

# Ball Bearing Freewheel Clutch Unit FK (2RS)



for press fit (IR and OR)



## Characteristics

### Dimensions

Dimensions in accordance with bearing series 62 (DIN 625)

### Width

12 / 14 / 15 / 16 / 17 / 18 mm

### Operating temperature

max. 140°C

Higher temperatures on request  
max. 110°C (design 2RS with RS seals)

## Lubrication

### Series FK 2RS with seals

Operative lifetime grease lubrication

### Series FK without seal discs

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 includes a ball bearing.  
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 RS Seals reliably seal out grease and dust but are not suitable to protect against permanent higher liquid levels.

Series FK 6203-RS has an RS seal 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

outer ring

Press fit

### + Ball bearing

Integrated

- Roller bearing -

### + Lubrication

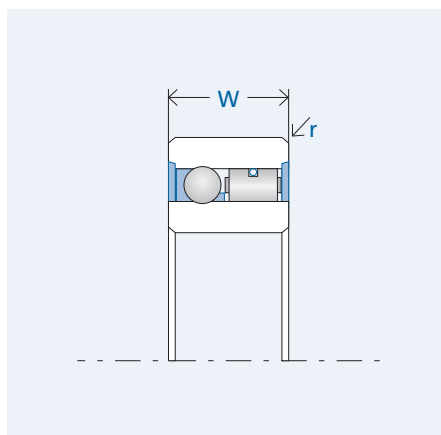
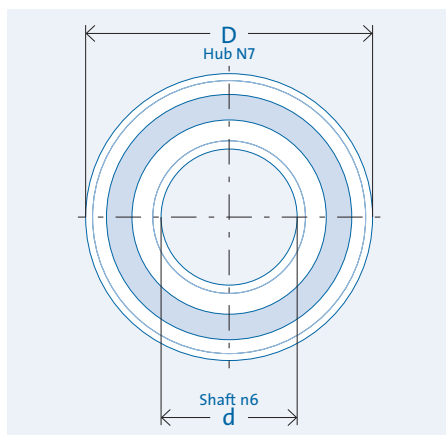
Lifetime grease lubrication\*

### + Seal

RS seals\*

\* Series FK 2RS (with RS seals)

## Data



## Drawing legend

- $d$  = inner diameter
- $D$  = outer diameter
- $W$  = width
- $r$  = edge radius
- $T$  = torque
- $n$  = rotation speed
- $C$  = load capacity

Designation	$d$ [mm]	$D$ [mm]	$W$ [mm]	$T_{nom}$ [Nm]	$n_{max}$ [rpm]	$C_{dyn.}$ [N]	$C_{stat.}$ [N]	$r$ [mm]	Weight [kg]	Item no.
FK 6203	17	40	12	53	10,800	6,245	3,441	1.0	0.07	301065
FK 6203-RS	17	40	12	53	3,700	6,245	3,441	1.0	0.07	301079
FK 6204	20	47	14	60	7,500	6,869	4,268	1.5	0.12	301068
FK 6204-2RS	20	47	14	60	3,200	6,869	4,268	1.5	0.12	301087
FK 6205	25	52	15	104	5,400	7,448	5,146	1.5	0.15	301070
FK 6205-2RS	25	52	15	104	2,800	7,448	5,146	1.5	0.15	301092
FK 6206	30	62	16	148	5,100	7,859	6,066	1.5	0.23	301074
FK 6206-2RS	30	62	16	148	2,400	7,859	6,066	1.5	0.23	301103
FK 6207	35	72	17	265	3,700	8,902	7,819	2.7	0.34	301077
FK 6207-2RS	35	72	17	265	1,900	8,902	7,819	2.7	0.34	301108
FK 6208	40	80	18	267	3,700	8,902	7,752	2.7	0.45	301078
FK 6208-2RS	40	80	18	267	1,900	8,902	7,752	2.7	0.45	301110
FK 6304-2RS	20	52	15	104	2,800	7,448	5,146	1.5	0.17	301098

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

The specified nominal torque is based on sufficient stiffness of mating parts (Pg. 22).

Rotation speed  $n$  for series FK (without seals) = assembly unit's inherent speed (Pg. 57)

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