



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 &amp; 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