Number of vertices $n = 6$.
Adjacencies of Graph

1. vertex 1 adjacent to 2 3 4 5

2. vertex 2 adjacent to 1 3 5 6

3. vertex 3 adjacent to 1 2 4 6

4. vertex 4 adjacent to 1 3 5 6

5. vertex 5 adjacent to 1 2 4 6

6. vertex 6 adjacent to 2 3 4 5

Size of automorphism group of the graph=48
Full group: $|Aut(polytope)| = 1536$
Restricted group: $|Aut(G) \times switch| = 1536$
Number of orbits for the full group : 2
List of orbits of facets for the full group: Total number of orbits = 2 Total number of facets = 56

1. Inequality 1 with incidence 24 and stabilizer of size 48. Orbit size is 32 nature: 3-cycle inequality, C=[5, 6, 2] F=[5, 6]

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

2. Inequality 2 with incidence 16 and stabilizer of size 64. Orbit size is 24 nature: 4-cycle inequality, C=[1, 2, 6, 4] F=[1, 2]

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

1