

BIOMECATRÓNICA

Reducción de múltiples subsistemas

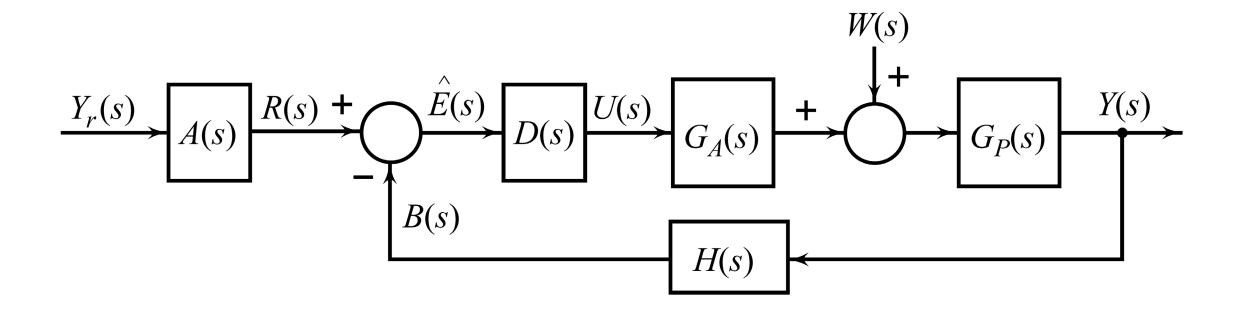


EIA Diagrama de bloques

- Representación gráfica de sistemas interconectados
- Cada sistema dinámico que tiene una relación de E/S es un **bloque**, que suele ser una sola función de transferencia
- Los bloques están conectados por trayectorias que representan el flujo de señal y los cálculos de entrada y salida
- El flujo de señal en un bloque representa una operación matemática, generalmente una multiplicación



Diagrama general de un SAC



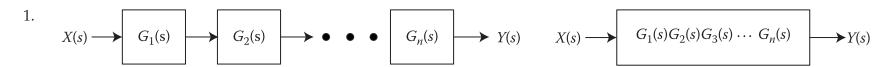
Ela Elementos básicos

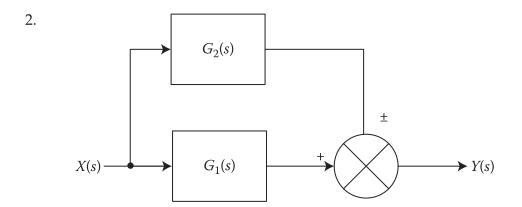
En general, un diagrama de bloques consta de una configuración específica de cuatro tipos de elementos:

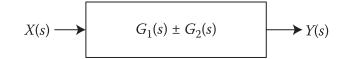
- bloques
- puntos de suma
- puntos de despegue
- flechas

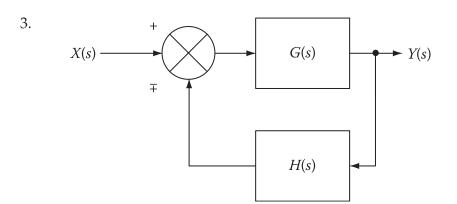


EIA Operaciones







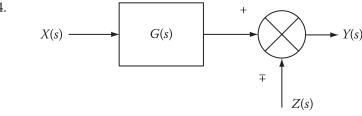


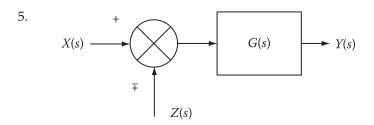
$$X(s) \longrightarrow \frac{G(s)}{1 \pm G(s)H(s)} \longrightarrow Y(s)$$

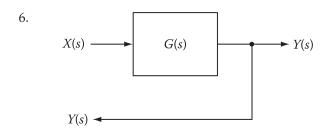


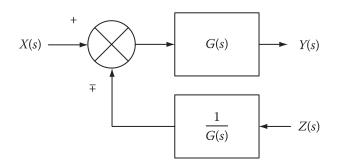
CEIA Operaciones

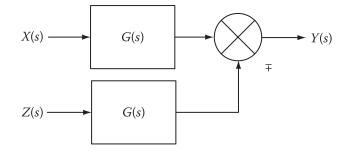


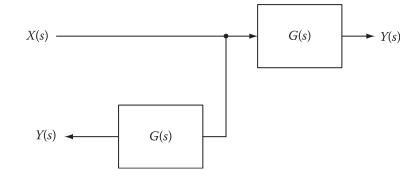






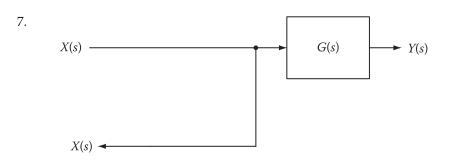


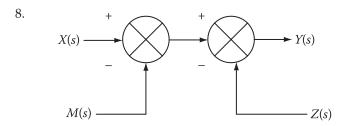


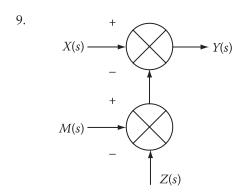


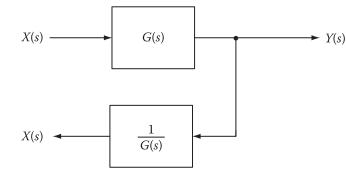


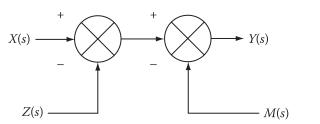
EIA Operaciones

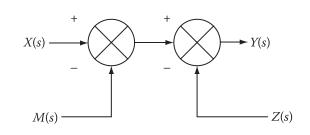






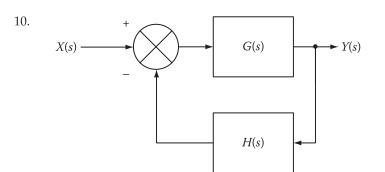


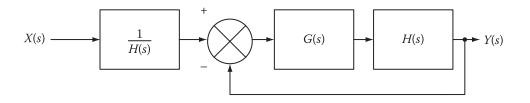


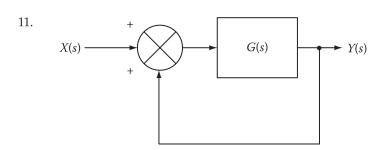


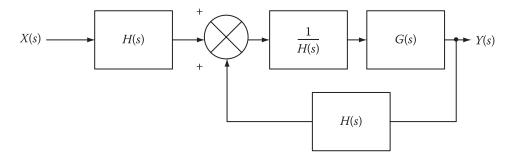


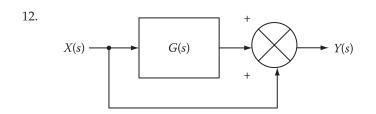
CEIA Operaciones

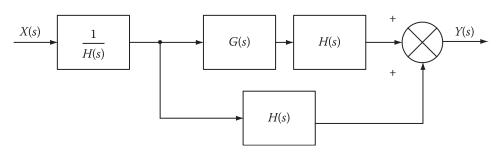




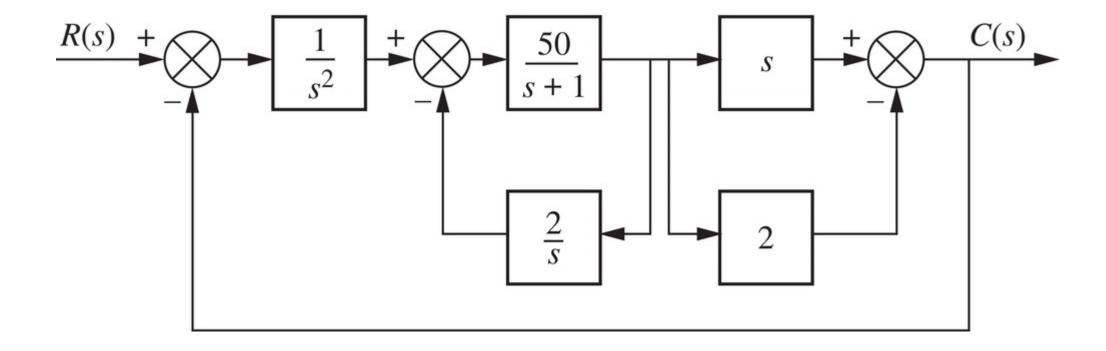




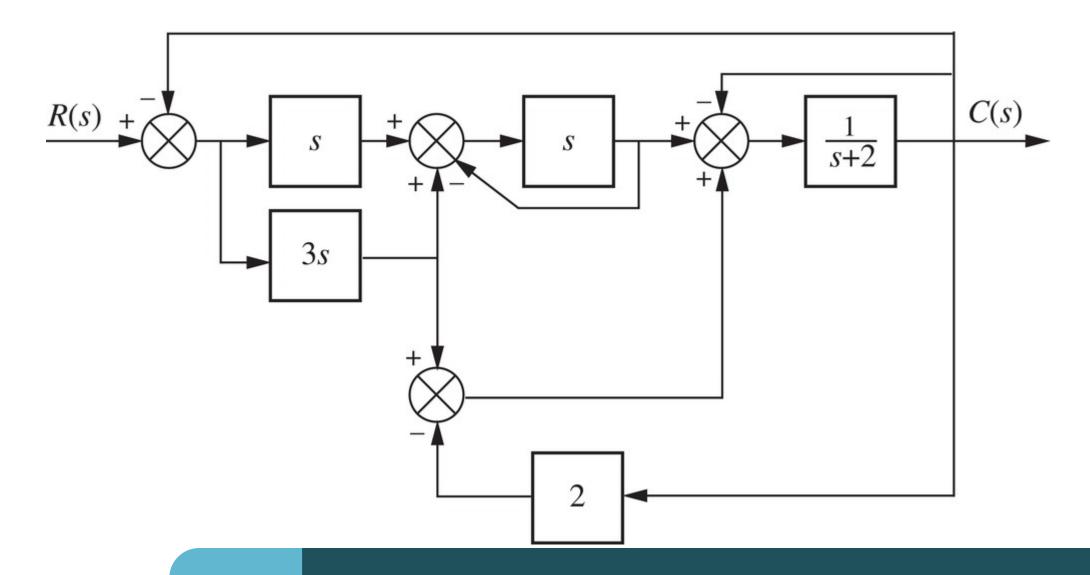




EIA Ejemplo 1



EIA Ejemplo 2



EIA Ejemplo 3

