Shafts
Surface Fully Plated Type

Surface treatment is also applied to shaft ends.

	Type					D Tol.	M Material	H Hardness	S Surface Treatment
	Solid	One End Tapped	Both Ends Tapped	One End Stepped and Tapped	One End Stepped, Both Ends Tapped				
	PSFCJ	PSFCT	PSFCW	PSFCG	PSFCA	g6	SUJ2	Effective Hardened Depth of Induction Hardening ☞ P.142 SUJ2 58HRC~	Electroless Nickel Plating

The surface roughness of D part is 0.4 √.

Solid Type PSFCJ

One End Tapped PSFCT

Both Ends Tapped PSFCW

One End Stepped, Both Ends Tapped PSFCA

One End Stepped and Tapped PSFCG

RoHS

- L Dimension Tolerance, Circularity, Straightness, Perpendicularity, Concentricity and Changes in Hardness ☞ P.141
- Annealing may lower hardness at shaft end machined areas (effective thread length + approx. 10mm).
- Shafts may have centering holes at end faces depending on shapes.
- Use "Oil-Free Bushings" for sliding applications. P.415~436 (Using rolling ball elements such as linear ball bushings on electroless nickel plated shafts may result in flaking of the nickel plating layer.)

■Solid / One End Tapped / Both Ends Tapped

Part Number		1mm Increments	Selection		C
Type	D	L	M	N (Both Ends Tapped Type only)	
Solid Type **PSFCJ**	8	20~ 800	3　4　5	3　4　5	0.5 or Less
	10	20~ 800	3　4　5　6	3　4　5　6	
	12	20~1000	4　5　6　8	4　5　6　8	
One End Tapped **PSFCT**	15	25~1000	4　5　6　8　10	4　5　6　8　10	
	20	30~1000	4　5　6　8　10　12	4　5　6　8　10　12	
	25	35~1000	4　5　6　8　10　12　16	4　5　6　8　10　12　16	
Both Ends Tapped **PSFCW**	30	35~1000	6　8　10　12　16　20	6　8　10　12　16　20	1.0 or Less
	35	35~1000	8　10　12　16　20　24	8　10　12　16　20　24	
	40	50~1000	10　12　16　20　24　30	10　12　16　20　24　30	
	50	65~1000	12　16　20　24　30	12　16　20　24　30	

- For One End Tapped Type, when Mx2.5+4≥L, tap pilot holes may go through.
- For Both Ends Tapped Type, when Mx2.5+4x2≥L, tap pilot holes may go through and the effective length of the smaller tap part may be shortened.

■One End Stepped and Tapped / One End Stepped, Both Ends Tapped

Part Number		1mm Increments			Selection		(Y)Max.	R	C
Type	D	L	F	P	M	N (One End Stepped, Both Ends Tapped Type only)			
One End Stepped and Tapped **PSFCG**	8	25~798		6	3	3　4　5	800		0.5 or Less
	10	25~798		6~ 8	3　4　5	3　4　5　6	800		
	12	25~998		6~10	3　4　5　6	4　5　6　8	1000		
	15	25~998	2≤F≤Px4	6~13	3　4　5　6　8　10	4　5　6　8　10	1000		0.4 or Less
	20	25~998		8~17	4　5　6　8　10　12	4　5　6　8　10　12	1000		
One End Stepped, Both Ends Tapped **PSFCA**	25	25~998		8~22	4　5　6　8　10　12　16	4　5　6　8　10　12　16	1000		
	30	25~998		9~27	5　6　8　10　12　16　20　24	6　8　10　12　16　20	1000		1.0 or Less
	35	25~998		9~32	5　6　8　10　12　16　20　24	8　10　12　16　20　24	1000		
	40	25~998		11~37	6　8　10　12　16　20　24　30	10　12　16　20　24　30	1000		0.5 or Less
	50	25~998		11~47	6　8　10　12　16　20　24　30	12　16　20　24　30	1000		

- For One End Stepped and Tapped Type, when P≥M+3 and Mx2.5+4≥Y, tap pilot holes may go through.
- For One End Stepped, Both Ends Tapped Type, when P≥M+3 and Mx2.5+4x2≥Y, tap pilot holes may go through and the effective length of the smaller tap part may be shortened.

Part Number	-	L	-	F	-	P	-	M	-	N
PSFCJ20	-	75								
PSFCT20	-	525					-	M8		
PSFCW20	-	525					-	M8	-	N8
PSFCG20	-	400	-	F25	-	P16	-	M10		
PSFCA20	-	400	-	F25	-	P16	-	M10	-	N10

■Solid

Part Number			Unit Price								
Type	D	Min. L 50	L51 ? 100	L101 ? 150	L151 ? 200	L201 ? 300	L301 ? 400	L401 ? 500	L501 ? 600	L601 ? 800	L801 ? 1000
PSFCJ	8										-
	10										-
	12										
	15										
	20										
	25										
	30										
	35										
	40										
	50	-									

■Both Ends Tapped

Part Number			Unit Price								
Type	D	Min. L 50	L51 ? 100	L101 ? 150	L151 ? 200	L201 ? 300	L301 ? 400	L401 ? 500	L501 ? 600	L601 ? 800	L801 ? 1000
PSFCW	8										-
	10										-
	12										
	15										
	20										
	25										
	30										
	35										
	40										
	50	-									

■One End Tapped

Part Number			Unit Price								
Type	D	Min. L 50	L51 ? 100	L101 ? 150	L151 ? 200	L201 ? 300	L301 ? 400	L401 ? 500	L501 ? 600	L601 ? 800	L801 ? 1000
PSFCT	8										-
	10										-
	12										
	15										
	20										
	25										
	30										
	35										
	40										
	50	-									

■One End Stepped, Both Ends Tapped

Part Number			Unit Price								
Type	D	Min. L 50	L51 ? 100	L101 ? 150	L151 ? 200	L201 ? 300	L301 ? 400	L401 ? 500	L501 ? 600	L601 ? 800	L801 ? 1000
PSFCA	8										-
	10										-
	12										
	15										
	20										
	25										
	30										
	35										
	40										
	50	-									

■One End Stepped and Tapped

Part Number			Unit Price								
Type	D	Min. L 50	L51 ? 100	L101 ? 150	L151 ? 200	L201 ? 300	L301 ? 400	L401 ? 500	L501 ? 600	L601 ? 800	L801 ? 1000
PSFCG	8										-
	10										-
	12										
	15										
	20										
	25										
	30										
	35										
	40										
	50	-									

Alterations

Part Number	-	L	-	M	-	N	-	(SC FC--etc.)
PSFCW20	-	525	-	M8	-	N8	-	SC0

- Surface treatment will be also applied to altered areas.
- Alterations may lower hardness. See ☞ P.142.
- When selecting multiple alteration additions, the distance between machined areas should be greater than 2mm. ☞ P.144

	Alteration to L dimension tolerance	Wrench Flats	Set Screw Flat	Fine Tap	
Alterations	LKC	SC ℓ₁ W	FC E	MSC (Fine)	NSC (Fine)
Code	LKC	SC	FC	MSC, NSC	

Spec.

Alteration to L dimension tolerance:
Changes L tolerance.
Ordering Code LKC
- L<200 ···L±0.03
- 200≤L<500···L±0.05
- L>500 ···L±0.1
- L dimensions can be specified in 0.1mm increment for LKC.
- Not applicable to One End Threaded with O.D. same as Shaft O.D.

Wrench Flats:
Adds wrench flats.
Ordering Code SC5
- SC = 1mm Increment
- SC+ℓ₁≤L SC≥0

D	W	ℓ₁	D	W	ℓ₁
8	7	8	25	22	10
10	8		30	27	15
12	10	8	35	30	
15	13	10	40	36	20
20	17		50	41	

Set Screw Flat:
Adds a screw flat.
Ordering Code FC10-E8
- FC, E=1mm Increment
- FC≤Dx3
- When 1.5xD<FC, FC≤L/2
- E=0 or E≥2

D	h
8~15	1
20~40	2
50	3

Fine Tap:
Changes tapped threads to fine tapped threads shown in the table below.
Ordering Code MSC14
- Specify in reference to D dimensions for One End Threaded Shafts; P dimensions for One End Stepped and Tapped Shafts.

D, P	MSC, NSC			
12	8			
15	8	10		
20	8	10	12　14	
25~35	8	10	12　14　18	
40		10	12　14　18	
50			12　14　18	
Pitch	1.0	1.25		1.5

- Specify M dimensions with MSC.
- M dimension is equal to MSC.