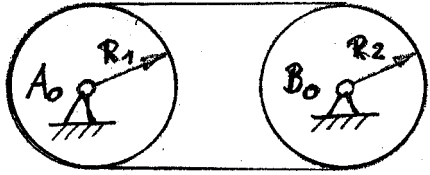
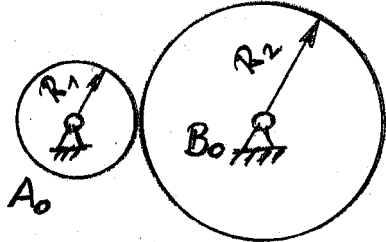
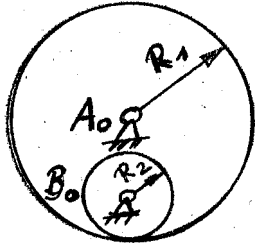
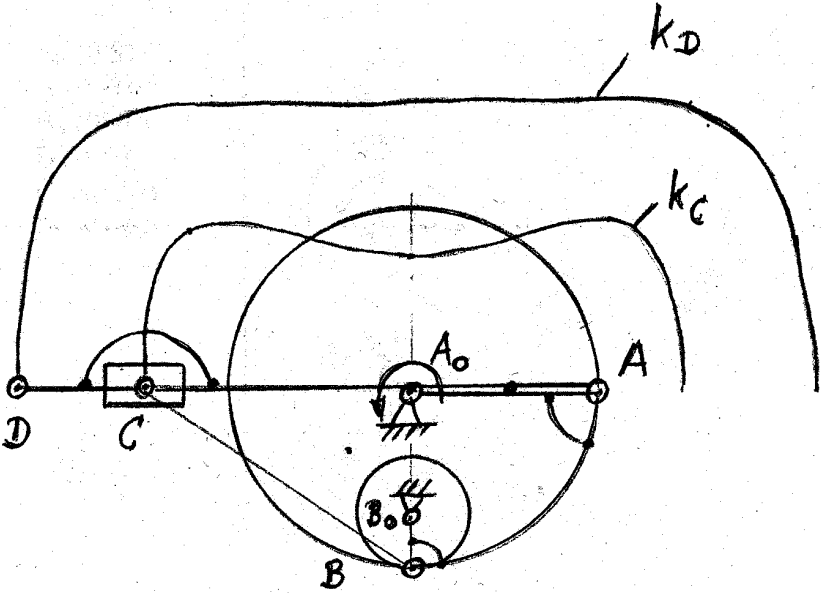


**Exercise 1.18:**

| Windscreen wiper mechanism with additional radial movement  |   |   |
|---|---|---|
| <p>a) Belt drive</p> <p><math>A_o</math> (0/0)<br/> <math>r = 20</math> mm<br/> <math>B_o</math> (60/0)<br/> <math>i = 1</math></p>   | <p><b>Icon:</b><br/> <b>Create belt element</b><br/> <math>A_o</math> : Space bar (0/0)<br/> <math>r</math> : Space bar <b>20</b><br/> <math>B_o</math> : Space bar (60/0)<br/> <math>i_{21} = R_1/R_2</math> : Space bar <b>1</b></p>              |   |
| <p>b) Gear element<br/>         (External tooth)</p> <p><math>A_o</math> (0/0)<br/> <math>B_o</math> (60/0)<br/> <math>i = 0,5</math></p>   | <p><b>Icon:</b><br/> <b>Create gear element</b><br/> <math>A_o</math> : Space bar (0/0)<br/> <math>B_o</math> : Space bar (60/0)<br/> <math>i_{21} = R_1/R_2</math> : Space bar <b>0.5</b></p>  |   |
| <p>c) Gear element<br/>         (Internal tooth)</p> <p><math>A_o</math> (0/0)<br/> <math>B_o</math> (0/-30)<br/> <math>i = 4</math></p>  | <p><b>Icon:</b><br/> <b>Create gear element</b><br/> <math>A_o</math> : Space bar (0/0)<br/> <math>B_o</math> : Space bar (0/-30)<br/> <math>i_{21} = R_1/R_2</math> : Space bar <b>4</b><br/>         (Internal tooth <math>\checkmark</math>)</p> |  |
| <p>d) Coordinates:<br/> <math>A_o</math> (0/0)<br/> <math>A</math> (40/0)<br/> <math>B_o</math> (0/-30)<br/> <math>B</math> (0/-40)<br/> <math>C</math> (-60/0)<br/> <math>D</math> (-120/0)</p> <p>Create the mechanism with SAM and find <math>k_C</math> and <math>k_D</math></p> <p>Hint:<br/> <math>A-C-D</math> is a slider</p> |   |   |