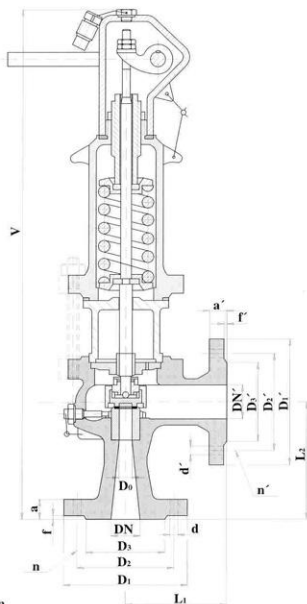


Spring-loaded safety valve proportional, full-lift

P 51 217-525(540,5100)

PN 25(40,100)



Installation

The valve must be installed in vertical position With the thrust pin above the disc.

Operation

Automatically operated by service pressure on the disc.

Application

Safety valve designed to protect steam boilers, pressure vessels and other pressure equipment against exceeding specific pressure level for steam, air, non-aggressive liquids and gases for service pressures and temperatures:

Temperature [°C]	PN 40	PN 100
	Pressure [MPa]	
200	4,00	10,00
300	3,09	7,73
400	2,35	5,88

The lowest opening overpressure the valve can be set for is 0,05 MPa for PN 40 and 2,00 MPa for PN 100.

Technical description

The non-enclosed design of the valve has a raising lever for in-service testing of the valve. The valve has no cover base for service temperatures up to 200°C. Seat is pressed into the body. There is a regulation ring screwed into the seat to ensure that guaranteed discharge can be set more precisely. Closing disc (with additional functional surface) fits the seat. The disc is pressed into the seat by a thrust pin, which is forced down by a spring. Flow direction in the valve is from under the disc.

Connecting and face-to-end dimensions

Flange connecting dimensions as per ČSN 13 1060, DIN 2501 and ČSN 13 1061, DIN 2526, sealing surface finish is for PN 40 (PN 100) on inlet side, for PN 16 on outlet side. Basic face-to-end and connecting dimensions are given in the table.

Material

Body, cover carbon steel (42 2643)
Top cover nodular cast iron (42 2304)
Disc, guide bush stainless steel (13 Cr)
Seat weld overlay (13 Cr)
Spring special steel

Testing

The valve is tested as per ČSN 13 3060, part 2 DIN 3230.

PN 25 P_{max} - maximum opening overpressure [MPa]

DN	DN'	D ₀	L ₁	L ₂	V	D ₁	D ₂	D ₃	D ₄	a	f	d	n	D ₁ '	D ₂ '	D ₃ '	a'	f'	d'	n'	P_{max} kg	
200	300	120	330	290	1440	360	310	278	-	30	3	26	12	445	400	370	26	4	22	12	2,0	340

PN 40

DN	DN'	D ₀	L ₁	L ₂	V	D ₁	D ₂	D ₃	D ₄	a	f	d	n	D ₁ '	D ₂ '	D ₃ '	a'	f'	d'	n'	P_{max} kg	
25	40	15	100	105	440	115	85	68	-	18	2	14	4	150	110	88	18	3	18	4	4	17,7
40	65	25	120	130	605	150	110	88	-	18	3	18	4	185	145	122	18	3	18	4	4	31
50	80	32	125	145	600	165	125	102	-	20	3	18	4	200	160	133	20	3	18	8	4	33
65	100	40	145	150	770	185	145	122	-	22	3	18	8	220	180	158	20	3	18	8	4	53

PN 100

DN	DN'	D ₀	L ₁	L ₂	V	D ₁	D ₂	D ₃	D ₄	a	f	d	n	D ₁ '	D ₂ '	D ₃ '	a'	f'	d'	n'	P_{max} kg	
25	40	15	110	120	495	140	100	68	58	24	2	18	4	150	110	88	18	3	18	4	10	18
40	65	25	130	140	635	170	125	88	76	26	3	22	4	185	145	122	22	3	18	4	10	34
50	80	32	150	150	800	195	145	102	88	28	3	26	4	200	160	133	24	3	18	8	10	56