# Complete Freewheel Clutch Unit RA



# with seals, keyway (IR) and mounting tab (OR)





# Components

Freewheel clutch Complete freewheel clutch unit, series FND insert element FE 400 Z (tension spring)

+ Raceways inner ring

Bearing steel, hardened and ground Keyway per DIN 6885, Sheet 1

P9 with back clearance

outer ring

With mounting tab (cast steel or steel)\*

+ Ball bearing

Integrated

+ Roller bearing RL 400

+ Lubrication

Lifetime oil lubrication

+ Seal

GMN rubber seal

## **Characteristics**

#### Width

34 mm

## Operating temperature

max. 100°C

#### Lubrication

Operative lifetime oil lubrication

#### Installation

### Installation tolerances

Shaft js6 (k5)

#### 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 ball and roller bearings. Additional external bearing support is not necessary.

#### Press fit pressure

Press fit pressure must not be applied to the balls. Installation/removal through inner ring only.

### **Clamping direction**

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

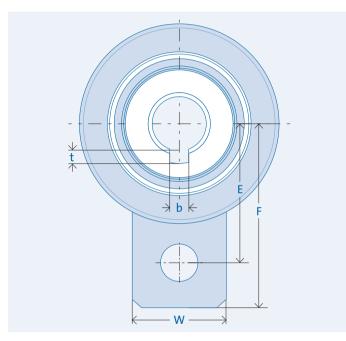
#### Mounting tab

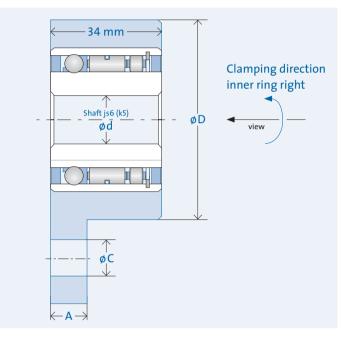
Mounting tab must not be fixed to the housing tight.

<sup>\*</sup> Not suitable for indexing freewheel clutch applications.



# Data





Designation	d [mm]	D [mm]	A [mm]	W [mm]	C [mm]	E [mm]	F [mm]	T <sub>nom</sub> [Nm]	n <sub>max</sub> [rpm]	C <sub>dyn.</sub> [N]	C <sub>stat.</sub> [N]	Weight [kg]	b [mm]	t [mm]	Item no.
RA 437 Z	15	65	12	32	10	47	62	161	1,700	8,962	8,661	0.81	5	2.3	301026
RA 442 Z	20	75	16	36	12	54	72	208	1,500	10,247	10,708	1.08	6	2.8	301030
RA 453 Z	25	90	16	45	16	62	84	314	1,200	11,417	13,577	1.50	8	3.3	301043
RA 459 Z	30	100	16	50	16	68	92	381	1,100	12,691	16,320	1.81	8	3.3	301048
RA 463 Z	35	100	16	50	16	68	92	428	1,100	13,070	17,063	1.75	10	3.3	306681
RA 470 Z	40	110	20	50	20	85	115	509	1,000	14,050	19,840	2.28	12	3.3	301056
RA 473 Z	45	110	20	50	20	85	115	543	1,000	14,128	19,896	2.2	14	3.8	306682

Inner ring clamping direction left available on request. Rotation speed n = shaft speed
The specified nominal torque refers to the integrated freewheel clutch insert element, not the key way.

# **Drawing legend**

E = bore spacing

F = support lever length

T = torque

n = rotation speed

C = mounintg tab bore

d = inner diameter

**b** = keyway width

t = keyway depth

D = outer diameter

B = mounintg tab width

A = mounintg tab thickness