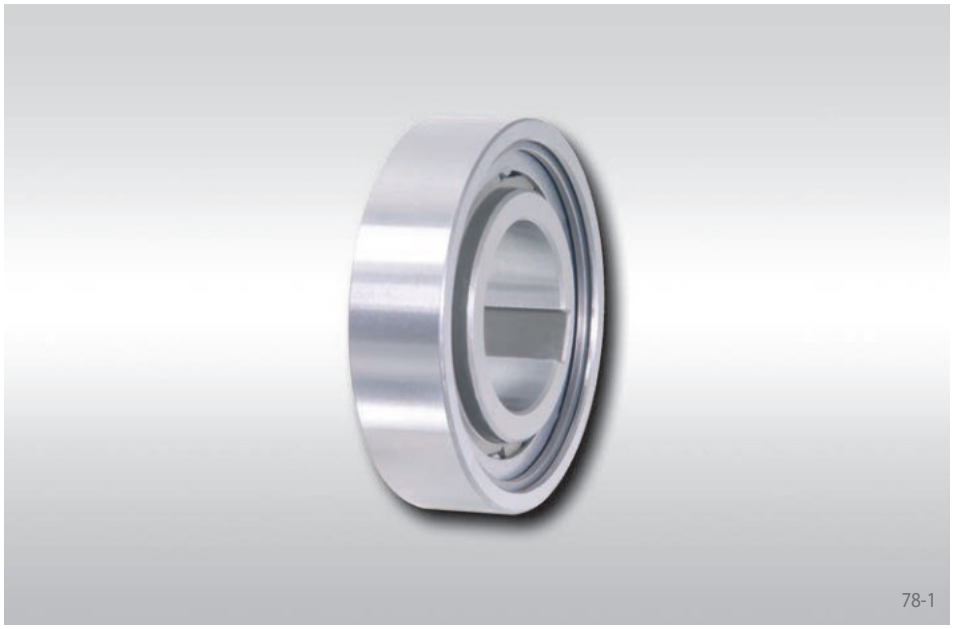
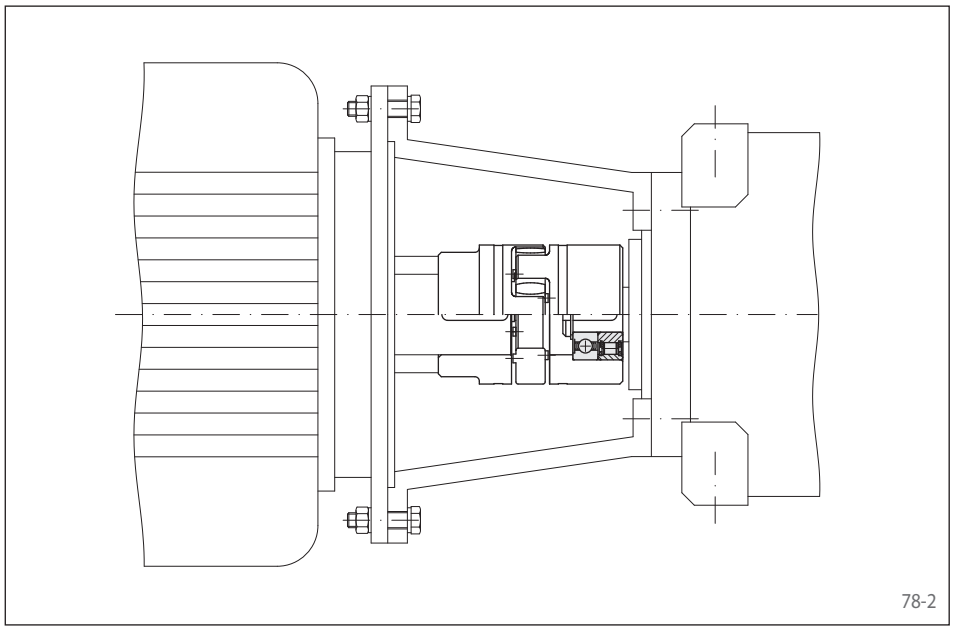
Internal Freewheels FCN … R

for press fit on the outer ring with rollers


78-1


78-2

Application as

- Backstop
- Overrunning Clutch
- Indexing Freewheel

Features

Internal Freewheels FCN … R are roller freewheels without bearing support and with series 62 ball bearing dimensions.

The outer ring is pressed into the customer housing. This makes compact, space-saving fitting solutions possible.

Nominal torques up to 840 Nm. The torque is transmitted on the outer ring by press fit.

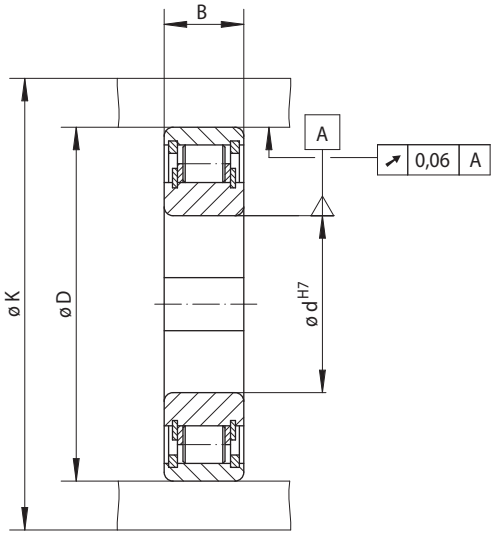
Bores up to 80 mm.

Application example

Internal Freewheel FCN 30 R as overrunning freewheel in the drive of the roof brush of an automatic car washing facility. The freewheel is arranged in the hub of a shaft coupling that connects the motor and the reduction gear. The freewheel prevent the drive from pushing the roof brush uncontrolled down onto the car roof in the event of a fault. The roof brush is raised by the freewheels that are working in driving operation. The direction of motor rotation changes in order to lower the brush. The downwards movement of the roof brush is performed by its own weight at the speed specified by the motor. In the case of an uncontrolled lowering of the roof brush on the car roof, the drive is automatically disengaged via the freewheel. The brush rests on the roof under its own weight, while the freewheel which is working in driving operation enables the drive to continue to turn in the lowering direction without causing any damage.

Internal Freewheels FCN … R

for press fit on the outer ring with rollers



79-1

Standard type
For universal use

Dimensions

Freewheel Size	Type	Nominal torque M_N Nm	Max.speed Inner ring freewheels/ overruns min^{-1}	Max.speed Outer ring freewheels/ overruns min^{-1}	Bore d mm	B mm	D mm	K mm	Weight kg
FCN 8	R	3,2	4300	6700	8	8	24	28	0,02
FCN 10	R	7,3	3500	5300	10	9	30	35	0,03
FCN 12	R	11,0	3200	5000	12	10	32	37	0,05
FCN 15	R	12,0	2800	4400	15*	11	35	40	0,08
FCN 20	R	40,0	2200	3300	20*	14	47	54	0,12
FCN 25	R	50,0	1900	2900	25*	15	52	60	0,15
FCN 30	R	90,0	1600	2400	30*	16	62	70	0,24
FCN 35	R	135,0	1350	2100	35*	17	72	80	0,32
FCN 40	R	170,0	1200	1900	40*	18	80	90	0,40
FCN 45	R	200,0	1150	1750	45*	19	85	96	0,45
FCN 50	R	220,0	1050	1650	50*	20	90	100	0,50
FCN 60	R	420,0	850	1350	60*	22	110	122	0,80
FCN 80	R	840,0	690	1070	80*	26	140	155	1,40

■ Freewheels with bore diameters highlighted blue in the table are available with short delivery times.
The maximum transmissible torque is 2 times the specified nominal torque. See page 14 for determination of selection torque.
Keyway according to DIN 6885, page 1 • Tolerance of keyway width JS10.
* Keyway according to DIN 6885, page 3 • Tolerance of keyway width JS10.

Mounting

Internal freewheels FCN … R are without bearing support. Concentric alignment of inner and outer ring must be provided by the customer.

The torque is transmitted on the outer ring by press fit. In order to transmit the torques specified in the table, the outer ring must be accommodated in a housing with an external diameter K. The housing is made of steel or grey cast iron in minimum quality GG-20. When using other housing materials or smaller external diameters, we urge you to contact us regarding the transmissible torque.

The tolerance of the housing bore D must be ISO H7 or J6 and the tolerance of the shaft must be ISO h6 or j6.

Lubrication

An oil lubrication of the specified quality must be provided.

Example for ordering

Freewheel size FCN 30, standard type:

- FCN 30 R

Morskate®

Any questions? Please contact us.

Morskate Aandrijvingen BV
Oosterveldsingel 47A
7558 PJ Hengelo (Ov)
The Netherlands

NL
T +31 (0)74 - 760 11 11
info@morskateaandrijvingen.nl
www.morskateaandrijvingen.nl

DE
T +49 692 - 222 34 95
info@morskateantriebstechnik.de
www.morskateantriebstechnik.de

EN
T +31 (0)74 - 760 11 11
info@morskatedrivetechnology.com
www.morskatedrivetechnology.com