

An ac servomotor is basically a two-phase induction motor but it differs from that in two ways.

1. The ac servomotor has low value of  $X/R$  to achieve linear torque-speed characteristics. But normal induction motors have large values of  $X/R$  for higher efficiency.
2. The ac servomotor has low inertia rotor. The inertia of the rotor is reduced by reducing the diameter or by drag-cup construction.