2. Homogenous form:
3. Lines:
4. Intersection:
6. Translation: : 2 Dof
7. Euclidean: : 3 Dof
8. similarity: : 4 Dof
9. affine: : 6 Dof
10. projective: : 8 Dof

Projective has only 8 Dof because the important of this transformation is ratio not the actual value themselves, so this matrix can be changed by multiplication by an arbitrary non-zero scale factor, which will makes one of the 9 elements result into 1, for example, 1/h11. Therefore, there are only 8 independent ratios among 9 elements.