

KUNKLE SAFETY AND RELIEF PRODUCTS
 MODELS 215V AND 337

Model 215V is non-code vacuum relief. PED certified for non-hazardous gas.

Model 337 is ASME Section VIII Air/Gas "UV" National Board Certified Safety Valve. PED certified for non-hazardous gas.



Model 215V



Model 337

Model descriptions

Model 337: has "lift-pin" lift device for easy manual testing.

Model 215V: seal cap for vacuum service
 All adjustments are factory sealed to help prevent tampering or disassembly.

Option

- Stainless Steel (SS) trim. (nozzle and disc) (variation 03)

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 preopen or simmer.
- Pivot between disc and spring corrects misalignment and compensates for spring side thrust.
- Each Kunkle valve is tested and inspected for pressure setting and leakage.

Technical data
Vacuum Limits

Model 215V:
 2" Hg to 29" Hg [67.7 to 982 mbarg]
 -20° to 406°F [-29° to 208°C]

Code: **CE**

Pressure and Temperature Limits

Model 337:
 1 to 60 psig [0.07 to 4.1 barg]
 -20° to 406°F [-29° to 208°C]

Code:  **CE**

Note:

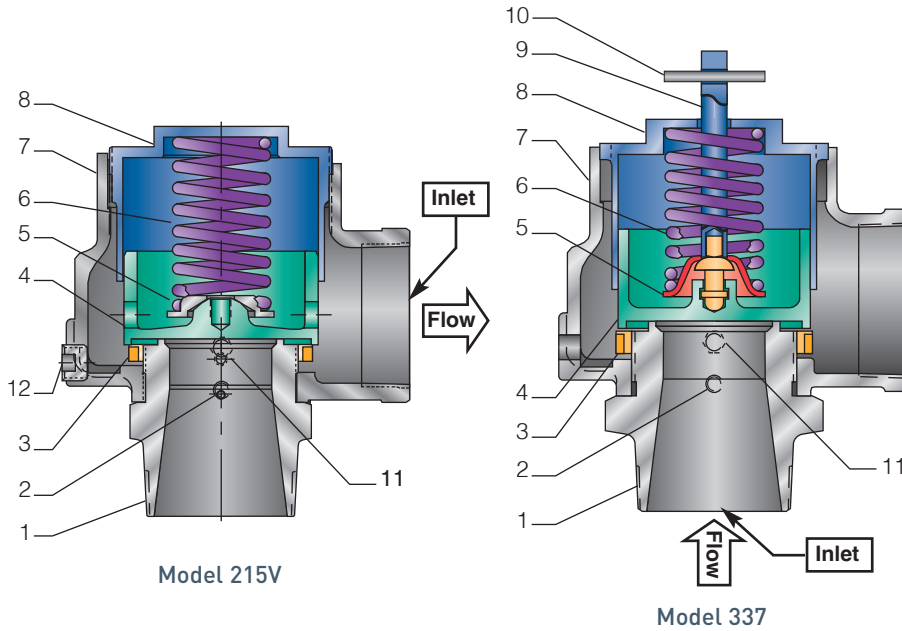
1. ASME Valves made from cast iron; A126 may not be used for lethal or flammable service.
2. Model 215V Valves are not suitable for positive pressure.

Applications

- Protection of low to medium pressure high volume blowers, compressors and pneumatic conveying systems.
- Bulk hauling trailers/equipment.
- Light gauge tanks.
- Protection of high volume vacuum pumps and conveying systems.

KUNKLE SAFETY AND RELIEF PRODUCTS
 MODELS 215V AND 337

Parts and Materials



Models 215V and 337

| No. | Part Name | 215V | 337 |
|-----|--------------------------|-----------------------------------|-----------------------------------|
| 1 | Nozzle ¹ | Bronze, SB62 or Brass B283-C48500 | Bronze, SB62 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 |

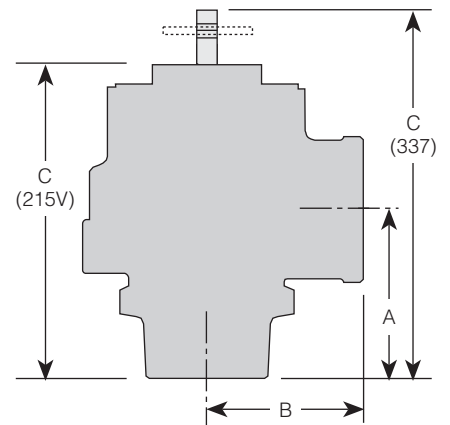
Specifications

| Size Inlet and Outlet | Dimensions, in [mm] | | | | Weight lb [kg] |
|-----------------------|---------------------|--------------|---------------|-----------|----------------|
| | A | B | C 215V | C 337 | |
| 2" [50.8 mm] | 3 1/4 [82.5] | 3 [76.2] | 6 1/2 [165.1] | 7 [177.8] | 8 [3.6] |
| 2 1/2" [63.5 mm] | 3 3/4 [95.2] | 3 1/2 [88.9] | 7 5/8 [194.6] | 8 [203.2] | 12 [5.4] |
| 3" [76.2 mm] | 4 1/4 [107.9] | 4 [101.6] | 8 1/2 [215.9] | 9 [228.6] | 20 [9.07] |

Dimensions are for reference only.

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.



Model 337

Capacities

**Model 337, Non-code¹ and ASME Section VIII
 Air (SCFM), Flow Coefficient = 0.860**

| Set Pressure (psig) | Valve Inlet and Outlet Size | | |
|---------------------|-----------------------------|--|-------------|
| | 2" 1.916 | 2 1/2" Orifice Area, in ² 2.786 | 3" 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 |

Note:

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

**Model 337, Non-code¹ and ASME Section VIII
 Air [Metric, Nm³/h]**

| Set Pressure [barg] | Valve Inlet and Outlet Size | | |
|---------------------|------------------------------------|--|------------------------------------|
| | 50 mm [12.361 cm ²] | 63 mm Orifice Area [17.974 cm ²] | 80 mm [26.045 cm ²] |
| 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.

**Model 215V, Non-code Vacuum Air (SCFM),
 Flow Coefficient = 0.860**

| Relief Set (in, HG) | Valve Inlet and Outlet Size | | |
|---------------------|-----------------------------|--|-------------|
| | 2" 1.916 | 2 1/2" Orifice Area, in ² 2.786 | 3" 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 [Metric, Nm³/h]

| Relief Set [mbarg] | Valve Inlet and Outlet Size | | |
|--------------------|------------------------------------|--|------------------------------------|
| | 50 mm [12.361 cm ²] | 63 mm Orifice Area [17.974 cm ²] | 80 mm [26.045 cm ²] |
| 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.

KUNKLE SAFETY AND RELIEF PRODUCTS

MODELS 215V AND 337

Model Number/Order Guide

| Model Number Position | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|-----------------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|
|-----------------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|

| | | | | | | | | | | | | | | | |
|---------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Example | 2 | 1 | 5 | V | — | H | 0 | 1 | A | Q | E | 0 | 0 | 1 | 5 |
|---------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

Model

215V
0337

Inlet Size

H - 2" [50.8 mm]
J - 2 1/2" [63.5 mm]
K - 3" [76.2 mm]

Variation

01 - Bronze Disc and Nozzle
03 - SS Disc and Nozzle
60 - BSPT Connections
63 - SS Disc and Nozzle with BSPT Connections

Design Revision

Indicates non-interchangeable revision.
Current Design is at Revision "A."

Valve Service

K - Air ASME Section VIII (Model 337 only)
Q - Vacuum (Model 215V only)
N - Non-code Air/Gas (Model 337 only)

Spring Material

215V:
E - SST Type 302 or Type 17-7
337:
E - SST Type 302
(H-Orifice up to 8 psi; J-Orifice up to 20 psi; K-Orifice up to 25 psi)
M - SST Type 17-7
(H-Orifice above 8 psi; J-Orifice above 20 psi; K-Orifice above 25 psi)

Set Pressure

Model 337, 1 psig [0.7 barg] [0001] to 60 psig [4.1 barg] [0060]
Model 215V, 2" Hg [68 mbarg] [0002] to 29" Hg [982 mbarg] [0029] vacuum



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