

Calculation note: Braking time

$$\dot{x} = \sigma(y - x) \quad (1)$$

$$\dot{y} = \rho x - y - xz \quad (2)$$

$$\dot{z} = -\beta z + xy \quad (3)$$

Motor description

In [8]:

```
import ipywidgets as widgets
from IPython.display import display
from ipywidgets.embed import embed_minimal_html

motor_speed= widgets.FloatText(
    value=5000,
    description='Motor speed (RPM):',
    disabled=False
)

#embed_minimal_html('export.html', views=[motor_speed], title='Widgets export')
display(motor_speed)
```

In [9]:

```
from ipywidgets import interact, interactive, fixed, interact_manual
import ipywidgets as widgets

import matplotlib.pyplot as plt
%matplotlib inline

import numpy as np

def plot_func(freq):
    x = np.linspace(0, 2*np.pi)
    y = np.sin(x * freq)
    plt.plot(x, y)

interact(plot_func, freq = widgets.FloatSlider(value=7.5,
                                                min=1,
                                                max=5.0,
                                                step=0.5))
```

Out[9]: <function __main__.plot_func(freq)>

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