

# AST 22238MBK spherical roller bearings

With over 10170 full-service stores, our 115x75x20 Size (mm) AST 22238MBK spherical roller bearings inventory is extensive and our parts are priced right. within 24 hours. This 115 Bore Diameter (mm) helps you maximize your productivity by saving time and your hard-earned dollars.

Size (mm)	115x75x20
Bore Diameter (mm)	115
Outer Diameter (mm)	75
Width (mm)	20
d	75 mm
D	115 mm
B	20 mm
d1	87.3 mm
d2	87.3 mm
D1	102.7 mm
b	1.8 mm
C1	10.9 mm
C2	3.9 mm
C3	3.4 mm
r1,2 – min.	1.1 mm
r3,4 – min.	0.6 mm
a	32.3 mm
da – min.	81 mm
db – min.	81 mm
Da – max.	109 mm

Db – max.	111 mm
ra – max.	1 mm
rb – max.	0.6 mm
dn	90 mm
Basic dynamic load rating – C	49.4 kN
Basic static load rating – C0	46.5 kN
Fatigue load limit – Pu	2 kN
Limiting speed for grease lubrication	10000 r/min
Limiting speed for oil lubrication	16000 mm/min
Ball – Dw	12.7 mm
Ball – z	20
Gref	8.4 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	310 N
Preload class B – GB	620 N
Preload class C – GC	1240 N
Preload class D – GD	2480 N
Calculation factor – f	1.14
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	200 N/micron

Preload class B	262 N/micron
Preload class C	347 N/micron
Preload class D	471 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.	81 mm
d <sub>b</sub> min.	81 mm
D <sub>a</sub> max.	109 mm
D <sub>b</sub> max.	111 mm
r <sub>a</sub> max.	1 mm
r <sub>b</sub> max.	0.6 mm
Basic dynamic load rating C	49.4 kN
Basic static load rating C <sub>0</sub>	46.5 kN
Fatigue load limit P <sub>u</sub>	1.96 kN
Attainable speed for grease lubrication	10000 r/min
Attainable speed for oil-air lubrication	16000 r/min
Ball diameter D <sub>w</sub>	12.7 mm
Number of balls z	20
Reference grease quantity G <sub>ref</sub>	8.4 cm <sup>3</sup>
Preload class A G <sub>A</sub>	310 N
Static axial stiffness, preload class A	200 N/μm
Preload class B G <sub>B</sub>	620 N
Static axial stiffness, preload class B	262 N/μm
Preload class C G <sub>C</sub>	1240 N
Static axial stiffness, preload class C	347 N/μm
Preload class D G <sub>D</sub>	2480 N
Static axial stiffness, preload class D	471 N/μm
Calculation factor f	1.14
Calculation factor f <sub>1</sub>	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
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	0.63 kg