



# Needle Roller Bearings with Thrust Ball Bearings / Needle Roller Bearings with Thrust Roller Bearings With Inner Ring

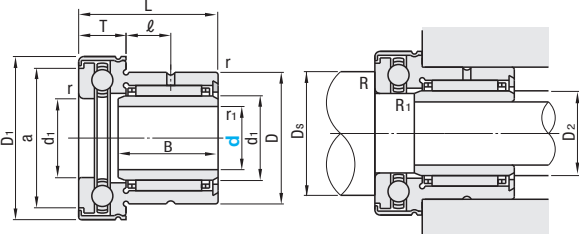
# One-Way Clutches

**Needle Roller Bearings**

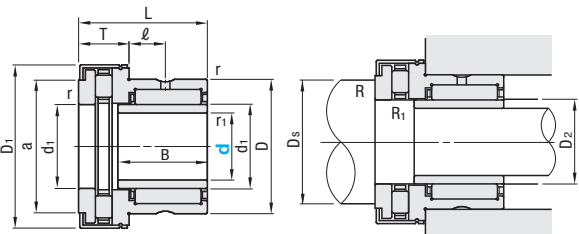



RoHS 10

**NKXZ (With Thrust Ball Bearings)**



**NKXRZ (With Thrust Roller Bearings)**



The model number of this product is determined based on the inner diameter of the detachable inner ring. This may cause a disparity in the model number of the similar products by other companies. Please make sure to check the catalog dimensions when you place an order.

**Features**



- Dust cover is provided on the thrust bearing side to prevent intrusion of dirt and lubricant leakage.
- With its ability to sustain radial and axial loads simultaneously, NKXZ is suitable for the compact design to use on fixed shaft ends. The NKXRZ has better performance against axial loads.

**Recommended Fits**

Shaft	Housing
k6	K6

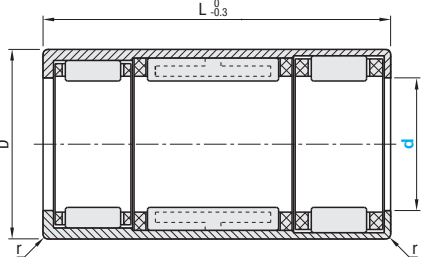
Material: SUJ2 Equivalent  
Accessory: Cover  
Bearing Accuracy: JIS B 1514 Class 0 Compliant

**Features:** Bearings are on both ends of the clutch to support radial loads.


RoHS 10

**BHFL**



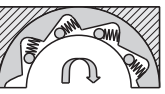
**One-Way Clutch Structure**

During Lock-up



Shaft torque is transmitted to the housing during lock-up.

During Free Running



Shaft torque is not transmitted to the housing during free running.

**Recommended Fits**

Shaft	Housing	
	Steel	Light Metal
h5(h6)	N6(N7)	R6(R7)

\*When applied torque is smaller than half the allowable torque, tolerance in ( ) can be applied.

Material: SPCC

Note the mounting direction as the clutch will lock in one direction and free-spin in the other.

Part Number	Type	d	D	B	L	T	r (min)	r1 (min)	d1	D1	ℓ	a	Radial				Axial				Allowable Rotational Speed rpm (Reference)	Relative Dimensions				Mass (g) (Reference)	Unit Price
													Basic Dynamic Load Rating CrkN	Basic Static Load Rating CorkN	Basic Dynamic Load Rating CakN	Basic Static Load Rating CpakN	Ds (min)	D2 (min)	R (max)	R1 (max)							
7	19	19	16	23	9	0.3	10	25.2	6.5	19.7	6.2	7.8	10.0	14.0	7200	18	9	0.3	40.9								
9	21	21	16	23	9	0.3	12	27.2	6.5	21.7	9	11	10.3	15.4	6600	20	11	0.3	46								
12	24	24	17	25	10	0.3	15	29.2	8	23.7	10.7	12.7	10.5	16.8	5700	23	14	0.3	54.6								
14	26	26	17	25	10	0.3	17	31.2	8	25.7	11.9	15	10.8	18.2	5100	25	16	0.3	64.5								
17	30	30	20	30	11	0.3	20	36.2	10.5	30.7	16.4	23.8	14.3	24.7	4500	29	19	0.3	103.5								
20	37	37	20	30	11	0.3	25	43.2	10.5	37.7	18.8	30.5	19.6	37.5	3600	35	22	0.3	159.5								
25	42	42	20	30	11	0.3	30	48.2	9.5	42.7	22.6	36	20.4	42.0	3000	40	27	0.3	180.8								
30	47	47	20	30	11	0.6	35	53.2	9.0	47.7	24.3	41.5	21.2	47.0	2700	45	32	0.6	207								
35	52	52	25	35	14	0.6	40	61.2	10	55.7	26	47	27	63	2400	52	37	0.6	252.2								
40	58	58	25	35	14	0.6	45	66.5	9	60.5	27.5	53	28	69	2100	57	42	0.6	315.8								
45	62	62	25	35	14	0.6	50	71.5	10	65.5	38	74	29	75	1900	62	48	0.6	370.8								
50	72	72	40	47	17	1	60	86.5	12	80.5	42	90	41.5	113	1600	75	55	1	542								

Part Number	Type	d	D	B	L	T	r (min)	r1 (min)	d1	D1	ℓ	a	Radial				Axial				Allowable Rotational Speed rpm (Reference)	Relative Dimensions				Mass (g) (Reference)	Unit Price
													Basic Dynamic Load Rating CrkN	Basic Static Load Rating CorkN	Basic Dynamic Load Rating CakN	Basic Static Load Rating CpakN	Ds (min)	D2 (min)	R (max)	R1 (max)							
12	24	24	16	23	9	0.3	15	29.2	6.5	23.7	10.7	12.7	14.4	28.5	7800	25	14	0.3	52.6								
14	26	26	17	25	10	0.3	17	31.2	8	25.7	11.9	15	15.9	33.5	7200	27	16	0.3	62.5								
17	30	30	20	30	11	0.3	20	36.2	10.5	30.7	16.4	23.8	24.9	53	6000	32	19	0.3	97.5								
20	37	37	20	30	11	0.3	25	43.2	10.5	37.7	18.8	30.5	33.5	76	5100	39	22	0.3	152.5								
25	42	42	20	30	11	0.3	30	48.2	9.5	42.7	22.6	36	35.5	86	4500	44	27	0.3	173.8								
30	47	47	20	30	11	0.6	35	53.2	9	47.7	24.3	41.5	39	101	3900	49	32	0.6	204								
35	52	52	25	35	14	0.6	40	61.2	10	55.7	26	47	56	148	3600	56	37	0.6	258.2								
40	58	58	25	35	14	0.6	45	66.5	9	60.6	27.5	53	59	163	3000	61	42	0.6	310.8								
45	62	62	25	35	14	0.6	50	71.5	10	65.5	38	74	61	177	2800	66	48	0.6	358.8								

Ordering Example: **NKXZ20**  
**NKXRZ17**

Part Number	Type	d	D	L	r (min)	Allowable Torque N·m	Allowable Rotational Speed		Mass (g)	Unit Price
							During Shaft Rotation rpm	During Outer Race Rotation rpm		
6	BHFL	6	10	15	0.3	1.76	23000	13000	4	
8	BHFL	8	12	22	0.3	3.15	17000	12000	7	
10	BHFL	10	14	22	0.3	5.3	14000	11000	8	
12	BHFL	12	18	26	0.3	12.2	11000	8000	18	
14	BHFL	14	20	26	0.3	17.3	9500	8000	20	
16	BHFL	16	22	26	0.3	20.5	8500	7500	22	
18	BHFL	18	24	26	0.3	24.1	7500	7500	25	
20	BHFL	20	26	26	0.3	28.5	7000	6500	27	
25	BHFL	25	32	30	0.3	66	5500	5500	44	
30	BHFL	30	37	30	0.3	90	4500	4500	51	
35	BHFL	35	42	30	0.3	121	3900	3900	58	

Ordering Example: **BHFL10**

