



Job Name:	
Job Location:	
Engineer:	
Contractor:	
Tag:	
PO#:	
Rep:	
Wholesale Dist.:	

## DESCRIPTION

ASME Sections I & VIII capacity certified safety valve for overpressure protection of steam power boilers, steam & air system, pressure vessels, piping and similar equipment. Compact and economic design ideal for OEM applications.

## FEATURES

- Steam, Air or Gas Service
- ASME Section I & VIII NB Certified Capacities
- 30 - 200 psig Set Pressures @ 406°F max
- 3/8" - 1-1/4" Inlet Connections Available
- Stainless Steel Wetted Component Option
- PFA Teflon® Soft Seat
- 100% Factory Tested
- **Made in the USA**

## APPROVALS

- ASME Section I Power Boilers
- ASME Section VIII Div 1 Pressure Vessels for Steam, Air/Gas and Liquids
- Canadian Registration Number OG8547.5C
- Pressure Equipment Directive 2014/68/EU (PED)

*\*Set pressures and temperatures vary by model.  
Refer to catalog for sizing and selection information*

## STANDARD MATERIALS LIST

<b>BODY</b>	ASTM A584 Bronze
<b>NOZZLE</b>	ASTM B16 Brass
<b>SPRING</b>	Stainless Steel
<b>SEAT</b>	PFA Teflon®

## CAPACITY, LB/HR (KG/HR)

### NATIONAL BOARD CAPACITY CERTIFIED, SECTION I STEAM

SET PRESSURE PSIG (BAR)	29102/202/302	29303/402/501
30 (2.07)	164 (74)	330 (150)
100 (6.90)	423 (192)	851 (386)
200 (13.79)	794 (360)	1596 (725)

## AVAILABLE CONFIGURATIONS

MODEL NUMBER	SIZE	INSTALLED HEIGHT IN. (MM)	HEIGHT IN. (MM)
29102	3/8M x 1F	5.00 (127)	5.40 (137)
29202	1/2M x 1F	5.00 (127)	5.40 (137)
29302	3/4M x 1F	5.00 (127)	5.40 (137)
29303	3/4M x 1-1/4F	6.70 (170)	7.25 (184)
29402	1M x 1-1/4F	6.70 (170)	7.25 (184)
29501	1-1/4M x 1-1/4F	6.70 (170)	7.25 (184)

## PART NUMBER MATRIX

29	202	A	100	A
BASE MODEL NUMBER	INLET X OUTLET NPT	ASME CODE & SERVICE	SET PRESSURE (PSI)	SPECIAL OPTIONS
BRONZE WITH BRASS TRIM AND TEFLON® SOFT SEAT	102 - 3/8 X 1	A - SEC I STEAM	SET PRESSURE (PSIG)	S - STAINLESS STEEL WETTED TRIM
	202 - 1/2 X 1	K - SEC VIII AIR	(RANGE 30-200 PSIG)	(MODELS 29-202 & 29-303 ONLY)
	302 - 3/4 X 1	L - SEC VIII STEAM		C - CE/PED
	303 - 3/4 X 1-1/4			Q - PERFORMANCE (CALIBRATION TEST REPORTS
	402 - 1 X 1-1/4			*OTHER SUFFIXES - FACTORY ISSUED
	501 - 1-1/4 X 1-1/4			

*\*Not all configurations available together*

## 29 SERIES BRONZE SAFETY

### ASME SECTION I - STEAM

• Pounds per hour (kilograms per hour) saturated steam at 3% overpressure. National Board Certified. Ratings are 90% of actual.

#### US CUSTOMARY UNITS LB./HR.

PART NO. SEAT DIA. (IN.)	29-102, 29-202, 29-302 0.500	29-303, 29-402, 29-501 0.737
<b>SET PRESSURE PSIG</b>		
30	164	330
35	182	367
40	201	405
45	220	442
50	238	479
55	257	517
60	275	554
65	294	591
70	312	628
75	331	664
80	349	702
85	368	739
90	386	777
95	405	814
100	423	851
105	442	888
110	460	925
115	479	963
120	497	1,000
125	516	1,036
130	534	1,074
135	553	1,112
140	571	1,149
145	590	1,186
150	608	1,223
155	627	1,261
160	645	1,298
165	664	1,335
170	683	1,372
175	701	1,409
180	720	1,447
185	738	1,484
190	757	1,521
195	775	1,558
200	794	1,596
Approx. 1 psi increments	3.7	7.4

#### METRIC UNITS KG/HR.

PART NO. SEAT DIA. (MM)	29-102, 29-202, 29-302 12.70	29-303, 29-402, 29-501 18.72
<b>SET PRESSURE BARG</b>		
2.1	77	155
2.5	86	174
3	98	197
3.5	110	221
4	122	245
4.5	134	269
5	146	293
5.5	158	318
6	170	342
6.5	182	367
7	195	391
7.5	207	416
8	219	440
8.5	231	465
9	243	489
9.5	255	514
10	268	538
10.5	280	563
11	292	587
11.5	304	612
12	316	636
12.5	329	661
13	341	685
13.5	353	710
13.8	360	724
Approx. 0.1 barg increments	2.44	4.9

SAFETY RELIEF VALVES

## 29 SERIES BRONZE SAFETY

### ASME SECTION VIII - STEAM

• Pounds per hour (kilograms per hour) saturated steam at 10% overpressure. National Board Certified. Ratings are 90% of actual.

#### US CUSTOMARY UNITS LB./HR.

PART NO. SEAT DIA. (IN.)	29-102, 29-202, 29-302 0.500	29-303, 29-402, 29-501 0.737
SET PRESSURE PSIG		
30	164	330
35	182	367
40	201	405
45	220	442
50	238	479
55	257	517
60	275	554
65	294	591
70	312	628
75	331	664
80	349	702
85	368	739
90	386	777
95	405	814
100	423	851
105	442	888
110	460	925
115	479	963
120	497	1,000
125	516	1,036
130	534	1,074
135	553	1,112
140	571	1,149
145	590	1,186
150	608	1,223
155	627	1,261
160	645	1,298
165	664	1,335
170	683	1,372
175	701	1,409
180	720	1,447
185	738	1,484
190	757	1,521
195	775	1,558
200	794	1,596
Approx. 1 psi increments	3.7	7.4

#### METRIC UNITS KG/HR.

PART NO. SEAT DIA. (MM)	29-102, 29-202, 29-302 12.70	29-303, 29-402, 29-501 18.72
SET PRESSURE BARG		
2.1	79	158
2.5	89	179
3	102	205
3.5	115	231
4	128	257
4.5	141	284
5	154	310
5.5	167	336
6	180	362
6.5	193	388
7	206	414
7.5	219	441
8	232	467
8.5	245	493
9	258	519
9.5	271	545
10	284	571
10.5	297	598
11	310	624
11.5	323	650
12	336	676
12.5	349	702
13	362	728
13.5	375	755
13.8	383	770
Approx. 0.1 barg increments	2.6	5.22

SAFETY RELIEF VALVES

## 29 SERIES BRONZE SAFETY

### ASME SECTION VIII - AIR

• Standard cubic feet per minute (normalized cubic meters per hour) of air at 10% overpressure. National Board Certified. Ratings are 90% of actual.

#### US CUSTOMARY UNITS SCFM

PART NO. SEAT DIA. (IN.)	29-102, 29-202, 29-302 0.500	29-303, 29-402, 29-501 0.737
<b>SET PRESSURE PSIG</b>		
30	61	123
35	68	137
40	75	151
45	82	165
50	89	180
55	96	193
60	103	208
65	110	222
70	117	236
75	124	250
80	131	264
85	138	278
90	145	292
95	152	307
100	159	321
105	166	335
110	173	349
115	180	363
120	187	378
125	194	392
130	201	406
135	208	420
140	215	434
145	222	448
150	229	463
155	236	477
160	243	491
165	250	505
170	257	519
175	265	533
180	272	547
185	279	562
190	286	576
195	293	590
200	300	604
Approx. 1 psi increments	1.4	2.8

#### METRIC UNITS Nm<sup>3</sup>/HR.

PART NO. SEAT DIA. (MM)	29-102, 29-202, 29-302 12.70	29-303, 29-402, 29-501 18.72
<b>SET PRESSURE BARG</b>		
2.1	105	210
2.5	118	238
3	136	273
3.5	153	308
4	170	342
4.5	188	377
5	205	412
5.5	222	447
6	240	482
6.5	257	516
7	274	551
7.5	291	586
8	309	621
8.5	326	655
9	343	690
9.5	361	725
10	378	760
10.5	395	795
11	413	829
11.5	430	864
12	447	899
12.5	464	934
13	482	969
13.5	499	1,003
13.8	509	1,024
Approx. 0.1 barg increments	3.46	6.96

SAFETY RELIEF VALVES