

# NTN NA497 needle roller bearings

NTN NA497 needle roller bearings manufacturer and global supplier of reliable ball and 140x100x20 Size (mm) roller ... NTN NA497 needle roller bearings Industries Products Manufacturing & Engineering 100 Outer Diameter (mm) and Agricultural Bearings designed 140 Bore Diameter (mm) to meet the unique requirements of our targeted industries.

Size (mm)	140x100x20
Bore Diameter (mm)	140
Outer Diameter (mm)	100
Width (mm)	20
d	100 mm
D	140 mm
B	20 mm
d1	112.3 mm
d2	112.3 mm
D1	127.7 mm
b	2.3 mm
C1	10.9 mm
C2	4 mm
C3	3.3 mm
r1,2 – min.	1.1 mm
r3,4 – min.	0.6 mm
a	38.1 mm
da – min.	106 mm
db – min.	106 mm
Da – max.	134 mm

Db – max.	136 mm
ra – max.	1 mm
rb – max.	0.6 mm
dn	115.6 mm
Basic dynamic load rating – C	57.2 kN
Basic static load rating – C0	63 kN
Fatigue load limit – Pu	2.4 kN
Limiting speed for grease lubrication	9000 r/min
Limiting speed for oil lubrication	15000 mm/min
Ball – Dw	12.7 mm
Ball – z	26
Gref	10.5 cm <sup>3</sup>
Calculation factor – e	0.68
Calculation factor – Y2	1.41
Calculation factor – Y0	0.76
Calculation factor – X2	0.67
Calculation factor – Y1	0.92
Preload class A – GA	360 N
Preload class B – GB	720 N
Preload class C – GC	1440 N
Preload class D – GD	2880 N
Calculation factor – f	1.23
Calculation factor – f1	0.98
Calculation factor – f2A	1
Calculation factor – f2B	1.07
Calculation factor – f2C	1.12
Calculation factor – f2D	1.17
Calculation factor – fHC	1.04
Preload class A	283 N/micron

Preload class B	373 N/micron
Preload class C	498 N/micron
Preload class D	680 N/micron
r <sub>1,2</sub> min.	1.1 mm
r <sub>3,4</sub> min.	0.6 mm
d <sub>a</sub> min.	106 mm
d <sub>b</sub> min.	106 mm
D <sub>a</sub> max.	134 mm
D <sub>b</sub> max.	136 mm
r <sub>a</sub> max.	1 mm
r <sub>b</sub> max.	0.6 mm
Basic dynamic load rating C	57.2 kN
Basic static load rating C <sub>0</sub>	63 kN
Fatigue load limit P <sub>u</sub>	2.4 kN
Attainable speed for grease lubrication	9000 r/min
Attainable speed for oil-air lubrication	15000 r/min
Ball diameter D <sub>w</sub>	12.7 mm
Number of balls z	26
Reference grease quantity G <sub>ref</sub>	10.5 cm <sup>3</sup>
Preload class A G <sub>A</sub>	360 N
Static axial stiffness, preload class A	283 N/μm
Preload class B G <sub>B</sub>	720 N
Static axial stiffness, preload class B	373 N/μm
Preload class C G <sub>C</sub>	1440 N
Static axial stiffness, preload class C	498 N/μm
Preload class D G <sub>D</sub>	2880 N
Static axial stiffness, preload class D	680 N/μm
Calculation factor f	1.23
Calculation factor f <sub>1</sub>	0.98

Calculation factor f2A	1
Calculation factor f2B	1.07
Calculation factor f2C	1.12
Calculation factor f2D	1.17
Calculation factor fHC	1.04
Calculation factor e	0.68
Calculation factor (single, tandem) Y2	0.87
Calculation factor (single, tandem) Y0	0.38
Calculation factor (single, tandem) X2	0.41
Calculation factor (back-to-back, face-to-face) Y1	0.92
Calculation factor (back-to-back, face-to-face) Y2	1.41
Calculation factor (back-to-back, face-to-face) Y0	0.76
Calculation factor (back-to-back, face-to-face) X2	0.67
Mass bearing	0.67 kg