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

1. vertex 1 adjacent to 2 3 4 5 6

2. vertex 2 adjacent to 1 3 4 5 6

3. vertex 3 adjacent to 1 2 4 5 6

4. vertex 4 adjacent to 1 2 3

5. vertex 5 adjacent to 1 2 3

6. vertex 6 adjacent to 1 2 3

Size of automorphism group of the graph=36
   Full group: $|Aut(polytope)| = 1152$
   Restricted group: $|Aut(G) \times switch| = 1152$
   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 $= 40$

1. Inequality 1 with incidence 24 and stabilizer of size 32. Orbit size is 36

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

2. Inequality 2 with incidence 24 and stabilizer of size 288. Orbit size is 4

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

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