V

C

 3’’ 3’’

 B

 ø

 A

The elements of a switching device are shown. If the vertical control rod has a downward velocity of V = 3 ft/sec when ø = 60 degrees and if roller A is in continuous contact with the horizontal surface determine the magnitude of velocity of C for this instant using the method of “instantaneous center of zero velocity”.

Vc = 6.24 ft/sec