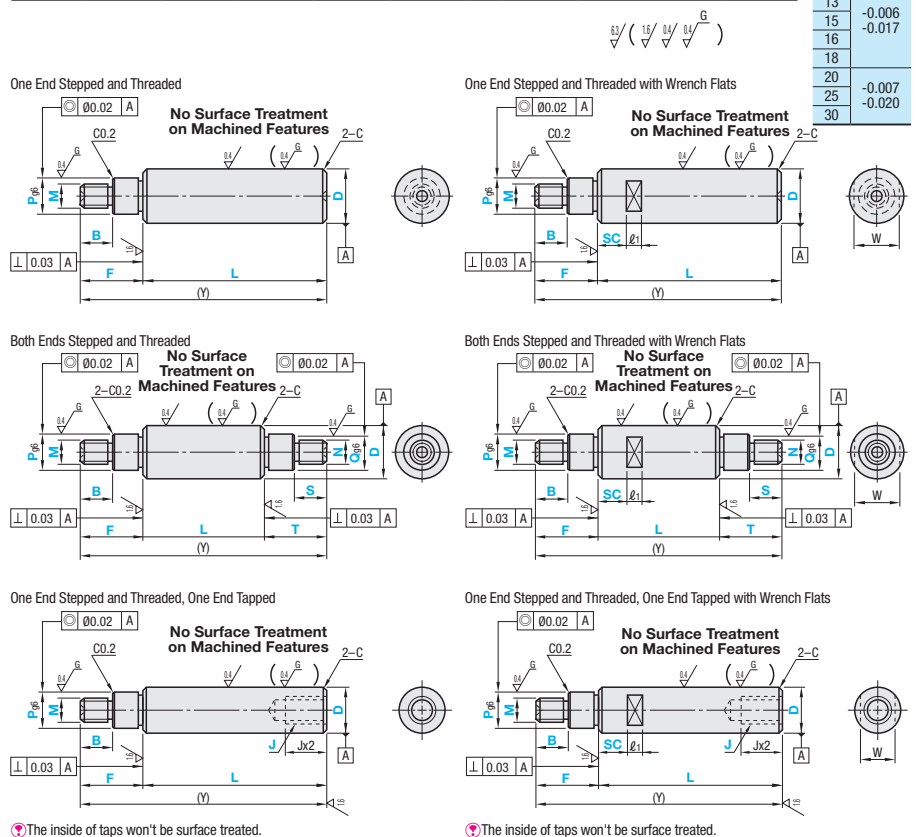


High Precision Linear Shafts - Stepped Ends / Stepped Ends with Wrench Flats - One End Threaded / Both Ends Threaded / One End Threaded, One End Tapped



RoHS

Type						D Tol. Dg6	Material	Hardness	Surface Treatment
One End Stepped and Threaded Standard	With Wrench Flats	Both Ends Stepped and Threaded Standard	With Wrench Flats	One End Stepped and Threaded, One End Tapped Standard	With Wrench Flats				
VFAN	VFPN	VFAM	VFPM	VFAD	VFPD	4	S2100 Bearing Steel	Effective Hardened Depth of Induction Hardened	
VSFAN	VSFPN	VSFAM	VSFPM	VSFAD	VSFPD	5	440C Stainless Steel		
VRAN	VRPN	VRAM	VRPM	VRAD	VRPD	6	S2100 Bearing Steel	P98	Low Temp. Black Chrome Plating
VSRAN	VSRPN	VSRAM	VSRPM	VSRAD	VSRPD	8	440C Stainless Steel		
						9	S2100 Bearing Steel		
						10	440C Stainless Steel		
						12			
						13			
						15			
						16			
						18			
						20			
						25			
						30			



- Annealing required for wrench flats machining and shaft end threading (effective thread length + approx. 10mm) may lower hardness. P98
- Changes in Hardness and Thread Undercut Dimensions P97
- There will be centering holes on end faces of the shafts.
- Features of Low Temp. Black Chrome Plating P112

The inside of taps won't be surface treated.

Part Number Type	1mm Increment					M (Coarse Thread) N (Coarse Thread)	J (Coarse)	Wrench Flats Dimensions			(Y) Max.	C
	D	L	F, T	B, S	P, Q			SC	W	l ₁		
VFAN	VFPN	(4) 25-195				3	2				200	0.2 or Less
VSFAN	VSFPN	(5) 25-295				3 4	2.6 3				300	
VRAN	VRPN	6 25-295				3 4 5	3				300	
VSRAN	VSRPN	8 25-295				3 4 5 6 8	3 4 5 6				300	
		10 25-345				4 5 6 8 10	3 4 5 6 8				350	
VFAM	VFPM	12 25-345	5<F>P×5	B=0 S=0	M<P<D	5 6 8 10	4 5 6 8 10				350	0.5 or Less
VSFAM	VSFPM	13 25-345				5 6 8 10	4 5 6 8 10				350	
VRAM	VRPM	15 25-345	5<T>N×5		N<Q<D	5 6 8 10 12	4 5 6 8 10 12				350	
VSRAM	VSRPM	16 25-345				5 6 8 10 12	4 5 6 8 10 12				350	
		18 25-345				5 6 8 10 12	4 5 6 8 10 12				450	
VFAD	VFPD	20 25-445				6 8 10 12 16	4 5 6 8 10 12 16				450	1.0 or Less
VSFAD	VSFPD	25 25-445				8 10 12 16 20	4 5 6 8 10 12 16				450	
VRAD	VRPD					8 10 12 16 20 24	6 8 10 12 16 20				450	
VSRAD	VSRPD	30 25-445									450	

For VFAD, VRAD, VSFAD, VSRAD, VFPD, VSFPD, VRPD and VSRPD, overall length L requires Jx3L. F-B(T-S)≥2 is required.

Specify M=0 when B=0; N=0 when S=0. Sizes in () are not applicable to Shafts with Wrench Flats.

Ordering Example: Part Number - L - F - B - P - M - SC

VFAN20 - 400 - F30 - B20 - P10 - M8

Part Number - L - F - B - P - M - T - S - Q - N - SC

VFPM12 - 300 - F30 - B20 - P10 - M8 - T20 - S10 - Q10 - N6 - SC10

Part Number - L - F - B - P - M - J - SC

VSFAD30 - 250 - F50 - B40 - P20 - M16 - J20

Days to Ship **Configure Online**

Price **Configure Online**

Part Number Type	D	Unit Price				
		Min. L-50	L51-100	L101-200	L201-300	L301-445
VFAN	4					
VRAN	10					
VFPN	5					
VRPN	8					
VFPN	13					
VRPN	18					
VFPN	25					
VRPN	30					

Part Number Type	D	Unit Price				
		Min. L-50	L51-100	L101-200	L201-300	L301-440
VFAM	4					
VRAM	10					
VFPM	13					
VRPM	18					
VFPM	25					
VRPM	30					

Part Number Type	D	Unit Price				
		Min. L-50	L51-100	L101-200	L201-300	L301-445
VFAD	4					
VRAD	10					
VFPD	13					
VRPD	18					
VFPD	25					
VRPD	30					

Low Temp. Black Chrome Plating Additional Charge	D	Additional Price				
		Min. L-50	L51-100	L101-200	L201-300	L301-445
	4-6					
	8, 10					
	12, 13					
	15, 16					

Part Number Type	D	Unit Price				
		Min. L-50	L51-100	L101-200	L201-300	L301-445
VSFAN	4					
VSRAN	10					
VSFPN	5					
VSRPN	8					
VSFPN	13					
VSRPN	18					
VSFPN	25					
VSRPN	30					

Part Number Type	D	Unit Price				
		Min. L-50	L51-100	L101-200	L201-300	L301-440
VSFAM	4					
VSRAM	10					
VSFPM	13					
VSRPM	18					
VSFPM	25					
VSRPM	30					

Part Number Type	D	Unit Price				
		Min. L-50	L51-100	L101-200	L201-300	L301-445
VSFAD	4					
VSRAD	10					
VSFPD	13					
VSRPD	18					
VSFPD	25					
VSRPD	30					

Low Temp. Black Chrome Plating Additional Charge	D	Additional Price				
		Min. L-50	L51-100	L101-200	L201-300	L301-445
	18, 20					
	25					
	30					

Alterations Part Number - L - F - B - P - M (MMC, MMS) - T, J (JSC) - S - Q - N (NMC, NMS) - SC - (LKC)

Alterations	Alteration to L dimension tolerance	Change to Fine Thread	Change to Fine Tapped Thread
Code	LKC	MMC, MMS, NMC, NMS	JSC
Spec.	Changes L Tolerance. (Ordering Code) LKC Applicable to L dimension 200 or less. → ±0.03 L dimensions can be specified in 0.1mm increment for LKC. Not applicable when D-P(Q)≤2	Changes the threads to fine threads shown in the table below. (MMC, NMC → Applicable to bearing nut fine thread pitches.) (MMS, NMS → Applicable to cylinder fine thread pitches.) (Ordering Code) MMC17	Changes tapped threads to fine tapped threads shown in the table below. (Ordering Code) JSC14
Price Adder			

The distance between wrench flats and alteration areas should be greater than 2mm for alterations. P.100

Alterations may lower hardness. P.98