

AF-4,4M

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		



AF-4

AF-4M

■ 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 (AF-4).
3. Blowdown pressure can be adjusted with a back pressure throttle valve.
4. A material of excellent quality is used for the trim parts. High performance is maintained by precision processing and heat treatment.

■ Specifications

Structure	Open type	
Application	Steam, Air, Other non-dangerous fluids	
Working pressure	0.1-1.0 MPa	
Maximum temperature	220°C *	
Material	Valve case	Ductile cast iron
	Spring case	Ductile cast iron
	Valve, valve seat	Stainless steel
Connection	JIS 10K FF flanged JIS 10K RF flanged *	

* JIS 10K RF flanged when nominal size is more than 100A.

■ Dimensions and Weights

Nominal size	Inlet diameter x Throat diameter x Outlet diameter	Flow area $\frac{\pi}{4} d_t^2$ (mm ²)	Lift/R R (mm)	Dimension (mm)				Flange			Weight (kg)
				L	H ₁	H _L	H _x	Inlet	T (mm)	Outlet	
25A	25 x 16 x 40	200.9	3.7	100	100	358	335	25A	26	40A	12
40A	40 x 26 x 65	530.6	6.0	120	120	410	408	40A	28	65A	21
50A	50 x 30 x 75	706.5	6.8	130	130	459	453	50A	30	80A	27
65A	65 x 40 x 100	1256.0	9.0	150	150	510	537	65A	32	100A	41
80A	80 x 49 x 125	1884.7	11.1	165	160	678	648	80A	32	125A	60
100A	100 x 76 x 150	4534.1	16.8	215	200	799	779	100A	26	150A	115 (119)
125A	125 x 84 x 200	5538.9	19.1	220	210	858	835	125A	28	200A	135 (143)
150A	150 x 100 x 200	7850.0	22.7	250	230	1006	966	150A	30	200A	203 (214)

· The connection flange standard is JIS B 2239 10K FF.

· The values in parentheses is JIS 10KRF.

· Connection flange standard is inlet : JIS B 2239 10KFF or JIS B 2239 10KRF but thickness of flange at inlet is thicker than JIS standard.

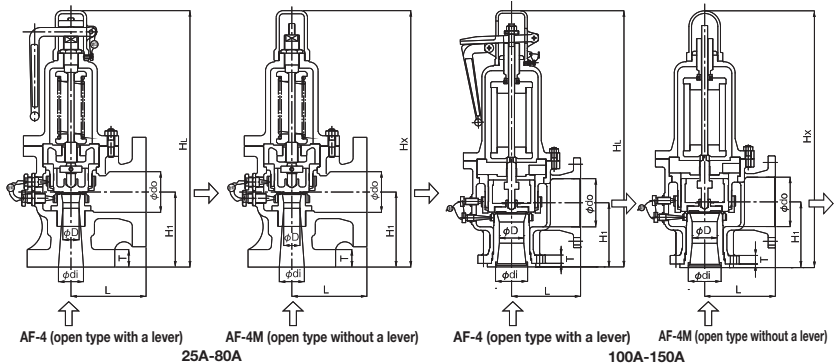
· Outlet connection is JIS B 2239 10KFF.

■ At the Time of Ordering

When ordering, please inform set pressure and application. (If the application is steam, please also specify the usage either pressure vessel structure or boiler structure.)

<Inlet: JIS 10K FF flanged>

<Inlet: JIS 10K RF flanged>



■ Certified Capacity Table for AF-4, 4M

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

(kg/h)

Nominal size \ Pressure MPa	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
25A	181	263	353	444	532	620	707	793	879	966
40A	478	694	932	1174	1407	1638	1868	2095	2323	2552
50A	636	925	1242	1563	1874	2182	2487	2790	3093	3398
65A	1132	1644	2208	2780	3332	3879	4422	4960	5500	6042
80A	1699	2467	3313	4171	4999	5821	6636	7444	8253	9067
100A	4087	5937	7971	10036	12028	14004	15964	17908	19855	21813
125A	4993	7252	9738	12260	14694	17108	19502	21877	24256	26647
150A	7076	10279	13801	17375	20825	24246	27640	31005	34377	37766

<Boiler structure standard>

(kg/h)

Nominal size \ Pressure MPa	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
25A	177	258	340	424	504	586	668	749	829	911
40A	467	683	900	1120	1333	1550	1764	1980	2191	2406
50A	622	910	1198	1491	1775	2063	2350	2636	2918	3204
65A	1106	1619	2131	2651	3156	3669	4177	4687	5187	5696
80A	1660	2429	3198	3978	4735	5505	6269	7033	7784	8547
100A	3995	5844	7694	9572	11393	13245	15081	16920	18728	20563
125A	4880	7139	9399	11693	13918	16180	18424	20670	22878	25120
150A	6916	10118	13321	16572	19725	22931	26111	29294	32424	35601

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

(kg/h)

Nominal size \ Pressure MPa	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
25A	293	425	571	717	863	1009	1155	1301	1447	1593
40A	774	1124	1510	1895	2280	2666	3051	3436	3822	4207
50A	1030	1497	2010	2523	3036	3550	4063	4576	5089	5602
65A	1832	2662	3574	4486	5398	6311	7223	8135	9047	9960
80A	2750	3994	5363	6732	8101	9470	10839	12207	13576	14945
100A	6616	9610	12903	16196	19489	22782	26076	29369	32662	35955
125A	8082	11739	15762	19785	23808	27831	31854	35877	39900	43923
150A	11454	16638	22339	28041	33742	39444	45146	50847	56549	62250

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