

# ISO TOLERANCE TABLES: ROUND BARS



## NOTES

All units are millimeters.

H Tolerances = all minus

K Tolerances = all plus

J Tolerances = plus and minus

## ISO F7 TOLERANCES

Diameter mm	Upper	Lower
over 3 & up to & incl 6	-0.010	-0.022
over 6 to 10	-0.013	-0.028
over 10 to 18	-0.016	-0.034
over 18 to 30	-0.020	-0.041
over 30 to 50	-0.025	-0.050
over 50 to 80	-0.030	-0.060
over 80 to 120	-0.036	-0.071
over 120 to 180	-0.043	-0.083
over 180 to 250	-0.050	-0.096

## ISO H TOLERANCES

Diameter mm	h6	h7	h8	h9	h10	h11	h12
up to & incl 3	-0.006/+0	-0.010/+0	-0.014/+0	-0.025/+0	-0.040/+0	-0.060/+0	-0.100/+0
3 < 6	-0.008/+0	-0.012/+0	-0.018/+0	-0.030/+0	-0.048/+0	-0.075/+0	-0.120/+0
6 < 10	-0.009/+0	-0.015/+0	-0.022/+0	-0.036/+0	-0.058/+0	-0.090/+0	-0.150/+0
10 < 18	-0.011/+0	-0.018/+0	-0.027/+0	-0.043/+0	-0.070/+0	-0.110/+0	-0.180/+0
18 < 30	-0.013/+0	-0.021/+0	-0.033/+0	-0.052/+0	-0.084/+0	-0.130/+0	-0.210/+0
30 < 50	-0.016/+0	-0.025/+0	-0.039/+0	-0.062/+0	-0.100/+0	-0.160/+0	-0.250/+0
50 < 80	-0.019/+0	-0.030/+0	-0.046/+0	-0.074/+0	-0.120/+0	-0.190/+0	-0.300/+0
80 < 120	-0.022/+0	-0.035/+0	-0.054/+0	-0.087/+0	-0.140/+0	-0.220/+0	-0.350/+0
120 < 180	-0.025/+0	-0.040/+0	-0.063/+0	-0.100/+0	-0.160/+0	-0.250/+0	-0.400/+0
180 < 250	-0.029/+0	-0.046/+0	-0.072/+0	-0.115/+0	-0.185/+0	-0.290/+0	-0.460/+0
250 < 315	-0.032/+0	-0.052/+0	-0.081/+0	-0.130/+0	-0.210/+0	-0.320/+0	-0.520/+0

ISO h-tolerances are always minus tolerances.

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## ISO J TOLERANCES

Diameter mm	j5	j6	j7
up to & incl 3	-	+0.004/-0.002	+0.006/-0.004
3 < 6	+0.003/-0.002	+0.006/-0.002	+0.008/-0.004
6 < 10	+0.004/-0.002	+0.007/-0.002	+0.010/-0.005
10 < 18	+0.005/-0.003	+0.008/-0.002	+0.012/-0.006
18 < 30	+0.005/-0.004	+0.009/-0.004	+0.013/-0.008
30 < 50	+0.006/-0.005	+0.011/-0.005	+0.015/-0.010
50 < 80	+0.006/-0.007	+0.012/-0.007	+0.018/-0.012
80 < 120	+0.006/-0.009	+0.013/-0.009	+0.020/-0.015
120 < 180	+0.007/-0.011	+0.014/-0.011	+0.022/-0.018
180 < 250	+0.007/-0.013	+0.016/-0.013	+0.025/-0.021
250 < 315	+0.007/-0.016	-	-

## ISO K TOLERANCES

Diameter mm	k6	k7	k8	k9	k10	k11	k12
up to & incl 3	+0.006/-0	+0.010/-0	+0.014/-0	+0.025/-0	+0.040/-0	+0.060/-0	+0.100/-0
3 < 6	+0.009/+0.001	+0.013/+0.001	+0.018/-0	+0.030/-0	+0.048/-0	+0.075/-0	+0.120/-0
6 < 10	+0.010/+0.001	+0.016/+0.001	+0.022/-0	+0.036/-0	+0.058/-0	+0.090/-0	+0.150/-0
10 < 18	+0.012/+0.001	+0.019/+0.001	+0.027/-0	+0.043/-0	+0.070/-0	+0.110/-0	+0.180/-0
18 < 30	+0.015/+0.002	+0.023/+0.002	+0.033/-0	+0.052/-0	+0.084/-0	+0.130/-0	+0.210/-0
30 < 50	+0.018/+0.002	+0.027/+0.002	+0.039/-0	+0.062/-0	+0.100/-0	+0.160/-0	+0.250/-0
50 < 80	+0.021/+0.002	+0.032/+0.002	+0.046/-0	+0.074/-0	+0.120/-0	+0.190/-0	+0.300/-0
80 < 120	+0.025/+0.003	+0.038/+0.003	+0.054/-0	+0.087/-0	+0.140/-0	+0.220/-0	+0.350/-0
120 < 180	+0.028/+0.003	+0.043/+0.003	+0.063/-0	+0.100/-0	+0.160/-0	+0.250/-0	+0.400/-0
180 < 250	+0.033/+0.004	+0.050/+0.004	+0.072/-0	+0.115/-0	+0.185/-0	+0.290/-0	+0.460/-0
250 < 315	+0.036/+0.004	+0.056/+0.004	+0.081/-0	+0.130/-0	+0.210/-0	+0.320/-0	+0.520/-0

ISO k-tolerances are always plus tolerances.

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ASTM A484 / A484M	
Diameter mm	Tolerance mm
8 > 11	+/-0.15
11 > 15.5	+/-0.18
15.5 > 22	+/-0.20
22 > 25	+/-0.23
25 > 28	+/-0.25
28 > 31.5	+/-0.28
31.5 > 34.5	+/-0.30
34.5 > 38	+/-0.35
38 > 50	+0.40/-0
50 > 63	+0.80/-0
63 > 90	+1.20/-0
90 > 115	+1.60/-0
115 > 140	+2.00/-0
140 > 165	+3.00/-0
165 > 200	+4.00/-0
200 > 300	+4.80/-0
300 > 400	+5.50/-0
400 > 625	+6.50/-0

DIN 1013	
Diameter mm	Tolerance mm
8 - 15	+/-0.40
16 - 25	+/-0.50
26 - 35	+/-0.60
36 - 50	+/-0.80
51 - 80	+/-1.00
81 - 100	+/-1.30
101 - 120	+/-1.50
121 - 160	+/-2.00
161 - 200	+/-2.50

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