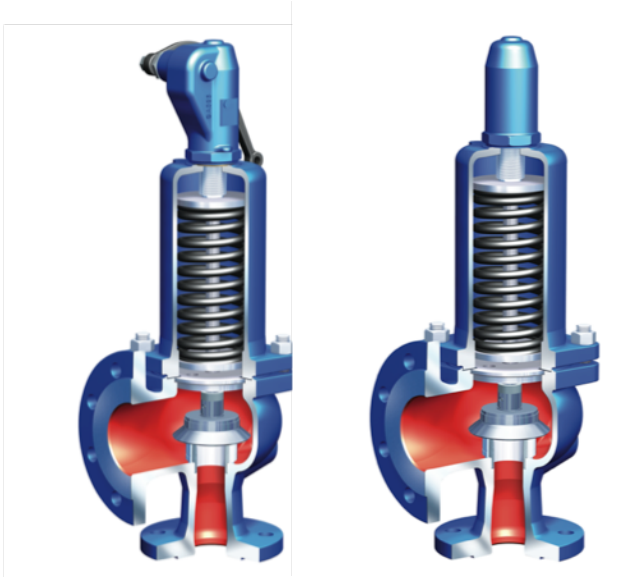
Flange-Safety valve TYPE SF01 / SF02 / SF03



Description:

Flange-Safety valves are used to protect a closed system, pressure tanks etc. against overpressure.

Features:

- suitable for neutral and non-neutral, not adhesive **liquid & gaseous media.**
- TUV-type test approval letter L & D/G
- TUV SV 811 F und TUV SV 811 D/G
- Safety valves are set and sealed at the factory
- Direct loaded with spring
- Installation in vertical position with spindle standing upwards

Connection:	**Temperature:**	**Set pressure:**
DN15, DN20, DN25, DN32, DN40, DN50, DN65, DN80, DN100	-60°C to +450°C – depending on design	0,2 bar – 40,0 bar– depending on design

Design: Safety valve with flange

Type SF01

Material:	EN-JL1040 grey cast iron
Temperature:	Metal: -10°C up to +300°C | EPDM: 0°C up to +150°C | FPM: 0°C up to +180°C
Flange :	DIN EN 1092-2 / DIN 2533
Nominal pressure:	PN16

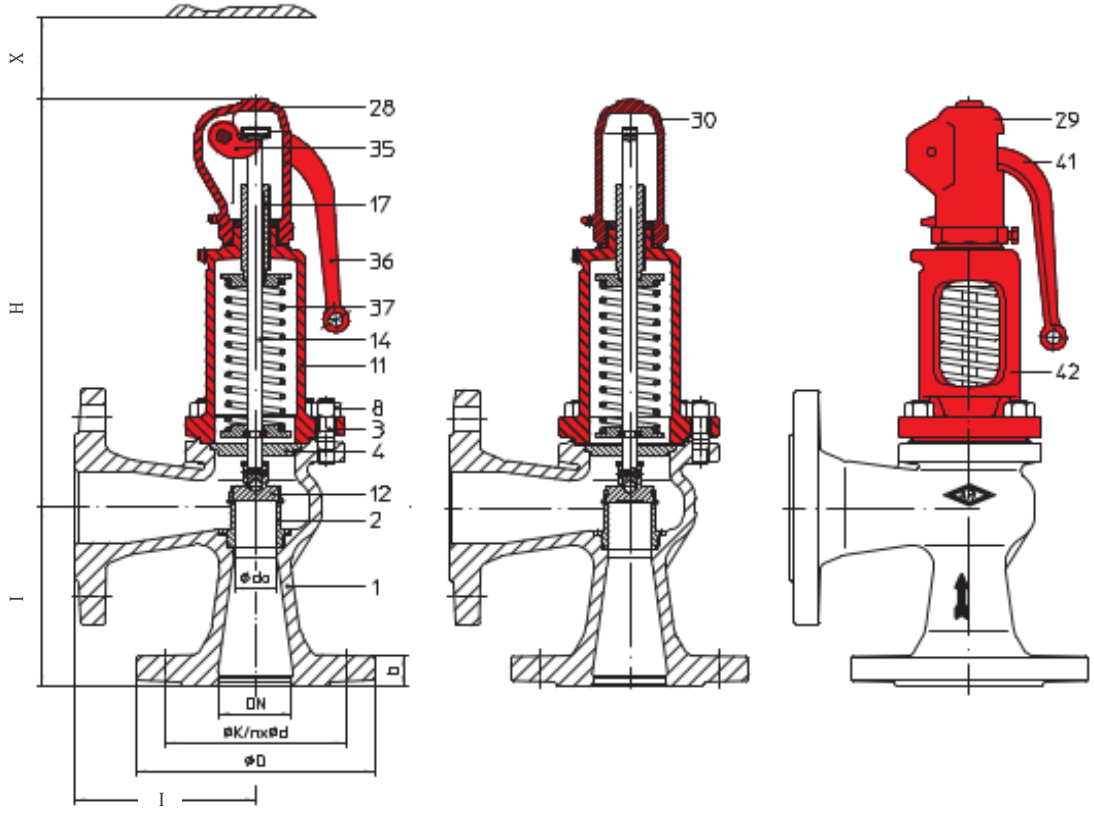
Type SF02

Material:	1.0619+N carbon iron
Temperature:	Metal: -10°C up to +450°C | EPDM: 0°C up to +150°C | FPM: 0°C up to +180°C
Flange :	DIN EN 1092-1 / DIN 2545
Nominal pressure:	PN40

Type SF03

Material:	1.4408 stainless steel
Temperature:	Metal: -60°C to +400°C | EPDM: 0°C up to +150°C | FPM: 0°C up to +180°C
Flange :	DIN EN 1092-1 / DIN 2545
Nominal pressure:	PN40

Approvals:
AD 2000-A2
EN ISO 4126-1
TRB 801 No. 45
TRD 421
VdTÜV-leaflet 100



with closed lifting device & closed bonnet	gastight cap & closed bonnet	with open lifting device & open bonnet (only for gaseous media!!!)
SFXX00....	SFXX01....	SFXX02....

Dimensions:

DN1 / DN2		15	20	25	32	40	50	65	80	100
d0		12	12	15	18	20	29	36	44	55
A0		113	113	177	254	314	661	1018	1520	2376
I		90	95	100	105	115	125	145	155	175
H		260	260	270	285	290	290	340	400	450
X		130	130	130	150	150	150	200	250	300
Weight kg		5,0	5,0	5,5	8,0	9,5	11,5	15,5	20,5	33
∅D PN16		95	105	115	140	150	165	185	200	220
∅D PN40		95	105	115	140	150	165	185	200	235
b EN-JL1040		14	16	16	18	18	20	20	22	24
b 1.0619+N		16	18	18	18	18	20	20	22	24
b 1.4408		16	18	18	18	18	20	20	22	24
Flange acc. DIN EN 1092-1 / -2, Flangeholes/-thickness tolerances acc. to DIN 2533 / 2545, raised face, facing acc. to DIN 2526 form C										
∅K	PN16	65	75	85	100	110	125	145	160	180
n x ∅d	PN16	4 x 14	4 x 14	4 x 14	4 x 18	4 x 18	4 x 18	4 x 18	8 x 18	8 x 18
∅K	PN40	65	75	85	100	110	125	145	160	190
n x ∅d	PN40	4 x 14	4 x 14	4 x 14	4 x 18	4 x 18	4 x 18	8 x 18	8 x 18	8 x 22
Coefficient of discharge Kdr		0,26	0,26	0,23	0,23	0,26	0,23	0,26	0,23	0,23
Set pressure (bar)*		0,3-40	0,3-40	0,2-40	0,2-40	0,2-40	0,2-40	0,2-40	0,2-40	0,2-40

*Set pressure with soft sealing from 0,5 bar

Parts and Material:

Pos.	Part	SF01	SF02	SF03
1	Body	EN-JL 1040	1.0619+N	1.4408
2	Seat	1.4571	1.4571	1.4571
3	Studs	25CrMo4, 1.7218	25CrMo4, 1.7218	A4 - 70
4	Spindle guide	X20Cr13*QT, 1.4021*QT		1.4571
8	Hexagon nut	C35E, 1:1181	C35E, 1:1181	A4
7	gasket	Pure graphite	Pure graphite	Pure graphite
11	Bonnet closed	EN-JL 1040	EN-JS1049	1.4408
12	Disc	1.4122+QT	1.4122+QT	1.4571
14	Spindle	1.4021+QT	1.4021+QT	1.4571
17	Adjusting screw	1.4021+QT	1.4021+QT	1.4404
27	Sealing ring	CuFa	CuFa	1.4571
28	cap closed	EN-JL 1040	EN-JS 1049	1.4408
29	cap open	EN-JL 1040	EN-JS 1049	1.4408
30	cap gastight	EN-JL 1040	EN-JS 1049	1.4408
31	Packingrings	Pure graphite	Pure graphite	Pure graphite
35	Lift fork	EN-JS 1049	EN-JS 1049	1.4408
36	Lever closed	EN-JS 1049	EN-JS 1049	1.4571
37	spring	1.8159	1.8159	1.4310
41	lever open	EN-JS 1049	EN-JS 1049	--
42	bonnet open	EN-JL 1040	EN-JS 1049	--

Pressure-temperature-ratings:

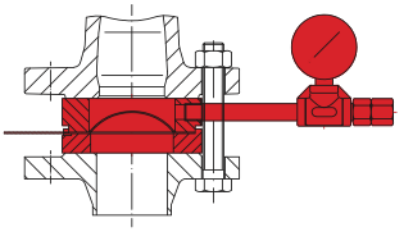
Intermediate values for max. permissible operational pressures can be determined by linear interpolation of the given temperature / pressure chart.

DIN EN 1092-2	-60°C to <-10°C	-10°C to 120°C	150°C	200°C	250°C	300°C	350°C	400°C	450°C
SF01 EN JL1040 in bar	--	16	14,4	12,8	11,2	9,6	--	--	--

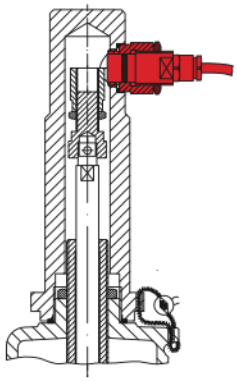
manufacturers standard	-60°C to <-10°C	-10°C to 120°C	150°C	200°C	250°C	300°C	350°C	400°C	450°C
SF02 1.0619+N in bar	30	40	38,1	35	32	28	25,7	23,8	13,1

DIN EN 1092-1	-60°C to <-10°C	-10°C to 100°C	150°C	200°C	250°C	300°C	350°C	400°C	450°C
SF03 1.4408 in bar	40	40	36,3	33,7	31,8	29,7	28,5	27,4	--

on request:



Berstscheibe



Näherungsschalter

Capacity table:

Blowing-off rates at 10% above set pressure

DN	15	20	25	32	40	50	65	80	100
Set pressure bar⎍	Water 20°C (t/h)	Water 20°C (t/h)	Water 20°C (t/h)	Water 20°C (t/h)	Water 20°C (t/h)	Water 20°C (t/h)	Water 20°C (t/h)	Water 20°C (t/h)	Water 20°C (t/h)
0,2	--	--	0,97	1,4	1,95	3,63	6,33	8,36	13,06
0,3	0,84	0,84	1,16	1,67	2,33	4,30	7,46	9,80	15,22
0,5	1,11	1,11	1,54	2,21	3,09	5,74	10,0	13,22	20,6
1	1,57	1,57	2,17	3,13	4,37	8,12	14,15	18,69	29,2
2	2,22	2,22	3,07	4,42	6,17	11,48	20,0	26,4	41,3
3	2,72	2,72	3,76	5,42	7,56	14,07	24,5	32,4	50,6
4	3,14	3,14	4,35	6,26	8,73	16,24	28,3	37,4	58,4
5	3,51	3,51	4,86	7,0	9,76	18,16	31,6	41,8	65,3
6	3,85	3,85	5,32	7,66	10,69	19,89	34,6	45,8	71,6
7	4,16	4,16	5,75	8,28	11,55	21,5	37,4	49,5	77,3
8	4,45	4,45	6,14	8,85	12,35	23,0	40,0	52,9	82,6
9	4,72	4,72	6,52	9,39	13,1	24,4	42,4	56,1	87,6
10	4,97	4,97	6,87	9,89	13,81	25,7	44,7	59,1	92,4
12	5,44	5,44	7,53	10,84	15,12	28,1	49,0	64,8	100,2
14	5,88	5,88	8,13	11,71	16,34	30,4	52,9	69,9	109,3
16	6,29	6,29	8,69	12,51	17,46	32,5	56,6	74,8	116,8
18	6,67	6,67	9,22	13,27	18,52	34,4	60,0	79,3	123,9
20	7,03	7,03	9,72	14,0	19,53	36,3	63,3	83,6	130,6
22	7,37	7,37	10,19	14,7	20,5	38,1	66,3	87,7	137,0
24	7,7	7,7	10,64	15,33	21,4	39,8	69,3	91,6	143,1
25	7,86	7,86	10,86	15,64	21,8	40,6	70,7	93,3	146,0
26	8,0	8,0	11,06	15,92	22,2	41,3	72,0	95,1	148,6
28	8,3	8,3	11,47	16,52	23,1	42,9	74,7	98,7	154,2
30	8,6	8,6	11,88	17,1	23,9	44,4	77,3	102,2	159,7
35	9,28	9,28	12,83	18,47	25,8	47,9	83,5	110,4	172,5
36	9,4	9,4	13,0	18,7	26,1	48,7	84,7	111,9	174,9
40	9,92	9,92	13,71	19,75	27,6	51,3	89,3	118,0	184,4

Capacity table:

Blowing-off rates at 10% above set pressure

DN	15	20	25	32	40	50	65	80	100
Set pressure barü	Steam (kg/h)	Steam (kg/h)	Steam (kg/h)	Steam (kg/h)	Steam (kg/h)	Steam (kg/h)	Steam (kg/h)	Steam (kg/h)	Steam (kg/h)
0,2	--	--	20	33	44	85	142	195	305
0,3	20	20	28	41	56	107	82	247	386
0,4	23	23	23	48	65	126	209	290	450
0,5	27	27	27	55	74	144	239	332	520
0,6	30	30	30	62	82	162	267	372	580
0,8	36	36	36	73	100	189	323	435	680
1	41	41	41	84	114	218	370	500	785
2	68	68	68	139	188	362	610	830	1300
3	95	95	95	197	265	510	860	1180	1840
4	119	119	119	246	330	640	1070	1470	2300
5	142	142	142	295	396	765	1280	1760	2750
6	166	166	166	343	460	890	1495	2050	3200
7	189	189	189	391	525	1015	1700	2340	3650
8	213	213	213	440	590	1140	1910	2630	4100
9	236	236	236	490	655	1265	2120	2910	4550
10	259	259	259	535	720	1390	2330	3200	5000
12	306	306	306	630	850	1640	2750	3780	5900
14	352	352	352	730	980	1890	3170	4350	6800
16	400	400	400	825	1105	2140	3590	4920	7700
18	445	445	445	920	1235	2390	4000	5500	8600
20	490	490	490	1020	1365	2640	4430	6080	9500
22	540	540	540	1110	1495	2890	4850	6660	10400
24	585	585	585	1210	1630	3140	5270	7240	11300
25	609	609	609	1260	1690	3270	5480	7530	11760
26	630	630	630	1310	1760	3400	5700	7820	12200
28	680	680	680	1405	1890	3650	6120	8400	13100
30	730	730	730	1505	2020	3900	6550	8990	14000
32	775	775	775	1600	2150	4160	6980	9580	15000

Structure Article number:

Type	Design	Seal	Size
SF01 – grey cast iron	00 – closed lifting device & bonnet	00 – Metal	03 – DN15
SF02 – carbon steel	01 – gastight cap & closed bonnet	01 – EPDM	04 – DN20
SF03 – stainless steel	02 – open lifting device & open bonnet, (only for gaseous media)	02 – FPM	05 – DN25
			06 – DN32
			07 – DN40
			08 – DN50
			09 – DN65
			10 – DN80
			11 – DN100

Example SF02010106:

SF02	**01**	**01**	**06**

Article number. SF02010106
Safety valve made on carbon steel
Design: gastight cap & closed bonnet
Seal: EPDM
Size: DN32

Image similar. Change without notice.