


Shafts

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

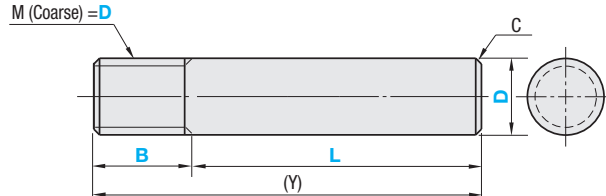
For One End Threaded Shafts with different diameters, see P.191.

For products uncovered by the e-Catalog Standards, see P.131.



Type			Material	Hardness	Surface Treatment	D Tol.			
D Tol. g6	SFUQ	D Tol. h5				D Tol. f8	D	g6	h5
SFAQ	SFUQ	-	SUJ2	Effective Hardened Depth of Induction Hardening P.142 SUJ2 58HRC~ SUS440C Equivalent 56HRC~	Hard Chrome Plating - Plating Hardness: HV750 ~, Plating Thickness: 5µ or More	3	-0.002	0	-0.004
SSFAQ	SSFUQ	-	SUS440C Equivalent			4	-0.008	-	-
PSFAQ	PSFUQ	-	SUJ2			5	-0.004	0	-0.005
PSSFAQ	PSSFUQ	-	SUS440C Equivalent			6	-0.012	-	-0.010
RSFAQ	-	-	SUJ2			8	-0.005	0	-0.013
-	-	PSFGQ	S45C Equivalent			10	-0.014	-0.006	-0.035
-	-	PSSFGQ	SUS304	12	-0.006	0	-0.016		
-	-	-	-	16	-0.017	-0.008	-0.043		
-	-	-	-	20	-0.007	0	-0.020		
-	-	-	-	30	-0.020	-0.009	-0.053		

For plated products, the surface roughness of D part is $R_a \leq 0.4$; and for unplated products, it is $R_a \leq 0.8$.



RoHS

Annealing may lower hardness at shaft end machined areas (effective thread length + approx. 10mm). P.142

L Dimension Tolerance, Circularity, Straightness, Perpendicularity, Concentricity and Changes in Hardness P.141

Features of Low Temp. Black Chrome Plating P.156

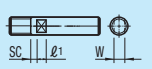
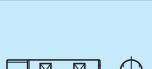
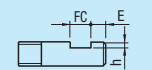
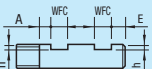
L does not include incomplete threads.

Part Number	Type	D	L	B	M	(Y) Max.	C	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		12	1.75
PSFGQ	-	16	25~1190	10~ 80	16	1200		16	2.0
PSSFGQ	-	20	25~1187	13~100	20	1200	1.0 or Less	20	2.5
-	-	30	25~1482	18~150	30	1500		30	3.5

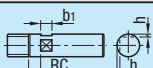
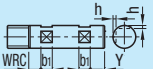
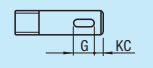
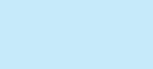
L dimension has priority, thus B dimensions should be B-(Pitchx2).

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)=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)

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

Part Number	Type	D	Unit Price																									
			Min. L	L51	L101	L151	L201	L251	L301	L351	L401	L451	L501	L551	L601	L651	L701	L751	L801	L851	L901	L951	L1001	L1101	L1201	L1301	L1401	
SFAQ	SFUQ	3																										
		4																										
		5																										
		6																										
		8																										
		10																										
SSFAQ	SSFUQ	3																										
		4																										
		5																										
		6																										
		8																										
		10																										
PSFAQ	PSFUQ	3																										
		4																										
		5																										
		6																										
		8																										
		10																										
PSSFAQ	PSSFUQ	3																										
		4																										
		5																										
		6																										
		8																										
		10																										

For D tolerance h5, add the relevant surcharge to the prices above.

Part Number	Type	D	Min. L	L101	L201	L401	L601	L801	L1001	L1201	L1401
PSFGQ	PSFUQ	6	100	200	400	600	800	1000	1200	1482	
		8									
		10									
		12									
		16									
		20									
PSSFGQ	PSSFUQ	6									
		8									
		10									
		12									
		16									
		20									

Part Number	Type	D	Min. L	L51	L101	L151	L201	L301	L401
RSFAQ	RSFUQ	3	50	100	150	200	300	400	500
		4							
		5							
		6							
		8							
		10							

Example

