

# Rotary Shafts

## -One Stepped and Tapped End-One Threaded End (For Metric Bearings)-



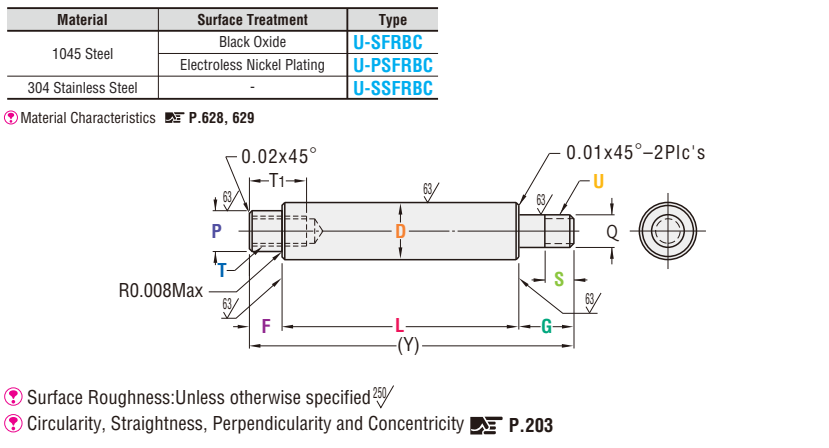
Mostly used as drive or idler shafts in rotary motion applications. Available in 1045 carbon steel and 304 stainless steel. This rotary shaft has one metric male thread with very precise O.D. so it can be used in combination with metric bearings and locknuts. Choose from a wide variety of modifications. Simply add the modification ordering code to the end of the part number. The overall length can be specified with 0.01" increments. 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.



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

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



Part No.	Choose in 0.01" Increments			P Choose in 0.0001" Increments	T Inch Thread Selection (Callout)							Choose in 0.01" Increments		U (=Q) Metric Thread Selection (Callout)												
	D Callout	Nominal	F		G	S	#6-32	#8-32	#10-32	1/4-20	5/16-18	3/8-16	1/2-13	5/8-11	3/4-10	M3	M4	M5	M6	M8	M10	M12	M16	M20	M24	
U-SFRBC	0.38	3/8	0.75-18.00	0.09 ≤ F ≤ P × 5	0.1250 + T Dia SP ± 0.01 (When T = 6 - 0.31)	6	8	10							0.09 ≤ G ≤ U Dia x 7 (When U ≤ M6)	0.25 ≤ S ≤ U Dia x 3 & S ≤ G - 0.09 (When U ≤ M6)	M3	M4	M5	M6	M8					
U-PSFRBC	0.50	1/2	1.00-22.00	0.09 ≤ F ≤ P × 5				10	0.25						0.13 ≤ G ≤ U Dia x 7 (When M8 ≤ U ≤ M12)	S ≤ G - 0.13 (When M8 ≤ U ≤ M12)	M5	M6	M8	M10	M12					
U-SSFRBC	0.63	5/8	1.50-24.00	0.09 ≤ F ≤ P × 5	0.1875 + T Dia SP ± 0.01 (When T = 0.38 - 0.63)			0.25	0.31						0.19 ≤ G ≤ U Dia x 7 (When U > M12)	S ≤ G - 0.19 (When U > M12)	M5	M6	M8	M10	M12	M16	M20			
	0.75	3/4	1.50-28.00	0.09 ≤ F ≤ P × 5				0.31	0.38								M6	M8	M10	M12	M16					
	1.00	1"	1.75-28.00	0.09 ≤ F ≤ P × 5	0.3750 + T Dia SP ± 0.01 (When T = 0.75)					0.38	0.50						M8	M10	M12	M16	M20	M24				
	1.25	1-1/4	1.75-28.00	0.09 ≤ F ≤ P × 5						0.50	0.63						M8	M10	M12	M16	M20	M24				
	1.50	1-1/2	2.00-28.00	0.09 ≤ F ≤ P × 5						0.63	0.75						M12	M16	M20	M24						

Order Example: 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 - G - S - U  
Type D  
U-SFRBC 1.00 - L 20.00 - F 0.47 - P 0.7874 - T 0.50 - G 1.00 - S 0.69 - U M12

### Technical Information

D Callout	Nominal	Tolerance		Y Max.
		over	up to	
0.38	3/8	0.3748	0.3744	20.00
0.50	1/2	0.4998	0.4994	24.00
0.63	5/8	0.6248	0.6244	26.00
0.75	3/4	0.7497	0.7492	30.00
1.00	1"	0.9997	0.9992	30.00
1.25	1-1/4	1.2496	1.2490	30.00
1.50	1-1/2	1.4996	1.4990	30.00

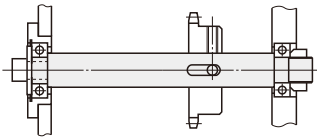
P		Tolerance
over	up to	
0.1200	0.2400	+0 / -0.0005
0.2400	0.4000	+0 / -0.0006
0.4000	0.7100	+0 / -0.0007
0.7100	1.1900	+0 / -0.0008
1.1900	1.9700	+0 / -0.0010

T (Thread)			T1 Thread Depth
Callout	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

U (=Q)		Q	
Callout	Thread Size	Dia (inch)	Tolerance
M3	M3 x 0.5	0.1181	0.1181 0.1177
M4	M4 x 0.7	0.1575	0.1575 0.1570
M5	M5 x 0.8	0.1969	0.1969 0.1964
M6	M6 x 1	0.2362	0.2362 0.2357
M8	M8 x 1.25	0.3150	0.3150 0.3144
M10	M10 x 1.5	0.3937	0.3937 0.3931
M12	M12 x 1.75	0.4724	0.4724 0.4717
M16	M16 x 2	0.6299	0.6299 0.6292
M20	M20 x 2.5	0.7874	0.7874 0.7866
M24	M24 x 3	0.9449	0.9449 0.9441



Days to Ship: Standard 6 Days, Express 4 Days. Specify Express A. \$ 8.00/piece P.30. Non-Returnable P.30. A flat charge of \$21.60 for 3 or more identical pieces.



Optional Modifications: Part No. - L - F - P - T - G - S - U(UC) - (Ordering Code: UC) (SC, LKC, KFC...etc)  
U-SFRBC 1.00 - L 20.125 - F 0.47 - P 0.7874 - T 0.50 - G 1.00 - S 0.69 - UC M12 - SC 10.00 - LKC

Optional Modifications	Key Groove	Set Screw Flat	Two Set Screw Flats at Angle	Wrench Flats	Length Tolerance	Concentricity	Metric Fine Thread																																																																								
Key Groove: KC	Key Groove: KC	Set Screw Flat: FC	Two Set Screw Flats at Angle: KFC	Wrench Flats: SC	Length Tolerance: LKC	Concentricity: CKC	Metric Fine Thread: UC																																																																								
Key Groove: WKC	Key Groove: WKC	Set Screw Flat: WFC	Two Set Screw Flats at Angle: WFC	Wrench Flats: SC	Length Tolerance: LKC	Concentricity: CKC	Metric Fine Thread: UC																																																																								
Ordering Code	KC, WKC	FC, WFC	KFC	SC	LKC	CKC	UC																																																																								
Details	<p>Example: KC2.00-A0.50</p> <p>KC: Adds one key groove.</p> <p>WKC: Adds two key grooves.</p> <p>⊕ KC, A, WKC, C, K, E = 0.01" Increments</p> <p>⊕ A, C, E ≤ 4.00</p> <p>⊕ Key Groove Dimensions: Please refer to specifications on P.204.</p> <p>⊕ When 3 key grooves are required, please use both KC and WKC. Please see P.204.</p>	<p>Example: FC1.00-G0.13</p> <p>KC: Adds one set screw flat.</p> <p>WFC: Adds two set screw flats.</p> <p>⊕ FC, G, WFC, J, W, V = 0.01" Increments</p> <p>⊕ 0.01 ≤ G, J, G ≤ 2.00</p> <p>⊕ FC, WFC, W = 0 or FC, WFC, W ≥ 0.02</p>	<p>Example: KFC1.00-G0.13-A6120</p> <p>Adds a flat at the base face (0°), and another at the designated angle.</p> <p>⊕ KFC, G = 0.01" Increments</p> <p>⊕ AG = 15° Increments</p> <p>⊕ 0.01 ≤ G ≤ 2.00</p> <p>⊕ KFC = 0 or KFC ≥ 0.02</p>	<p>Example: SC1.00</p> <p>Adds wrench flats.</p> <p>⊕ SC = 0.01" Increments</p> <p>⊕ SC+ #2 ≤ L</p> <p>⊕ SC = 0 or SC ≥ 0.05</p>	<p>Example: LKC</p> <p>Changes the length tolerance.</p> <p>⊕ If the LKC is used, 0.001" Increments can be specified for L dimension.</p> <p>⊕ Please refer to order example.</p>	<p>Example: CKC</p> <p>Changes the concentricity to dia 0.0008.</p> <p>⊕ Available with L dimension range in a table below.</p>	<p>Example: UCM10</p> <p>Changes to metric fine thread in a table below.</p> <table border="1"> <thead> <tr> <th>D</th> <th colspan="8">UC (Metric Fine Thread)</th> </tr> </thead> <tbody> <tr> <td>0.38</td> <td>M3</td> <td>M4</td> <td>M5</td> <td>M6</td> <td>M8</td> <td></td> <td></td> <td></td> </tr> <tr> <td>0.50</td> <td></td> <td>M5</td> <td>M6</td> <td>M8</td> <td>M10</td> <td></td> <td></td> <td></td> </tr> <tr> <td>0.63</td> <td></td> <td>M5</td> <td>M6</td> <td>M8</td> <td>M10</td> <td>M12</td> <td></td> <td></td> </tr> <tr> <td>0.75</td> <td></td> <td></td> <td>M6</td> <td>M8</td> <td>M10</td> <td>M12</td> <td>M15</td> <td></td> </tr> <tr> <td>1.00</td> <td></td> <td></td> <td></td> <td>M8</td> <td>M10</td> <td>M12</td> <td>M15</td> <td>M17</td> </tr> <tr> <td>1.25</td> <td></td> <td></td> <td></td> <td></td> <td>M8</td> <td>M10</td> <td>M12</td> <td>M15</td> </tr> <tr> <td>1.50</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>M12</td> <td>M15</td> <td>M17</td> </tr> </tbody> </table> <p>Thread Pitch: 0.35 0.5 0.5 0.75 1.0 1.0 1.0 1.0 1.0 1.0 1.5</p> <p>⊕ P dimension is the same with UC.</p> <p>⊕ Change U to UC to specify fine threads like the order example.</p>	D	UC (Metric Fine Thread)								0.38	M3	M4	M5	M6	M8				0.50		M5	M6	M8	M10				0.63		M5	M6	M8	M10	M12			0.75			M6	M8	M10	M12	M15		1.00				M8	M10	M12	M15	M17	1.25					M8	M10	M12	M15	1.50						M12	M15	M17
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\$ Price Adder	KC: 4.00 WKC: 8.00	FC: 2.00 WFC: 4.00	6.00	4.00	4.00	8.00	3.00																																																																								

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

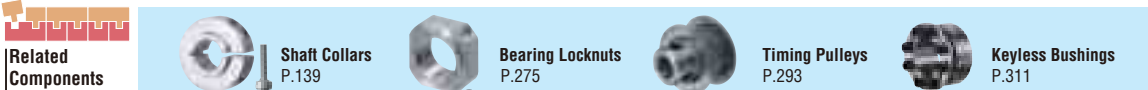


Quantity Discount Rate

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

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

Part No.	\$ Unit Price								
	D	Min. L	L2.01	L4.01	L6.01	L8.01	L12.01	L16.01	L24.01
U-SFRBC	0.38	9.80	10.70	12.20	13.40	18.80	21.50	24.60	-
	0.50	11.10	12.90	13.80	14.60	20.00	22.80	31.40	-
	0.63	12.00	14.10	14.90	15.80	21.60	24.80	33.90	-
	0.75	13.50	17.00	17.70	19.70	27.50	30.60	41.30	49.10
	1.00	16.20	20.10	22.80	25.10	31.10	38.10	51.50	60.80
	1.25	19.10	21.60	24.80	27.50	36.00	42.30	55.80	67.70
U-PSFRBC	0.38	10.70	12.30	14.00	15.20	20.90	23.70	27.00	-
	0.50	12.20	14.30	14.70	16.40	22.10	25.10	35.60	-
	0.63	13.10	15.60	15.90	17.70	23.90	27.20	38.60	-
	0.75	15.90	19.80	21.00	23.40	31.80	36.00	47.30	71.30
	1.00	19.50	24.30	26.90	30.00	39.20	44.60	58.40	73.60
	1.25	22.80	25.80	29.00	32.10	42.00	47.70	67.10	76.40
U-SSFRBC	0.38	14.20	15.70	18.00	19.60	29.50	32.90	36.50	-
	0.50	16.70	19.60	20.30	22.50	32.40	36.20	45.50	-
	0.63	18.20	21.20	22.00	24.50	35.10	39.10	49.50	-
	0.75	18.90	23.60	24.30	25.90	38.20	41.90	58.90	67.30
	1.00	20.70	25.90	29.70	32.90	41.90	52.90	81.40	91.30
	1.25	23.20	31.10	34.90	39.10	54.70	62.30	98.60	99.50



Express Options P.30

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