PSp(4,3) as a symmetric (45,12,3), (40,13,4) and (36,15,6) design

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It is shown in [?] that a symmetric (36,15,6) design can be constructed from the group PSp(4,3). In the similar way from the group PSp(4,3) one can construct symmetric (40,13,4) and (45,12,3) designs.

References

[1] D. Held, J. Hrabe de Angelis, M.-O. Pavčević, $PSp_4(3)$ as a symmetric (36, 15, 6)-design, Rend. Semin. Mat. Univ. Padova 101, 95-98 (1999).