

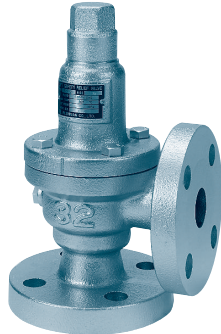
Cast iron,  
Cast steel,  
Stainless steel  
10K, 16K, 20K

## Type RPS16,17 Lift Safety Relief Valve

### ● Soft seat type

RPS16 : Corresponding to RPF12 with soft seat valve disc.

RPS17 : Corresponding to RPF13 with soft seat valve disc.



RPS16



RPS17

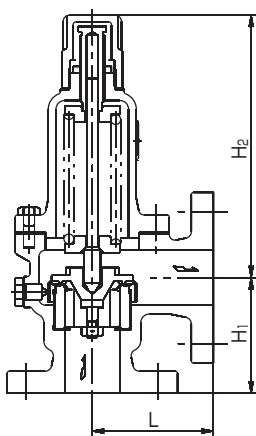
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Safety Relief Valves

### Specifications

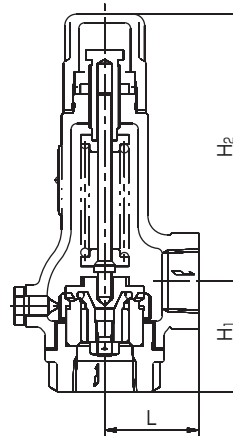
Type		RPS16			RPS17	
Size		15—80			15—40	
Spring case form		Non-lever closed				
Fluid		Air, non-corrosive gas				
Set pressure		0.02—1.0MPa (back press. : atm)	0.02—2.0MPa (back press. : atm)	0.02—2.0MPa (back press. : atm)	0.02—1.6MPa (back press. : atm)	0.02—2.0MPa (back press. : atm)
Temperature		0—110℃	—5 — 110℃	—30 — 110℃	0—110℃	—30 — 110℃
Material	Body	Cast iron	Cast steel	Stainless cast steel	Cast steel	Stainless steel
	Valve seat	Same as RPF12			Same as RPF13	
	Valve disc	Stainless steel & synthetic rubber				
	Stem	Same as RPF12			Same as RPF13	
	Spring case					
	Adjusting spring					
	Adjusting ring					
Use for		Gas (Especially for tight seal)				

### Construction



RPS16

Dimension : Same as RPF12



RPS17

Dimension : Same as RPF13

# Capacity of Type RPF12, 13 , RPS16, 17 Safety Relief Valves

Capacity of RPF12 and RPF13 safety relief valve (Fluid : saturated steam)

(kg/h)

Size		15·20	25	32	40	50	65	80
Seat dia. D(mm)		21	26	33	41	51	66	81
Lift ℓ (mm)		0.6	0.7	0.9	1.1	1.3	1.7	2.1
Set pressure (MPa·G)	Discharge area A (mm <sup>2</sup> )	39.5	57.1	93.3	141.6	208.2	352.4	534.3
	coefficient C							
0.1	1.000	40	58	95	144	212	359	544
0.2	1.000	58	84	138	209	308	522	791
0.3	1.000	78	113	185	282	414	701	1064
0.4	1.003	99	143	234	355	522	884	1340
0.5	0.999	118	171	280	425	626	1059	1606
0.6	0.995	138	199	326	495	729	1234	1871
0.7	0.991	157	228	372	565	831	1407	2133
0.8	0.987	176	255	417	634	932	1578	2393
0.9	0.985	196	283	463	704	1035	1752	2656
1.0	0.983	215	311	509	773	1137	1925	2919
1.1	0.980	234	339	554	841	1237	2095	3177
1.2	0.978	254	367	600	910	1339	2266	3436
1.3	0.976	273	394	645	979	1439	2437	3695
1.4	0.975	292	422	690	1048	1541	2609	3957
1.5	0.974	311	450	736	1117	1643	2782	4218
1.6	0.973	331	478	782	1186	1745	2953	4478
1.7	0.972	350	506	827	1255	1846	3125	4738
1.8	0.971	369	534	872	1324	1947	3296	4998
1.9	0.970	388	561	917	1393	2048	3467	5257
2.0	0.970	408	590	964	1463	2151	3641	5521

Capacity of RPF12, RPF13, RPS16 and RPS17 safety relief valve (Fluid : air 20℃)

(kg/h)

Size		15·20	25	32	40	50	65	80
Seat dia. D(mm)		21	26	33	41	51	66	81
Lift ℓ (mm)		0.6	0.7	0.9	1.1	1.3	1.7	2.1
Set pressure (MPa·G)	Discharge area A (mm <sup>2</sup> )	39.5	57.1	93.3	141.6	208.2	352.4	534.3
	coefficient C							
0.1		65	94	153	233	343	581	881
0.2		94	137	223	339	499	845	1282
0.3		127	184	300	456	671	1136	1723
0.4		159	231	377	573	843	1427	2163
0.5		192	278	454	690	1014	1717	2604
0.6		225	325	531	807	1186	2008	3045
0.7		257	372	608	923	1358	2299	3486
0.8		290	419	685	1040	1530	2590	3926
0.9		322	466	762	1157	1701	2880	4367
1.0		355	513	839	1274	1873	3171	4808
1.1		388	560	916	1391	2045	3462	5249
1.2		420	608	993	1507	2217	3752	5690
1.3		453	655	1070	1624	2388	4043	6130
1.4		485	702	1147	1741	2560	4334	6571
1.5		518	749	1224	1858	2732	4625	7012
1.6		550	796	1301	1975	2904	4915	7453
1.7		583	843	1378	2092	3076	5206	7893
1.8		616	890	1455	2208	3247	5497	8334
1.9		648	937	1532	2325	3419	5787	8775
2.0		681	984	1609	2442	3591	6078	9216

## Capacity of Type RPF12, 13 , RPS16, 17 Safety Relief Valves

Capacity of RPF12 and RPF13 safety relief valve (Fluid : Water)

(kg/h)

Size	15·20	25	32	40	50	65	80
Seat dia. D(mm)	21	26	33	41	51	66	81
Lift $\ell$ (mm)	0.6	0.7	0.9	1.1	1.3	1.7	2.1
Discharge area Set pressure(MPa·G) A(mm <sup>2</sup> )	39.5	57.1	93.3	141.6	208.2	352.4	534.3
0.1	1349	1950	3186	4836	7110	12035	18248
0.2	1907	2757	4506	6839	10056	17020	25806
0.3	2336	3377	5519	8376	12316	20846	31606
0.4	2698	3900	6372	9672	14221	24071	36496
0.5	3016	4360	7125	10813	15900	26912	40803
0.6	3304	4776	7805	11845	17417	29481	44698
0.7	3569	5159	8430	12795	18813	31843	48279
0.8	3815	5515	9012	13678	20112	34041	51613
0.9	4047	5850	9559	14508	21332	36106	54744
1.0	4266	6166	10076	15293	22486	38059	57705
1.1	4474	6467	10568	16039	23583	39917	60522
1.2	4673	6755	11038	16752	24632	41692	63213
1.3	4864	7031	11489	17436	25638	43395	65794
1.4	5047	7296	11922	18095	26605	45033	68278
1.5	5224	7552	12341	18730	27539	46613	70674
1.6	5396	7800	12745	19344	28442	48142	72992
1.7	5562	8040	13138	19939	29318	49624	75238
1.8	5723	8273	13519	20517	30168	51062	77420
1.9	5880	8500	13889	21080	30994	52461	79541
2.0	6033	8721	14250	21627	31800	53824	81607

Remark : Except for G (sp.gr.) = 1, the relieving capacity in the table should be multiplied by  $\sqrt{G}$ .