

# 22205CE4 NSK ALPHA\_ 0.23

## 25x52x18mm Spherical roller bearings

|                               |   |
|-------------------------------|---|
| Bearing number                | 22205CE4  |
| NSK (int)                     | 22205CE4  |
| Brand                         | NSK   |
| Bore Diameter (mm)            | 25  |
| Outer Diameter (mm)           | 52  |
| Width (mm)                    | 18  |
| d                             | 25 mm   |
| D                             | 52 mm   |
| B                             | 18 mm   |
| C                             | 18 mm   |
| r min.                        | 1 mm  |
| da min.                       | 31 mm   |
| da max.                       | 31 mm   |
| Da min.                       | 45 mm   |
| Da max.                       | 46 mm   |
| ra max.                       | 1 mm  |
| Weight                        | 0.17 Kg   |
| Basic dynamic load rating (C) | 37.5 kN   |
| Basic static load rating (C0) | 37 kN   |
| (Grease) Lubrication Speed    | 7100 r/min  |
| (Oil) Lubrication Speed       | 9000 r/min  |
| Calculation factor (a1)       | 0.35  |
| Calculation factor (a2)       | 1.9   |
| Calculation factor (a3)       | 2.9   |
| Category                      | Spherical Roller Bearings   |
| BEC Inventory                 | 0.0   |
| Manufacturer Name             | NSK   |
| Minimum Buy Quantity          | N/A   |
| Weight / Kilogram             | 0.08  |
| EAN                           | 8020176078095   |
| Product Group - BEC           | 084311  |
| Internal Clearance            | C0-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   |
| Without Sleeve                | Not Applicable  |
| Inch - Metric                 | Metric  |
| Lang. Description             | 20mm Straight Bore; 52mm Outside Diameter; 18mm Width; C0-Medium Clearance; Shaft Mount; Double Row of Spherical Roller Bearings; Steel Cage Material; Open Enclosure; Relubricatable   |
| Category - BEC                | Spherical Roller Bearing  |
| HSNC                          | 312130  |
| Harmonized Tariff Code        | 84823000  |
| Mean                          | Bearing   |
| Keyword String                | Spherical   |
| Manufacturer URL              | http://www.nskamericas.com  |
| Manufacturer Item Number      | 22205CE4  |
| Weight / LBS                  | 0.38  |
| Adapter Part Number           | Not Applicable Inch   Not Applicable Millimeter   |
| Width                         | 0.709 Inch   18 Millimeter  |
| Bore                          | 0.984 Inch   25 Millimeter  |
| Outside Diameter              | 2.047 Inch   52 Millimeter  |
| bore diameter: machine rpm    | 9000 RPM  |
| outside diameter: machine rpm | 52 mm   |
| operating temperature range:  | Maximum of +200 °C  |
| overall width:                | 18 mm   |
| cage material:                | Steel   |
| bore type:                    | Straight  |
| bearing material:             | Steel   |
| outer ring type:              | Not Split   |
| cage type:                    | Inner Ring Guided   |
| internal clearance:           | C0  |
| precision rating:             | BEC 1 (ISO Class Normal)  |
| closure type:                 | Open  |
| finish/coating:               | Uncoated  |
| Lubrication hole type:        | Lubrication Groove & Hole   |
| outer ring width:             | 18 mm   |
| dynamic load capacity:        | 37500 N   |
| fatigue load capacity:        | 1 mm  |
| static load capacity:         | 37000 N   |
| series:                       | 222   |
| Y0                            | 1.9   |
| Y1                            | 222   |
| LangID                        | 22205CE4  |
| Y2                            | 1   |
| Y3                            | 1.9   |
| Y4                            | 52  |
| Y5                            | 2.9   |
| Mecha rpm                     | 18  |
| URL                           | https://service.web2cad.co.jp/pcon/maker_login.php?maker=NSK_R&lang=en&id=nsk_rb/roller_bearings/spherical_rb/cylindrical_bore_wmh&prj=varnet-STAM-1_(ORDEN=22205CE4_(S0=25)-(B=22)-(D=18.8)-(D=1.8)-(CR1=37500)-(CR0=37000)-(L1=18000)-(L2=9000)-(DA1=31)-(DA2=31.000)-(DA3=46)-(DA4=45)-(DA=1.8)-(E=0.35)-(CY=2.9)-(CY=1.9)-(Y0=1.9)-(Y1=1.9)-(Y2=1.9)-(Y3=1.9)-(Y4=52)-(Y5=2.9)) |
| da                            | 31  |
| da_min                        | 31  |
| da_max                        | 31  |
| G11 rpm                       | 9000  |
| Y0                            | 1.9   |
| mass                          | 0.17  |
| GRC rpm                       | 7100  |
| ra                            | 1   |
| TDK rpm                       | 10000   |
| CS                            | 37  |
| SC                            | 46.343  |
| SD                            | 0   |
| Prod_Type3                    | SR0_C0_CB   |
| X1                            | 1   |
| X2                            | 0.47  |
| X3                            | 2.9   |
| e                             | 0.35  |
| DA                            | 7.9   |
| Y0                            | 22205CE4  |
| Z                             | 14  |
| ALP2                          | 18  |
| ALP3                          | 18  |
| ALP4                          | 0   |
| D_a_max                       | 46  |
| D_a_min                       | 45  |
| Y01                           | 22205CE4  |
| ALPHA                         | 0.23  |
| SPL                           | 39.455  |
| e                             | 1   |
| KMG                           | 2322  |
| SBG                           | 22  |
| SI                            | 32.327  |
| calc01                        | /bearingguide/html/calculation.jsp  |