



## NTN Bearing Manufacturing



MLE7005HVUJ74S Bearing 2D drawings and 3D CAD models

25 mm x 47 mm x 12 mm SNR  
MLE7005HVUJ74S angular contact ball bearings

Bearing No. MLE7005HVUJ74S

|                             |             |
|-----------------------------|-------------|
| Size                        | 25x47x12 mm |
| Bore Diameter               | 25 mm       |
| Outer Diameter              | 47 mm       |
| Width                       | 12 mm       |
| d                           | 25 mm       |
| D                           | 47 mm       |
| B                           | 12 mm       |
| C                           | 12 mm       |
| Angle ( ° )                 | 20 °        |
| d1                          | 32.2 mm     |
| d2                          | 30.25 mm    |
| D1                          | 42.65 mm    |
| D2                          | 44.25 mm    |
| a                           | 14 mm       |
| Contact angle               | 25 °        |
| rs min                      | 0.6 mm      |
| r1s min                     | 0.3 mm      |
| f0                          | 7.83        |
| Precision class             | P4S         |
| Mass                        | 0.08 kg     |
| Dynamic load, C             | 7.1 kN      |
| Static load, C0             | 3.7 kN      |
| Fatigue limit load, Cu      | 0.23 kN     |
| Nlim (grease)               | 38,000 rpm  |
| Axial displacement K Factor | 0.84        |
|                             |             |



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|   |                |
|---|----------------|
| Preload level                                 | 7              |
| Preload value                                 | 0.06 kN        |
| Axial rigidity                                | 65 N/ $\mu$ m  |
| Radial rigidity                               | 144 N/ $\mu$ m |
| Min operating temperature, T <sub>min</sub>   | -20 ° C        |
| Max operating temperature, T <sub>max</sub>   | 120 ° C        |
| Characteristic cage frequency, FTF            | 0.43 Hz        |
| Characteristic rolling element frequency, BSF | 6.32 Hz        |
| Characteristic outer ring frequency, BPF0     | 7.3 Hz         |
| Characteristic inner ring frequency, BRFI     | 9.7 Hz         |
| d <sub>a</sub> min                            | 29.5 mm        |
| d <sub>b</sub> min                            | 29.5 mm        |
| D <sub>a</sub> max                            | 42.5 mm        |
| D <sub>b</sub> max                            | 42.5 mm        |
| r <sub>1a</sub> max                           | 0.3 mm         |
| r <sub>a</sub> max                            | 0.6 mm         |
| D <sub>6</sub>                                | 34.2 mm        |