Shafts

Standard Type / One End Threaded with O.D. Same as Shaft O.D.

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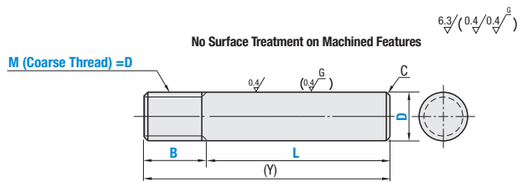
RoHS 10

- Shaft End Machined Area (Effective Thread Length + approx. 10 mm) Annealing could reduce hardness. **P.199**
- Changes in Circularity, Straightness, Perpendicularity, concentricity and Hardness. **P.198**
- Features of Low Temperature Black Chrome Plating, **P.213**.
- For One End Threaded Shafts with different diameters, please see **P.220**.

Type			Material	Hardness	Surface Treatment
Standard					
D Tol. g6	D Tol. h5	D Tol. f8			
SFAQ	SFUQ	—	52100 Bearing Steel Equivalent	Effective Hardened Depth of Induction Hardened **P.199** 52100 Bearing Steel Equivalent 58 HRC min. SUS440C (13Cr) Stainless Steel Equivalent 56 HRC min.	—
SSFAQ	SSFUQ	—	SUS440C (13Cr) Stainless Steel Equivalent		
PSFAQ	PSFUQ	—	52100 Bearing Steel Equivalent		Hard Chrome Plating Plating Hardness: HV 750~ Plating Thickness: 5 μ or More
PSSFAQ	PSSFUQ	—	SUS440C (13Cr) Stainless Steel Equivalent		
RSFAQ	—	—	52100 Bearing Steel Equivalent		Low Temperature Black Chrome Plating
—	—	PSFGQ	1045 Carbon Steel Equivalent	—	Hard Chrome Plating Plating Hardness: HV 750~ Plating Thickness: 10 μ or More
—	—	PSSFGQ	304 Stainless Steel		

No Surface Treatment on Machined Features



- L does not include incomplete threads.

D	D Tolerance g6	D Tolerance h5	D Tolerance f8
3	-0.002 -0.008	0 -0.004	—
4	-0.004 -0.012	0 -0.005	
5			-0.010 -0.028
6			
8	-0.005 -0.014	0 -0.006	-0.013 -0.035
10			
12	-0.006 -0.017	0 -0.008	-0.016 -0.043
16			
20	-0.007 -0.020	0 -0.009	-0.020 -0.053
30			

Part Number		1 mm Increment		M	(Y) Max.	C
Type	D	L	B			
D Tolerance g6 SFAQ SSFAQ PSFAQ PSSFAQ RSFAQ L≤500 / D Tolerance h5 SFUQ SSFUQ PSFUQ PSSFUQ / D Tolerance f8 PSFGQ PSSFGQ	3	25–197	3–15	3	200	0.2 or Less
	4	25–296	4–20	4	300	
	5	25–396	4–25	5	400	
	6	25–895	5–30	6	900	0.5 or Less
	8	25–1093	7–40	8	1100	
	10	25–1192	8–50	10	1200	
	12	25–1391	9–60	12	1400	
	16	25–1390	10–80	16	1400	
	20	25–1387	13–100	20	1400	1.0 or Less
	30	25–1482	18–150	30	1500	

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

Coarse Thread Dimensions	
M	Pitch
3	0.5
4	0.7
5	0.8
6	1.0
8	1.25
10	1.5
12	1.75
16	2.0
20	2.5
24	3.0
30	3.5

Part Number Example

Part Number	-	L	-	B
SFAQ12	-	500	-	B20
RSFAQ8	-	500	-	B15

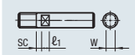
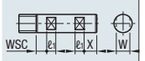
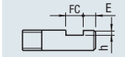
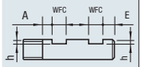
Shafts

Standard Type / One End Threaded with O.D. Same as Shaft O.D., *continued*

Part Number Alterations

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

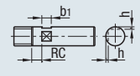
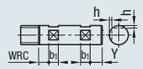
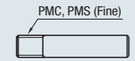
Alteration Details **P.200**

Alterations	Code	Spec.
	SC	Wrench Flats at One Location **Ordering Code:** SC5 **Application Notes:** Applicable to D=6 or more SC=1 mm Increment ⓘ SC+ℓ1≤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 = 1 mm increment ⓘ WSC+X+ℓ1x2<L ⓘ WSC (X)=0 or WSC (X)≥2 ⊗ Orientation between wrench flat features is random. Not available in combination with SC.
	FC	Set Screw Flat at One Location **Ordering Code:** FC10-E8 FC, E = 1 mm Increment ⓘ FC≤3xD ⓘ When 1.5XD<FC, FC≤L/2 ⓘ 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 and E = 1 mm Increment ⓘ WFC≤3xD ⓘ When 1.5xD<FC, 2WFC≤L/2 ⓘ A (E)=0 or A (E)≥2 ⊗ Orientation between set screw flats is random. Not available in combination with FC.

D	W	ℓ1
6	5	8
8	7	
10	8	
12	10	10
13	11	
15	13	
16	14	
18	16	
20	17	
25	22	
30	27	15

D	h
3–5	0.5
6–18	1
20–30	2

D	h
3–5	0.5
6–18	1
20–30	2

Alterations	Code	Spec.
	RC	90° Set Screw Flat at One Location **Ordering Code:** RC10 **Application Notes:** Only applicable to D=10–30 ⊗ Not available in combination with WRC. ⓘ For details, see Shaft Alteration Overview **P.200**.
	WRC	2 x 90° set screw flats **Ordering Code:** WRC10-Y10 **Application Notes:** Applicable to D=10–30 ⊗ Not available in combination with RC. ⊗ Orientation between set screw features is random. ⓘ For details, see Shaft Alteration Overview **P.200**.
	KC	Keyway is added at one location **Ordering Code:** KC10-G10 **Application Notes:** Only applicable to D=12, 16, 20 and 30 ⓘ For details, see Shaft Alteration Overview **P.200**.
	PMC PMS	Change to Fine Thread **Ordering Code:** PMC10 (P is changed to PMC) PMS10 (P is changed to PMSC)

D	PMC	Pitch	PMS	Pitch
3	3	0.35		
4	4	0.5		
5	5			
6	6	0.75		
8	8	1.0		
10	10		10	1.25
12	12		12	1.5
16	—	—		
20	20	1.0		
30	30	1.5		

- Please see Shaft Alteration Overview for details if provided. **P.200**
- When selecting multiple alteration additions, the distance between machined areas should be greater than 2 mm. **P.201**
- Alterations may lower hardness. **P.199**