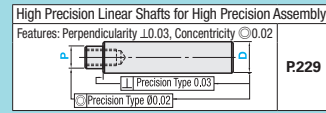


Shafts

One End Stepped and Tapped / One End Stepped



P.229

For High Precision Linear Shafts with high perpendicular precision of the shaft end ($\perp 0.03$), see P.229. For Shafts with Wrench Flats, see P.167.

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

Type		Material	Hardness	Surface Treatment	D Tol.		
One End Stepped and Tapped	One End Stepped				g6	h5	f8
SFAG	SFUG	SFAC	SFCU	SUJ2	Effective Hardened		
SSFAG	SSFUG	SSFAC	SSFCU	SUS40C Equivalent	Depth of Induction Hardening P.142		
PSFAG	PSFUG	PSFAC	PSFCU	SUJ2	Hard Chrome Plating - Plating Thickness: 5μ or More		
PSSFAG	PSSFUG	PSSFAC	PSSFCU	SUS40C Equivalent	Low Temp. Black Chrome Plating - Plating Thickness: 10μ or More		
RSFAG	RSFUG	RSFAC	RSFCU	SUJ2	SUS40C Equivalent 56HRC		
	PSFGG		PSCGC	S45C Equivalent			
	PSSFGG		PSSCGC	SUS304			

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

One End Stepped and Tapped

One End Stepped

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

Part Number Type	1mm Increments				M (Coarse) Selection	Y Max.	R	C
	D	L	F	P				
One End Stepped and Tapped (D Tol. g6)	8	25-998		6	3	800	0.3 or Less	0.5 or Less
One End Stepped (D Tol. h5)	10	25-998		6-8	3 4 5	800		
SFAG	SFUG	SFAC	SFCU	6-10	3 4 5 6	1000		
SSFAG	SSFUG	SSFAC	SSFCU	6-11	3 4 5 6 8	1000		
PSFAG	PSFUG	PSFAC	PSFCU	6-13	3 4 5 6 8 10	1000		
PSSFAG	PSSFUG	PSSFAC	PSSFCU	6-14	3 4 5 6 8 10	1200		
RSFAG	RSFUG	RSFAC	RSFCU	8-16	4 5 6 8 10 12	1200		
(D≤30, L≤500)	(D≤30, L≤500)			8-17	4 5 6 8 10 12	1200		
(D Tol. f8)	(D Tol. h8)			8-22	4 5 6 8 10 12 16	1200		
PSFAG	PSFUG	PSCGC		9-27	5 6 8 10 12 16 20 24	1500		
PSSFAG	PSSFUG	PSSCGC		9-32	5 6 8 10 12 16 20 24	1500		
				11-37	6 8 10 12 16 20 24 30	1500		
				11-47	6 8 10 12 16 20 24 30	1500		

2≤F≤P×4

One End Stepped and Tapped P dimensions require M+3≤P. When M×2.5+4≥Y, tap pilot holes may go through.

Ordering Example

Part Number	L	F	P	M
SFAG20	400	F25	P16	M10
SFUG20	400	F25	P16	M10
SFAC20	500	F25	P16	

Alterations

Part Number	L	F	P	M(MD)	(LKC, FC--etc.)
SFAG30	400	F25	P16	M10	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
	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: WFC8-A8-E4 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.

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 at One Location: KC
	WKC	Keyways at Two Locations: WKC Ordering Code: KC10-G10 WKC10-C8-KC10-G10 Application Notes: Only applicable to D=12, 16, 20, 25 and 30.
	MD	Change the effective length of tapped part to Mx3. Ordering Code: MD6 (M is changed to MD) Application Notes: Only applicable to D=10~30 and M=6~20. One End Tapped: MD×3.5+4≤L Not available in combination with KC, WSC.
	LFC	Set Screw Flat at Step Parts Ordering Code: LFC10-A0 LFC+A≤F D-M≥1

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		
SFAG SFUG SFAC SFCU	8																											
	10																											
	12																											
	13																											
	15																											
	16																											
	20																											
	25																											
	30																											
	35																											
SSFAG SSFUG SSFAC SSFCU	8																											
	10																											
	12																											
	13																											
	15																											
	16																											
	20																											
	25																											
	30																											
	35																											
PSFAG PSFUG PSFAC PSFCU	8																											
	10																											
	12																											
	13																											
	15																											
	16																											
	20																											
	25																											
	30																											
	35																											
PSSFAG PSSFUG PSSFAC PSSFCU	8																											
	10																											
	12																											
	13																											
	15																											
	16																											
	20																											
	25																											
	30																											
	35																											

One End Stepped and Tapped For D tolerance h5, add the relevant surcharge to the prices above.

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

For D tolerance g6, subtract the relevant charge from the prices above.

Part Number Type	D	Unit Price					
		Min. L	L51	L101	L151	L201	L401
RSFAG RSFAC	8						
	10						
	12						
	13						
	15						
	16						
	20						
	25						
	30						
	35						

For One End Stepped Shafts, subtract the relevant charge from the prices above.

Part Number Type	D	Unit Price					
		Min. L	L101	L201	L401	L601	L1201
PSFAG PSFUG PSFAC PSFCU	8, 10						
	12, 13						
	15, 16						
	18, 20						
	25						
	30						
	35						
	40						
	50						

For One End Stepped Shafts, subtract the relevant charge from the prices above.

Part Number Type	D	Unit Price					
		Min. L	L101	L201	L401	L601	L1201
PSSFAG PSSFUG PSSFAC PSSFCU	8, 10						
	12, 13						
	15, 16						
	18, 20						
	25						
	30						
	35						
	40						
	50						

For One End Stepped Shafts, subtract the relevant charge from the prices above.