$$C = \frac{\left[L_1 \left(R_L^2 + \omega^2 L_2^2\right) - L_2 \omega^2 M^2\right] \left(R_L^2 + \omega^2 L_2^2\right)}{\left[\omega^2 R_L M^2 - R_C \left(R_L^2 + \omega^2 L_2^2\right)\right]^2 + \omega^2 L_1 \left(R_L^2 + \omega^2 L_2^2\right)\left[L_1 \left(R_L^2 + \omega^2 L_2^2\right) - L_2 \omega^2 M^2\right] - \omega^4 L_2 M^2 \left(L_1 \left(R_L^2 + \omega^2 L_2^2\right) - L_2 \omega^2 M^2\right)}$$