

# Cryogenic Gas Relief Valves, Non-ASME 9400 Series

## Application

9400 series relief valves are specifically designed for vapor line safety relief applications and cryogenic liquid containers.

## Features

- Cleaned and packaged for oxygen service per CGA G-4.1
- Bubble tight at 95% of set pressure
- Color coded labels clearly identify pressure setting range
- Tamper resistant
- Adapters provide standard pipe thread connections for venting gas to the outdoors
- Repeatable performance
- 100% factory tested
- Temperature Range (Teflon Seat) -320° to +165° F (-196°C to +74°C)

(Fluorosilicone Seat) -60° to +165° F (-51°C to +74°C)

- Rated for gas service only
- In liquid service be sure to use with a candy cane riser (Sold Separately)
- Setpoint tolerance ± 3%

## Materials SS style

Body ..... Stainless Steel  
 Spring ..... Stainless Steel  
 Seat Retainer..... Stainless Steel  
 Pipe-Away Adapter ..... Stainless Steel

## Materials PRV and B-Style

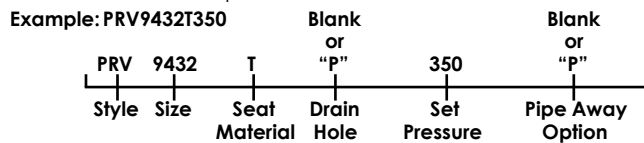
Body ..... Brass  
 Spring ..... Stainless Steel  
 Seat Retainer..... Brass  
 Pipe-Away Adapter ..... Brass

## Flow Performance

- 9400 for set pressure 90-600 psig, flow of 0.783 SCFM Air/psig at 110% of set pressure.
- 9400 for set pressure 15-89 psig, flow of 0.750 SCFM Air/psig at 110% of set pressure.
- B-9425N flow of 6.7 SCFM Air/psig at 120% of set pressure.
- B-9426N flow of 11.0 SCFM Air/psig at 120% of set pressure

## Ordering Information

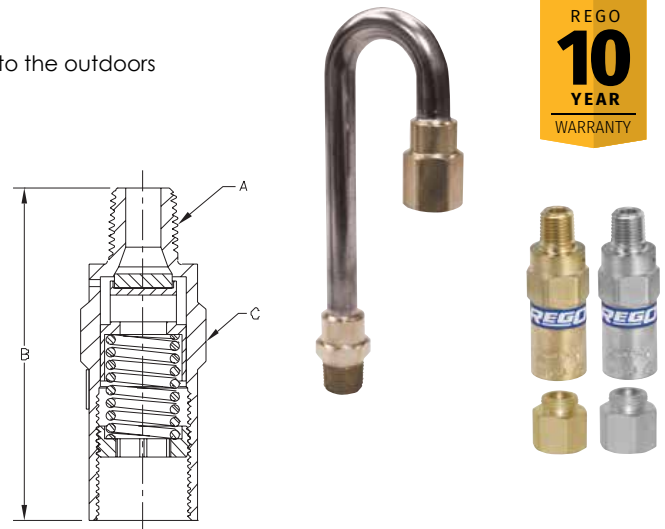
Fill in the blanks with options below.



This example part number indicates a 1/4" M.NPT PRV style brass relief valve with PTFE seat, set at 350 psig with drain hole and no pipe away adapter.

## Ordering Information

Style	Size	Body and Valves Material	Pressure Setting Range psig (barg)	Inlet MNPT A Inches (mm)	Height B Inches (mm)	Wrenching Hex C inches (mm)	Kd value	Orifice Size In2 (mm2)	Pipe-Away Adapter P/N	Pipe-Away Outlet FNPT Inches (mm)				
PRV	9432	Brass	10-600 (0.68-41.36)	1/4" (6.35)	2.6" (66.04)	3/8" (22.35)	0.686	.062 (40)	B-9412-2	3/8" (9.65)				
SS		Stainless Steel		1/2" (12.70)					SS9412-4	1/2" (6.35)				
PRV	9433	Brass			2.8" (71.12)				B-9412-2	3/8" (9.65)				
SS		Stainless Steel		SS9412-4					1/2" (6.35)					
PRV	9434	Brass		20-300 (1.37-20.68)	1/2" (12.70)					3.4" (86.36)	0.894	.42 (271)	B-9412-4	1" (25.4)
SS		Stainless Steel							SS9412-4					
B-	9425	Brass	60-300 (4.13-20.68)		3/4" (19.05)	5.3" (134.62)	5.3" (134.62)	0.986	.62 (400)				B-3131-10	1 1/4" (31.75)
	9426				1" (25.4)								B-3132-10	



## Seat Material Option

**F** for Fluorosilicone for PRV and SS styles for 16-139 psig (1.10 - 9.58 barg) **T** for PTFE for PRV and SS styles for 140-600 psig (9.65 - 41.36 barg)  
**N** for B-9425 and B-9426, Fluorosilicone seat, all set pressures.

## Drain Hole Option

Relief valves without pipeaway typically provided with drain holes, leave blank. **P** - for relief valves without drain hole, for example PRV9432TP350 Drain hole can not be used with pipeaway.

## Pipe Away Option

**P** Pipeaway included and attached, No drain hole in relief valve. For example PRV9432TP350**P**  
 Leave blank for relief valve without pipe-away attached. For example PRV9432TP350.

## Set Pressure

Specify set pressure within range specified for style and size. The B-9425 & B-9426N are available in select settings only. Special order.

For easy identification, the following standard settings have color coded labels for all PRV and SS Style sizes and settings marked in psig and barg:

**WARNING:** Inspection and maintenance of pressure relief valves is very important. Failure to properly inspect and maintain pressure relief valves could result in personal injuries or property damage. The useful safe service life of a pressure relief valve may be significantly affected by the service environment.

Pressure Setting and Flow Data PRV9400 Series

Pressure Setting psig	barg	Air Flow Capacity SCFM	Pressure Setting psig	barg	Air Flow Capacity SCFM	Pressure Setting psig	barg	Air Flow Capacity SCFM
15	1.0	25	215	14.8	197	450	31.0	399
20	1.4	28	220	15.2	201	460	31.7	408
22	1.5	30	225	15.5	205	470	32.4	416
25	1.7	32	230	15.9	210	480	33.1	425
30	2.1	36	235	16.2	214	490	33.8	434
35	2.4	40	240	16.5	218	500	34.5	442
40	2.8	44	250	17.2	227	510	35.2	451
45	3.1	48	260	17.9	235	520	35.9	459
50	3.4	52	270	18.6	244	530	36.5	468
55	3.8	56	275	19.0	248	540	37.2	477
60	4.1	61	280	19.3	253	550	37.9	485
65	4.5	65	285	19.7	257	560	38.6	494
70	4.8	69	290	20.0	261	570	39.3	502
75	5.2	73	300	20.7	270	580	40.0	511
80	5.5	77	310	21.4	279	590	40.7	520
85	5.9	81	320	22.1	287	600	41.4	528
90	6.2	89	325	22.4	291			
100	6.9	98	330	22.8	296			
110	7.6	106	340	23.4	304			
120	8.3	115	350	24.1	313			
125	8.6	119	360	24.8	322			
130	9.0	123	370	25.5	330			
140	9.7	132	375	25.9	334			
150	10.3	141	380	26.2	339			
160	11.0	149	390	26.9	347			
170	11.7	158	400	27.6	356			
175	12.1	162	410	28.3	365			
180	12.4	167	420	29.0	373			
190	13.1	175	425	29.3	378			
200	13.8	184	430	29.6	382			
210	14.5	192	440	30.3	390			

Color Identification

22 psig	230 psig
35 psig	350 psig
50 psig	450 psig
100 psig	500 psig
150 psig	

Color Identification

1.51 barg	15.85 barg
2.41 barg	24.13 barg
3.44 barg	31.02 barg
6.89 barg	34.47 barg
10.34 barg	

Non-ASME Ordering Information

