

Rotary Shafts

—Retaining Ring Grooves on Both Ends—



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 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.

Material	Surface Treatment	Type
1045 Steel	Black Oxide	U-SFRR
	Electroless Nickel Plating	U-PSFRR U-SSFRR
304 Stainless Steel	-	U-SSFRR

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 250
Circularity, Straightness, Perpendicularity and Concentricity P.203

Type	Part No.			Choose in 0.01" Increments		M		d		R max	Compatible Retaining Rings (ASME B18.27-1998)			
	Callout	Nominal	Tolerance	L	B, S	Width	Tolerance	Diameter	Tolerance					
U-SFRR U-PSFRR U-SSFRR	0.13	1/8	0.1249	0.1246	0.75 ~ 6.00	0.08 < B, S < L/2	0.012	0.014	0.012	0.117	0.1185	0.1155	0.002	NA1- 12
	0.19	3/16	0.1874	0.1871	0.75 ~ 10.00	0.08 < B, S < L/2	0.018	0.020	0.018	0.175	0.1765	0.1735	0.002	NA1- 18
	0.25	1/4	0.2498	0.2494	0.75 ~ 12.00	0.08 < B, S < L/2	0.029	0.032	0.029	0.230	0.2315	0.2285	0.003	NA1- 25
	0.38	3/8	0.3748	0.3744	0.75 ~ 20.00	0.12 < B, S < L/2	0.029	0.032	0.029	0.352	0.3540	0.3500	0.005	NA1- 37
	0.50	1/2	0.4998	0.4994	1.00 ~ 24.00	0.16 < B, S < L/2	0.039	0.042	0.039	0.468	0.4700	0.4660	0.005	NA1- 50
	0.63	5/8	0.6248	0.6244	1.50 ~ 26.00	0.16 < B, S < L/2	0.039	0.042	0.039	0.588	0.5910	0.5850	0.005	NA1- 62
	0.75	3/4	0.7497	0.7492	1.75 ~ 30.00	0.16 < B, S < L/2	0.046	0.049	0.046	0.704	0.7070	0.7010	0.005	NA1- 75
	1.00	1"	0.9997	0.9992	2.00 ~ 30.00	0.20 < B, S < L/2	0.046	0.049	0.046	0.940	0.9430	0.9370	0.005	NA1-100
	1.25	1-1/4	1.2496	1.2490	2.50 ~ 30.00	0.20 < B, S < L/2	0.056	0.060	0.056	1.118	1.1220	1.1140	0.005	NA1-125

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

Part No. — L — B — S

Type D

U-SFRR 1.00 — L 20.00 — B 1.25 — S 2.13

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.

Optional Modifications Part No. — L — B — S — (Ordering Code) (SC, KC, KFC... etc)

Type D

U-SFRR 1.00 — L 20.00 — B 1.25 — S 2.13 — SC 1.00

Optional Modifications	Key Groove	Set Screw Flat	Two Set Screw Flats at Angle	Wrench Flats																																																																					
	<ul style="list-style-type: none"> 1 Key Groove: KC 2 Key Grooves: WKC 	<ul style="list-style-type: none"> Set Screw Flat: FC Two Set Screw Flats: WFC 																																																																							
Ordering Code	KC, WKC	FC, WFC	KFC	SC																																																																					
Details	<p>Example KC2.00-A0.50</p> <p>KC: Adds one key groove. WKC: Adds two key grooves.</p> <ul style="list-style-type: none"> KC, A, WKC, C, K, E = 0.01" Increments A, C, E ≤ 4.00 D = 0.13, 0.19, 0.25 are 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>Example FC1.00-G0.13</p> <p>FC: Adds one set screw flat. WFC: Adds two set screw flats.</p> <ul style="list-style-type: none"> 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 <table border="1"> <thead> <tr> <th colspan="2">D</th> <th>H</th> </tr> <tr> <th>From</th> <th>To</th> <th></th> </tr> </thead> <tbody> <tr> <td>0.13</td> <td>0.19</td> <td>0.02</td> </tr> <tr> <td>0.25</td> <td>0.63</td> <td>0.04</td> </tr> <tr> <td>0.75</td> <td>1.25</td> <td>0.08</td> </tr> </tbody> </table>	D		H	From	To		0.13	0.19	0.02	0.25	0.63	0.04	0.75	1.25	0.08	<p>Example KFC1.00-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"> KFC, G = 0.01" Increments AG = 15° Increments 0.01 ≤ G ≤ 2.00 KFC = 0 or KFC ≥ 0.02 <table border="1"> <thead> <tr> <th colspan="2">D</th> <th colspan="2">H</th> </tr> <tr> <th>From</th> <th>To</th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>0.13</td> <td>0.19</td> <td>0.02</td> <td></td> </tr> <tr> <td>0.25</td> <td>0.63</td> <td>0.04</td> <td></td> </tr> <tr> <td>0.75</td> <td>1.25</td> <td>0.08</td> <td></td> </tr> </tbody> </table>	D		H		From	To			0.13	0.19	0.02		0.25	0.63	0.04		0.75	1.25	0.08		<p>Example SC1.00</p> <p>Adds wrench flats.</p> <ul style="list-style-type: none"> SC = 0.01" Increments SC + $\Delta z \leq L$ SC = 0 or SC ≥ 0.05 D = 0.13, 0.19 not available <table border="1"> <thead> <tr> <th rowspan="2">D</th> <th colspan="2">W</th> <th rowspan="2">Δz</th> </tr> <tr> <th>Wrench Size</th> <th>Actual</th> </tr> </thead> <tbody> <tr> <td>0.25</td> <td>3/16</td> <td>0.188</td> <td>0.31</td> </tr> <tr> <td>0.38</td> <td>5/16</td> <td>0.313</td> <td>0.31</td> </tr> <tr> <td>0.50</td> <td>7/16</td> <td>0.438</td> <td>0.38</td> </tr> <tr> <td>0.63</td> <td>9/16</td> <td>0.563</td> <td>0.38</td> </tr> <tr> <td>0.75</td> <td>11/16</td> <td>0.688</td> <td>0.50</td> </tr> <tr> <td>1.00</td> <td>7/8</td> <td>0.875</td> <td>0.50</td> </tr> <tr> <td>1.25</td> <td>1-1/8</td> <td>1.125</td> <td>0.50</td> </tr> </tbody> </table>	D	W		Δz	Wrench Size	Actual	0.25	3/16	0.188	0.31	0.38	5/16	0.313	0.31	0.50	7/16	0.438	0.38	0.63	9/16	0.563	0.38	0.75	11/16	0.688	0.50	1.00	7/8	0.875	0.50	1.25	1-1/8	1.125	0.50
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\$ Price Adder	KC: 4.00 WKC: 8.00	FC: 2.00 WFC: 4.00	6.00	4.00																																																																					

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

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

Type	Part No.	\$ Unit Price								
		D	Min. L	L2.01	L4.01	L6.01	L8.01	L12.01	L16.01	L24.01
U-SFRR	0.13	6.30	7.70	8.90	-	-	-	-	-	
	0.19	6.30	7.70	8.90	9.60	10.70	-	-	-	
	0.25	7.70	8.60	9.60	10.50	14.90	-	-	-	
	0.38	7.70	8.60	9.60	10.50	14.90	17.00	19.50	-	
	0.50	8.90	10.20	10.80	11.60	15.80	18.00	24.80	-	
	0.63	9.50	11.10	11.70	12.50	17.10	19.70	26.70	31.20	
U-PSFRR	0.75	10.80	13.50	14.10	15.60	21.60	24.20	32.40	38.60	
	1.00	12.70	15.90	18.00	19.80	24.60	30.20	40.50	48.00	
	1.25	-	17.10	19.70	21.60	28.50	33.30	44.00	53.40	
	0.13	7.10	8.60	9.80	-	-	-	-	-	
	0.19	7.10	8.60	9.80	10.80	12.20	-	-	-	
	0.25	8.60	9.80	11.10	12.00	16.50	-	-	-	
U-SSFRR	0.38	8.60	9.80	11.10	12.00	16.50	18.80	21.30	-	
	0.50	9.60	11.40	11.60	12.90	17.40	19.70	28.10	-	
	0.63	10.40	12.30	12.60	14.10	18.80	21.50	30.50	34.20	
	0.75	12.20	15.60	16.70	18.50	25.10	28.50	37.20	56.30	
	1.00	15.40	19.20	21.20	23.70	30.90	35.30	46.10	58.10	
	1.25	-	20.40	22.80	25.40	33.20	37.70	53.10	60.20	

Express Options P.30

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

TEL. 1-847-843-9105 FAX. 1-847-843-9107 TOLL FREE TEL. 1-800-681-7475 TOLL FREE FAX. 1-800-681-7402

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