



# 22311 EK/VA405

SKF Explorer

## Spherical roller bearings

### Bearing data

[Tolerances,](#)

Normal, P6, P5, tapered bore 1:12,  
tapered bore 1:30,

[Radial internal clearance,](#)

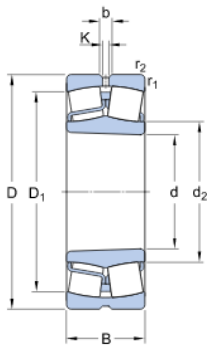
cylindrical bore, tapered bore

### Bearing interfaces

[Seat tolerances for standard conditions,](#)

[Tolerances and resultant fit](#)

## Technical specification

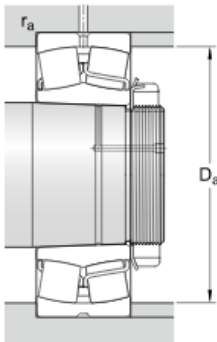


### DIMENSIONS

d	55 mm
D	120 mm
B	43 mm
d <sub>2</sub>	≈ 70.1 mm
D <sub>1</sub>	≈ 102 mm
b	5.5 mm
K	3 mm
r <sub>1,2</sub>	min. 2 mm
Tapered bore, taper 1:12	

### ABUTMENT DIMENSIONS

D <sub>a</sub>	max. 109 mm
r <sub>a</sub>	max. 2 mm



## CALCULATION DATA

Basic dynamic load rating	C	280 kN
Basic static load rating	C <sub>0</sub>	280 kN
Fatigue load limit	P <sub>u</sub>	30 kN
Reference speed		4300 r/min
Limiting speed		5600 r/min
Calculation factor	e	0.35
Calculation factor	Y <sub>1</sub>	1.9
Calculation factor	Y <sub>2</sub>	2.9
Calculation factor	Y <sub>0</sub>	1.8
Permissible rotational acceleration (oil lubrication)		765 m/s
Permissible linear acceleration (oil lubrication)		255 m/s

## MASS

Mass bearing		2.4 kg
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## MOUNTING INFORMATION

Recommended lock nut tightening angle	α	115 °
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More information

Product details	Product details	Engineering information	Engineering information	Tools	Tools
<a href="#">Designs and variants</a>	<a href="#">Designs and variants</a>	<a href="#">Principles of rolling bearing selection</a>	<a href="#">Principles of rolling bearing selection</a>	<a href="#">SimPro Quick</a>	<a href="#">SimPro Quick</a>
<a href="#">Bearing data</a>	<a href="#">Bearing data</a>	<a href="#">General bearing knowledge</a>	<a href="#">General bearing knowledge</a>	<a href="#">Bearing Select</a>	<a href="#">Bearing Select</a>
<a href="#">Loads</a>	<a href="#">Loads</a>			<a href="#">Engineering Calculator</a>	<a href="#">Engineering Calculator</a>
<a href="#">Temperature limits</a>	<a href="#">Temperature limits</a>	<a href="#">Bearing selection process</a>	<a href="#">Bearing selection process</a>	<a href="#">Housing Select</a>	<a href="#">Housing Select</a>
<a href="#">Permissible speed</a>	<a href="#">Permissible speed</a>	<a href="#">Bearing failure and how to prevent it</a>	<a href="#">Bearing failure and how to prevent it</a>	<a href="#">LubeSelect for SKF greases</a>	<a href="#">LubeSelect for SKF greases</a>
<a href="#">Design considerations</a>	<a href="#">Design considerations</a>			<a href="#">Drive-up Method Program</a>	<a href="#">Drive-up Method Program</a>
<a href="#">Mounting</a>	<a href="#">Mounting</a>			<a href="#">Heater selection tool</a>	<a href="#">Heater selection tool</a>
<a href="#">Designation system</a>	<a href="#">Designation system</a>			<a href="#">Oil Injection Method Program</a>	<a href="#">Oil Injection Method Program</a>
				<a href="#">Rolling bearings mounting and dismounting instruction</a>	<a href="#">Rolling bearings mounting and dismounting instruction</a>
				<a href="#">Cool and Accessory Selector for sleeves and shafts</a>	<a href="#">Cool and Accessory Selector for sleeves and shafts</a>

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