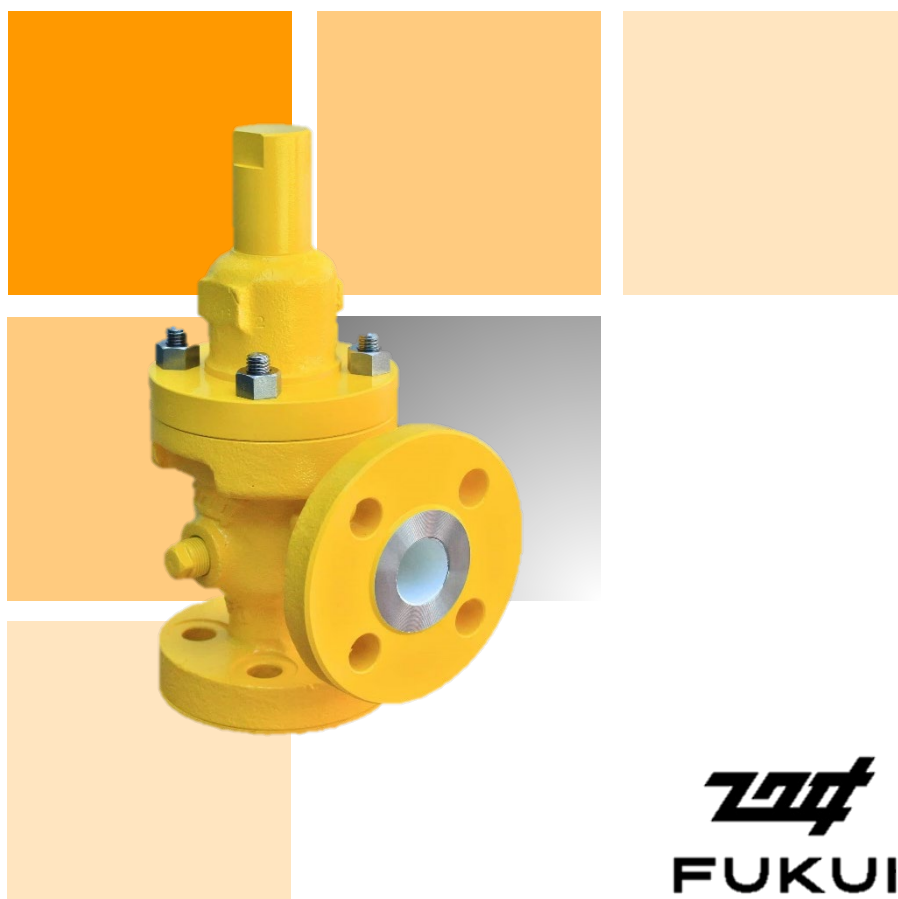




FUKUI

RTE Series

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◆ Features

The RTE series is a flange-connected pressure relief valve developed primarily for thermal relief. The structure is an ASME stamp compatible type that adopts a full nozzle and bolted bonnet and balances robustness and economy. It can be used for all services, including gas, liquid, and steam, and has a wide range of applications regardless of the service used.

◆ Certification

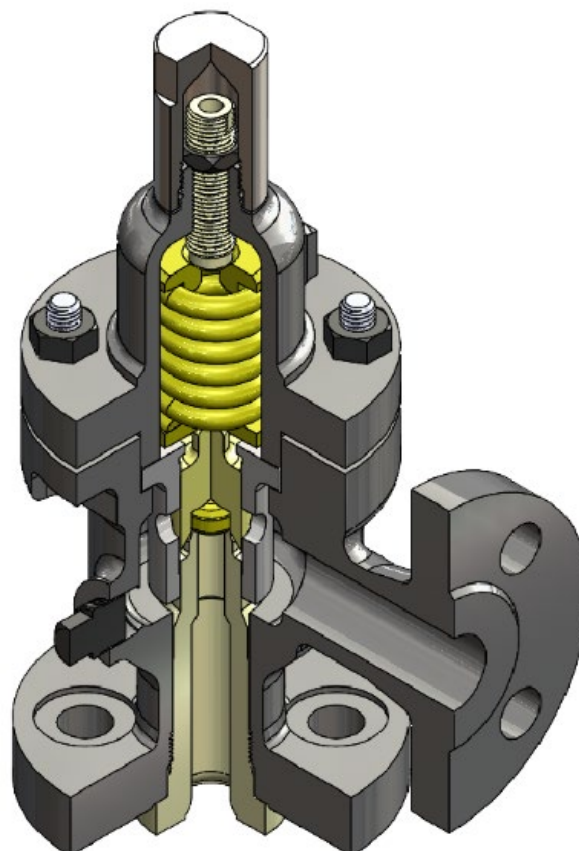
Certification	Range			
	Service	size	Pressure Range	Coefficient of discharge
ASME SECTION VIII Division 1	Gas	3 /4"D*1 1"D*1 1"D*2	0.345 ~ 103 (MPa) 50 ~ 15000 (psi)	0 .878
	Vapor	3 /4"D*1 1"D*1 1"D*2	0.345 to 20 (MPa) 50 ~ 2900 (psi)	0 .878
	Liquid	3 /4"D*1 1"D*1 1"D*2	0.345 ~ 103 (MPa) 50 to 15000 (psi)	0 .752

* For actual manufacturing range, please refer to the pressure and temperature standards.

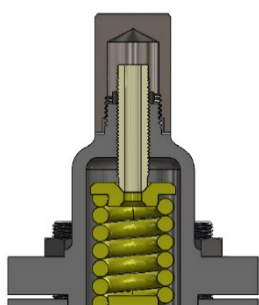
◆ Structure

The RTE structure is a good balance between robustness
This is the design.

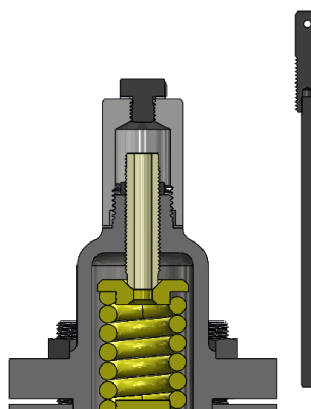
- ◆ Full nozzle
- ◆ Bolted bonnet
- ◆ Cast integral body



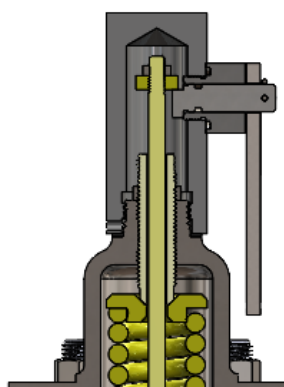
◆ Cap Code



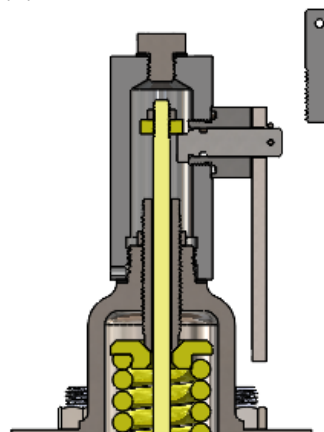
(A) Closed screwed cap



(B) Closed screwed cap + test gag



(M) Closed lever

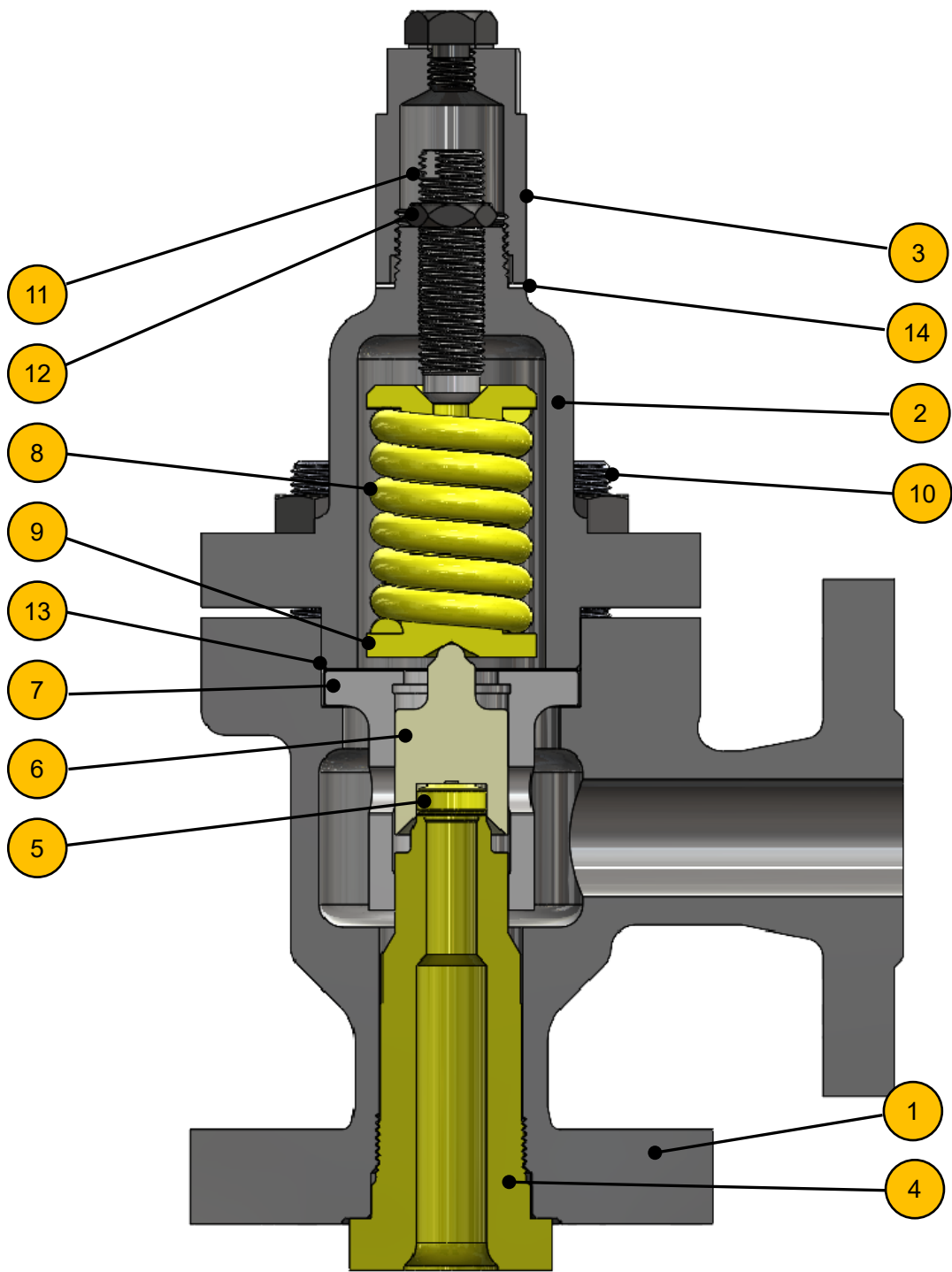


(N) Closed lever + test gag

 Type

RTE	4	6	1 -	S	(A)	
					Cap Code	
					(A)	Closed screwed cap
					(B)	Closed screwed cap + Test Gag
					(M)	Closed lever
					(N)	Closed lever + Test Gag
					Material Code	
					Blank	WCB or SCPH2
					C5	LCB or SCPL1
					S	CF8 or SCS13A
					S1	CF8M or SCS14A
					Connection	
					1 -	ASME Flange
					2 -	J.P.I. Flange
					4 -	JIS Flange
					5 -	Special
					Temperature Code (determined by discharge temperature)	
					3	-196° C (-320° F) ≤ T < -101(-150° F)
					4	-101° C (-150° F) ≤ T < -60° C (-75° F)
					5	-60° C (-75° F) ≤ T < -29° C (-20° F)
					6	-29° C (-20° F) ≤ T < 232° C (450° F)
					7	232° C (-20° F) ≤ T ≤ 427° C (450° F)
					Pressure Class	
					1	Class 150 or JIS 10K
					2	JIS 20K
					3	Class 300 or JIS 30K
					4	Class 600
Type						
RTE		RTE Series				

◆ Cross-sectional View



Standard materials

No	Material Code	Blank	C5	S
	Applicable temperature range	-29 °C to 427 °C	-60 °C to 350 °C	-196 °C to 427 °C
	Part Name	Material		
1	Body	A216-WCB SCPH2	A 217-LCB SCPL1	A351-CF8 SCS13A
2	Bonnet	A216-WCB SCPH2	A 217-LCB SCPL1	A351-CF8 SCS13A
3	Cap	SUS304		
4	Nozzle	SUS304		
5	Disk	B ISHILITE® * 1		
6	Disc Holder	SUS304		
7	Guide	SUS304		
8	Spring	SUS304		
9	Spring Washer	SUS304		
1 0	Stud Bolts and Nuts	SNB7.S45C	S US304	
1 1	Adjusting Screw	SUS304		
1 2	Adjusting Screw Lock Nut	SUS304		
1 3	Gasket (Guide)	PFA		
1 4	Gasket (Cap)	V7020		

*Other material grades are available upon request. .

* 1 BISHILITE® is a registered trademark of Hitachi Metals, Ltd. and is a wear-resistant cobalt alloy.

Actual area

Orifice	Throat diameter mm	Area mm ²	Lift mm
D	10.6	88.2	2.7

Pressure-temperature rating

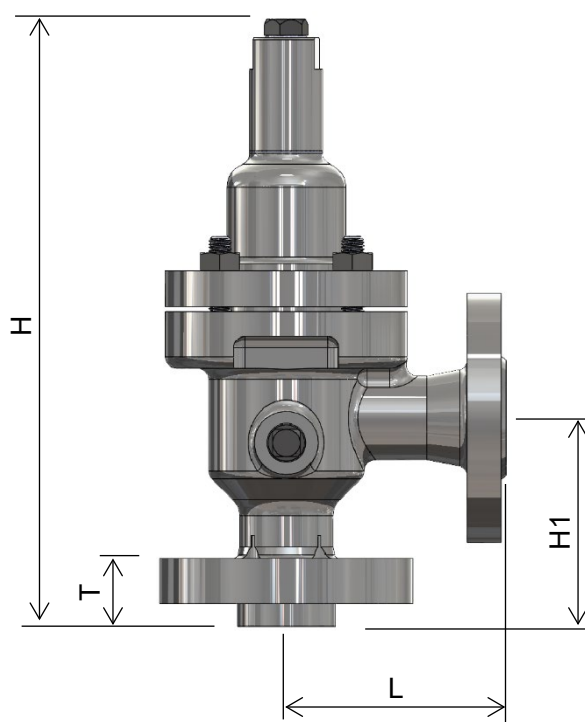
No	Material * ¹ Body bonnet	Size	ASME Class		Maximum Pressure Limits MPa					Outlet Pressure Limit (MPa)
					Temperature range T °C					
			Inlet	Outlet	-196≤T T< -60	-60≤T T< -29	-29≤T T<38	38≤T T≤232	232<T T≤427	
1	SCPH2 * ¹ A216-WCB	3/4*D*1	150	150	-	-	1.96	1.27	0.91	1.96
2		1*D*1	300		-	-	5.1	4.24	3.54	
3		1*D*2	600		-	-	10.2	8.51	7.28	
4	SCS13A A351-CF8	3/4*D*1	150	150	1.89	1.89	1.89	1.24	0.90	1.89
5		1*D*1	300		4.96	4.96	4.96	3.41	3.15	
6		1*D*2	600		9.92	9.92	9.92	6.72	6.28	

* Please contact us for materials other than these.

*1 The minimum operating temperature for SCPH2 varies depending on applicable regulations.

◆ Dimensions

Dimensions and weight										mm, kg	
Size	Type	ASME Class		Center to face dimensions		Inlet Flange Thickness T	Hight (Approx.)		Weight (Approx.)		
		Inlet	Outlet	H1	L		Cap Code		Cap Code		
							A	M	A	M	
3/4*D*1	RTE161	150	150	92	96	28	270	295	8	8.5	
	RTE361	300	150						8	8.5	
			300						8.5	9	
	RTE461	600	150	98	96	34	275	305	9	9.5	
			300						9	9.5	
1*D*1	RTE161	150	150	92	96	28	270	295	8	8.5	
	RTE361	300	150						8.5	9	
			300						8.5	9	
	RTE461	600	150	99	96	35	275	305	9	9.5	
			300						9	9.5	
1*D*2	RTE161	150	150	105	114	35	280	310	8.5	9	
	RTE361	300	150						8.5	9	
	RTE461	600	150						9	9.5	





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The product photos and structures are representative examples. Product specifications in the catalog may be changed without notice for product improvement or quality enhancement.