

**ZARN5090-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	50 mm	Bore diameter
D	90 mm	Outside diameter
H	78 mm	Hight
C _a	90.000 N	Basic dynamic load rating, axial
C _{0a}	300.000 N	Basic static load rating, axial
C _r	40.000 N	Basic dynamic load rating, radial
C _{0r}	82.000 N	Basic static load rating, radial
C _{ua}	28.000 N	Fatigue load limit, axial
C _{ur}	11.500 N	Fatigue load limit, radial
n _{G Oil}	3.600 1/min	Limiting speed for oil lubrication
n _{G Grease}	1.200 1/min	Limiting speed for grease lubrication
M _{RL}	2,2 Nm	Bearing friction torque
≈m	1,608 kg	Weight

Mounting dimensions

D _{a max}	79 mm	Maximum diameter of housing shoulder
d _{a min}	58 mm	Minimum diameter shaft shoulder



Dimensions

H ₁	60,5 mm	Height outer ring over wave washer
C	25 mm	Width, outer ring
D ₁	78 mm	Rip diameter shaft washer
D ₂	60 mm	Heeldiameter wave washer long
D ₃	78 mm	Outside diameter wave washer long
B	11,5 mm	Width, inner ring
B ₁	29,5 mm	Width wave washer long
B ₂	14 mm	Width heel wave washer long
r _{min}	0,3 mm	Minimum chamfer dimension
r _{1 min}	0,6 mm	Minimum chamfer dimension

Temperature range

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

Additional information

c _{aL}	4.800 N/μm	Rigidity axial
c _{kL}	2.470 Nm/mrad	Tilting stiffness
M _m	10,46 kg*cm ²	Mass moment of inertia
	1 μm	Axial runout
radial	ZMA50/75	Recommended INA precision locknut for radial locking (not included)
axial	AM50	Recommended INA precision locknut for axial locking (not included)
M _A	85 Nm	Tightening torque nut
	18.410 N	Required locknut force
	60X80X8	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