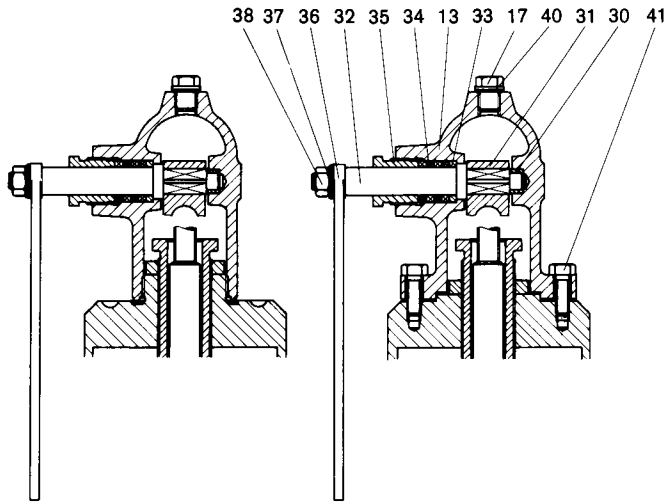
Sempell

Full Lift Safety Relief Valve Type Test No. TÜV-SV-519
 Normal Safety Valve Type Test No. TÜV-SV-551

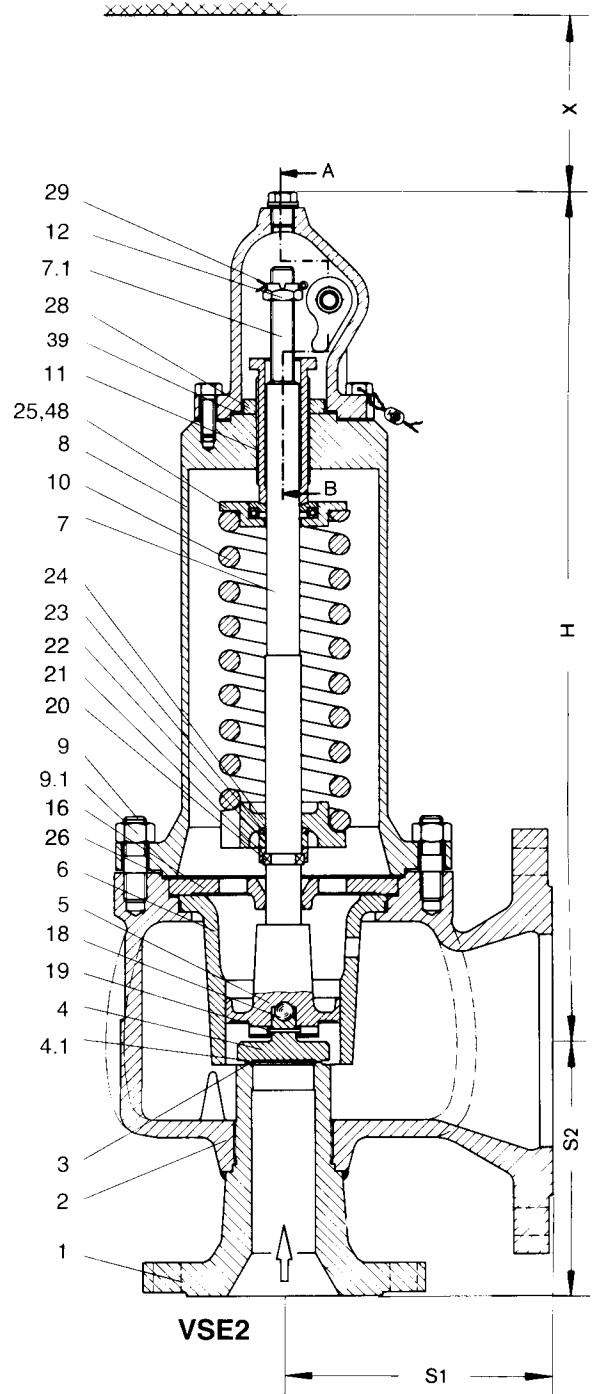
VSE2/VSR 2 Spring loaded
 VSE4 Weight loaded

SKB A-H

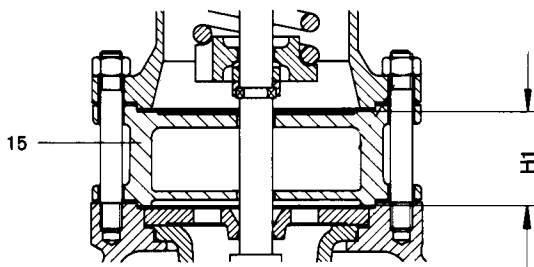
SKB J-R



VSR2 with adjusting ring



VSE2



Accessory SN 110 Cooling spacer

For protection of the spring with
 operating temperatures in excess of +400° C and below -90° C (-130° F).

Date

Name

Job-No.

Item

Sheet-No.

TO 272.01.890 E

Sempell-Seat Code Letters and DIN Connections

1) PN of the inlet flange acc. to DIN 2401

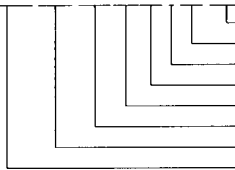
2) For SN 110 the height H increases by dimension H1

3) For pressures in brackets () type VSE 4 with direct weight-loading only. Type tested from p = 0,4 bar and above.

1) Inlet DN	Seat code letter SKB	Outlet 3) DN	Pressure group	3) Set pressure in bar		Smallest flow section A ₀ mm ²	Outlet flange PN	Dimensions in mm					2) H ca.	Weight kg	SN 110 H1 mm	Dismantling-dimension x mm	
				min.	max.			S ₁	S ₂ Inlet flange PN								
25	A	40	I	(0,3/0,5)	45	254	40	100	110	125	-	-	-	290	9	50	300
		50	I	(0,3/0,5)	45	254	40	100	110	125	-	-	-	290	10	50	300
		40	II	45	125	254	40	100	-	125	150	150	150	290	9	50	300
		50	II	45	125	254	40	100	-	125	150	150	150	290	10	50	300
		50	III	125	200	254	64	140	-	125	150	150	150	345	17	50	300
		50	IV	200	500	133	64	140	-	150	150	150	320	19	50	300	
25	B	40	I	(0,3/0,5)	45	254	40	100	110	125	-	-	-	290	9	50	300
		50	I	(0,3/0,5)	45	254	40	100	110	125	-	-	-	290	10	50	300
		40	II	45	125	254	40	100	-	125	150	150	150	290	9	50	300
		50	II	45	125	254	40	100	-	125	150	150	150	290	10	50	300
		50	III	125	200	254	64	140	-	125	150	150	150	345	18	50	300
		50	IV	200	450	254	64	140	-	150	150	150	475	19	50	300	
40	C	50	I	(0,3/0,5)	45	254	40	100	115	130	-	-	-	290	11	50	300
		65	I	(0,3/0,5)	45	254	40	110	115	130	-	-	-	290	12	50	300
		50	II	45	125	254	40	100	-	130	160	160	160	290	11	50	300
		65	II	45	125	254	40	110	-	130	160	160	160	290	12	50	300
		65	III	125	200	254	64	140	-	130	160	160	160	345	20	50	300
		65	IV	200	450	254	64	140	-	160	160	160	475	21	50	300	
40	D	65	I	(0,4/0,56)	31,5	471	40	110	115	130	-	-	-	300	14	50	300
		65	II	31,5	90	471	40	120	115	130	160	160	160	340	22	50	300
		65	III	90	140	471	40	140	-	130	160	160	160	435	30	50	300
		65	IV	140	315	471	64	140	-	130	160	160	160	475	35	50	300
50	E	80	I	(0,4/0,56)	31,5	471	40	120	135	155	-	-	-	300	30	50	300
		80	II	31,5	90	471	40	130	135	155	175	175	175	340	48	50	300
		80	III	90	140	471	40	140	-	155	175	175	175	435	65	50	300
		80	IV	140	315	471	64	140	-	155	175	175	175	475	70	50	300
50	F	80	I	(0,4/0,56)	28	616	40	140	120	140	-	-	-	360	32	50	300
		100	I	(0,4/0,56)	28	616	40	145	150	160	-	-	-	370	40	50	300
		100	II	28	80	616	40	145	150	160	180	180	180	370	50	50	300
		100	III	80	125	616	40	145	-	160	180	180	180	450	70	50	300
		100	IV	125	280	616	40	145	-	160	180	180	500	80	50	300	
65	G	100	I	(0,4/0,56)	22,4	855	40	145	160	170	-	-	-	375	32	50	300
		100	II	22,4	63	855	40	145	160	170	-	-	-	375	50	50	300
		100	III	63	100	855	40	160	-	170	190	190	230	450	72	50	300
		100	IV	100	224	855	40	160	-	170	190	190	230	500	80	50	300
80	G	100	I	(0,4/0,56)	22,4	855	40	145	160	170	-	-	-	375	32	50	300
		100	II	22,4	63	855	40	145	160	170	-	-	-	375	50	50	300
		100	III	63	100	855	40	160	-	170	190	190	230	450	72	50	300
		100	IV	100	224	855	40	160	-	170	190	190	230	500	80	50	300
65	H	125	I	(0,4/0,5)	20	1134	40	160	160	190	-	-	-	385	39	50	700
		125	II	20	56	1134	40	160	160	190	-	-	-	385	54	50	700
		125	III	56	90	1134	40	160	-	190	190	230	230	510	80	50	700
		125	IV	90	200	1134	40	160	-	190	190	230	230	510	90	50	700
80	H	125	I	(0,4/0,5)	20	1134	40	160	160	190	-	-	-	385	39	50	700
		125	II	20	56	1134	40	160	160	190	-	-	-	385	54	50	700
		125	III	56	90	1134	40	160	-	190	190	230	230	510	80	50	700
		125	IV	90	200	1134	40	160	-	190	190	230	230	510	90	50	700
80	J	150	I	(0,4/1,8)	18	1521	40	190	180	190	-	-	-	550	56	70	700
		150	II	18	45	1521	40	190	180	190	-	-	-	705	75	70	700
		150	III	45	90	1521	40	190	-	190	200	250	250	705	100	70	700
		150	IV	90	180	1521	40	190	-	190	200	250	250	705	110	70	700
100	K	150	I	(0,4/1,6)	16	2043	40	190	180	-	-	-	-	555	60	70	700
		150	II	16	40	2043	40	190	180	200	-	-	-	710	80	70	700
		150	III	40	90	2043	40	190	180	200	-	-	-	710	100	70	700
		150	IV	90	160	2043	40	190	-	200	200	250	275	710	110	70	700
100	L	150	I	(0,4/1,25)	12,5	2734	40	190	180	-	-	-	-	565	90	70	700
		150	II	12,5	35,5	2734	40	190	180	200	-	-	-	720	110	70	700
		150	III	35,5	71	2734	40	190	180	200	-	-	-	720	140	70	700
		150	IV	71	140	2734	40	190	-	200	200	250	275	720	150	70	700
125	M	200	I	(0,4/1,12)	10	3739	10	225	220	-	-	-	-	595	120	70	700
		200	II	10	28	3739	10	225	220	220	-	-	-	730	130	70	700
		200	III	28	56	3739	10	225	220	220	-	-	-	800	160	70	700
		200	IV	56	100	3739	16	225	-	220	220	250	-	800	170	70	700
150	M	200	I	(0,4/1,12)	10	3739	10	225	220	-	-	-	-	595	120	70	700
		200	II	10	28	3739	10	225	220	220	-	-	-	730	130	70	700
		200	III	28	56	3739	10	225	220	220	-	-	-	800	160	70	700
		200	IV	56	100	3739	16	225	-	220	220	275	-	800	170	70	700
150	N	200	I	(0,2/1,0)	9	5027	10	225	220	-	-	-	-	970	160	110	700
		200	II	9	25	5027	10	225	220	220	-	-	-	1060	170	110	700
		200	III	25	71	5027	16	225	220	220	220	275	-	1060	200	110	700
150	P	250	I	(0,2/0,9)	8	6793	10	270	240	-	-	-	-	970	210	110	700
		250	II	8	20	6793	10	270	240	240	-	-	-	1060	220	110	700
		250	III	20	56	6793	10	270	240	240	-	-	-	1060	250	110	700
200	Q	250	I	(0,2/0,8)	7,1	8992	10	270	240	-	-	-	-	990	235	110	700
		250	II	7,1	18	8992	10	270	240	250	-	-	-	1080	245	110	700
		250	III	18	40	8992	10	270	240	250	-	-	-	1080	270	110	700
200	R	250	I	(0,2/0,71)	6,3	12469	10	270	240	-	-	-	-	1015	260	110	700
		250	II	6,3	16	12469	10	270	240	-	-	-	-	1105	270	110	700
		250	III	16	31,5	12469	10	270	240	250	-	-	-	1105	300	110	700

Example for valve specification

VSE2. 40- 25 B50-I-12-110 Sempell-SKB and DIN-connections
VSE2.150-1½ FA 2-I-12-110 API-seat code letter and ANSI-connections



Standard. Accessories
Material specification
Pressure group
Outlet nominal size DN
Seat code letter SKB
Inlet nominal size DN
Inlet nominal pressure PN
Type of valve

To be specified on enquiry or order

Operating medium and state of medium (gaseous or liquid)
Set pressure and design pressure
Operating temperature
Capacity
Material specification
Standardized accessories of design, materials and flanges
Inlet with welding end

SN Standardized accessories acc. to TO.270.00.

API 526-Seat Code Letters and ANSI Connections

*Not contained in API standard 526

2) For SN 110 the height H increases by dimension H1

Inlet DN	Seat code letter SKB	Outlet DN	Pressure group	Set pressure		Center-to-face dimensions								2) H ca. inch	Weight ca. lbs	Respective Sempell SKB	SN 110 H1 inch	Dismantling-dimension x inch	
				min. psig	max. psig	S1 Outlet ASA 150 inch	S1 Outlet ASA 300 inch	S2 Inlet ASA 150 inch		S2 Inlet ASA 300 inch		S2 Inlet ASA 600 inch							S2 Inlet ASA 900 inch
1 1½	EA	2	I	7	650	4½	4½	4½							12	22	A	2	12
			II	650	1810	4½	4½	4½	4½					12	22				
		1½	II	2	650	1810		5½			4½	4½			12	22			
				2	1810	2900		5½			4½	4½			14	38			
	2	IV	2	2900	6000		5½			4½	4½			13	42				
			2½	1810	2900		6½					5½		14	38				
		IV	2½	2900	6000		6½					5½		13	42				
			2½	6000	7250		6½						5½	13	42				
1½	FA	2	I	7	285	4¾	4¾	4¾						12	22	B	2	12	
			II	650	1810	6	6	4¾	4¾					12	22				
		2½	II	2	650	1810		6			4¾	4¾			12				22
				2½	1810	2900		6			4¾	4¾			14				38
		2½	III	2½	1810	2900		6½					5½		14				38
				2½	2900	5000		6½					5½		19				42
			IV	2½	2900	5000		6½					5½		13				42
				2½	5000	6220		6½						5½	19				42
1½ 2	GA	2½	I	8	285	4¾	4¾	4¾						13	31	D	2	12	
			II	455	1300	6	6	4¾	4¾					13	31				
		2½	II	2½	455	1300		6			4¾	4¾			14				49
				2½	1300	2030		6			4¾	4¾			18				66
	3	III	2½	1300	2030		6			4¾	4¾			18	66				
			2½	1300	2030		6			4¾	4¾			18	66				
		3	IV	3	455	1300		6¾			6½	6½			14				49
				3	1300	2030		6¾			6½	6½			18				66
3	IV	3	2030	3705		6¾			6½	6½			19	77					
		3	3705	4560		6¾					6½		19	77					
	1½ 2	HA	3	I	8	285	4¾	5½	5½						12	66	E	2	12
				II	455	1305	4¾	4¾	5½						12	66			
3			II	3	455	1305		4¾			5½	5½			14	107			
				3	455	1305		6¾			6½	6½			14	107			
3		III	3	1305	2030		6¾					6½		18	145				
			3	1305	2030		6¾					6½		18	145				
		IV	3	2030	2750		6¾					6½		18	155				
			3	2750	4560		6¾						7½	19	155				
2 2½	JA	4	I	8	285	4¾	5¾	5¾						16	70	G	2	12	
			II	325	910	5½	5¾	5¾						16	70				
		4	II	4	325	910		5½			5¾	5¾			16				110
				4	910	1450		6¾			6½	6½			18				160
	4	III	4	910	1450		6¾			6½	6½			18	160				
			4	910	1450		7½					7¼		18	160				
		IV	4	1450	2700		7½					7¼		20	175				
			4	2700	3250		7½						8½	20	175				
3	KA	4	I	7	285	6¾	6½	6½						16	86	H	2	26	
			II	290	810	6¾	6¾	6½						16	120				
		4	II	4	290	810		7½			7¼	7¼			16				120
				4	810	1305		7½			7¼	7¼			21				175
		4	IV	4	1305	2220		7½					7¼		21				200
				4	815	1305		8½					7¾		21				175
			6	III	6	810	1305		8½				7¾		21				175
					6	1305	2220		8½					7¾					21
6	IV	6	1305	2220		8½					7¾		21	200					
		6	2220	2900		8½						9	21	200					
	3 4	LA	4	I	23	232	6½	6½	6½						22	132	K	2¾	26
				II	232	580	6½	6½	6½						28	178			
6			I	6	232	580		7½			7½	7½			22	132			
				6	580	1305		7½			7½	7½			28	178			
6		II	6	580	1305		7½			7½	7½			28	220				
			6	232	580		8			7½	7½			28	178				
		6	III	6	580	1305		8			7½	7½			28	220			
				6	580	1305		8¾			7¾	7¾			28	220			
6	IV	6	1305	1500		8¾			7¾	7¾			28	245					
		6	1500	2320		8¾					9½		28	245					
	4	MA	6	I	18	181	7¼	7	7						23	200	L	2¾	26
				II	181	515	7¼	7	7						29	245			
6			II	6	181	515		8			7	7			29	245			
				6	515	1030		8¾				7¾	7¾		29	310			
6		IV	6	1030	2030		8¾					8½		29	310				
			6	1030	2030		8¾					8½		29	310				
		6	I	6	181	181	8¼	7¾	7¾						23	200			
				6	181	515	8¼	7¾	7¾	7¾	7¾				29	245			
6	II		6	181	515	8¾	7¾	7¾	7¾	7¾				29	245				
			6	515	1000	8¾	7¾	7¾	7¾	7¾				29	310				
6	IV	6	1000	2030	8¾	7¾	7¾	7¾	7¾				29	310					
		6	1000	2030		8½					8½		29	310					
	4 6	PA	6	I	15	131	9	7½	7½						39	350	N	4½	26
				II	131	363	9	7½	7½						42	375			
6			III	6	363	1030		10			8¾	8¾	8¾		42	440			
				6	363	1030		10			8¾	8¾	8¾		42	440			
6		I	8	12	116	9½	9½	9½						39	465				
			8	116	290	9½	9½	9½	9½	9½				42	485				
		8	III	8	290	600	9½	9½	9½	9½	9½				42	555			
				8	600	812	9½	9½	9½	9½	9½				42	555			
6	RA	8	I	10	91	9½	9½	9½						40	575	R	4½	26	
			II	91	232	9½	9½	9½						44	600				
		10	II	10	91	232	10½	9½	9½	9½	9½				44				600
				10	232	300	10½	9½	9½	9½	9½				44				665
	10	III	10	300	457	10½	9½	9½	9½	9½				44	665				
			10	300	457	10½	9½	9½	9½	9½				44	665				

1) or alternative spring materials acc. to DIN 17221, 17223 and 17225. Special materials possible.

2) chromium plated up to SKB M

* or equivalent cast/forged materials
● wear parts in spare parts box

Material specification		22		23		26	
Operating temperatures– Range of application		–10 to +400 °C –14 to +752 °F		+400 to + 550 °C +752 to +1022 °F		–195 to +300 °C –320 to +572 °F	
Part	Part name	Material	DIN-No.	Material	DIN-No.	Material	DIN-No.
1*	Inlet nozzle	C22.8	1.0460	13CrMo44	1.7335	X5CrNi189	1.4301
2	Body	GS-C25	1.0619	GS-17CrMo55	1.7357	G-X6CrNi189	1.4308
3	Seat zone	X20CrMo171	1.4115	X20CrMo171	1.4115	X5CrNi189	1.4301
4●	Disc	X35CrMo17	1.4122	X35CrMo17	1.4122	X5NiCrTi2615	1.4980
5*2)	Guide piston	X20Cr13	1.4021	X20Cr13	1.4021	X10CrNiTi189	1.4541
6*	Guide bush	G-X6CrNi189	1.4308	G-X6CrNi189	1.4308	G-X6CrNi189	1.4308
7	Spindle	X20Cr13	1.4021	X20Cr13	1.4021	X10CrNiTi189	1.4541
7.1	Screw bolt	5.6	–	5.6	–	X5CrNi189	1.4301
8*	Bonnet	C22.8	1.0460	C22.8	1.0460	X10CrNiTi189	1.4541
9	Stud	Ck35	1.1181	21CrMoV57	1.7709	X10CrNiMoTi1810	1.4571
9.1	Nut	C35	1.0501	24CrMo5	1.7258	A2	1.4541
10 ¹⁾	Spring (weight with VSE 4)	50CrV4	1.8159	50CrV4	1.8159	50CrV4 Nickel-plated	1.8159
11	Tightening screw	CuZn40Al2	2.0550	CuZn40Al2	2.0550	X20Cr13	1.4021
12	Nut	St37	1.0110	St37	1.0110	X5CrNi189	1.4301
13	Cap	GGG40.3	0.7043	GGG40.3	0.7043	GGG40.3	0.7043
14*	Adjusting ring	X5CrNi189	1.4301	X5CrNi189	1.4301	X5CrNi189	1.4301
15*	Cooling spacer	GS-C25	1.0619	GS-C25	1.0619	G-X7CrNiNb189	1.4552
16	Cover	X35CrMo17	1.4122	G-X6CrNi189	1.4308	G-X6CrNi189	1.4308
17	Gag plug	St37	1.0110	St37	1.0110	St37	1.0110
18●	Ball	X45Cr13	1.3541	X45Cr13	1.3541	Hastelloy-C	2.4819
19●	Pin	X12CrNiS188	1.4305	X12CrNiS188	1.4305	X12CrNiS188	1.4305
20	Split ring	X20Cr13	1.4021	X20Cr13	1.4021	X20Cr13	1.4021
21	Stop bush	X20Cr13	1.4021	X20Cr13	1.4021	X20Cr13	1.4021
22	Distance tube	X20Cr13	1.4021	X20Cr13	1.4021	X20Cr13	1.4021
23	Pressure bush	X20Cr13	1.4021	X20Cr13	1.4021	X20Cr13	1.4021
24	Spring stop	GGG-50	0.7050	GGG-50	0.7050	G-X6CrNi189	1.4308
25	Spring plate	St37	1.0110	St37	1.0110	X5CrNi189	1.4301
26	Gasket	Kautschuk	–	Kautschuk	–	Kautschuk	–
28	Nut	St37	1.0110	St37	1.0110	X5CrNi189	1.4301
29	Split pin	St37	1.0110	St37	1.0110	X5CrNi189	1.4301
30	Bush	X20Cr13	1.4021	X20Cr13	1.4021	X20Cr13	1.4021
31	Fork	GTW35	–	GTW35	–	GTW35	–
32	Square shaft	St37	1.0110	St37	1.0110	St37	1.0110
33	Bottom ring	Sintered iron	–	Sintered iron	–	Sintered iron	–
34	Packing	P4	–	P4	–	P4	–
35	Screwing	CuZn40Al2	2.0550	CuZn40Al2	2.0550	X20Cr13	1.4021
36	Lever	GTW35	–	GTW35	–	GTW35	–
37	Washer	St37	1.0110	St37	1.0110	St37	1.0110
38	Nut	St50-2	1.0050	St50-2	1.0050	St50-2	1.0050
39	Gasket	Kautschuk	–	Kautschuk	–	Kautschuk	–
40	Gasket	Soft iron	–	Soft iron	–	Soft iron	–
41	Cap screw	Ck35	1.1181	Ck35	1.1181	Ck35	1.1181
44	Adjusting screw	X20Cr13	1.4021	X20Cr13	1.4021	X5CrNi189	1.4301
45	Gasket	Soft iron	–	Soft iron	–	X5CrNi189	1.4301
48	Roller bearing (above 8000 N spring force)	Steel	–	Steel	–	Steel	–

Material specification		27		28		29	
Operating temperatures– Range of application		–60 to +400 °C –76 to +752 °F		–10 to +400 °C –13 to +752 °F		–10 to +400 °C –14 to +752 °F	
Part	Part name	Material	DIN-No.	Material	DIN-No.	Material	DIN-No.
1*	Inlet nozzle	X10CrNiMoTi1810	1.4571	C22.8	1.0460	C22.8	1.0460
2	Body	GS-C25	1.0619	GS-C25	1.0619	GS-C25	1.0619
3	Seat zone	X10CrNiMoTi1810	1.4571	X20CrMo171	1.4115	X20CrMo171	1.4115
4●	Disc	X5NiCrTi2615	1.4980	X5NiCrTi2615	1.4980	X35CrMo17	1.4122
5*2)	Guide piston	X10CrNiTi189	1.4541	X10CrNiTi189	1.4541	X20Cr13	1.4021
6*	Guide bush	G-X6CrNi189	1.4308	G-X6CrNi189	1.4308	G-X6CrNi189	1.4308
7	Spindle	X20Cr13	1.4021	X20Cr13	1.4021	X20Cr13	1.4021
7.1	Screw bolt	5.6	–	5.6	–	5.6	–
8*	Bonnet	C22.8	1.0460	C22.8	1.0460	C22.8	1.0460
9	Stud	Ck35	1.1181	Ck35	1.1181	Ck35	1.1181
9.1	Nut	C35	1.0501	C35	1.0501	C35	1.0501
10 ¹⁾	Spring (weight with VSE4)	50CrV4 Zinc-plated	1.8159	50CrV4 Zinc-plated	1.8159	50CrV4	1.8159
11	Tightening screw	X20Cr13	1.4021	X20Cr13	1.4021	X20Cr13	1.4021
12	Nut	X5CrNi189	1.4301	X5CrNi189	1.4301	St37	1.0110
13	Cap	GGG40.3	0.7043	GGG40.3	0.7043	GGG40.3	0.7043
14*	Adjusting ring	X5CrNi189	1.4301	X5CrNi189	1.4301	X5CrNi189	1.4301
15*	Cooling spacer	GS-C25	1.0619	GS-C25	1.0619	GS-C35	1.0619
16	Cover	G-X6CrNi189	1.4308	G-X6CrNi189	1.4308	GG-26 plated	0.6026
17	Gag plug	St37	1.0110	St37	1.0110	St37	1.0110
18●	Ball	Hastelloy-C	2.4819	Hastelloy-C	2.4819	X45Cr13	1.3541
19●	Pin	X12CrNiS188	1.4305	X12CrNiS188	1.4305	X12CrNiS188	1.4305
20	Split ring	X20Cr13	1.4021	X20Cr13	1.4021	X20Cr13	1.4021
21	Stop bush	X20Cr13	1.4021	X20Cr13	1.4021	X20Cr13	1.4021
22	Distance tube	X20Cr13	1.4021	X20Cr13	1.4021	X20Cr13	1.4021
23	Pressure bush	X20Cr13	1.4021	X20Cr13	1.4021	X20Cr13	1.4021
24	Spring stop	GGG-50 Zinc-plated	0.7050	GGG-50 Zinc-plated	0.7050	GGG-50	0.7050
25	Spring plate	St37 Zinc-plated	1.0110	St37 Zinc-plated	1.0110	St37	1.0110
26	Gasket	Kautschuk	–	Kautschuk	–	Kautschuk	–
28	Nut	X5CrNi189	1.4301	X5CrNi189	1.4301	St37	1.0110
29	Split pin	X5CrNi189	1.4301	X5CrNi189	1.4301	St37	1.0110
30	Bush	X20Cr13	1.4021	X20Cr13	1.4021	X20Cr13	1.4021
31	Fork	GTW35	–	GTW35	–	GTW35	–
32	Square shaft	St37	1.0110	St37	1.0110	St37	1.0110
33	Bottom ring	Sintered iron	–	Sintered iron	–	Sintered iron	–
34	Packing	P4	–	P4	–	P4	–
35	Screwing	CuZn40Al2	1.4021	CuZn40Al2	2.0550	X20Cr13	1.4021
36	Lever	GTW35	–	GTW35	–	GTW35	–
37	Washer	St37	1.0110	St37	1.0110	St37	1.0110
38	Nut	St50-2	1.0050	St50-2	1.0050	St50-2	1.0050
39	Gasket	Kautschuk	–	Kautschuk	–	Kautschuk	–
40	Gasket	Soft iron	–	Soft iron	–	Soft iron	–
41	Cap screw	Ck35	1.1181	Ck35	1.1181	Ck35	1.1181
44	Adjusting screw	X20Cr13	1.4021	X20Cr13	1.4021	X20Cr13	1.4021
45	Gasket	Soft iron	–	Soft iron	–	Soft iron	–
48	Roller bearing (above 8000 N spring force)	Steel	–	Steel	–	Steel	–