

AF-1

3

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. Larger discharge capacity than lift type.
2. Due to lift lever mechanism a discharge inspection can be manually performed at more than 75% of the opening pressure.

■Specifications

Structure		Open type with a lever	
Application		Steam	
Working pressure		0.18-1.6 MPa	
Maximum temperature		220°C	
Material	Valve case	Ductile cast iron (FCD450)	
	Valve, Valve seat	Stainless steel	
Connection		Inlet: JIS R screwed Outlet: JIS Rp screwed	

* Rp is a parallel screw applicable to taper pipe thread.

■Dimensions and Weights

Nominal size	Inlet diameter x Throat diameter x Outlet diameter di x dt x do	Flow area $\frac{\pi}{4} dt^2$ (mm ²)	Lift ℓ (mm)	Dimensions (mm)				Weight (kg)
				Seat diameter	L	H ₁	H	
20A	R 1 x 15 x Rp 1	176.6	3.3	19	47	67	258	3.0
25A	R 1-1/4 x 19 x Rp 1-1/4	283.3	4.4	23	50	79	302	4.2
32A	R 1-1/2 x 26 x Rp 1-1/2	530.6	6.0	31	62	92	358	7.2
40A	R 2 x 30 x Rp 2	706.5	6.8	37	70	108	403	10.5
50A	R 2-1/2 x 38 x Rp 2-1/2	1133.5	8.7	46	89	123	466	18.5

* The nominal size and the connection size are different.

■Certified Capacity Table for AF-1

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

Nominal size	Pressure MPa	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6
20A		231	310	390	468	545	621	697	773	849	925	1001	1076	1152	1227	1303
25A		370	498	627	751	875	997	1118	1240	1362	1484	1606	1726	1849	1968	2090
32A		694	932	1174	1407	1638	1868	2095	2323	2552	2780	3008	3234	3463	3687	3915
40A		925	1242	1563	1874	2182	2487	2790	3093	3398	3702	4005	4306	4611	4910	5213
50A		1484	1992	2508	3007	3501	3991	4477	4963	5453	5940	6425	6909	7398	7877	8364

<Boiler structure standard>

Nominal size	Pressure MPa	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6
20A		227	299	372	443	515	587	659	729	800	872	942	1013	1084	1156	1227
25A		365	480	598	711	827	942	1057	1170	1284	1398	1512	1625	1740	1854	1968
32A		683	900	1120	1333	1550	1764	1980	2191	2406	2620	2833	3045	3259	3473	3687
40A		910	1198	1491	1775	2063	2350	2636	2918	3204	3488	3772	4054	4340	4625	4909
50A		1461	1923	2393	2848	3311	3770	4229	4681	5140	5597	6052	6505	6963	7420	7876

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

