

FAG

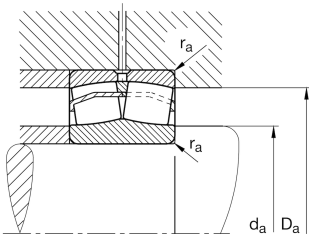
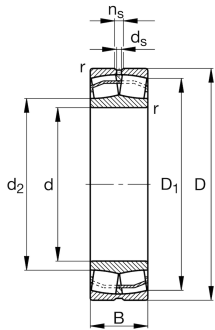
X-life

23120-E1-XL-TVPB-C3 [🔗](#)

Spherical Roller Bearing

Spherical roller bearings 231...-E1, main dimensions to DIN 635-2

Technical information



Your current product variant

Design	E1	Without central rip
Bore type	Z	Cylindrical
Cage	TVPB	Plastic cage
Radial internal clearance	C3 (Group 3)	Internal clearance larger than CN
Relubrication	Standard	

Main Dimensions & Performance Data

d	100 mm	Bore diameter
D	165 mm	Outside diameter
B	52 mm	Width
C _r	450.000 N	Basic dynamic load rating, radial
C _{0r}	570.000 N	Basic static load rating, radial
C _{ur}	54.000 N	Fatigue load limit, radial
n _G	4.000 1/min	Limiting speed
n _{gr}	2.750 1/min	Reference speed
≈m	4,188 kg	Weight



Mounting dimensions

$d_{a \min}$	111 mm	Minimum diameter shaft shoulder
$D_{a \max}$	154 mm	Maximum diameter of housing shoulder
$r_{a \max}$	2 mm	Maximum recess radius

Dimensions

$r_{\min}$	2 mm	Minimum chamfer dimension
D_1	146,3 mm	Bore diameter outer ring
d_2	113,9 mm	Raceway diameter of the inner ring
d_s	3,2 mm	Diameter lubrication hole
n_s	6,5 mm	Width of lubricating groove

Temperature range

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

Calculation factors

e	0,28	Limiting value of F_a/F_r for the applicability of diff. Values of factors X and Y
Y_1	2,37	Dynamic axial load factor
Y_2	3,53	Dynamic axial load factor
Y_0	2,32	Static axial load factor



Characteristics



Radial load



Axial load in one direction



Axial load in two directions



Grease Lubrication



Oil Lubrication



Not sealed



Static angular error and misalignment



Dynamic angular error and misalignment