The group $G$ is isomorphic to the group labelled by [ 32, 11 ] in the Small Groups library.

Ordinary character table of $G \cong$ (C4 x C4) : C2:

| | 1a | 4a | 2a | 4b | 2b | 4c | 2c | 4d | 8a | 8b | 4e | 4f | 4g | 4h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $\chi_1$ | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| $\chi_2$ | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | $-1$ | $-1$ | $-1$ | $-1$ | $-1$ | $-1$ |
| $\chi_3$ | 1 | 1 | 1 | 1 | 1 | 1 | $-1$ | $-1$ | 1 | 1 | $-1$ | $-1$ | $-1$ | $-1$ |
| $\chi_4$ | 1 | 1 | 1 | 1 | 1 | 1 | $-1$ | $-1$ | $-1$ | $-1$ | 1 | 1 | 1 | 1 |
| $\chi_5$ | 2 | 2 | 2 | 2 | $-2$ | $-2$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $\chi_6$ | 1 | $-1$ | 1 | $-1$ | $-1$ | 1 | 1 | $-1$ | $E(4)$ | $-E(4)$ | $E(4)$ | $-E(4)$ | $E(4)$ | $-E(4)$ |
| $\chi_7$ | 1 | $-1$ | 1 | $-1$ | $-1$ | 1 | 1 | $-1$ | $-E(4)$ | $E(4)$ | $E(4)$ | $-E(4)$ | $E(4)$ | $-E(4)$ |
| $\chi_8$ | 1 | $-1$ | 1 | $-1$ | $-1$ | 1 | $-1$ | 1 | $E(4)$ | $-E(4)$ | $-E(4)$ | $E(4)$ | $-E(4)$ | $E(4)$ |
| $\chi_9$ | 1 | $-1$ | 1 | $-1$ | $-1$ | 1 | $-1$ | 1 | $-E(4)$ | $E(4)$ | $-E(4)$ | $E(4)$ | $-E(4)$ | $E(4)$ |
| $\chi_{10}$ | 2 | $-2$ | 2 | $-2$ | 2 | $-2$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $\chi_{11}$ | 2 | $2*E(4)$ | $-2$ | $-2*E(4)$ | 0 | 0 | 0 | 0 | 0 | 0 | $1+E(4)$ | $-1+E(4)$ | $-1-E(4)$ | $1-E(4)$ |
| $\chi_{12}$ | 2 | $-2*E(4)$ | $-2$ | $2*E(4)$ | 0 | 0 | 0 | 0 | 0 | 0 | $1-E(4)$ | $-1-E(4)$ | $-1+E(4)$ | $1+E(4)$ |
| $\chi_{13}$ | 2 | $2*E(4)$ | $-2$ | $-2*E(4)$ | 0 | 0 | 0 | 0 | 0 | 0 | $-1-E(4)$ | $1-E(4)$ | $1+E(4)$ | $-1+E(4)$ |
| $\chi_{14}$ | 2 | $-2*E(4)$ | $-2$ | $2*E(4)$ | 0 | 0 | 0 | 0 | 0 | 0 | $-1+E(4)$ | $1+E(4)$ | $1-E(4)$ | $-1-E(4)$ |

Trivial source character table of $G \cong$ (C4 x C4) : C2 at $p = 2$:

| Normalisers $N_i$ | $N_1$ | $N_2$ | $N_3$ | $N_4$ | $N_5$ | $N_6$ | $N_7$ | $N_8$ | $N_9$ | $N_{10}$ | $N_{11}$ | $N_{12}$ | $N_{13}$ | $N_{14}$ | $N_{15}$ | $N_{16}$ | $N_{17}$ | $N_{18}$ | $N_{19}$ | $N_{20}$ | $N_{21}$ | $N_{22}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $p$-subgroups of $G$ up to conjugacy in $G$ | $P_1$ | $P_2$ | $P_3$ | $P_4$ | $P_5$ | $P_6$ | $P_7$ | $P_8$ | $P_9$ | $P_{10}$ | $P_{11}$ | $P_{12}$ | $P_{13}$ | $P_{14}$ | $P_{15}$ | $P_{16}$ | $P_{17}$ | $P_{18}$ | $P_{19}$ | $P_{20}$ | $P_{21}$ | $P_{22}$ |
| Representatives $n_j \in N_i$ | 1a | 1a | 1a | 1a | 1a | 1a | 1a | 1a | 1a | 1a | 1a | 1a | 1a | 1a | 1a | 1a | 1a | 1a | 1a | 1a | 1a | 1a |
| $1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 2 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 1 \cdot \chi_9 + 2 \cdot \chi_{10} + 2 \cdot \chi_{11} + 2 \cdot \chi_{12} + 2 \cdot \chi_{13} + 2 \cdot \chi_{14}$ | 32 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 2 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 1 \cdot \chi_9 + 2 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$ | 16 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 2 \cdot \chi_{10} + 1 \cdot \chi_{11} + 1 \cdot \chi_{12} + 1 \cdot \chi_{13} + 1 \cdot \chi_{14}$ | 16 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9 + 0 \cdot \chi_{10} + 1 \cdot \chi_{11} + 1 \cdot \chi_{12} + 1 \cdot \chi_{13} + 1 \cdot \chi_{14}$ | 16 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 2 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$ | 8 | 8 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 1 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$ | 8 | 8 | 8 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 1 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$ | 8 | 8 | 8 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 2 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$ | 8 | 8 | 8 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 1 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$ | 8 | 8 | 0 | 4 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 1 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$ | 8 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 1 \cdot \chi_{10} + 1 \cdot \chi_{11} + 1 \cdot \chi_{12} + 1 \cdot \chi_{13} + 1 \cdot \chi_{14}$ | 8 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 1 \cdot \chi_{10} + 1 \cdot \chi_{11} + 1 \cdot \chi_{12} + 1 \cdot \chi_{13} + 1 \cdot \chi_{14}$ | 8 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$ | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$ | 4 | 4 | 0 | 2 | 4 | 0 | 4 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$ | 4 | 4 | 0 | 4 | 0 | 4 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$ | 4 | 4 | 4 | 0 | 0 | 4 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
| $1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 2 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$ | 4 | 4 | 4 | 0 | 0 | 0 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| $1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 1 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$ | 4 | 4 | 4 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 |
| $1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 1 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$ | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 0 | 2 | 0 | 2 | 0 | 0 | 0 |
| $1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$ | 2 | 2 | 2 | 0 | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 2 | 0 | 0 |
| $1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$ | 2 | 2 | 0 | 2 | 2 | 2 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 |
| $1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$ | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

$P_1 = Group([()]) \cong 1$

$P_2 = Group([(1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32)]) \cong$ C2

$P_3 = Group([(1,14)(2,20)(3,23)(4,16)(5,15)(6,26)(7,27)(8,22)(9,21)(10,30)(11,25)(12,24)(13,31)(17,29)(18,28)(19,32)]) \cong$ C2

$P_4 = Group([(1,3)(2,7)(4,24)(5,12)(6,13)(8,28)(9,18)(10,19)(11,15)(14,31)(16,25)(17,21)(20,32)(22,29)(23,26)(27,30)]) \cong$ C2

$P_5 = Group([(1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,5,6,16)(2,9,10,22)(3,12,13,25)(4,14,15,26)(7,18,19,29)(8,20,21,30)(11,23,24,31)(17,27,28,32)]) \cong$ C4

$P_6 = Group([(1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,4,6,15)(2,8,10,21)(3,11,13,24)(5,14,16,26)(7,17,19,28)(9,20,22,30)(12,23,25,31)(18,27,29,32)]) \cong$ C4

$P_7 = Group([(1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,14)(2,20)(3,23)(4,16)(5,15)(6,26)(7,27)(8,22)(9,21)(10,30)(11,25)(12,24)(13,31)(17,29)(18,28)(19,32)]) \cong$ C2 x C2

$P_8 = Group([(1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,3)(2,7)(4,24)(5,12)(6,13)(8,28)(9,18)(10,19)(11,15)(14,31)(16,25)(17,21)(20,32)(22,29)(23,26)(27,30)]) \cong$ C2 x C2

$P_9 = Group([(1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,12,6,25)(2,18,10,29)(3,5,13,16)(4,31,15,23)(7,9,19,22)(8,32,21,27)(11,26,24,14)(17,30,28,20)]) \cong$ C4

$P_{10} = Group([(1,17,14,29)(2,23,20,3)(4,19,16,32)(5,27,15,7)(6,28,26,18)(8,25,22,11)(9,24,21,12)(10,31,30,13), (1,14)(2,20)(3,23)(4,16)(5,15)(6,26)(7,27)(8,22)(9,21)(10,30)(11,25)(12,24)(13,31)(17,29)(18,28)(19,32)]) \cong$ C4

$P_{11} = Group([(1,28,14,18)(2,31,20,13)(3,10,23,30)(4,7,16,27)(5,32,15,19)(6,17,26,29)(8,12,22,24)(9,11,21,25), (1,14)(2,20)(3,23)(4,16)(5,15)(6,26)(7,27)(8,22)(9,21)(10,30)(11,25)(12,24)(13,31)(17,29)(18,28)(19,32)]) \cong$ C4

$P_{12} = Group([(1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,4,6,15)(2,8,10,21)(3,11,13,24)(5,14,16,26)(7,17,19,28)(9,20,22,30)(12,23,25,31)(18,27,29,32), (1,5,6,16)(2,9,10,22)(3,12,13,25)(4,14,15,26)(7,18,19,29)(8,20,21,30)(11,23,24,31)(17,27,28,32)]) \cong$ C4 x C2

$P_{13} = Group([(1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,3)(2,7)(4,24)(5,12)(6,13)(8,28)(9,18)(10,19)(11,15)(14,31)(16,25)(17,21)(20,32)(22,29)(23,26)(27,30), (1,5,6,16)(2,9,10,22)(3,12,13,25)(4,14,15,26)(7,18,19,29)(8,20,21,30)(11,23,24,31)(17,27,28,32)]) \cong$ C4 x C2

$P_{14} = Group([(1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,3)(2,7)(4,24)(5,12)(6,13)(8,28)(9,18)(10,19)(11,15)(14,31)(16,25)(17,21)(20,32)(22,29)(23,26)(27,30), (1,4,6,15)(2,8,10,21)(3,11,13,24)(5,14,16,26)(7,17,19,28)(9,20,22,30)(12,23,25,31)(18,27,29,32)]) \cong$ D8

$P_{15} = Group([(1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,12,6,25)(2,18,10,29)(3,5,13,16)(4,31,15,23)(7,9,19,22)(8,32,21,27)(11,26,24,14)(17,30,28,20), (1,4,6,15)(2,8,10,21)(3,11,13,24)(5,14,16,26)(7,17,19,28)(9,20,22,30)(12,23,25,31)(18,27,29,32)]) \cong$ Q8

$P_{16} = Group([(1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,3)(2,7)(4,24)(5,12)(6,13)(8,28)(9,18)(10,19)(11,15)(14,31)(16,25)(17,21)(20,32)(22,29)(23,26)(27,30), (1,14)(2,20)(3,23)(4,16)(5,15)(6,26)(7,27)(8,22)(9,21)(10,30)(11,25)(12,24)(13,31)(17,29)(18,28)(19,32)]) \cong$ C8

$P_{17} = Group([(1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,2,5,9,6,10,16,22)(3,17,12,27,13,28,25,32)(4,21,14,30,15,8,26,20)(7,23,18,24,19,31,29,11), (1,5,6,16)(2,9,10,22)(3,12,13,25)(4,14,15,26)(7,18,19,29)(8,20,21,30)(11,23,24,31)(17,27,28,32)]) \cong$ C8

$P_{18} = Group([(1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,17,14,29)(2,23,20,3)(4,19,16,32)(5,27,15,7)(6,28,26,18)(8,25,22,11)(9,24,21,12)(10,31,30,13), (1,14)(2,20)(3,23)(4,16)(5,15)(6,26)(7,27)(8,22)(9,21)(10,30)(11,25)(12,24)(13,31)(17,29)(18,28)(19,32)]) \cong$ C4 x C2

$P_{19} = Group([(1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,4,6,15)(2,8,10,21)(3,11,13,24)(5,14,16,26)(7,17,19,28)(9,20,22,30)(12,23,25,31)(18,27,29,32), (1,3)(2,7)(4,24)(5,12)(6,13)(8,28)(9,18)(10,19)(11,15)(14,31)(16,25)(17,21)(20,32)(22,29)(23,26)(27,30)]) \cong$ (C4 x C2) : C2

$P_{20} = Group([(1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,4,6,15)(2,8,10,21)(3,11,13,24)(5,14,16,26)(7,17,19,28)(9,20,22,30)(12,23,25,31)(18,27,29,32), (1,2,5,9,6,10,16,22)(3,17,12,27,13,28,25,32)(4,21,14,30,15,8,26,20)(7,23,18,24,19,31,29,11)]) \cong$ C8 : C2

$P_{21} = Group([(1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,4,6,15)(2,8,10,21)(3,11,13,24)(5,14,16,26)(7,17,19,28)(9,20,22,30)(12,23,25,31)(18,27,29,32), (1,3)(2,7)(4,24)(5,12)(6,13)(8,28)(9,18)(10,19)(11,15)(14,31)(16,25)(17,21)(20,32)(22,29)(23,26)(27,30)]) \cong$ (C4 x C4) : C2

$P_{22} = Group([(1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,4,6,15)(2,8,10,21)(3,11,13,24)(5,14,16,26)(7,17,19,28)(9,20,22,30)(12,23,25,31)(18,27,29,32), (1,3)(2,7)(4,24)(5,12)(6,13)(8,28)(9,18)(10,19)(11,15)(14,31)(16,25)(17,21)(20,32)(22,29)(23,26)(27,30)]) \cong$ (C4 x C4) : C2

$N_1 = Group([(1,2,5,9,6,10,16,22)(3,17,12,27,13,28,25,32)(4,21,14,30,15,8,26,20)(7,23,18,24,19,31,29,11), (1,3)(2,7)(4,24)(5,12)(6,13)(8,28)(9,18)(10,19)(11,15)(14,31)(16,25)(17,21)(20,32)(22,29)(23,26)(27,30), (1,4,6,15)(2,8,10,21)(3,11,13,24)(5,14,16,26)(7,17,19,28)(9,20,22,30)(12,23,25,31)(18,27,29,32), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32)]) \cong$ (C4 x C4) : C2

$N_2 = Group([(1,2,5,9,6,10,16,22)(3,17,12,27,13,28,25,32)(4,21,14,30,15,8,26,20)(7,23,18,24,19,31,29,11), (1,3)(2,7)(4,24)(5,12)(6,13)(8,28)(9,18)(10,19)(11,15)(14,31)(16,25)(17,21)(20,32)(22,29)(23,26)(27,30), (1,4,6,15)(2,8,10,21)(3,11,13,24)(5,14,16,26)(7,17,19,28)(9,20,22,30)(12,23,25,31)(18,27,29,32)]) \cong$ (C4 x C4) : C2

$N_3 = Group([(1,12,6,25)(2,18,10,29)(3,5,13,16)(4,31,15,23)(7,9,19,22)(8,32,21,27)(11,26,24,14)(17,30,28,20), (1,5,6,16)(2,9,10,22)(3,12,13,25)(4,14,15,26)(7,18,19,29)(8,20,21,30)(11,23,24,31)(17,27,28,32), (1,14)(2,20)(3,23)(4,16)(5,15)(6,26)(7,27)(8,22)(9,21)(10,30)(11,25)(12,24)(13,31)(17,29)(18,28)(19,32)]) \cong$ (C4 x C4) : C2

$N_4 = Group([(1,3)(2,7)(4,24)(5,12)(6,13)(8,28)(9,18)(10,19)(11,15)(14,31)(16,25)(17,21)(20,32)(22,29)(23,26)(27,30), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32)]) \cong$ C4 x C2

$N_5 = Group([(1,5,6,16)(2,9,10,22)(3,12,13,25)(4,14,15,26)(7,18,19,29)(8,20,21,30)(11,23,24,31)(17,27,28,32), (1,2,5,9,6,10,16,22)(3,17,12,27,13,28,25,32)(4,21,14,30,15,8,26,20)(7,23,18,24,19,31,29,11)]) \cong$ (C4 x C4) : C2

$N_6 = Group([(1,4,6,15)(2,8,10,21)(3,11,13,24)(5,14,16,26)(7,17,19,28)(9,20,22,30)(12,23,25,31)(18,27,29,32), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,2,5,9,6,10,16,22)(3,17,12,27,13,28,25,32)(4,21,14,30,15,8,26,20)(7,23,18,24,19,31,29,11), (1,3)(2,7)(4,24)(5,12)(6,13)(8,28)(9,18)(10,19)(11,15)(14,31)(16,25)(17,21)(20,32)(22,29)(23,26)(27,30)]) \cong$ (C4 x C4) : C2

$N_7 = Group([(1,14)(2,20)(3,23)(4,16)(5,15)(6,26)(7,27)(8,22)(9,21)(10,30)(11,25)(12,24)(13,31)(17,29)(18,28)(19,32), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,2,5,9,6,10,16,22)(3,17,12,27,13,28,25,32)(4,21,14,30,15,8,26,20)(7,23,18,24,19,31,29,11)]) \cong$ (C4 x C2) : C2

$N_8 = Group([(1,3)(2,7)(4,24)(5,12)(6,13)(8,28)(9,18)(10,19)(11,15)(14,31)(16,25)(17,21)(20,32)(22,29)(23,26)(27,30), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,4,6,15)(2,8,10,21)(3,11,13,24)(5,14,16,26)(7,17,19,28)(9,20,22,30)(12,23,25,31)(18,27,29,32), (1,5,6,16)(2,9,10,22)(3,12,13,25)(4,14,15,26)(7,18,19,29)(8,20,21,30)(11,23,24,31)(17,27,28,32)]) \cong$ (C4 x C4) : C2

$N_9 = Group([(1,12,6,25)(2,18,10,29)(3,5,13,16)(4,31,15,23)(7,9,19,22)(8,32,21,27)(11,26,24,14)(17,30,28,20), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,3)(2,7)(4,24)(5,12)(6,13)(8,28)(9,18)(10,19)(11,15)(14,31)(16,25)(17,21)(20,32)(22,29)(23,26)(27,30)]) \cong$ (C4 x C4) : C2

$N_{10} = Group([(1,17,14,29)(2,23,20,3)(4,19,16,32)(5,27,15,7)(6,28,26,18)(8,25,22,11)(9,24,21,12)(10,31,30,13), (1,14)(2,20)(3,23)(4,16)(5,15)(6,26)(7,27)(8,22)(9,21)(10,30)(11,25)(12,24)(13,31)(17,29)(18,28)(19,32)]) \cong$ C4 x C4

$N_{11} = Group([(1,28,14,18)(2,31,20,13)(3,10,23,30)(4,7,16,27)(5,32,15,19)(6,17,26,29)(8,12,22,24)(9,11,21,25), (1,14)(2,20)(3,23)(4,16)(5,15)(6,26)(7,27)(8,22)(9,21)(10,30)(11,25)(12,24)(13,31)(17,29)(18,28)(19,32)]) \cong$ C4 x C4

$N_{12} = Group([(1,5,6,16)(2,9,10,22)(3,12,13,25)(4,14,15,26)(7,18,19,29)(8,20,21,30)(11,23,24,31)(17,27,28,32), (1,4,6,15)(2,8,10,21)(3,11,13,24)(5,14,16,26)(7,17,19,28)(9,20,22,30)(12,23,25,31)(18,27,29,32), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,2,5,9,6,10,16,22)(3,17,12,27,13,28,25,32)(4,21,14,30,15,8,26,20)(7,23,18,24,19,31,29,11)]) \cong$ (C4 x C4) : C2

$N_{13} = Group([(1,5,6,16)(2,9,10,22)(3,12,13,25)(4,14,15,26)(7,18,19,29)(8,20,21,30)(11,23,24,31)(17,27,28,32), (1,3)(2,7)(4,24)(5,12)(6,13)(8,28)(9,18)(10,19)(11,15)(14,31)(16,25)(17,21)(20,32)(22,29)(23,26)(27,30), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32)]) \cong$ (C4 x C2) : C2

$N_{14} = Group([(1,4,6,15)(2,8,10,21)(3,11,13,24)(5,14,16,26)(7,17,19,28)(9,20,22,30)(12,23,25,31)(18,27,29,32), (1,2,5,9,6,10,16,22)(3,17,12,27,13,28,25,32)(4,21,14,30,15,8,26,20)(7,23,18,24,19,31,29,11)]) \cong$ C4 x C4

$N_{15} = Group([(1,4,6,15)(2,8,10,21)(3,11,13,24)(5,14,16,26)(7,17,19,28)(9,20,22,30)(12,23,25,31)(18,27,29,32), (1,12,6,25)(2,18,10,29)(3,5,13,16)(4,31,15,23)(7,9,19,22)(8,32,21,27)(11,26,24,14)(17,30,28,20), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32)]) \cong$ (C4 x C4) : C2

$N_{16} = Group([(1,14)(2,20)(3,23)(4,16)(5,15)(6,26)(7,27)(8,22)(9,21)(10,30)(11,25)(12,24)(13,31)(17,29)(18,28)(19,32), (1,3)(2,7)(4,24)(5,12)(6,13)(8,28)(9,18)(10,19)(11,15)(14,31)(16,25)(17,21)(20,32)(22,29)(23,26)(27,30), (1,4,6,15)(2,8,10,21)(3,11,13,24)(5,14,16,26)(7,17,19,28)(9,20,22,30)(12,23,25,31)(18,27,29,32)]) \cong$ (C4 x C2) : C2

$N_{17} = Group([(1,2,5,9,6,10,16,22)(3,17,12,27,13,28,25,32)(4,21,14,30,15,8,26,20)(7,23,18,24,19,31,29,11), (1,5,6,16)(2,9,10,22)(3,12,13,25)(4,14,15,26)(7,18,19,29)(8,20,21,30)(11,23,24,31)(17,27,28,32), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32)]) \cong$ C8 : C2

$N_{18} = Group([(1,28,14,18)(2,31,20,13)(3,10,23,30)(4,7,16,27)(5,32,15,19)(6,17,26,29)(8,12,22,24)(9,11,21,25), (1,5,6,16)(2,9,10,22)(3,12,13,25)(4,14,15,26)(7,18,19,29)(8,20,21,30)(11,23,24,31)(17,27,28,32), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32)]) \cong$ (C4 x C4) : C2

$N_{19} = Group([(1,3)(2,7)(4,24)(5,12)(6,13)(8,28)(9,18)(10,19)(11,15)(14,31)(16,25)(17,21)(20,32)(22,29)(23,26)(27,30), (1,5,6,16)(2,9,10,22)(3,12,13,25)(4,14,15,26)(7,18,19,29)(8,20,21,30)(11,23,24,31)(17,27,28,32), (1,4,6,15)(2,8,10,21)(3,11,13,24)(5,14,16,26)(7,17,19,28)(9,20,22,30)(12,23,25,31)(18,27,29,32), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32)]) \cong$ (C4 x C4) : C2

$N_{20} = Group([(1,5,6,16)(2,9,10,22)(3,12,13,25)(4,14,15,26)(7,18,19,29)(8,20,21,30)(11,23,24,31)(17,27,28,32), (1,4,6,15)(2,8,10,21)(3,11,13,24)(5,14,16,26)(7,17,19,28)(9,20,22,30)(12,23,25,31)(18,27,29,32), (1,2,5,9,6,10,16,22)(3,17,12,27,13,28,25,32)(4,21,14,30,15,8,26,20)(7,23,18,24,19,31,29,11)]) \cong$ (C4 x C4) : C2

$N_{21} = Group([(1,17,14,29)(2,23,20,3)(4,19,16,32)(5,27,15,7)(6,28,26,18)(8,25,22,11)(9,24,21,12)(10,31,30,13), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,5,6,16)(2,9,10,22)(3,12,13,25)(4,14,15,26)(7,18,19,29)(8,20,21,30)(11,23,24,31)(17,27,28,32)]) \cong$ (C4 x C4) : C2

$N_{22} = Group([(1,2,5,9,6,10,16,22)(3,17,12,27,13,28,25,32)(4,21,14,30,15,8,26,20)(7,23,18,24,19,31,29,11), (1,3)(2,7)(4,24)(5,12)(6,13)(8,28)(9,18)(10,19)(11,15)(14,31)(16,25)(17,21)(20,32)(22,29)(23,26)(27,30), (1,5,6,16)(2,9,10,22)(3,12,13,25)(4,14,15,26)(7,18,19,29)(8,20,21,30)(11,23,24,31)(17,27,28,32), (1,4,6,15)(2,8,10,21)(3,11,13,24)(5,14,16,26)(7,17,19,28)(9,20,22,30)(12,23,25,31)(18,27,29,32), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32)]) \cong$ (C4 x C4) : C2