

What is Ne_2 molecular orbital diagram?

Neon is a chemical element with atomic number equal to 10, which means a neutral atom of neon has 10 electrons. The electronic configuration of this atom is $1s^2 2s^2 2p^6$.

Therefore the Ne_2 molecule has 20 electrons distributed in this way:

$$(\sigma_{1s})^2 (\sigma_{1s}^*)^2 (\sigma_{2s})^2 (\sigma_{2s}^*)^2 (\sigma_{2p})^2 (\pi_{2p})^4 (\pi_{2p}^*)^4 (\sigma_{2p}^*)^2$$

The orbital diagram for Ne_2 molecule is:

