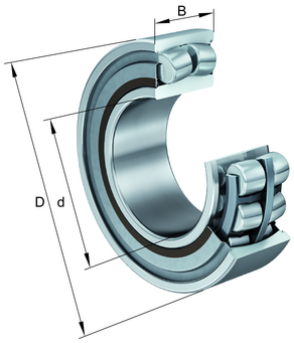


FAG

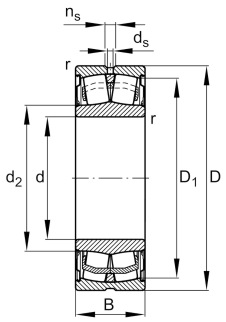
X-life

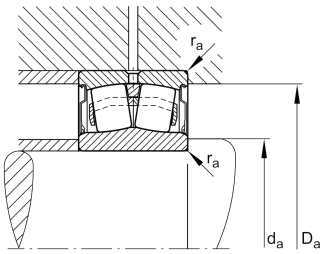
WS22218-E1-XL-2VSR-C4

Spherical Roller Bearing

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

Technical information





Your current product variant

Design	E1	Without central rip
Bore type	Z	Cylindrical
Cage	JPA	Sheet metal cage
Radial internal clearance	C4 (Group 4)	Internal clearance larger than C3
Relubrication facility	Standard	
Sealing	2VSR	Seals on both sides, high temperature
Sealing - excess width	WS	Sealing - excess width

Main Dimensions & Performance Data

d	90 mm	Bore diameter
D	160 mm	Outside diameter
B	48 mm	Width
C_r	345.000 N	Basic dynamic load rating, radial
C_{0r}	375.000 N	Basic static load rating, radial
C_{ur}	43.500 N	Fatigue load limit, radial
n_G	1.300 1/min	Limiting speed
≈m	3,8 kg	Weight

Mounting dimensions

$d_{a\ min}$	101 mm	Minimum diameter shaft shoulder
$D_{a\ max}$	149 mm	Maximum diameter of housing shoulder
$r_{a\ max}$	2 mm	Maximum recess radius

Dimensions

r_{min}	2 mm	Minimum chamfer dimension
D_1	146,7 mm	Bore diameter outer ring
d_2	101,4 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}	180 °C	Operating temperature max.

Calculation factors

e	0,23	Limiting value of Fa/Fr for the applicability of diff. Values of factors X and Y
Y_1	2,9	Dynamic axial load factor
Y_2	4,31	Dynamic axial load factor
Y_0	2,83	Static axial load factor

Characteristics

Radial load

Axial load in one direction

Axial load in two directions


Grease Lubrication


Sealed on both sides


Static angular error and misalignment


Dynamic angular error and misalignment