

AL-4,4T

Full bore type	Lift type	Safety valve	Relief valve
Safety relief valve	Lever type	Closed type	Dash-pot structure
Handle type	Stainless	High pressure gas testing products	
Diaphragm	Non-leakage		



■Features

1. Mainly be used at the outlet side of PRV for alarming, compact boiler, each pressure vessel or instrumentation machine etc...
2. The valve parts of AL-4T is polytetrafluoroethylene material, the airtightness of valve seat is excellent.

■Specifications

· AL-4

Structure		Close type
Application		Steam
Working pressure		0.05-1.5 MPa *1
Maximum temperature		220°C
Material	Spring case	Ductile cast iron
	Valve, valve seat	Stainless steel
Connection		JIS 10K FF flanged JIS 16K FF flanged *2

*1 Maximum working pressure for 150A type is 0.8 MPa (connection: JIS 10K FF flanged).

*2 JIS 16K FF flanged when working pressure is more than 1.0 MPa.

· Please refer to the chart in P. 8-80 for set pressure range.

· AL-4T

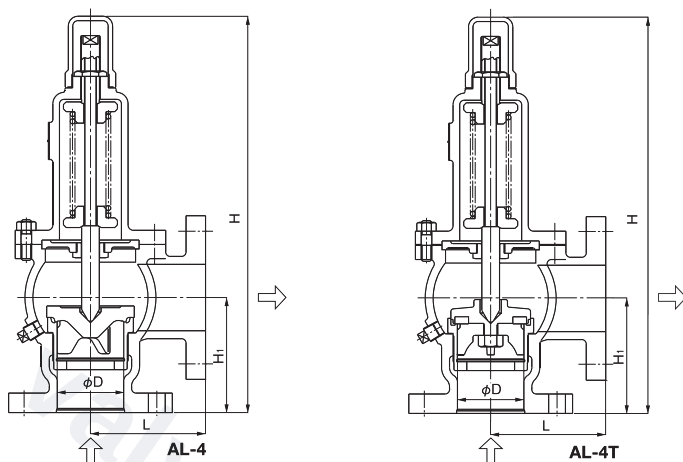
Type		Standard	With SUS trim parts
Structure		Closed type	
Application		Air, Cold and hot water, Oil, Other non-dangerous fluids	
Working pressure		0.05-1.0 MPa *1	0.05-1.5 MPa *2
Maximum temperature		150°C	
Material	Spring case	Ductile cast iron	
	Valve, valve seat	Cast bronze (PTFE disc incorporated)	Stainless steel (PTFE disc incorporated)
Connection		JIS 10K FF flanged	JIS 10K FF flanged JIS 16K FF flanged *3

*1 Maximum working pressure for 150A is 0.8 MPa (connection: JIS 10K FF flanged).

*2 When working pressure is more than 1.2 MPa (for 65A and 80A) or 1.0 MPa (for 100A and 125A), a metal-to-metal seating is incorporated in.

*3 JIS 16K FF flanged is used when working pressure is more than 1.0 MPa.

■Dimensions and Weights



· AL-4 (JIS 10K)

Nominal size	Dimension (mm)				Flow area $\pi D \ell$ (mm ²)	Weight (kg)
	L	H ₁	H	D		
65A	120	120	432	65	331.9	20
80A	130	130	447	75	441.8	22
100A	160	150	595	100	785.4	44
125A	200	205	779	125	1227.2	88
150A	210	215	835	150	1767.2	113

· AL-4T (JIS 10K)

Nominal size	Dimension (mm)				Flow area $\pi D \ell$ (mm ²)	Weight (kg)
	L	H ₁	H	D		
65A	120	120	434	65	331.9	20
80A	130	130	449	75	441.8	22
100A	160	150	597	100	785.4	44
125A	200	205	781	125	1227.2	88
150A	210	215	837	150	1767.2	113

· AL-4 · AL-4T (JIS 16K)

Nominal size	Dimension (mm)				Flow area $\pi D \ell$ (mm ²)
	L	H ₁	H	D	
65A	120	120	432 (434)	65	331.9
80A	132	130	449 (451)	75	441.8
100A	162	150	597 (599)	100	785.4
125A	200	205	781 (783)	125	1227.2

· The above values in parentheses are the dimensions of the AL-4T.

■At the Time of Ordering

When ordering AL-4T, please specify the material of valve and valve seat in addition to the setting pressure.

■ Certified Capacity Table for AL-4

· For steam (saturation temperature) <Pressure vessel structure standard>

(kg/h)

Pressure MPa Nominal size	0.05	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
65A	263	340	493	663	834	1000	1165	1328	1489	1651	1814
80A	350	452	657	882	1111	1331	1550	1767	1983	2198	2415
100A	622	804	1168	1569	1975	2367	2756	3142	3525	3908	4294
125A	972	1257	1826	2451	3086	3699	4307	4910	5508	6107	6709
150A	1400	1810	2629	3530	4445	5327	6203	7071	7932	—	—

(kg/h)

Pressure MPa Nominal size	1.1	1.2	1.3	1.4	1.5
65A	1976	2138	2299	2461	2621
80A	2631	2846	3060	3276	3489
100A	4677	5059	5440	5825	6203
125A	7309	7906	8500	9102	9692
150A	—	—	—	—	—

■ Certified Capacity Table for AL-4T

· For air (20°C) <Pressure vessel structure standard>

(kg/h)

Pressure MPa Nominal size	0.05	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
65A	422	550	799	1073	1347	1621	1895	2169	2443	2717	2991
80A	562	732	1064	1428	1793	2158	2522	2887	3252	3616	3981
100A	999	1302	1891	2540	3188	3836	4484	5133	5781	6429	7077
125A	1562	2035	2955	3968	4981	5994	7007	8020	9033	10046	11059
150A	2249	2930	4256	5715	7173	8632	10091	11549	13008	—	—

(kg/h)

Pressure MPa Nominal size	1.1	1.2	1.3	1.4	1.5
65A	3264	3538	3812	4086	4360
80A	4346	4710	5075	5440	5804
100A	7726	8374	9022	9671	10319
125A	12072	13085	14098	15111	16124
150A	—	—	—	—	—

· For water (accumulation: 25%) <Yoshitake standard>

(m³/h)

Pressure MPa Nominal size	0.05	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
65A	4.1	5.9	8.3	10.2	11.8	13.2	14.5	15.6	16.7	17.7	18.7
80A	5.5	7.8	11.1	13.6	15.7	17.6	19.3	20.8	22.3	23.6	24.9
100A	9.9	14.0	19.8	24.2	28.0	31.3	34.3	37.0	39.6	42.0	44.3
125A	15.4	21.9	30.9	37.9	43.8	48.9	53.6	57.6	61.9	65.7	69.2
150A	22.3	31.5	44.6	54.6	63.0	70.5	77.2	83.4	89.2	—	—

(m³/h)

Pressure MPa Nominal size	1.1	1.2	1.3	1.4	1.5
65A	19.6	20.5	21.3	22.1	22.9
80A	26.1	27.3	28.4	29.5	30.5
100A	46.4	48.5	50.5	52.4	54.2
125A	72.6	75.8	78.9	81.9	84.8
150A	—	—	—	—	—

· Please refer to P. 3-12 for the calculation procedure for nominal size selection.