

# ISO 286-2 Round Bar Tolerances

## ROUND STEEL ISO TOLERANCE "h SERIES" IN MILLIMETERS

NOMINAL SIZE DIAMETER mm	h5	h6	h7	h8	h9	h10	h11	h12
1 to 3	-0.004 (-0.00016")	-0.006 (-0.00024")	-0.01 (-0.00039")	-0.014 (-0.00055")	-0.025 (-0.00098")	-0.04 (-0.00158")	-0.06 (-0.00236")	-0.100 (-0.00394")
Over 3 to 6	-0.005 (-0.00020")	-0.008 (-0.00032")	-0.012 (-0.00047")	-0.018 (-0.00071")	-0.03 (-0.00118")	-0.048 (-0.00189")	-0.075 (-0.00295")	-0.120 (-0.00472")
Over 6 to 10	-0.006 (-0.00024")	-0.009 (-0.00035")	-0.015 (-0.00059")	-0.022 (-0.00086")	-0.036 (-0.00142")	-0.058 (-0.00228")	-0.09 (-0.00354")	-0.150 (-0.00591")
Over 10 to 18	-0.008 (-0.00032")	-0.011 (-0.00043")	-0.018 (-0.00071")	-0.027 (-0.0010")	-0.043 (-0.00169")	-0.07 (-0.00275")	-0.11 (-0.00433")	-0.18 (-0.00709")
Over 18 to 30	-0.009 (-0.00035")	-0.013 (-0.00051")	-0.021 (-0.00083")	-0.033 (-0.00129")	-0.052 (-0.00205")	-0.084 (-0.00331")	-0.13 (-0.00512")	-0.210 (-0.00827")
Over 30 to 50	-0.011 (-0.00043")	-0.016 (-0.00063")	-0.025 (-0.00098")	-0.039 (-0.00153")	-0.062 (-0.00244")	-0.1 (-0.00393")	-0.16 (-0.00630")	-0.250 (-0.00984")
Over 50 to 80	-0.013 (-0.00051")	-0.019 (-0.00075")	-0.03 (-0.00118")	-0.046 (-0.00181")	-0.074 (-0.00291")	-0.12 (-0.00472")	-0.19 (-0.00748")	-0.300 (-0.01181")
Over 80 to 120	-0.015 (-0.00059")	-0.022 (-0.00087")	-0.035 (-0.00138")	-0.054 (-0.00213")	-0.087 (-0.00343")	-0.14 (-0.00551")	-0.22 (-0.00866")	-0.350 (-0.01378")
Over 120 to 180	-0.018 (-0.00071")	-0.025 (-0.00098")	-0.04 (-0.00158")	-0.063 (-0.00248")	-0.1 (-0.00393")	-0.16 (-0.00629")	-0.25 (-0.00984")	-0.400 (-0.01575")
Over 180 to 250	-0.02 (-0.00079")	-0.029 (-0.00114")	-0.046 (-0.00181")	-0.072 (-0.00283")	-0.115 (-0.00453")	-0.185 (-0.00723")	-0.29 (-0.01142")	-0.460 (-0.01811")

Tolerances are all plus 0mm, - mm size. Parenthetical numbers indicate "inches." Refer to the above chart for the following example:

Example: a 20mm Round h9 will have a tolerance of + 0mm, - 0.052mm which equals + 0", - 0.00205"

### Equivalent German Specifications

DIN 668 = h11

DIN 669 = h9

DIN 671 = h9

DIN 175 = h9

DIN 670 = h8