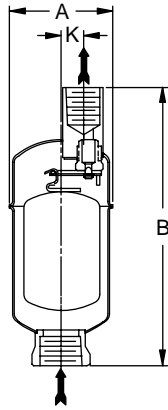
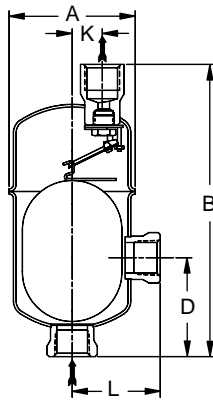


Free Floating Lever Air/Gas Vents—All Stainless Steel

For Pressures to 600 (41 bar) or Specific Gravity Down to 0.50



Model 11-AV



Model 22-AV and 13-AV



The Armstrong all-stainless steel guided lever air vents have been developed to provide positive venting of air/gases under pressure.

The body and cap and all working parts of the No. 11-AV, 22-AV and 13-AV are made of high strength, corrosion resistant stainless steel. Body and caps are welded together to form a permanently sealed, tamperproof unit with no gaskets. Elliptical floats and high leverage provide up to 115 SCFM capacity for these compact air/gas vents. Lever action is guided to assure proper seating of the valve under all operating conditions.

11-AV, 22-AV and 13-AV—All stainless steel construction where exposure to either internal or external corrosion is a problem. These air/gas vents have the same proven free floating mechanisms used in other Armstrong steam traps. Pressures to 600 psi @ 100°F.

For a fully detailed certified drawing, refer to list below:
11-AV CD #1066
13-AV and 22-AV CD #1086

| Physical Data | | | | | | |
|--------------------------------------|---|----------|---|-----|---|-----|
| Model No. | 11-AV | | 22-AV | | 13-AV | |
| Pipe Connections | 1/2, 3/4** | 15, 20** | 3/4 | 20 | 1 | 25 |
| "A" | 2-3/4 | 70 | 3-7/8 | 99 | 4-1/2 | 114 |
| "B" | 7-1/4 | 184 | 8-13/16 | 224 | 11-3/8 | 289 |
| "D" | — | — | 3-3/8 | 86 | 6-1/8 | 156 |
| "K" | 9/16 | 14 | 7/8 | 22 | 1-3/16 | 30 |
| "L" | — | — | 2-5/8 | 67 | 3-1/4 | 83 |
| Weight, lb (kg) | 1-3/4 (0.80) | | 5 (2.3) | | 7-1/2 (3.4) | |
| Max. Allow. Pressure (Vessel Design) | 500 psig @ 100°F (34 bar @ 38°C) 440 psig @ 500°F (30 bar @ 260°C) | | 600 psig @ 100°F (41 bar @ 38°C) 475 psig @ 500°F (33 bar @ 260°C) | | 570 psig @ 100°F (39 bar @ 38°C) 490 psig @ 500°F (34 bar @ 260°C) | |

** 1/2" (15 mm) outlet.

| List of Materials | | | | |
|-------------------|-----------------|-----------------|-----------------|---------------------------------|
| Model No. | Valve & Seat | Leverage System | Float | Body & Cap |
| 11-AV | *440 | 303/304 | 304 | Sealed Stainless Steel 304-L |
| 22-AV | Stainless Steel | Stainless Steel | Stainless Steel | |
| 13-AV | Steel | Steel | Steel | |

*Type 316 SS valve and seat available. Consult factory.

All dimensions and weights are approximate. Use certified print for exact dimensions. Design and materials are subject to change without notice.

Free Floating Lever Air/Gas Vents—All Stainless Steel

For Pressures to 600 (41 bar) or Specific Gravity Down to 0.50



Maximum Operating Pressures of free floating lever vents with weighted floats for different orifice sizes, and the specific gravities on which they can be used.

| 11-AV Maximum Operating Pressures | | | | |
|-----------------------------------|----------------------------|----|-------------------|----|
| Minimum Specific Gravity | 0.75 | | 0.50 | |
| Float wt., oz (g) | 2.90 (82) Standard | | 2.08 (59) Special | |
| Orifice Size (in) | Maximum Operating Pressure | | | |
| | psi | | bar | |
| 1/8 | 178 | 12 | 118 | 8 |
| #38 | 267 | 18 | 177 | 12 |
| 5/64 | 400 | 28 | 311 | 21 |

| 22-AV Maximum Operating Pressure | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|----------------------------|------|-----------|------|-----------|------|-----------|------|-----------|------|-----------|------|-----------|------|-----------|------|-----------|------|-----------|------|-----------|------|-----|
| Specific Gravity* | 1.00 | | 0.95 | | 0.90 | | 0.85 | | 0.80 | | 0.75 | | 0.70 | | 0.65 | | 0.60 | | 0.55 | | 0.50 | | |
| Float wt., oz (g) | 10.0 (282) | | 9.5 (268) | | 9.0 (254) | | 8.5 (240) | | 8.0 (226) | | 7.5 (212) | | 5.4 (152) | | 5.0 (141) | | 4.6 (130) | | 4.2 (119) | | 3.8 (109) | | |
| Orifice Size (in) | Maximum Operating Pressure | | | | | | | | | | | | | | | | | | | | | | |
| | psi | | bar | | psi | | bar | | psi | | bar | | psi | | bar | | psi | | bar | | psi | | bar |
| 5/16 | 35 | 2.4 | 33 | 2.3 | 31 | 2.2 | 30 | 2.0 | 28 | 1.9 | 26 | 1.8 | 19 | 1.3 | 18 | 1.2 | 16 | 1.1 | 15 | 1.0 | 14 | 0.9 | |
| 1/4 | 57 | 3.9 | 54 | 3.7 | 51 | 3.5 | 49 | 3.4 | 46 | 3.2 | 43 | 3.0 | 31 | 2.1 | 29 | 2.0 | 27 | 1.8 | 24 | 1.7 | 22 | 1.5 | |
| 3/16 | 126 | 8.7 | 120 | 8.2 | 113 | 7.8 | 107 | 7.4 | 101 | 7.0 | 95 | 6.5 | 68 | 4.7 | 64 | 4.4 | 59 | 4.1 | 54 | 3.7 | 49 | 3.4 | |
| 5/32 | 217 | 14.9 | 206 | 14.2 | 195 | 13.5 | 185 | 12.7 | 174 | 12.0 | 163 | 11.2 | 118 | 8.1 | 110 | 7.6 | 101 | 7.0 | 93 | 6.4 | 85 | 5.8 | |
| 1/8 | 371 | 25.6 | 352 | 24.3 | 334 | 23.0 | 316 | 21.8 | 297 | 20.5 | 279 | 19.2 | 202 | 13.9 | 187 | 12.9 | 173 | 12.0 | 159 | 11.0 | 145 | 10.0 | |
| 7/64 | 474 | 32.7 | 451 | 31.1 | 427 | 29.5 | 404 | 27.9 | 380 | 26.2 | 357 | 24.6 | 258 | 17.8 | 240 | 16.5 | 222 | 15.3 | 204 | 14.0 | 186 | 12.8 | |
| #38 | 590 | 40.7 | 561 | 38.7 | 532 | 36.7 | 503 | 34.7 | 473 | 32.7 | 444 | 30.6 | 321 | 22.1 | 298 | 20.6 | 276 | 19.0 | 253 | 17.5 | 231 | 15.9 | |
| 5/64 | 600 | 41.4 | 600 | 41.4 | 600 | 41.4 | 600 | 41.4 | 600 | 41.4 | 600 | 41.4 | 473 | 32.6 | 440 | 30.3 | 407 | 28.1 | 374 | 25.8 | 341 | 23.5 | |

| 13-AV Maximum Operating Pressures | | | | | | | | | | | | | | | | | | | |
|-----------------------------------|----------------------------|-----|------------|-----|------------|-----|------------|-----|------------|-----|------------|------|------------|------|-----------|-----|-----------|-----|-----|
| Specific Gravity* | 1.00 | | 0.95 | | 0.90 | | 0.85 | | 0.80 | | 0.75 | | 0.70 | | 0.65 | | 0.60 | | |
| Float wt., oz (g) | 14.9 (423) | | 14.2 (402) | | 13.4 (381) | | 12.7 (360) | | 12.0 (339) | | 11.2 (318) | | 10.5 (296) | | 9.7 (275) | | 9.0 (254) | | |
| Orifice Size (in) | Maximum Operating Pressure | | | | | | | | | | | | | | | | | | |
| | psi | | bar | | psi | | bar | | psi | | bar | | psi | | bar | | psi | | bar |
| 1/2 | 21 | 1.5 | 20 | 1.4 | 19 | 1.3 | 18 | 1.3 | 17 | 1.2 | 16 | 1.1 | 15 | 1.0 | 14 | 1.0 | 13 | 0.9 | |
| 3/8 | 45 | 3.1 | 43 | 3.0 | 41 | 2.8 | 38 | 2.7 | 36 | 2.5 | 34 | 2.3 | 32 | 2.2 | 30 | 2.0 | 27 | 1.9 | |
| 5/16 | 72 | 5.0 | 69 | 4.7 | 65 | 4.5 | 61 | 4.2 | 58 | 4.0 | 54 | 3.8 | 51 | 3.5 | 47 | 3.3 | 44 | 3.0 | |
| 9/32 | 96 | 6.6 | 91 | 6.3 | 87 | 6.0 | 82 | 5.6 | 77 | 5.3 | 72 | 5.0 | 68 | 4.7 | 63 | 4.3 | 58 | 4.0 | |
| 1/4 | 144 | 9.9 | 137 | 9.4 | 130 | 8.9 | 123 | 8.5 | 116 | 8.0 | 109 | 7.5 | 102 | 7.0 | 94 | 6.5 | 87 | 6.0 | |
| 7/32 | 206 | 14 | 196 | 13 | 186 | 13 | 176 | 12 | 165 | 11 | 155 | 10.7 | 145 | 10.0 | 135 | 9.3 | 125 | 8.6 | |
| 3/16 | 309 | 21 | 294 | 20 | 279 | 19 | 264 | 18 | 249 | 17 | 234 | 16 | 218 | 15 | 203 | 14 | 188 | 13 | |
| 5/32 | 484 | 33 | 460 | 32 | 437 | 30 | 413 | 28 | 389 | 27 | 365 | 25 | 342 | 24 | 318 | 22 | 294 | 20 | |
| 1/8 | 570 | 39 | 570 | 39 | 570 | 39 | 570 | 39 | 570 | 39 | 570 | 39 | 570 | 39 | 570 | 39 | 570 | 39 | |
| 7/64 | 570 | 39 | 570 | 39 | 570 | 39 | 570 | 39 | 570 | 39 | 570 | 39 | 570 | 39 | 570 | 39 | 570 | 39 | |

*If specific gravity falls between those shown, use next lowest: e.g., if actual gravity is 0.73, use 0.70 specific gravity data.

Air Vents