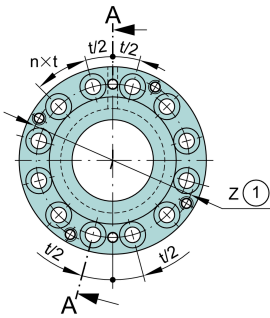


**ZARF60150-L-TV**

## Needle roller/axial cylindrical roller bearing

Needle roller/axial cylindrical roller bearings  
ZARF..-L, double direction, for screw  
mounting, long shaft locating washer

## Technical information

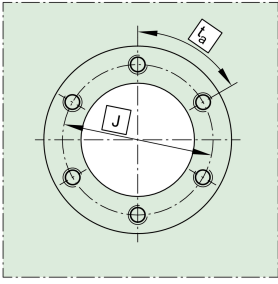


## Your current product variant

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	60 mm	Bore diameter
D	150 mm	Outside diameter
H	103 mm	Hight
C <sub>a</sub>	187.000 N	Basic dynamic load rating, axial
C <sub>0a</sub>	550.000 N	Basic static load rating, axial
C <sub>r</sub>	44.500 N	Basic dynamic load rating, radial
C <sub>0r</sub>	92.000 N	Basic static load rating, radial
C <sub>ua</sub>	51.000 N	Fatigue load limit, axial
C <sub>ur</sub>	12.900 N	Fatigue load limit, radial
n <sub>G Oil</sub>	2.700 1/min	Limiting speed for oil lubrication
n <sub>G Grease</sub>	950 1/min	Limiting speed for grease lubrication
M <sub>RL</sub>	4,2 Nm	Bearing friction torque
≈m	5 kg	Weight



### Mounting dimensions

$D_{a \max}$	106 mm	Maximum diameter of housing shoulder
$d_{a \min}$	88 mm	Minimum diameter shaft shoulder
$t_1$	0,2 mm	Position bore in the housing

### Dimensions

$H_1$	72 mm	Height outer ring over wave washer
C	22,5 mm	Width, outer ring
$C_1$	12,5 mm	Distance to lubrication hole
$D_1$	105 mm	Rip diameter shaft washer
$D_2$	90 mm	Heeldiameter wave washer long
$D_3$	105 mm	Outside diameter wave washer long
B	17,5 mm	Width, wave washer
$B_1$	38,5 mm	Width wave washer long
$B_2$	18 mm	Width heel wave washer long
$r_{\min}$	0,3 mm	Minimum chamfer dimension
$r_{1 \min}$	0,6 mm	Minimum chamfer dimension
$d_1$	6 mm	Diameter lubrication hole
J	123 mm	Pitch circle diameter (holes)
n	12	Number of screwing holes
$n \times t$	30 °	Split

### Temperature range







$T_{\min}$	-30 °C	Operating temperature min.
$T_{\max}$	120 °C	Operating temperature max.



### Additional information

$c_{aL}$	5.300 N/ $\mu$ m	Rigidity axial
$c_{kL}$	4.300 Nm/mrad	Tilting stiffness
$M_m$	54,5 kg*cm <sup>2</sup>	Mass moment of inertia
	1 $\mu$ m	Axial runout
radial	ZMA60/98	Recommended INA precision locknut for radial locking (not included)
axial	AM60	Locknut 2
$M_A$	250 Nm	Tightening torque nut
	41.144 N	Preload force axial
	90X110X12	Sealing ring
	M10	Screw size
$n_a$	12	Number of screws
$n_a \times t_a$	30 °	Division (screwing holes)

### Characteristics

-  Radial load
-  Axial load in one direction
-  Axial load in two directions
-  Grease Lubrication
-  Oil Lubrication
-  Not sealed