

AL-140ML

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. Safety relief valve of all stainless steel made. Used for trim parts is SCS14A (equivalent to SUS316) with outstanding corrosion resistance.
3. 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

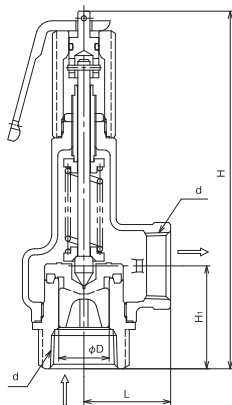
Structure	Closed type with a lever	
Application	Air, Cold and hot water, Oil, Other non-dangerous fluids *	
Working pressure	0.05-1.0 MPa	
Working temperature	5-120°C	
Material	Spring case	Stainless steel
	Valve, valve seat	Stainless steel (SCS14A)
	Adjusting spring	Stainless steel
Connection	JIS Rc screwed	

* Please contact us when using for oil.

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

■ Dimensions and Weights

Nominal size	Dimension (mm)						Flow area $\pi D^2/4$ (mm ²)	Weight (kg)
	d	D	L	H ₁	H			
15A	Rc 1/2	16	34	40	158	20.1	0.8	
20A	Rc 3/4	21	38	42	158	34.6	0.9	
25A	Rc 1	26	43	51	177	53.0	1.3	
32A	Rc 1-1/4	33	50	61.5	211	93.3	1.9	
40A	Rc 1-1/2	41	60	64	246	135.2	3.0	
50A	Rc 2	51	75	76	286	208.2	4.9	



■ Certified Capacity Table

· AL-140T, AL-140ML, AL-140TML 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-140T, 140T-N, 140ML, 140TML, 140TML-N 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. 8-12 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.

