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| 11-20 An **02-series single-row deep-groove ball bearing** with a **65-mm bore** (see Tables 11–1 and 11–2 for specifications) is loaded with a **3-kN axial** load and a **7-kN radial load**. The outer ring rotates at **500 rev/min.** (*a*) Determine the **equivalent radial load** that will be experienced by this particular bearing. | (*b*) Determine whether this bearing should be expected to carry this load **with a 95 percent reliability for 10 kh**. |

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| 11-23  An 02-series single-row deep-groove ball bearing is to be selected from Table 11–2 for the application conditions specified in the table. Assume Table 11–1 is applicable if needed. Specify  the smallest bore size from Table 11–2 that can satisfy these conditions. |  |