$$\frac{d\,\overline{Y(t)^2}}{2\,\mathrm{dt}} = D_y \approx 700\,\mathrm{um}^2/s$$

$$\frac{d\,\overline{X(t)^2}}{2\,\mathrm{dt}} = D_x \approx 1200\,\mathrm{um}^2/s$$