
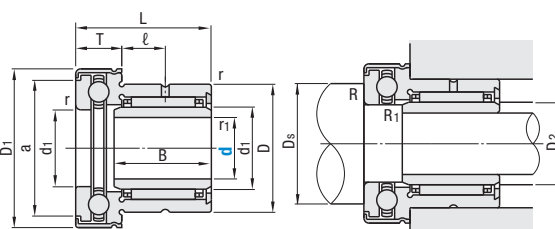


Needle Roller Bearings with Thrust Ball / Roller Bearings

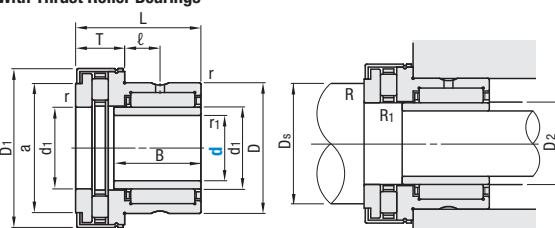
Needle Roller Bearings with Thrust Ball / Roller Bearings



NKXZ
With Thrust Ball Bearings



NKXRZ
With Thrust Roller Bearings



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 load 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: 52100 Bearing Steel or Equivalent
Accessories: Cover
Bearing Accuracy: JIS B 1514 Class 0 Compliant

kgf=Nx0.101972

Part Number	Type	d	D	B	L	T	r (min)	r ₁ (min)	d ₁	D ₁	I	a	Radial		Axial		Allowable Rotational Speed rpm (Reference)	Relative Dimensions				Mass (g) (Reference)
													Basic Dynamic Load Rating CrkN	Basic Static Load Rating CorkN	Basic Dynamic Load Rating CakN	Basic Static Load Rating CpakN		D _s (min)	D ₂ (min)	R (max.)	R ₁ (max.)	
7	NKXZ	19	19	16	23	9	0.3		10	25.2	19.7	6.2	7.8	10.0	14.0	7200	18	9	0.3	0.3	40.9	
9	NKXZ	21	21	17	25	10	0.3		12	27.2	21.7	9	11	10.3	15.4	6600	20	11	0.3	0.3	46	
12	NKXZ	24	24	19	27	11	0.3		15	29.2	23.7	10.7	12.7	10.5	16.8	5700	23	14	0.3	0.3	54.6	
14	NKXZ	26	26	21	29	12	0.3		17	31.2	25.7	11.9	15	10.8	18.2	5100	25	16	0.3	0.3	64.5	
17	NKXZ	30	30	25	33	13	0.3		20	36.2	30.7	16.4	23.8	14.3	24.7	4500	29	19	0.3	0.3	103.5	
20	NKXZ	37	37	30	40	14	0.3		25	43.2	37.7	18.8	30.5	19.6	37.5	3600	35	22	0.3	0.3	159.5	
25	NKXZ	42	42	35	45	15	0.3		30	48.2	42.7	22.6	36	20.4	42.0	3000	40	27	0.3	0.3	180.8	
30	NKXZ	47	47	40	50	16	0.6		35	53.2	47.7	24.3	41.5	21.2	47.0	2700	45	32	0.6	0.6	207	
35	NKXZ	52	52	45	55	17	0.6		40	61.2	55.7	26	47	27	63	2400	52	37	0.6	0.6	252.2	
40	NKXZ	58	58	50	63	18	0.6		45	66.5	60.5	27.5	53	28	69	2100	57	42	0.6	0.6	315.8	
45	NKXZ	62	62	55	67	19	0.6		50	71.5	65.5	38	74	29	75	1900	62	48	0.6	0.6	370.8	
50	NKXZ	72	72	65	77	20	1	1	60	86.5	80.5	42	90	41.5	113	1600	75	55	1	1	542	

kgf=Nx0.101972


Part Number	Type	d	D	B	L	T	r (min)	r ₁ (min)	d ₁	D ₁	I	a	Radial		Axial		Allowable Rotational Speed rpm (Reference)	Relative Dimensions				Mass (g) (Reference)
													Basic Dynamic Load Rating CrkN	Basic Static Load Rating CorkN	Basic Dynamic Load Rating CakN	Basic Static Load Rating CpakN		D _s (min)	D ₂ (min)	R (max.)	R ₁ (max.)	
12	NKXRZ	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	0.3	52.6
14	NKXRZ	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	0.3	62.5
17	NKXRZ	30	30	21	29	11	0.3		20	36.2	10.5	30.7	16.4	23.8	24.9	53	6000	32	19	0.3	0.3	97.5
20	NKXRZ	37	37	25	33	12	0.3		25	43.2	13	37.7	18.8	30.5	33.5	76	5100	39	22	0.3	0.3	152.5
25	NKXRZ	42	42	30	40	13	0.3		30	48.2	15	42.7	22.6	36	35.5	86	4500	44	27	0.3	0.3	173.8
30	NKXRZ	47	47	35	45	14	0.6		35	53.2	17	47.7	24.3	41.5	39	101	3900	49	32	0.6	0.6	204
35	NKXRZ	52	52	40	50	15	0.6		40	61.2	19	55.7	26	47	56	148	3600	56	37	0.6	0.6	258.2
40	NKXRZ	58	58	45	55	16	0.6		45	66.5	21	60.6	27.5	53	59	163	3000	61	42	0.6	0.6	310.8
45	NKXRZ	62	62	50	63	17	0.6		50	71.5	23	65.5	38	74	61	177	2800	66	48	0.6	0.6	358.8

Part Number Example: NKXZ20, NKXRZ17

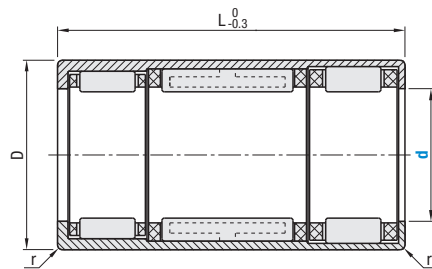
One-Way Clutches

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

One-Way Clutches

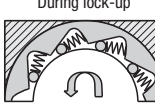


BHFL




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: Low Carbon Steel

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

kgf=Nx0.101972

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

Part Number Example: BHFL10

