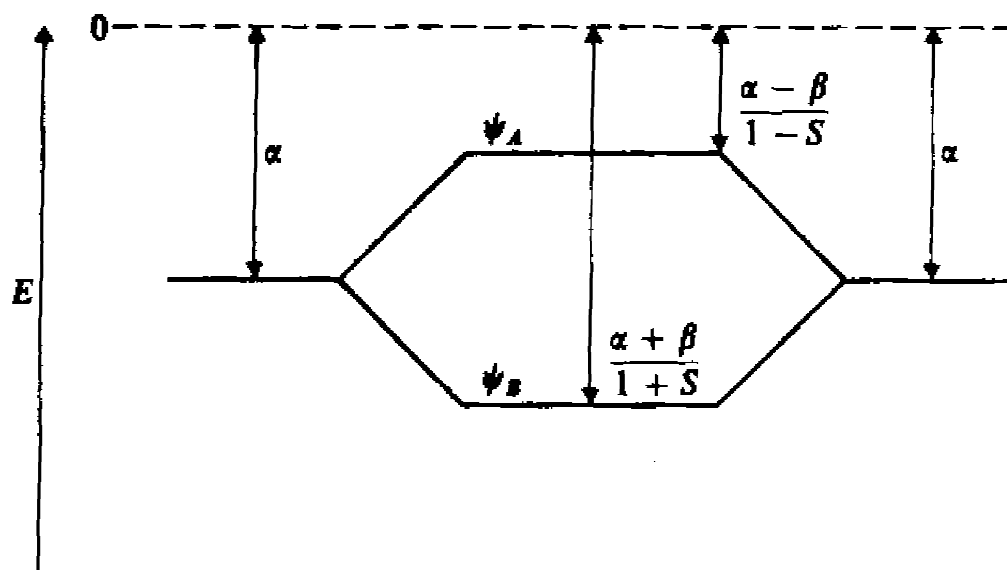


MO Diagram for Dihydrogen - Like Molecules



| Species | Electron configuration | Bond order |
|----------------|--------------------------------|---------------|
| H_2^+ | $(1s\sigma_B)^1$ | $\frac{1}{2}$ |
| H_2 | $(1s\sigma_B)^2$ | 1 |
| HHe | $(1s\sigma_B)^2(1s\sigma^*)^1$ | $\frac{1}{2}$ |
| He_2 | $(1s\sigma_B)^2(1s\sigma^*)^2$ | 0 |