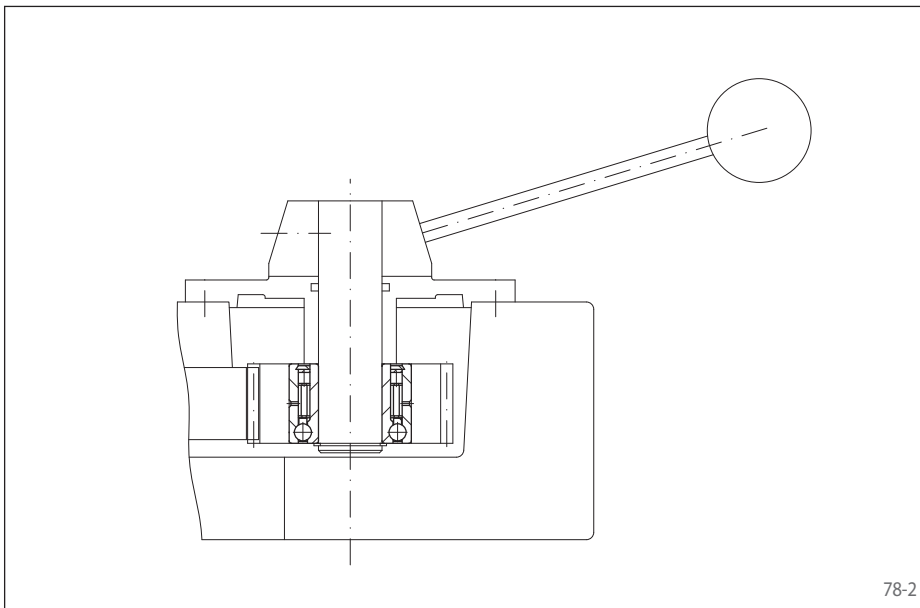


# Internal Freewheels FGK

for press fit on the outer ring  
with sprags and bearing



78-1



78-2

## Features

Internal Freewheels FGK are sprag freewheels with bearing support in the dimensions of the needle bearing series 59. The freewheels are supplied grease-filled for normal operating conditions and are maintenance-free.

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

The freewheels FGK are used as

- ▶ Backstops
- ▶ Overrunning Clutches
- ▶ Indexing Freewheels

Nominal torques up to 460 Nm.

The torque is transmitted on the outer ring by press fit.

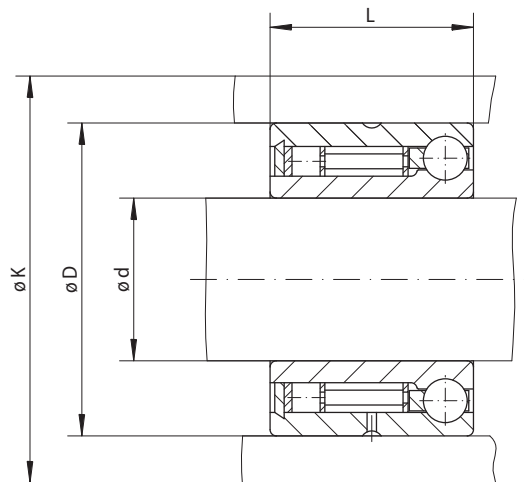
Bores up to 50 mm.

## Application example

Internal Freewheel FGK 35 as an indexing freewheel in a circular knitting machine. Set-up in order to change material or after breakdown requires a sensitive, manual adjustment of the rotary table. Therefore the rotary table is moved per hand lever via the freewheel which is working in driving operation. After set-up, the drive is carried out via the main motor and the freewheel outer ring overruns.

# Internal Freewheels FGK

for press fit on the outer ring  
with sprags and bearing



79-1

Indexing Freewheel Overrunning Clutch Backstop	Standard type	Dimensions
	For universal use	

Freewheel Size	Nominal torque Nm	Max. speed		Load rating of bearing support				Bore d mm	D mm	K mm	L mm	Weight kg
		Inner ring freewheels/overruns min <sup>-1</sup>	Outer ring freewheels/overruns min <sup>-1</sup>	dynamic C		static C						
				Roller N	Ball N	Roller N	Ball N					
FGK 20	50	5500	4000	5 600	4 400	2 900	2 750	20	37	42	23	0,09
FGK 25	70	5300	3800	6 300	5 300	3 450	3 350	25	42	48	23	0,11
FGK 30	95	5000	3500	7 700	5 500	4 600	3 650	30	47	54	23	0,13
FGK 35	200	4600	3200	8 200	8 500	5 200	5 700	35	55	63	27	0,20
FGK 40	310	4200	3000	8 650	8 300	5 750	5 700	40	62	70	30	0,30
FGK 45	370	3800	2500	9 200	9 650	6 350	7 200	45	68	76	30	0,34
FGK 50	460	3400	2200	9 650	10 000	6 950	7 800	50	72	80	30	0,36

The maximum transmissible torque is 2 times the specified nominal torque. See page 14 for determination of selection torque.

## Mounting

The torque is transmitted on the inner and 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 R6 and the tolerance of the shaft must be ISO p5. With these fits, normal bearing clearance is achieved in a built-in state.

The permissible operating temperature of the freewheel is -40°C to 80°C.

## Lubrication

The freewheels are supplied grease-filled for normal operating conditions. However, the freewheels can also be connected to the customer's oil lubrication system; this is particularly recommended in the case of higher speeds.

## Example for ordering

Freewheel size FGK 40, standard type:

- FGK 40