

# 22220EAE4 NSK 100x180x46mm

## maximum rpm: 3600 RPM

## Spherical roller bearings

Bearing number	22220EAE4
SKF (mm)	100x180x46
Brand	NSK
Bore diameter (mm)	100
Outer diameter (mm)	180
Width (mm)	46
d	100 mm
D	180 mm
B	46 mm
r min.	46 mm
d <sub>a</sub> min.	7.1 mm
d <sub>s</sub> min.	112 mm
D <sub>a</sub> min.	119 mm
D <sub>s</sub> min.	180 mm
r <sub>a</sub> max.	168 mm
Weight	2 kg
Basic dynamic load rating (C)	4.88 kN
Basic static load rating (C0)	363 kN
(C <sub>rate</sub> )	490 kN
Lubrication Speed (S <sub>lim</sub> )	2400 r/min
Lubrication Speed (S <sub>01</sub> )	3200 r/min
Calculation factor (e)	0.24
Calculation factor (FS)	2.0
Calculation factor (FS)	4.3
Category	Spherical Roller Bearings
BSI Inventory	8.0
Manufacturer Name	NSK
Minimum Buy Quantity	N/A
Weight / Kilogram	4.92
EAN	602017411409
Product Group - BSI	004311
Internal Clearance	CS-Medium
Mounting Method	Shaft Mount
Rolling Element	Spherical Roller Bearing
Bore Profile	Straight
Cage Material	Steel
Enclosure	Open
Number of Rows of Rollers	Double Row
Relubricatable	Yes
Widened Slaves	Not Applicable
Sm - Metric	Metric
Long Description	100mm Straight Bore; 180mm Outside Diameter; 46mm Width; CS-Medium Clearance; Shaft Mount; Double Row of Spherical Roller Bearings; Steel Cage Material; Open Enclosure; Relubricatable
Category - BSI	Spherical Roller Bearings
HSPC	3171530
Harmonized Tariff Code	84823000
Notes	Bearing
Keycode Group	Spherical
Manufacturer URL	<a href="http://www.nskamericas.com">http://www.nskamericas.com</a>
Manufacturer Item Number	22220EAE4
Weight / LBS	4.92
Bore	3.937 Inch   100 Millimeter
Outside Diameter	7.087 Inch   180 Millimeter
Width	1.811 Inch   46 Millimeter
Adapter Part Number	Not Applicable Inch   Not Applicable Millimeter
bore diameter:	100 mm
maximum rpm:	3600 RPM
outside diameter:	180 mm
operating temperature range:	Maximum of +200 °C
overall width:	46 mm
cage material:	Steel
bore type:	Straight
bearing material:	Steel
outer ring type:	Not Split
cage type:	Roller Guided
internal clearance:	CS
precision rating:	RREC 1 (ISO Class Normal)
clearance type:	Open
finish/coatings:	Crowned
Lubrication Note Type:	Lubrication Groove & Hole
outer ring width:	46 mm
dynamic load capacity:	45000 N
static load capacity:	40000 N
series:	222
VS	2.0
ISO/ANSI	22220EAE4
LampID	2
D	180
B	46
NSM <sub>1</sub> rpm	4300
S	46
CS	https://service.omega.com/ce-303000/maker_login.php?maker=NSK_IS&language=j&id=EN&v=20220EAE4_rdr/roller_bearing/spherical_rb/cylindrical_bore_wash_bearing-31608-WPS_(0820)-22220EAE4_(30-100)_(D=100)_(B=46)_(B=2.1)_(CS)=100000_(C1=3600)_(LH=3000)_(LD=3600)_(DA=112)_(DA2=110.000)_(DA3=100)_(DAA=160)_(DB=2.0)_(E=6-24)_(F1=4.3)_(F2=2.0)_(F3=2.0)_(MSS=4.84)
d <sub>a</sub> min	
ISO/ANSI	22220EAE4
ISO RPM	3600
ISO	2.0
MSS	4.84
ISO RPM	3600
r <sub>a</sub>	2
ISO RPM	3600
CS	100
SC	163.165
S0	1
Prec. System	RREC_C1N_CS
SI	1
S2	6.57
S2S	18.2
e	0.24
SA	20.0
Temp	22220EAE4
Z	19
ALP2	35
ALP3	0
ALP3	0
D <sub>a</sub> max	168
D <sub>s</sub> max	168
ym1	22220EAE4
MPS	MPS
ALMA	0.166
SPS	142.457
F	2.1
MSS	2320
SPS	22
SI	121.81
calcInt	/BearingGuideline/Calculation.rpt