

P_pend =

$$\frac{1.045e-05 \text{ s}}{2.3e-06 \text{ s}^3 + 4.182e-07 \text{ s}^2 - 7.172e-05 \text{ s} - 1.025e-05}$$

Continuous-time transfer function.

Model Properties

C =

$$K_p + K_i * \frac{1}{s} + K_d * s$$

with Kp = 1, Ki = 1, Kd = 1

Continuous-time PID controller in parallel form.

Model Properties

T =

$$\frac{1.045e-05 \text{ s}^2}{2.3e-06 \text{ s}^4 + 1.087e-05 \text{ s}^3 - 6.126e-05 \text{ s}^2 + 2.091e-07 \text{ s}}$$

Continuous-time transfer function.

Model Properties

C =

$$K_p + K_i * \frac{1}{s} + K_d * s$$

with Kp = 100, Ki = 1, Kd = 1

Continuous-time PID controller in parallel form.

Model Properties

T =

$$\frac{1.045e-05 \text{ s}^2}{2.3e-06 \text{ s}^4 + 1.087e-05 \text{ s}^3 + 0.0009737 \text{ s}^2 + 2.091e-07 \text{ s}}$$

Continuous-time transfer function.

Model Properties

C =

$$K_p + K_i * \frac{1}{s} + K_d * s$$

with Kp = 100, Ki = 1, Kd = 20

Continuous-time PID controller in parallel form.

Model Properties

T =

$$\frac{1.045 \times 10^{-5} s^2}{2.3 \times 10^{-6} s^4 + 0.0002095 s^3 + 0.0009737 s^2 + 2.091 \times 10^{-7} s}$$

Continuous-time transfer function.

Model Properties

P_cart =

$$\frac{4.182 \times 10^{-6} s^2 - 0.0001025}{2.3 \times 10^{-6} s^4 + 4.182 \times 10^{-7} s^3 - 7.172 \times 10^{-5} s^2 - 1.025 \times 10^{-5} s}$$

Continuous-time transfer function.

Model Properties

T2 =

$$\frac{9.618 \times 10^{-12} s^6 + 1.749 \times 10^{-12} s^5 - 5.355 \times 10^{-10} s^4 - 8.569 \times 10^{-11} s^3 + 7.348 \times 10^{-9} s^2}{5.29 \times 10^{-12} s^8 + 4.828 \times 10^{-10} s^7 + 2.162 \times 10^{-9} s^6 - 1.464 \times 10^{-8} s^5 - 7.198 \times 10^{-8} s^4 - 9.991 \times 10^{-9} s^3 + 1.045 \times 10^{-5} s^2}$$

Continuous-time transfer function.

Model Properties

>>