

Ball Bearing Freewheel Clutch Unit FKNN (2RS)



with keyway (IR) and rectangular groove (OR)



Characteristics

Dimensions

Dimensions in accordance with bearing series 62 (DIN 625)

Width

12 / 14 / 15 / 16 / 18 mm

Operating temperature

max. 140°C

Higher temperatures on request

max. 110°C (design 2RS with RS seals)

Lubrication

Series FKNN 2RS with seals

Operative lifetime grease lubrication

Series FKNN without seals

Oil or grease lubrication (Pg. 60–61)

Delivered with corrosion protection.

Installation

Installation tolerances

Shaft n6; hub N7

Mating parts

Hardening and grinding of the mating parts is not necessary.

Thoroughly clean (grease free) the mating parts in the vicinity of the freewheel clutch as well as the freewheel clutch's rings before making the press fit.

Bearing

The freewheel clutch is bearing mounted.

Additional external bearing support is not necessary.

Press fit pressure

Press fit pressure must not be applied to the balls.

Clamping direction

The arrow on the inner ring designates the inner ring's clamping direction.

Seals*

The employed RS seals reliably seal out grease and dust but are not suitable protection against the presence of liquids.

Series FKNN 6203-RS has a RS seal disc on one side only (RS seal on the freewheel side).

Components

Freewheel clutch

insert element FE 400 Z2

+ Raceways inner ring

Bearing steel, hardened and ground
Keyway per DIN 6885, Sheet 3
(Sizes 6203-6206)

Keyway per DIN 6885, Sheet 1
(Sizes 6207-6208)

outer ring

Tolerance: P9 with back clearance
Rectangular groove

+ Ball bearing

Integrated

- Roller bearing -

+ Lubrication

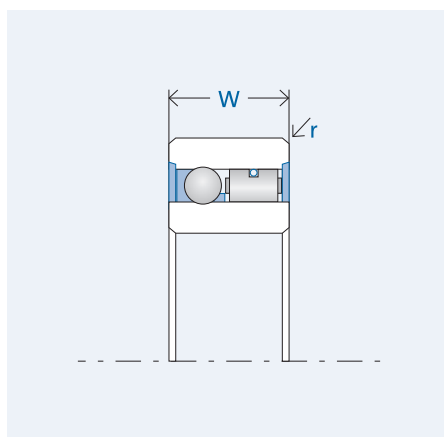
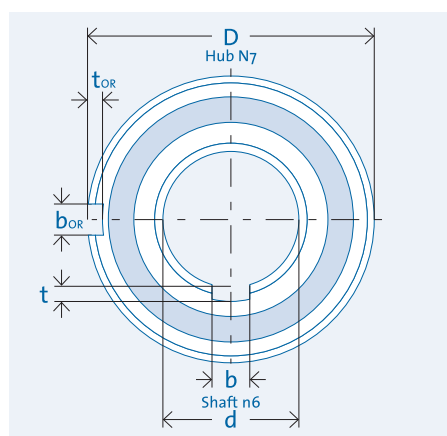
Lifetime grease lubrication*

+ Seal

RS seals*

* Series FKNN 2RS (with RS seals)

Data



Drawing legend

- d = inner diameter
- D = outer diameter
- W = width
- r = edge radius
- b = keyway width
- t = keyway depth
- b_{OR} = rectangular groove width
- t_{OR} = rectangular groove depth
- T = torque
- n = rotation speed
- C = load capacity

Designation	d [mm]	D [mm]	W [mm]	r [mm]	b [mm]	t [mm]	b _{OR} [mm]	t _{OR} [mm]	T _{nom} [Nm]	n _{max} [rpm]	C _{dyn.} [N]	C _{stat.} [N]	Weight [kg]	Item no.
FKNN 6203	17	40	12	1	5	1.2	2	1	53	10,800	6,245	3,441	0.07	305989
FKNN 6203-RS	17	40	12	1	5	1.2	2	1	53	3,700	6,245	3,441	0.07	305990
FKNN 6204	20	47	14	1.5	6	1.6	3	1.5	60	7,500	6,869	4,268	0.12	305992
FKNN 6204-2RS	20	47	14	1.5	6	1.6	3	1.5	60	3,200	6,869	4,268	0.12	305993
FKNN 6205	25	52	15	1.5	8	2	6	2	104	5,400	7,448	5,146	0.14	305995
FKNN 6205-2RS	25	52	15	1.5	8	2	6	2	104	2,800	7,448	5,146	0.14	305996
FKNN 6206	30	62	16	1.5	8	2	6	2	148	5,100	7,859	6,066	0.22	305998
FKNN 6206-2RS	30	62	16	1.5	8	2	6	2	148	2,400	7,859	6,066	0.22	305999
FKNN 6208	40	80	18	1.5	12	3.3	10	3	267	3,700	8,902	7,752	0.44	306004
FKNN 6208-2RS	40	80	18	1.5	12	3.3	10	3	267	1,900	8,902	7,752	0.44	306005
FKNN 6304-2RS	20	52	15	1.5	6	2	6	2	104	2,800	7,448	5,146	0.15	306137

All specifications for series FKNN 2RS (with seals) and series FKNN (without seals)

The specified nominal torque is based on sufficient stiffness of mating parts (Pg. 22) and refers to the integrated insert element, not the key way.

Rotation speed n for series FKNN (without seals) = insert element's inherent speed (Pg. 57)

Rotation speed n for series FKNN 2RS (with seals) = speed difference of mating parts.