



## Tilt angle



The maximum tilt angle depends on the type of assembly. It is not recommended to exceed the tilt angle given in the tables of dimensions.

The maximum tilt angle is governed by:

- $d_k$  the diameter of the sphere
- $d$  the diameter of the bore
- $d_1$  the diameter of flat
- $B$  the width of the bush
- $C$  the width of the cage or mount

$$\alpha_1 = \cos^{-1}\left(\frac{C}{d_k}\right) - \tan^{-1}\left(\frac{D_1}{B}\right)$$

$$\alpha_2 = \cos^{-1}\left(\frac{C}{d_k}\right) - \sin^{-1}\left(\frac{d_1}{B}\right)$$

Size	Value of angle $\alpha$	
	$\alpha_1$	$\alpha_2$
<b>2</b>	16°	33°
<b>3</b>	15°	
<b>4</b>	14°	31°
<b>5</b>	13°	30°
<b>6</b>		
<b>8</b>	14°	25°
<b>10</b>	13°	25°
<b>12</b>	16°	24°
<b>14</b>		
<b>16</b>		
<b>18</b>	15°	24°
<b>20</b>		
<b>22</b>	15°	23°
<b>25</b>		
<b>30</b>	17°	24°