Number of vertices n = 7.

Adjacencies of Graph

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

Size of automorphism group of the graph=240

Full group: |Aut(polytope)| = 29491200

Restricted group:  $|Aut(G) \times switch| = 15360$ 

Number of orbits for the full group: 1

List of orbits of facets for the full group: Total number of orbits = 1 Total number of facets = 100

1. Inequality 1 with incidence 32 and stabilizer of size 294912. Orbit size is 100 nature: edge inequality e=[ 1, 7 ]

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

Number of orbits for the restricted group: 2

List of orbits of facets for the restricted group: Total number of orbits = 2 Total number of facets = 100

1. Inequality 1 with incidence 32 and stabilizer of size 768. Orbit size is 20 nature: edge inequality e=[1, 7]

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

2. Inequality 2 with incidence 32 and stabilizer of size 192. Orbit size is 80 nature: 4-cycle inequality, C=[2, 6, 1, 7] F=[2, 6]

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