| mm | inch | Seri 1 | Seri 2 | Seri 3 | W.T | 1,6 | 1,8 | 2,0 | 2,3 | 2,6 | 2,9 | 3,2 | 3,6 | 4,0 | 4,5 | 5,0 | 5,6 | 6,3 | 7,1 | 8,0 | 8,8 | 10,0 | 11,0 | 12.5 | 14.2 | 16,0 | 17.5 | 20,0 | 22,5 | 25,0 | 28,0 | 30,0 | 32,0 | 36,0 | 40,0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1/8 | 10,2 |  |  | 1,6 | 506 | 579 | 656 | 776 | 903 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | ET KALINLIĞI TOLERANSLARI / WALL THICKNESS TOLERANCE DIN 17175-DIN 1629 |  |  |  |  |  |
|  | 1/4 | 13,5 |  |  | 1,8 |  | 421 | 474 | 556 | 642 | 731 | 825 | 956 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | 16,0 |  | 1,8 |  | 349 | 392 | 458 | 527 | 598 | 671 | 774 | 881 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10 | 3/8 | 17,2 |  |  | 1,8 |  | 322 | 362 | 422 | 485 | 550 | 616 | 709 | 806 | 933 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | 19,0 |  | 2,0 |  |  | 324 | 378 | 433 | 490 | 549 | 630 | 714 | 824 | 940 |  |  |  |  |  |  |  |  |  |  |  |  |  | +15,0 \% / - 10,0\% |  |  |  |  |  |
|  |  |  | 20,0 |  | 2,0 |  |  | 307 | 357 | 409 | 463 | 517 | 593 | 671 | 774 | 881 |  |  |  |  |  |  |  |  |  |  |  |  |  | + 12,5\% / - 10,0\% |  |  |  |  |  |
| 15 | 1/2 | 21,3 |  |  | 2,0 |  |  | 286 | 333 | 381 | 431 | 482 | 551 | 623 | 717 | 815 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | 25,0 |  | 2,0 |  |  | 241 | 280 | 320 | 361 | 402 | 459 | 517 | 593 | 671 | 770 | 890 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | 25,4 | 2,0 |  |  | 237 | 275 | 314 | 354 | 395 | 451 | 508 | 582 | 659 | 755 | 873 |  |  |  |  |  |  |  |  |  |  |  | +9,0\% / - 9,0\% |  |  |  |  |  |
| 20 | 3/4 | 26,9 |  |  | 2,3 |  |  | 223 | 259 | 295 | 333 | 371 | 423 | 476 | 545 | 616 | 704 | 813 | 944 |  |  |  |  |  |  |  |  |  |  | + 17,5\% / - 12,5\% |  |  |  |  |  |
|  |  |  |  | 30,0 | 2,6 |  |  |  | 230 | 263 | 295 | 329 | 374 | 421 | 481 | 542 | 619 | 712 | 823 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | 31,8 |  | 2,6 |  |  |  | 216 | 247 | 277 | 309 | 351 | 394 | 450 | 507 | 578 | 664 | 767 | 888 |  |  |  |  |  |  |  |  |  | + 12,5\% / - 12,5\% |  |  |  |  |  |
| 25 | 1 | 33,7 |  |  | 2,6 |  |  |  | 204 | 232 | 261 | 290 | 329 | 370 | 422 | 475 | 540 | 620 | 715 | 826 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | 38,0 |  | 2,6 |  |  |  |  | 204 | 229 | 255 | 289 | 324 | 369 | 415 | 471 | 539 | 619 | 714 | 802 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 32 | 11/4 | 42,4 |  |  | 2,6 |  |  |  |  | 182 | 204 | 227 | 257 | 288 | 327 | 367 | 416 | 476 | 545 | 627 | 702 | 820 |  |  |  |  |  |  |  | + 10,0\% / - 10,0\% |  |  |  |  |  |
|  |  |  |  | 44,5 | 2,6 |  |  |  |  | 173 | 194 | 215 | 244 | 273 | 310 | 348 | 395 | 450 | 516 | 592 | 662 | 773 | 869 |  |  |  |  |  |  |  |  |  |  |  |  |
| 40 | 11/2 | 48,3 |  |  | 2,6 |  |  |  |  | 159 | 178 | 197 | 224 | 250 | 284 | 318 | 360 | 411 | 470 | 538 | 601 | 700 | 785 | 920 |  |  |  |  |  | + $22,5 \% /-12,5 \%$ |  |  |  |  |  |
|  |  |  | 51,0 |  | 2,6 |  |  |  |  | 150 | 168 | 186 | 211 | 236 | 268 | 300 | 339 | 387 | 442 | 506 | 565 | 656 | 735 | 860 | 1010 |  |  |  |  | + 15,0\% / -12,5\% |  |  |  |  |  |
|  |  |  |  | 54,0 | 2,6 |  |  |  |  | 141 | 158 | 175 | 199 | 222 | 252 | 282 | 319 | 363 | 414 | 474 | 528 | 613 | 686 | 801 | 939 |  |  |  |  |  |  |  |  |  |  |
|  |  |  | 57,0 |  | 2,9 |  |  |  |  |  | 150 | 166 | 188 | 210 | 238 | 266 | 301 | 342 | 390 | 446 | 497 | 576 | 644 | 750 | 877 | 1021 |  |  |  |  |  |  |  |  |  |
| 50 | 2 | 60,3 |  |  | 2,9 |  |  |  |  |  | 141 | 156 | 177 | 198 | 224 | 250 | 283 | 321 | 367 | 419 | 466 | 539 | 602 | 701 | 818 | 950 | 1066 |  |  | +12,5\% / - 10,0\% |  |  |  |  |  |
|  |  |  | 63,5 |  | 2,9 |  |  |  |  |  | 134 | 148 | 167 | 187 | 212 | 237 | 268 | 304 | 346 | 395 | 440 | 508 | 567 | 659 | 768 | 890 | 967 |  |  |  |  |  |  |  |  |
|  |  |  | 70,0 |  | 2,9 |  |  |  |  |  | 121 | 134 | 151 | 169 | 191 | 214 | 241 | 273 | 311 | 355 | 394 | 455 | 507 | 588 | 683 | 789 | 881 | 1044 |  |  |  |  |  |  |  |
|  |  |  |  | 73,0 | 2,9 |  |  |  |  |  | 116 | 128 | 145 | 162 | 183 | 204 | 230 | 261 | 297 | 339 | 376 | 434 | 483 | 560 | 650 | 750 | 836 | 989 |  |  |  |  |  |  |  |
| 65 | $21 / 2$ | 76,1 |  |  | 2,9 |  |  |  |  |  | 111 | 123 | 139 | 155 | 175 | 196 | 221 | 250 | 285 | 324 | 360 | 415 | 462 | 534 | 619 | 714 | 796 | 940 |  |  |  |  |  |  |  |
|  |  |  |  | 82,5 | 3,2 |  |  |  |  |  |  | 113 | 128 | 142 | 161 | 180 | 202 | 229 | 261 | 296 | 329 | 379 | 421 | 486 | 563 | 647 | 720 | 848 | 967 |  |  |  |  |  |  |
| 80 | 3 | 88,9 |  |  | 3,2 |  |  |  |  |  |  | 105 | 118 | 132 | 149 | 166 | 187 | 212 | 241 | 273 | 303 | 349 | 387 | 447 | 516 | 593 | 659 | 774 | 880 | 1023 |  |  |  |  |  |
| 90 | $31 / 2$ |  | 101,6 |  | 3,6 |  |  |  |  |  |  |  | 103 | 115 | 129 | 144 | 163 | 184 | 209 | 237 | 262 | 301 | 334 | 385 | 444 | 508 | 563 | 659 | 747 | 864 | 997 | 1090 | 1187 |  |  |
|  |  |  |  | 108,0 | 3,6 |  |  |  |  |  |  |  | 97 | 108 | 122 | 136 | 153 | 173 | 196 | 222 | 246 | 282 | 313 | 360 | 414 | 474 | 525 | 619 | 694 | 801 | 922 | 1007 | 1095 | 1282 |  |
| 100 | 4 | 114,3 |  |  | 3,6 |  |  |  |  |  |  |  | 91 | 102 | 115 | 128 | 144 | 163 | 184 | 209 | 231 | 265 | 294 | 338 | 389 | 445 | 492 | 574 | 648 | 748 | 859 | 937 | 1017 | 1187 |  |
|  |  |  | 127,0 |  | 4,0 |  |  |  |  |  |  |  |  | 91 | 103 | 115 | 129 | 146 | 165 | 187 | 207 | 237 | 262 | 301 | 346 | 395 | 437 | 508 | 573 | 659 | 755 | 821 | 890 | 1034 | 1187 |
|  |  |  | 133,0 |  | 4,0 |  |  |  |  |  |  |  |  | 87 | 98 | 109 | 123 | 139 | 157 | 178 | 197 | 226 | 250 | 287 | 329 | 375 | 415 | 482 | 543 | 624 | 714 | 776 | 840 | 974 | 1117 |
| 125 | 5 | 139,7 |  |  | 4,0 |  |  |  |  |  |  |  |  | 33 | 93 | 104 | 117 | 132 | 149 | 169 | 187 | 214 | 237 | 272 | 312 | 356 | 393 | 456 | 513 | 589 | 673 | 731 | 791 | 915 | 1047 |
|  |  |  |  | 152,4 | 4,5 |  |  |  |  |  |  |  |  |  | 85 | 95 | 107 | 121 | 136 | 155 | 171 | 195 | 216 | 248 | 284 | 323 | 357 | 413 | 465 | 532 | 607 | 659 | 712 | 821 | 937 |
|  |  |  |  | 159,0 | 4,5 |  |  |  |  |  |  |  |  |  | 82 | 91 | 102 | 115 | 131 | 148 | 163 | 187 | 207 | 237 | 271 | 309 | 340 | 394 | 443 | 507 | 578 | 627 | 676 | 780 | 888 |
| 150 | 6 | 168,3 |  |  | 4,5 |  |  |  |  |  |  |  |  |  | 77 | 86 | 96 | 109 | 123 | 139 | 154 | 176 | 194 | 223 | 255 | 290 | 320 | 370 | 416 | 475 | 541 | 586 | 632 | 728 | 828 |
|  | 7 |  |  | 177,8 | 5,0 |  |  |  |  |  |  |  |  |  |  | 81 | 91 | 103 | 116 | 132 | 145 | 166 | 184 | 210 | 241 | 273 | 301 | 349 | 391 | 447 | 508 | 550 | 593 | 681 | 774 |
|  |  |  |  | 193,7 | 5,6 |  |  |  |  |  |  |  |  |  |  |  | 83 | 94 | 106 | 120 | 133 | 152 | 168 | 192 | 220 | 249 | 275 | 317 | 356 | 406 | 461 | 499 | 537 | 616 | 698 |
| 200 | 8 | 219,1 |  |  | 6,3 |  |  |  |  |  |  |  |  |  |  |  |  | 83 | 94 | 106 | 117 | 134 | 148 | 169 | 193 | 219 | 241 | 278 | 311 | 354 | 402 | 434 | 467 | 534 | 603 |
|  | 9 |  |  | 244,5 | 6,3 |  |  |  |  |  |  |  |  |  |  |  |  | 74 | 84 | 95 | 105 | 119 | 132 | 150 | 172 | 195 | 214 | 247 | 276 | 314 | 356 | 384 | 412 | 471 | 531 |
| 250 | 10 | 273,0 |  |  | 6,3 |  |  |  |  |  |  |  |  |  |  |  |  | 66 | 75 | 85 | 93 | 106 | 117 | 134 | 153 | 173 | 191 | 219 | 245 | 279 | 315 | 340 | 365 | 416 | 468 |
| 300 | 12 | 323,9 |  |  | 7,1 |  |  |  |  |  |  |  |  |  |  |  |  |  | 63 | 71 | 78 | 89 | 98 | 112 | 128 | 145 | 159 | 183 | 204 | 232 | 262 | 282 | 303 | 344 | 386 |
| 350 | 14 | 355,6 |  |  | 8,0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 65 | 71 | 81 | 89 | 102 | 116 | 132 | 144 | 166 | 185 | 210 | 237 | 255 | 273 | 311 | 349 |
| 400 | 16 | 406,4 |  |  | 8,8 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 62 | 71 | 78 | 89 | 101 | 115 | 126 | 144 | 161 | 182 | 206 | 221 | 237 | 269 | 301 |
| 450 | 18 | 457,0 |  |  | 10,0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 63 | 69 | 79 | 90 | 102 | 111 | 128 | 143 | 161 | 182 | 195 | 209 | 237 | 265 |
| 500 | 20 | 508,0 |  |  | 11,0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 62 | 71 | 81 | 91 | 100 | 115 | 128 | 144 | 163 | 175 | 187 | 212 | 237 |
| 550 | 22 |  |  | 559,0 | 12,5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 64 | 73 | 83 | 91 | 104 | 116 | 131 | 147 | 158 | 169 | 191 | 214 |
| 600 | 24 | 610,0 |  |  | 12,5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 59 | 67 | 76 | 83 | 95 | 106 | 119 | 134 | 144 | 154 | 175 | 195 |
| 650 | 26 |  |  | 660,0 | 14,2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 62 | 70 | 76 | 88 | 97 | 110 | 124 | 133 | 142 | 161 | 180 |

