Number of vertices $n = 8$.
Adjacencies of Graph

1. vertex 1 adjacent to 6 7 8
2. vertex 2 adjacent to 6 7 8
3. vertex 3 adjacent to 6 7 8
4. vertex 4 adjacent to 6 7 8
5. vertex 5 adjacent to 6 7 8
6. vertex 6 adjacent to 1 2 3 4 5 7 8
7. vertex 7 adjacent to 1 2 3 4 5 6 8
8. vertex 8 adjacent to 1 2 3 4 5 6 7

Size of automorphism group of the graph=720
Full group: $|Aut(polytope)| = 92160$
Restricted group: $|Aut(G) \times switch| = 92160$
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 = 64

1. Inequality 1 with incidence 96 and stabilizer of size 1536. Orbit size is 60

(1,6) : 0	(1,7) : 0	(1,8) : 0	(2,6) : 0	(2,7) : 0	(2,8) : 0
(3,6) : -1	(3,7) : 1	(3,8) : 0	(4,6) : 0	(4,7) : 0	(4,8) : 0
(5,6) : 0	(5,7) : 0	(5,8) : 0	(6,7) : 1	(6,8) : 0	(7,8) : 0

2. Inequality 2 with incidence 96 and stabilizer of size 23040. Orbit size is 4

(1,6) : 0	(1,7) : 0	(1,8) : 0	(2,6) : 0	(2,7) : 0	(2,8) : 0
(3,6) : 0	(3,7) : 0	(3,8) : 0	(4,6) : 0	(4,7) : 0	(4,8) : 0
(5,6) : 0	(5,7) : 0	(5,8) : 0	(6,7) : 1	(6,8) : -1	(7,8) : 1