



WA44C Type Pound-grade balance bellows spring-loaded safety valve

Main property and specification

| | | | | | |
|-------------------------|----------|--------------------------------------|-------|--------|------|
| Normal Pressure | PN | 150 | 300 | 600 | 900 |
| Body strength | Ps (MPa) | 3.0 | 7.5 | 15 | 22.5 |
| Set pressure | Pk (MPa) | 0.1~2 | 1.6~5 | 3.2~10 | 8~15 |
| Seal pressure | Pm | 90%Pk | | | |
| Reseating pressure | Ph | ≥90%Pk | | | |
| Relieving pressure | Pp | ≤1.1Pk | | | |
| Lift | H (mm) | ≥1/4 do | | | |
| Appropriate temperature | C | ≤300℃ | | | |
| | P、R | ≤200℃ | | | |
| Appropriate medium | C | Gas, liquid | | | |
| | P、R | Nitric Acid, Acetic Acid, Gas Liquid | | | |

Code of throat diameter

| Code | Diameter | Code | Diameter |
|------|----------|------|----------|
| D | 10 | L | 50 |
| E | 13 | M | 55 |
| F | 16 | N | 60 |
| G | 20.5 | P | 72 |
| H | 26 | Q | 96 |
| J | 33 | R | 115 |
| K | 40 | T | 148 |

Main Dimension

| WA44C150, WA44C150P, WA44C150R | | | | | | | | | | | | | | | | | |
|--------------------------------|----------------|-----|-------|-----|----|----|-------|-----|-----|-------|-----|----|-----|--------|-----|-----|-----|
| Normal Diameter DN (in) | Dimension (mm) | | | | | | | | | | | | | | | | |
| | do | D | D1 | D2 | b | t | z-φ d | DN' | D' | D1' | D2' | b' | t' | z-φ d' | L | L1 | H |
| 1/2"×3/4" | D | 89 | 60.5 | 35 | 12 | 6 | 4-15 | 20 | 98 | 70 | 43 | 14 | 1.6 | 4-15 | 90 | 90 | 340 |
| 3/4" × 1" | D | 98 | 70 | 43 | 14 | 6 | 4-15 | 25 | 108 | 79.5 | 51 | 15 | 1.6 | 4-15 | 96 | 92 | 350 |
| 1" × 1 1/2" | D | 108 | 79.5 | 51 | 15 | 7 | 4-15 | 40 | 127 | 98.5 | 73 | 18 | 1.6 | 4-15 | 115 | 105 | 360 |
| 1" × 2" | D | 108 | 79.5 | 51 | 15 | 7 | 4-15 | 50 | 152 | 120.5 | 92 | 18 | 1.6 | 4-19 | 115 | 105 | 360 |
| 1 1/2" × 2" | G | 127 | 98.5 | 73 | 18 | 6 | 4-15 | 50 | 152 | 120.5 | 92 | 18 | 1.6 | 4-19 | 121 | 124 | 380 |
| 1 1/2" × 2 1/2" | G | 127 | 98.5 | 73 | 18 | 6 | 4-15 | 65 | 178 | 139.5 | 105 | 20 | 1.6 | 4-19 | 121 | 124 | 390 |
| 1 1/2" × 3" | G | 127 | 98.5 | 73 | 18 | 6 | 4-15 | 80 | 190 | 152.5 | 127 | 22 | 1.6 | 4-19 | 124 | 130 | 390 |
| 2" × 2 1/2" | H | 152 | 120.5 | 92 | 18 | 6 | 4-19 | 65 | 178 | 139.5 | 105 | 20 | 1.6 | 4-19 | 124 | 130 | 410 |
| 2" × 3" | J | 152 | 120.5 | 92 | 18 | 6 | 4-19 | 80 | 190 | 152.5 | 127 | 22 | 1.6 | 4-19 | 124 | 130 | 410 |
| 2 1/2" × 4" | J | 178 | 139.5 | 105 | 20 | 7 | 4-19 | 100 | 229 | 190.5 | 157 | 24 | 1.6 | 8-19 | 143 | 137 | 410 |
| 3" × 4" | L | 190 | 152.5 | 127 | 22 | 10 | 4-19 | 100 | 229 | 190.5 | 157 | 24 | 1.6 | 8-19 | 162 | 156 | 480 |
| 4" × 6" | N | 229 | 190.5 | 157 | 24 | 12 | 8-19 | 150 | 279 | 241.5 | 216 | 26 | 1.6 | 8-22 | 229 | 181 | 560 |
| 6" × 8" | P | 279 | 241.5 | 216 | 26 | 10 | 8-22 | 200 | 343 | 298.5 | 270 | 29 | 1.6 | 8-22 | 241 | 240 | 790 |
| 8" × 10" | R | 343 | 298.5 | 270 | 29 | 10 | 8-22 | 250 | 406 | 362 | 324 | 31 | 1.6 | 12-25 | 279 | 276 | 840 |
| 12" × 14" | T | 483 | 432 | 381 | 32 | 10 | 12-25 | 350 | 533 | 476 | 413 | 35 | 1.6 | 12-28 | 370 | 360 | 920 |



| WA44C300, WA44C300P, WA44C300R | | | | | | | | | | | | | | | | | |
|--------------------------------|----------------|-----|-------|-----|----|----|-------|-----|-----|-------|-----|----|-----|--------|-----|-----|-----|
| Normal Diameter DN (in) | Dimension (mm) | | | | | | | | | | | | | | | | |
| | do | D | D1 | D2 | b | t | z-φ d | DN' | D' | D1' | D2' | b' | t' | z-φ d' | L | L1 | H |
| 12" × 3/4" | D | 95 | 66.5 | 35 | 15 | 6 | 4-15 | 20 | 98 | 70 | 43 | 14 | 1.6 | 4-15 | 90 | 90 | 340 |
| 3/4" × 1" | D | 117 | 82.5 | 43 | 16 | 10 | 4-19 | 25 | 105 | 79.5 | 51 | 15 | 1.6 | 4-15 | 96 | 92 | 350 |
| 1" × 1 1/2" | D | 124 | 90 | 51 | 18 | 7 | 4-19 | 40 | 127 | 98.5 | 73 | 18 | 1.6 | 4-15 | 115 | 105 | 360 |
| 1" × 2" | D | 124 | 90 | 51 | 18 | 6 | 4-19 | 50 | 152 | 120.5 | 92 | 18 | 1.6 | 4-19 | 115 | 105 | 360 |
| 1 1/2" × 2" | F | 156 | 114.5 | 73 | 20 | 6 | 4-22 | 50 | 152 | 120.5 | 92 | 18 | 1.6 | 4-19 | 121 | 124 | 380 |
| 1 1/2" × 2 1/2" | F | 156 | 114.5 | 73 | 20 | 9 | 4-22 | 65 | 178 | 139.5 | 105 | 20 | 1.6 | 4-19 | 121 | 124 | 390 |
| 1 1/2" × 3" | F | 156 | 114.5 | 73 | 20 | 6 | 4-22 | 80 | 190 | 152.5 | 127 | 22 | 1.6 | 4-19 | 124 | 130 | 390 |
| 2" × 2 1/2" | H | 165 | 127 | 92 | 22 | 6 | 8-19 | 65 | 178 | 139.5 | 105 | 20 | 1.6 | 4-19 | 124 | 130 | 410 |
| 2" × 3" | H | 165 | 127 | 92 | 22 | 6 | 8-19 | 80 | 190 | 152.5 | 127 | 22 | 1.6 | 4-19 | 124 | 130 | 410 |
| 2 1/2" × 4" | J | 190 | 149.5 | 105 | 24 | 7 | 8-22 | 100 | 229 | 190.5 | 157 | 24 | 1.6 | 8-19 | 143 | 137 | 420 |
| 3" × 4" | L | 210 | 168 | 127 | 28 | 10 | 8-22 | 100 | 229 | 190.5 | 157 | 24 | 1.6 | 8-19 | 162 | 156 | 480 |
| 4" × 6" | N | 254 | 200 | 157 | 32 | 12 | 8-22 | 150 | 279 | 241.5 | 216 | 26 | 1.6 | 8-22 | 229 | 181 | 560 |
| 6" × 8" | P | 318 | 270 | 216 | 38 | 10 | 12-22 | 200 | 343 | 298.5 | 270 | 29 | 1.6 | 8-22 | 241 | 240 | 790 |
| 8" × 10" | R | 381 | 330 | 270 | 42 | 10 | 12-25 | 250 | 406 | 362 | 324 | 31 | 1.6 | 12-25 | 279 | 276 | 840 |

Remark: 150Lb for outlet flange

| WA44C600, WA44C600P, WA44C600R | | | | | | | | | | | | | | | | | |
|--------------------------------|----------------|-----|-------|-----|----|----|-------|-----|-----|-------|-----|----|-----|--------|-----|-----|-----|
| Normal Diameter DN (in) | Dimension (mm) | | | | | | | | | | | | | | | | |
| | do | D | D1 | D2 | b | t | z-φ d | DN' | D' | D1' | D2' | b' | t' | z-φ d' | L | L1 | H |
| 3/4" × 1" | D | 117 | 82.5 | 43 | 16 | 10 | 4-19 | 25 | 108 | 79.5 | 51 | 15 | 1.6 | 4-15 | 96 | 92 | 360 |
| 1" × 2" | D | 124 | 90 | 51 | 19 | 6 | 4-19 | 50 | 152 | 120.5 | 92 | 18 | 1.6 | 4-19 | 115 | 105 | 370 |
| 1 1/2" × 2" | F | 156 | 114.5 | 73 | 22 | 10 | 4-22 | 50 | 152 | 120.5 | 92 | 18 | 1.6 | 4-19 | 152 | 124 | 370 |
| 1 1/2" × 2 1/2" | F | 156 | 114.5 | 73 | 22 | 9 | 4-22 | 65 | 178 | 139.5 | 105 | 20 | 1.6 | 4-19 | 152 | 214 | 390 |
| 1 1/2" × 3" | F | 156 | 114.5 | 73 | 22 | 6 | 4-22 | 80 | 190 | 152.5 | 127 | 22 | 1.6 | 4-19 | 152 | 124 | 400 |
| 2" × 2 1/2" | H | 165 | 127 | 92 | 26 | 6 | 8-19 | 65 | 178 | 139.5 | 105 | 20 | 1.6 | 4-19 | 162 | 154 | 400 |
| 2" × 3" | H | 165 | 127 | 92 | 26 | 6 | 8-19 | 80 | 190 | 152.5 | 127 | 22 | 1.6 | 4-19 | 162 | 154 | 420 |
| 2 1/2" × 4" | K | 190 | 149.5 | 105 | 29 | 7 | 8-22 | 100 | 229 | 190.5 | 157 | 24 | 1.6 | 8-19 | 143 | 165 | 420 |
| 3" × 4" | K | 210 | 168 | 127 | 32 | 10 | 8-22 | 100 | 229 | 190.5 | 157 | 24 | 1.6 | 8-19 | 162 | 155 | 480 |
| 4" × 6" | N | 273 | 215.9 | 157 | 38 | 12 | 8-25 | 150 | 279 | 241.5 | 216 | 26 | 1.6 | 8-22 | 210 | 200 | 560 |
| 6" × 8" | P | 356 | 292 | 216 | 46 | 10 | 12-28 | 200 | 343 | 298.5 | 270 | 29 | 1.6 | 8-22 | 241 | 240 | 790 |

Remark: 150Lb for outlet flange

| WA44C900 | | | | | | | | | | | | | | | | | |
|-------------------------|----------------|-----|-------|-----|----|----|-------|-----|-----|-------|-----|----|-----|--------|-----|-----|-----|
| Normal Diameter DN (in) | Dimension (mm) | | | | | | | | | | | | | | | | |
| | do | D | D1 | D2 | b | t | z-φ d | DN' | D' | D1' | D2' | b' | t' | z-φ d' | L | L1 | H |
| 1 1/2" × 2" | F | 178 | 124 | 73 | 32 | 10 | 4-28 | 50 | 152 | 120.5 | 92 | 18 | 1.6 | 4-19 | 115 | 124 | 380 |
| 2" × 3" | H | 216 | 165.1 | 92 | 38 | 10 | 8-25 | 80 | 190 | 152.5 | 127 | 22 | 1.6 | 4-19 | 162 | 154 | 420 |
| 3" × 4" | J | 241 | 190.5 | 127 | 38 | 10 | 8-25 | 100 | 229 | 190.5 | 157 | 24 | 1.6 | 8-19 | 181 | 184 | 480 |
| 4" × 6" | K | 292 | 235 | 150 | 44 | 12 | 8-32 | 150 | 279 | 241.5 | 216 | 26 | 1.6 | 8-22 | 222 | 197 | 560 |