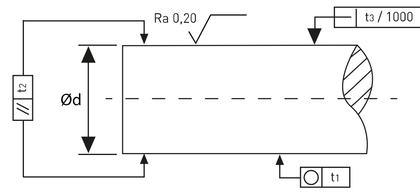
# W

## Precision shafts

Material: Quenched and tempered steel (cf53/ck55) (1.1213/1.1203)
Series W

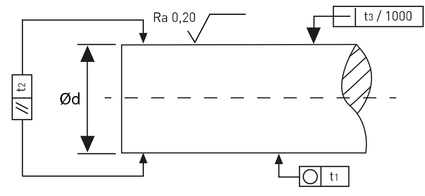



| Shaft designation | Shaft diameter d | Standard length | Hardening depth Rht DIN 6773 | Standard tolerance ISO h6 | Roundness | Parallelism | Straightness | Weight |
|---|---|---|---|---|---|---|---|---|
| Type | mm | mm | mm | µm | µm t1 | µm t2 | mm/m t3 | Kg/m |
| W-3 | 3 | 1100 | 0.4 - 0.6 | 0 - 6 | 3 | 4 | 0.16 | 0.055 |
| W-4 | 4 | 2100 | 0.5 - 0.8 | 0 - 8 | 3 | 4 | 0.16 | 0.1 |
| W-5 | 5 | 3200 | 0.5 - 0.8 | 0 - 8 | 4 | 6 | 0.16 | 0.16 |
| W-6 | 6 | 6000 | 0.5 - 0.8 | 0 - 8 | 4 | 6 | 0.16 | 0.23 |
| W-8 | 8 | 6000 | 0.6 - 0.9 | 0 - 9 | 4 | 6 | 0.16 | 0.4 |
| W-10 | 10 | 6000 | 0.7 - 1.0 | 0 - 9 | 4 | 6 | 0.12 | 0.62 |
| W-12 | 12 | 6000 | 0.8 - 1.2 | 0 - 11 | 5 | 8 | 0.12 | 0.89 |
| W-13 | 13 | 6000 | 0.8 - 1.2 | 0 - 11 | 5 | 8 | 0.12 | 1.04 |
| W-14 | 14 | 6000 | 0.9 - 1.3 | 0 - 11 | 5 | 8 | 0.12 | 1.21 |
| W-15 | 15 | 6000 | 1.0 - 1.4 | 0 - 11 | 5 | 8 | 0.12 | 1.39 |
| W-16 | 16 | 6000 | 1.1 - 1.5 | 0 - 11 | 5 | 8 | 0.1 | 1.58 |
| W-18 | 18 | 6000 | 1.1 - 1.5 | 0 - 11 | 5 | 8 | 0.1 | 2 |
| W-20 | 20 | 6000 | 1.2 - 1.5 | 0 - 13 | 6 | 8 | 0.1 | 2 47 |
| W-22 | 22 | 6000 | 1.2 - 1.5 | 0 - 13 | 6 | 8 | 0.1 | 2.98 |
| W-24 | 24 | 6000 | 1.4 - 1.6 | 0 - 13 | 6 | 8 | 0.1 | 3.55 |
| W-25 | 25 | 6000 | 1.5 - 1.7 | 0 - 13 | 6 | 9 | 0.1 | 3.85 |
| W-28 | 28 | 6000 | 1.5 - 1.8 | 0 - 13 | 6 | 9 | 0.1 | 4.83 |
| W-30 | 30 | 6000 | 1.5 - 1.9 | 0 - 13 | 6 | 9 | 0.1 | 5.55 |
| W-32 | 32 | 6000 | 1.5 - 1.9 | 0 - 16 | 7 | 11 | 0.1 | 6.31 |
| W-35 | 35 | 6000 | 1.8 - 1.9 | 0 - 16 | 7 | 11 | 0.1 | 7.55 |
| W-40 | 40 | 6000 | 1.6 - 2.0 | 0 - 16 | 7 | 11 | 0.1 | 9.87 |
| W-45 | 45 | 6000 | 1.6 - 2.0 | 0 - 16 | 7 | 11 | 0.1 | 12.5 |
| W-50 | 50 | 6000 | 2.2 - 2.6 | 0 - 16 | 7 | 11 | 0.1 | 15.4 |
| W-55 | 55 | 6000 | 2.2 - 2.6 | 0 - 19 | 8 | 13 | 0.1 | 18.64 |
| W-60 | 60 | 6000 | 2.2 - 2.6 | 0 - 19 | 8 | 13 | 0.1 | 22.2 |
| W-70 | 70 | 6000 | 2.2 - 2.6 | 0 - 19 | 8 | 13 | 0.1 | 30.2 |
| W-75 | 75 | 6000 | 2.2 - 2.6 | 0 - 19 | 8 | 13 | 0.1 | 34.7 |
| W-80 | 80 | 6000 | 2.2 - 2.6 | 0 - 19 | 8 | 13 | 0.1 | 39.5 |
| W-90 | 90 | 6000 | 2.2 - 3.2 | 0 - 22 | 8 | 13 | 0.2 | 49.92 |
| W-100 | 100 | 6000 | 2.2 - 3.2 | 0 - 22 | 8 | 13 | 0.2 | 61.62 |

- Special tolerances and diameters are available upon request.
- Max available length 8200 mm upon request (for shafts ≥ da. 16).
- Surface hardness: 58/62 HRC
- Lenght tolerance: +200 / -0 mm.

# WZ

## Induction hardened and ground shafts in inches (Ck55 or Cf53)




| Shaft designation | Shaft diameter d | Standard length | Hardening depth Rht DIN 6773 | Tolerance class "L" | Roundness | Parallelism | Straightness | Weight |
|---|---|---|---|---|---|---|---|---|
| Type | mm | inch | inch | inch | inch t1 | inch t2 | inch t3 | Kg/m |
| WZ 1/4 | 6.35 | 237 | 0.019-0.031 | -0.0005/-0.0010 | 0.0002 | 0.0002 | 0.008 | 0.25 |
| WZ 3/8 | 9.525 | 237 | 0.027-0.039 | -0.0005/-0.0010 | 0.0002 | 0.0002 | 0.008 | 0.56 |
| WZ 1/2 | 12.7 | 237 | 0.031-0.047 | -0.0005/-0.0010 | 0.0002 | 0.0003 | 0.008 | 0.99 |
| WZ 5/8 | 15.875 | 237 | 0.043-0.059 | -0.0005/-0.0010 | 0.0002 | 0.0003 | 0.008 | 1.55 |
| WZ 3/4 | 19.05 | 237 | 0.047-0.059 | -0.0005/-0.0010 | 0.0002 | 0.0004 | 0.008 | 2.24 |
| WZ 1 | 25.4 | 237 | 0.059-0.066 | -0.0005/-0.0010 | 0.0002 | 0.0004 | 0.008 | 3.97 |
| WZ 11/4 | 31.75 | 237 | 0.059-0.074 | -0.0005/-0.0010 | 0.0003 | 0.0004 | 0.004 | 6.22 |
| WZ 11/2 | 38.1 | 237 | 0.062-0.078 | -0.0006/-0.0011 | 0.0003 | 0.0004 | 0.004 | 8.95 |
| WZ 2 | 50.8 | 237 | 0.086-0.102 | -0.0006/-0.0013 | 0.0003 | 0.0004 | 0.004 | 15.91 |
| WZ 21/4 | 57.15 | 237 | 0.086-0.102 | -0.0007/-0.0015 | 0.0003 | 0.0005 | 0.004 | 20.13 |
| WZ 21/2 | 63.5 | 237 | 0.086-0.102 | -0.0007/-0.0015 | 0.0003 | 0.0005 | 0.004 | 24.85 |
| WZ 3 | 76.2 | 237 | 0.086-0.102 | -0.0008/-0.0017 | 0.0003 | 0.0005 | 0.004 | 35.78 |

- Special tolerances and diameters are available upon request.
- Max available length 8200mm upon request (for shafts ≥ da. 16).
- Class "S" available upon request.
- Length tolerance:+200 / -0 mm.
- Surface hardness: 60 - 64 HRC.