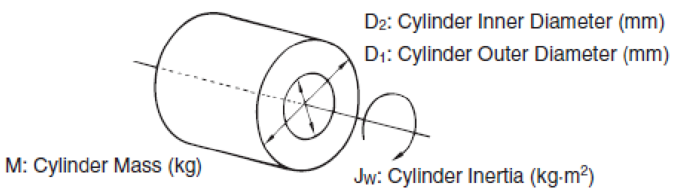
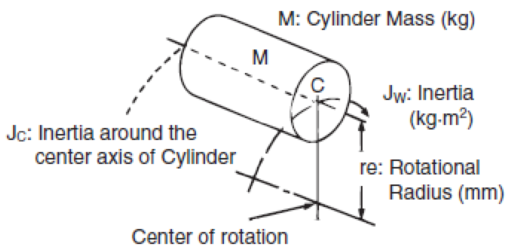
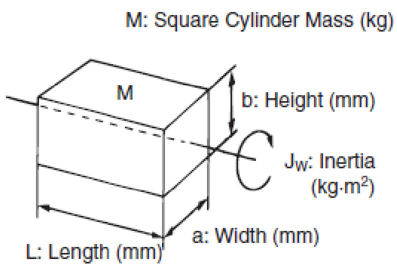
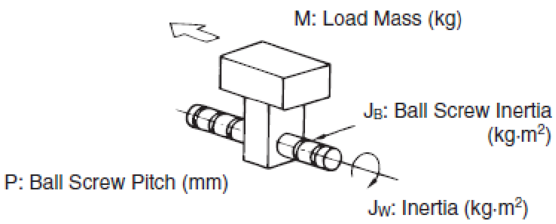
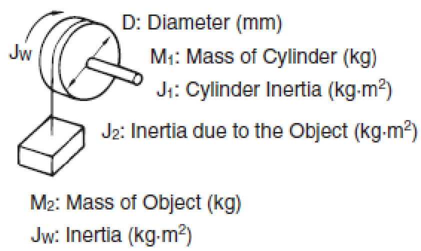
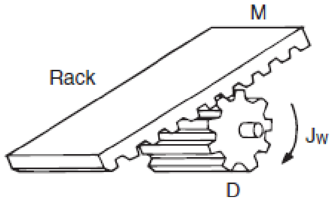
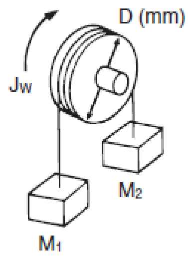
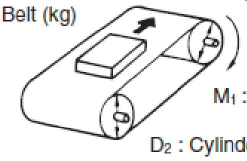
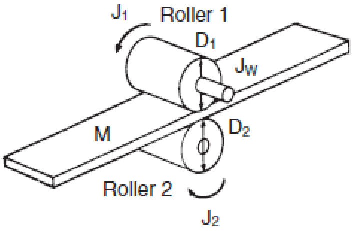
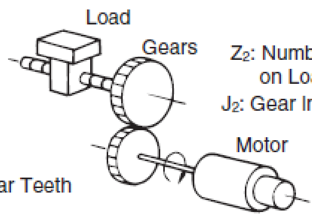
Cylindrical Inertia		$J_W = \frac{M(D_1^2 + D_2^2)}{8} \times 10^{-6}$ (kg·m^2)
Eccentric Disc Inertia (Cylinder which rotates off the center axis)		$J_W = J_C + M \cdot re^2 \times 10^{-6}$ (kg·m^2)
Inertia of Rotating Square Cylinder		$J_W = \frac{M(a^2 + b^2)}{12} \times 10^{-6}$ (kg·m^2)
Inertia of Linear Movement		$J_W = M\left(\frac{P}{2\pi}\right)^2 \times 10^{-6} + J_B$ (kg·m^2)
Inertia of Lifting Object by Pulley		$J_W = J_1 + J_2$ $= \left(\frac{M_1 \cdot D^2}{8} + \frac{M_2 \cdot D^2}{4}\right) \times 10^{-6}$ (kg·m^2)

Inertia of Rack and Pinion Movement	 J_W: Inertia (kg·m^2) M: Mass (kg) D: Pinion Diameter (mm)	$J_W = \frac{M \cdot D^2}{4} \times 10^{-6}$ (kg·m^2)
Inertia of Suspended Counterbalance	 J_W: Inertia (kg·m^2) M_1: Mass (kg) M_2: Mass (kg)	$J_W = \frac{D^2 (M_1 + M_2)}{4} \times 10^{-6}$ (kg·m^2)
Inertia when Carrying Object via Conveyor Belt	M_3 : Mass of Object (kg) M_4 : Mass of Belt (kg) D_1 : Cylinder 1 Diameter (mm) J_W: Inertia (kg·m^2) M_1 : Mass of Cylinder 1 (kg) D_2 : Cylinder 2 Diameter (mm) M_2 : Mass of Cylinder 2 (kg)  J_W : Inertia (kg·m^2) J_1 : Cylinder 1 Inertia (kg·m^2) J_2 : Inertia due to Cylinder 2 (kg·m^2) J_3 : Inertia due to the Object (kg·m^2) J_4 : Inertia due to the Belt (kg·m^2)	$J_W = J_1 + J_2 + J_3 + J_4 = \left(\frac{M_1 \cdot D_1^2}{8} + \frac{M_2 \cdot D_2^2}{8} \cdot \frac{D_1^2}{D_2^2} + \frac{M_3 \cdot D_1^2}{4} + \frac{M_4 \cdot D_1^2}{4}\right) \times 10^{-6}$ (kg·m^2)
Inertia where Work is Placed between Rollers	J_W : System Inertia (kg·m^2) J_1 : Roller 1 Inertia (kg·m^2) J_2 : Roller 2 Inertia (kg·m^2) D_1 : Roller 1 Diameter (mm) D_2 : Roller 2 Diameter (mm) M : Equivalent Mass of Work (kg) 	$J_W = J_1 + \left(\frac{D_1}{D_2}\right)^2 J_2 + \frac{M \cdot D_1^2}{4} \times 10^{-6}$ (kg·m^2)
Inertia of a Load Value Converted to Motor Shaft	 Z_2: Number of Gear Teeth on Load Side J_2: Gear Inertia on Load Side (kg·m^2) J_W: Load Inertia (kg·m^2) Z_1: Number of Gear Teeth on Motor Side J_1: Gear Inertia on Motor Side (kg·m^2) Gear Ratio $G = Z_1/Z_2$ J_L: Motor Shaft Conversion Load Inertia (kg·m^2)	$J_L = J_1 + G^2 (J_2 + J_W)$ (kg·m^2)