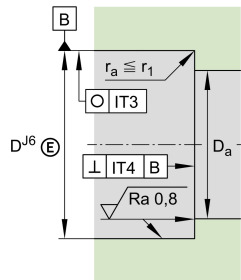


**ZARN90180-L-TV**

Needle roller/axial cylindrical roller bearing

Needle roller/axial cylindrical roller bearings
ZARN...-L, double direction, long shaft
locating washer

Technical information



Your current product variant

Cage	TV	Plastic Cage made from PA66
Locating Feature , bearing outer ring	L	Stepped shaft locating washer extended on one side

Main Dimensions & Performance Data

d	90 mm	Bore diameter
D	180 mm	Outside diameter
H	135 mm	Hight
C _a	325.000 N	Basic dynamic load rating, axial
C _{0a}	1.030.000 N	Basic static load rating, axial
C _r	98.000 N	Basic dynamic load rating, radial
C _{0r}	210.000 N	Basic static load rating, radial
C _{ua}	95.000 N	Fatigue load limit, axial
C _{ur}	29.000 N	Fatigue load limit, radial
n _{G Oil}	1.800 1/min	Limiting speed for oil lubrication
n _{G Grease}	700 1/min	Limiting speed for grease lubrication
M _{RL}	10,5 Nm	Bearing friction torque
≈m	13,896 kg	Weight

Mounting dimensions

D _{a max}	161 mm	Maximum diameter of housing shoulder
d _{a min}	125 mm	Minimum diameter shaft shoulder



Dimensions

H ₁	97,5 mm	Height outer ring over wave washer
C	35 mm	Width, outer ring
D ₁	160 mm	Rip diameter shaft washer
D ₂	130 mm	Heeldiameter wave washer long
D ₃	158 mm	Outside diameter wave washer long
B	22,5 mm	Width, inner ring
B ₁	47,5 mm	Width wave washer long
B ₂	18 mm	Width heel wave washer long
r _{min}	0,3 mm	Minimum chamfer dimension
r _{1 min}	1 mm	Minimum chamfer dimension

Temperature range

T _{min}	-30 °C	Operating temperature min.
T _{max}	120 °C	Operating temperature max.

Additional information

c _{aL}	7.700 N/μm	Rigidity axial
c _{kL}	14.500 Nm/mrad	Tilting stiffness
M _m	372 kg*cm ²	Mass moment of inertia
	1 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 _A	960 Nm	Tightening torque nut
	100.669 N	Required locknut force
	130X160X12	Rotary shaft seal to DIN 3760 (not included)



Characteristics



Radial load



Axial load in one direction



Axial load in two directions



Grease Lubrication



Oil Lubrication



Not sealed