


# Rotary Shafts

—One Stepped End-Both Ends Tapped—

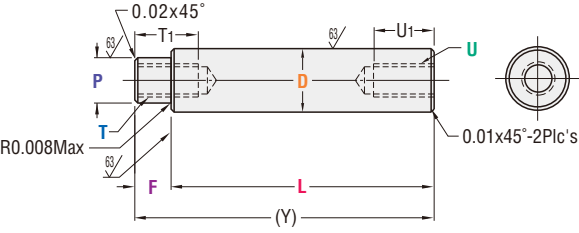


Mostly used as drive or idler shafts in rotary motion applications. Available in 1045 carbon steel and 304 stainless steel. Choose from a wide variety of modifications. Simply add the modification ordering code to the end of the part number. The "L" length can be specified with 0.01" increments. See the application examples at the bottom of the page. MISUMI's Rotary Shafts are delivered with complete shaft end machining, fine surface finish, and can fit into your system right out of the box.



Material	Surface Treatment	Type
1045 Steel	Black Oxide	U-SFRA
	Electroless Nickel Plating	U-PSFRA
304 Stainless Steel	-	U-SSFRA

Material Characteristics **P.628, 629**



Tolerance of L and Y **P.203**  
**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

⊕ Surface Roughness: Unless otherwise specified **P.203**  
 ⊕ Circularity, Straightness, Perpendicularity and Concentricity **P.203**

Part No.	Choose in		P	T							U							
	Type	D		0.01" Increments	Thread Selection (Callout)							Thread Selection (Callout)						
U-SFRA U-PSFRA U-SSFRA	0.38	3/8	0.75 - 19.75	0.09sF5Px5	0.1250 + T Dias P±0.01	6	8	10					6	8	10			
	0.50	1/2	1.00 - 23.75	0.09sF5Px5	(When T = 6 - 0.31)	10	0.25						10	0.25	0.31			
	0.63	5/8	1.50 - 25.75	0.09sF5Px5	0.1875 + T Dias P±0.01				0.25	0.31			0.25	0.31	0.38			
	0.75	3/4	1.50 - 29.75	0.09sF5Px5	(When T = 0.38 - 0.63)				0.31	0.38			0.31	0.38				
	1.00	1"	1.75 - 29.75	0.09sF5Px5					0.38	0.50			0.38	0.50	0.63			
	1.25	1-1/4	1.75 - 29.75	0.09sF5Px5	0.3750 + T Dias P±0.01				0.50	0.63			0.50	0.63	0.75			
1.50	1-1/2	2.00 - 29.75	0.09sF5Px5	(When T = 0.75)				0.63	0.75			0.63	0.75					

Order Example **P.203** The part number consists only of the fields with blue characters. Please refer to the table below for technical information.

Part No. **L** - **F** - **P** - **T** - **U**

Type **D**

U-SFRA 1.00 - L 20.00 - F 0.47 - P 0.7874 - T 0.50 - U 0.63

## Technical Information

Callout	D		(Y) Max
	Nominal	Tolerance	
0.38	3/8	0.3748	20.00
0.50	1/2	0.4998	24.00
0.63	5/8	0.6248	26.00
0.75	3/4	0.7497	30.00
1.00	1"	0.9997	30.00
1.25	1-1/4	1.2496	30.00
1.50	1-1/2	1.4996	30.00

over	up to	Tolerance
0.2400	0.4000	+0/-0.0006
0.4000	0.7100	+0/-0.0007
0.7100	1.1900	+0/-0.0008
1.1900	1.9700	+0/-0.0010

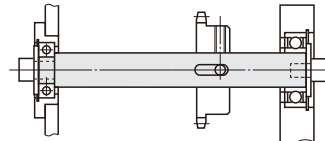
Callout	T, U (Thread)		T1, U1 Thread Depth
	Thread Size	Diameter	
6	#6-32	0.138	0.28
8	#8-32	0.164	0.33
10	#10-32	0.190	0.38
0.25	1/4-20	0.250	0.50
0.31	5/16-18	0.313	0.63
0.38	3/8-16	0.375	0.75
0.50	1/2-13	0.500	1.00
0.63	5/8-11	0.625	1.25
0.75	3/4-10	0.750	1.50

Selection Criteria:  $L \geq U_1 \times 1.5$   
 $(Y) \geq T_1 + U_1$

Days to Ship **6** Days **P.30** Non-Returnable

Express **4** Days (Specify Express **A**) \$ 8.00/piece **P.30**

A flat charge of \$21.60 for 3 or more identical pieces.



Optional Modifications Part No. **L** - **F** - **P** - **T** - **U** (Ordering Code) (SC, LKC, WFC...etc)  
 Type **D**  
 U-SFRA 1.00 - L 20.125 - F 0.47 - P 0.7874 - T 0.50 - U 0.63 - SC 10.00 - LKC

Optional Modifications	Key Groove	Set Screw Flat	Two Set Screw Flats at Angle	Wrench Flats	Length Tolerance	Concentricity
Ordering Code	KC, WKC	FC, WFC	KFC	SC	LKC	CKC
Details	<p>Example KC02.00-A0.50</p> <p>KC: Adds one key groove. WKC: Adds two key grooves.</p> <ul style="list-style-type: none"> <li>KC, A, WKC, C, K, E = 0.01" Increments</li> <li>A, C, E ≤ 4.00</li> <li>Key Groove Dimensions: Please refer to specifications on P.204.</li> <li>When 3 key grooves are required, please use both KC and WKC. Please see P.204.</li> </ul>	<p>Example FC01.00-G0.13</p> <p>FC: Adds one set screw flat. WFC: Adds two set screw flats.</p> <ul style="list-style-type: none"> <li>FC, G, WFC, J, W, V = 0.01" Increments</li> <li>0.01 ≤ G, J, V ≤ 2.00</li> <li>FC, WFC, W = 0 or FC, WFC, W ≥ 0.02</li> </ul>	<p>Example KFC01.00-G0.13-AG120</p> <p>Adds a flat at the base face (0°), and another at the designated angle.</p> <ul style="list-style-type: none"> <li>KFC, G = 0.01" Increments</li> <li>AG = 15° Increments</li> <li>0.01 ≤ G ≤ 2.00</li> <li>KFC = 0 or KFC ≥ 0.02</li> </ul>	<p>Example SC1.00</p> <p>Adds wrench flats.</p> <ul style="list-style-type: none"> <li>SC = 0.01" Increments</li> <li>SC + <math>\phi 2 \leq L</math></li> <li>SC = 0 or SC ≥ 0.05</li> </ul>	<p>Example LKC</p> <p>Changes the length tolerance.</p> <ul style="list-style-type: none"> <li>If the LKC is used, 0.001" Increments can be specified for L dimension.</li> <li>Please refer to order example.</li> </ul>	<p>Example CKC</p> <p>Changes the concentricity to dia 0.0008.</p> <ul style="list-style-type: none"> <li>Available with L dimension range in a table below.</li> </ul>
\$ Price Adder	KC: 4.00 WKC: 8.00	FC: 2.00 WFC: 4.00	6.00	4.00	4.00	8.00

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



Quantity Discount Rate

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

For larger quantity orders "Days to Ship" may differ from published catalog term. **P.29**

Part No.	\$ Unit Price									
	Type	D	Min. L	L2.01	L4.01	L6.01	L8.01	L12.01	L16.01	L24.01
U-SFRA		0.38	10.20	11.30	12.80	14.00	19.70	22.40	25.80	-
		0.50	11.60	13.50	14.30	15.30	21.00	23.90	32.70	-
		0.63	12.60	14.60	15.60	16.50	22.70	25.80	35.40	41.30
		0.75	14.30	17.90	18.50	20.60	28.70	32.00	42.90	51.20
		1.00	17.00	21.00	23.70	26.40	32.40	39.90	53.70	63.60
		1.25	18.10	22.70	25.80	28.70	37.70	44.10	58.40	70.70
U-PSFRA		0.38	11.30	12.90	14.60	15.80	21.80	24.90	28.20	-
		0.50	12.80	15.00	15.50	17.10	23.00	26.30	37.20	-
		0.63	13.80	16.20	16.80	18.50	25.10	28.40	40.20	45.30
		0.75	16.80	20.90	22.10	24.50	33.20	37.70	49.40	74.60
		1.00	20.40	25.40	28.10	31.40	41.00	46.70	61.10	77.00
		1.25	21.60	27.00	30.20	33.60	44.00	49.80	70.20	79.80
U-SSFRA		0.38	14.90	16.60	18.70	20.50	31.00	34.60	38.20	-
		0.50	17.50	20.50	21.20	23.60	33.80	37.80	47.70	-
		0.63	18.90	22.10	23.00	25.40	36.70	40.90	51.50	65.30
		0.75	19.80	24.70	25.40	27.20	39.80	43.90	61.40	70.20
		1.00	21.80	27.20	31.00	34.40	43.90	55.40	85.10	95.40
		1.25	29.00	32.60	36.50	40.90	57.40	65.00	103.00	104.00
	1.50	45.40	51.10	57.80	63.90	90.50	103.00	144.70	164.70	



Timing Pulleys P.293



Keyless Bushings P.311



Precision Washers P.495



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