



FAG

WS22220-E1-XL-2VSR

Spherical Roller Bearing

Spherical roller bearing WS222..-E1-XL-2VSR, symmetric with cage guidance ring

X-life

Technical information



Your current product variant

Design	E1	Without central rip
Bore type	Z	Cylindrical
Cage	JPA	Sheet metal cage
Radial internal clearance	CN (Group N)	Normal internal clearance
Relubrication facility	Standard	
Type of Seal	2VSR	Seals on both sides, high temperature
Sealing - excess width	WS	Sealing - excess width

Main Dimensions & Performance Data

d	100 mm	Bore diameter
D	180 mm	Outside diameter
B	55 mm	Width
C_r	430.000 N	Basic dynamic load rating, radial
C_{0r}	475.000 N	Basic static load rating, radial
C_{ur}	53.000 N	Fatigue load limit, radial
n_G	1.140 1/min	Limiting speed
$\approx m$	5,51 kg	Weight



Mounting dimensions

$d_{a \min}$	112 mm	Minimum diameter shaft shoulder
$D_{a \max}$	169,1 mm	Maximum diameter of housing shoulder
$r_{a \max}$	2,1 mm	Maximum recess radius

Dimensions

r_{\min}	2,1 mm	Minimum chamfer dimension
D_1	169,1 mm	Bore diameter outer ring
d_2	115 mm	Raceway diameter of the inner ring
d_s	4,8 mm	Diameter lubrication hole
n_s	9,5 mm	Width of lubricating groove

Temperature range

T_{\min}	-30 °C	Operating temperature min.
T_{\max}	180 °C	Operating temperature max.

Calculation factors

e	0,24	Limiting value of F_a/F_r for the applicability of diff. Values of factors X and Y
Y_1	2,84	Dynamic axial load factor
Y_2	4,23	Dynamic axial load factor
Y_0	2,78	Static axial load factor