## table 4 - Shaft tolerances and resultant fits

| Shaft Nominal diameter | | Bearing Bore diameter tolerance | | Shaft diameter deviations, resultant fits[1] Tolerance classes | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| d | | $t_{\Delta dmp}$ | | k5Ⓔ | | k6Ⓔ | | m5Ⓔ | | m6Ⓔ | | n5Ⓔ | |
| | | | | Deviations (shaft diameter) | | | | | | | | | |
| | | | | Theoretical interference (–) | | | | | | | | | |
| > | ≤ | L | U | Probable interference (–) | | | | | | | | | |
| mm | | µm | | µm | | | | | | | | | |
| – | 3 | –8 | 0 | +4 | 0 | +6 | 0 | +6 | +2 | +8 | +2 | +8 | +4 |
| | | | | –12 | 0 | –14 | 0 | –14 | –2 | –16 | –2 | –16 | –4 |
| | | | | –11 | –1 | –12 | –2 | –13 | –3 | –14 | –4 | –15 | –5 |
| 3 | 6 | –8 | 0 | +6 | +1 | +9 | +1 | +9 | +4 | +12 | +4 | +13 | +8 |
| | | | | –14 | –1 | –17 | –1 | –17 | –4 | –20 | –4 | –21 | –8 |
| | | | | –13 | –2 | –15 | –3 | –16 | –5 | –18 | –6 | –20 | –9 |
| 6 | 10 | –8 | 0 | +7 | +1 | +10 | +1 | +12 | +6 | +15 | +6 | +16 | +10 |
| | | | | –15 | –1 | –18 | –1 | –20 | –6 | –23 | –6 | –24 | –10 |
| | | | | –13 | –3 | –16 | –3 | –18 | –8 | –21 | –8 | –22 | –12 |
| 10 | 18 | –8 | 0 | +9 | +1 | +12 | +1 | +15 | +7 | +18 | +7 | +20 | +12 |
| | | | | –17 | –1 | –20 | –1 | –23 | –7 | –26 | –7 | –28 | –12 |
| | | | | –15 | –3 | –18 | –3 | –21 | –9 | –24 | –9 | –26 | –14 |
| 18 | 30 | –10 | 0 | +11 | +2 | +15 | +2 | +17 | +8 | +21 | +8 | +24 | +15 |
| | | | | –21 | –2 | –25 | –2 | –27 | –8 | –31 | –8 | –34 | –15 |
| | | | | –19 | –4 | –22 | –5 | –25 | –10 | –28 | –11 | –32 | –17 |
| 30 | 50 | –12 | 0 | +13 | +2 | +18 | +2 | +20 | +9 | +25 | +9 | +28 | +17 |
| | | | | –25 | –2 | –30 | –2 | –32 | –9 | –37 | –9 | –40 | –17 |
| | | | | –22 | –5 | –26 | –6 | –29 | –12 | –33 | –13 | –37 | –20 |
| 50 | 80 | –15 | 0 | +15 | +2 | +21 | +2 | +24 | +11 | +30 | +11 | +33 | +20 |
| | | | | –30 | –2 | –36 | –2 | –39 | –11 | –45 | –11 | –48 | –20 |
| | | | | –26 | –6 | –32 | –6 | –35 | –15 | –41 | –15 | –44 | –24 |
| 80 | 120 | –20 | 0 | +18 | +3 | +25 | +3 | +28 | +13 | +35 | +13 | +38 | +23 |
| | | | | –38 | –3 | –45 | –3 | –48 | –13 | –55 | –13 | –58 | –23 |
| | | | | –33 | –8 | –39 | –9 | –43 | –18 | –49 | –19 | –53 | –28 |
| 120 | 180 | –25 | 0 | +21 | +3 | +28 | +3 | +33 | +15 | +40 | +15 | +45 | +27 |
| | | | | –46 | –3 | –53 | –3 | –58 | –15 | –65 | –15 | –70 | –27 |
| | | | | –40 | –9 | –46 | –10 | –52 | –21 | –58 | –22 | –64 | –33 |
| 180 | 250 | –30 | 0 | +24 | +4 | +33 | +4 | +37 | +17 | +46 | +17 | +51 | +31 |
| | | | | –54 | –4 | –63 | –4 | –67 | –17 | –76 | –17 | –81 | –31 |
| | | | | –48 | –10 | –55 | –12 | –61 | –23 | –68 | –25 | –75 | –37 |
| 250 | 315 | –35 | 0 | +27 | +4 | +36 | +4 | +43 | +20 | +52 | +20 | +57 | +34 |
| | | | | –62 | –4 | –71 | –4 | –78 | –20 | –87 | –20 | –92 | –34 |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | –54 | –12 | –62 | –13 | –70 | –28 | –78 | –29 | –84 | –42 |
| 315 | 400 | –40 | 0 | +29 | +4 | +40 | +4 | +46 | +21 | +57 | +21 | +62 | +37 |
| | | | | –69 | –4 | –80 | –4 | –86 | –21 | –97 | –21 | –102 | –37 |
| | | | | –61 | –12 | –69 | –15 | –78 | –29 | –86 | –32 | –94 | –45 |
| 400 | 500 | –45 | 0 | +32 | +5 | +45 | +5 | +50 | +23 | +63 | +23 | +67 | +40 |
| | | | | –77 | –5 | –90 | –5 | –95 | –23 | –108 | –23 | –112 | –40 |
| | | | | –68 | –14 | –78 | –17 | –86 | –32 | –96 | –35 | –103 | –49 |
| 500 | 630 | –50 | 0 | +29 | 0 | +44 | 0 | +55 | +26 | +70 | +26 | +73 | +44 |
| | | | | –78 | 0 | –94 | 0 | –105 | –26 | –120 | –26 | –122 | –44 |
| | | | | –68 | –10 | –81 | –13 | –94 | –36 | –107 | –39 | –112 | –54 |
| 630 | 800 | –75 | 0 | +32 | 0 | +50 | 0 | +62 | +30 | +80 | +30 | +82 | +50 |
| | | | | –107 | 0 | –125 | 0 | –137 | –30 | –155 | –30 | –157 | –50 |
| | | | | –95 | –12 | –108 | –17 | –125 | –42 | –138 | –47 | –145 | –62 |
| 800 | 1 000 | –100 | 0 | +36 | 0 | +56 | 0 | +70 | +34 | +90 | +34 | +92 | +56 |
| | | | | –136 | 0 | –156 | 0 | –170 | –34 | –190 | –34 | –192 | –56 |
| | | | | –122 | –14 | –136 | –20 | –156 | –48 | –170 | –54 | –178 | –70 |
| 1 000 | 1 250 | –125 | 0 | +42 | 0 | +66 | 0 | +82 | +40 | +106 | +40 | +108 | +66 |
| | | | | –167 | 0 | –191 | 0 | –207 | –40 | –231 | –40 | –233 | –66 |
| | | | | –150 | –17 | –167 | –24 | –190 | –57 | –207 | –64 | –216 | –83 |
| 1 250 | 1 600 | –160 | 0 | +50 | 0 | +78 | 0 | +98 | +48 | +126 | +48 | +128 | +78 |
| | | | | –210 | 0 | –238 | 0 | –258 | –48 | –286 | –48 | –288 | –78 |
| | | | | –189 | –21 | –208 | –30 | –237 | –69 | –256 | –78 | –267 | –99 |
| 1 600 | 2 000 | –200 | 0 | +60 | 0 | +92 | 0 | +118 | +58 | +150 | +58 | +152 | +92 |
| | | | | –260 | 0 | –292 | 0 | –318 | –58 | –350 | –58 | –352 | –92 |
| | | | | –235 | –25 | –257 | –35 | –293 | –83 | –315 | –93 | –327 | –117 |