



ASME SAFETY & RELIEF VALVE
MANUFACTURER SINCE 1947



MASTER VALVE
PRODUCT CATALOG
WWW.AQUATROL.COM

**SERIES
69**



**SERIES
743**



**SERIES
560**



**SERIES
140**



Aquatrol VALVE COMPANY, INC.

Aquatrol, Inc is a US based manufacturer of safety and relief valve products. As we move into our 8th decade, our commitment and focus has not changed: We are driven to produce industry leading safety and relief valve product with quality and safety standards second to none.

All engineering, design and production is done by our team of motivated and professional safety valve specialists...Over the past few years, we are proud to offer many new product and choices:

Cryogenic options with both our 740 and 89 Series valve lines

Tri-clamp (sometimes referred to as sanitary) connections

Lap-joint flange options for the 741, 742 and 743 series. Both offer variable dimensions on the inlet and outlet.

PED / CE and ISO as it applies to the safety valve industry

Increased set pressures and pipe sizing options; throughout all valve lines

Our mini-series 140 is ASME approved and offers pressures up to 450 psig. Like all of our product, the valve is designed to ruggedly enhanced specifications.

Over 95% of our components are manufactured here, in the USA and by Aquatrol.

Orders are all confirmed, acknowledged (with ship dates and all valve details) upon acceptance. All orders shipped will also receive a notice with tracking details and electronic billing (if requested).

As always, we strive to have 100% of all components in stock...allowing you to make quick and 'best fit / best choice' selections.

We welcome the opportunity to be of service.

***With Best Regards,
—Your Aquatrol Staff***

SERIES 740 SAFETY VALVES

Series 740 safety and relief valve is engineered for heavy-duty industrial usage. Multiple purpose safety and relief valve for all services: Liquid, Steam and Air/Gas. ASME and National Board Certified for Section XIII "UV" for ASME Section VIII Div. 1 service as well as CE and CRN Certifications. Pressures are to 1500 psig. Available with the full array of metal and seating options.

SERIES 740



SERIES 740

Brass nozzle, stainless steel ring, disc and springs. Brass / bronze body, bonnet. 350 psig (24.1 barg) for air/gas and liquid, 250 psig (17.2 barg) for steam. Temperatures -320°F (-196°C) to 406°F (208°C)

SERIES 741

Stainless steel nozzle, ring, disc and springs. Brass / bronze body, bonnet. 1500 psig (103.4 barg) for air/gas and liquid, 300 psig (20.7 barg) for steam. Temperatures -320°F (-196°C) to 425°F (218°C)

SERIES 742

Stainless steel nozzle, ring, disc, all internals and springs. Carbon steel body, bonnet. 1500 psig (103.4 barg) for air/gas and liquid, 300 psig (20.7 barg) for steam. Temperatures -20°F (-29°C) to 800°F (427°C)

SERIES 743



SERIES 743

Stainless steel nozzle, ring, disc, all internals and springs. Stainless steel body, bonnet. 1500 psig (103.4 barg) for air/gas and liquid, 300 psig (20.7 barg) for steam. Temperatures -320°F (-196°C) to 800°F (427°C)

SERIES 744 THRU 748

Specialty metals with distinct options, contact Aquatrol for specs, dimensions and cut sheets.

Usages: Pressure Vessels, Pumps, Hydraulics, Tanks, Steam Systems, Chemical, Cryogenic, Air and Gas Compressors, Separators, by-pass and over pressure protection. Choose for most industrial applications requiring a safety relief valve.

Features:

- Full nozzle – Top guided design
- Short, precise blow-down
- Wide choice of inlet/outlet sizes
- Dual-lapped precision seating
- 100% Back-pressure tight
- Drain hole with threaded plug
- Cryogenic compatible

Options:

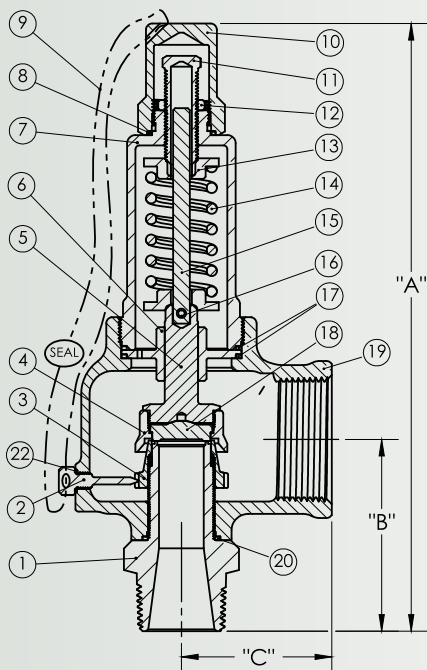
- O-ring seating options (see charts)
- Packed lift lever or Closed cap
- BSPT and BSPP Piping
- Tri-Clamp Inlets
- Full array of metal options
- API 527 Seating
- Lap Joint Flanges
- Lead-Free (D, E, and F orifice only)
- O2 Cleaning

SERIES 742



¹For temperatures above 650°F contact aquatrol for high-temp springs





Shown with Optional Closed Cap

SERIES 740 THRU 743

#	DESCRIPTION	740	741	742	743
1	Nozzle	B16 Brass	SA479-316 SS	SA479-316 SS	SA479-316 SS
2	Lock Screw	B16 Brass	B16 Brass	SA479-316 SS	SA479-316 SS
3	Lower Ring	SA351-CF8M	SA351-CF8M	SA351-CF8M	SA351-CF8M
4	Disc Holder	B16 Brass	B16 Brass	SA479-316 SS	SA479-316 SS
5	Disc Holder Shaft	B16 Brass	B16 Brass	SA479-316 SS	SA479-316 SS
6	Disc Guide	B16 Brass	B16 Brass	SA479-316 SS	SA479-316 SS
7	Bonnet	B16 Brass	B16 Brass	SA216-WCB	SA351-CF8M
8	Hood Seal	PTFE	PTFE	PTFE	PTFE
9	Seal Wire	Steel / Lead	Steel / Lead	Steel / Lead	Stainless / Lead
10	Hood	B16 Brass	B16 Brass	SA108-1018	SA479-316 SS
11	Pressure Screw	B16 Brass	B16 Brass	SA479-316 SS	SA479-316 SS
12	Lock Nut	B16 Brass	B16 Brass	SA479-316 SS	SA479-316 SS
13	Spring Plate	B16 Brass	B16 Brass	SA479-316 SS	SA479-316 SS
14	Spring	302/17-7 SS	302/17-7 SS	302/17-7 SS	302/17-7 SS
15	Spring Post	B16 Brass	B16 Brass	SA479-316 SS	SA479-316 SS
16	Spring Pin	18-8 SS	18-8 SS	18-8 SS	18-8 SS
17	Guide Seals (2)	PTFE	PTFE	PTFE	PTFE
18	Disc	SA479-316 SS	SA479-316 SS	SA479-316 SS	SA479-316 SS
19	Body	B584-C84400	B584-C84400	SA216-WCB	SA351-CF8M
20	Nozzle Seal	PTFE	PTFE	PTFE	PTFE
21	Nameplate	Stainless	Stainless	Stainless	Stainless
22	Lock Screw Seal	PTFE	PTFE	PTFE	PTFE

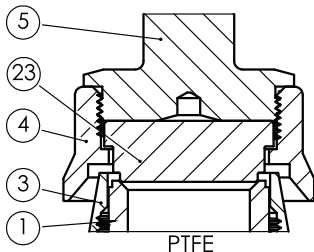
SERIES 740 THRU 743

ORIFICE	FLOW AREA In ² (mm ²)	INLET	OUTLET	DN	SIZE ID	DIMENSIONS – in (mm)				WEIGHT Lbs. (Kg)
						A CLOSED CAP	A LIFT LEVER	B	C	
D	.125 (80.6)	1/2"	3/4"	15	C	7-3/8" (187)	8-1/8" (206)	2-3/8" (60)	1-5/8" (41)	2 (0.9)
D	.125 (80.6)	1/2"	1"	15	D	7-3/8" (187)	8-1/8" (206)	2-3/8" (60)	1-5/8" (41)	2 (0.9)
D	.125 (80.6)	3/4"	3/4"	20	E	7-3/8" (187)	8-1/8" (206)	2-3/8" (60)	1-5/8" (41)	2 (0.9)
D	.125 (80.6)	3/4"	1"	20	F	7-3/8" (187)	8-1/8" (206)	2-3/8" (60)	1-5/8" (41)	2 (0.9)
D	.125 (80.6)	1"	1"	25	G	7-3/8" (187)	8-1/8" (206)	2-3/8" (60)	1-5/8" (41)	2 (0.9)
E ¹	.217 (140.0)	1/2"	1"	15	A	8-1/8" (206)	9" (229)	2-5/8" (67)	2" (51)	3 (1.4)
E ¹	.217 (140.0)	1/2"	1-1/4"	15	B	8-1/8" (206)	9" (229)	2-5/8" (67)	2" (51)	3 (1.4)
E	.217 (140.0)	3/4"	1"	20	C	8-1/8" (206)	9" (229)	2-5/8" (67)	2" (51)	3 (1.4)
E	.217 (140.0)	3/4"	1-1/4"	20	D	8-1/8" (206)	9" (229)	2-5/8" (67)	2" (51)	3 (1.4)
E	.217 (140.0)	1"	1"	25	G	8-1/8" (206)	9" (229)	2-5/8" (67)	2" (51)	3 (1.4)
E	.217 (140.0)	1"	1-1/4"	25	F	8-1/8" (206)	9" (229)	2-5/8" (67)	2" (51)	3 (1.4)
E	.217 (140.0)	1-1/4"	1-1/4"	32	H	8-1/8" (206)	9" (229)	2-5/8" (67)	2" (51)	3 (1.4)
F	.353 (227.7)	1"	1-1/2"	25	F	9-1/4" (235)	9-5/8" (244)	2-7/8" (73)	2-1/4" (57)	5 (2.3)
F	.353 (227.7)	1-1/4"	1-1/2"	32	H	9-1/4" (235)	9-5/8" (244)	2-7/8" (73)	2-1/4" (57)	5 (2.3)
F	.353 (227.7)	1-1/2"	1-1/2"	40	G	9-1/4" (235)	9-5/8" (244)	2-7/8" (73)	2-1/4" (57)	5 (2.3)
G	.554 (357.4)	1-1/4"	2"	32	G	10-1/4" (260)	10-5/8" (270)	3-3/8" (86)	2-5/8" (67)	9 (4.1)
G	.554 (357.4)	1-1/2"	2"	40	H	10-1/4" (260)	10-5/8" (270)	3-3/8" (86)	2-5/8" (67)	9 (4.1)
G	.554 (357.4)	2"	2"	50	F	10-1/4" (260)	10-5/8" (270)	3-3/8" (86)	2-5/8" (67)	9 (4.1)
H	.923 (595.5)	1-1/2"	2"	40	F	11-3/4" (298)	12-1/4" (311)	3-1/2" (89)	2-7/8" (73)	16 (7.3)
H	.923 (595.5)	2"	2"	50	G	11-3/4" (298)	12-1/4" (311)	3-1/2" (89)	2-7/8" (73)	16 (7.3)
H	.923 (595.5)	1-1/2"	2-1/2"	40	H	11-3/4" (298)	12-1/4" (311)	3-1/2" (89)	2-7/8" (73)	16 (7.3)
H	.923 (595.5)	2"	2-1/2"	50	J	11-3/4" (298)	12-1/4" (311)	3-1/2" (89)	2-7/8" (73)	16 (7.3)
H	.923 (595.5)	2-1/2"	2-1/2"	65	K	12" (305)	12-1/2" (318)	3-3/4" (95)	2-7/8" (73)	16 (7.3)
J	1.418 (914.8)	2"	3"	50	J	14-1/4" (362)	14-1/2" (368)	4" (102)	3-1/4" (83)	18 (8.2)
J	1.418 (914.8)	2-1/2"	3"	65	K	14-1/4" (362)	14-1/2" (368)	4" (102)	3-1/4" (83)	18 (8.2)
J	1.418 (914.8)	3"	3"	80	L	14-1/4" (362)	14-1/2" (368)	4" (102)	3-1/4" (83)	18 (8.2)

¹ – 1/2" Inlet for "E" orifice is ASME/CE Air/Gas and Steam

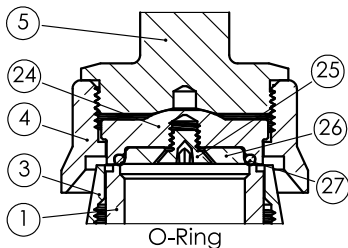
SEATING MATERIALS

MATERIAL	NAMES	MIN TEMP °F (°C)	MAX TEMP °F (°C)	USE FOR:
FKM	Viton-A	-13° (-25°)	446° (230°)	Acetone, Air, Alcohol, Benzine, Butane, Ethylene, Ethylene Glycol, Ethyl Alcohol, Gasoline, Isobutyl Alcohol, Kerosene, Lube Oil, Natural Gas, Naphtha, Nitrogen, Propane, Water, Xylene
Nitrile	Buna-N	-40° (-40°)	250° (121°)	Air, Butane, Carbon Dioxide, Diesel Oil, Ethyl Chloride, Ethyl Ether, Fuel Oil, Gasoline, Helium, Hydrogen Sulphide, Kerosene, Natural Gas, Nitrogen, Oxygen (Gas), Propane
EPDM		-40° (-40°)	303° (151°)	Steam (under 55 psig), Water, Hot Water, Acetone, Beer, Brake Fluid, Hydrogen Gas, Sulfur Dioxide, Acids, Alkalies
FFKM	Markez® Kalrez®	5° (-15°) -4° (-20°)	500° (260°) 525° (274°)	Aromatic Hydrocarbons, Chlorinated Hydrocarbons, Polar Solvents (ketones, esters, ethers), Inorganic and Organic Acids, Water, and Steam.
PTFE		-450° (-268°)	500° (260°)	Cryogenic Service including Argon, Carbon Dioxide, Helium, Hydrogen, Nitrogen, Oxygen, Steam
PCTFE	Kel-F®	-320° (-196°)	245° (118°)	Cryogenic Service including Argon, Carbon Dioxide, Helium, Hydrogen, Nitrogen, Oxygen, Steam
Silicone		-75° (-59°)	400° (204°)	Air, Helium, Nitrogen, Oxygen(Gas)



PTFE SEATING

#	DESCRIPTION	740	741	742	743
1	Nozzle	B16 Brass	SA479-316 SS	SA479-316 SS	SA479-316 SS
3	Lower Ring	SA351-CF8M	SA351-CF8M	SA351-CF8M	SA351-CF8M
4	Disc Holder	B16 Brass	B16 Brass	SA479-316 SS	SA479-316 SS
5	Disc Holder Shaft	B16 Brass	B16 Brass	SA479-316 SS	SA479-316 SS
23	Disc	PTFE	PTFE	PTFE	PTFE



RING SEATING

#	DESCRIPTION	740	741	742	743
1	Nozzle	B16 Brass	SA479-316 SS	SA479-316 SS	SA479-316 SS
3	Lower Ring	SA351-CF8M	SA351-CF8M	SA351-CF8M	SA351-CF8M
4	Disc Holder	B16 Brass	B16 Brass	SA479-316 SS	SA479-316 SS
5	Disc Holder Shaft	B16 Brass	B16 Brass	SA479-316 SS	SA479-316 SS
24	O-Ring Disc	SA479-316 SS	SA479-316 SS	SA479-316 SS	SA479-316 SS
25	Screw	18-8 SS	18-8 SS	18-8 SS	18-8 SS
26	Disc Insert	SA479-316 SS	SA479-316 SS	SA479-316 SS	SA479-316 SS
27	O-Ring	Various	Various	Various	Various

SERIES	INLET SIZES	METALS ¹	MIN. TEMP °F (°C)	MAX. TEMP ^{4,5} °F (°C)	MAX PRESSURE ^{2,3} psig (barg)	SERVICES	CERTIFICATIONS
740	1/2" to 3"	Brass/Bronze	-320° (-196°)	406° (208°)	350 (24.1)	Air / Gas / Steam / Liquid	ASME VIII, CE, CRN
741	1/2" to 3"	Stainless/Bronze	-320° (-196°)	425° (218°)	1500 (103.4)	Air / Gas / Steam / Liquid	ASME VIII, CE, CRN
742	1/2" to 3"	Stainless/Carbon	-20° (-29°)	800° (427°)	1500 (103.4)	Air / Gas / Steam / Liquid	ASME VIII, CE, CRN
743	1/2" to 3"	Stainless	-320° (-196°)	800° (427°)	1500 (103.4)	Air / Gas / Steam / Liquid	ASME VIII, CE, CRN
744	1/2" to 3"	Monel/Bronze	-320° (-196°)	800° (427°)	1500 (103.4)	Air / Gas / Steam / Liquid	ASME VIII, CE, CRN
745	1/2" to 3"	Monel/Carbon	-320° (-196°)	800° (427°)	1500 (103.4)	Air / Gas / Steam / Liquid	ASME VIII, CE, CRN
746	1/2" to 3"	Monel/Stainless	-320° (-196°)	800° (427°)	1500 (103.4)	Air / Gas / Steam / Liquid	ASME VIII, CE, CRN
747	1/2" to 3"	No-Lead Brass/Bronze	-320° (-196°)	406° (208°)	350 (24.1)	Air / Gas / Steam / Liquid	Non-Code
748	1/2" to 3"	No-Lead Brass/Stainless	-320° (-196°)	406° (208°)	1500 (103.4)	Air / Gas / Steam / Liquid	Non-Code

¹ Other metal options available, contact Aquatrol.

² Maximum set pressure for steam service is 300 psig (20.7 barg)

³ Maximum set pressure for steam on Series 740 is 250 psig (17.2 barg)

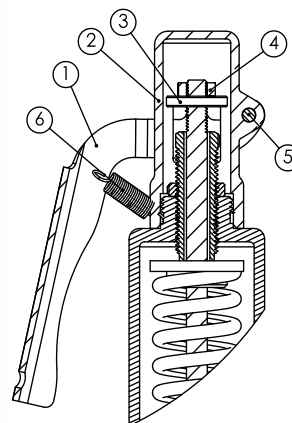
⁴ Maximum temperatures depend upon seating material.

⁵ For temps over 425°F (218°C) contact Aquatrol. (Inconel spring used temperatures above 650°F)

INLET and LIFT LEVER OPTIONS

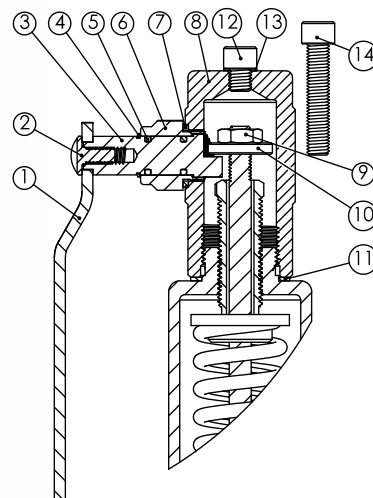
OPEN LIFT LEVER - STANDARD

ITEM	DESCRIPTION	MATERIALS		
		740 / 741	742	743
1	Handle	C1018/Plated	C1018/Plated	C1018/Plated
2	Hood	Anodized Alum.	Anodized Alum.	Anodized Alum.
3	Lifter Nut	B16 Brass	SA479-316 SS	SA479-316 SS
4	Jam Nut	18-8 SS	18-8 SS	18-8 SS
5	Lift Lever Pin	B16 Brass	SA479-316 SS	SA479-316 SS
6	Spring	Optional Stainless Anti-Vibration Spring		

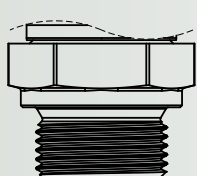


PACKED LIFT LEVER - OPTION

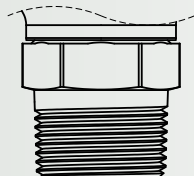
ITEM	DESCRIPTION	MATERIALS		
		740 / 741	742	743
1	Handle	B16 Brass	B16/Plated	B16/Plated
2	Handle Screw	Steel/Plated	Steel/Plated	Steel/Plated
3	Cam	B16 Brass	SA479-316 SS	SA479-316 SS
4	Retaining Ring	Steel/Plated	17-7 SS	17-7 SS
5	Cam O-Rings	Viton	Viton	Viton
6	Cam Nut	B16 Brass	SA479-316 SS	SA479-316 SS
7	Packed Nut Washer	PTFE	PTFE	PTFE
8	Hood	B16 Brass	SA108-C1018	SA479-316 SS
9	Jam Nut	18-8 SS	18-8 SS	18-8 SS
10	Lifter Nut	B16 Brass	SA479-316 SS	SA479-316 SS
11	Hood Seal	PTFE	PTFE	PTFE
12	Plug	18-8 SS	12,13,14 are part of the additional Gag Screw option	
13	Seal	PTFE		
14	Gag Screw	18-8 SS		



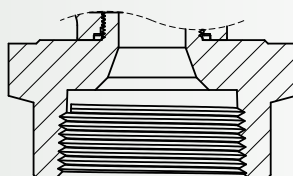
Inlet Options:



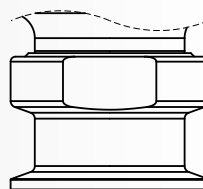
BSPP



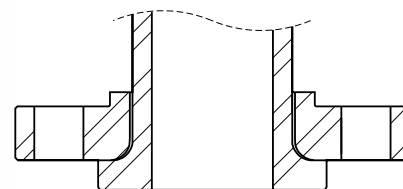
NPT - BSPT



Female NPT - BSPT



Tri-Clamp



Lap Joint Flange

Unless otherwise specified, All valves will be shipped with the standard open lift lever option.

Lifting Device as required by the ASME, ASME Section XIII: 3.2.7(a)

Section VIII (UV Designator) pressure relief valves intended for use on air or steam service, or on water service where the valve inlet temperature exceeds 60°C(140°F) excluding overpressure or relief events, shall have a substantial lifting device that, when activated, will release the seating force on the disk when pressure relief valve is subjected to a pressure of at least 75% of the set pressure of the valve.

SERIES 740-748 THREADED INLET - PART NUMBERS

740		ED	1	V	3	J	1	125
SERIES	DESCRIPTION	ORIFICE/SIZE ID	CONNECTION	SEATING	CAP	SERVICE	OPTIONS	SET
740	Brass/Bronze	DC- 1/2" x 3/4"	1- NPT MxF	M- Metal	1- Lift lever	K- ASME XIII "UV"-Air/gas	1- None	Ex.125
741	316 SS / Bronze	DD- 1/2" x 1"	2- NPT FxF	P- PTFE	2- Closed cap	L- ASME XIII "UV"-Steam	2- Chrome Plating	
742	316 SS / Carbon	DE- 3/4" x 3/4"	3- BSPT MxF	B- Buna	3- Packed lift lever	J- ASME XIII "UV"-Liquid	3- O2 Cleaned	
743	316 SS / 316 SS	DF- 3/4" x 1"	4- BSPT FxF	V- Viton	4- Lift Lever with Anti-Vibe Spring	P- CE - Air/gas	4- API Seating	
744	Monel / Bronze	DG- 1" x 1"	8 ³ - BSPP MxF	E- EPDM	5- Closed Cap with Test Gag	E- CE - Steam	5- O2 Clean / API Seating	
745	Monel / Carbon	EA ² - 1/2" x 1"	9 ³ - BSPP FxF	K- Kalrez		D- CE - Liquid	6- O2 Clean / Chrome	
746	Monel / 316 SS	EB ² - 1/2" x 1-1/4"		Z- Markez	6- Packed Lever with Test Gag	N- Non-code Air/gas	7- O2 / API / Chrome	
747 ¹	No-Lead / No-Lead	EC- 3/4" x 1"		C- PCTFE		T- Non-code Steam	8- API / Chrome	
748 ¹	316 SS / No-Lead	ED- 3/4" x 1-1/4"		S- Silicone	U- Non-code Liquid	9- High-Temp		
		EG- 1" x 1"			A- Open Lever with Test Gag			
		EF- 1" x 1-1/4"						
		EH- 1-1/4" x 1-1/4"						
		FF- 1" x 1-1/2"						
		FH- 1-1/4" x 1-1/2"						
		FG- 1-1/2" x 1-1/2"						
		GG- 1-1/4" x 2"						
		GH- 1-1/2" x 2"						
		GF- 2" x 2"						
		HF- 1-1/2" x 2"						
		HG- 2" x 2"						
		HH- 1-1/2" x 2-1/2"						
		HJ- 2" x 2-1/2"						
		HK- 2-1/2" x 2-1/2"						
		JJ- 2" x 3"						
		JK- 2-1/2" x 3"						
		JL- 3" x 3"						

Note:
This chart is for threaded inlets only.

¹ – No-Lead is non-code and available for D,E,F Orifice only

² – 1/2" Inlet for "E" orifice is ASME/CE Air/Gas, Steam Only

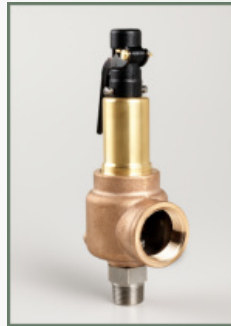
³ – BSPP Outlet is available for 740 and 741 Series Only

Note:
This chart is for threaded inlets only.

¹ - No-Lead is non-code and available for D,E,F Orifice only

² - 1/2" Inlet for "E" orifice is ASME/CE Air/Gas, Steam Only

³ - BSPP Outlet is available for 740 and 741 Series Only



SERIES 741-743 AND 748 TRI-CLAMP INLET - PART NUMBERS

743		ED	5	M	1	L	1	125
SERIES	DESCRIPTION	ORIFICE/SIZE ID	CONNECTION	SEATING	CAP	SERVICE	OPTIONS	SET
741	316 SS / Bronze	DE- 3/4" x 3/4"	5- Tri-clamp x NPT	M- Metal	1- Lift lever	K- ASME XIII "UV" - Air/gas	1- None	Ex.125
742	316 SS / Carbon	DF- 3/4" x 1"		P- PTFE	2- Closed cap	L- ASME XIII "UV" - Steam	2- Chrome Plating	
743	316 Stainless	DH- 1" x 3/4"	6- Tri-clamp x BSPT	B- Buna	3- Packed lift lever	J- ASME XIII "UV" - Liquid	3- O2 Cleaned	
748¹	316 SS / No-Lead	DG- 1" x 1"		V- Viton	4- Lift Lever with Anti-Vibe Spring	P- CE - Air/gas	4- API Seating	
Note: This chart is for Tri-Clamp inlets only		EC- 3/4" x 1"		E- EPDM	5- Closed Cap with Test Gag	E- CE - Steam	5- O2 Clean / API Seating	
		ED- 3/4" x 1-1/4"		K- Kalrez		D- CE - Liquid	6- O2 Clean / Chrome	
		EG- 1" x 1"		Z- Markez	N- Non-code Air/gas	7- O2 / API / Chrome		
		EF- 1" x 1-1/4"		C- PCTFE	T- Non-code Steam	8- API / Chrome		
		EJ- 1-1/2" x 1"		S- Silicone	U- Non-code Liquid	9- High-Temp		
		EK- 1-1/2" x 1-1/4"		A- Open Lever with Test Gag				
		FF- 1" x 1-1/2"						
		FG- 1-1/2" x 1-1/2"						
		GH- 1-1/2" x 2"						
		GF- 2" x 2"						
		HF- 1-1/2" x 2"						
		HG- 2" x 2"						
		HH- 1-1/2" x 2-1/2"						
		HJ- 2" x 2-1/2"						
		HK- 2-1/2" x 2-1/2"						
		JJ- 2" x 3"						
JK- 2-1/2" x 3"								
JL- 3" x 3"								



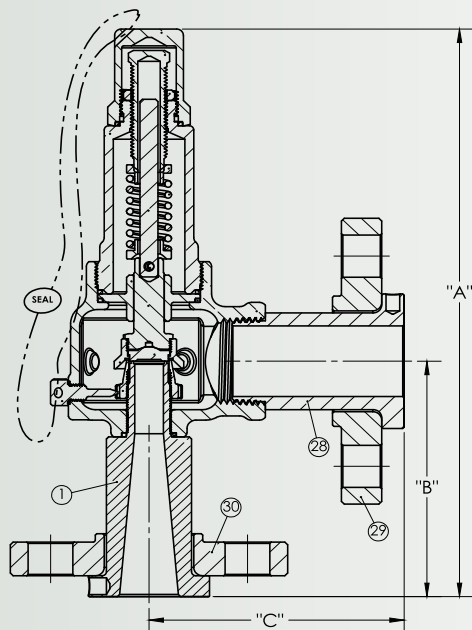
¹ – No-Lead is non-code and available for D,E,F Orifice only

Note:
This chart is for Tri-Clamp inlets only

¹ - No-Lead is non-code and available for D,E,F Orifice only



FLANGE OPTIONS



SERIES 741 THRU 743 FLANGE OPTION

#	DESCRIPTION	MATERIALS		
		741	742	743
1	Lap Joint Nozzle	SA479-316 SS	SA479-316 SS	SA479-316 SS
28	Outlet Fitting	SA479-316 SS	SA479-316 SS	SA479-316 SS
29	Lap Joint Flange	A182-F316	CS A-105	A182-F316
30	Lap Joint Flange	A182-F316	CS A-105	A182-F316

See page 4 for internal parts

Options Note: B + C dimensions are customizable

SERIES 741 THRU 743 LAP JOINT FLANGE

ORIFICE	FLOW AREA In2 (mm2)	INLET	OUTLET	DN	SIZE ID	DIMENSIONS – in (mm)			
						A CLOSED CAP	A LIFT LEVER	B	C
D	.125 (80.6)	1/2"	3/4"	15	C	9-5/8" (244)	10-1/4" (260)	4-5/8" (117)	4-1/4" (108)
D	.125 (80.6)	1/2"	1"	15	D	9-5/8" (244)	10-1/4" (260)	4-5/8" (117)	4-1/4" (108)
D	.125 (80.6)	3/4"	3/4"	20	E	9-5/8" (244)	10-1/4" (260)	4-5/8" (117)	4-1/4" (108)
D	.125 (80.6)	3/4"	1"	20	F	9-5/8" (244)	10-1/4" (260)	4-5/8" (117)	4-1/4" (108)
D	.125 (80.6)	1"	1"	25	G	11-1/2" (292)	12-1/8" (308)	6-1/2" (165)	4-1/4" (108)
E ¹	.217 (140.0)	1/2"	1"	15	A	10-1/4" (260)	10-7/8" (276)	4-5/8" (117)	4-1/4" (108)
E ¹	.217 (140.0)	1/2"	1-1/4"	15	B	10-1/4" (260)	10-7/8" (276)	4-5/8" (117)	4-1/4" (108)
E	.217 (140.0)	3/4"	1"	20	C	10-1/4" (260)	10-7/8" (276)	4-5/8" (117)	4-1/4" (108)
E	.217 (140.0)	3/4"	1-1/4"	20	D	10-1/4" (260)	10-7/8" (276)	4-5/8" (117)	4-1/4" (108)
E	.217 (140.0)	1"	1"	25	G	10-1/4" (260)	10-7/8" (276)	4-5/8" (117)	4-1/4" (108)
E	.217 (140.0)	1"	1-1/4"	25	F	10-1/4" (260)	10-7/8" (276)	4-5/8" (117)	4-1/4" (108)
E	.217 (140.0)	1-1/4"	1-1/4"	32	H	10-1/4" (260)	10-7/8" (276)	4-5/8" (117)	4-1/4" (108)
F	.353 (227.7)	1"	1-1/2"	25	F	11" (279)	11-5/8" (295)	4-5/8" (117)	4-5/8" (117)
F	.353 (227.7)	1-1/4"	1-1/2"	32	H	11" (279)	11-5/8" (295)	4-5/8" (117)	4-5/8" (117)
F	.353 (227.7)	1-1/2"	1-1/2"	40	G	11" (279)	11-5/8" (295)	4-5/8" (117)	4-5/8" (117)
G	.554 (357.4)	1-1/4"	2"	32	G	12-3/8" (314)	13" (330)	5-5/8" (143)	4-3/4" (121)
G	.554 (357.4)	1-1/2"	2"	40	H	12-3/8" (314)	13" (330)	5-5/8" (143)	4-3/4" (121)
G	.554 (357.4)	2"	2"	50	F	14" (356)	14-1/2" (368)	7-1/8" (181)	6-1/2" (165)
H	.923 (595.5)	1-1/2"	2"	40	F	14" (356)	14-5/8" (371)	5-7/8" (149)	5-3/8" (137)
H	.923 (595.5)	2"	2"	50	G	14" (356)	14-5/8" (371)	5-7/8" (149)	5-3/8" (137)
H	.923 (595.5)	1-1/2"	2-1/2"	40	H	14" (356)	14-5/8" (371)	5-7/8" (149)	5-3/8" (137)
H	.923 (595.5)	2"	2-1/2"	50	J	14" (356)	14-5/8" (371)	5-7/8" (149)	5-3/8" (137)
H	.923 (595.5)	2-1/2"	2-1/2"	65	K	14" (356)	14-5/8" (371)	5-7/8" (149)	5-3/8" (137)
J	1.418 (914.8)	2"	3"	50	J	16-5/8" (422)	17-1/8" (435)	6-1/2" (165)	6" (152)
J	1.418 (914.8)	2-1/2"	3"	65	K	16-5/8" (422)	17-1/8" (435)	6-1/2" (165)	6" (152)
J	1.418 (914.8)	3"	3"	80	L	16-5/8" (422)	17-1/8" (435)	6-1/2" (165)	6" (152)

¹ – 1/2" Inlet for "E" orifice is ASME/CE Air/Gas and

FLANGE PART NUMBERS

SERIES 741 THRU 746 AND 748 LAP JOINT FLANGE - PART NUMBERS

742		ED	A	V	3	J	1	A	125
SERIES	DESCR.	ORIFICE/SIZE ID	CONNECTION	SEATING	CAP	SERVICE	OPTIONS	FACE FINISH	SET
741	316 SS/Bronze	DC- 1/2" x 3/4"	A- 150# x 150#	M- Metal	1- Lift lever	K- ASME XIII-Air/gas	1- None	A- Serrated x Serrated B- Smooth x Serrated C- Smooth x Smooth D- Serrated x Smooth	Ex.125
742	316 SS/Carbon	DD- 1/2" x 1"	B- 300# x 150#	P- PTFE	2- Closed cap	L- ASME XIII-Steam	2- Chrome Plating		
743	316 S.S.	DE- 3/4" x 3/4"	C- 600# x 150#	B- Buna	3- Packed lift lever	J- ASME XIII-Liquid	3- O2 Cleaned		
744	Monel/Bronze	DF- 3/4" x 1"	D- 900# x 150#	V- Viton	4- Lift Lever with Anti-Vibe Spring	P- CE - Air/gas	4- API Seating		
745	Monel/Carbon	DG- 1" x 1"	E- 150# x FNPT	E- EPDM	5- Closed Cap with Test Gag 6- Packed Lever with Test Gag A- Open Lever with Test Gag	E- CE - Steam	5- O2 Clean / API Seating	C- Smooth x Smooth D- Serrated x Smooth	
746	Monel/316 SS	EA ² - 1/2" x 1"	F- 300# x FNPT	K- Kalrez		D- CE - Liquid	6- O2 Clean / Chrome		
748 ¹	316 SS/No Lead	EB ² - 1/2" x 1-1/4"	G- 600# x FNPT	Z- Markez		T- Non-code Steam	7- O2 / API / Chrome		
		EC- 3/4" x 1"	H- 900# x FNPT	C- PCTFE		U- Non-code Liquid	8- API / Chrome		
		ED- 3/4" x 1-1/4"	J- 300# x 300#	S- Silicone			9- High-Temp		
		EG- 1" x 1"	K- 600# x 600#						
		EF- 1" x 1-1/4"	L- 900# x 900#						
		EH- 1-1/4" x 1-1/4"	M- 150# x FBSPT						
		FF- 1" x 1-1/2"	N- 300# x FBSPT						
		FH- 1-1/4" x 1-1/2"	P- 600# x FBSPT						
		FG- 1-1/2" x 1-1/2"	R- 900# x FBSPT						
		GG- 1-1/4" x 2"	S- 600# x 300#						
		GH- 1-1/2" x 2"	T- 900# x 300#						
		GF- 2" x 2"							
		HF- 1-1/2" x 2"							
		HG- 2" x 2"							
		HH- 1-1/2" x 2-1/2"							
		HJ- 2" x 2-1/2"							
		HK- 2-1/2" x 2-1/2"							
		JJ- 2" x 3"							
		JK- 2-1/2" x 3"							
		JL- 3" x 3"							

¹ – No-Lead is non-code and available for D,E,F Orifice only

² – 1/2" Inlet for "E" orifice is ASME/CE Air/Gas, Steam Only

¹ – No-Lead is non-code and available for D,E,F Orifice only

² – 1/2" Inlet for "E" orifice is ASME/CE Air/Gas, Steam Only



LIQUID CAPACITY

SERIES 740 THRU 748 CAPACITIES LIQUID GPM - ASME SECTION VIII

SET psig	ORIFICE AREA in ² FLOW COEFFICIENT = .791					
	"D" .126	"E" .217	"F" .353	"G" .554	"H" .923	"J" 1.418
5	11	18	30	47	78	121
10	14	24	38	60	100	154
15	16	28	45	71	118	181
20	18	31	51	80	133	204
25	20	35	56	88	147	226
30	22	37	61	96	159	245
35	23	40	66	103	172	264
40	25	43	70	110	184	283
45	27	46	75	117	195	300
50	28	48	79	123	206	316
55	29	51	83	130	216	332
60	31	53	86	135	225	346
65	32	55	90	141	235	360
70	33	57	93	146	243	374
75	34	59	96	151	252	387
80	36	61	100	156	260	400
85	37	63	103	161	268	412
90	38	65	106	166	276	424
95	39	67	108	170	284	436
100	40	68	111	175	291	447
125	44	76	124	195	325	500
150	49	84	136	214	356	547
175	53	90	147	231	385	591
200	56	97	157	247	411	632
225	60	103	167	262	436	671
250	63	108	176	276	460	707
300	69	118	193	302	504	774
350	74	128	208	327	544	836
400	79	137	223	349	582	894
450	84	145	236	370	617	948
500	89	153	249	391	651	1000
550	93	160	261	410	682	1048
600	97	168	273	428	713	1095
650	101	174	284	445		
700	105	181	294	462		
750	109	187	305			
800	112	193				
850	116	199				
900	119	205				
950	122	211				
1000	126	216				
1100	132	227				
1200	138	237				
1300	143	247				
1400	149	256				
1500	154	265				

SERIES 740 THRU 748 CAPACITIES LIQUID LPM - ASME SECTION VIII

SET barg	ORIFICE AREA mm ² FLOW COEFFICIENT = .791					
	"D" 81.3	"E" 140.0	"F" 227.7	"G" 357.4	"H" 595.5	"J" 914.8
0.2	35	60	98	153	255	392
0.5	46	79	129	202	336	517
1	60	103	168	264	439	675
2	81	140	227	357	594	913
3	99	171	278	436	726	1116
4	115	197	321	503	839	1289
5	128	220	359	563	938	1441
6	140	242	393	617	1027	1578
7	151	261	424	666	1110	1705
8	162	279	454	712	1186	1822
9	172	296	481	755	1258	1933
10	181	312	507	796	1326	2038
11	190	327	532	835	1391	2137
12	198	342	556	872	1453	2232
13	206	356	578	908	1512	2323
14	214	369	600	942	1569	2411
15	222	382	621	975	1624	2496
16	229	394	642	1007	1678	2577
17	236	407	661	1038	1729	2657
18	243	418	681	1068	1779	2734
19	250	430	699	1097	1828	2809
20	256	441	717	1126	1876	2882
22	269	462	752	1181	1967	3022
24	280	483	786	1233	2055	3157
26	292	503	818	1284	2139	3286
30	314	540	879	1379	2297	3529
35	339	583	949	1489	2481	3812
40	362	624	1014	1592	2653	4075
41.38	368	634	1032	1619	2698	4145
45	384	661	1076	1689		
48.27	398	685	1114	1749		
51.72	412	709	1154			
60	443	764				
70	479	825				
80	512	882				
90	543	935				
103.42	582	1003				

Set pressures not limited to this chart. Specify when ordering.

Capacities are at 3 psig or 10% (whichever is greater) over set pressure

Set pressures below 15 psig (1.03 barg) are NON-Code.

Maximum back-pressure is 10% of set pressure or 50 psig (3.45 barg) whichever is less.

Lifting Device as required by the ASME, ASME Section XIII: 3.2.7(a) Section VIII (UV Designator) pressure relief valves intended for use on air or steam service, or on water service where the valve inlet temperature exceeds 60°C(140°F), excluding over-pressure or relief events, shall have a substantial lifting device that, when activated, will release the seating force on the disk when the pressure relief valve is subjected to a pressure of at least 75% of the set pressure of the valve.

SERIES 740 THRU 748 CAPACITIES AIR SCFM - ASME SECTION VIII

SET psig	ORIFICE AREA in ² FLOW COEFFICIENT = .878					
	"D" .126	"E" .217	"F" .353	"G" .554	"H" .923	"J" 1.418
5	46	79	129	202	337	518
10	56	97	157	247	411	632
15	66	114	186	292	486	746
20	76	132	214	336	560	860
25	87	149	243	381	634	975
30	97	167	271	425	709	1089
35	108	186	302	474	790	1214
40	119	205	333	523	872	1340
45	130	224	365	572	954	1465
50	141	243	396	621	1035	1591
55	152	263	427	671	1117	1716
60	164	282	458	720	1199	1842
65	175	301	490	769	1281	1967
70	186	320	521	818	1362	2093
75	197	339	552	867	1444	2218
80	208	359	583	916	1526	2344
85	219	378	615	965	1607	2469
90	231	397	646	1014	1689	2595
95	242	416	677	1063	1771	2720
100	253	436	708	1112	1852	2846
125	309	532	865	1357	2261	3474
150	364	628	1021	1602	2670	4101
175	420	724	1177	1847	3078	4729
200	476	820	1333	2093	3487	5356
225	532	916	1490	2338	3895	5984
250	587	1012	1646	2583	4304	6612
300	699	1204	1958	3073	5121	7867
350	811	1396	2271	3564	5938	9122
400	922	1588	2583	4054	6755	10377
450	1034	1780	2896	4545	7572	11632
500	1145	1972	3208	5035	8389	12888
550	1257	2164	3521	5526	9206	14143
600	1368	2356	3833	6016	10023	15398
650	1480	2549	4146	6506		
700	1591	2741	4458	6997		
750	1703	2933	4771			
800	1814	3125				
850	1926	3317				
900	2037	3509				
950	2149	3701				
1000	2261	3893				
1100	2484	4277				
1200	2707	4661				
1300	2930	5046				
1400	3153	5430				
1500	3376	5814				

SERIES 740 THRU 748 CAPACITIES AIR NM³/HR - ASME SECTION VIII

SET barg	ORIFICE AREA mm ² FLOW COEFFICIENT = .878					
	"D" 81.3	"E" 140.0	"F" 227.7	"G" 357.4	"H" 595.5	"J" 914.8
0.2	71	122	199	312	520	799
0.5	86	148	241	378	630	967
1	111	191	311	488	813	1248
2	161	277	451	707	1179	1811
3	215	371	604	948	1579	2425
4	270	466	758	1189	1981	3044
5	325	560	912	1431	2384	3662
6	380	655	1066	1672	2786	4280
7	435	750	1220	1914	3189	4899
8	490	844	1373	2156	3591	5517
9	545	939	1527	2397	3994	6136
10	600	1034	1681	2639	4396	6754
11	655	1128	1835	2880	4799	7373
12	710	1223	1989	3122	5201	7991
13	765	1318	2143	3364	5604	8609
14	820	1412	2297	3605	6007	9228
15	875	1507	2451	3847	6409	9846
16	930	1601	2605	4088	6812	10465
17	985	1696	2759	4330	7214	11083
18	1040	1791	2913	4572	7617	11702
19	1095	1885	3067	4813	8019	12320
20	1150	1980	3221	5055	8422	12938
22	1260	2169	3529	5538	9227	14175
24	1369	2359	3837	6021	10032	15412
26	1479	2548	4145	6505	10837	16649
30	1699	2926	4760	7471	12447	19123
35	1974	3400	5530	8679	14460	22215
40	2249	3873	6300	9887	16473	25307
41.38	2325	4003	6512	10221	17028	26160
45	2523	4346	7070	11095		
48.27	2703	4655	7573	11885		
51.72	2893	4982	8104			
60	3348	5766				
70	3897	6712				
80	4447	7658				
90	4996	8605				
103.42	5734	9875				

Set pressures not limited to this chart. Specify when ordering.

Capacities are at 3 psig or 10% (whichever is greater) over set pressure

Set pressures below 15 psig (1.03 barg) are NON-Code.

Maximum back-pressure is 10% of set pressure or 50 psig (3.45 barg) whichever is less.

Lifting Device as required by the ASME, ASME Section XIII: 3.2.7(a) Section VIII (UV Designator) pressure relief valves intended for use on air or steam service, or on water service where the valve inlet temperature exceeds 60°C(140°F), excluding over-pressure or relief events, shall have a substantial lifting device that, when activated, will release the seating force on the disk when the pressure relief valve is subjected to a pressure of at least 75% of the set pressure of the valve.

STEAM CAPACITY

SERIES 740 THRU 748 CAPACITIES STEAM LBS/HR - ASME SECTION VIII

SET psig	ORIFICE AREA in ² FLOW COEFFICIENT = .878					
	"D" .126	"E" .217	"F" .353	"G" .554	"H" .923	"J" 1.418
5	129	223	362	569	947	1455
10	158	272	442	694	1156	1776
15	186	321	522	819	1365	2097
20	215	370	602	944	1573	2417
25	243	419	682	1070	1782	2738
30	272	468	761	1195	1991	3058
35	303	522	849	1333	2220	3411
40	334	576	937	1470	2450	3764
45	366	630	1025	1608	2679	4116
50	397	684	1113	1746	2909	4469
55	428	738	1200	1884	3138	4822
60	460	792	1288	2022	3368	5174
65	491	846	1376	2159	3598	5527
70	522	900	1464	2297	3827	5880
75	554	954	1551	2435	4057	6232
80	585	1008	1639	2573	4286	6585
85	616	1062	1727	2710	4516	6938
90	648	1116	1815	2848	4745	7290
95	679	1170	1903	2986	4975	7643
100	710	1224	1990	3124	5204	7995
125	867	1493	2429	3813	6352	9759
150	1024	1763	2868	4502	7500	11522
175	1180	2033	3307	5190	8648	13285
200	1337	2303	3746	5879	9795	15048
225	1494	2573	4185	6568	10943	16812
250	1651	2843	4624	7257	12091	18575
275	1807	3112	5063	7946	13238	20338
300	1964	3382	5502	8635	14386	22101

SERIES 740 THRU 748 CAPACITIES STEAM KG/HR - ASME SECTION VIII

SET barg	ORIFICE AREA mm ² FLOW COEFFICIENT = .878					
	"D" 81.3	"E" 140.0	"F" 227.7	"G" 357.4	"H" 595.5	"J" 914.8
0.2	53	92	149	234	390	599
0.5	64	111	181	284	472	726
1	83	143	233	366	610	936
2	121	208	338	531	884	1358
3	162	278	453	711	1184	1819
4	203	349	568	892	1486	2283
5	244	420	684	1073	1788	2747
6	285	491	799	1254	2090	3211
7	327	562	915	1436	2392	3675
8	368	633	1030	1617	2694	4139
9	409	704	1146	1798	2996	4603
10	450	775	1261	1979	3298	5066
11	491	846	1377	2161	3600	5530
12	533	917	1492	2342	3902	5994
13	574	988	1608	2523	4204	6458
14	615	1059	1723	2704	4506	6922
15	656	1130	1839	2886	4808	7386
16	698	1201	1954	3067	5110	7850
17	739	1272	2070	3248	5411	8314
18	780	1343	2185	3429	5713	8777
19	821	1414	2301	3611	6015	9241
20	862	1485	2416	3792	6317	9705
20.7	891	1535	2497	3919	6529	10030



Set pressures not limited to this chart. Specify when ordering.
Capacities are at 3 psig or 10% (whichever is greater) over set pressure
Set pressures below 15 psig (1.03 barg) are NON-Code.
Maximum back-pressure is 10% of set pressure or 50 psig (3.45 barg)
whichever is less.

Lifting Device as required by the ASME, ASME Section XIII: 3.2.7(a)
Section VIII (UV Designator) pressure relief valves intended for use on air or steam service, or on water service where the valve inlet temperature exceeds 60°C(140°F), excluding over-pressure or relief events, shall have a substantial lifting device that, when activated, will release the seating force on the disk when the pressure relief valve is subjected to a pressure of at least 75% of the set pressure of the valve.

SERIES 560/570 SAFETY VALVES

Our 560 / 570 valve line is a high capacity safety valve used for boilers, piping lines and vessel protection. Designed and engineered for heavy-duty industrial use. ASME and National Board Certified for Section I and XIII "UV" for ASME Section VIII Div. 1 service as well as CE and CRN Certifications.

**SERIES
560**



SERIES 560

Use for ASME Section I applications, .
Boilers, or most areas where steam safety valves are required.
Set pressure up to 250 psig (17.2 barg)

SERIES 563

Same as Series 560 except with Stainless Steel wetted trimming (Nozzle and Disc),
Set pressure up to 300 psig (20.7 barg)

SERIES 570

ASME Section XIII "UV" for Section VIII Div. 1, CE, CRN certified for unfired vessel protection.
Used for many applications to protect or relieve pressure for Air / Gas or Steam.
Set pressures: Air up to 300 psig (20.7 barg), Steam to 250 psig (17.2 barg).

SERIES 573

Same as Series 570 except with Stainless Steel wetted trimming (Nozzle and Disc),
Set pressure for air and steam up to 300 psig (20.7 barg)

**SERIES
573**



Usages: Steam Boilers, Air Compressors, Dryers, Receivers, Pressure Vessels, Piping Systems, Accumulators, Reducing Stations, Tanks, Inter/After Coolers, Cooking Equipment, Autoclaves, Sterilizers or wherever higher capacity pressure protection or relief may be required.

Features:

- Designed for durability
- 6 orifices – 12 sizes of piping options
- Top guided seating and discharge
- Full nozzle, high capacity levels
- Short, tuned blow-down with dual-ring technology
- Heavy duty hood and lever mechanism
- Standard 17-7 stainless steel springs

Options:

- O-ring seating options (see charts)
- Packed lift lever
- Stainless steel trimming package, nozzle, disc (all sizes)
- Bubble tight seating options
- Anti-vibration spring for lift lever
- BSPT and BSPP pipe threading
- Tri-Clamp Inlets
- O2 Cleaning



SEATING OPTIONS

SEATING MATERIALS

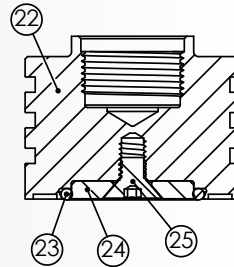
MATERIAL	NAMES	MIN TEMP °F (°C)	MAX TEMP °F (°C)	USE FOR:
FKM	Viton-A	-13° (-25°)	446° (230°)	Acetone, Air, Alcohol, Benzene, Butane, Ethylene, Ethylene Glycol, Ethyl Alcohol, Gasoline, Isobutyl Alcohol, Kerosene, Lube Oil, Natural Gas, Naphtha, Nitrogen, Propane, Water, Xylene
Nitrile	Buna-N	-40° (-40°)	250° (121°)	Air, Butane, Carbon Dioxide, Diesel Oil, Ethyl Chloride, Ethyl Ether, Fuel Oil, Gasoline, Helium, Hydrogen Sulphide, Kerosene, Natural Gas, Nitrogen, Oxygen (Gas), Propane
EPDM		-40° (-40°)	303° (151°)	Steam (under 55 psig), Water, Hot Water, Acetone, Beer, Brake Fluid, Hydrogen Gas, Sulfur Dioxide, Acids, Alkalies
FFKM	Markez® Kalrez®	5° (-15°) -10° (-23°)	500° (260°) 550° (288°)	Aromatic Hydrocarbons, Chlorinated Hydrocarbons, Polar Solvents (ketones, esters, ethers), Inorganic and Organic Acids, Water, and Steam.
PTFE		-450° (-268°)	500° (260°)	Cryogenic Service including Argon, Carbon Dioxide, Helium, Hydrogen, Nitrogen, Oxygen, Steam

Note:

This is just a partial listing. Visit www.aquatrol.com for links to websites with more specific applications.

SOFT SEAT OPTION

ITEM	DESCRIPTION	560 / 570	563 / 573
22	Disc	B16 Brass	A479-316 SS
23	O-Ring	Various	Various
24	Center Insert	B16 Brass	A479-316 SS
25	Screw	18-8 SS	18-8 SS



Soft Seat Option



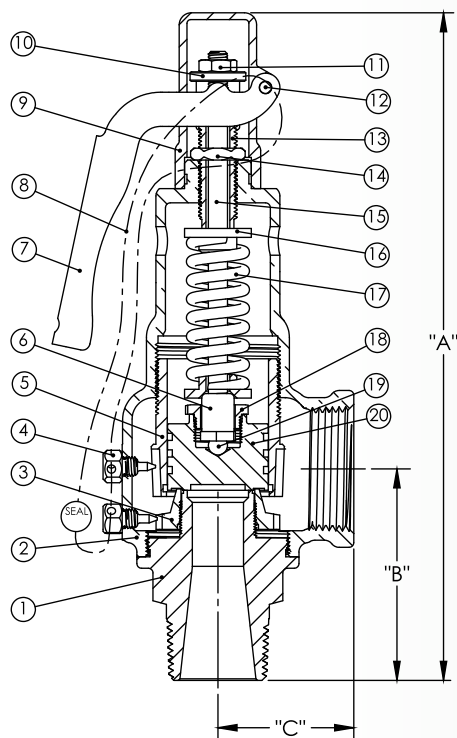
SERIES 560-563-570-573 PART NUMBERS

573	DC	1	M	1	L	1	250
SERIES/DESCRIPTION	ORIFICE/SIZE ID	CONNECTION	SEATING	CAP	SERVICE	OPTIONS	SET
560- Brass/bronze Section I	DC- 1/2" x 3/4"	1- NPT MxF	M- Metal	1- Lift lever	K- ASME XIII "UV"- Air/gas	1- None	Ex.250
	DD- 3/4" x 3/4"	2- NPT FxF	P- PTFE	3- Packed lift lever	L- ASME XIII "UV"- Steam	2- Chrome Plating	
563- 316 SS/Bronze Section I	DE- 1/2" x 1"	3- BSPT MxF	E- EPDM	4- Lift Lever with Anti Vibe Spring	A- ASME I Steam	3- O2 Cleaned	
	DF- 3/4" x 1"	4- BSPT FxF	V- Viton		P- CE - Air/gas	4- API Seating	
570- Brass/bronze Section VIII	DH- 1" x 3/4"	5- Tri-Clamp x NPT	B- Buna	6- Packed Lever with Test Gag	E- CE - Steam	5- O2 Clean / API Seating	
	DJ- 1-1/2" x 3/4"	6- Tri-Clamp x BSPT	K- Kalrez		N- Non-code Air/gas	6- O2 Clean / Chrome	
573- 316 SS/bronze Section VIII	ED- 3/4" x 1"	8- BSPP MxF	Z- Markez	9- Easy Test Lever	T- Non-code Steam	7- O2 / API / Chrome	
	EE- 1" x 1"	9- BSPP FxF		A- Open Lever with Test Gag		8- API/Chrome	
	EJ- 1-1/2" x 1"						
	FE- 1" x 1-1/4"						
	FF- 1-1/4" x 1-1/4"						
	FG- 1-1/2" x 1-1/4"						
	GF- 1-1/4" x 1-1/2"						
	GG- 1-1/2" x 1-1/2"						
	HG- 1-1/2" x 2"						
	HH- 2" x 2"						
	JH- 2" x 2-1/2"						
	JJ- 2-1/2" x 2-1/2"						

Note:

Tri-Clamp connections are Series 563 / 573 Only.
1/2" and 1-1/4" inlet not available in Tri-Clamp.
Sizes DH - DJ - EJ - FG are Tri-Clamp only.

DIMENSIONS AND MATERIALS



SERIES 560 / 570 / 563 / 573

ITEM	DESCRIPTION	560 / 570	563 / 573
1	Body	B16/B62-C83600	SA479-316 SS
2	Bonnet	B584-C84400	B584-C84400
3	Lower Ring	B584-C84400	B584-C84400
4	Lock Screw	B16 Brass	B16 Brass
5	Upper Ring	B584-C84400	B584-C84400
6	Spring Support	B16 Brass	B16 Brass
7	Lift Lever	Steel / Plated	Steel / Plated
8	Seal Wire	Steel / Galvanized	Steel / Galvanized
9	Hood	Aluminum / Plated	Aluminum / Plated
10	Lifter Nut	B16 Brass	B16 Brass
11	Jam Nut	18-8 SS	18-8 SS
12	Lever Pin	B16 Brass	B16 Brass
13	Pressure Screw	B16 Brass	B16 Brass
14	Lock Nut	B16 Brass	B16 Brass
15	Stem	B16 Brass	B16 Brass
16	Spring Plate	B16 Brass	B16 Brass
17	Spring	302/17-7 SS	302/17-7 SS
18	Disc Nut	B16 Brass	B16 Brass
19	Ball Bearing	440 SS	440 SS
20	Disc	B16 Brass	SA479-316 SS
21	Name Plate	Stainless	Stainless

SERIES 560-563-570-573

ORIFICE	FLOW AREA In ² (mm ²)	INLET	OUTLET	DN	SIZE ID	DIMENSIONS – in (mm)			WEIGHT Lbs. (Kg)
						A	B	C	
D	.125 (80.6)	1/2"	3/4"	15	C	7-1/4" (184)	2-1/2" (64)	1-1/2" (38)	2.5 (1.1)
D	.125 (80.6)	3/4"	3/4"	20	D	7-1/4" (184)	2-1/2" (64)	1-1/2" (38)	2.5 (1.1)
D	.125 (80.6)	1/2"	1"	15	E	7-1/4" (184)	2-1/2" (64)	1-1/2" (38)	2.5 (1.1)
D	.125 (80.6)	3/4"	1"	20	F	7-1/4" (184)	2-1/2" (64)	1-1/2" (38)	2.5 (1.1)
E	.221 (142.6)	3/4"	1"	20	D	7-5/8" (194)	2-1/2" (64)	1-5/8" (41)	3 (1.4)
E	.221 (142.6)	1"	1"	25	E	7-5/8" (194)	2-1/2" (64)	1-5/8" (41)	3 (1.4)
F	.352 (227.1)	1"	1-1/4"	25	E	8-7/8" (225)	2-7/8" (73)	1-3/4" (44)	4 (1.8)
F	.352 (227.1)	1-1/4"	1-1/4"	32	F	8-7/8" (225)	2-7/8" (73)	1-3/4" (44)	4 (1.8)
G	.567 (365.8)	1-1/4"	1-1/2"	32	F	9-1/2" (241)	3-1/4" (83)	2-1/4" (57)	6 (2.7)
G	.567 (365.8)	1-1/2"	1-1/2"	40	G	9-1/2" (241)	3-1/4" (83)	2-1/4" (57)	6 (2.7)
H	.899 (580.0)	1-1/2"	2"	40	G	11" (279)	3-5/8" (92)	2-1/2" (64)	10 (4.5)
H	.899 (580.0)	2"	2"	50	H	11" (279)	3-5/8" (92)	2-1/2" (64)	10 (4.5)
J	1.463 (943.9)	2"	2-1/2"	50	H	12-5/8" (321)	4" (102)	3-1/8" (79)	15 (6.8)
J	1.463 (943.9)	2-1/2"	2-1/2"	65	J	12-5/8" (321)	4" (102)	3-1/8" (79)	15 (6.8)

SERIES	METALS	MIN. TEMP °F (°C)	MAX. TEMP °F (°C)	MAX PRESSURE psig (barg)	SERVICES	CERTIFICATIONS
560	Brass/Bronze	-20° (-29°)	406° (208°)	250 (17.2)	Steam	ASME I, CE, CRN
563	Stainless/Bronze	-20° (-29°)	425° (218°)	300 (20.7)	Steam	ASME I, CE, CRN
570	Brass/Bronze	-20° (-29°)	406° (208°)	250 (17.2)	Air / Gas / Steam	ASME XIII "UV", CE, CRN
573	Stainless/Bronze	-20° (-29°)	425° (218°)	300 (20.7)	Air / Gas / Steam	ASME XIII "UV", CE, CRN

SECTION I STEAM CAPACITY

SERIES 560 / 563 CAPACITIES STEAM LBS/HR - ASME SECTION I

SET psig	ORIFICE AREA in ² FLOW COEFFICIENT = .856					
	"D" .125	"E" .221	"F" .352	"G" .567	"H" .899	"J" 1.463
5	120	211	337	542	860	1400
10	147	260	414	667	1058	1722
15	175	309	492	792	1256	2044
20	202	358	569	917	1454	2367
25	230	406	647	1042	1653	2689
30	257	455	725	1167	1851	3012
35	285	504	802	1292	2049	3334
40	312	552	880	1417	2247	3657
45	340	601	957	1542	2445	3979
50	368	650	1035	1667	2643	4302
55	395	699	1113	1792	2842	4624
60	423	747	1190	1917	3040	4947
65	450	796	1268	2042	3238	5269
70	478	846	1347	2170	3440	5598
75	507	896	1427	2298	3644	5930
80	535	946	1507	2427	3848	6262
85	563	996	1587	2556	4052	6595
90	592	1046	1667	2685	4256	6927
95	620	1097	1747	2813	4461	7259
100	649	1147	1826	2942	4665	7591
110	705	1247	1986	3199	5073	8255
120	762	1347	2146	3457	5481	8920
130	819	1448	2306	3714	5889	9584
140	876	1548	2466	3972	6297	10248
150	932	1648	2626	4229	6706	10913
160	989	1749	2785	4487	7114	11577
170	1046	1849	2945	4744	7522	12241
180	1103	1949	3105	5002	7930	12905
190	1159	2050	3265	5259	8338	13570
200	1216	2150	3425	5517	8747	14234
210	1273	2251	3585	5774	9155	14898
220	1330	2351	3744	6031	9563	15563
230	1386	2451	3904	6289	9971	16227
240	1443	2552	4064	6546	10379	16891
250	1500	2652	4224	6804	10788	17556
270	1613	2853	4544	7319	11604	18884
290	1727	3053	4863	7834	12421	20213
300	1784	3154	5023	8091	12829	20877

Set pressures not limited to this chart. Specify when ordering.
Capacities are at 2 psig or 3% (whichever is greater) over set pressure
Set pressures below 15 psig (1.03 barg) are NON-Code.
Section I Lift levers can not be omitted.
Set pressure above 250 psig (17.2 barg) are Series 563 Only

Lifting Device as required by the ASME:

ASME Section I - PG-73.2.4

Each safety valve shall have a substantial lifting device, which when activated will release the seating force on the disc when the valve is subjected to a pressure of at least 75% of the set pressure.

SERIES 560 / 563 CAPACITIES STEAM KG/HR - ASME SECTION I

SET barg	ORIFICE AREA mm ² FLOW COEFFICIENT = .856					
	"D" 80.6	"E" 142.6	"F" 227.1	"G" 365.8	"H" 580.0	"J" 943.9
0.2	49	87	138	222	352	573
0.5	60	106	169	272	431	701
1	78	138	220	354	561	913
2	114	202	322	518	822	1337
3	150	266	424	683	1082	1761
4	187	330	526	847	1343	2185
5	223	395	629	1013	1607	2615
6	261	461	734	1183	1875	3052
7	298	527	839	1352	2144	3489
8	335	593	944	1521	2412	3926
9	373	659	1050	1691	2681	4362
10	410	725	1155	1860	2949	4799
11	447	791	1260	2029	3218	5236
12	484	857	1365	2199	3486	5673
13	522	923	1470	2368	3755	6110
14	559	989	1575	2537	4023	6547
15	596	1055	1680	2707	4292	6984
16	634	1121	1785	2876	4560	7421
17	671	1187	1891	3045	4829	7858
18	708	1253	1996	3215	5097	8295
19	746	1319	2101	3384	5365	8732
20	783	1385	2206	3553	5634	9169
20.7	809	1431	2280	3672	5822	9475



SECTION VIII STEAM CAPACITY

SERIES 570 / 573 CAPACITIES STEAM LBS/HR - ASME SECTION VIII

SET psig	ORIFICE AREA in ² FLOW COEFFICIENT = .856					
	"D" .125	"E" .221	"F" .352	"G" .567	"H" .899	"J" 1.463
5	125	221	352	567	900	1464
10	153	270	430	692	1098	1787
15	180	319	507	817	1296	2109
20	208	367	585	942	1494	2431
25	235	416	663	1067	1692	2754
30	263	465	740	1192	1890	3076
35	293	518	826	1330	2108	3431
40	323	572	911	1467	2326	3786
45	354	625	996	1605	2544	4141
50	384	679	1082	1742	2762	4495
55	414	733	1167	1880	2980	4850
60	445	786	1252	2017	3198	5205
65	475	840	1338	2155	3416	5559
70	505	893	1423	2292	3634	5914
75	536	947	1508	2430	3852	6269
80	566	1001	1594	2567	4070	6624
85	596	1054	1679	2705	4288	6978
90	627	1108	1764	2842	4506	7333
95	657	1161	1850	2979	4724	7688
100	687	1215	1935	3117	4942	8043
110	748	1322	2106	3392	5378	8752
120	808	1429	2276	3667	5814	9461
130	869	1536	2447	3942	6250	10171
140	930	1644	2618	4217	6686	10880
150	990	1751	2789	4492	7122	11590
160	1051	1858	2959	4767	7558	12299
170	1111	1965	3130	5042	7994	13009
180	1172	2072	3301	5317	8430	13718
190	1233	2179	3471	5592	8866	14428
200	1293	2287	3642	5866	9302	15137
210	1354	2394	3813	6141	9737	15846
220	1415	2501	3983	6416	10173	16556
230	1475	2608	4154	6691	10609	17265
240	1536	2715	4325	6966	11045	17975
250	1596	2822	4495	7241	11481	18684
270	1718	3037	4837	7791	12353	20103
290	1839	3251	5178	8341	13225	21522
300	1899	3358	5349	8616	13661	22231

Capacities are at 3 psig or 10% (whichever is greater) over set pressure
Set pressures below 15 psig (1.03 barg) are NON-Code.
Set pressures above 250 psig are Series 573 only.

Lifting Device as required by the ASME Section XIII: 3.2.7(a)
Section VIII (UV Designator) pressure relief valves intended for use on air or steam service, or on water service where the valve inlet temperature exceeds 60°C(140°F) excluding overpressure or relief events, shall have a substantial lifting device that, when activated, will release the seating force on the disk when the pressure relief valve is subjected to a pressure of at least 75% of the set pressure of the valve.

SERIES 570 / 573 CAPACITIES STEAM KG/HR - ASME SECTION VIII

Set barg	ORIFICE AREA mm ² FLOW COEFFICIENT = .856					
	"D" 80.6	"E" 142.6	"F" 227.1	"G" 365.8	"H" 580.0	"J" 943.9
0.2	51	91	145	234	370	603
0.5	62	110	176	283	449	730
1	80	142	227	365	579	942
2	117	206	329	529	840	1366
3	156	276	440	709	1124	1830
4	196	347	553	890	1411	2297
5	236	417	665	1071	1698	2763
6	276	488	777	1252	1985	3230
7	316	558	889	1433	2271	3696
8	355	629	1002	1613	2558	4163
9	395	699	1114	1794	2845	4630
10	435	770	1226	1975	3132	5096
11	475	840	1338	2156	3418	5563
12	515	911	1451	2337	3705	6030
13	555	981	1563	2518	3992	6496
14	595	1052	1675	2698	4279	6963
15	634	1122	1788	2879	4565	7430
16	674	1193	1900	3060	4852	7896
17	714	1263	2012	3241	5139	8363
18	754	1334	2124	3422	5425	8829
19	794	1404	2237	3603	5712	9296
20	834	1475	2349	3783	5999	9763
20.7	862	1524	2427	3910	6200	10089



SECTION VIII AIR CAPACITY

SERIES 570 / 573 CAPACITIES AIR SCFM - ASME SECTION VIII

SET psig	ORIFICE AREA in ² FLOW COEFFICIENT = .856					
	"D" .125	"E" .221	"F" .352	"G" .567	"H" .899	"J" 1.463
5	45	79	125	202	320	521
10	54	96	153	246	391	636
15	64	113	181	291	461	751
20	74	131	208	335	532	865
25	84	148	236	380	602	980
30	94	165	263	424	673	1095
35	104	184	294	473	750	1221
40	115	204	324	522	828	1348
45	126	223	355	571	906	1474
50	137	242	385	620	983	1600
55	147	261	415	669	1061	1726
60	158	280	446	718	1138	1853
65	169	299	476	767	1216	1979
70	180	318	506	816	1294	2105
75	191	337	537	865	1371	2231
80	201	356	567	914	1449	2358
85	212	375	598	963	1526	2484
90	223	394	628	1012	1604	2610
95	234	413	658	1061	1681	2736
100	245	432	689	1109	1759	2863
110	266	471	750	1207	1914	3115
120	288	509	810	1305	2069	3368
130	309	547	871	1403	2225	3620
140	331	585	932	1501	2380	3873
150	352	623	993	1599	2535	4125
160	374	661	1053	1697	2690	4378
170	396	699	1114	1795	2845	4630
180	417	738	1175	1892	3000	4883
190	439	776	1236	1990	3156	5135
200	460	814	1296	2088	3311	5388
210	482	852	1357	2186	3466	5640
220	503	890	1418	2284	3621	5893
230	525	928	1479	2382	3776	6145
240	547	966	1539	2480	3931	6398
250	568	1005	1600	2577	4087	6650
270	611	1081	1722	2773	4397	7156
290	655	1157	1843	2969	4707	7661
300	676	1195	1904	3067	4863	7913

Capacities are at 3 psig or 10% (whichever is greater) over set pressure
Set pressures below 15 psig (1.03 barg) are NON-Code.

Lifting Device as required by the ASME Section XIII: 3.2.7(a)
Section VIII (UV Designator) pressure relief valves intended for use on air or steam service, or on water service where the valve inlet temperature exceeds 60°C(140°F) excluding overpressure or relief events, shall have a substantial lifting device that, when activated, will release the seating force on the disk when the pressure relief valve is subjected to a pressure of at least 75% of the set pressure of the valve.

SERIES 570 / 573 CAPACITIES AIR NM3/HR - ASME SECTION VIII

SET barg	ORIFICE AREA mm ² FLOW COEFFICIENT = .856					
	"D" 80.6	"E" 142.6	"F" 227.1	"G" 365.8	"H" 580.0	"J" 943.9
0.2	69	121	193	311	494	803
0.5	83	147	234	377	598	973
1	107	190	302	487	772	1256
2	156	275	438	706	1119	1821
3	208	369	587	945	1499	2440
4	261	463	737	1187	1881	3062
5	315	557	886	1428	2264	3684
6	368	651	1036	1669	2646	4306
7	421	744	1186	1910	3028	4928
8	474	838	1335	2151	3410	5550
9	527	932	1485	2392	3793	6172
10	580	1026	1635	2633	4175	6794
11	633	1120	1784	2874	4557	7416
12	686	1214	1934	3115	4939	8038
13	740	1308	2084	3356	5322	8660
14	793	1402	2233	3597	5704	9282
15	846	1496	2383	3838	6086	9905
16	899	1590	2533	4079	6468	10527
17	952	1684	2682	4321	6851	11149
18	1005	1778	2832	4562	7233	11771
19	1058	1872	2982	4803	7615	12393
20	1111	1966	3131	5044	7997	13015
20.7	1149	2032	3236	5213	8265	13450



SERIES 69 RELIEF VALVES

Series 69

The Aquatrol Series 69 is an industry standard relief valve used for liquid relief and by-pass. Engineered and designed for heavy duty, industrial and commercial usages. A single piece bonnet to eliminate leakage while allowing for simple cleaning. Easy removable sealed hex-cap to adjust pressure.

Valves are calibrated (set to pressure) based on a range of flow-rates (GPM) versus seat size and set pressure. Standard valve is set to pressure to achieve flow rate maximum and minimums within each set pressure range. See capacity chart for details.

Temperatures -60°F (-51°C) to 406°F (208°C), low reduced to -320°F (-196°C) with PTFE option, high increased to 425°F (218°C) with stainless option.

Usages: Include liquid by-pass, regulation, continuous relief and over-protection. Used on pumping stations, tanks, hydraulics, fluid / piping lines, oil fields, gas lines and more where a Liquid or Water Relief Valve is needed.

Features:

- Field adjustable by simple removal of the hex-cap
- Metal to metal precision lapped seating
- Back pressure tested
- Ease of cleaning and maintenance with simple bonnet removal.
- Stainless steel springs
- Single piece - 100% leak free bonnet
- Cryogenic compatible

Options:

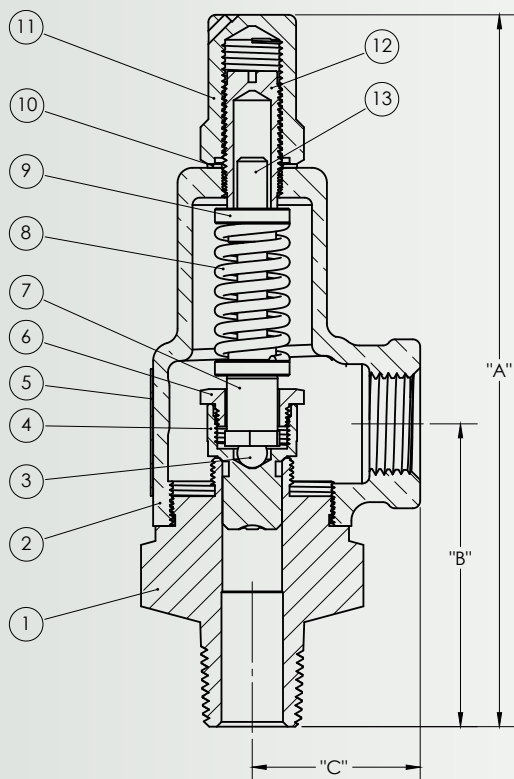
- BSPT and BSPP connections
- Female inlet
- Viton embedded o-ring at hex cap
- Packed lift lever
- Wide range (WR) adjustable (150 psig increments)
- Stainless steel body and disc
- Low Lead Configurations (for a potable Water Relief Valve)
- PTFE Seating
- Tamper proof wire seal
- O2 Cleaning
- Adjustable wheel handle

Wide Range:

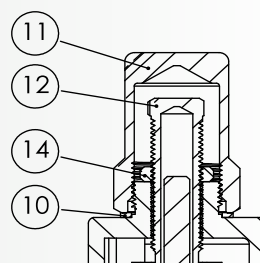
Series 69 is available with a wider adjustable range (as an option). Valves are set to the mid-level pressure (or as specified). Typical wide-range is 150 psig increments. Note: Flow rates are not showing.



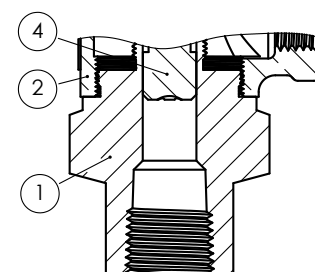
DIMENSIONS AND MATERIALS



SERIES 69			
ITEM	DESCRIPTION	BRASS OPTION	STAINLESS OPTION
1	Body	B16/B283	SA479-316 SS
2	Bonnet	B584-C84400	B584-C84400
3	Ball	Stainless	Stainless
4	Disc	B62-C83600	SA479-316 SS
5	Nameplate	Stainless	Stainless
6	Disc Nut	B16 Brass	B16 Brass
7	Spring Support	B16 Brass	B16 Brass
8	Spring	302/17-7 SS	302/17-7 SS
9	Spring Plate	B16 Brass	B16 Brass
10	Hood Seal	PTFE	PTFE
11	Hood	B16 Brass	B16 Brass
12	Pressure Screw	B16 Brass	B16 Brass
13	Spring Post	B16 Brass	B16 Brass
14	Lock-nut	B16 Brass	B16 Brass

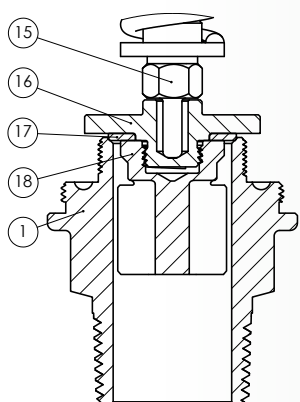
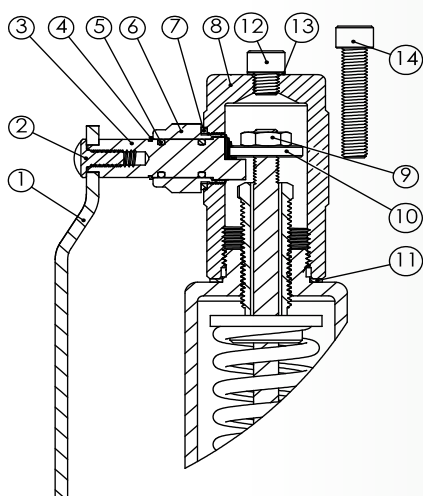


Hood Configuration
for 1" and up



Female Connections
"A" Dimensions same as Male

SERIES 69								
SERIES	SIZE ID	INLET	OUTLET	DN	DIMENSIONS - in (mm)			WEIGHT Lbs. (Kg)
					A	B	C	
69	A1	1/2"	1/2"	15	6" (152)	2-1/2" (64)	1-3/8" (35)	1.7 (0.8)
69	A2	1/2"	3/4"	15	6" (152)	2-1/2" (64)	1-3/8" (35)	1.7 (0.8)
69	B1	3/4"	3/4"	20	6-1/4" (159)	2-5/8" (67)	1-1/2" (38)	2.2 (1)
69	B2	3/4"	1"	20	6-1/4" (159)	2-5/8" (67)	1-1/2" (38)	2.2 (1)
69	C1	1"	1"	25	7-3/8" (187)	2-7/8" (73)	1-3/4" (44)	3 (1.4)
69	C2	1"	1-1/4"	25	7-3/8" (187)	2-7/8" (73)	1-3/4" (44)	3 (1.4)
69	D1	1-1/4"	1-1/4"	32	8-1/4" (210)	3-3/8" (86)	2" (51)	4 (1.8)
69	D2	1-1/4"	1-1/2"	32	8-1/4" (210)	3-3/8" (86)	2" (51)	4 (1.8)
69	E1	1-1/2"	1-1/2"	40	9-1/2" (241)	3-1/2" (89)	2-1/8" (54)	5.8 (2.6)
69	E2	1-1/2"	2"	40	9-1/2" (241)	3-1/2" (89)	2-1/8" (54)	5.8 (2.6)
69	F1	2"	2"	50	11" (279)	3-7/8" (98)	2-5/8" (67)	9.7 (4.4)
69	F2	2"	2-1/2"	50	11" (279)	3-7/8" (98)	2-5/8" (67)	9.7 (4.4)
69	G1	2-1/2"	2-1/2"	65	13" (330)	5-1/4" (133)	3-5/8" (92)	19 (8.6)
69	G2	2-1/2"	3"	65	13" (330)	5-1/4" (133)	3-5/8" (92)	19 (8.6)
69	H1	3"	3"	80	13-1/4" (337)	5-5/8" (143)	3-5/8" (92)	19 (8.6)



PACKED LIFT LEVER OPTION

ITEM	DESCRIPTION	MATERIAL
1	Handle	B16 Brass
2	Handle Screw	Steel/Plated
3	Cam	B16 Brass
4	Retaining Ring	Steel/Plated
5	O-Rings	Viton
6	Cam Nut	B16 Brass
7	O-Ring	PTFE
8	Hood	B16 Brass
9	Jam Nut	18-8 SS
10	Lifter Nut	B16 Brass
11	Hood Seal	PTFE
12	Plug	Gag Screw Option 18-8 / PTFE
13	Seal	
14	Gag Screw	

PTFE SOFT SEAT OPTION

ITEM	DESCRIPTION	BRASS	STAINLESS
1	Body	B16/B283	SA479-316 SS
15	Support	B16 Brass	B16 Brass
16	Disc	B16 Brass	SA479-316 SS
17	Insert	PTFE	PTFE
18	Disc Wings	B16 Brass	SA479-316 SS

SERIES	INLET SIZES	METALS	MIN. TEMP °F (°C)	MAX. TEMP ^{3,4} °F (°C)	MAX PRESSURE ^{1,2} psig (barg)	SERVICES	CERTIFICATIONS
Series 69	1/2" to 3"	Brass/Bronze	¹ -60° (-51°)	406° (208°)	600 (41.4)	Liquid	Non-Code
	1/2" to 3"	Stainless/Bronze	-320° (-196°)	425° (218°)	600 (41.4)	Liquid	Non-Code
	1/2" to 3"	No Lead	-60° (-51°)	406° (208°)	600 (41.4)	Liquid	Non-Code
	1/2" to 3"	Stainless/No Lead	-320° (-196°)	425° (218°)	600 (41.4)	Liquid	Non-Code

¹ PTFE disc lowers minimum temperature to -320°F

SERIES 69 PART NUMBERS

69	C	1	A	1	M	3	U	1	125
SERIES	INLET	OUTLET	METALS	CONNECTION	SEATING	CAP	SERVICE	OPTIONS	SET
69	A- 1/2" B- 3/4" C- 1" D- 1-1/4" E- 1-1/2" F- 2" G- 2-1/2" H- 3"	1- Same Size as Inlet 2- Next Larger than Inlet	A- Brass/Bronze B- 316 SS Nozzle-Disc w/Bronze L- No Lead Nozzle-Disc-Bonnet M- 316 Nozzle-Disc/No Lead Bonnet	1- NPT MxF 2- NPT FxF 3- BSPT MxF 4- BSPT FxF 8- BSPP MxF 9- BSPP FxF	M- Metal P- PTFE	2- Closed cap 3- Packed lift lever 5- Closed Cap with Test Gag 6- Packed Lever with Test Gag 8- Closed Cap With O-Ring W- Wheel Handle	U- Non-Code Liquid	1- None 2- Chrome Plating 3- O2 Cleaned T- Tamper Proof Seal	Ex.125

LIQUID CAPACITY

SERIES 69 LIQUID CAPACITY GPM AT 25% OVER SET PRESSURE

FLOW FACTOR	1.586	3.088	4.820	6.821	8.769	13.019	17.540	22.135
psig	A 1/2"	B 3/4"	C 1"	D 1-1/4"	E 1-1/2"	F 2"	G 2-1/2"	H 3"
5	4.0	7.7	12	17	22	33	44	55
10	5.6	10.9	17	24	31	46	62	78
20	7.9	15	24	34	44	65	88	111
30	9.7	19	30	42	54	80	107	136
40	11	22	34	48	62	92	124	157
50	13	24	38	54	69	103	139	175
60	14	27	42	59	76	113	152	192
70	15	29	45	64	82	122	164	207
80	16	31	48	68	88	130	175	221
90	17	33	51	72	93	138	186	235
100	18	35	54	76	98	146	196	247
120	19	38	59	84	107	159	215	271
140	21	41	64	90	116	172	232	293
160	22	44	68	96	124	184	248	313
180	24	46	72	102	132	195	263	332
200	25	49	76	108	139	206	277	350
225	27	52	81	114	147	218	294	371
250	28	55	85	121	155	230	310	391
275	29	57	89	126	163	241	325	410
300	31	60	93	132	170	252	340	429
325	32	62	97	137	177	262		
350	33	65	101	143	183	272		
375	34	67	104	148	190	282		
400	35	69	108	153	196	291		
450	38	73	114					
500	40	77	121					
550	42	81	126					
600	43	85	132					

SERIES 69 LIQUID CAPACITY LPM AT 25% OVER SET PRESSURE

FLOW FACTOR	1.586	3.088	4.820	6.821	8.769	13.019	17.540	22.135
barg	A 1/2"	B 3/4"	C 1"	D 1-1/4"	E 1-1/2"	F 2"	G 2-1/2"	H 3"
0.2	11	22	35	49	63	94	126	160
0.5	18	35	55	78	100	148	200	252
1	26	50	78	110	141	210	283	357
2	36	70	110	155	200	297	400	504
3	44	86	135	190	245	363	490	618
4	51	100	155	220	283	420	565	713
5	57	111	174	246	316	469	632	798
6	63	122	190	269	346	514	692	874
7	68	132	206	291	374	555	748	944
8	72	141	220	311	400	593	799	1009
9	77	149	233	330	424	629	848	1070
10	81	157	246	348	447	663	894	1128
12	89	172	269	381	489	727	979	1236
14	96	186	291	411	529	785	1058	1335
16	102	199	311	440	565	839	1131	1427
18	108	211	330	466	600	890	1199	1513
20	114	223	347	492	632	938	1264	1595
22	120	233	364	516	663	984		
24	125	244	381	538	692	1028		
27.5	134	261	407	576	741	1100		
28	135	263	411					
30	140	273	425					
32	145	281	439					
34	149	290	453					
36	153	299	466					
38	158	307	479					
40	162	315	491					
41.3	164	320	499					

Set pressures not limited to this chart.
Specify when ordering.



SERIES 88

Series 88 are multiple purpose safety valves for air / gas protection. Designed for durability, yet an economical choice for safety and relief applications. Choose for a variety of applications where mid-level capacity is required.

ASME and National Board Certified for Section XIII "UV" for ASME Section VIII Div. 1 service as well as CRN Certifications.

Temperatures -60°F (-51°C) to 406°F (208°C), low reduced to -320°F (-196°C) with PTFE option, high increased to 425°F (218°C) with stainless option.

SERIES 89

Series 89 the same as Series 88, but with a closed cap.

ASME and National Board Certified for Section XIII "UV" for ASME Section VIII Div. 1 service as well as CRN Certifications.

Temperatures -60°F (-51°C) to 406°F (208°C), low reduced to -320°F (-196°C) with PTFE option, high increased to 425°F (218°C) with stainless option.

Usages: Over pressure protection on Pressure vessels,
Piping systems, Tanks, Compressors, Dryers, Inter and After-coolers

Features:

- Precision lapped metal to metal seating
- Stainless steel springs
- Ruggedly constructed
- Closed seal hex cap or lift lever options
- Wide variety of inlet and outlet options
- Disc-guided seat provides quick, accurate and excellent re-seating

Options:

- Stainless steel body and disc
- Chrome plating
- Viton embedded o-ring at hex cap
- Packed lift lever
- Low Lead Configurations
- PTFE Seating
- Oxygen cleaning
- BSPT and BSPP connections

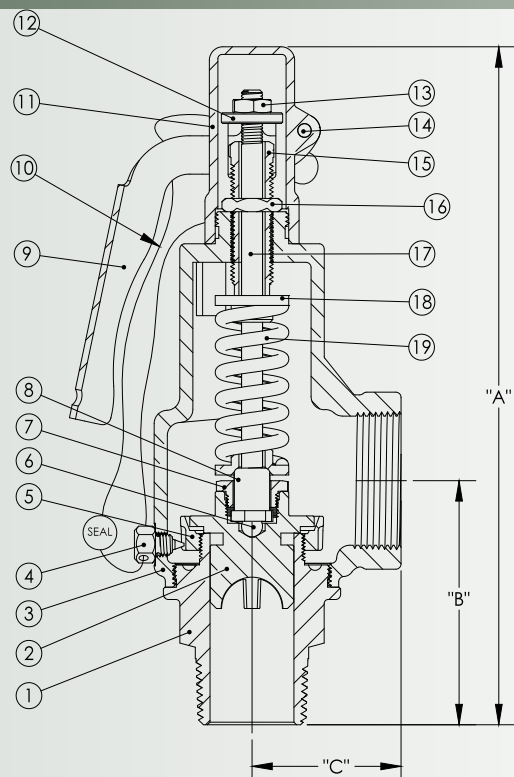
Cryogenic:

- Standard with PTFE seating
- O2 Cleaned and bagged



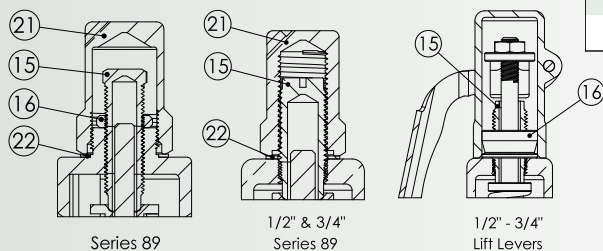
CRN

DIMENSIONS AND MATERIALS



SERIES 88 / 89

ITEM	DESCRIPTION	BRASS	STAINLESS
1	Body	B16/B283-C37700	SA479 316 SS
2	Disc	B62-C83600	SA479 316 SS
3	Bonnet	B584 C84400	B584 C84400
4	Lock Screw	B16 Brass	B16 Brass
5	Lower Ring	B584 C84400	B584 C84400
6	Ball	Stainless	Stainless
7	Disc Nut	B16 Brass	B16 Brass
8	Spring Support	B16 Brass	B16 Brass
9	Lift Lever	Plated Steel	Plated Steel
10	Seal Wire	Steel / Lead	Steel / Lead
11	Hood	Aluminum	Aluminum
12	Lifter Nut	B16 Brass	B16 Brass
13	Jam Nut	18-8 SS	18-8 SS
14	Lever Pin	B16 Brass	B16 Brass
15	Pressure Screw	B16 Brass	B16 Brass
16	Locknut	B16 Brass	B16 Brass
17	Spring Post	B16 Brass	B16 Brass
18	Spring Plate	B16 Brass	B16 Brass
19	Spring	302/17-7 SS	302/17-7 SS
20	Nameplate	Stainless	Stainless
21	Closed Hood	B16 Brass	B16 Brass
22	Closed Hood Seal	PTFE	PTFE



Series 89

1/2" & 3/4"
Series 89

1/2" - 3/4"
Lift Levers

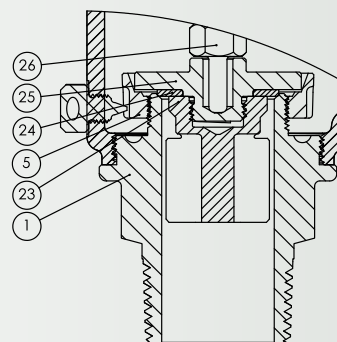
SERIES 88 / 89

SIZE ID	INLET	OUTLET	DN	DIMENSIONS – in (mm)				WEIGHT Lbs. (Kg)
				A-88	A-89	B	C	
A1	1/2"	1/2"	15	6-7/8" (175)	6" (152)	2-1/2" (64)	1-3/8" (35)	1.7 (0.8)
A2	1/2"	3/4"	15	6-7/8" (175)	6" (152)	2-1/2" (64)	1-3/8" (35)	1.7 (0.8)
B1	3/4"	3/4"	20	7-1/8" (181)	6-1/4" (159)	2-5/8" (67)	1-1/2" (38)	2.2 (1)
B2	3/4"	1"	20	7-1/8" (181)	6-1/4" (159)	2-5/8" (67)	1-1/2" (38)	2.2 (1)
C1	1"	1"	25	7-7/8" (200)	7-3/8" (187)	2-7/8" (73)	1-3/4" (44)	3 (1.4)
C2	1"	1-1/4"	25	7-7/8" (200)	7-3/8" (187)	2-7/8" (73)	1-3/4" (44)	3 (1.4)
D1	1-1/4"	1-1/4"	32	8-3/4" (222)	8-1/4" (210)	3-3/8" (86)	2" (51)	4 (1.8)
D2	1-1/4"	1-1/2"	32	8-3/4" (222)	8-1/4" (210)	3-3/8" (86)	2" (51)	4 (1.8)
E1	1-1/2"	1-1/2"	40	9-7/8" (251)	9-1/2" (241)	3-1/2" (89)	2-1/8" (54)	5.8 (2.6)
E2	1-1/2"	2"	40	9-7/8" (251)	9-1/2" (241)	3-1/2" (89)	2-1/8" (54)	5.8 (2.6)
F1	2"	2"	50	11-1/4" (286)	11" (279)	3-7/8" (98)	2-5/8" (67)	9.7 (4.4)
F2	2"	2-1/2"	50	11-1/4" (286)	11" (279)	3-7/8" (98)	2-5/8" (67)	9.7 (4.4)
G1*	2-1/2"	2-1/2"	65	13-7/8" (352)	13" (330)	5-1/4" (133)	3-5/8" (92)	19 (8.6)
G2*	2-1/2"	3"	65	13-7/8" (352)	13" (330)	5-1/4" (133)	3-5/8" (92)	19 (8.6)
H1*	3"	3"	80	13-7/8" (352)	13-1/4" (337)	5-5/8" (143)	3-5/8" (92)	19 (8.6)

* - "G" and "H" are Non-Code

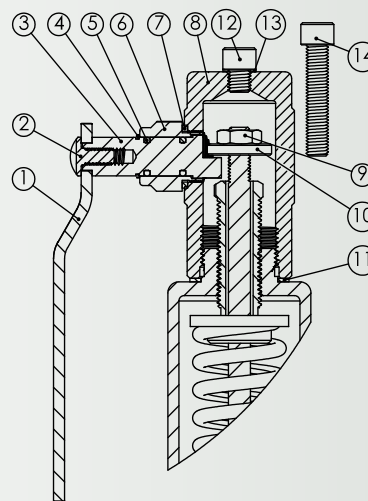
PTFE SOFT SEAT

ITEM	DESCRIPTION	BRASS	STAINLESS
1	Body	B16/B283	SA479-316 SS
5	Lower Ring	B584-C84400	B584-C84400
23	Disc Wings	B16 Brass	SA479-316 SS
24	Insert	PTFE	PTFE
25	Disc	B16 Brass	SA479-316 SS
26	Support	B16 Brass	B16 Brass



PACKED LIFT LEVER OPTION

ITEM	DESCRIPTION	MATERIAL
1	Handle	B16 Brass
2	Handle Screw	Steel/Plated
3	Cam	B16 Brass
4	Retaining Ring	Steel/Plated
5	O-Rings	Viton
6	Cam Nut	B16 Brass
7	O-Ring	PTFE
8	Hood	B16 Brass
9	Jam Nut	18-8 Stainless
10	Lifter Nut	B16 Brass
11	Hood Seal	PTFE
12	Plug	Gag Screw Option 18-8 / PTFE
13	Seal	
14	Gag Screw	



SERIES	INLET SIZES	METALS	MIN. TEMP °F (°C)	MAX. TEMP ^{3,4} °F (°C)	MAX PRESSURE ^{1,2} psig (barg)	SERVICES	CERTIFICATIONS
Series 88/89	1/2" to 3"	Brass/Bronze	-60° (-51°)	406° (208°)	250 (17.2)	Air / Gas / Steam	ASME XIII "UV", CRN
	1/2" to 3"	Stainless/Bronze	-320° (-196°)	425° (218°)	250 (17.2)	Air / Gas / Steam	ASME XIII "UV", CRN
	1/2" to 3"	No Lead	-60° (-51°)	406° (208°)	250 (17.2)	Air / Gas / Steam	Non-code
	1/2" to 3"	Stainless/No Lead	-320° (-196°)	406° (208°)	250 (17.2)	Air / Gas / Steam	Non-code

¹ PTFE disc lowers minimum temperature to -320°F

SERIES 88 / 89 PART NUMBERS

88	C	2	A	1	M	1	N	1	125
SERIES	INLET	OUTLET	METALS	CONNECTION	SEATING	CAP	SERVICE	OPTION	SET
88	A- 1/2"	1- Same Size as Inlet 2- Next Larger than Inlet	A- Brass/Bronze	1- NPT MxF	M- Metal	1- Lift lever	K- ASME XIII "UV" Air/gas	1- None	Ex.125
89	B- 3/4"		B- 316 SS Nozzle Disc w/Bronze	2- NPT FxF	P- PTFE	2- Closed cap	N- Non-code Air/gas	2- Chrome Plating	
	C- 1"		L- No Lead Nozzle-Disc-Bonnet	3- BSPT MxF		3- Packed Lift Lever	T- Non-code Steam	3- O2 Cleaned	
	D- 1-1/4"		M- 316 Nozzle-Disc/No Lead Bonnet	4- BSPT FxF		4- Lift Lever Anti-Vibration Spring		4- API Seating	
	E- 1-1/2"			8- BSPP MxF		5- Closed Cap with Test Gag		5- O2 Clean / API Seating	
	F- 2"			9- BSPP FxF		6- Packed Lever with Test Gag			
	G*- 2-1/2"					8- Closed Cap with O-Ring			
	H*- 3"					A- Open Lever with Test Gag			

* - G & H are non-code

AIR CAPACITY

SERIES 88 / 89 AIR CAPACITY SCFM - ASME SECTION VIII

SLOPE	.644	.93	2.274	3.504	4.90	7.404	13.416	16.98
SET psig	A 1/2"	B 3/4"	C 1"	D 1-1/4"	E 1-1/2"	F 2"	G* 2-1/2"	H* 3"
5	15	21	52	80	111	168	305	385
10	18	26	63	97	136	205	372	470
15	21	30	74	115	160	242	439	555
20	24	35	86	132	185	279	506	640
25	27	40	97	150	209	316	573	725
30	31	44	108	167	234	353	640	810
35	34	49	121	186	261	394	714	903
40	38	55	133	206	288	435	788	997
45	41	60	146	225	315	475	861	1090
50	45	65	158	244	342	516	935	1184
55	48	70	171	264	368	557	1009	1277
60	52	75	184	283	395	598	1083	1370
65	56	80	196	302	422	638	1156	1464
70	59	85	209	321	449	679	1230	1557
75	63	90	221	341	476	720	1304	1650
80	66	96	234	360	503	760	1378	1744
85	70	101	246	379	530	801	1452	1837
90	73	106	259	398	557	842	1525	1931
95	77	111	271	418	584	883	1599	2024
100	80	116	284	437	611	923	1673	2117
120	94	136	334	514	719	1086	1968	2491
140	109	157	384	591	827	1249	2263	2865
160	123	177	434	668	934	1412	2558	3238
180	137	198	484	745	1042	1575	2854	3612
200	151	218	534	822	1150	1738	3149	3985
220	165	239	584	899	1258	1901	3444	4359
240	179	259	634	977	1366	2063	3739	4732
250	187	269	659	1015	1420	2145	3887	4919

SERIES 88 / 89 AIR CAPACITY NM3/HR - ASME SECTION VIII

SLOPE	.644	.93	2.274	3.504	4.90	7.404	13.416	16.98
SET barg	A 1/2"	B 3/4"	C 1"	D 1-1/4"	E 1-1/2"	F 2"	G* 2-1/2"	H* 3"
0.2	23	33	80	123	171	259	470	594
0.5	27	39	96	149	208	314	569	720
1	35	51	124	192	268	405	734	929
2	51	74	180	278	389	587	1064	1347
3	68	99	242	372	521	787	1426	1804
4	86	124	303	467	653	987	1789	2265
5	103	149	365	562	786	1188	2153	2725
6	121	174	427	657	919	1389	2516	3185
7	138	200	488	752	1052	1589	2880	3645
8	156	225	550	847	1185	1790	3243	4105
9	173	250	611	942	1317	1991	3607	4565
10	191	275	673	1037	1450	2191	3970	5025
11	208	300	735	1132	1583	2392	4334	5485
12	225	326	796	1227	1716	2592	4698	5945
13	243	351	858	1322	1848	2793	5061	6406
14	260	376	919	1417	1981	2994	5425	6866
15	278	401	981	1512	2114	3194	5788	7326
16	295	426	1043	1607	2247	3395	6152	7786
17.2	316	457	1117	1721	2406	3636	6588	8338

Set pressures not limited to this chart. Specify when ordering.
Capacities are at 3 psig or 10% (whichever is greater) over set pressure
* 2-1/2" ("G") and 3" ("H") sizes are NON-Code
Set pressures below 15 psig (1.03 barg) are NON-Code..

Maximum back-pressure is 10% of set pressure or 50 psig (3.45 barg) whichever is less.

Lifting Device as required by the ASME,
ASME Section XIII: 3.2.7(a)
Section VIII (UV Designator) pressure relief valves intended for use on air or steam service, or on water service where the valve inlet temperature exceeds 60°C(140°F) excluding overpressure or relief events, shall have a substantial lifting device that, when activated, will release the seating force on the disk when the pressure relief valve is subjected to a pressure of at least 75% of the set pressure of the valve.



SERIES 120 SAFETY VALVES

Our Series 120 air/gas and steam safety valve is designed for safety and pressure relief for light and medium capacity applications where a smaller sized valve is needed. The series 120 valves have a higher capacity than our Series 130. Many are manufactured to meet specific field and OEM applications.

Temperatures -20°F (-29°C) to 406°F (208°C)

ASME and National Board Certified for Section XIII "UV" for ASME Section VIII Div. 1 service as well as CRN Certifications.

SERIES 120

Features a top outlet bonnet with an open lift lever.

SERIES 121

Features a top outlet bonnet with an a lift lever and a cap.

SERIES 125

Features a side outlet bonnet with an open lift lever.

SERIES 126

Features a side outlet bonnet with a lift lever and a cap.

Usages: High quality smaller valve, Compressors, Receivers, Gas lines, Steam lines, Air and Gas receivers, Piping system/tanks, Steam cleaners, sterilizers, Autoclaves

Features:

- Fixed blow-down
- Brass/bronze construction
- Metal-to-metal seating
- Rugged, yet economical
- Stainless steel springs
- Factory set and sealed
- Excellent seat tightness

Options:

- Stainless body and disk
- Polishing and chrome plating
- Variety of inlets/outlets and lift levers or pull ring
- Many configurations (not shown)
- O2 Cleaning
- BSPT connections

Set pressures below 15 psig (1.03 barg) and above 200 psig (13.8 barg) are NON-Code.

Maximum back-pressure is 10% of set pressure or 50 psig (3.45 barg) whichever is less.

Lifting Device as required by the ASME,
ASME Section XIII: 3.2.7(a)

Section VIII (UV Designator) pressure relief valves intended for use on air or steam service, or on water service where the valve inlet temperature exceeds 60°C(140°F) excluding overpressure or relief events, shall have a substantial lifting device that, when activated, will release the seating force on the disk when the pressure relief valve is subjected to a pressure of at least 75% of the set pressure of the valve.



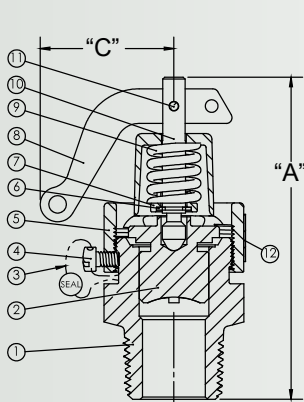
CRN

SERIES 120 INFORMATION

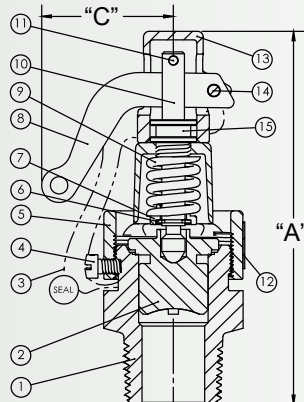
SERIES 120 THRU 126 PART NUMBERS

121	B	A	1	M	1	K	1	125
SERIES/DESCRIPTION	INLET/OUTLET	METALS	CONNECTION	SEATING	CAP	SERVICE	OPTIONS	SET
120 Top Outlet w/Lift Lever	A- 1/2" B- 3/4"	A- Brass Bronze	1- NPT MxF 2- NPT FxF	M- Metal	1- Lift lever H- Hood and Lift Lever	K- ASME XIII "UV" Air/gas L- ASME XIII "UV" Steam N- Non-code Air/gas T- Non-code Steam	1- None 2- Chrome Plating 3- O2 Cleaned	Ex.125
121 Top Outlet Hood And Lift Lever	C- 1" *D- 1"	B- 316 SS Bronze	3- BSPT MxF 4- BSPT FxF					
125 Side Outlet w/Lift Lever	A- 1/2" x 3/4" B- 3/4" x 3/4"							
126 Side Outlet Hood And Lift Lever	C- 1" x 3/4" *D- 1" x 1"							

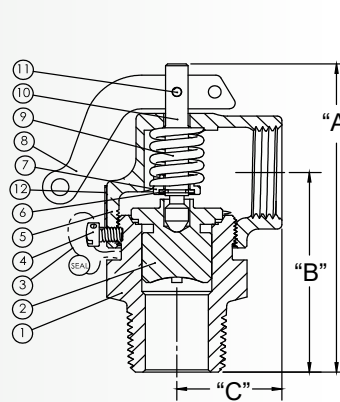
* Inlet/Outlet 'D' are non-code valves



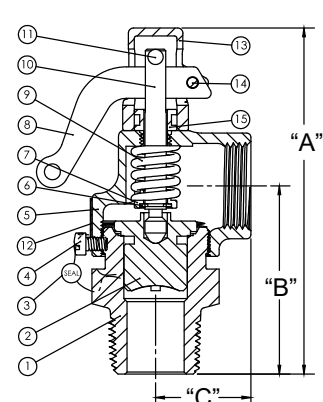
Series 120



Series 121



Series 125



Series 126

SERIES	INLET SIZES	METALS	MIN. TEMP °F (°C)	MAX. TEMP °F (°C)	MAX PRESSURE ^{1,2} psig (barg)	SERVICES	CERTIFICATIONS
Series 120	1/2", 3/4", 1"	Brass/Bronze	-20° (-29°)	406° (208°)	200 (13.8)	Air / Gas / Steam	ASME XIII "UV", CRN
	1/2", 3/4", 1"	Stainless/Bronze	-20° (-29°)	425° (218°)	200 (13.8)	Air / Gas / Steam	ASME XIII "UV", CRN

SERIES 120 CAPACITY AIR - SCFM

SLOPE	SET psig	10	15	20	25	40	50	75	100	125	150	175	200
1.037	SCFM	29	34	39	44	61	72	101	129	158	186	215	243

SERIES 120 THRU 126

ITEM	DESCRIPTION	BRASS OPTION	STAINLESS OPTION
1	Body	B16 Brass	SA479-316 SS
2	Disc	B62-C83600	SA479-316 SS
3	Seal Wire	Steel/Lead	Steel/Lead
4	Lock Screw	B16 Brass	B16 Brass
5	Bonnet	B584-C84400	B584-C84400
6	Support	Stainless	Stainless
7	Spring Plate	B16 Brass	B16 Brass
8	Lift Lever	Plated Steel	Plated Steel
9	Spring	302 SS	302 SS
10	Spring Post	B16 Brass	B16 Brass
11	Lift Pin	B16 Brass	B16 Brass
12	Nameplate	Stainless	Stainless
13	Hood	B584-C84400	B584-C84400
14	Lever Pin	B16 Brass	B16 Brass
15	Hood Mount	B16 Brass	B16 Brass

SERIES 120 CAPACITY STEAM - Lbs/hr

SLOPE	SET psig	10	15	20	25	40	50	75	100	125	150	175	200
2.910	Lbs./Hr	81	95	110	124	171	203	283	363	443	523	603	683

Set pressures not limited to this chart. Specify when ordering.

Capacities are at 3 psig or 10% (whichever is greater) over set pressure

SERIES 120 THRU 126

SERIES	INLET	OUTLET	SEAT	DIMENSIONS - in (mm)			MAX SET psig (barg)	WEIGHT Lbs. (Kg)
				A	B	C		
120	1/2"-3/4"-1"	Top	3/4"	3-1/2" (89)	-	1-1/2" (38)	200 (13.8)	0.5 (0.2)
120*	1"	Top	1"	3-3/4" (95)	-	1-1/2" (38)	200 (13.8)	1.1 (0.5)
121	1/2"-3/4"-1"	Top	3/4"	4-1/8" (105)	-	1-3/8" (35)	200 (13.8)	0.8 (0.3)
121*	1"	Top	1"	4-1/2" (114)	-	1-3/8" (35)	200 (13.8)	1.3 (0.6)
125	1/2"-3/4"-1"	3/4"	3/4"	3-1/2" (89)	2-1/4" (57)	1-1/8" (29)	200 (13.8)	0.5 (0.2)
125*	1"	1"	1"	3-3/4" (95)	2-5/8" (67)	1-3/8" (35)	200 (13.8)	1.1 (0.5)
126	1/2"-3/4"-1"	3/4"	3/4"	4-1/8" (105)	2-1/4" (57)	1-1/8" (29)	200 (13.8)	0.6 (0.3)
126*	1"	1"	1"	4-1/2" (114)	2-5/8" (67)	1-3/8" (35)	200 (13.8)	1.1 (0.5)

* 1" seat is non-code

SERIES 130 SAFETY VALVES

Our Series 130 air/gas and steam safety valves are designed for safety and pressure relief for light and medium capacity applications; where a smaller sized valve is needed. Many are manufactured to meet specific field and OEM applications.

Temperatures -20°F (-29°C) to 406°F (208°C)

ASME and National Board Certified for Section XIII "UV" for ASME Section VIII Div. 1 service as well as CRN Certifications.

SERIES 130

Features a top outlet bonnet with an open lift lever.

SERIES 132

Features a top outlet bonnet with a lift lever and cap.

SERIES 133

Features a side outlet bonnet with a lift lever and a cap.

SERIES 135

Features a side outlet bonnet with a closed cap.

Usages: Compressors, Receivers, Gas lines, Steam lines, Air and Gas receivers, Piping system/tanks, Steam cleaners, sterilizers, Autoclaves

Features:

- Fixed blow-down
- Brass/bronze construction
- Metal-to-metal seating
- Rugged, yet economical
- Stainless steel springs
- Factory set and sealed
- Excellent seat tightness

Options:

- Stainless body and disc
- Polishing and chrome plating
- O2 cleaning
- Variety of inlets/outlets and lift levers or pull ring
- BSPT connections



Set pressures below 15 psig (1.03 barg) and above 200 psig (13.8 barg) are NON-Code.

Maximum back-pressure is 10% of set pressure or 50 psig (3.45 barg) whichever is less.

Lifting Device as required by the ASME,
ASME Section XIII: 3.2.7(a)
Section VIII (UV Designator) pressure relief valves intended for use on air or steam service, or on water service where the valve inlet temperature exceeds 60°C(140°F) excluding overpressure or relief events, shall have a substantial lifting device that, when activated, will release the seating force on the disk when the pressure relief valve is subjected to a pressure of at least 75% of the set pressure of the valve.

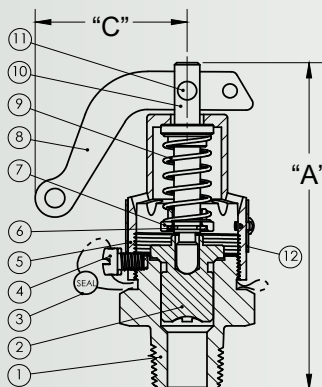


CRN

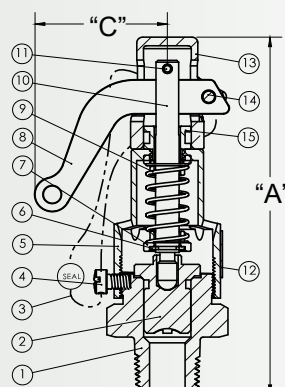
SERIES 130 INFORMATION

SERIES 130 THRU 135 PART NUMBERS

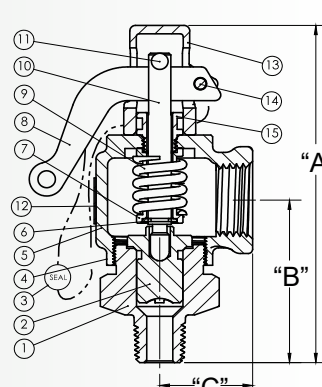
130	B	A	1	M	1	K	1	125
SERIES/DESCRIPTION	INLET/OUTLET	METALS	CONNECTION	SEATING	CAP	SERVICE	OPTIONS	SET
130 Top Outlet w/Lift Lever	A- 1/4" B- 3/8"	A- Brass Bronze	1- NPT MxF 2- NPT FxF	M- Metal	1- Lift lever 2- Closed Cap H- Hood and Lift Lever	K- ASME XIII "UV" Air/gas L- ASME XIII "UV" Steam N- Non-code Air/gas T- Non-code Steam	1- None 2- Chrome Plating 3- O2 Cleaned	Ex.125
132 Top Outlet Hood And Lift Lever	C- 1/2"	B- 316 SS Bronze	3- BSPT MxF 4- BSPT FxF					
133 Side Outlet Hood And Lift Lever	A- 1/4" x 1/2" B- 3/8" x 1/2"							
135 Side Outlet Closed Cap	C- 1/2" x 1/2"							



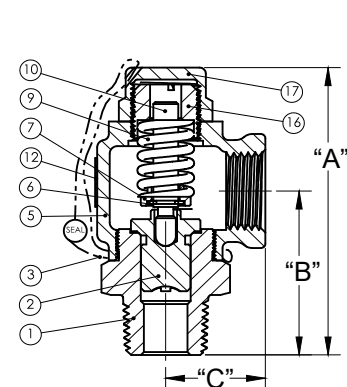
Series 130



Series 132



Series 133



Series 135

SERIES	INLET SIZES	METALS	MIN. TEMP °F (°C)	MAX. TEMP ^{3,4} °F (°C)	MAX PRESSURE ^{1,2} psig (barg)	SERVICES	CERTIFICATIONS
Series 130	1/4", 3/8"/1/2"	Brass/Bronze	-20° -(-29°)	406° (208°)	200 (13.8)	Air / Gas / Steam	ASME XIII "UV", CRN
	1/4", 3/8"/1/2"	Stainless/Bronze	-20° -(-29°)	425° (218°)	200 (13.8)	Air / Gas / Steam	ASME XIII "UV", CRN

SERIES 130 THRU 135

ITEM	DESCRIPTION	BRASS OPTION	STAINLESS OPTION
1	Body	B16 Brass	SA479-316 SS
2	Disc	B62-C83600	SA479-316 SS
3	Seal Wire	Steel/Lead	Steel/Lead
4	Lock Screw	B16 Brass	B16 Brass
5	Bonnet	B16/B584-C84400	B16/B584-C84400
6	Support	Stainless	Stainless
7	Spring Plate	B16 Brass	B16 Brass
8	Lift Lever	Plated Steel	Plated Steel
9	Spring	302 SS	302 SS
10	Spring Post	B16 Brass	B16 Brass
11	Lift Pin	B16 Brass	B16 Brass
12	Nameplate	Stainless	Stainless
13	Hood	B584-C84400	B584-C84400
14	Lever Pin	B16 Brass	B16 Brass
15	Hood Mount	B16 Brass	B16 Brass
16	Pressure Screw	B16 Brass	B16 Brass
17	Hood	B16 Brass	B16 Brass

SERIES 130 CAPACITY AIR - SCFM

SLOPE	SET psig	10	20	30	40	50	60	75	100	125	150	175	200
0.403	SCFM	11	15	19	24	28	33	39	50	61	72	84	95

SERIES 130 CAPACITY STEAM - Lbs/hr

SLOPE	SET psig	10	20	30	40	50	60	75	100	125	150	175	200
1.130	Lbs/Hr	31	43	54	66	79	91	110	141	172	203	234	265

Set pressures not limited to this chart. Specify when ordering.

Capacities are at 3 psig or 10% (whichever is greater) over set pressure

SERIES 130 THRU 135

SERIES	INLET	OUTLET	SEAT	DIMENSIONS - in (mm)			MAX SET psig (barg)	WEIGHT Lbs. (Kg)
				A	B	C		
130	1/4"-3/8"-1/2"	Top	1/2"	3-1/4" (83)	-	1-1/2" (38)	200 (13.8)	1/2 (0.2)
132	1/4"-3/8"-1/2"	Top	1/2"	3-7/8" (98)	-	1-3/8" (35)	200 (13.8)	3/4 (0.3)
133	1/4"-3/8"-1/2"	1/2"	1/2"	3-3/4" (95)	1-7/8" (48)	1-1/8" (29)	200 (13.8)	5/8 (0.3)
135	1/4"-3/8"-1/2"	1/2"	1/2"	3" (76)	1-3/4" (44)	1-1/8" (29)	200 (13.8)	5/8 (0.3)

SERIES 55 - 51 SAFETY VALVES



SERIES 51 - 55

Series 51 non-code liquid valves are smaller with a maximum pressure of 750 psig. Series 55 are small compact non-code (liquid) water relief valves with a max pressure of 200 psig. Temperatures -20°F (-29°C) to 406°F (208°C)

Usages:

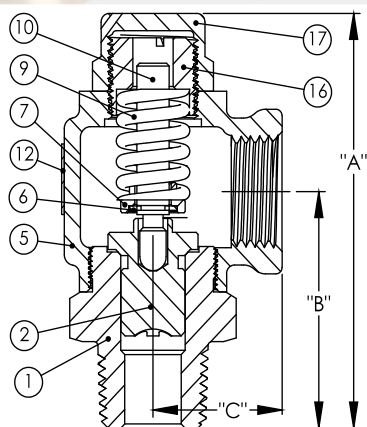
- Compressors, Air and Gas receivers
- Gas lines, Steam lines
- Piping system/tanks
- Steam cleaners, Sterilizers, Autoclaves

SERIES 51 - 55

SERIES	INLET	OUTLET	DIMENSIONS – in (mm)			WEIGHT Lbs. (Kg)
			A	B	C	
51	1/4"-3/8"-1/2"	1/2"	5-1/4" (133)	2-1/4" (57)	1-1/8" (29)	1 (0.5)
55	1/4"-3/8"-1/2"	1/2"	3" (76)	1-3/4" (44)	1-1/8" (29)	0.6 (0.3)

SERIES 51 AND 55

ITEM	DESCRIPTION	BRASS OPTION	STAINLESS OPTION
1	Body	B16 Brass	SA479-316 SS
2	Disc	B62-C83600	SA479-316 SS
4	Lock Screw	B16 Brass	B16 Brass
5	Bonnet	B584-C84400	B584-C84400
6	Support	Stainless	Stainless
7	Spring Plate	B16 Brass	B16 Brass
9	Spring	302 SS	302 SS
10	Spring Post	B16 Brass	B16 Brass
12	Nameplate	Stainless	Stainless
16	Pressure Screw	B16 Brass	B16 Brass
17	Hood	B16 Brass	B16 Brass

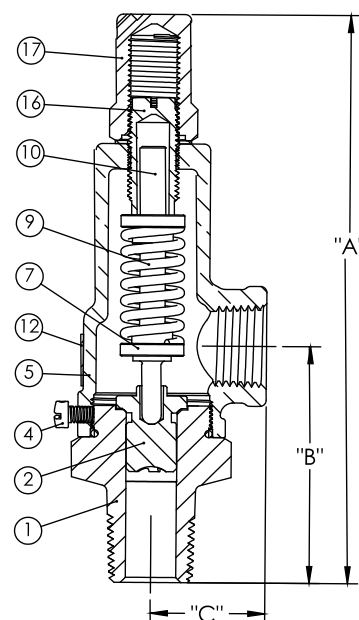


Series 55

SERIES 51 AND 55 GPM @ 25% OVER SET PRESSURE

Series 51	psig	10	20	30	40	50	75	100	150	200	300	400	500	600	750
	GPM	3.3	4.6	5.7	6.5	7.3	8.9	10	13	14	18	21	23	25	28

Series 55	psig	10	20	30	40	50	75	100	150	200
	GPM	3.3	4.6	5.7	6.5	7.3	8.9	10	13	14



Series 51

SERIES 51 AND 55 PART NUMBERS

55		B	A	1	M	2	U	1	125
SERIES/DESCRIPTION		INLET/OUTLET	METALS	CONNECTION	SEATING	CAP	SERVICE	OPTIONS	SET
55	Side Outlet Closed Cap	A- 1/4" x 1/2"	A- Brass Bronze	1- NPT MxF	M- Metal	2- Closed Cap	U- Non-code Liquid	1- None	Ex.125
		B- 3/8" x 1/2"		2- NPT FxF				2- Chrome Plating	
51		C- 1/2" x 1/2"	B- 316 SS Bronze					3- O2 Cleaned	

SERIES 140 SAFETY VALVES

**SERIES
140**



**SERIES
143**



**SERIES
140**



The Series 140 valve line is designed for air/gas safety. Compact in nature, yet rugged in all aspects of design and construction. The 140 series offers excellent fast acting reseating that minimizes loss of medium. High capacity flow rates.

SERIES 140

Brass body, stainless ball, brass bonnet, and brass internals.

Temperatures -20°F (-29°C) to 406°F (208°C)

ASME and National Board Certified for Section XIII "UV" for Section VIII Div. 1 air and inert gas services.

SERIES 141

Stainless body, stainless ball, brass bonnet, and brass internals.

Temperatures -20°F (-29°C) to 406°F (208°C)

ASME and National Board Certified for Section XIII "UV" for Section VIII Div. 1 air and inert gas services.

SERIES 143

Stainless body, stainless ball, stainless bonnet, and brass internals.

Temperatures -20°F (-29°C) to 800°F (426°C)

ASME and National Board Certified for Section XIII "UV" for Section VIII Div. 1 air and inert gas services.

Usages:

- Compressors, Air and Gas receivers
- Gas lines, Steam lines
- Piping system/tanks
- Steam cleaners, Sterilizers, Autoclaves

Features:

- Precise / accurate set pressures
- Polished ball-seat in stainless steel
- Pressures to 450 psig
- Fast acting fixed blowdown
- High flow capacity

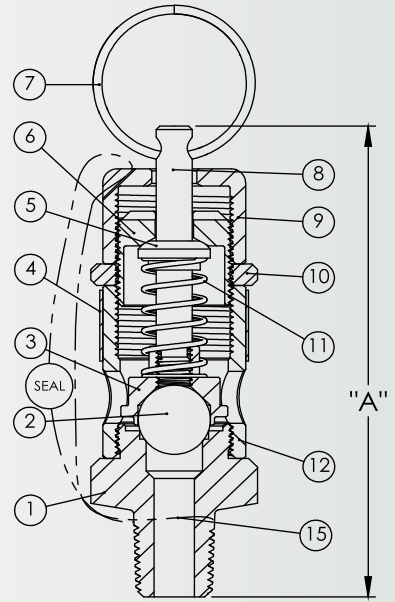
Options:

- BSPT or BSPP Inlet connection
- Female connection
- Stainless Steel Construction
- Pull Ring or Lift Lever
- O2 Cleaning
- NEW - Viton seating



SERIES 140 INFORMATION

SERIES 140 - 141 - 143				
ITEM	DESCRIPTION	MATERIALS		
		140	141	143
1	Body	B16 Brass	SA479-316 SS	SA479-316 SS
2	Ball	440 SS	440 SS	440 SS
3	Disk Holder	B16 Brass	B16 Brass	SA479-316 SS
4	Name Plate	Stainless	Stainless	Stainless
5	Spring Plate	B16 Brass	B16 Brass	SA479-316 SS
6	Pressure Screw	B16 Brass	B16 Brass	SA479-316 SS
7	Pull Ring	Plated Steel	Plated Steel	Stainless
8	Spring Post	B16 Brass	B16 Brass	SA479-316 SS
9	Hood	B16 Brass	B16 Brass	SA479-316 SS
10	Lock Nut	B16 Brass	B16 Brass	SA479-316 SS
11	Spring	302/17-7 SS	302/17-7 SS	302/17-7 SS
12	Bonnet	B16 Brass	B16 Brass	SA479-316 SS
13	Lift Lever	Plated Steel	Plated Steel	Plated Steel
14	Lever Pin	B16 Brass	B16 Brass	Plated Brass
15	Seal Wire	Steel / Lead	Steel / Lead	Stainless / Lead



SERIES 140 - 141 - 143						
ORIFICE	SLOPE	INLET	"A" DIMENSION			MAX SET PRESSURE
			PULL RING	LIFT LEVER	LBS.	
"A"	0.924	1/4"	3-3/8"	3-1/2"	0.50	450 psig
		3/8"	3-3/8"	3-1/2"	0.52	
		1/2"	3-3/8"	3-1/2"	0.54	
"B"	1.487	3/8"	3-3/4"	3-7/8"	0.52	
		1/2"	3-3/4"	3-7/8"	0.56	
		3/4"	3-3/4"	3-7/8"	0.63	

SERIES 140 - 141 - 143 CAPACITY AIR - SCFM									
SET psig	20	40	60	80	100	200	300	400	450
"A" ORIFICE SCFM	34	54	75	95	115	217	319	420	471
"B" ORIFICE SCFM	55	87	120	153	185	349	513	676	758

Set pressures not limited to this chart. Specify when ordering.
Capacities are at 3 psig or 10% (whichever is greater) over set pressure

SERIES	INLET SIZES	METALS	MIN. TEMP °F (°C)	MAX. TEMP ^{3,4} °F (°C)	MAX PRESSURE ^{1,2} psig (barg)	SERVICES	CERTIFICATIONS
140	1/4", 3/8", 1/2"	Brass	-20° -(-29°)	406° (208°)	350 (24.1)	Air / Gas / Steam	ASME XIII "UV" Air/Gas
141	1/4", 3/8", 1/2"	Stainless-Brass	-20° -(-29°)	406° (208°)	450 (31.0)	Air / Gas / Steam	ASME XIII "UV" Air/Gas
143	1/4", 3/8", 1/2"	Stainless	-20° -(-29°)	800° (427°)	450 (31.0)	Air / Gas / Steam	ASME XIII "UV" Air/Gas

SERIES 140 - 141 - 143 PART NUMBERS								
140		BC	1	M	7	N	1	125
SERIES	DESCRIPTION	ORIFICE X INLET	CONNECTION	SEATING	CAP	SERVICE	OPTIONS	SET
140	Brass	AA- 0.28 x 1/4"	1- NPT Male	M- Metal	1- Lift Lever	K- ASME XIII "UV" Air/gas	1- None	Ex.125
141	Stainless / Brass	AB- 0.28 x 3/8"	2- NPT Female	V- Viton	7- Pull Ring	N- Non-code Air/gas	3- O2 Cleaned	
143	Stainless	AC- 0.28 x 1/2"	3- BSPT Male			T- Non-code Steam	4- API Seating	
		BB- 0.39 x 3/8"	4- BSPT Female				5- O2 Cleaned / API Seating	
		BC- 0.39 x 1/2"	8- BSPP Male					
		BD- 0.39 x 3/4"	9- BSPP Female					

ORDERING AND CUSTOMER SERVICE

All product has gone through a re-naming process over the past few years. Please refer to each valve line and it's identification when ordering. Questions can be answered by contacting the Aquatrol 'tech-reps' by either phone or email at sales@aquatrol.com. Your Aquatrol representatives have over 10 years in experience...helping customers with choosing the proper valve for each application. Engineers are also on staff to assist with sizing and special usage requirements. We welcome all calls.

Visit www.aquatrol.com for expanded information, engineering prints, CAD files and option details.

INDUSTRIES

Aquatrol's valves are used in all environments intended to protect pressure and relief. Industry's we service include the following;

- Compressed gas and air
- Food/Beverage
- Pharmaceutical
- Oil/Gas and Energy
- Chemical
- Construction
- Aerospace
- Mining and Marine
- Process
- Industrial

VISIT WWW.AQUATROL.COM:

For expanded information, engineering prints, CAD files, cut sheets, certificates, options, details and more.

CONTACT US AT:

1-800-323-0688 (USA)
630-365-5400 (INTERNATIONAL)
OR SALES@AQUATROL.COM

OUR GUARANTEE/WARRANTY

Unless otherwise agreed upon, all valves are guaranteed for a period of 1 year from The date of shipment and covers all parts and labor. Applies to valves installed in accordance with ASME and industry standards for sizing and usages. Go to www.aquatrol.com for full warrantee information. All terms and conditions apply.

SAFETY AND PRECAUTIONS:

Our website has detailed safety information for installation and repair.

FOB: Aquatrol, Inc – 600 E North St – Elburn, IL 60119 USA





**ASME SAFETY & RELIEF VALVE
MANUFACTURER SINCE 1947**

**SERIES
69**



**SERIES
573**



**SERIES
743**



**SERIES
140**



**SERIES
742**



**ASME SECTION I AND XIII
SAFETY VALVE MANUFACTURER.
STEAM, AIR, GAS AND LIQUID.
PED/CE
CRN/ISO 9001/2015**

AQUATROL, INC.
600 E. NORTH STREET
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ELBURN, IL 60119

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