


Rotary Shafts

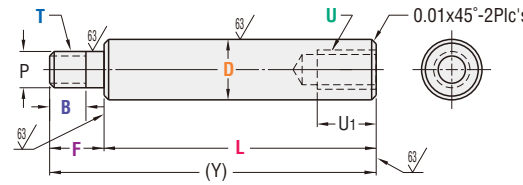
—One Threaded End-One Tapped End (For Metric Bearings)—

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. 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-SFRDC
	Electroless Nickel Plating	U-PSFRDC
304 Stainless Steel	-	U-SSFRDC

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 0.01" Increments				Metric Thread Selection (Callout)								Inch Thread Selection (Callout)												
	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	#5-40	#6-32	#8-32	#10-32	1/4-20	5/16-18	3/8-16	1/2-13	5/8-11	3/4-10	
U-SFRDC	0.25	1/4	0.75 - 11.00	0.095F-T Dia x 7	M3	M4	M5	M3	M4	M5	M6	M8	M5	M6	M8	M10	M12	M16	M20	M24	M24	5	6	8	10
U-PSFRDC	0.38	3/8	0.75 - 19.00	0.13F-T Dia x 7	M3	M4	M5	M3	M4	M5	M6	M8	M5	M6	M8	M10	M12	M16	M20	M24	M24	5	6	8	10
U-SSFRDC	0.50	1/2	1.00 - 23.00	0.19F-T Dia x 7	M3	M4	M5	M3	M4	M5	M6	M8	M5	M6	M8	M10	M12	M16	M20	M24	M24	5	6	8	10
	0.63	5/8	1.50 - 25.00	0.25F-T Dia x 7	M3	M4	M5	M3	M4	M5	M6	M8	M5	M6	M8	M10	M12	M16	M20	M24	M24	5	6	8	10
	0.75	3/4	1.50 - 29.00	0.31F-T Dia x 7	M3	M4	M5	M3	M4	M5	M6	M8	M5	M6	M8	M10	M12	M16	M20	M24	M24	5	6	8	10
	1.00	1"	1.75 - 29.00	0.38F-T Dia x 7	M3	M4	M5	M3	M4	M5	M6	M8	M5	M6	M8	M10	M12	M16	M20	M24	M24	5	6	8	10
	1.25	1-1/4	1.75 - 29.00	0.45F-T Dia x 7	M3	M4	M5	M3	M4	M5	M6	M8	M5	M6	M8	M10	M12	M16	M20	M24	M24	5	6	8	10
	1.50	1-1/2	2.00 - 29.00	0.51F-T Dia x 7	M3	M4	M5	M3	M4	M5	M6	M8	M5	M6	M8	M10	M12	M16	M20	M24	M24	5	6	8	10

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 — U

Type — D

U-SFRDC 1.00 — L 20.00 — F 1.00 — B 0.69 — T M12 — U 0.50

Technical Information

Callout	Nominal	Tolerance	(Y) Max.	
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

U (Thread)		U1	
Callout	Thread Size	Diameter	Thread Depth
5	#5-40	0.125	0.25
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 ≥ U1 × 1.5

Days to Ship: Standard 6 Days, Express 4 Days (Specify Express A) \$ 8.00/piece P.30

Example: 

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

Optional Modifications: Part No. — L — F — B — T (TC) — U — (Ordering Code: TC) (SC, LKC, KC...etc)

U-SFRDC 1.00 — L 20.125 — F 1.00 — B 0.69 — TC M12 — U 0.50 — 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																		
Key Groove: KC	• 1 Key Groove: KC	• Set Screw Flat: FC	• 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>Example: KC2.00-A0.50</p> <p>KC: Adds one key groove. 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>• D = 0.25 is not available</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>FC: Adds one set screw flat. WFC: Adds two set screw flats.</p> <p>• FC, G, WFC, J, W, V = 0.01" Increments</p> <p>• 0.01 ≤ G, J, V ≤ 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 (D°), 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 + Δ2 ≤ 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: TCM10</p> <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: 0.38 0.5 0.5 0.75 1.0 1.0 1.0 1.0 1.0 1.5</p> <p>• P dimension is the same with TC.</p> <p>• 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	TC (Metric Fine Thread)																								
0.25	M3 M4 M5																								
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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 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									
	Type	D	Min. L	L2.01	L4.01	L6.01	L8.01	L12.01	L16.01	L24.01
U-SFRDC		0.25	9.60	10.50	11.90	13.10	18.50	-	-	-
		0.38	9.60	10.50	11.90	13.10	18.50	21.00	24.20	-
		0.50	11.00	12.80	13.50	14.30	19.70	22.40	30.80	-
		0.63	11.90	13.80	14.60	15.60	21.30	24.30	33.30	38.90
		0.75	13.40	16.80	17.40	19.40	26.90	30.20	40.40	48.00
		1.00	15.90	19.70	22.40	24.80	30.50	37.40	50.60	59.70
		1.25	17.00	21.30	24.30	26.90	35.60	41.40	54.80	66.50
U-PSFRDC		1.50	25.60	32.00	35.60	39.50	52.80	64.80	86.60	103.50
		0.25	10.50	12.20	13.70	14.90	20.40	-	-	-
		0.38	10.50	12.20	13.70	14.90	20.40	23.40	26.60	-
		0.50	11.90	14.10	14.40	16.10	21.60	24.60	34.80	-
		0.63	12.90	15.30	15.60	17.40	23.40	26.60	37.80	42.60
		0.75	15.60	19.70	20.70	23.00	31.20	35.60	46.50	70.10
		1.00	19.20	23.90	26.40	29.40	38.60	44.00	57.50	72.40
U-SSFRDC		1.25	20.30	25.40	28.40	31.70	41.30	46.80	65.90	75.00
		1.50	29.60	37.10	40.80	45.30	59.90	73.20	96.30	117.20
		0.25	14.00	15.50	17.60	19.30	29.00	-	-	-
		0.38	14.00	15.50	17.60	19.30	29.00	32.40	36.00	-
		0.50	16.40	19.30	20.00	22.10	31.90	35.50	44.60	-
		0.63	17.80	20.90	21.80	23.90	34.60	38.30	48.40	61.40
		0.75	18.70	23.20	24.10	25.60	37.40	41.40	57.60	65.90
	1.00	20.30	25.60	29.20	32.20	41.40	52.00	79.90	89.60	
	1.25	27.00	30.40	34.40	38.20	53.80	61.00	96.80	97.70	
	1.50	42.70	48.10	54.40	60.10	85.10	96.80	135.90	154.80	

Related Components

- Shaft Collars P.139
- Bearing Locknuts P.275
- Timing Pulleys P.293
- Keyless Bushings P.311

Express Options P.30

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