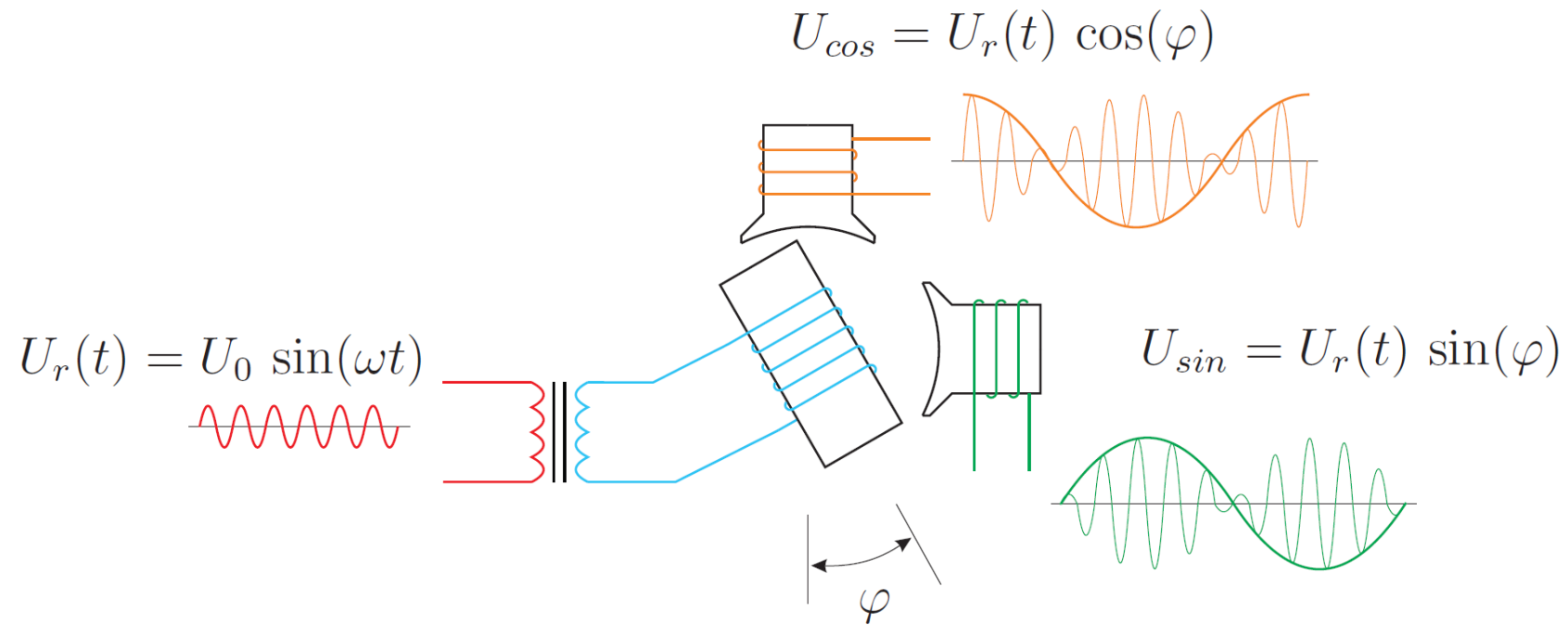


# Mechatronic Actuators

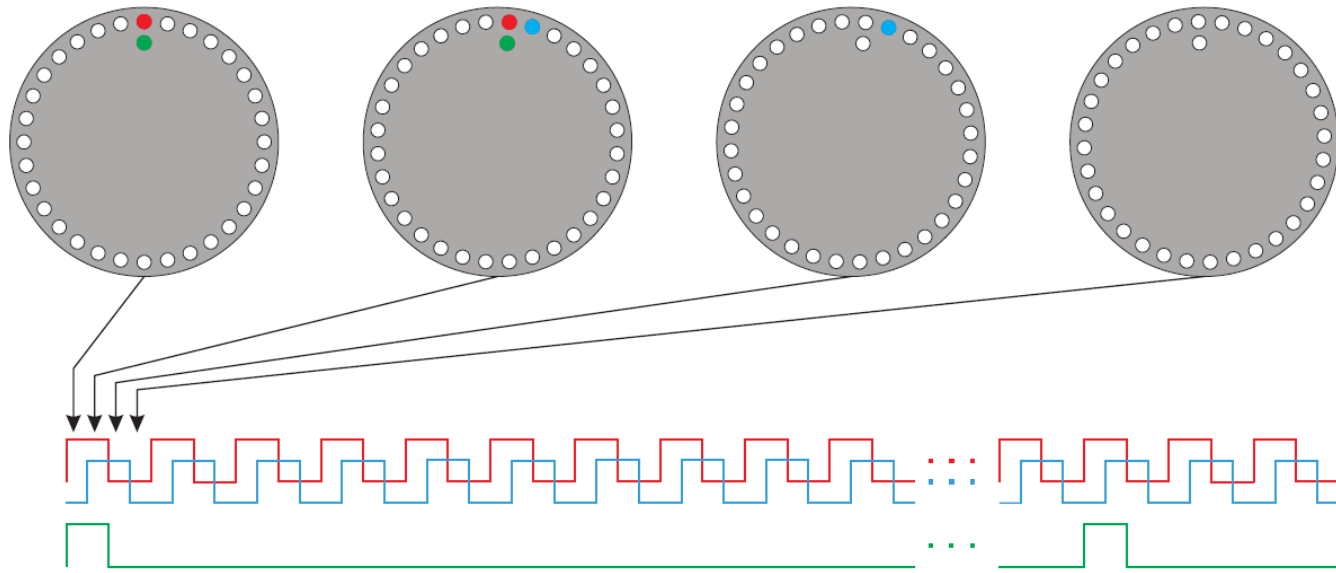
Lecture 7c

# Mechanical drives

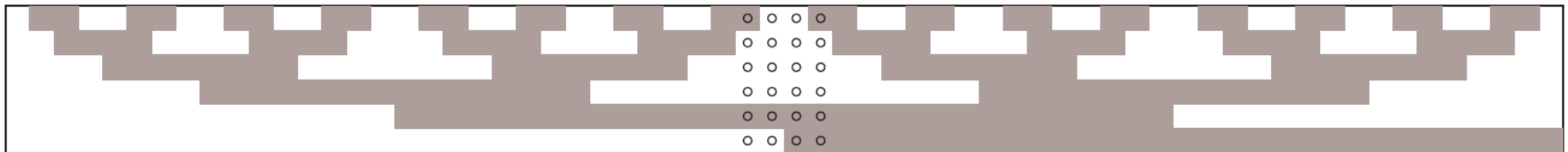
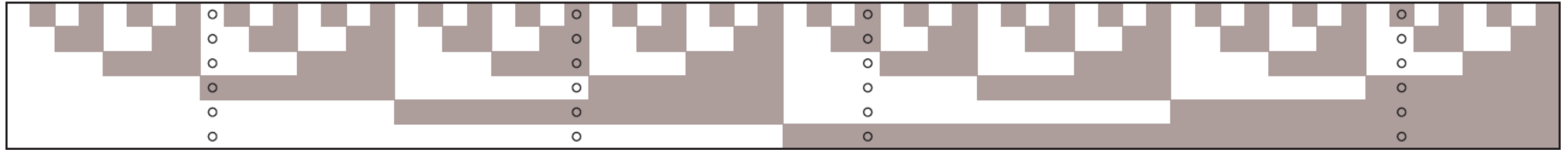
# Sensors - resolver



# Sensors - encoder



# Binary / Gray code



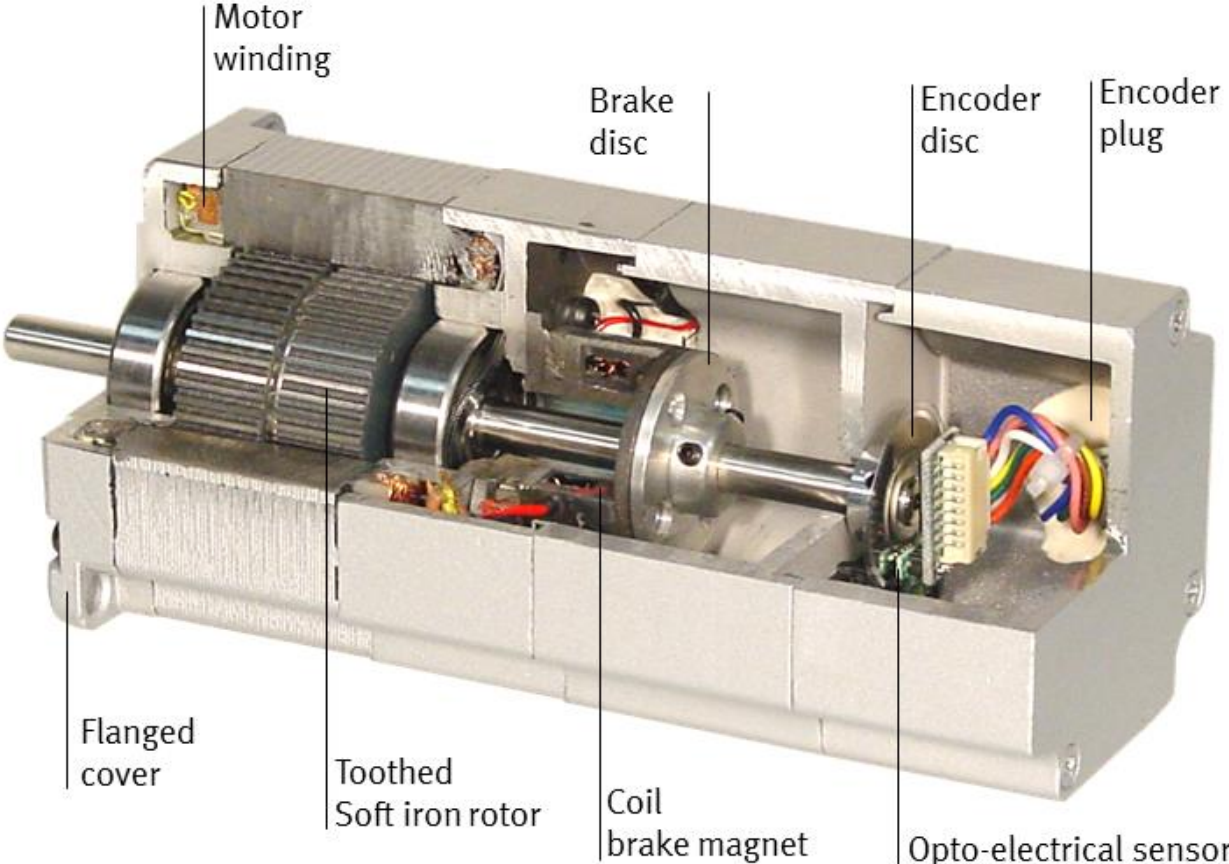
# Absolute encoder



# Tachogenerator

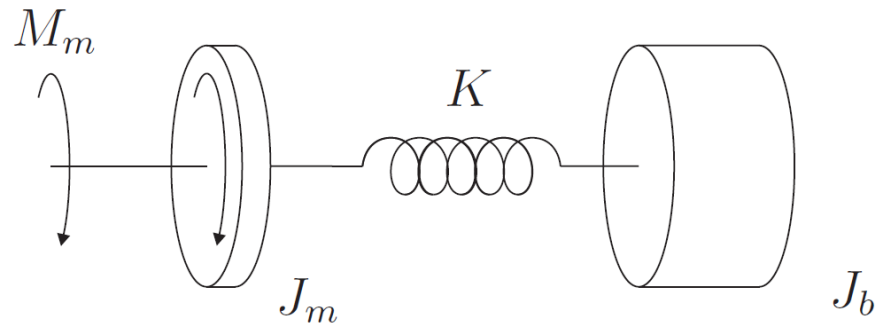


# Assembly





# Matching moments



$$r = \frac{J_b}{J_m}$$

$$J_b = \frac{J_{bd}}{\nu^2}$$

Maximum values are:

- $r = 10$  (servo motor)
- $r = 15$  (stepper motor)