

ASTM A312, ASTM A778 PIPES FOR GENERAL SERVICE
ANSI Sizes according to B 36.19-B 36.10

| NPS SCH Ø ext.mm | OUTSIDE DIAMETER | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------|---------------------|-------|-------|-------|-------|-------|-------|--------|--------|-------|--------|-------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-----|--|--|--|--|--|--|
| | inches | 1/8" | 1/4" | 3/8" | 1/2" | 3/4" | 1" | 1 1/4" | 1 1/2" | 2" | 2 1/2" | 3" | 3 1/2" | 4" | 5" | 6" | 8" | 10" | 12" | 14" | 16" | 18" | 20" | 22" | 24" | 26" | 28" | 30" | 32" | 34" | 36" | 38" | 40" | 42" | | | | | | | | | | | | | |
| | mm | 10,29 | 13,72 | 17,15 | 21,34 | 26,67 | 33,40 | 42,16 | 48,26 | 60,33 | 73,03 | 88,90 | 101,60 | 114,30 | 141,30 | 168,28 | 219,08 | 273,05 | 323,85 | 355,60 | 406,4 | 457,2 | 508,0 | 558,8 | 609,6 | 660,4 | 711,2 | 762,0 | 812,8 | 863,6 | 914,4 | 965,2 | 1016 | 1066,8 | | | | | | | | | | | | | |
| 5 S | Wall Thickness (mm) | | | | 1,65 | 1,65 | 1,65 | 1,65 | 1,65 | 1,65 | 2,11 | 2,11 | 2,11 | 2,11 | 2,77 | 2,77 | 2,77 | 3,40 | 3,96 | 3,96 | 4,19 | 4,19 | 4,78 | 4,78 | 5,54 | | | | | | | | 6,35 | | | | | | | | | | | | | | |
| | weight kg/m | | | | 0,81 | 1,03 | 1,31 | 1,67 | 1,93 | 2,42 | 3,75 | 4,58 | 5,26 | 5,93 | 9,61 | 11,5 | 15,0 | 22,9 | 31,7 | 34,9 | 42,0 | 47,5 | 60,2 | 66,3 | 83,8 | | | | | | | | | | 120 | | | | | | | | | | | | |
| 10 S | Wall Thickness (mm) | 1,24 | 1,65 | 1,65 | 2,11 | 2,11 | 2,77 | 2,77 | 2,77 | 2,77 | 3,05 | 3,05 | 3,05 | 3,05 | 3,40 | 3,40 | 3,76 | 4,19 | 4,57 | 4,78 | 4,78 | 4,78 | 5,54 | 5,54 | 6,35 | | | | | | | | | | 7,92 | | | | | | | | | | | | |
| | weight kg/m | 0,28 | 0,50 | 0,64 | 1,02 | 1,30 | 2,12 | 2,73 | 3,16 | 3,99 | 5,34 | 6,56 | 7,53 | 8,50 | 11,7 | 14,0 | 20,3 | 28,2 | 36,5 | 42,0 | 48,0 | 54,1 | 69,7 | 76,7 | 95,9 | | | | | | | | | | | 149 | | | | | | | | | | | |
| 10 | Wall Thickness (mm) | | | | | | | | | | | | | | | | | | | 6,35 | 6,35 | 6,35 | 6,35 | 6,35 | 6,35 | 7,92 | 7,92 | 7,92 | 7,92 | 7,92 | 7,92 | 7,92 | 7,92 | 7,92 | 7,92 | | | | | | | | | | | | |
| | weight kg/m | | | | | | | | | | | | | | | | | | | 55,5 | 63,6 | 71,7 | 79,8 | 87,8 | 95,9 | 129 | 139 | 149 | 160 | 170 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | | | | | | | | | | |
| 20 | Wall Thickness (mm) | | | | | | | | | | | | | | | | 6,35 | 6,35 | 6,35 | 7,92 | 7,92 | 7,92 | 9,52 | 9,52 | 9,52 | 12,70 | 12,70 | 12,70 | 12,70 | 12,70 | 12,70 | 12,70 | 12,70 | 12,70 | 12,70 | 12,70 | | | | | | | | | | | |
| | weight kg/m | | | | | | | | | | | | | | | | 33,8 | 42,4 | 50,5 | 68,9 | 79,0 | 89,1 | 119 | 131 | 143 | 206 | 222 | 238 | 254 | 270 | 287 | 287 | 287 | 287 | 287 | 287 | 287 | 287 | | | | | | | | | |
| 30 | Wall Thickness (mm) | | | | | | | | | | | | | | | | 7,04 | 7,80 | 8,38 | 9,52 | 9,52 | 11,13 | 12,70 | 12,70 | 14,27 | | | 15,88 | 15,88 | 15,88 | 15,88 | 15,88 | 15,88 | 15,88 | 15,88 | 15,88 | 15,88 | | | | | | | | | | |
| | weight kg/m | | | | | | | | | | | | | | | | 37,4 | 51,8 | 66,2 | 82,5 | 94,6 | 124 | 157 | 174 | 213 | | | 278 | 298 | 318 | 338 | 359 | 359 | 359 | 359 | 359 | 359 | 359 | 359 | | | | | | | | |
| STD | Wall Thickness (mm) | 1,73 | 2,24 | 2,31 | 2,77 | 2,87 | 3,38 | 3,56 | 3,68 | 3,91 | 5,16 | 5,49 | 5,74 | 6,02 | 6,55 | 7,11 | 8,18 | 9,27 | 9,52 | 9,52 | 9,52 | 9,52 | 9,52 | 9,52 | 9,52 | 9,52 | 9,52 | 9,52 | 9,52 | 9,52 | 9,52 | 9,52 | 9,52 | 9,52 | 9,52 | 9,52 | 9,52 | 9,52 | 9,52 | | | | | | | | |
| 40 S | weight kg/m | 0,37 | 0,64 | 0,86 | 1,29 | 1,71 | 2,54 | 3,44 | 4,11 | 5,52 | 8,77 | 11,47 | 13,78 | 16,03 | 22,1 | 28,7 | 43,2 | 61,2 | 74,9 | 82,5 | 94,6 | 107 | 119 | 131 | 143 | 155 | 167 | 191 | 204 | 216 | 228 | 240 | 252 | 252 | 252 | 252 | 252 | 252 | 252 | | | | | | | | |
| 40 | Wall Thickness (mm) | 1,73 | 2,24 | 2,31 | 2,77 | 2,87 | 3,38 | 3,56 | 3,68 | 3,91 | 5,16 | 5,49 | 5,74 | 6,02 | 6,55 | 7,11 | 8,18 | 9,27 | 10,31 | 11,13 | 12,70 | 14,27 | 15,09 | | | 17,48 | | | 17,48 | 17,48 | 19,05 | | | | | | | | | | | | | | | | |
| | weight kg/m | 0,37 | 0,64 | 0,86 | 1,29 | 1,71 | 2,54 | 3,44 | 4,11 | 5,52 | 8,77 | 11,47 | 13,78 | 16,3 | 22,1 | 28,7 | 43,2 | 61,2 | 80,9 | 96,0 | 125 | 158 | 186 | | | 260 | | | 349 | 372 | 429 | | | | | | | | | | | | | | | | |
| 60 | Wall Thickness (mm) | | | | | | | | | | | | | | | | 10,31 | 12,70 | 14,27 | 15,09 | 16,66 | 19,05 | 20,62 | 22,23 | 24,61 | | | | | | | | | | | | | | | | | | | | | | |
| | weight kg/m | | | | | | | | | | | | | | | | 53,9 | 82,8 | 110 | 129 | 162 | 209 | 252 | 300 | 362 | | | | | | | | | | | | | | | | | | | | | | |
| XS | Wall Thickness (mm) | 2,41 | 3,02 | 3,20 | 3,73 | 3,91 | 4,55 | 4,85 | 5,08 | 5,54 | 7,01 | 7,62 | 8,08 | 8,56 | 9,53 | 10,97 | 12,70 | 12,70 | 12,70 | 12,70 | 12,70 | 12,70 | 12,70 | 12,70 | 12,70 | 12,70 | 12,70 | 12,70 | 12,70 | 12,70 | 12,70 | 12,70 | 12,70 | 12,70 | 12,70 | 12,70 | 12,70 | 12,70 | 12,70 | 12,70 | | | | | | | |
| 80 S | weight kg/m | 0,48 | 0,81 | 1,12 | 1,65 | 2,24 | 3,30 | 4,55 | 5,51 | 7,63 | 11,63 | 15,57 | 18,99 | 22,6 | 31,4 | 43,2 | 65,6 | 82,8 | 99,0 | 109 | 125 | 141 | 157 | 174 | 190 | 206 | 222 | 238 | 254 | 270 | 287 | 303 | 319 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | 335 | | | | | | |
| 80 | Wall Thickness (mm) | 2,41 | 3,02 | 3,20 | 3,73 | 3,91 | 4,55 | 4,85 | 5,08 | 5,54 | 7,01 | 7,62 | 8,08 | 8,56 | 9,53 | 10,97 | 12,70 | 15,09 | 17,47 | 19,05 | 21,44 | 23,83 | 26,19 | 28,58 | 30,96 | | | | | | | | | | | | | | | | | | | | | | |
| | weight kg/m | 0,48 | 0,81 | 1,12 | 1,65 | 2,24 | 3,30 | 4,55 | 5,51 | 7,63 | 11,63 | 15,57 | 18,99 | 22,6 | 31,4 | 43,2 | 65,6 | 97,4 | 134 | 160 | 207 | 260 | 317 | 381 | 450 | | | | | | | | | | | | | | | | | | | | | | |
| 100 | Wall Thickness (mm) | | | | | | | | | | | | | | | | 15,09 | 18,26 | 21,44 | 23,83 | 26,19 | 29,36 | 32,54 | 34,93 | 38,89 | | | | | | | | | | | | | | | | | | | | | | |
| | weight kg/m | | | | | | | | | | | | | | | | 77,1 | 116 | 162 | 199 | 250 | 316 | 389 | 460 | 558 | | | | | | | | | | | | | | | | | | | | | | |

Straight pipe tolerances

| Nominal W.T. | Sizes | Outside diameter | | Lenght |
|-----------------|---------------|------------------|---------|------------------------------|
| | | +over | -/under | |
| A/SA 312 | | A/SA 312 | | A/SA 312 |
| All sizes | 1/8" : 1 1/2" | 0,4 mm | 0,8 mm | 4,6 : 7,3 m for fixed length |
| | 2" : 4" | 21 mm | 0,8 mm | |
| | 5" : 8" | 1,6 mm | 0,8 mm | |
| | 10" : 18" | 2,4 mm | 0,8 mm | |
| | 20" : 26" | 3,2 mm | 0,8 mm | |
| | 28" : 34" | 4 mm | 0,8 mm | |
| -12,5% | 36" : 42" | 4,8 mm | 0,8 mm | |