

**ZARN4580-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 &amp; Performance Data

|                       |             |                                       |
|-----------------------|-------------|---------------------------------------|
| d                     | 45 mm       | Bore diameter                         |
| D                     | 80 mm       | Outside diameter                      |
| H                     | 75 mm       | Hight                                 |
| C <sub>a</sub>        | 61.000 N    | Basic dynamic load rating, axial      |
| C <sub>0a</sub>       | 177.000 N   | Basic static load rating, axial       |
| C <sub>r</sub>        | 38.000 N    | Basic dynamic load rating, radial     |
| C <sub>0r</sub>       | 74.000 N    | Basic static load rating, radial      |
| C <sub>ua</sub>       | 15.500 N    | Fatigue load limit, axial             |
| C <sub>ur</sub>       | 10.400 N    | Fatigue load limit, radial            |
| n <sub>G Oil</sub>    | 4.000 1/min | Limiting speed for oil lubrication    |
| n <sub>G Grease</sub> | 1.500 1/min | Limiting speed for grease lubrication |
| M <sub>RL</sub>       | 1,2 Nm      | Bearing friction torque               |
| ≈m                    | 1,229 kg    | Weight                                |

## Mounting dimensions

|                    |       |                                      |
|--------------------|-------|--------------------------------------|
| D <sub>a max</sub> | 71 mm | Maximum diameter of housing shoulder |
| d <sub>a min</sub> | 54 mm | Minimum diameter shaft shoulder      |



## Dimensions

|                    |         |                                    |
|--------------------|---------|------------------------------------|
| H <sub>1</sub>     | 57,5 mm | Height outer ring over wave washer |
| C                  | 25 mm   | Width, outer ring                  |
| D <sub>1</sub>     | 70 mm   | Rip diameter shaft washer          |
| D <sub>2</sub>     | 56 mm   | Heeldiameter wave washer long      |
| D <sub>3</sub>     | 68 mm   | Outside diameter wave washer long  |
| B                  | 11,5 mm | Width, inner ring                  |
| B <sub>1</sub>     | 26,5 mm | Width wave washer long             |
| B <sub>2</sub>     | 13 mm   | Width heel wave washer long        |
| r <sub>min</sub>   | 0,3 mm  | Minimum chamfer dimension          |
| r <sub>1 min</sub> | 0,6 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> | 3.000 N/μm              | Rigidity axial  |
| c <sub>kL</sub> | 1.340 Nm/mrad           | Tilting stiffness   |
| M <sub>m</sub>  | 6,03 kg*cm <sup>2</sup> | Mass moment of inertia  |
|                 | 1 μm                    | Axial runout  |
| radial          | ZMA45/68                | Recommended INA precision locknut for radial locking (not included) |
| axial           | AM45                    | Recommended INA precision locknut for axial locking (not included)  |
| M <sub>A</sub>  | 65 Nm                   | Tightening torque nut   |
|                 | 15.112 N                | Required locknut force  |
|                 | 56X70X8                 | Rotary shaft seal to DIN 3760 (not included)                        |



### Characteristics

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Radial load



Axial load in one direction



Axial load in two directions



Grease Lubrication



Oil Lubrication



Not sealed