

the original **BIG GUN®** SPRINKLER

TAPER RING NOZZLE PERFORMANCE (U.S. UNITS)

Flow and diameter (feet) information at various pressures with different nozzle sizes.

75 TAPER RING NOZZLE — 24° TRAJECTORY

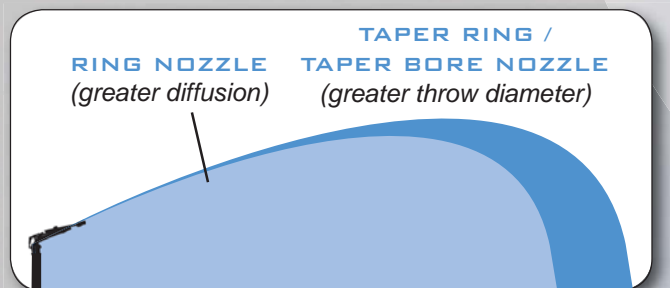
| PSI | 0.4" | | 0.45" | | 0.5" | | 0.55" | | 0.6" | | 0.65" | | 0.7" | | 0.75" | | 0.8" | |
|-----|------|-----------|-------|-----------|------|-----------|-------|-----------|------|-----------|-------|-----------|------|-----------|-------|-----------|------|-----------|
| | GPM | DIAM. FT. | GPM | DIAM. FT. | GPM | DIAM. FT. | GPM | DIAM. FT. | GPM | DIAM. FT. | GPM | DIAM. FT. | GPM | DIAM. FT. | GPM | DIAM. FT. | GPM | DIAM. FT. |
| 25 | — | — | — | — | — | — | 42 | 146 | 50 | 155 | 59 | 161 | 69 | 167 | 80 | 174 | 91 | 182 |
| 30 | — | — | — | — | 37 | 158 | 45 | 158 | 55 | 165 | 64 | 172 | 75 | 182 | 87 | 187 | 99 | 192 |
| 35 | — | — | 32 | 154 | 40 | 164 | 49 | 172 | 59 | 178 | 69 | 191 | 81 | 196 | 93 | 202 | 106 | 208 |
| 40 | 27 | 149 | 35 | 160 | 43 | 171 | 52 | 180 | 63 | 190 | 74 | 198 | 87 | 204 | 98 | 213 | 112 | 221 |
| 45 | 29 | 155 | 37 | 167 | 46 | 180 | 56 | 189 | 67 | 198 | 79 | 206 | 91 | 214 | 104 | 223 | 118 | 230 |
| 50 | 30 | 161 | 39 | 174 | 48 | 186 | 59 | 195 | 70 | 203 | 83 | 212 | 95 | 220 | 109 | 230 | 123 | 237 |
| 55 | 32 | 165 | 41 | 179 | 50 | 193 | 62 | 203 | 74 | 213 | 87 | 221 | 100 | 230 | 115 | 239 | 130 | 247 |
| 60 | 33 | 169 | 42 | 184 | 53 | 198 | 64 | 208 | 77 | 220 | 91 | 228 | 104 | 237 | 120 | 245 | 136 | 254 |
| 65 | 35 | 172 | 44 | 189 | 55 | 205 | 67 | 216 | 80 | 227 | 95 | 237 | 109 | 247 | 125 | 254 | 142 | 263 |
| 70 | 36 | 175 | 45 | 194 | 57 | 210 | 69 | 221 | 83 | 232 | 98 | 243 | 113 | 254 | 129 | 260 | 147 | 270 |
| 75 | 37 | 179 | 47 | 201 | 59 | 217 | 72 | 228 | 86 | 239 | 101 | 250 | 117 | 261 | 134 | 268 | 153 | 277 |
| 80 | 39 | 182 | 49 | 207 | 61 | 222 | 74 | 234 | 89 | 244 | 105 | 256 | 121 | 266 | 138 | 274 | 158 | 283 |

100 TAPER RING NOZZLE — 24° TRAJECTORY

| PSI | 16 mm | | 17 mm | | 18 mm | | 19 mm | | 20 mm | | 21 mm | | 22 mm | | 23 mm | | 24 mm | |
|-----|-------|-----------|-------|-----------|-------|-----------|-------|-----------|-------|-----------|-------|-----------|-------|-----------|-------|-----------|-------|-----------|
| | GPM | DIAM. FT. | GPM | DIAM. FT. | GPM | DIAM. FT. | GPM | DIAM. FT. | GPM | DIAM. FT. | GPM | DIAM. FT. | GPM | DIAM. FT. | GPM | DIAM. FT. | GPM | DIAM. FT. |
| 40 | 67 | 212 | 76 | 219 | 86 | 225 | 98 | 233 | 110 | 242 | 125 | 250 | 136 | 254 | 151 | 259 | 166 | 275 |
| 50 | 75 | 224 | 85 | 231 | 97 | 240 | 110 | 250 | 123 | 258 | 139 | 266 | 152 | 271 | 169 | 279 | 185 | 288 |
| 60 | 83 | 239 | 94 | 246 | 106 | 254 | 120 | 264 | 135 | 273 | 153 | 281 | 167 | 286 | 186 | 294 | 203 | 303 |
| 70 | 89 | 249 | 101 | 259 | 114 | 268 | 130 | 277 | 146 | 286 | 165 | 295 | 180 | 300 | 200 | 309 | 219 | 320 |
| 80 | 95 | 259 | 108 | 269 | 122 | 278 | 139 | 288 | 156 | 297 | 176 | 306 | 193 | 313 | 214 | 324 | 235 | 336 |
| 90 | 101 | 268 | 115 | 278 | 130 | 289 | 147 | 299 | 166 | 308 | 187 | 317 | 204 | 324 | 227 | 334 | 249 | 345 |
| 100 | 107 | 278 | 121 | 288 | 137 | 298 | 155 | 308 | 175 | 318 | 197 | 327 | 216 | 334 | 240 | 344 | 262 | 355 |
| 110 | 112 | 288 | 127 | 298 | 143 | 308 | 163 | 317 | 183 | 326 | 207 | 336 | 226 | 342 | 251 | 353 | 275 | 364 |

150 TAPER RING NOZZLE — 24° TRAJECTORY

| PSI | 22 mm | | 24 mm | | 26 mm | | 28 mm | | 30 mm | | 32 mm | | 34 mm | |
|-----|-------|-----------|-------|-----------|-------|-----------|-------|-----------|-------|-----------|-------|-----------|-------|-----------|
| | GPM | DIAM. FT. | GPM | DIAM. FT. | GPM | DIAM. FT. | GPM | DIAM. FT. | GPM | DIAM. FT. | GPM | DIAM. FT. | GPM | DIAM. FT. |
| 50 | 135 | 270 | 164 | 286 | 196 | 302 | 233 | 318 | 274 | 333 | 319 | 347 | 369 | 358 |
| 60 | 148 | 284 | 179 | 301 | 214 | 317 | 255 | 334 | 301 | 351 | 350 | 367 | 405 | 378 |
| 70 | 159 | 299 | 194 | 315 | 231 | 331 | 276 | 349 | 325 | 366 | 378 | 382 | 437 | 393 |
| 80 | 170 | 310 | 207 | 330 | 247 | 346 | 295 | 364 | 347 | 381 | 404 | 397 | 467 | 409 |
| 90 | 181 | 320 | 220 | 340 | 262 | 357 | 313 | 377 | 368 | 396 | 429 | 411 | 495 | 424 |
| 100 | 191 | 329 | 231 | 350 | 277 | 366 | 330 | 386 | 388 | 405 | 452 | 423 | 522 | 436 |
| 110 | 200 | 339 | 243 | 359 | 290 | 376 | 346 | 397 | 407 | 416 | 474 | 433 | 548 | 446 |
| 120 | 209 | 349 | 253 | 369 | 303 | 386 | 361 | 407 | 425 | 426 | 495 | 443 | 572 | 457 |



Diameters are based on a 24° trajectory. The lower trajectory angles result in better wind fighting ability, but reduced throw distances. Throw reduction depends upon nozzle flow rate. In general, the throw distance is reduced approximately 3% with each 3° drop in trajectory angle. Use of the wedge insert to modify trajectory will affect distance. Big Gun® performance data has been obtained under ideal test conditions and may be adversely affected by wind, poor hydraulic entrance conditions or other factors. Test riser height of 3 feet (0.91 meters) above measurement surface. No representation regarding droplet condition, uniformity, application rate, or suitability for a particular application is made herein.

Additional nozzle options and sizes available. Go to www.nelsonirrigation.com or contact the factory for nozzle performance.

TAPER RING NOZZLE. This nozzle combines the changeability of a Ring Nozzle with some of the efficiency of a Taper Bore Nozzle. When ordering the Taper Ring Nozzle, specify the size as only one Taper Ring comes with the nozzle body and cap. Additional taper ring sizes can be purchased. *The Taper Ring Nozzle should not be used with the Nozzle Valve End Gun.*

the original **BIG GUN®** SPRINKLER

TAPER RING NOZZLE PERFORMANCE (METRIC)

Flow and diameter (meters) information at various pressures with different nozzle sizes.

75 TAPER RING NOZZLE — 24° TRAJECTORY

| Kg/cm ² | 10.2 mm | | | 11.4 mm | | | 12.7 mm | | | 14.0 mm | | | 15.2 mm | | | 16.5 mm | | | 17.8 mm | | | 19.1 mm | | | 20.3 mm | | |
|--------------------|---------|-------------------|---------|---------|-------------------|---------|---------|-------------------|---------|---------|-------------------|---------|---------|-------------------|---------|---------|-------------------|---------|---------|-------------------|---------|---------|-------------------|---------|---------|-------------------|---------|
| | L/S | M ³ /H | DIAM. M | L/S | M ³ /H | DIAM. M | L/S | M ³ /H | DIAM. M | L/S | M ³ /H | DIAM. M | L/S | M ³ /H | DIAM. M | L/S | M ³ /H | DIAM. M | L/S | M ³ /H | DIAM. M | L/S | M ³ /H | DIAM. M | L/S | M ³ /H | DIAM. M |
| 1.75 | — | — | — | — | — | — | — | — | — | 2.64 | 9.5 | 44 | 3.17 | 11.4 | 48 | 3.72 | 13.4 | 49 | 4.30 | 15.5 | 51 | 4.91 | 17.7 | 54 | 5.59 | 20.1 | 56 |
| 2.00 | — | — | — | — | — | — | 2.33 | 8.4 | 48 | 2.82 | 10.2 | 48 | 3.39 | 12.2 | 51 | 3.98 | 14.3 | 52 | 4.59 | 16.5 | 56 | 5.25 | 18.9 | 58 | 5.97 | 21.5 | 59 |
| 2.50 | — | — | — | 2.11 | 7.6 | 47 | 2.61 | 9.4 | 50 | 3.16 | 11.4 | 53 | 3.79 | 13.6 | 55 | 4.45 | 16.0 | 58 | 5.14 | 18.5 | 60 | 5.87 | 21.1 | 62 | 6.68 | 24.0 | 64 |
| 3.00 | 1.83 | 6.6 | 47 | 2.32 | 8.3 | 50 | 2.86 | 10.3 | 53 | 3.46 | 12.4 | 57 | 4.15 | 14.9 | 59 | 4.88 | 17.6 | 61 | 5.63 | 20.3 | 63 | 6.43 | 23.1 | 66 | 7.32 | 26.3 | 69 |
| 3.50 | 1.98 | 7.1 | 49 | 2.50 | 9.0 | 52 | 3.09 | 11.1 | 57 | 3.74 | 13.4 | 60 | 4.48 | 16.1 | 62 | 5.27 | 19.0 | 64 | 6.08 | 21.9 | 67 | 6.95 | 25.0 | 70 | 7.90 | 28.4 | 73 |
| 4.00 | 2.11 | 7.6 | 50 | 2.67 | 9.6 | 54 | 3.30 | 11.9 | 59 | 3.99 | 14.4 | 62 | 4.79 | 17.2 | 65 | 5.63 | 20.3 | 67 | 6.50 | 23.4 | 71 | 7.43 | 26.7 | 73 | 8.45 | 30.4 | 76 |
| 4.50 | 2.24 | 8.1 | 52 | 2.84 | 10.2 | 57 | 3.50 | 12.6 | 62 | 4.24 | 15.2 | 66 | 5.08 | 18.3 | 68 | 5.97 | 21.5 | 71 | 6.89 | 24.8 | 75 | 7.88 | 28.4 | 78 | 8.96 | 32.3 | 80 |
| 5.00 | 2.36 | 8.5 | 53 | 2.99 | 10.8 | 60 | 3.69 | 13.3 | 64 | 4.46 | 16.1 | 68 | 5.35 | 19.3 | 70 | 6.30 | 22.7 | 74 | 7.26 | 26.1 | 78 | 8.30 | 29.9 | 80 | 9.45 | 34.0 | 84 |
| 5.50 | 2.48 | 8.9 | 55 | 3.13 | 11.3 | 62 | 3.87 | 13.9 | 66 | 4.68 | 16.9 | 70 | 5.61 | 20.2 | 73 | 6.60 | 23.8 | 77 | 7.62 | 27.4 | 81 | 8.71 | 31.3 | 83 | 9.90 | 35.7 | 86 |
| 6.00 | 2.59 | 9.3 | 56 | 3.27 | 11.8 | 63 | 4.04 | 14.6 | 68 | 4.89 | 17.6 | 72 | 5.86 | 21.1 | 74 | 6.90 | 24.8 | 79 | 7.96 | 28.6 | 84 | 9.09 | 32.7 | 85 | 10.3 | 37.2 | 87 |

100 TAPER RING NOZZLE — 24° TRAJECTORY

| Kg/cm ² | 16 mm | | | 17 mm | | | 18 mm | | | 19 mm | | | 20 mm | | | 21 mm | | | 22 mm | | | 23 mm | | | 24 mm | | |
|--------------------|-------|-------------------|---------|-------|-------------------|---------|-------|-------------------|---------|-------|-------------------|---------|-------|-------------------|---------|-------|-------------------|---------|-------|-------------------|---------|-------|-------------------|---------|-------|-------------------|---------|
| | L/S | M ³ /H | DIAM. M | L/S | M ³ /H | DIAM. M | L/S | M ³ /H | DIAM. M | L/S | M ³ /H | DIAM. M | L/S | M ³ /H | DIAM. M | L/S | M ³ /H | DIAM. M | L/S | M ³ /H | DIAM. M | L/S | M ³ /H | DIAM. M | L/S | M ³ /H | DIAM. M |
| 3.5 | 4.83 | 17.4 | 69 | 5.47 | 19.7 | 71 | 6.22 | 22.4 | 74 | 7.06 | 25.4 | 77 | 7.89 | 28.4 | 79 | 8.92 | 32.1 | 82 | 9.75 | 35.1 | 83 | 10.9 | 39.1 | 86 | 11.9 | 42.7 | 89 |
| 4.0 | 5.19 | 18.7 | 72 | 5.89 | 21.2 | 75 | 6.64 | 23.9 | 77 | 7.53 | 27.1 | 80 | 8.44 | 30.4 | 83 | 9.58 | 34.5 | 85 | 10.4 | 37.6 | 87 | 11.6 | 41.9 | 89 | 12.7 | 45.8 | 92 |
| 4.5 | 5.47 | 19.7 | 75 | 6.22 | 22.4 | 78 | 7.03 | 25.3 | 80 | 7.97 | 28.7 | 83 | 8.97 | 32.3 | 86 | 10.1 | 36.5 | 88 | 11.1 | 39.9 | 90 | 12.3 | 44.3 | 93 | 13.5 | 48.5 | 96 |
| 5.0 | 5.78 | 20.8 | 77 | 6.56 | 23.6 | 80 | 7.39 | 26.6 | 83 | 8.42 | 30.3 | 86 | 9.47 | 34.1 | 88 | 10.7 | 38.5 | 91 | 11.7 | 42.0 | 93 | 13.0 | 46.7 | 96 | 14.2 | 51.2 | 99 |
| 5.5 | 6.06 | 21.8 | 79 | 6.86 | 24.7 | 82 | 7.78 | 28.0 | 85 | 8.83 | 31.8 | 88 | 9.92 | 35.7 | 91 | 11.2 | 40.3 | 94 | 12.3 | 44.2 | 96 | 13.6 | 49.0 | 99 | 14.9 | 53.8 | 103 |
| 6.0 | 6.33 | 22.8 | 81 | 7.19 | 25.9 | 84 | 8.14 | 29.3 | 88 | 9.22 | 33.2 | 91 | 10.4 | 37.4 | 93 | 11.7 | 42.2 | 96 | 12.8 | 46.0 | 98 | 14.2 | 51.2 | 101 | 15.6 | 56.2 | 105 |
| 6.5 | 6.61 | 23.8 | 84 | 7.50 | 27.0 | 87 | 8.47 | 30.5 | 90 | 9.58 | 34.5 | 93 | 10.8 | 39.0 | 96 | 12.2 | 43.9 | 98 | 13.3 | 48.0 | 101 | 14.8 | 53.4 | 104 | 16.2 | 58.4 | 107 |
| 7.0 | 6.86 | 24.7 | 86 | 7.78 | 28.0 | 89 | 8.78 | 31.6 | 92 | 9.94 | 35.8 | 95 | 11.2 | 40.4 | 98 | 12.6 | 45.5 | 101 | 13.9 | 49.9 | 103 | 15.4 | 55.4 | 106 | 16.8 | 60.6 | 109 |
| 7.5 | 7.08 | 25.5 | 88 | 8.06 | 29.0 | 91 | 9.06 | 32.6 | 94 | 10.3 | 37.2 | 97 | 11.6 | 41.7 | 100 | 13.1 | 47.2 | 103 | 14.3 | 51.5 | 104 | 15.9 | 57.2 | 108 | 17.4 | 62.7 | 111 |

150 TAPER RING NOZZLE — 24° TRAJECTORY

| Kg/cm ² | 22 mm | | | 24 mm | | | 26 mm | | | 28 mm | | | 30 mm | | | 32 mm | | | 34 mm | | | | | | | | |
|--------------------|-------|-------------------|---------|-------|-------------------|---------|-------|-------------------|---------|-------|-------------------|---------|-------|-------------------|---------|-------|-------------------|---------|-------|-------------------|---------|------|-------------------|---------|------|-------------------|---------|
| | L/S | M ³ /H | DIAM. M | L/S | M ³ /H | DIAM. M | L/S | M ³ /H | DIAM. M | L/S | M ³ /H | DIAM. M | L/S | M ³ /H | DIAM. M | L/S | M ³ /H | DIAM. M | L/S | M ³ /H | DIAM. M | L/S | M ³ /H | DIAM. M | L/S | M ³ /H | DIAM. M |
| 3.5 | 8.67 | 31.2 | 83 | 10.5 | 37.9 | 88 | 12.6 | 45.2 | 93 | 14.9 | 53.8 | 98 | 17.6 | 63.3 | 102 | 20.5 | 73.7 | 107 | 23.7 | 85.3 | 110 | 27.7 | 98.3 | 115 | 31.7 | 113.3 | 120 |
| 4.0 | 9.28 | 33.4 | 86 | 11.2 | 40.4 | 91 | 13.4 | 48.3 | 96 | 16.0 | 57.5 | 101 | 18.9 | 67.9 | 107 | 21.9 | 78.9 | 111 | 25.4 | 91.3 | 115 | 29.9 | 108.3 | 120 | 34.9 | 125.3 | 125 |
| 4.5 | 9.81 | 35.3 | 90 | 11.9 | 42.9 | 95 | 14.2 | 51.1 | 99 | 16.9 | 61.0 | 105 | 20.0 | 71.9 | 110 | 23.2 | 83.7 | 115 | 26.9 | 96.8 | 118 | 31.9 | 114.3 | 122 | 36.9 | 133.3 | 127 |
| 5.0 | 10.3 | 37.1 | 92 | 12.6 | 45.2 | 98 | 15.0 | 53.9 | 103 | 17.9 | 64.4 | 108 | 21.1 | 75.8 | 113 | 24.5 | 88.2 | 118 | 28.3 | 102 | 122 | 33.3 | 120.3 | 125 | 38.3 | 140.3 | 130 |
| 5.5 | 10.8 | 38.9 | 95 | 13.2 | 47.4 | 101 | 15.7 | 56.6 | 106 | 18.8 | 67.6 | 111 | 22.1 | 79.5 | 117 | 25.7 | 92.5 | 122 | 29.7 | 107 | 125 | 34.7 | 126.3 | 128 | 39.7 | 146.3 | 133 |
| 6.0 | 11.3 | 40.8 | 97 | 13.8 | 49.6 | 103 | 16.4 | 59.1 | 108 | 19.6 | 70.6 | 114 | 23.1 | 83.0 | 120 | 26.9 | 96.7 | 125 | 31.1 | 112 | 129 | 36.1 | 132.3 | 131 | 41.1 | 152.3 | 136 |
| 6.5 | 11.8 | 42.5 | 99 | 14.3 | 51.5 | 106 | 17.1 | 61.6 | 110 | 20.4 | 73.5 | 117 | 24.0 | 86.4 | 122 | 28.1 | 101 | 128 | 32.2 | 116 | 131 | 37.2 | 138.3 | 134 | 42.2 | 158.3 | 139 |
| 7.0 | 12.2 | 44.1 | 101 | 14.8 | 53.4 | 108 | 17.8 | 64.0 | 113 | 21.2 | 76.2 | 119 | 24.9 | 89.6 | 125 | 28.9 | 104 | 130 | 33.6 | 121 | 134 | 38.6 | 144.3 | 137 | 43.6 | 164.3 | 142 |
| 7.5 | 12.7 | 45.6 | 104 | 15.4 | 55.4 | 110 | 18.4 | 66.1 | 115 | 21.9 | 78.9 | 121 | 25.8 | 92.8 | 127 | 30.0 | 108 | 132 | 34.7 | 125 | 136 | 39.7 | 148.3 | 140 | 44.7 | 170.3 | 145 |
| 8.0 | 13.1 | 47.1 | 106 | 15.9 | 57.1 | 112 | 19.0 | 68.3 | 117 | 22.6 | 81.4 | 124 | 26.6 | 95.8 | 129 | 31.1 | 112 | 135 | 35.8 | 129 | 139 | 40.8 | 152.3 | 143 | 45.8 | 176.3 | 148 |

See opposite side for performance notes and Taper Ring Nozzle description.



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WARRANTY AND DISCLAIMER: Nelson Big Gun® Sprinklers are warranted for one year from date of original sale to be free of defective materials and workmanship when used within the working specifications for which the products were designed and under normal use and service. The manufacturer assumes no responsibility for installation, removal or unauthorized repair of defective parts. The manufacturer's liability under this warranty is limited solely to replacement or repair of defective parts and the manufacturer will not be liable for any crop or other consequential damages resulting from defects or breach of warranty. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSES AND OF ALL OTHER OBLIGATIONS OR LIABILITIES OF MANUFACTURER. No agent, employee or representative of the manufacturer has authority to waive, alter or add to the provisions of this warranty, nor to make any representations or warranty not contained herein.

This product may be covered by one or more of the following U.S. Patent Nos. D297,453, 3,559,887, 3,744,720, 4,193,548, 4,669,663 and other U.S. Patents pending or corresponding issued or pending foreign patents.