

Rotary Shafts

-One Tapped End-



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-SFRT |
| | Electroless Nickel Plating | U-PSFRT |
| 304 Stainless Steel | - | U-SSFRT |

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

| Type | Part No. D | | | L Choose in 0.01" Increments | T Thread Selection (Callout) | | | | | | | | | |
|---------|------------|---------|-----------|------------------------------|------------------------------|-------|-------|--------|--------|---------|--------|--------|--------|--------|
| | Callout | Nominal | Tolerance | | #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-SFRT | 0.25 | 1/4 | 0.2498 | 0.2494 | 5 | | | | | | | | | |
| | 0.38 | 3/8 | 0.3748 | 0.3744 | 0.75 ~ 20.00 | | 6 | 8 | 10 | | | | | |
| | 0.50 | 1/2 | 0.4998 | 0.4994 | 1.00 ~ 24.00 | | | | 10 | 0.25 | 0.31 | | | |
| | 0.63 | 5/8 | 0.6248 | 0.6244 | 1.50 ~ 26.00 | | | | | 0.25 | 0.31 | 0.38 | | |
| | 0.75 | 3/4 | 0.7497 | 0.7492 | 1.75 ~ 30.00 | | | | | 0.31 | 0.38 | | | |
| U-PSFRT | 1.00 | 1" | 0.9997 | 0.9992 | 2.00 ~ 30.00 | | | | | | 0.50 | 0.63 | 0.75 | |
| | 1.25 | 1-1/4 | 1.2496 | 1.2490 | 2.50 ~ 30.00 | | | | | | 0.50 | 0.63 | 0.75 | |
| | 1.50 | 1-1/2 | 1.4996 | 1.4990 | 3.50 ~ 30.00 | | | | | | 0.63 | 0.75 | | |

Order Example The part number consists only of the fields with blue characters. Please refer to the table below for technical information.

Part No. -
Type
U-SFRT 1.00 - L 20.00 - T 0.50

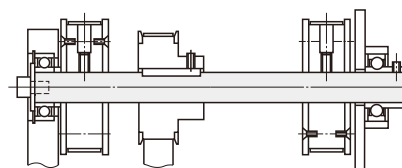
Technical Information

| Callout | T (Thread) | | T1 Thread Depth |
|---------|-------------|----------|-----------------|
| | Thread Size | Diameter | |
| 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 |

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. - (Ordering Code) (KS, SC, FC ... etc)
Type
U-SFRT 1.00 - L 20.00 - T 0.50 - KC 2.00 - A 0.50

| 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 = 0.25 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>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, V, W = 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>0.25</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 | | H | From | To | | 0.25 | 0.63 | 0.04 | 0.75 | 1.50 | 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>0.25</td> <td>0.63</td> <td>0.04</td> <td></td> </tr> <tr> <td>0.75</td> <td>1.50</td> <td>0.08</td> <td></td> </tr> </tbody> </table> | D | | H | | From | To | | | 0.25 | 0.63 | 0.04 | | 0.75 | 1.50 | 0.08 | | <p>Example SC1.00</p> <p>Adds wrench flats.</p> <ul style="list-style-type: none"> SC = 0.01" Increments SC + $\delta_2 \leq L$ SC = 0 or SC ≥ 0.05 <table border="1"> <thead> <tr> <th>D</th> <th>Wrench Size</th> <th>Actual</th> <th>δ_2</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> <tr> <td>1.50</td> <td>1-3/8</td> <td>1.375</td> <td>0.63</td> </tr> </tbody> </table> | D | Wrench Size | Actual | δ_2 | 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 | 1.50 | 1-3/8 | 1.375 | 0.63 |
| D | | H | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| From | To | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.25 | 0.63 | 0.04 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.75 | 1.50 | 0.08 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| D | | H | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| From | To | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.25 | 0.63 | 0.04 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.75 | 1.50 | 0.08 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| D | Wrench Size | Actual | δ_2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.50 | 1-3/8 | 1.375 | 0.63 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| \$ 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 | 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. D | \$ Unit Price | | | | | | | |
|---------|------------|---------------|-------|-------|-------|-------|--------|--------|--------|
| | | Min. L | L2.01 | L4.01 | L6.01 | L8.01 | L12.01 | L16.01 | L24.01 |
| U-SFRT | 0.25 | 7.40 | 8.10 | 9.20 | 10.10 | 14.30 | - | - | - |
| | 0.38 | 7.40 | 8.10 | 9.20 | 10.10 | 14.30 | 16.10 | 18.50 | - |
| | 0.50 | 8.40 | 9.80 | 10.40 | 11.00 | 15.00 | 17.10 | 23.60 | - |
| | 0.63 | 9.00 | 10.50 | 11.30 | 11.90 | 16.40 | 18.60 | 25.50 | 29.90 |
| | 0.75 | 10.20 | 12.90 | 13.40 | 14.90 | 20.60 | 23.10 | 30.90 | 36.90 |
| | 1.00 | 12.20 | 15.20 | 17.10 | 18.90 | 23.40 | 28.70 | 38.60 | 45.80 |
| U-PSFRT | 1.25 | - | 16.40 | 18.60 | 20.60 | 27.20 | 31.80 | 42.00 | 50.90 |
| | 1.50 | - | 24.50 | 27.30 | 30.20 | 40.40 | 49.70 | 66.30 | 79.40 |
| | 0.25 | 8.10 | 9.30 | 10.50 | 11.40 | 15.60 | - | - | - |
| | 0.38 | 8.10 | 9.30 | 10.50 | 11.40 | 15.60 | 18.00 | 20.40 | - |
| | 0.50 | 9.20 | 10.80 | 11.10 | 12.30 | 16.70 | 18.90 | 26.70 | - |
| | 0.63 | 9.90 | 11.70 | 12.00 | 13.40 | 18.00 | 20.40 | 29.10 | 32.60 |
| U-SSFRT | 0.75 | 12.00 | 15.00 | 15.80 | 17.60 | 23.90 | 27.20 | 35.60 | 53.60 |
| | 1.00 | 14.70 | 18.30 | 20.30 | 22.50 | 29.40 | 33.60 | 44.00 | 55.30 |
| | 1.25 | - | 19.50 | 21.80 | 24.20 | 31.70 | 35.90 | 50.60 | 57.50 |
| | 1.50 | - | 28.40 | 31.20 | 34.80 | 45.90 | 56.10 | 73.80 | 89.90 |
| | 0.25 | 10.60 | 11.90 | 13.50 | 14.80 | 22.10 | - | - | - |
| | 0.38 | 10.60 | 11.90 | 13.50 | 14.80 | 22.10 | 24.80 | 27.50 | - |
| 0.50 | 12.60 | 14.80 | 15.50 | 17.10 | 24.50 | 27.20 | 34.40 | - | |
| 0.63 | 13.70 | 16.00 | 16.60 | 18.40 | 26.50 | 29.50 | 37.10 | 47.00 | |
| 0.75 | 14.20 | 17.80 | 18.40 | 19.60 | 28.60 | 31.70 | 44.30 | 50.60 | |
| 1.00 | 15.50 | 19.60 | 22.30 | 24.70 | 31.70 | 39.80 | 61.20 | 68.80 | |
| 1.25 | - | 23.40 | 26.50 | 29.30 | 41.40 | 46.80 | 74.20 | 74.90 | |
| 1.50 | - | 36.90 | 41.60 | 46.10 | 65.20 | 74.20 | 104.20 | 113.20 | |

