

Rotary Shafts

—Both Ends Threaded (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 two metric male threads with very precise O.D. so it can be used in combination with metric bearing and locknuts. Choose from a wide variety of modifications. Simply add the modification ordering code to the end of the part number. The "L" dimension 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.

Material	Surface Treatment	Type
1045 Steel	Black Oxide	U-SFRMC
	Electroless Nickel Plating	U-PSFRMC
304 Stainless Steel	-	U-SSFRMC

Material Characteristics: P.628, 629

Tolerance of L and Y: P.203

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 0.01" Increments				Metric Thread Selection (Callout)										
	Type	D	L	F	B	M3 x 0.5	M4 x 0.7	M5 x 0.8	M6 x 1	M8 x 1.25	M10 x 1.5	M12 x 1.75	M16 x 2	M20 x 2.5	M24 x 3
U-SFRMC	0.25	1/4	0.75 ~ 10.00	0.09≤F≤T Dia x 7 (When T≤M6)	0.25≤B≤T Dia x 3 & B≤F-0.09 (When T≤M6) B≤F-0.13 (When M8≤T≤M12) B≤F-0.19 (When M16≤T)	M3	M4	M5	M6	M8	M10	M12	M16	M20	M24
	0.38	3/8	0.75 ~ 18.00	0.13≤F≤T Dia x 7 (When M8≤T≤M12)		M3	M4	M5	M6	M8	M10	M12	M16	M20	M24
	0.50	1/2	1.00 ~ 22.00			M5	M6	M8	M10	M12	M16	M20	M24		
	0.63	5/8	1.50 ~ 24.00			M6	M8	M10	M12	M16	M20	M24			
	0.75	3/4	1.50 ~ 28.00			M8	M10	M12	M16	M20	M24				
1.00	1"	1.75 ~ 28.00	M8	M10	M12	M16	M20	M24							
1.25	1-1/4	1.75 ~ 28.00	M8	M10	M12	M16	M20	M24							
1.50	1-1/2	1.75 ~ 28.00	M8	M10	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 — B — T

Type D

U-SFRMC 1.00 — L 20.00 — F 1.00 — B 0.69 — T M12

Technical Information

Callout	D		(Y) Max
	Nominal	Tolerance	
0.25	1/4	0.2498 0.2494	12.00
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

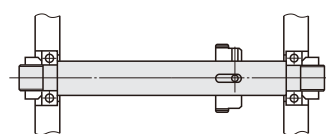
T (=P)			P		
Callout	Thread Size	Dia (inch)	Tolerance		
M3	M3 x 0.5	0.1181	0.1181	0.1177	
M4	M4 x 0.7	0.1575	0.1575	0.1570	
M5	M5 x 0.8	0.1969	0.1969	0.1964	
M6	M6 x 1	0.2362	0.2362	0.2357	
M8	M8 x 1.25	0.3150	0.3150	0.3144	
M10	M10 x 1.5	0.3937	0.3937	0.3931	
M12	M12 x 1.75	0.4724	0.4724	0.4717	
M16	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	

Standard 6 Days Non-Returnable P.30

Example

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 — B — T (TC) — (Ordering Code: TC) (SC, LKC, FC...etc) U-SFRMC 1.00 — L 20.125 — F 1.00 — B 0.69 — TC M12 — SC 1.00 — LKC

Optional Modifications	Key Groove	Set Screw Flat	Two Set Screw Flats at Angle	Wrench Flats	Length Tolerance	Concentricity	Metric Fine Thread																																																											
Ordering Code	KC, WKC	FC, WFC	KFC	SC	LKC	CKC	TC																																																											
Details	<p>• 1 Key Groove: KC</p> <p>• 2 Key Grooves: WKC</p> <p>KC: Adds one key groove. WKC: Adds two key grooves.</p> <p>⊕ KC, A, WKC, C, K, E = 0.01" Increments ⊕ A, C, E ≤ 4.00 ⊕ D = 0.25 is not available ⊕ Key Groove Dimensions: Please refer to specifications on P.204. ⊕ When 3 key grooves are required, please use both KC and WKC. Please see P.204.</p>	<p>• Set Screw Flat: FC</p> <p>• Two Set Screw Flats: WFC</p> <p>KC: Adds one set screw flat. WKC: Adds two set screw flats.</p> <p>⊕ FC, G, WFC, J, W, V = 0.01" Increments ⊕ 0.01 ≤ G, J, V ≤ 2.00 ⊕ FC, WFC, W = 0 or FC, WFC, W ≥ 0.02</p>	<p>Adds a flat at the base face (0°), and another at the designated angle.</p> <p>⊕ KFC, G = 0.01" Increments ⊕ AG = 15° Increments ⊕ 0.01 ≤ G ≤ 2.00 ⊕ KFC = 0 or KFC ≥ 0.02</p>	<p>Adds wrench flats.</p> <p>⊕ SC = 0.01" Increments ⊕ SC + δ ≤ L ⊕ SC = 0 or SC ≥ 0.05</p> <table border="1"> <thead> <tr> <th>D</th> <th>W</th> <th>δ</th> </tr> </thead> <tbody> <tr> <td>0.25</td> <td>3/16</td> <td>0.31</td> </tr> <tr> <td>0.38</td> <td>5/16</td> <td>0.31</td> </tr> <tr> <td>0.50</td> <td>7/16</td> <td>0.38</td> </tr> <tr> <td>0.63</td> <td>9/16</td> <td>0.38</td> </tr> <tr> <td>0.75</td> <td>11/16</td> <td>0.50</td> </tr> <tr> <td>1.00</td> <td>7/8</td> <td>0.50</td> </tr> <tr> <td>1.25</td> <td>1-1/8</td> <td>0.50</td> </tr> <tr> <td>1.50</td> <td>1-3/8</td> <td>0.63</td> </tr> </tbody> </table>	D	W	δ	0.25	3/16	0.31	0.38	5/16	0.31	0.50	7/16	0.38	0.63	9/16	0.38	0.75	11/16	0.50	1.00	7/8	0.50	1.25	1-1/8	0.50	1.50	1-3/8	0.63	<p>Changes the length tolerance.</p> <p>⊕ If the LKC is used, 0.001" Increments can be specified for L dimension. ⊕ Please refer to order example.</p> <table border="1"> <thead> <tr> <th>L</th> <th>Tolerance</th> </tr> </thead> <tbody> <tr> <td>0.750</td> <td>12.000 ± 0.002</td> </tr> <tr> <td>12.001</td> <td>24.000 ± 0.004</td> </tr> <tr> <td>24.001</td> <td>28.000 ± 0.006</td> </tr> </tbody> </table>	L	Tolerance	0.750	12.000 ± 0.002	12.001	24.000 ± 0.004	24.001	28.000 ± 0.006	<p>Changes the concentricity to dia 0.0008.</p> <p>⊕ Available with L dimension range in a table below.</p> <table border="1"> <thead> <tr> <th>D</th> <th>L max</th> </tr> </thead> <tbody> <tr> <td>0.25-0.75</td> <td>18.00</td> </tr> <tr> <td>1.00-1.50</td> <td>24.00</td> </tr> </tbody> </table>	D	L max	0.25-0.75	18.00	1.00-1.50	24.00	<p>Changes to metric fine thread in a table below.</p> <table border="1"> <thead> <tr> <th>D</th> <th>TC (Metric Fine Thread)</th> </tr> </thead> <tbody> <tr> <td>0.25</td> <td>M3 M4 M5</td> </tr> <tr> <td>0.38</td> <td>M3 M4 M5 M6 M8</td> </tr> <tr> <td>0.50</td> <td>M5 M6 M8 M10</td> </tr> <tr> <td>0.63</td> <td>M5 M6 M8 M10 M12</td> </tr> <tr> <td>0.75</td> <td>M6 M8 M10 M12 M15</td> </tr> <tr> <td>1.00</td> <td>M8 M10 M12 M15 M17 M20</td> </tr> <tr> <td>1.25</td> <td>M8 M10 M12 M15 M17 M20 M25</td> </tr> <tr> <td>1.50</td> <td>M12 M15 M17 M20 M25</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 TC. ⊕ Change T to TC to specify fine threads like the order example.</p>	D	TC (Metric Fine Thread)	0.25	M3 M4 M5	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 M20	1.25	M8 M10 M12 M15 M17 M20 M25	1.50	M12 M15 M17 M20 M25
D	W	δ																																																																
0.25	3/16	0.31																																																																
0.38	5/16	0.31																																																																
0.50	7/16	0.38																																																																
0.63	9/16	0.38																																																																
0.75	11/16	0.50																																																																
1.00	7/8	0.50																																																																
1.25	1-1/8	0.50																																																																
1.50	1-3/8	0.63																																																																
L	Tolerance																																																																	
0.750	12.000 ± 0.002																																																																	
12.001	24.000 ± 0.004																																																																	
24.001	28.000 ± 0.006																																																																	
D	L max																																																																	
0.25-0.75	18.00																																																																	
1.00-1.50	24.00																																																																	
D	TC (Metric Fine Thread)																																																																	
0.25	M3 M4 M5																																																																	
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 M20																																																																	
1.25	M8 M10 M12 M15 M17 M20 M25																																																																	
1.50	M12 M15 M17 M20 M25																																																																	
\$ 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	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									
	Type	D	Min. L	L2.01	L4.01	L6.01	L8.01	L12.01	L16.01	L24.01
U-SFRMC	0.25	9.20	10.20	11.40	12.60	17.70	-	-	-	-
	0.38	9.20	10.20	11.40	12.60	17.70	20.10	23.10	-	-
	0.50	10.40	12.20	12.90	13.70	18.80	21.50	29.40	-	-
	0.63	11.40	13.10	14.10	14.90	20.40	23.30	31.80	-	-
	0.75	12.80	16.10	16.70	18.50	25.70	28.80	38.60	46.10	-
U-PSFRMC	1.00	15.30	18.90	21.30	23.70	29.10	35.90	48.30	57.20	-
	1.25	18.00	20.40	23.30	25.70	33.90	39.80	52.40	63.50	-
	1.50	23.30	30.60	34.10	37.70	50.40	62.00	82.80	99.20	-
	0.25	10.20	11.60	13.10	14.30	19.70	-	-	-	-
	0.38	10.20	11.60	13.10	14.30	19.70	22.40	25.40	-	-
U-SSFRMC	0.50	11.40	13.50	14.00	15.50	20.70	23.60	33.30	-	-
	0.63	12.30	14.60	15.00	16.70	22.40	25.50	36.20	-	-
	0.75	15.00	18.80	19.70	22.10	29.90	33.90	44.40	66.90	-
	1.00	18.30	22.80	25.20	28.20	36.90	42.00	54.80	69.10	-
	1.25	21.30	24.30	27.20	30.30	39.50	44.90	63.00	71.70	-
U-SSFRMC	1.50	27.90	35.40	39.00	43.40	57.30	70.10	92.30	112.20	-
	0.25	13.50	14.80	16.90	18.50	27.70	-	-	-	-
	0.38	13.50	14.80	16.90	18.50	27.70	31.00	34.40	-	-
	0.50	15.70	18.50	19.10	21.20	30.40	33.80	42.80	-	-
	0.63	17.10	20.00	20.70	23.00	33.10	36.70	46.30	-	-
U-SSFRMC	0.75	17.80	22.10	22.90	24.50	35.80	39.60	55.30	63.20	-
	1.00	19.40	24.50	27.90	30.80	39.60	49.90	76.50	85.90	-
	1.25	21.80	29.20	32.90	36.50	51.50	58.50	92.70	93.40	-
	1.50	30.80	46.10	52.00	57.60	81.40	92.70	130.10	148.10	-

Related Components



Express Options P.30

MISUMI www.misumiusa.com E-mail: inquire@misumiusa.com