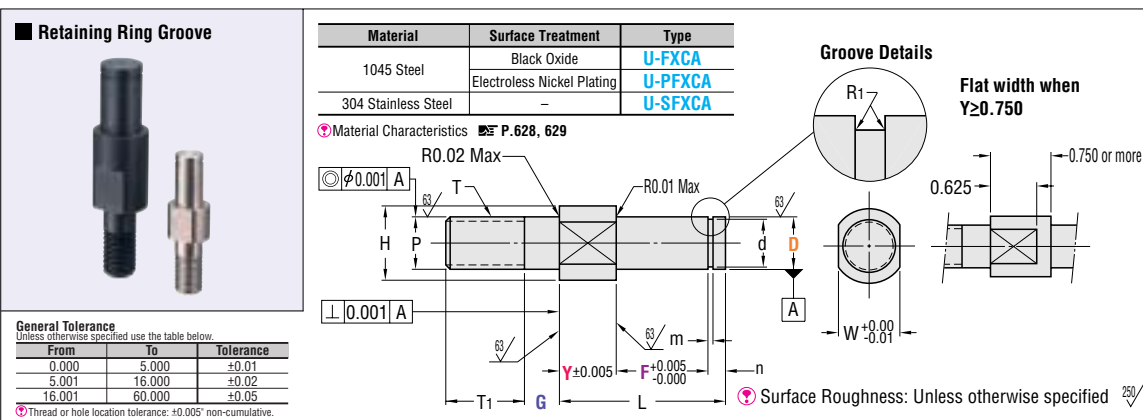


# Cantilever Shafts –Piloted Shafts–

Cantilever Shafts are generally used in combination with rotary bearings, pulleys or as swivel mechanisms. They are often used as the idler portion of a rotary system and are mounted on a flat surface. Choose from a 1045 carbon steel or 304 stainless steel. The P diameter has a very critical tolerance and allows you to precisely locate the part.

### Retaining Ring Groove



Material	Surface Treatment	Type
1045 Steel	Black Oxide	U-FXCA
	Electroless Nickel Plating	U-PFXCA
304 Stainless Steel	-	U-SFXCA

Material Characteristics **P.628, 629**

General Tolerance Unless otherwise specified use the table below.

From	To	Tolerance
0.000	5.000	±0.01
5.001	16.000	±0.02
16.001	60.000	±0.05

Thread or hole location tolerance: ±0.005" non-cumulative.

Surface Roughness: Unless otherwise specified  $R_{a} 250$

Type	Part No.			Choose in 0.001" Increments			L	P		T (Thread) Size	T <sub>1</sub>	H	W
	Callout	Nominal	Tolerance	Y	F	G		Dia.	Tolerance				
U-FXCA U-PFXCA U-SFXCA	0.25	1/4	0.2498 0.2494	0.125 ~ 2.250	0.250 ~ 3.875	0.188 ~ 0.375	Y+F+n	0.2500	0.2498 0.2494	1/4-20	0.375	0.50	0.438
	0.38	3/8	0.3748 0.3744	0.125 ~ 2.250	0.250 ~ 3.875	0.188 ~ 0.375	Y+F+n	0.3750	0.3748 0.3744	3/8-16	0.563	0.59	0.500
	0.50	1/2	0.4998 0.4994	0.125 ~ 2.250	0.250 ~ 3.875	0.188 ~ 0.563	Y+F+n	0.5000	0.4998 0.4994	1/2-13	0.750	0.69	0.560
	0.63	5/8	0.6248 0.6244	0.125 ~ 2.250	0.375 ~ 5.750	0.188 ~ 0.563	Y+F+n	0.6250	0.6248 0.6244	5/8-11	0.938	0.81	0.688
	0.75	3/4	0.7497 0.7492	0.156 ~ 2.875	0.375 ~ 5.750	0.188 ~ 0.750	Y+F+n	0.7500	0.7497 0.7492	3/4-10	1.125	1.00	0.875
1.00	1"	0.9997 0.9992	0.156 ~ 2.875	0.375 ~ 5.750	0.188 ~ 0.750	Y+F+n	1.0000	0.9997 0.9992	1-8	1.500	1.25	1.125	

Order Example The part number consists only of the fields with blue characters. Please refer to the table below for technical information.

Part No. - Y - F - G  
Type D  
U-FXCA 0.50 - Y 1.375 - F 1.000 - G 0.375

### Retaining Ring Groove Tolerance & Details

D	Diameter	d	Tolerance	Width	m	n	R1 max	Compatible Retaining Rings (ASME B18.27-1998)
0.25	0.230	0.2315	0.2285	0.029	0.032 0.029	0.094	0.003	NA1- 25
0.38	0.352	0.3540	0.3500	0.029	0.032 0.029	0.125	0.005	NA1- 37
0.50	0.468	0.4700	0.4660	0.039	0.042 0.039	0.156	0.005	NA1- 50
0.63	0.588	0.5910	0.5850	0.039	0.042 0.039	0.156	0.005	NA1- 62
0.75	0.704	0.7070	0.7010	0.046	0.049 0.046	0.156	0.005	NA1- 75
1.00	0.940	0.9430	0.9370	0.046	0.049 0.046	0.156	0.005	NA1-100

Days to Ship **Standard** 6 Days **Express** 4 Days (Specify Express A) \$ 8.00/piece  
Optional Modifications Part No. - Y - F - G - TA (Ordering Code) (YKC, WSC)  
U-FXCA 0.50 - Y 1.375 - F 1.000 - G 0.375 - YKC

Optional Modifications	Y Dimension Tolerance	Wrench Flats Added
Ordering Code	YKC	WSC
Details	Changes the Y dimension tolerance to ±0.002. [Example] YKC	Wrench flats have been changed from 2 sides to 4 sides. [Example] WSC
\$ Price Adder	4.00	4.00

When using Optional Modifications, add the "Price Adder" to the standard "Unit Price".

Quantity Discount Rate

Quantity	Rate
1	-
2-4	5%
5-19	10%
20-	15%

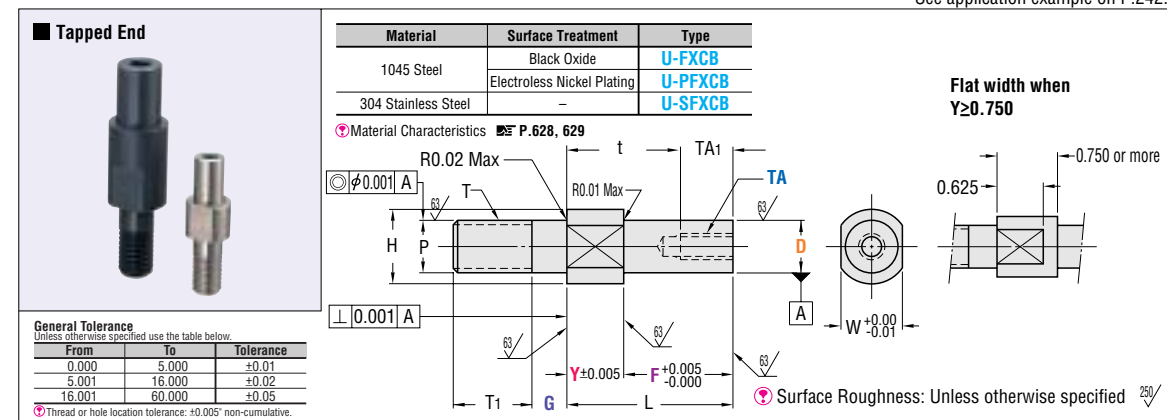
D	U-FXCA	U-PFXCA	U-SFXCA
0.25	15.40	18.40	23.00
0.38	17.40	20.80	26.00
0.50	19.30	23.30	29.20
0.63	22.40	26.90	33.60
0.75	28.60	34.20	43.00
1.00	34.00	40.80	51.00

Related Components

- Idler Pulleys - Timing Belt- P.303
- Idler Pulleys P.305
- Collars P.499

See application example on P.242.

### Tapped End



Material	Surface Treatment	Type
1045 Steel	Black Oxide	U-FXCB
	Electroless Nickel Plating	U-PFXCB
304 Stainless Steel	-	U-SFXCB

Material Characteristics **P.628, 629**

General Tolerance Unless otherwise specified use the table below.

From	To	Tolerance
0.000	5.000	±0.01
5.001	16.000	±0.02
16.001	60.000	±0.05

Thread or hole location tolerance: ±0.005" non-cumulative.

Surface Roughness: Unless otherwise specified  $R_{a} 250$

Type	Part No.			Choose in 0.001" Increments			Thread Selection (Callout)					L	P		T (Thread) Size	T <sub>1</sub>	H	W		
	Callout	Nominal	Tolerance	Y	F	G	#6-32	#8-32	#10-32	1/4-20	5/16-18		3/8-16	1/2-13					5/8-11	Dia.
U-FXCB U-PFXCB U-SFXCB	0.25	1/4	0.2498 0.2494	0.125 ~ 2.250	0.250 ~ 3.875	0.188 ~ 0.375	6							Y+F	0.2500	0.2498 0.2494	1/4-20	0.375	0.50	0.438
	0.38	3/8	0.3748 0.3744	0.125 ~ 2.250	0.250 ~ 3.875	0.188 ~ 0.375	6 8							Y+F	0.3750	0.3748 0.3744	3/8-16	0.563	0.59	0.500
	0.50	1/2	0.4998 0.4994	0.125 ~ 2.250	0.250 ~ 3.875	0.188 ~ 0.563	8 10 0.25							Y+F	0.5000	0.4998 0.4994	1/2-13	0.750	0.69	0.560
	0.63	5/8	0.6248 0.6244	0.125 ~ 2.250	0.375 ~ 5.750	0.188 ~ 0.563	10 0.25 0.31							Y+F	0.6250	0.6248 0.6244	5/8-11	0.938	0.81	0.688
	0.75	3/4	0.7497 0.7492	0.156 ~ 2.875	0.375 ~ 5.750	0.188 ~ 0.750	0.25 0.31 0.38							Y+F	0.7500	0.7497 0.7492	3/4-10	1.125	1.00	0.875
1.00	1"	0.9997 0.9992	0.156 ~ 2.875	0.375 ~ 5.750	0.188 ~ 0.750	0.31 0.38 0.50 0.63							Y+F	1.0000	0.9997 0.9992	1-8	1.500	1.25	1.125	

Order Example The part number consists only of the fields with blue characters. Please refer to the table below for technical information.

Part No. - Y - F - G - TA  
Type D  
U-FXCB 0.50 - Y 1.375 - F 1.000 - G 0.375 - TA 10

Selection Criteria: Select Y and F, "t" in the drawing does not become smaller than the table below.

### Technical Information

TA (Thread) Callout	Thread Size	Major Dia.	TA <sub>1</sub> (Depth)	"t" Minimum	
				TA (Thread)	t min.
6	#6-32	0.138	0.28	#6-32	0.219
8	#8-32	0.164	0.33	#8-32	0.250
10	#10-32	0.190	0.38	#10-32	0.250
0.25	1/4-20	0.250	0.50	1/4-20	0.266
0.31	5/16-18	0.313	0.63	5/16-18	0.297
0.38	3/8-16	0.375	0.75	3/8-16	0.344
0.50	1/2-13	0.500	1.00	1/2-13	0.469
0.63	5/8-11	0.625	1.25	5/8-11	0.516

Days to Ship **Standard** 6 Days **Express** 4 Days (Specify Express A) \$ 8.00/piece  
Optional Modifications Part No. - Y - F - G - TA (Ordering Code) (YKC, WSC)  
U-FXCB 0.50 - Y 1.375 - F 1.000 - G 0.375 - TA 10 - YKC

Optional Modifications	Y Dimension Tolerance	Wrench Flats Added
Ordering Code	YKC	WSC
Details	Changes the Y dimension tolerance to ±0.002. [Example] YKC	Wrench flats have been changed from 2 sides to 4 sides. [Example] WSC
\$ Price Adder	4.00	4.00

When using Optional Modifications, add the "Price Adder" to the standard "Unit Price".

Quantity Discount Rate

Quantity	Rate
1	-
2-4	5%
5-19	10%
20-	15%

D	U-FXCB	U-PFXCB	U-SFXCB
0.25	17.80	21.40	26.60
0.38	20.80	24.80	31.20
0.50	23.40	28.10	35.30
0.63	26.90	32.20	40.30
0.75	34.30	41.20	51.50
1.00	40.60	48.70	60.80

Express Options P.30

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