


Shafts

Solid Type

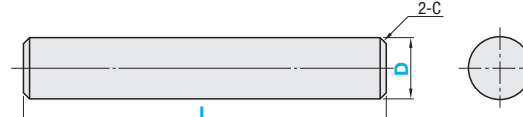
For products uncovered by the e-Catalog Standards, see P.131.

Shaft length can be specified in 1mm increments. Stocked in fixed L dimensions.



Type			Material	Hardness	Surface Treatment
D Tol. g6	D Tol. h5	D Tol. f8			
SFJ	SFU	-	SUJ2 Equivalent	Effective Hardened Depth of Induction Hardening P.142	Hard Chrome Plating - Plating Hardness: HV750 ~, Plating Thickness: 5µ or More
ZSFJ	-	-	SUS440C or 13Cr stainless		
SSFJ	SSFU	-	SUJ2 Equivalent	SUS440C or 13Cr stainless 58HRC~	Low Temp. Black Chrome Plating
PSFJ	PSFU	-	SUJ2 Equivalent		
PSSFJ	PSSFU	-	SUS440C or 13Cr stainless	S45C Equivalent	Hard Chrome Plating - Plating Hardness: HV750 ~, Plating Thickness: 10µ or More
RSFJ	-	-	SUJ2 Equivalent		
-	-	PSFG	SUS304	-	-
-	-	PSSFG	SUS304	-	-

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



RoHS10

Features of Low Temp. Black Chrome Plating **P.156**

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

Part Number			L			C			Unit Price		
Type	D	specified in 1mm increments	Type	D	Fixed	Type	D	Fixed	Type	D	Fixed
SFJ SSFJ PSFJ PSSFJ RSFJ (Ds<30, L<500)	3	10~ 400	ZSFJ	10	100	0.2 or Less	10	100	0.5 or Less	30	300
	4	10~ 400		12	300			12			300
	5	10~ 400		20	200			15			1500
	6	15~ 800		20	300			16			30~1200
	8	15~1000		25	35~1200			18			30~1200
	10	15~1000		30	35~1500			20			30~1200
	12	15~1200		35	35~1500			25			35~1200
	13	15~1200		40	50~1500			30			35~1500
	15	15~1200		50	65~1500			35			35~1500
	16	30~1200		50	65~1500			40			50~1500
18	30~1200	50	65~1500	50	65~1500						

Alterations Part Number - L - (LKC, SC-etc.)

SFJ30 - 250 - LKC

Alterations	Code	Spec.
	LKC	Alteration to L dimension tolerance (Ordering Code) LKC L dimensions can be specified in 0.1mm increment for LKC. L<200 ...L±0.03 200<L<500 ...L±0.05 L≥500 ...L±0.1
	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 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 Orientation between wrench flats is not coplanar. Not available in combination with SC.
	FC	Set Screw Flat at One Location (Ordering Code) FC10-A8 FC, A=1mm Increment D≤30:FC≤5xD D≥35:FC≤3xD A=0 or A≥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 SC.

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.
	VC	V Groove at One Location (Ordering Code) VCB (Application Notes) Applicable to D=6 or more Not available in combination with WVC.
	WVC	V Grooves at Two Locations (Ordering Code) WVC180-F8 (Application Notes) Applicable to D=6 or more Not available in combination with VC.
	KC	Keyway at one location (Ordering Code) KC10-G10
	WKC	Keyways at two locations (Ordering Code) WKC10-C8-KC10-G10 (Application Notes) Only applicable to D=12, 16, 20, 25 and 30.

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. **P.144**

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		
SFJ	SFU	3																											
		4																											
		5																											
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SSFJ	SSFU	3																											
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PSFJ	PSFU	3																											
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PSSFJ	PSSFU	3																											
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		16																											

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

Part Number		Unit Price						
Type	D	Min. L	L51	L101	L151	L201	L301	L401
RSFJ	3, 4, 5							
	6							
	8							
	10							
	12							
	13							
	15							
	16							
	18							
	20							
25								
30								
PSSFG	6							
	8							
	10							
	12							
	13							
	15, 16							
	18, 20							
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	30							
	35							
40								
50								

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