

Universal
Components
Inc.



Safety Relief
Valves



PSNC and PBNC SERIES RELIEF VALVES

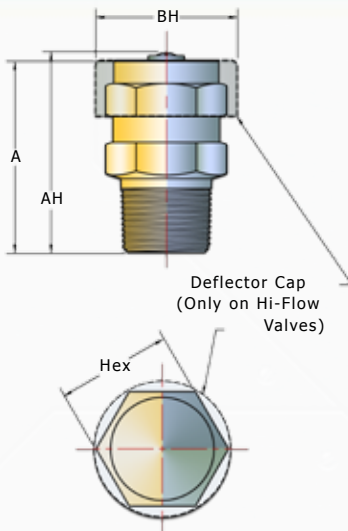
FEATURES:

- Available in 316 Stainless Steel & Brass
- High Accuracy Relief Settings (.5 to 150psi)
- 200psi Max Working Pressure
- Viton Seal Standard
- Working Temperature 0°F to 350°F
- Relieves +/- 5% of Set Pressure



Suffix and Options for PBNC and PSNC Series Relief Valves

* = High Flow Deflector Cap (H for cap or leave blank if not needed)
 *** = Set Pressure (example of part # PSNC2H-15.5 Psi)
 Viton is Standard Seal other Elastomers are available, Please Consult Factory
 Minimum Set Pressure is 0.5 Psi, Maximum Set Pressure is 150 Psi

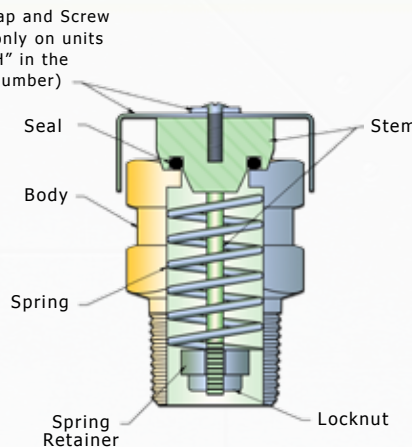


PBNC & PSNC Dimensions				
Part		Pipe Size	A	Hex
(Brass)	(Stainless)			
PBNC1	PSNC1	1/8" NPT	0.97	0.50
PBNC2	PSNC2	1/4" NPT	1.20	0.62
PBNC3	PSNC3	3/8" NPT	1.24	0.75
PBNC4	PSNC4	1/2" NPT	1.75	1.00
PBNC6	PSNC6	3/4" NPT	2.25	1.12
PBNC8	PSNC8	1" NPT	3.12	1.50

PBNC & PSNC Dimensions					
Part		Pipe Size	AH	BH	Hex
(Brass)	(Stainless)				
PBNC1H	PSNC1H	1/8" NPT	1.10	0.69	0.50
PBNC2H	PSNC2H	1/4" NPT	1.32	0.92	0.62
PBNC3H	PSNC3H	3/8" NPT	1.38	1.17	0.75
PBNC4H	PSNC4H	1/2" NPT	1.92	1.40	1.00
PBNC6H	PSNC6H	3/4" NPT	2.44	1.73	1.12
PBNC8H	PSNC8H	1" NPT	3.29	1.94	1.50

PBNC Series relief Valve Bill of Materials

DESCRIPTION	MATERIAL
Body	Brass (ASTM B16)
Spring	302 Stainless Steel (316 Optional)
Stem	Brass (ASTM B16)
Locknut	18-8 Stainless Steel
Seal	Viton
Spring Retainer	Brass (ASTM B16)
Hi-Flow Deflector Cap and Screw	2024 Aluminum ASTM B211



PSNC Series relief Valve Bill of Materials

DESCRIPTION	MATERIAL
Body	316 Stainless Steel
Spring	302 Stainless Steel (316 Optional)
Stem	316 Stainless Steel
Locknut	18-8 Stainless Steel
Seal	Viton
Spring Retainer	316 Stainless Steel
Hi-Flow Deflector Cap and Screw	2024 Aluminum ASTM B211



Flow Data

PSNC and PBNC SERIES Flow (SCFM)

Spring No.		1	2	3	4	5	6	7
Set Pressure		.5 - 2.5	2.6 - 7.5	7.6 - 15	16 - 35	36 - 75	76 - 125	126 - 150
1/8"	PSNC1 (SCFM)	0.13	0.57	0.92	1.50	4.33	8.33	10.17
	PBNC1 (SCFM)							
1/4"	PSNC2 (SCFM)	0.13	0.62	1.15	2.05	8.58	33.52	38.17
	PBNC2 (SCFM)							
3/8"	PSNC3 (SCFM)	0.20	0.97	1.80	2.50	9.17	21.67	19
	PBNC3 (SCFM)							
1/2"	PSNC4 (SCFM)	0.83	1.83	2.50	3.67	24.3	62.08	66.67
	PBNC4 (SCFM)							
3/4"	PSNC6 (SCFM)	C/F	C/F	C/F	C/F	C/F	C/F	C/F
	PBNC6 (SCFM)							
1"	PSNC8 (SCFM)	C/F	C/F	C/F	C/F	C/F	C/F	C/F
	PBNC8 (SCFM)							

PSNC*H and PBNC*H SERIES Flow (SCFM) with High Flow Deflector Cap

Spring No.		1	2	3	4	5	6	7
Set Pressure		.5 - 2.5	2.6 - 7.5	7.6 - 15	16 - 35	36 - 75	76 - 125	126 - 150
1/8"	PSNC1H (SCFM)	0.17	0.65	1.58	1.67	4.67	9.67	13
	PBNC1H (SCFM)							
1/4"	PSNC2H (SCFM)	0.148	0.67	1.67	2.87	39	71.2	110.83
	PBNC2H (SCFM)							
3/8"	PSNC3H (SCFM)	0.22	1.28	2.17	3.25	12.3	72.55	104.58
	PBNC3H (SCFM)							
1/2"	PSNC4H (SCFM)	1	4.1	7	10.97	43.42	C/F	C/F
	PBNC4H (SCFM)							
3/4"	PSNC6H (SCFM)	C/F	C/F	C/F	C/F	C/F	C/F	C/F
	PBNC6H (SCFM)							
1"	PSNC8H (SCFM)	C/F	C/F	C/F	C/F	C/F	C/F	C/F
	PBNC8H (SCFM)							



NCHL2 SERIES RELIEF VALVES

- FEATURES:**
- Machined Solid Brass Body & Spring
 - 302 Stainless Steel Spring, Guides and Pull Ring
 - Viton Seal Standard
 - Temperature Range 0°F to 350°F
 - Relieves +/- 10% of Set Pressure



Dimensional Data

Part no.	A	B	C
NCHL2	0.75	1/4 NPT	5/8"

Flow Data

Pressure Settings (psi)	5	10	15	20	25
SCFM	12	30	43	50	56
Pressure Settings (psi)	30	40	50	60	75
SCFM	63	82	97	110	134

NOTE: Part Number NCHL2
 Pressure Settings in 5psi Increments
 Example: NCHL2-30 = 30psi Relief

Bill of Materials

DESCRIPTION	MATERIAL
Body	Brass
Seat	Viton
Stem	302 Stainless Steel
Spring	
Shield Disc	
Pull Ring	
Guide	

CV SERIES RELIEF VALVES



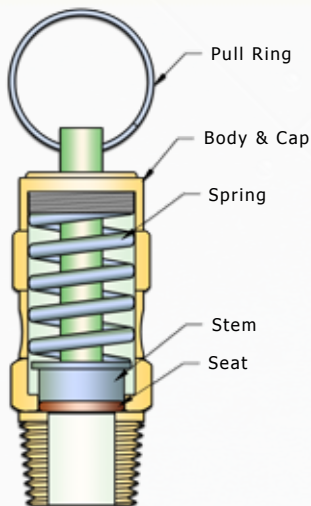
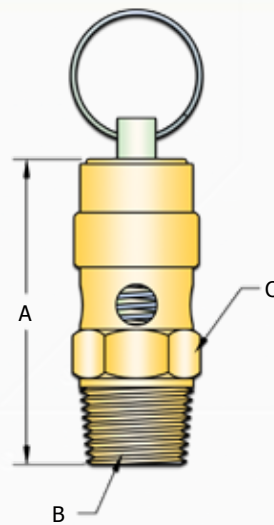
FEATURES:

- Brass Body
- Silicon Seal, Standard
- Optional Viton Seal, Suffix "V"
- ASME, NB, UV & CRN
- Unfired Pressure Vessel
- Temperature Range -65°F to 250°F
- Relieves +/- 3% of Set Pressure



Dimensional Data

Part No.	A	B	C
CVM1	1.50	1/8" NPT	9/16"
CVM2	1.59	1/4" NPT	9/16"
CVH2	1.99	1/4" NPT	11/16"
CV3	2.00	3/8" NPT	11/16"
CV4	3.36	1/2" NPT	7/8"
CVH4	3.36	1/2" NPT	1-1/16"
CV6	3.59	3/4" NPT	1-1/16"
CV8	4.39	1" NPT	1-5/8"
CV10	4.39	1-1/4" NPT	1-5/8"



Bill of Materials

DESCRIPTION	MATERIAL
Body	Brass
Seat	Silicone (Viton Optional)
Spring	1/4", 3/8", 1/2" NPT Zinc plated music wire 3/4", 1", 1-1/4" NPT Stainless Steel
Pull Ring	Stainless Steel
Stem	Brass



SSCV & SSCVH SERIES RELIEF VALVES

- FEATURES:**
- 303 Stainless Steel Body
 - Viton Seal Standard
 - ASME, NB, UV & CRN
 - Unfired Pressure Vessel
 - Working Temperature 0°F to 350°F
 - Relieves +/- 3% of Set Pressure



Dimensional Data

Part No.	A	B	C
SSCVH2	1.99	1/4" NPT	11/16"
SSCV4	3.36	1/2" NPT	7/8"
SSCV6	3.59	3/4" NPT	1-1/16"

Bill of Materials

DESCRIPTION	MATERIAL
Body & Cap	ASTM B-16 Stainless Steel
Seat	Viton
Spring & Stem	Stainless Steel
Pull Ring	304 Stainless Steel



SCFM Flow for CV Series Relief Valves at Set Pressure
 Factory Set "POP" +/-3%, +/-2% Below 70 PSIG
 Working Pressure 10% Less than Set Pressure or 5 PSIG for Settings Below 50 PSIG

CVH2, SSCVH2 & CV3									
Set Pressure (psi)	25	30	35	40	45	50	55	60	65
Flow (SCFM)	32	36	40	45	49	53	57	61	65
Set Pressure (psi)	70	75	80	85	90	95	100	105	135
Flow (SCFM)	70	74	78	82	86	90	95	99	124
Set Pressure (psi)	140	145	150	155	160	165	170	175	180
Flow (SCFM)	128	132	136	141	145	149	153	157	161
Set Pressure (psi)	185	190	195	200	205	210	215	240	245
Flow (SCFM)	166	170	174	178	182	186	191	212	216
Set Pressure (psi)	240	245	250	255	260	265	270	275	280
Flow (SCFM)	212	216	220	224	228	232	237	241	245
Set Pressure (psi)	285	290	295	300	305	310	315	320	
Flow (SCFM)	249	253	257	262	266	270	274	278	

CV4 & SSCV4									
Set Pressure (psi)	50	55	60	65	70	75	80	85	90
Flow (SCFM)	106	115	123	132	140	148	157	165	174
Set Pressure (psi)	95	100	105	110	115	120	125	130	150
Flow (SCFM)	182	190	199	207	215	224	232	241	274
Set Pressure (psi)	155	160	165	170	175	180	185	190	195
Flow (SCFM)	283	291	299	308	316	325	333	341	350
Set Pressure (psi)	200	205	210	215	220	225	230		
Flow (SCFM)	358	367	375	383	392	400	409		

CVH4, SSCV6 & CV6									
Set Pressure (psi)	25	30	35	40	45	50	55	60	65
Flow (SCFM)	140	158	176	194	213	231	249	267	285
Set Pressure (psi)	70	75	80	85	90	95	100	110	160
Flow (SCFM)	304	322	340	358	376	395	413	449	631
Set Pressure (psi)	170	175	180	190	200	210	220	230	240
Flow (SCFM)	668	686	704	740	777	813	850	886	922
Set Pressure (psi)	250	260	270	275	280	290	300		
Flow (SCFM)	959	995	1032	1050	1068	1105	1141		

CV8 & CV10									
Set Pressure (psi)	25	30	35	40	45	50	55	60	65
Flow (SCFM)	292	330	368	406	444	482	520	558	597
Set Pressure (psi)	70	75	80	85	90	95	100	110	160
Flow (SCFM)	635	673	711	749	787	825	863	939	1320
Set Pressure (psi)	170	175	180	190	200	210	220	230	240
Flow (SCFM)	1396	1434	1472	1548	1624	1700	1776	1852	1929
Set Pressure (psi)	250	260	270	275	280	290	300		
Flow (SCFM)	2005	2081	2157	2195	2233	2309	2385		

CVM1 & CVM2									
Set Pressure (psi)	80	90	100	110	115	125	135	145	150
Flow (SCFM)	28	31	34	37	39	42	45	48	50
Set Pressure (psi)	165	175	180	190	200	215	225		
Flow (SCFM)	54	57	59	62	65	69	72		

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