

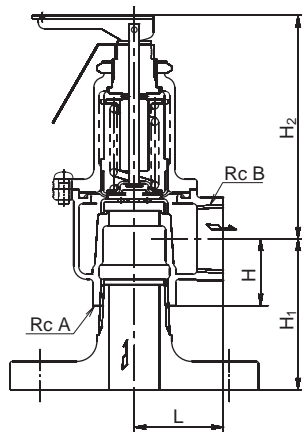
**Bronze  
16K**

# Type R101-1BHA Relief Valve

**4  
Relief Valve**

## Features

- Diaphragm seal type valve disc.
- A valve disc made of synthetic rubber prevents seat leakage.
- Pressure setting can be done without taking off the lever.
- Frozen cracking doesn't occur because of its construction and material.



- Note
1. Back pressure should be atmospheric.
  2. Exhaust piping such a collecting drain should be avoided.
  3. In case of presuming the freezing, insulation should be done sufficiently.

## Specifications

Type	Diaphragm seal	
Fluid	Water	
Pressure	Set : 0.05 – 1.6 MPa (back pressure : atmospheric)	
Temperature	0 – 100°C	
Material	Lever	Mild steel
	Adjusting screw	Brass
	Spring seat	Mild steel
	Stem	Stainless steel
	Adjusting spring	Spring wire, piano wire
	Spring case	Bronze
	Diaphragm seat	Stainless steel
	Diaphragm	Synthetic rubber
	Body	Bronze
Flange	Bronze	
Use for	Thermal relief	

## Dimensions and weights

(mm, kg)

Size Inlet×Outlet	L	H (Screwed)	H <sub>1</sub> (Flanged)	Height		Connection			Weight	
				H <sub>2</sub>	A	Inlet	B	Outlet	Screwed	Flanged (Inlet)
15×20	44	33	64	111	1/2	Screwed JIS Rc or Flanged JIS16KFF	3/4	Screwed JIS Rc	1.2	2.0
20×25	44	33	67	111	3/4		1		1.2	2.1
25×25	44	33	72	111	1		1		1.2	2.7
32×32	62	43	82	140	1 1/4		1 1/4		3.0	5.1
40×40	62	43	83	140	1 1/2		1 1/2		3.0	5.4

## Capacity of Type RPC14, R101-1BHA Relief Valves

Capacity of RPC14 relief valve (Fluid : water)

(kg/h)

Size	15	20	25	32	40	50	65	80
Seat dia. D (mm)	20	20	25	32	40	50	65	80
Lift $\ell$ (mm)	0.28	0.5	0.63	0.8	1.0	1.25	1.63	2.0
Discharge area A (mm <sup>2</sup> )	12.4	22.2	34.9	56.8	88.8	138.8	235.3	355.3
Set pressure (MPa·G)								
0.1	423	758	1191	1939	3032	4740	8036	12134
0.2	598	1072	1685	2743	4289	6704	11364	17160
0.3	733	1313	2064	3360	5252	8210	13919	21017
0.4	847	1516	2383	3879	6065	9480	16072	24269
0.5	946	1695	2665	4337	6781	10600	17969	27133
0.6	1037	1857	2919	4751	7428	11611	19684	29723
0.7	1120	2006	3153	5132	8024	12542	21261	32105
0.8	1197	2144	3371	5486	8578	13408	22729	34321
0.9	1270	2274	3575	5819	9098	14221	24108	36403
1.0	1339	2397	3769	6134	9590	14990	25412	38373
1.1	1404	2514	3953	6433	10058	15722	26653	40246
1.2	1467	2626	4129	6720	10505	16421	27838	42035
1.3	1526	2733	4297	6994	10934	17092	28975	43752
1.4	1584	2836	4459	7258	11347	17737	30068	45403
1.5	1640	2936	4616	7513	11746	18359	31124	46997
1.6	1694	3032	4767	7759	12131	18961	32145	48538
1.7	1746	3126	4914	7998	12504	19545	33134	50032
1.8	1796	3216	5057	8230	12867	20112	34094	51482
1.9	1845	3304	5195	8455	13219	20663	35029	52893
2.0	1893	3390	5330	8675	13563	21200	35939	54267

Remark : Except for G (sp.gr.) = 1, the flow rate should be multiplied by  $\sqrt{G}$ .

Capacity of R101-1BHA relief valve (Fluid : water)

(kg/h)

Size	15·20	25	32	40
Seat dia. D (mm)	20	25	32	40
Lift $\ell$ (mm)	0.7	0.8	1.0	1.3
Discharge area A (mm <sup>2</sup> )	43.9	62.8	100.5	163.3
Set pressure (MPa·G)				
0.1	1499	2144	3432	5645
0.2	2120	3033	4854	7983
0.3	2596	3714	5945	9778
0.4	2998	4289	6864	11291
0.5	3352	4795	7675	12623
0.6	3672	5253	8407	13828
0.7	3966	5674	9081	14936
0.8	4240	6066	9708	15967
0.9	4497	6434	10297	16936
1.0	4741	6782	10854	17852
1.1	4972	7113	11383	18724
1.2	5193	7429	11890	19556
1.3	5405	7733	12375	20355
1.4	5609	8025	12842	21123
1.5	5806	8306	13293	21865
1.6	5997	8579	13729	22582

Remark : Except for G (sp.gr.) = 1, the flow rate should be multiplied by  $\sqrt{G}$ .

4 Relief Valve