

# NMB SBT30 plain bearings

NMB SBT30 plain bearings manufacturer and global supplier of reliable ball and roller ... 55x90x18 Size (mm) NMB SBT30 plain bearings Industries Products Manufacturing & Engineering and Agricultural Bearings designed to meet the unique requirements of our targeted industries.

Size (mm)	55x90x18
Bore Diameter (mm)	55
Outer Diameter (mm)	90
Width (mm)	18
d	55 mm
D	90 mm
B	18 mm
d1	65.8 mm
d2	65.8 mm
D1	79.2 mm
K	0.5 mm
C1	4.88 mm
r1,2 – min.	1.1 mm
r3,4 – min.	0.6 mm
a	26 mm
da – min.	61 mm
db – min.	61 mm
Da – max.	84 mm
Db – max.	86.8 mm
ra – max.	1 mm
rb – max.	0.6 mm
dn	68.1 mm

Basic dynamic load rating – C	37.1 kN
Basic static load rating – C0	31 kN
Fatigue load limit – Pu	1.3 kN
Limiting speed for grease lubrication	14000 r/min
Limiting speed for oil lubrication	22000 mm/min
Ball – Dw	11.112 mm
Ball – z	18
Gref	5.1 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	230 N
Preload class B – GB	460 N
Preload class C – GC	920 N
Preload class D – GD	1840 N
Calculation factor – f	1.1
Calculation factor – f1	0.99
Calculation factor – f2A	1
Calculation factor – f2B	1.02
Calculation factor – f2C	1.05
Calculation factor – f2D	1.08
Calculation factor – fHC	1
Preload class A	159 N/micron
Preload class B	207 N/micron
Preload class C	275 N/micron
Preload class D	372 N/micron
r1,2 min.	1.1 mm

r <sub>3,4</sub> min.	0.6 mm
d <sub>a</sub> min.	61 mm
d <sub>b</sub> min.	61 mm
D <sub>a</sub> max.	84 mm
D <sub>b</sub> max.	86.8 mm
r <sub>a</sub> max.	1 mm
r <sub>b</sub> max.	0.6 mm
Basic dynamic load rating C	37.1 kN
Basic static load rating C <sub>0</sub>	31 kN
Fatigue load limit P <sub>u</sub>	1.32 kN
Attainable speed for grease lubrication	14000 r/min
Attainable speed for oil-air lubrication	22000 r/min
Ball diameter D <sub>w</sub>	11.112 mm
Number of balls z	18
Reference grease quantity G <sub>ref</sub>	5.1 cm <sup>3</sup>
Preload class A G <sub>A</sub>	230 N
Static axial stiffness, preload class A	159 N/μm
Preload class B G <sub>B</sub>	460 N
Static axial stiffness, preload class B	207 N/μm
Preload class C G <sub>C</sub>	920 N
Static axial stiffness, preload class C	275 N/μm
Preload class D G <sub>D</sub>	1840 N
Static axial stiffness, preload class D	372 N/μm
Calculation factor f	1.1
Calculation factor f <sub>1</sub>	0.99
Calculation factor f <sub>2A</sub>	1
Calculation factor f <sub>2B</sub>	1.02
Calculation factor f <sub>2C</sub>	1.05
Calculation factor f <sub>2D</sub>	1.08

Calculation factor fHC	1
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	0.38 kg