

Experimental Data for Selected First-Row Diatomics

Molecule	MO Theory Bond Order	Bond Length (Å)	BDE (kJ/mol)
H_2^+	0.5	1.05	255
H_2	1	0.74	432
H_2^-	0.5	~1.1	~200

For a given pair of atoms, increasing bond order leads to shorter and stronger bonds.