



FAG

23120-E1-XL-TVPB

Spherical roller bearing

Schaeffler ID:
0190012900000Spherical roller bearings 231...-E1, main
dimensions to DIN 635-2

X-life

Technical information

**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
	4,187 kg	Weight

Dimensions

$d_{a \min}$	111 mm	Minimum diameter shaft shoulder
r_{\min}	2 mm	Minimum chamfer dimension
D_1	146,3 mm	Bore diameter outer ring
$D_{a \max}$	154 mm	Maximum diameter of housing shoulder
$r_{a \max}$	2 mm	Maximum recess radius
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

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

Temperature range

T _{min}	-30 °C	Operating temperature min.
T _{max}	120 °C	Operating temperature max.