

**ZARN90180-TV**

Needle roller/axial cylindrical roller bearing

Needle roller/axial cylindrical roller bearings  
ZARN, double direction

## Technical information

**Your current product variant**

Cage	TV	Plastic Cage made from PA66
------	----	-----------------------------

**Main Dimensions & Performance Data**

d	90 mm	Bore diameter
D	180 mm	Outside diameter
H	110 mm	Hight
C <sub>a</sub>	325.000 N	Basic dynamic load rating, axial
C <sub>0a</sub>	1.030.000 N	Basic static load rating, axial
C <sub>r</sub>	98.000 N	Basic dynamic load rating, radial
C <sub>0r</sub>	210.000 N	Basic static load rating, radial
C <sub>ua</sub>	95.000 N	Fatigue load limit, axial
C <sub>ur</sub>	29.000 N	Fatigue load limit, radial
n <sub>G Oil</sub>	1.800 1/min	Limiting speed for oil lubrication
n <sub>G Grease</sub>	700 1/min	Limiting speed for grease lubrication
M <sub>RL</sub>	10,5 Nm	Bearing friction torque
≈m	12,356 kg	Weight

**Mounting dimensions**

D <sub>a max</sub>	161 mm	Maximum diameter of housing shoulder
d <sub>a min</sub>	130 mm	Minimum diameter shaft shoulder



## Dimensions

H <sub>1</sub>	72,5 mm	Height outer ring over wave washer
C	35 mm	Width, outer ring
D <sub>1</sub>	160 mm	Rip diameter shaft washer
B	22,5 mm	Width, inner ring
r <sub>min</sub>	0,3 mm	Minimum chamfer dimension
r <sub>1 min</sub>	1 mm	Minimum chamfer dimension

## Temperature range

T <sub>min</sub>	-30 °C	Operating temperature min.
T <sub>max</sub>	120 °C	Operating temperature max.

## Additional information

c <sub>aL</sub>	7.700 N/μm	Rigidity axial
c <sub>kL</sub>	14.500 Nm/mrad	Tilting stiffness
M <sub>m</sub>	312 kg*cm <sup>2</sup>	Mass moment of inertia
	2 μm	Axial runout
radial	ZMA90/155	Recommended INA precision locknut for radial locking (not included)
axial	AM90	Recommended INA precision locknut for axial locking (not included)
M <sub>A</sub>	960 Nm	Tightening torque nut
	100.669 N	Preload force axial



### Characteristics

---



Radial load



Axial load in one direction



Axial load in two directions



Grease Lubrication



Oil Lubrication



Not sealed