

Rotary Shafts

-Both Ends Stepped-



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-SFRQ
	Electroless Nickel Plating	U-PSFRQ
304 Stainless Steel	-	U-SSFRQ

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 $R_{a} 250$
Circularity, Straightness, Perpendicularity and Concentricity: P.203

Type	Part No.			Choose in 0.01" Increments		P Choose in 0.0001" Increments	(Y) Max
	Callout	Nominal	Tolerance	L	F		
U-SFRQ U-PSFRQ U-SSFRQ	0.25	1/4	0.2498 0.2494	0.75 ~ 11.50	0.09 ≤ F ≤ Px5	0.1250 ~ 0.2400	12.00
	0.38	3/8	0.3748 0.3744	0.75 ~ 19.50	0.09 ≤ F ≤ Px5	0.1250 ~ 0.3650	20.00
	0.50	1/2	0.4998 0.4994	1.00 ~ 23.50	0.09 ≤ F ≤ Px5	0.1875 ~ 0.4900	24.00
	0.63	5/8	0.6248 0.6244	1.50 ~ 25.50	0.09 ≤ F ≤ Px5	0.1875 ~ 0.6150	26.00
	0.75	3/4	0.7497 0.7492	1.50 ~ 29.50	0.09 ≤ F ≤ Px5	0.1875 ~ 0.7400	30.00
	1.00	1"	0.9997 0.9992	1.75 ~ 29.50	0.09 ≤ F ≤ Px5	0.3125 ~ 0.9900	30.00
	1.25	1-1/4	1.2496 1.2490	1.75 ~ 29.50	0.09 ≤ F ≤ Px5	0.3750 ~ 1.2400	30.00
	1.50	1-1/2	1.4996 1.4990	1.75 ~ 29.50	0.09 ≤ F ≤ Px5	0.5000 ~ 1.4900	30.00

Order Example: The part number consists only of the fields with blue characters.

Part No. - L - F - P
Type D
U-SFRQ 1.00 - L 20.00 - F 1.00 - P 0.6250

Technical Information

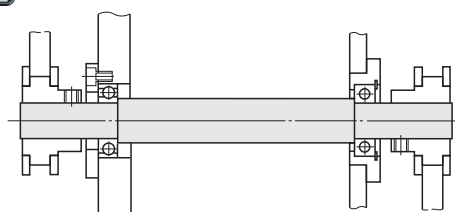
P	Tolerance
over 0.1200 up to 0.2400	+0 / -0.0005
0.2400 up to 0.4000	+0 / -0.0006
0.4000 up to 0.7100	+0 / -0.0007
0.7100 up to 1.1900	+0 / -0.0008
1.1900 up to 1.9700	+0 / -0.0010

Days to Ship: Standard 6 Days (Non-Returnable P.30)

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

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

Example



Optional Modifications: Part No. - L - F - P - (Ordering Code) (SC, LKC, FC...etc)
Type D
U-SFRQ 1.00 - L 20.125 - F 1.00 - P 0.6250 - SC 1.00 - 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>• 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> <table border="1"> <thead> <tr> <th>D</th> <th>To</th> <th>H</th> </tr> </thead> <tbody> <tr> <td>0.25</td> <td>0.63</td> <td>0.04</td> </tr> <tr> <td>0.75</td> <td>1.50</td> <td>0.08</td> </tr> </tbody> </table>	D	To	H	0.25	0.63	0.04	0.75	1.50	0.08	<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> <table border="1"> <thead> <tr> <th>D</th> <th>To</th> <th>H</th> </tr> </thead> <tbody> <tr> <td>0.25</td> <td>0.63</td> <td>0.04</td> </tr> <tr> <td>0.75</td> <td>1.50</td> <td>0.08</td> </tr> </tbody> </table>	D	To	H	0.25	0.63	0.04	0.75	1.50	0.08	<p>Adds wrench flats.</p> <p>⊕ SC = 0.01" Increments ⊕ SC + $\phi 2 \leq L$ ⊕ SC = 0 or SC ≥ 0.05</p> <table border="1"> <thead> <tr> <th>D</th> <th>W</th> <th>$\phi 2$</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	$\phi 2$	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>From 0.750 To 12.000</td> <td>±0.002</td> </tr> <tr> <td>12.001 To 24.000</td> <td>±0.004</td> </tr> <tr> <td>24.001 To 29.500</td> <td>±0.006</td> </tr> </tbody> </table>	L	Tolerance	From 0.750 To 12.000	±0.002	12.001 To 24.000	±0.004	24.001 To 29.500	±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
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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																																																											

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-SFRQ		0.25	8.70	9.60	10.80	11.90	16.80	-	-	-
		0.38	8.70	9.60	10.80	11.90	16.80	19.20	22.10	-
		0.50	9.90	11.60	12.30	12.90	17.90	20.40	27.90	-
		0.63	10.80	12.60	13.20	14.10	19.40	22.10	30.30	35.40
		0.75	12.20	15.30	15.80	17.60	24.50	27.50	36.80	43.80
		1.00	14.40	18.00	20.30	22.40	27.80	34.10	45.90	54.30
U-PSFRQ		1.25	17.00	19.40	22.10	24.50	32.30	37.70	49.80	60.30
		1.50	22.20	29.10	32.40	35.90	48.00	58.80	78.80	94.20
		0.25	9.60	11.10	12.50	13.50	18.60	-	-	-
		0.38	9.60	11.10	12.50	13.50	18.60	21.30	24.20	-
		0.50	10.80	12.90	13.20	14.60	19.70	22.40	31.80	-
		0.63	11.70	14.00	14.30	15.80	21.30	24.20	34.50	38.60
U-SSFRQ		0.75	14.30	17.90	18.80	21.00	28.40	32.30	42.20	63.60
		1.00	17.40	21.80	24.00	26.70	35.00	39.90	52.10	65.70
		1.25	20.30	23.10	25.80	28.80	37.50	42.60	60.00	68.30
		1.50	26.40	33.60	37.10	41.30	54.50	66.60	87.60	106.50
		0.25	12.80	14.00	16.00	17.50	26.50	-	-	-
		0.38	12.80	14.00	16.00	17.50	26.50	29.50	32.80	-
	0.50	14.90	17.50	18.20	20.20	29.00	32.20	40.70	-	
	0.63	16.20	18.90	19.80	22.00	31.50	34.90	44.10	55.80	
	0.75	16.90	21.10	22.00	23.20	34.00	37.40	42.60	59.90	
	1.00	18.50	23.20	26.50	29.30	37.40	47.30	72.70	81.50	
	1.25	20.50	27.70	31.30	34.90	49.00	55.60	88.20	88.70	
	1.50	29.20	43.70	49.30	54.70	77.40	88.00	123.70	140.80	

