

MODEL : 6302 | Steam Safety Valve |

Connection : Flange PN 40



APPLICATION AND KINDS OF EXECUTION

Si 6302 - for air, steam and other neutral gases and vapours.
Working temperature: from -40°C up to + 400°C.

Si 6302C - Application of valves for liquids and others neutral factors– after limitation of constructional disc leap to the value 0,12 of seat diameter "d₀".
Working temperature: from -40°C do + 400°C.

For temperatures above 350°C the execution with insert **Si 6302 W** is recommended.
Applications for temperature under -10°C – valid are restrictions according to AD-2000 Merkblatt W10.

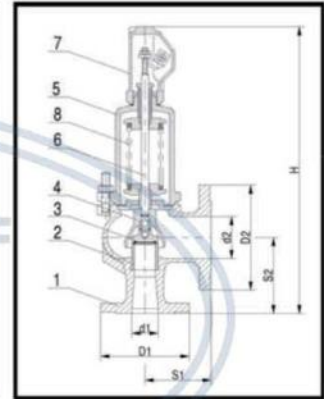
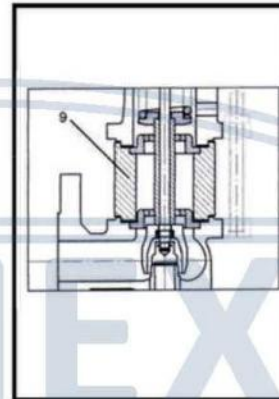
Valves are produced in the following executions :
Si 6302 - in execution **P** – normal, **G** – gas-tight and **WM** – for marine conditions.
Si 6302C - in execution **P** – normal; **G** – gas-tight

Valves have approval of Petroleum and Gas Institute for application to liquid gas fuels hydrocarbons (propane-butane) and oil products.

LIST OF APPLIED MATERIALS

Position No	Name of detail	Material
1	Body	GP240GH
2	Seat	X39CrMo17-1
3	Disc	X39CrMo17-1
4	Bell	EN-GJS-400-15
5	Cap	EN-GJS-400-15 / GP240GH
6	Stem	X20Cr13 ¹⁾
7	Hood	EN-GJS-400-15
8	Spring	51CrV4 ²⁾
9	Insert	C22

¹⁾ For marine execution (WM) stem made of: X17CrNi16-2
²⁾ Springs with wire diameter up to Φ 6 of patent wire BI, Max. working temperature is 250°C.



OVERALL DIMENSIONS

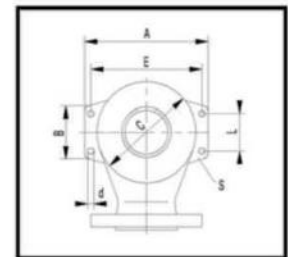
Size DN	Seat		Inlet flange PN 40	Outlet flange PN 10	Length of construction		Height of construction		Dehydration	Opening pressure		Mass ca. kg
	Passage	Section			Without insert	With insert	min	max.				
d ₁ x d ₂	d ₀	A	D ₁	D ₂	S ₁	S ₂	H	E	cal	bar		
	mm	mm ²			mm							
20 x 32	16	201	105	140	85	95	345	410	G¼	0,45	40	8
25 x 40	20	314	115	150	95	105	395	470	G¼	0,45	40	10
32 x 50	25	491	140	165	100	110	420	500	G¼	0,45	40	14
40 x 65	32	804	150	185	115	130	495	585	G¼	0,45	32	20
50 x 80	40	1257	165	200	125	145	550	660	G¼	0,45	32	27
65 x 100	50	1964	185	220	140	150	660	775	G¾	0,45	32	39
80 x 125	63	3117	200	250	155	170	710	845	G¾	0,45	25	55
100 x 150	77	4657	239	285	175	180	810	960	G¾	0,45	20	82
125 x 200	93	6793	270	340	215	220	860	965	G½	0,45	12,5	100
150 x 250	110	9503	300	395	225	245	1000	- ¹⁾	G½	0,45	10	155

¹⁾ After co-ordination with manufacturer.

DIMENSIONS OF SUPPORTED ARMS

DN	A	B	C	L	E	d	s
	mm						
40 x 65	180	84	134	65	155	14	10
50 x 80	210	93	160	70	180	14	12
65 x 100	245	94	196	70	215	14	12
80 x 125	300	100	240	90	270	18	15
100 x 150	320	160	280	130	285	18	15
125 x 200	365	120	300	90	330	18	15
150 x 250	415	150	360	120	380	18	15

NOTE! Drill of supported arms only onto client's wish.



TECHNICAL DATA

Discharge coefficients

Type of valve	DN	Valves in execution					
		For vapours and gases α		with reduction of leap (Si 6302C)			
				For liquids α_c		For vapours and gases α	
		$b_1 = 0,1 \text{ bar}$ ($p \leq 1 \text{ bar}$) or $b_1 = 10\%$ $1 < p \leq 1,4 \text{ bar}$	$b_1 = 10\%$ $p > 1,4 \text{ bar}$	$b_1 = 10\%$		$b_1 = 25\%$	$b_1 = 10\%$
$p \leq 6 \text{ bar}$	$p > 6 \text{ bar}$						
Si 6302 Si 6302W Si 6302C	20 x 32 to 150 x 250	0,72	0,78	0,01	0,28	0,28	0,36

Pressure ranges.

DN	Pressure ranges [bar]
20 x 32	0,45...0,68; 0,66...1,0; 0,95...1,4; 1,3...1,9; 1,8...2,6; 2,5...3,6; 3,5...5,0; 4,8...6,3; 6,0...8,0; 7,5...10; 9,5...12,5; 12...16; 15...20; 18...25; 23...32; 30...40
25 x 40	0,45...0,68; 0,66...1,0; 0,95...1,4; 1,3...1,9; 1,8...2,6; 2,5...3,6; 3,5...5,0; 4,8...6,3; 6,0...8,0; 7,5...10; 9,5...12,5; 12...16; 15...20; 18...25; 23...32; 30...40
32 x 50	0,45...0,68; 0,66...1,0; 0,95...1,4; 1,3...1,9; 1,8...2,6; 2,5...3,6; 3,5...5,0; 4,8...6,3; 6,0...8,0; 7,5...10; 9,5...12,5; 12...16; 15...20; 18...25; 23...32; 30...40
40 x 65	0,45...0,68; 0,66...1,0; 0,95...1,4; 1,3...1,9; 1,8...2,6; 2,5...3,6; 3,5...5,0; 4,8...6,3; 6,0...8,0; 7,5...10; 9,5...12,5; 12...16; 15...20; 18...25; 23...32; 30...40
50 x 80	0,45...0,68; 0,66...1,0; 0,95...1,4; 1,3...1,9; 1,8...2,6; 2,5...3,6; 3,5...5,0; 4,8...6,3; 6,0...8,0; 7,5...10; 9,5...12,5; 12...16; 15...20; 18...25; 23...32; 30...40
65 x 100	0,45...0,68; 0,66...1,0; 0,95...1,4; 1,3...1,9; 1,8...2,6; 2,5...3,6; 3,5...5,0; 4,8...6,3; 6,0...8,0; 7,5...10; 9,5...12,5; 12...16; 15...20; 18...25; 23...32; 30...40
80 x 125	0,45...0,68; 0,66...1,0; 0,95...1,4; 1,3...1,9; 1,8...2,6; 2,5...3,6; 3,5...5,0; 4,8...6,3; 6,0...8,0; 7,5...10; 9,5...12,5; 12...16; 15...20; 18...25
100 x 150	0,45...0,68; 0,66...1,0; 0,95...1,4; 1,3...1,9; 1,8...2,6; 2,5...3,6; 3,5...5,0; 4,8...6,3; 6,0...8,0; 7,5...10; 9,5...12,5; 12...16; 15...20
125 x 200	0,45...0,68; 0,66...1,0; 0,95...1,4; 1,3...1,9; 1,8...2,6; 2,5...3,6; 3,5...5,0; 4,8...6,3; 6,0...8,0; 7,5...10; 9,5...12,5;
150 x 250	0,45...0,68; 0,66...1,0; 0,95...1,4; 1,3...1,9; 1,8...2,6; 2,5...3,6; 3,5...5,0; 4,8...6,3; 6,0...8,0; 7,5...10;

If the required opening pressure appears in two neighbouring pressure ranges, one should to apply valve with spring of higher pressure range.

NOTES!

1. If condensate accumulates, in the lowest point of blow-out installation should be foreseen dehydration. The dehydration in valve's body is made only on special request of the client. In case of liquids, the blow-out installation should be inclined
2. The valve should be assembled in vertical position.

ORDERING

The order should specify: name and catalogue number of the valve, DN, opening pressure or range of pressures, working temperature and kind of medium. **Because of variety of objective norms, it is advisable to give the norms according to which should be executed the connected flanges of valve.**

Onto client's wish we can deliver counter flanges together with connection elements and gaskets.

For special order are produced valves with inductive proximity detector which signals moment of operation.

Basic data of detector:

Working range [mm]	3 (M8); 6 (M12); 10 (M18)
Supply tension [V]	10 ÷ 30 DC
Protection grade	IP67 (M8); IP68 (M12 and M18)
Working temperature	-25 ÷ +70°C
Standard length of cable [mm]	2000

The other executions of detector for special order after co-ordination with manufacturer. Onto client's wish are used detectors working in range of temperature: -25 ÷ +230°C.

