

KUNKLE MODELS 215V/337 VACUUM RELIEF AND SAFETY VALVES SAFETY AND RELIEF PRODUCTS

Cast iron non-code vacuum relief and ASME Section VIII and Section XIII air/gas, 'UV', National Board certified safety valves, both PED certified for non-hazardous gas



MODEL 215V



FEATURES

- Large nozzle design provides high capacity.
- Flat bronze valve seats are lapped for optimum performance.
- Warn ring offers easy adjustability for precise opening with minimum pre-open or simmer.
- Pivot between disc and spring corrects misalignment and compensates for spring side thrust.
- Model 215V has seal cap for vacuum service.
- Model 337 has 'lift-pin' lift device for easy manual testing.
- Bronze nozzle and disc as standard. Optional SS trim available.
- Each valve tested and inspected for pressure setting and leakage.

NOTES

- 1. ASME valves made from cast iron; A126 may not be used for lethal or flammable service.
- 2. Model 215V valves are not suitable for positive pressure.

GENERAL APPLICATION

Model 215V is suitable for the protection of high volume vacuum pumps, conveying systems and light gauge tanks. Model 337 for the protection of low to medium pressure high volume blowers, compressors, conveying systems and bulk hauling trailers/equipment.

CALIFORNIA PROPOSITION 65 WARNING

This product can expose you to chemicals including nickel, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov.

TECHNICAL	DATA
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Connections: Temperature range:

Vacuum range (Model 215V):

Pressure range (Model 337):

Codes Model 215V:

Model 337:

2 to 29 in. Hg (67.7 to 982 mbarg)

Threaded NPT or BSPT

-20 to 406°F

(-29 to 208°C)

1 to 60 psig (0.07 to 4.1 barg)

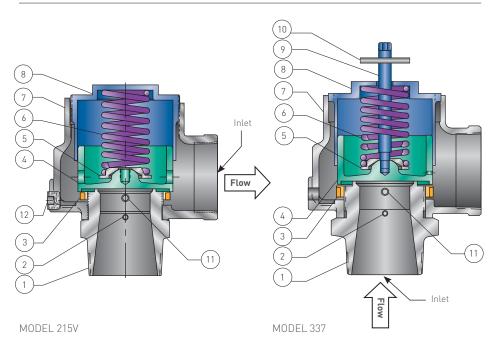
PED

ASME VIII, XIII (UV Designator) and PED



KUNKLE MODELS 215V/337 VACUUM RELIEF AND SAFETY VALVES SAFETY AND RELIEF PRODUCTS

PARTS AND MATERIALS



MODELS 215V AND 337

No.	Part name	Model 215V	Model 337		
1	Nozzle ^[1]	Bronze, SB62	Bronze, SB62		
		or brass B283-C48500	or brass B283-C48500		
2	Set screw	Steel A108-1018 brass plated	Steel A108-1018 brass plated		
3	Regulator ring	Bronze B584 alloy 84400	Bronze B584-C84400		
4	Disc ^[1]	Bronze B584 alloy 84400	Bronze B584-C84400		
5	Spring step	Steel A-109 coated ^[3]	Steel A109 coated ^[3]		
6	Spring	SS, A313 TY 302 or 17-7	SS, A313 TY 302 or 17-7		
7	Body	Cast iron A-126, CL A or B	Iron A-126, CL A or B		
8	Compression screw	Bronze, B-584 alloy 84400	Bronze, B584-C84400		
9	Stem ^[2]	N/A	Brass B16		
10	Lift pin ^[2]	N/A	Steel, zinc plated		
11	Regulator ring set screw	N/A	Brass B16		
12	NPT drainplug	Steel A108-1018	N/A		

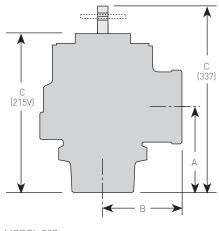
NOTES

- 1. Disc and nozzle available in SSA-479 TY 316.
- 2. Stem and lift pin available on Model 337 only.
- 3. Corrosion preventative coating.

SPECIFICATIONS

Size inlet and outlet					
in. (mm)	Α	В	C Model 215V	C Model 337	Weight, lb (kg)
2 (50)	3 1/4 (82.5)	3 (76.2)	61/2 (165.1)	7 (177.8)	8 (3.6)
2 1/2 (63)	3¾ (95.2)	3 1/2 (88.9)	75/8(194.6)	8 (203.2)	12 (5.4)
3 (80)	41⁄4 (107.9)	4 (101.6)	81⁄2 (215.9)	9 (228.6)	20 (9.07)

Dimensions are for reference only.



MODEL 337

CAPACITIES

MODEL 337, NON-CODE^[1] AND ASME SECTION VIII AND SECTION XIII AIR (SCFM), FLOW COEFFICIENT = 0.860

	Valve inlet and outlet size					
	2 in.	3 in.				
Set pressure	Orifice area, in ²					
(psig)	1.916	2.786	4.037			
1	250	364	527			
5	553	805	1166			
10	773	1124	1628			
15	988	1436	2081			
20	1139	1656	2399			
25	1290	1875	2718			
30	1441	2095	3036			
35	1607	2337	3386			
40	1773	2578	3736			
45	1939	2820	4086			
50	2105	3061	4436			
55	2271	3303	4786			
60	2438	3544	5136			

MODEL 337, NON-CODE^[1] AND ASME SECTION VIII AND SECTION XII AIR (Nm³/h), FLOW COEFFICIENT = 0.860 - METRIC UNITS

	Valve inlet and outlet size				
	50 mm	80 mm			
Set pressure		Orifice area, cm ²			
(barg)	12.361	17.974	26.045		
0.5	1056	1536	2226		
1.0	1468	2135	3094		
1.5	1901	2765	4006		
2.0	2251	3273	4743		
2.5	2631	3825	5543		
3.0	3015	4385	6553		
3.5	3400	4944	7164		
4.0	3784	5503	7974		

NOTE

1. No code stamp or 'NB' on nameplate below 1.1 barg set.

NOTE

1. No code stamp or 'NB' on nameplate below 15 psig set.

MODEL 215V, NON-CODE VACUUM AIR (SCFM),

FLOW COEFFICIENT = 0.860						
	Valve inlet and outlet size					
	2 in.	3 in.				
Relief set		Orifice area, in ²				
(in. Hg)	1.916	2.786	4.037			
2	239	347	503			
5	352	512	742			
10	433	630	912			
15	444	646	936			
20	444	646	936			
29	444	646	936			

NOTE

1. Based on 10% accumulation.

MODEL 215V, NON-CODE VACUUM AIR (Nm³/h), FLOW COEFFICIENT = 0.860 - METRIC UNITS

		Valve inlet and outlet size	
	50 mm	63 mm	80 mm
Relief set		Orifice area, cm ²	
(mbarg)	12.361	17.974	26.045
50	330	481	696
100	453	658	954
150	536	779	1129
200	597	868	1257
250	641	933	1351
300	673	979	1419
350	694	1010	1463
400	705	1026	1486
450	708	1030	1492
500	713	1037	1503
550	713	1037	1503
600	713	1037	1503
650	713	1037	1503
700	713	1037	1503
750	713	1037	1503

NOTE

1. Based on 10% accumulation.

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SELEC	TION G	UIDE									
Exam	ple:			215V	-	H	01	Α	Q	E	001
Model											
215V											
0337											
Inlet s	ize										
н	2 in. (50 mm)									
J	2 ½ ir	. (63 mm)									
К	3 in. (80 mm)									
Variat	ion										
01	Bronz	e disc and nozzle									
03	SS di	sc and nozzle									
60	BSPT	connections									
63	SS di	sc and nozzle with BSI	PT connections	5							
Desigr	n revisio	n									
Indicat	tes non-i	nterchangeable revisi	on								
Currer	nt design	is at revision 'A'									
Valve	service										
Κ	Air As	SME Section VIII and S	ection XIII (Mo	del 337 o	only)						
Q	Vacu	ım (Model 215V only)									
Ν	Non-	code air/gas (Model 33	87 only)								
Spring	g materia	ıl									
Model	215V:										
Е	SST T	ype 302 or Type 17-7									
Model	337:										
Е	SST Type 302 (H-orifice up to 8 psi; J-orifice up to 20 psi; K-orifice up to 25 psi)										
М	SST Type 17-7 (H-orifice above 8 psi; J-orifice above 20 psi; K-orifice above 25 psi)										
Set pr	essure										
Model	337	1 psig (0.7 barg) (00	01) to 60 psig (4.1 barg)	(0060)						
Model 215V		2 in. Hg (68 mbarg)	(0002) to 29 in.	Hg (982	mbarg) (0029)	vacuum	۱			

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