
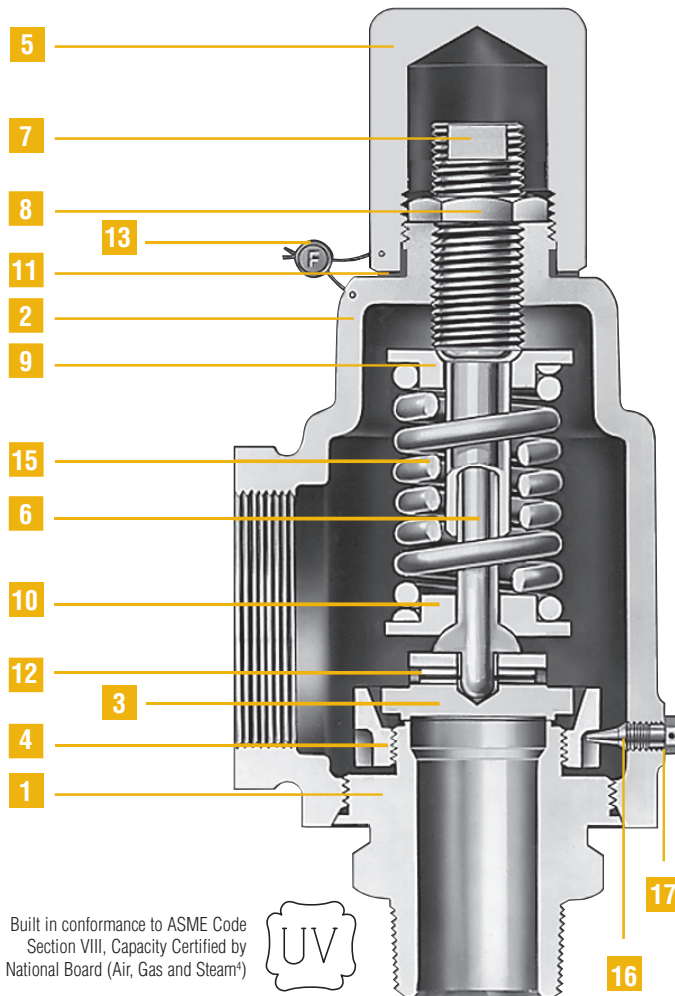


Series 2856

Pressure Relief Valves for Air, Steam, Vapor & Liquid Service



- Built in conformance to ASME Code Section VIII for Air, Steam, and Vapor Service.
- Set pressures to 300 psig.
- Brass body and trim - bronze bonnet.



Built in conformance to ASME Code Section VIII, Capacity Certified by National Board (Air, Gas and Steam*)



Bill of Materials

Item No.	Part Name	Material
1	Body	ASTM B16 H.H. Brass
2	Bonnet	SB-62 Bronze
3	Disc	ASTM B16 H.H. Brass
4	Blow Down Ring	316 St. St.
5	Cap, Plain Screwed	Brass
6	Stem	316 St. St.
7	Spring Adj. Screw	Brass
8	Jam Nut	Brass
9	Spring Button (Upper)	316 St. St.
10	Spring Button (Lower)	316 St. St.
11	Cap Gasket	316 St. St.
12	Grooved Pin	Hardened Stainless Steel
13	Wire Seal	Stainless Steel Wire/Lead Seal
14	Nameplate (not shown)	Stainless Steel
15	Spring	316 St. St.
16	Blow Down Ring Lock Screw	316 St. St.
17	Blow Down Ring Lock Screen Gasket	316 St. St.
not shown	Body Gasket (2" inlet size only)	316 St. St.

Selection Table

(Connections: MNPT x FNPT)

Type Number ¹	Valve Size	Maximum Set Pressure		Maximum Back Pressures		Materials	
		psig	barg	psig @ 100°F	barg @ 37.8°C	Body / Bonnet	Spring
	Inlet x Outlet	-400°F to +400°F	-240°C to +204°C				
285603-M20	3/4 x 1 1/4	300	20.7	50	3.45	Brass / Bronze	316 St. St.
285604-M20	1 x 1 1/2						
285606-M20	1 1/2 x 2 1/2						
285608-M20	2 x 3	250	17.2				

General Notes:

1. Type numbers shown designate valves with plain screwed caps. Test lever required for air, steam or hot water service (above 140°F / 60°C). For packed lever change the three digit type number suffix from "-M20" to "-M40". Example: 285603-M20 becomes 285603-M40.
2. Maximum set pressure for steam service is 240 psig (saturation temperature of 400°F)
3. For 1/2" x 1" size see 1896M Catalog 296C.
4. Also suitable for liquid service where ASME Code certification is not required.



Capacity Tables: ASME PRESSURE VESSEL CODE (UV)

AIR 10% OVERPRESSURE Capacities in Standard Cubic Feet Per Minute at 60° F (Note 1)				
Set Pressure (psig)	3/4	1	1-1/2	2
15	93	160	375	601
20	108	185	433	693
30	136	234	547	877
40	168	288	674	1079
50	199	342	800	1282
60	231	396	926	1484
70	263	450	1053	1686
80	294	504	1179	1889
90	326	558	1305	2091
100	357	612	1432	2293
150	515	882	2063	3305
200	673	1152	2695	4317
250	830	1423	3327	5328
300	988	1693	3325	–

STEAM 10% OVERPRESSURE Capacities in Pounds Per Hour at Saturation Temperature (Note 1)				
Set Pressure (psig)	3/4	1	1-1/2	2
15	263	451	1055	1689
20	303	520	1216	1948
30	384	658	1539	2464
40	473	810	1894	2981
50	561	961	2249	3498
60	650	1113	2604	4015
70	738	1265	2959	4532
80	827	1417	3313	5048
90	916	1569	3668	5565
100	1004	1720	4023	6082
150	1448	2479	5798	8666
200	1891	3238	7573	11249
240	2245	3846	8993	13317

NON-CODE

WATER 25% OVERPRESSURE Capacities in U.S. Gallons per minute at 70° F				
Set Pressure (psig)	3/4	1	1-1/2	2
15	10.3	18.1	41.0	72.7
20	11.9	21.0	47.3	84.0
30	14.6	25.7	58.0	102
40	16.8	29.7	67.0	118
50	18.8	33.2	74.9	132
60	20.6	36.3	82.0	145
70	22.3	39.3	88.6	157
80	23.8	42.0	94.7	168
90	25.3	44.5	100	178
100	26.6	46.9	105	187
150	32.6	57.5	129	230
200	37.7	66.4	149	265
250	42.1	74.2	167	297
300	46.1	81.3	183	–

Notes:

1. Capacities for Air & Steam at 30 PSIG and below are based on 3 psi overpressure.

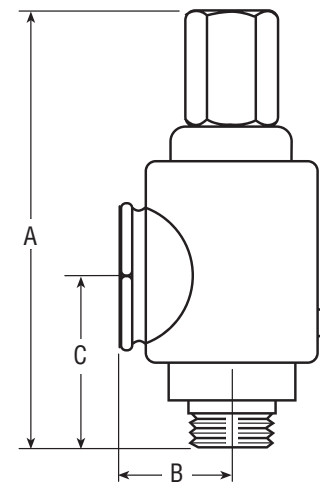
Actual Orifice Areas

Inlet Size	Vapor, Gas & Steam		Liquid	
	sq in	sq mm	sq in	sq mm
3/4"	0.240	155	0.109	70
1"	0.411	265	0.192	124
1 1/2"	0.961	620	0.433	279
2"	1.539	993	0.768	495

Note: For sizing purposes, the coefficients of discharge K_d are 0.652 for air, gas, vapor and steam; 0.576 for liquids

Dimensions & Weights

Inlet Size	A (max) All Cap Constructions		B		C		Approx. Weight	
	in.	mm.	in.	mm.	in.	mm.	Lbs.	Kg.
3/4 x 1 1/4	8 3/16	208	1 11/16	43	2 13/16	71	3.5	1.6
1 x 1 1/2	8 11/16	221	1 15/16	29	3	76	5	2.3
1 1/2 x 2 1/2	10 7/16	265	2 5/8	67	4	102	11	5.0
2 x 3	13 1/16	332	3 3/16	81	4 3/8	111	20	9.1



Farris Engineering Division of Curtiss-Wright Flow Control Corporation

10195 Brecksville Road, Brecksville, OH 44141 USA • Telephone: 440-838-7690 • Fax: 440-838-7699 • www.farrisengineering.com

Facilities: Brecksville, OH USA; Brantford, Ontario; Edmonton, Alberta, Canada; Kettering, Northants, UK; Delhi, India; Tianjin, China

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