

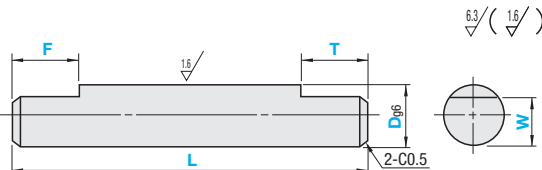
# Rotary Shafts

## D-Cut

### D-Cut



| Type  | Material         | Surface Treatment          |
|-------|------------------|----------------------------|
| SFRV  | EN 1.1191 Equiv. | Black Oxide                |
| PSFRV | EN 1.1191 Equiv. | Electroless Nickel Plating |
| SSFRV | EN 1.4301 Equiv. | -                          |



• Use this shaft type for conveyor rollers where roller rotation is undesired.  
• Circularity and Straightness **P820**

| Part Number |     | 0.1mm Increment |          | 1mm Increment |
|-------------|-----|-----------------|----------|---------------|
| Type        | Dg6 | L               | F, T     | W             |
| SFRV        | 6   | 20.0~300.0      | 2.0~30.0 | 4~5           |
|             | 8   | 20.0~400.0      |          | 5~7           |
|             | 10  | 20.0~500.0      |          | 7~9           |
|             | 12  | 30.0~600.0      |          | 9~11          |
|             | 13  | 30.0~600.0      | 2.0~54.0 | 10~12         |
|             | 15  | 30.0~700.0      |          | 12~14         |
|             | 16  | 30.0~700.0      |          | 13~15         |
|             | 17  | 40.0~800.0      |          | 14~16         |
|             | 18  | 40.0~800.0      |          | 15~17         |
|             | 20  | 40.0~800.0      |          | 15~18         |
| PSFRV       | 22  | 50.0~800.0      | 2.0~90.0 | 17~20         |
|             | 25  | 50.0~800.0      |          | 20~23         |
|             | 30  | 60.0~800.0      |          | 25~28         |
|             | 30  | 60.0~800.0      |          | 25~28         |

• When L>600, machined D-Cut ends are not exactly aligned. (Misalignment up to 1° may result.)  
• In the case of L-(F+T)≤20, warping may occur.

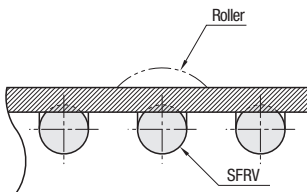
Ordering Example: Part Number - L - F - T - W  
SFRV15 - 300 - F30 - T7 - W13

| D  | SFRV   |        |        |        |        |        |        |        | PSFRV  |        |        |        |        |        |        |        | SSFRV  |        |        |        |        |        |        |        |
|----|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|    | Min. L | L50.1  | L100.1 | L150.1 | L200.1 | L300.1 | L400.1 | L600.1 | Min. L | L50.1  | L100.1 | L150.1 | L200.1 | L300.1 | L400.1 | L600.1 | Min. L | L50.1  | L100.1 | L150.1 | L200.1 | L300.1 | L400.1 | L600.1 |
| 6  | -50.0  | -100.0 | -150.0 | -200.0 | -300.0 | -400.0 | -600.0 | -800.0 | -50.0  | -100.0 | -150.0 | -200.0 | -300.0 | -400.0 | -600.0 | -800.0 | -50.0  | -100.0 | -150.0 | -200.0 | -300.0 | -400.0 | -600.0 | -800.0 |
| 8  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 10 |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 12 |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 13 |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 15 |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 16 |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 17 |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 18 |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 20 |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 22 |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 25 |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 30 |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |

Alterations: Part Number - L - F - T - W - (FC, LKC...etc.)  
SFRV15 - 300 - F15 - T8 - W12 - LKC

| Alterations | Set Screw Flat                                                                                                                                                                                                                     | Wrench Flats                                                                                                     | L Dimension Tolerance                                                               | Retaining Ring Groove                                                                                        |
|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| Code        | FC, WFC                                                                                                                                                                                                                            | SC                                                                                                               | LKC                                                                                 | TA, TB                                                                                                       |
| Spec.       | FC: Adds 1 set screw flat.<br>Ordering Code: FC10-G3<br>WFC: Adds 2 set screw flats.<br>Ordering Code: WFC10-J3-W10-V3<br>FC, G, WFC, J, W, V = 1mm Increment<br>G, J, V≤50<br>Processed ends will not be aligned with each other. | Adds a wrench flat.<br>SC = 1mm Increment<br>SC=0 or SC≥1<br>Processed ends will not be aligned with each other. | Changes L dimension tolerance.<br>Ordering Code: LKC<br>L<500→L±0.05<br>L≥500→L±0.1 | Ordering Code: TA10-TB10<br>For dimensions of the retaining ring groove, <b>P820</b><br>F+4≤TA(TB)≤(L+F×2)/2 |

Example



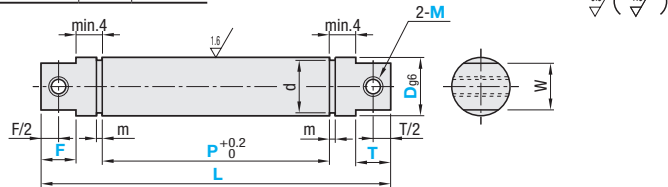
# Shafts for Tension

## Pull, Retaining Ring Groove

### Shafts for Tension



| Type   | Material         | Surface Treatment          | Accessory                          |
|--------|------------------|----------------------------|------------------------------------|
| SFRRT  | EN 1.1191 Equiv. | Black Oxide                | Retaining Ring 2 pcs. Spring Steel |
| PSFRRT | EN 1.1191 Equiv. | Electroless Nickel Plating | EN 1.4301 Equiv.                   |
| SSFRRT | EN 1.4301 Equiv. | -                          |                                    |



• Suitable for where tension needs to be applied such as belt conveyor.  
• Circularity and Straightness **P820**

| Part Number |     |        | 1mm Increment |       |       |        | M (Coarse)<br>Selection | W  | d    | Tolerance  | m    | Tolerance  |    |            |
|-------------|-----|--------|---------------|-------|-------|--------|-------------------------|----|------|------------|------|------------|----|------------|
| Type        | Dg6 |        | L             | F     | T     | P      |                         |    |      |            |      |            |    |            |
| SFRRT       | 8   | -0.005 | 20~400        | 7~30  | 7~30  | 5~370  | 3                       | 7  | 7    | +0.09<br>0 | 0.9  | +0.1<br>0  |    |            |
|             | 10  | -0.014 | 30~500        | 10~30 | 10~30 | 5~470  | 4                       | 8  | 9.6  | 0<br>-0.09 | 1.15 | +0.14<br>0 |    |            |
| PSFRRT      | 12  | -0.006 | 30~500        | 16~50 | 16~50 | 10~550 | 4 5                     | 9  | 11.5 | 0<br>-0.11 |      |            |    |            |
|             | 15  | -0.017 | 30~600        |       |       |        | 4 5 6                   | 12 | 14.3 |            |      |            |    |            |
| SSFRRT      | 17  |        | 40~600        |       |       |        | 5 6 8                   | 13 | 16.2 | 6 8 10     | 16   |            | 19 | 0<br>-0.21 |
|             | 20  | -0.007 | 40~600        |       |       |        | 8 10 12                 | 20 | 23.9 | 25         | 28.6 | 1.65       |    |            |
|             | 25  | -0.020 | 50~600        |       |       |        |                         |    |      |            |      |            |    |            |
|             | 30  |        | 60~600        |       |       |        |                         |    |      |            |      |            |    |            |

L≥P+F+T+8

Ordering Example: Part Number - L - F - T - P - M  
SFRRT20 - 250 - F30 - T30 - P184 - M10

| D  | SFRRT  |      |      |      |      |      |      | PSFRRT |      |      |      |      |      |      | SSFRRT |      |      |      |      |      |      |
|----|--------|------|------|------|------|------|------|--------|------|------|------|------|------|------|--------|------|------|------|------|------|------|
|    | Min. L | L51  | L101 | L151 | L201 | L301 | L401 | Min. L | L51  | L101 | L151 | L201 | L301 | L401 | Min. L | L51  | L101 | L151 | L201 | L301 | L401 |
| 8  | -50    | -100 | -150 | -200 | -300 | -400 | -600 | -50    | -100 | -150 | -200 | -300 | -400 | -600 | -50    | -100 | -150 | -200 | -300 | -400 | -600 |
| 10 |        |      |      |      |      |      |      |        |      |      |      |      |      |      |        |      |      |      |      |      |      |
| 12 |        |      |      |      |      |      |      |        |      |      |      |      |      |      |        |      |      |      |      |      |      |
| 15 |        |      |      |      |      |      |      |        |      |      |      |      |      |      |        |      |      |      |      |      |      |
| 17 |        |      |      |      |      |      |      |        |      |      |      |      |      |      |        |      |      |      |      |      |      |
| 20 |        |      |      |      |      |      |      |        |      |      |      |      |      |      |        |      |      |      |      |      |      |
| 25 |        |      |      |      |      |      |      |        |      |      |      |      |      |      |        |      |      |      |      |      |      |
| 30 |        |      |      |      |      |      |      |        |      |      |      |      |      |      |        |      |      |      |      |      |      |

Alterations: Part Number - L - F - T - P - M - (FC, WFC, SC...etc.)  
SFRRT20 - 250 - F30 - T30 - P160 - M10 - LKC

| Alterations | Set Screw Flat                                                                                                                                                                                                                     | Wrench Flats                                                                                                     | L Dimension Tolerance                                                               | Alter W Dimension                                                                                                                                                                                         | 2 Set Screw Flats at both ends                                                                                                                                                                                                                                       |
|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Code        | FC+WFC                                                                                                                                                                                                                             | SC                                                                                                               | LKC                                                                                 | WC                                                                                                                                                                                                        | DC                                                                                                                                                                                                                                                                   |
| Spec.       | FC: Adds 1 set screw flat.<br>Ordering Code: FC10-G3<br>WFC: Adds 2 set screw flats.<br>Ordering Code: WFC10-J3-W10-V3<br>FC, G, WFC, J, W, V = 1mm Increment<br>G, J, V≤50<br>Processed ends will not be aligned with each other. | Adds a wrench flat.<br>SC = 1mm Increment<br>SC=0 or SC≥1<br>Processed ends will not be aligned with each other. | Changes L dimension tolerance.<br>Ordering Code: LKC<br>L<500→L±0.05<br>L≥500→L±0.1 | Changes W dimension in 0.1 increment.<br>Ordering Code: WC6<br>D W WC<br>12 9 6~8.9<br>15 12 9~11.9<br>17 13 10~12.9<br>20 16 13~15.9<br>25 20 17~19.9<br>30 25 22~24.9<br>Not applicable to D10 or less. | Chamfering Dia. can be specified.<br>DC=0.1mm Increment<br>When DC≤W, chamfering is not available for W.<br>D DC W<br>12 8.0~11.9 9<br>15 12.0~14.9 12<br>17 14.0~16.9 13<br>20 17.0~19.9 16<br>25 22.0~24.9 20<br>30 27.0~29.9 25<br>Not applicable to D10 or less. |

Example

