

AL-150TML, AL-150TML-N

Soft seat type

JWWA approval
(AL-150TML-N)

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. Lever type safety relief valve. A discharge inspection can be manually performed when the difference between the set pressure and the inlet pressure is as shown in Table 1 below.
2. Excellent airtightness ensured by the valve seat incorporating soft seat. Most suitable for applications where valve seat leakage is not tolerated.
3. The trim parts (valve and valve seat) and adjusting spring are made of stainless steel. Used for the trim parts is SCS14A (equivalent to SUS316) with outstanding corrosion resistance.
4. Simple structure and easy to handle.
5. Closed structure prevents fluid leakage.



[Table 1] Required differential pressure at a discharge inspection

Nominal size	Difference between set pressure and inlet pressure
15A-25A	1.0 MPa or less
32A, 40A	0.6 MPa or less
50A	0.4 MPa or less

■Specifications

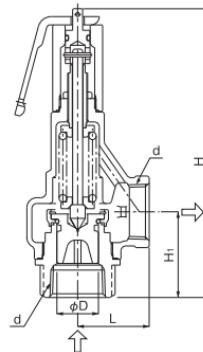
Model	AL-150TML	AL-150TML-N
Structure	Closed type with a lever	
Application	Air, Cold and hot water, Oil, Other non-dangerous fluids*	Cold and hot water
Working pressure	0.05-1.0 MPa	
Working temperature	5-120°C	5-100°C
Spring case	Bronze	Bronze (NPB treated)
Material		
Valve, valve seat	Stainless steel (SCS14A)	
Adjusting spring	Stainless steel	
O-ring	FKM	
Connection	JIS Rc screwed	

* Please contact us when using for oil.

- Please refer to the chart in P.3-82 for set pressure range.

■Dimensions and Weights

Nominal size	Dimension (mm)					Flow area $\pi D_L^2 / 4$ (mm ²)	Weight (kg)
	d	D	L	H ₁	H		
15A	Rc 1/2	16	34	40	157	20.1	0.8
20A	Rc 3/4	21	38	43	158	34.6	0.9
25A	Rc 1	26	43	51.5	174	53.0	1.3
32A	Rc 1-1/4	33	50	61.5	212	93.3	1.9
40A	Rc 1-1/2	41	60	60	246	135.2	3.0
50A	Rc 2	51	75	76	286	208.2	4.9



Certified Capacity Table for AL-150 Series

■Certified Capacity Table

· AL-150 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
15A	15	20	29	40	50	60	70	80	90	100	109
20A	27	35	51	69	87	104	121	138	155	172	189
25A	42	54	78	105	133	159	186	212	237	263	289
32A	70	91	132	178	224	268	313	356	400	443	487
40A	105	136	198	266	335	402	468	534	599	664	729
50A	163	211	306	411	518	621	723	824	924	1025	1126

· AL-150 · 150T · 150TML 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
15A	25	33	48	65	81	98	114	131	147	164	181
20A	44	57	83	111	140	169	197	226	254	283	311
25A	67	87	127	171	215	258	302	346	390	433	477
32A	113	147	214	288	362	435	509	582	656	730	803
40A	169	221	321	431	542	652	762	872	982	1093	1203
50A	262	341	496	666	836	1006	1176	1346	1516	1687	1857

· AL-150 · 150T · 150TML · 150TR 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
15A	0.4	0.5	0.9	1.1	1.3	1.5	1.6	1.8	1.9	2.0	2.1
20A	0.6	0.9	1.6	2.0	2.3	2.6	2.8	3.1	3.3	3.5	3.7
25A	1.0	1.5	2.5	3.1	3.6	4.0	4.4	4.7	5.1	5.4	5.7
32A	1.8	2.6	4.5	5.5	6.3	7.1	7.8	8.4	9.0	9.5	10.0
40A	2.7	3.8	6.5	7.9	9.2	10.3	11.3	12.2	13.0	13.8	14.6
50A	4.1	5.9	10.0	12.3	14.2	15.9	17.4	18.8	20.1	21.3	22.4

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

Soft seat is used for the trim parts!

Soft seat (O-ring) is used for the trim parts, ensuring the reliable airtightness of the valve seat.



Soft seat (O-ring)