



FAG

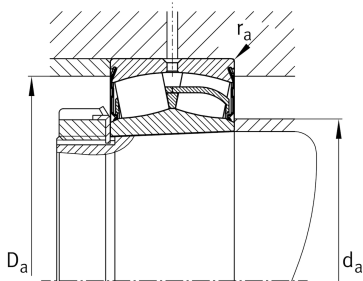
**WS22220-E1-XL-K-2RSR**

Spherical Roller Bearing

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

X-life

## Technical information



## Your current product variant

Design	E1	Without central rip
Bore type	K	Tapered, taper 1:12
Cage	JPA	Sheet metal cage
Radial internal clearance	CN (Group N)	Normal internal clearance
Relubrication facility	Standard	
Sealing	2RSR	Seals on both sides, normal 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 <sub>r</sub>	430.000 N	Basic dynamic load rating, radial
C <sub>0r</sub>	475.000 N	Basic static load rating, radial
C <sub>ur</sub>	53.000 N	Fatigue load limit, radial
n <sub>G</sub>	1.140 1/min	Limiting speed
≈m	5,5 kg	Weight



### Mounting dimensions

$d_{a \min}$	112 mm	Minimum diameter shaft shoulder
$d_{a \max}$	115 mm	Maximum diameter of shaft shoulder
$D_{a \max}$	169,1 mm	Maximum diameter of housing shoulder
$r_{a \max}$	2,1 mm	Maximum recess radius
$d_{b \min}$	108 mm	Minimum cavity diameter of the sleeve
$B_{a \min}$	8 mm	Minimum cavity width of the sleeve

### 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.
$T_{\max}$	100 °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






### Additional information

H2220-T-WS	Adapter sleeve
AH2220-WS	Withdrawal sleeve



### Characteristics

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-  Radial load
-  Axial load in one direction
-  Axial load in two directions
-  Lifetime lubrication, freedom from maintenance
-  Grease Lubrication
-  Sealed on both sides
-  Static angular error and misalignment
-  Dynamic angular error and misalignment