

Number of vertices $n = 6$.

Adjacencies of Graph

1. vertex 1 adjacent to 2 3 4
2. vertex 2 adjacent to 1 3 5
3. vertex 3 adjacent to 1 2 6
4. vertex 4 adjacent to 1 5 6
5. vertex 5 adjacent to 2 4 6
6. vertex 6 adjacent to 3 4 5

Size of automorphism group of the graph=12

Full group: $|Aut(polytope)| = 384$

Restricted group: $|Aut(G) \times switch| = 384$

Number of orbits for the full group : 3

List of orbits of facets for the full group: Total number of orbits = 3 Total number of facets = 38

1. Inequality 1 with incidence 24 and stabilizer of size 48. Orbit size is 8

$(1,2) : 0$	$(1,3) : 0$	$(1,4) : 0$	$(2,3) : 0$	$(2,5) : 0$	$(3,6) : 0$
$(4,5) : 1$	$(4,6) : 1$	$(5,6) : -1$			

2. Inequality 2 with incidence 16 and stabilizer of size 16. Orbit size is 24

$(1,2) : -1$	$(1,3) : 0$	$(1,4) : 1$	$(2,3) : 0$	$(2,5) : 1$	$(3,6) : 0$
$(4,5) : 1$	$(4,6) : 0$	$(5,6) : 0$			

3. Inequality 3 with incidence 16 and stabilizer of size 64. Orbit size is 6

$(1,2) : 0$	$(1,3) : 0$	$(1,4) : 1$	$(2,3) : 0$	$(2,5) : 0$	$(3,6) : 0$
$(4,5) : 0$	$(4,6) : 0$	$(5,6) : 0$			