Number of vertices $n = 5$.
Adjacencies of Graph

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

Size of automorphism group of the graph=12
Full group: $|Aut(polytope)| = 192$
Restricted group: $|Aut(G) \times switch| = 192$
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 = 28

1. Inequality 1 with incidence 12 and stabilizer of size 8. Orbit size is 24
   nature: 3-cycle inequality, C=[2, 5, 1] F=[2, 5]

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

2. Inequality 2 with incidence 12 and stabilizer of size 48. Orbit size is 4
   nature: 3-cycle inequality, C=[2, 3, 1] F=[2, 3]

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