

Shafts

One End Threaded with O.D. same as Shaft O.D.

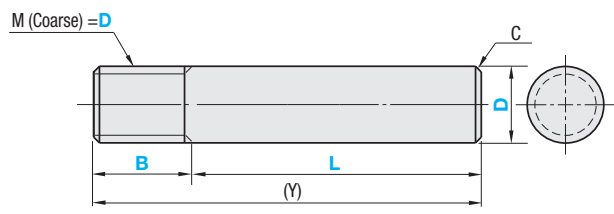
For One End Threaded Shafts with different diameters, see **P.191**.



| Type | | | Material | Hardness | Surface Treatment |
|-----------|-----------|-----------|---------------------------|---|---|
| D Tol. g6 | D Tol. h5 | D Tol. f8 | | | |
| SFAQ | SFUQ | - | SUJ2 Equivalent | Effective Hardened Depth of Induction Hardening | - |
| SSFAQ | SSFUQ | - | SUS440C or 13Cr stainless | | |
| PSFAQ | PSFUQ | - | SUJ2 Equivalent | P.142 SUJ2 Equivalent 58HRC- SUS440C or 13Cr stainless 56HRC- | Hard Chrome Plating - Plating Hardness: HV750 -, Plating Thickness: 5μ or More |
| PSSFAQ | PSSFUQ | - | SUS440C or 13Cr stainless | | |
| RSFAQ | - | - | SUJ2 Equivalent | - | Low Temp. Black Chrome Plating |
| - | - | PSFGQ | S45C Equivalent | | |
| - | - | PSSFGQ | SUS304 | - | Hard Chrome Plating - Plating Hardness: HV750 -, Plating Thickness: 10μ or More |

| D | D Tol. | | |
|----|------------------|----|------------------|
| | g6 | h5 | f8 |
| 3 | -0.002 -0.008 | 0 | -0.004 |
| 4 | - | - | - |
| 5 | -0.004 -0.012 | 0 | -0.005 |
| 6 | - | - | -0.010 -0.028 |
| 8 | -0.005 -0.014 | 0 | -0.013 -0.035 |
| 10 | - | - | - |
| 12 | -0.006 -0.017 | 0 | -0.016 -0.043 |
| 16 | - | - | - |
| 20 | -0.007 -0.020 | 0 | -0.020 -0.053 |
| 30 | - | - | - |

For plated products, the surface roughness of D part is $\sqrt{0.4}$; and for unplated products, it is $\sqrt{0.6}$.



L does not include incomplete threads.

RoHS10

- Annealing may lower hardness at shaft end machined areas (effective thread length + approx. 10mm).
- P.142
- L Dimension Tolerance, Circularity, Straightness, Perpendicularity and Changes in Hardness P.141
- Features of Low Temp. Black Chrome Plating P.156

| Part Number | | 1mm Increments | | | M | (Y) Max. | C | Coarse Thread Dimensions | |
|---------------|-------------|----------------|---------|--------|----|----------|-------------|--------------------------|------|
| Type | D | L | B | M | | | | pitch | |
| (D Tol. g6) | (D Tol. h5) | 3 | 25~ 197 | 3~ 15 | 3 | 200 | 0.2 or Less | 3 | 0.5 |
| SFAQ | SFUQ | 4 | 25~ 296 | 4~ 20 | 4 | 300 | | 4 | 0.7 |
| SSFAQ | SSFUQ | 5 | 25~ 396 | 4~ 25 | 5 | 400 | | 5 | 0.8 |
| PSFAQ | PSFUQ | 6 | 25~ 795 | 5~ 30 | 6 | 600 | 0.5 or Less | 6 | 1.0 |
| PSSFAQ | PSSFUQ | 8 | 25~ 993 | 7~ 40 | 8 | 800 | | 8 | 1.25 |
| RSFAQ (L≤500) | - | 10 | 25~ 992 | 8~ 50 | 10 | 800 | | 10 | 1.5 |
| (D Tol. f8) | - | 12 | 25~1191 | 9~ 60 | 12 | 1000 | 1.0 or Less | 12 | 1.75 |
| PSFGQ | - | 16 | 25~1190 | 10~ 80 | 16 | 1200 | | 16 | 2.0 |
| PSSFGQ | - | 20 | 25~1187 | 13~100 | 20 | 1200 | | 20 | 2.5 |
| - | - | 30 | 25~1482 | 18~150 | 30 | 1500 | 30 | 3.5 | |

L dimension has priority, thus B dimensions should be B-(Pitchx2).

Ordering Example: Part Number - L - B
SFAQ12 - 500 - B20
RSFAQ8 - 500 - B15

Alterations: Part Number - L - B - (SC -- etc.)
SFAQ12 - 500 - B20 - SC10

| Alterations | Code | Spec. |
|-------------|------|--|
| | SC | Wrench Flats at One Location (Ordering Code) SC5 (Application Notes) Applicable to D=6 or more SC=1mm Increment SC+Δ1<L SC=0 or SC≥2 Not available in combination with WSC. |
| | WSC | Wrench Flats at Two Locations (Ordering Code) WSC12-X8 (Application Notes) Applicable to D=6 or more WSC, X=1mm Increment WSC+X+Δ1x2<L WSC(X)=0 or WSC(X)≥2 Orientation between wrench flats is not coplanar. Not available in combination with SC. |
| | FC | Set Screw Flat at One Location (Ordering Code) FC10-E8 FC, E=1mm Increment D≤30:FC≤5xD, D≥35:FC≥3xD E=0 or E≥2 Not available in combination with WFC. |
| | WFC | Set Screw Flats at Two Locations (Ordering Code) WFC10-A8-E20 WFC, A, E=1mm Increment D≤30:WFC≤5xD, D≥35:WFC≥3xD A(E)=0 or A(E)≥2 Orientation between set screw flats is not coplanar. Not available in combination with FC. |

Alteration Details P.143

| Alterations | Code | Spec. |
|-------------|------------|---|
| | RC | 90-deg. Set Screw Flat at One Location (Ordering Code) RC10 (Application Notes) Only applicable to D=10 - 30. Not available in combination with WRC. |
| | WRC | 90-deg. Set Screw Flats at Two Locations (Ordering Code) WRC10-Y10 (Application Notes) Only applicable to D=10 - 30. Not available in combination with RC. Orientation between two set screw flats is not coplanar. |
| | KC | Keyway is added at one location. (Ordering Code) KC10-G10 (Application Notes) Only applicable to D=12, 16, 20 and 30. |
| | PMC PMS | Change to Fine Thread (Ordering Code) PMC10 (P is changed to PMC) PMS10 (P is changed to PMS) |

For details, see Shaft Alteration Overview. P.143

- Please see Shaft Alteration Overview for details if provided. P.143
- When selecting multiple alteration additions, the distance between machined areas should be greater than 2mm.
- Alterations may lower hardness. See P.142