

# 1209 KOYO Precision Class ABEC 1 | ISO P0 45x85x19mm Self aligning ball bearings

|                                  |            |
|----------------------------------|------------|
| Bearing number                   | 1209       |
| Size (mm)                        | 45x85x19   |
| Brand                            | KOYO       |
| Bore Diameter (mm)               | 45         |
| Outer Diameter (mm)              | 85         |
| Width (mm)                       | 19         |
| d                                | 45 mm      |
| D                                | 85 mm      |
| B                                | 19 mm      |
| C                                | 19 mm      |
| r min.                           | 1.1 mm     |
| da min.                          | 51.5 mm    |
| Da max.                          | 78.5 mm    |
| ra max.                          | 1 mm       |
| Weight                           | 0.465 Kg   |
| Basic dynamic load rating<br>(C) | 21.8 kN    |
| Basic static load rating<br>(C0) | 7.35 kN    |
| (Grease) Lubrication Speed       | 7000 r/min |
| (Oil) Lubrication Speed          | 8500 r/min |
| Calculation factor (e)           | 0.21       |
| Calculation factor (Y0)          | 3.09       |
| Calculation factor (Y1)          | 2.94       |

|                          |                                                                                                                                                                |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Category                 | Self Aligning Ball Bearings                                                                                                                                    |
| BDI Inventory            | 0.0                                                                                                                                                            |
| Manufacturer Name        | KOYO                                                                                                                                                           |
| Minimum Buy Quantity     | N/A                                                                                                                                                            |
| Weight / Kilogram        | 0.503                                                                                                                                                          |
| EAN                      | 0605790001062                                                                                                                                                  |
| Product Group – BDI      | B00152                                                                                                                                                         |
| Mounting Method          | Shaft                                                                                                                                                          |
| Enclosure                | Open                                                                                                                                                           |
| Rolling Element          | Ball Bearing                                                                                                                                                   |
| Cage Material            | Steel                                                                                                                                                          |
| Precision Class          | ABEC 1   ISO P0                                                                                                                                                |
| Internal Clearance       | C0-Medium                                                                                                                                                      |
| Number of Rows of Balls  | Double Row                                                                                                                                                     |
| Other Features           | Allowable Misalignment 2.5 Deg                                                                                                                                 |
| Long Description         | 45MM Bore; Shaft Mount; 85MM Outside Diameter; 19MM Inner Race Width; 19MM Outer Race Width; Open; Steel Cage; Double Row of Balls; ABEC 1   ISO P0; C0-Medium |
| Inch – Metric            | Metric                                                                                                                                                         |
| Category – BDI           | Self Aligning Ball Bearings                                                                                                                                    |
| UNSPSC                   | 31171532                                                                                                                                                       |
| Harmonized Tariff Code   | 8482.10.50.68                                                                                                                                                  |
| Noun                     | Bearing                                                                                                                                                        |
| Keyword String           | Self Aligning                                                                                                                                                  |
| Manufacturer URL         | <a href="http://www.koyousa.com">http://www.koyousa.com</a>                                                                                                    |
| Manufacturer Item Number | 1209                                                                                                                                                           |
| Weight / LBS             | 1.02515                                                                                                                                                        |

|                    |                            |
|--------------------|----------------------------|
| Outer Race Width   | 0.748 Inch   19 Millimeter |
| Inner Race Width   | 0.748 Inch   19 Millimeter |
| Bore               | 1.772 Inch   45 Millimeter |
| Outside Diameter   | 3.346 Inch   85 Millimeter |
| Bearing No.        | 1209                       |
| r(min)             | 1.1                        |
| Cr                 | 21.8                       |
| C0r                | 7.35                       |
| Cu                 | 0.46                       |
| Grease lub.        | 7000                       |
| Oil lub.           | 8500                       |
| da(min)            | 51.5                       |
| Da(max)            | 78.5                       |
| ra(max)            | 1                          |
| e                  | 0.21                       |
| Y1                 | 2.94                       |
| Y2                 | 4.56                       |
| Y0                 | 3.09                       |
| (Refer.) Mass (kg) | 0.465                      |