

**ZARN5090-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
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Main Dimensions & Performance Data

d	50 mm	Bore diameter
D	90 mm	Outside diameter
H	60 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	1,446 kg	Weight

Mounting dimensions

D _{a max}	79 mm	Maximum diameter of housing shoulder
d _{a min}	67 mm	Minimum diameter shaft shoulder



Dimensions

H ₁	42,5 mm	Height outer ring over wave washer
C	25 mm	Width, outer ring
D ₁	78 mm	Rip diameter shaft washer
B	11,5 mm	Width, inner ring
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	8,42 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	Preload force axial



Characteristics



Radial load



Axial load in one direction



Axial load in two directions



Grease Lubrication



Oil Lubrication



Not sealed