

# 1317 SKF 180x85x41mm outside diameter: 180 mm Self aligning ball bearings

|                                  |            |
|----------------------------------|------------|
| Bearing number                   | 1317       |
| Size (mm)                        | 180x85x41  |
| Brand                            | SKF        |
| Bore Diameter (mm)               | 180        |
| Outer Diameter (mm)              | 85         |
| Width (mm)                       | 41         |
| d                                | 85 mm      |
| D                                | 180 mm     |
| B                                | 41 mm      |
| $d_1$                            | 117.6 mm   |
| $D_1$                            | 152.8 mm   |
| $r_{1,2} - \text{min.}$          | 3 mm       |
| $d_a - \text{min.}$              | 99 mm      |
| $D_a - \text{max.}$              | 166 mm     |
| $r_a - \text{max.}$              | 3 mm       |
| Basic dynamic load rating – C    | 97.5 kN    |
| Basic static load rating – $C_0$ | 38 kN      |
| Fatigue load limit – $P_u$       | 1.7 kN     |
| Reference speed                  | 7000 r/min |
| Limiting speed                   | 4800 r/min |
| Calculation factor – $k_r$       | 0.045      |
| Calculation factor – e           | 0.22       |

|                                     |                                                                                                                                                                 |
|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Calculation factor – Y <sub>0</sub> | 2.8                                                                                                                                                             |
| Calculation factor – Y <sub>1</sub> | 2.9                                                                                                                                                             |
| Calculation factor – Y <sub>2</sub> | 4.5                                                                                                                                                             |
| Category                            | Self Aligning Ball Bearings                                                                                                                                     |
| BDI Inventory                       | 0.0                                                                                                                                                             |
| Manufacturer Name                   | SKF                                                                                                                                                             |
| Minimum Buy Quantity                | N/A                                                                                                                                                             |
| Weight / Kilogram                   | 5.037                                                                                                                                                           |
| EAN                                 | 7316576605581                                                                                                                                                   |
| 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 3 Deg                                                                                                                                    |
| Long Description                    | 85MM Bore; Shaft Mount; 180MM Outside Diameter; 41MM Inner Race Width; 41MM 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.skf.com">http://www.skf.com</a> |
| Manufacturer Item Number | 1317                                                |
| Weight / LBS             | 11.094                                              |
| Bore                     | 3.346 Inch   85 Millimeter                          |
| Outer Race Width         | 1.614 Inch   41 Millimeter                          |
| Inner Race Width         | 1.614 Inch   41 Millimeter                          |
| Outside Diameter         | 7.087 Inch   180 Millimeter                         |
| bore diameter:           | 85 mm                                               |
| precision rating:        | Not Rated                                           |
| outside diameter:        | 180 mm                                              |
| maximum rpm:             | 4800 RPM                                            |
| overall width:           | 41 mm                                               |
| cage material:           | Steel                                               |
| bore type:               | Straight                                            |
| finish/coating:          | Uncoated                                            |
| closure type:            | Open                                                |
| outer ring width:        | 41 mm                                               |
| internal clearance:      | C0                                                  |
| fillet radius:           | 3 mm                                                |
| dynamic load capacity:   | 97.5 kN                                             |
| series:                  | 1300                                                |
| static load capacity:    | 38 kN                                               |
| $d_1 \approx$            | 117.6 mm                                            |
| $D_1 \approx$            | 152.8 mm                                            |
| $r_{1,2} \text{ min.}$   | 3 mm                                                |
| $d_a \text{ min.}$       | 99 mm                                               |
| $D_a \text{ max.}$       | 166 mm                                              |

|                                           |         |
|-------------------------------------------|---------|
| $r_a$ max.                                | 3 mm    |
| Basic dynamic load rating C               | 97.5 kN |
| Basic static load rating $C_0$            | 38 kN   |
| Fatigue load limit $P_u$                  | 1.7 kN  |
| Permissible angular misalignment $\alpha$ | 3 °     |
| Calculation factor $k_r$                  | 0.045   |
| Calculation factor e                      | 0.22    |
| Calculation factor $Y_0$                  | 2.8     |
| Calculation factor $Y_1$                  | 2.9     |
| Calculation factor $Y_2$                  | 4.5     |
| Mass bearing                              | 5 kg    |