Rotary Shafts

D-Cut

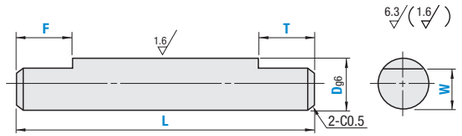
Rotary Shafts – D-Cut

RoHS 10

Type	Material	Surface Treatment
NSFRV	1045 Carbon Steel or Equivalent	—
SFRV		Black Oxide
PSFRV		Electroless Nickel Plating
SSFRV	304 Stainless Steel	—

Use this shaft type for conveyer rollers where roller rotation is undesired.

Circularity and Straightness **P.853**.



Part Number			0.1 mm Increment		1 mm Increment
Type	Dg_6		L	F / T	W
NSFRV	6	-0.004 -0.012	20.0–300.0	2.0–30.0	4–5
	8	-0.005	20.0–400.0		5–7
	10	-0.014	20.0–500.0		7–9
SFRV	12	-0.006 -0.017	30.0–600.0	2.0–54.0	9–11
	13		30.0–600.0		10–12
	15		30.0–700.0		12–14
PSFRV	16		30.0–700.0		13–15
	17		40.0–800.0		14–16
	18		40.0–800.0		15–17
SSFRV	20	-0.007 -0.020	40.0–800.0	2.0–90.0	15–18
	22		50.0–800.0		17–20
	25		50.0–800.0		20–23
	30		60.0–800.0		25–28

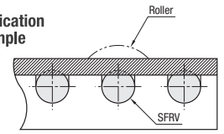
Max value for W will be used if W dimension is not specified.

When L>600, machined D-Cut ends are not exactly aligned. (Misalignment up to 1° may result.) L≥F+T+20

Part Number Example

Part Number	-	L	-	F	-	T	-	W
SFRV15	-	300	-	F30	-	T7	-	W13
SSFRV20	-	350	-	F35	-	T35	-	W18

Application Example



Part Number 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
	1 Set Screw Flat: FC 2 Set Screw Flats: WFC	SC, ℓ_2, W	LKC	d, m, TA, TB
Code	FC, WFC	SC	LKC	TA, TB
Spec.	FC: Adds 1 set screw flat. **Ordering Code:** FC10-G3 WFC: Adds 2 set screw flats. **Ordering Code:** WFC10-J3-W10-V3 FC / G / WFC / J / W / V = 1 mm Increment G / J / V≤50 Processed ends will not be aligned with each other.	Adds a wrench flat. SC = 1 mm Increment SC+ℓ_2≤L SC=0 or SC≥1 Processed ends will not be aligned with each other.	Changes L Dimension Tolerance. **Ordering Code:** LKC L<500 L±0.05 L≥500 L±0.1	Adds a retaining ring groove. (Applicable retaining rings are included.) TA, TB = 1 mm Increment **Ordering Code:** TA10-TB10 For dimensions of the retaining ring groove, please refer to **P.853**. F(T)+4≤TA(TB)≤L/2

D	H
6–17	1
18–30	2

D	W	ℓ_2
6	5	8
8	7	
10	8	
12 / 13	10	10
15 / 16	13	
17 / 18	14	

D	W	ℓ_2
20 / 22	17	10
25	v22	
30	27	15

For dimensions of the retaining ring groove, **P.853**.

Shaft for Tension

Pull – Retaining Ring Groove

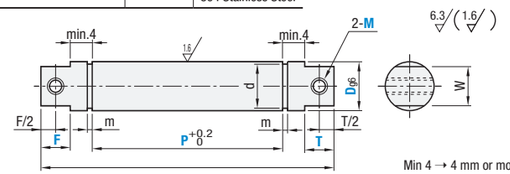
Shaft for Tension – Pull – Retaining Ring Groove

RoHS 10

Type	Material	Surface Treatment	Accessory	
SFRRT	1045 Carbon Steel or Equivalent	Black Oxide	Retaining Rings 2pcs.	Spring Steel
PSFRRT		Electroless Nickel Plating		
SSFRRT	304 Stainless Steel	—		304 Stainless Steel

Suitable for where tension needs to be applied such as belt conveyer.

Circularity and Straightness **P.853**.



Min 4 → 4 mm or more is required

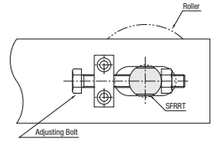
Part Number			1 mm Increment				M (Coarse) Selectable	W	d		m	
Type	Dg_6		L	F	T	P				Tolerance		Tolerance
SFRRT	8	-0.005 -0.014	20–400	7–30	7–30	5–370	3	7	7	+0.09 0	0.9	+0.1 0
	10		30–500	10–30	10–30	5–470	4	8	9.6	0 -0.09	1.15	+0.14 0
PSFRRT	12	-0.006 -0.017	30–500				4 5	9	11.5	0 -0.11		
	15		30–600	16–50	16–50	10–550	4 5 6	12	14.3			
SSFRRT	17		40–600				5 6 8	13	16.2			
	20	-0.007 -0.020	40–600				6 8 10	16	19	0 -0.21	1.35	
	25		50–600				8 10 12	20	23.9			
	30		60–600					25	28.6		1.65	

L≥P+F+T+8

Part Number Example

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

Application Example



Part Number Alterations

Part Number	-	L	-	F	-	T	-	P	-	M	-	(FC, WFC, SC...etc.)
SFRRT20	-	250	-	F30	-	T30	-	P184	-	M10	-	LKC

Alterations	Set Screw Flat	Wrench Flats	L Dimension Tolerance		
	1 Set Screw Flat: FC 2 Set Screw Flats: WFC	SC, ℓ_2, W	LKC	WC	W, DC
Code	FC, WFC	SC	LKC	WC	DC
Spec.	FC: Adds 1 set screw flat. **Ordering Code:** FC10-G3 WFC: Adds 2 set screw flats. **Ordering Code:** WFC10-J3-W10-V3 FC / G / WFC / J / W / V = 1 mm Increment G / J / V≤50 Processed ends will not be aligned with each other.	Adds a wrench flat. SC = 1 mm Increment SC+ℓ_2≤L SC=0 or SC≥1 Processed ends will not be aligned with each other.	Changes L Dimension Tolerance. **Ordering Code:** LKC L<500 L±0.05 L≥500 L±0.1	Changes W dimension in 0.1 increment. **Ordering Code:** WC6 Not applicable to D10 or less.	Chamfering Dia. can be specified. DC=0.1mm Increment When DC≤W, chamfering is not available for W. Not applicable to D10 or less.

D	H
8–17	1
20–30	2

D	W	ℓ_2
8	7	8
10	8	
12	10	10
15	13	
17	14	

D	W	ℓ_2
20	17	10
25	22	
30	27	15

D	W	WC
12	9	6–8.9
15	12	9–11.9
17	13	10–12.9
20	16	13–15.9
25	20	17–19.9
30	25	22–24.9

D	WC	W
12	8.0–11.9	9
15	12.0–14.9	12
17	14.0–16.9	13
20	17.0–19.9	16
25	22.0–24.9	20
30	27.0–29.9	25