F + V = E + 2
The Platonic Solids

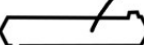| Icosahedron	Dodecahedron	Octahedron	Cube	Tetrahedron
20 Faces	12 Faces	8 Faces	6 Faces	4 Faces
12 Vertices	20 Vertices	6 Vertices	8 Vertices	4 Vertices
30 Edges	30 Edges	12 Edges	12 Edges	6 Edges

Edge lengths stated are for the 50mm circumradius set

The 50mm edge set has the same edge length (50mm) for all models
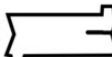
Face model

20x

Edge model

30x

Edge length approx 53mm
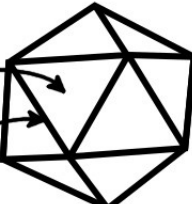{3, 5} Five triangle faces
or five 60° edges
at each vertex

Icosahedron
20 Faces
12 Vertices
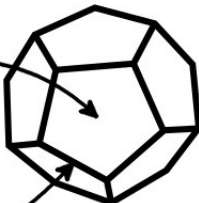30 Edges

Face model

12x

Edge model

30x

Edge length approx 36mm
{5, 3} Three pentagon faces
or three 108° edges
at each vertex
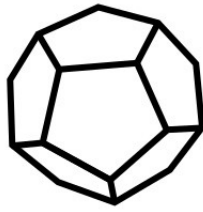
Dodecahedron
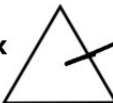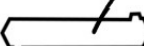12 Faces
20 Vertices
30 Edges

Face model

8x

Edge model

12x
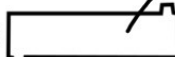
Edge length approx 71mm
{3, 4} Four triangle faces
or four 60° edges
at each vertex
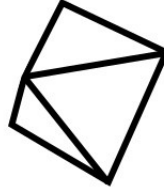
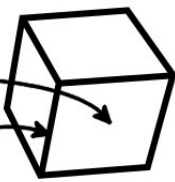**Octahedron**
8 Faces
6 Vertices
12 Edges

Face model

6x

Edge model

12x

Edge length approx 58mm
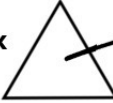{4, 3} Three square faces
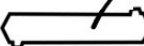or three 90° edges
at each vertex
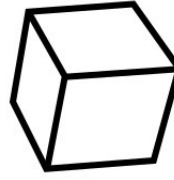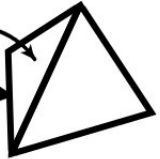
Cube
6 Faces
8 Vertices
12 Edges

Face model

4x

Edge model

6x

Edge length approx 82mm
{3, 3} Three triangle faces
or three 60° edges
at each vertex
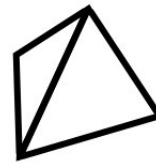
Tetrahedron
4 Faces
4 Vertices
6 Edges