The group $G$ is isomorphic to the group labelled by $[\,50, 3\,]$ in the Small Groups library.

Ordinary character table of $G \cong$ C5 x D10:

| | 1a | 2a | 5a | 5b | 10a | 5c | 5d | 5e | 10b | 5f | 5g | 5h | 10c | 5i | 5j | 5k | 10d | 5l | 5m | 5n |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $\chi_1$ | 1 | 1 | 1 | 1 | 1 | 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 | 1 | 1 | $-1$ | 1 | 1 | 1 |
| $\chi_3$ | 1 | $-1$ | $E(5)^4$ | 1 | $-E(5)^4$ | $E(5)^3$ | $E(5)^4$ | 1 | $-E(5)^3$ | $E(5)^2$ | $E(5)^3$ | $E(5)^4$ | $-E(5)^2$ | $E(5)$ | $E(5)^2$ | $E(5)^3$ | $-E(5)$ | $E(5)$ | $E(5)^2$ | $E(5)$ |
| $\chi_4$ | 1 | $-1$ | $E(5)^3$ | 1 | $-E(5)^3$ | $E(5)$ | $E(5)^4$ | 1 | $-E(5)$ | $E(5)^4$ | $E(5)$ | $E(5)^3$ | $-E(5)^4$ | $E(5)^2$ | $E(5)^4$ | $E(5)$ | $-E(5)^2$ | $E(5)^2$ | $E(5)^4$ | $E(5)^2$ |
| $\chi_5$ | 1 | $-1$ | $E(5)^2$ | 1 | $-E(5)^2$ | $E(5)^4$ | $E(5)^2$ | 1 | $-E(5)^4$ | $E(5)$ | $E(5)^4$ | $E(5)^2$ | $-E(5)$ | $E(5)^3$ | $E(5)$ | $E(5)^4$ | $-E(5)^3$ | $E(5)^3$ | $E(5)$ | $E(5)^3$ |
| $\chi_6$ | 1 | $-1$ | $E(5)$ | 1 | $-E(5)$ | $E(5)^2$ | $E(5)$ | 1 | $-E(5)^2$ | $E(5)^3$ | $E(5)^2$ | $E(5)$ | $-E(5)^3$ | $E(5)^4$ | $E(5)^3$ | $E(5)^2$ | $-E(5)^4$ | $E(5)^4$ | $E(5)^3$ | $E(5)^4$ |
| $\chi_7$ | 1 | 1 | $E(5)^4$ | 1 | $E(5)^4$ | $E(5)^3$ | $E(5)^4$ | 1 | $E(5)^3$ | $E(5)^2$ | $E(5)^3$ | $E(5)^4$ | $E(5)^2$ | $E(5)$ | $E(5)^2$ | $E(5)^3$ | $E(5)$ | $E(5)$ | $E(5)^2$ | $E(5)$ |
| $\chi_8$ | 1 | 1 | $E(5)^3$ | 1 | $E(5)^3$ | $E(5)$ | $E(5)^4$ | 1 | $E(5)$ | $E(5)^4$ | $E(5)$ | $E(5)^3$ | $E(5)^4$ | $E(5)^2$ | $E(5)^4$ | $E(5)$ | $E(5)^2$ | $E(5)^2$ | $E(5)^4$ | $E(5)^2$ |
| $\chi_9$ | 1 | 1 | $E(5)^2$ | 1 | $E(5)^2$ | $E(5)^4$ | $E(5)^2$ | 1 | $E(5)^4$ | $E(5)$ | $E(5)^4$ | $E(5)^2$ | $E(5)$ | $E(5)^3$ | $E(5)$ | $E(5)^4$ | $E(5)^3$ | $E(5)^3$ | $E(5)$ | $E(5)^3$ |
| $\chi_{10}$ | 1 | 1 | $E(5)$ | 1 | $E(5)$ | $E(5)^2$ | $E(5)$ | 1 | $E(5)^2$ | $E(5)^3$ | $E(5)^2$ | $E(5)$ | $E(5)^3$ | $E(5)^4$ | $E(5)^3$ | $E(5)^2$ | $E(5)^4$ | $E(5)^4$ | $E(5)^3$ | $E(5)^4$ |
| $\chi_{11}$ | 2 | 0 | 2 | $E(5)^2+E(5)^3$ | 0 | 2 | $E(5)^2+E(5)^3$ | $E(5)+E(5)^4$ | 0 | 2 | $E(5)+E(5)^4$ | $E(5)+E(5)^4$ | 0 | 2 | $E(5)^2+E(5)^3$ | $E(5)+E(5)^4$ | 0 | $E(5)^2+E(5)^3$ | $E(5)+E(5)^4$ | $E(5)^2+E(5)^4$ |
| $\chi_{12}$ | 2 | 0 | 2 | $E(5)+E(5)^4$ | 0 | 2 | $E(5)+E(5)^4$ | $E(5)^2+E(5)^3$ | 0 | 2 | $E(5)+E(5)^4$ | $E(5)^2+E(5)^3$ | 0 | 2 | $E(5)+E(5)^4$ | $E(5)^2+E(5)^3$ | 0 | $E(5)+E(5)^4$ | $E(5)^2+E(5)^3$ | $E(5)^2+E(5)^3$ |
| $\chi_{13}$ | 2 | 0 | $2*E(5)^4$ | $E(5)^2+E(5)^3$ | 0 | $2*E(5)^3$ | $E(5)+E(5)^2$ | $E(5)+E(5)^4$ | 0 | $2*E(5)^2$ | $-E(5)^2-E(5)^3-E(5)^4$ | $-E(5)-E(5)^2-E(5)^4$ | 0 | $2*E(5)$ | $-E(5)-E(5)^2-E(5)^3$ | $E(5)^2+E(5)^4$ | 0 | $E(5)^3+E(5)^4$ | $E(5)+E(5)^2$ | $-E(5)-E(5)^3-E(5)^4$ |
| $\chi_{14}$ | 2 | 0 | $2*E(5)$ | $E(5)^2+E(5)^3$ | 0 | $2*E(5)^2$ | $E(5)^3+E(5)^4$ | $E(5)+E(5)^4$ | 0 | $2*E(5)^3$ | $-E(5)-E(5)^2-E(5)^3$ | $-E(5)-E(5)^3-E(5)^4$ | 0 | $2*E(5)^4$ | $-E(5)^2-E(5)^3-E(5)^4$ | $E(5)+E(5)^3$ | 0 | $E(5)+E(5)^2$ | $E(5)^2+E(5)^4$ | $-E(5)-E(5)^2-E(5)^4$ |
| $\chi_{15}$ | 2 | 0 | $2*E(5)^3$ | $E(5)+E(5)^4$ | 0 | $2*E(5)$ | $E(5)^2+E(5)^3$ | $E(5)^2+E(5)^3$ | 0 | $2*E(5)^4$ | $-E(5)-E(5)^3-E(5)^4$ | $-E(5)^2-E(5)^3-E(5)^4$ | 0 | $2*E(5)^2$ | $-E(5)-E(5)^3-E(5)^4$ | $E(5)^3+E(5)^4$ | 0 | $E(5)+E(5)^3$ | $E(5)+E(5)^2$ | $-E(5)-E(5)^2-E(5)^4$ |
| $\chi_{16}$ | 2 | 0 | $2*E(5)^2$ | $E(5)+E(5)^4$ | 0 | $2*E(5)^4$ | $E(5)+E(5)^3$ | $E(5)^2+E(5)^3$ | 0 | $2*E(5)$ | $-E(5)-E(5)^2-E(5)^4$ | $-E(5)-E(5)^2-E(5)^3$ | 0 | $2*E(5)^3$ | $-E(5)-E(5)^3-E(5)^4$ | $E(5)+E(5)^2$ | 0 | $E(5)^2+E(5)^4$ | $E(5)^3+E(5)^4$ | $-E(5)^2-E(5)^3-E(5)^4$ |
| $\chi_{17}$ | 2 | 0 | $2*E(5)^3$ | $E(5)^2+E(5)^3$ | 0 | $2*E(5)$ | $E(5)^2+E(5)^3$ | $E(5)+E(5)^4$ | 0 | $2*E(5)^4$ | $E(5)^3+E(5)^4$ | $E(5)^2+E(5)^3$ | 0 | $2*E(5)^2$ | $E(5)+E(5)^2$ | $-E(5)-E(5)^2-E(5)^3$ | 0 | $-E(5)-E(5)^2-E(5)^3$ | $-E(5)^2-E(5)^3-E(5)^4$ | $E(5)+E(5)^3$ |
| $\chi_{18}$ | 2 | 0 | $2*E(5)^2$ | $E(5)^2+E(5)^3$ | 0 | $2*E(5)^4$ | $-E(5)-E(5)^2-E(5)^3$ | $E(5)+E(5)^4$ | 0 | $2*E(5)$ | $E(5)+E(5)^2$ | $E(5)+E(5)^3$ | 0 | $2*E(5)^3$ | $E(5)^3+E(5)^4$ | $-E(5)-E(5)^2-E(5)^4$ | 0 | $-E(5)^2-E(5)^3-E(5)^4$ | $-E(5)-E(5)^3-E(5)^4$ | $E(5)^2+E(5)^4$ |
| $\chi_{19}$ | 2 | 0 | $2*E(5)^4$ | $E(5)+E(5)^4$ | 0 | $2*E(5)^3$ | $-E(5)-E(5)^2-E(5)^4$ | $E(5)^2+E(5)^3$ | 0 | $2*E(5)^2$ | $E(5)^2+E(5)^3$ | $E(5)+E(5)^2$ | 0 | $2*E(5)$ | $E(5)+E(5)^3$ | $-E(5)^2-E(5)^3-E(5)^4$ | 0 | $-E(5)-E(5)^3-E(5)^4$ | $E(5)^3+E(5)^4$ | $E(5)^2+E(5)^4$ |
| $\chi_{20}$ | 2 | 0 | $2*E(5)$ | $E(5)+E(5)^4$ | 0 | $2*E(5)^2$ | $-E(5)-E(5)^3-E(5)^4$ | $E(5)^2+E(5)^3$ | 0 | $2*E(5)^3$ | $E(5)^2+E(5)^3$ | $E(5)+E(5)^2$ | 0 | $2*E(5)^4$ | $E(5)^2+E(5)^4$ | $-E(5)-E(5)^2-E(5)^3$ | 0 | $-E(5)-E(5)^2-E(5)^3$ | $-E(5)^2-E(5)^3-E(5)^4$ | $E(5)+E(5)^4$ |

Trivial source character table of $G \cong$ C5 x D10 at $p = 5$:

| | $N_1$ | | $N_2$ | | $N_3$ | | $N_4$ | $N_5$ | $N_6$ | |
|---|---|---|---|---|---|---|---|---|---|---|
| Normalisers $N_i$ | | | | | | | | | | |
| $p$-subgroups of $G$ up to conjugacy in $G$ | $P_1$ | | $P_2$ | | $P_3$ | | $P_4$ | $P_5$ | $P_6$ | |
| Representatives $n_j \in N_i$ | 1a | 2a | 1a | 2a | 1a | 2a | 1a | 1a | 1a | 2a |
| $0\cdot\chi_1+1\cdot\chi_2+1\cdot\chi_3+1\cdot\chi_4+1\cdot\chi_5+1\cdot\chi_6+0\cdot\chi_7+0\cdot\chi_8+0\cdot\chi_9+0\cdot\chi_{10}+1\cdot\chi_{11}+1\cdot\chi_{12}+1\cdot\chi_{13}+1\cdot\chi_{14}+1\cdot\chi_{15}+1\cdot\chi_{16}+1\cdot\chi_{17}+1\cdot\chi_{18}+1\cdot\chi_{19}+1\cdot\chi_{20}$ | 25 | $-5$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $1\cdot\chi_1+0\cdot\chi_2+0\cdot\chi_3+0\cdot\chi_4+0\cdot\chi_5+0\cdot\chi_6+1\cdot\chi_7+1\cdot\chi_8+1\cdot\chi_9+1\cdot\chi_{10}+1\cdot\chi_{11}+1\cdot\chi_{12}+1\cdot\chi_{13}+1\cdot\chi_{14}+1\cdot\chi_{15}+1\cdot\chi_{16}+1\cdot\chi_{17}+1\cdot\chi_{18}+1\cdot\chi_{19}+1\cdot\chi_{20}$ | 25 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $0\cdot\chi_1+1\cdot\chi_2+0\cdot\chi_3+0\cdot\chi_4+0\cdot\chi_5+0\cdot\chi_6+0\cdot\chi_7+0\cdot\chi_8+0\cdot\chi_9+0\cdot\chi_{10}+1\cdot\chi_{11}+1\cdot\chi_{12}+0\cdot\chi_{13}+0\cdot\chi_{14}+0\cdot\chi_{15}+0\cdot\chi_{16}+0\cdot\chi_{17}+0\cdot\chi_{18}+0\cdot\chi_{19}+0\cdot\chi_{20}$ | 5 | $-1$ | 5 | $-1$ | 0 | 0 | 0 | 0 | 0 | 0 |
| $1\cdot\chi_1+0\cdot\chi_2+0\cdot\chi_3+0\cdot\chi_4+0\cdot\chi_5+0\cdot\chi_6+0\cdot\chi_7+0\cdot\chi_8+0\cdot\chi_9+0\cdot\chi_{10}+1\cdot\chi_{11}+1\cdot\chi_{12}+0\cdot\chi_{13}+0\cdot\chi_{14}+0\cdot\chi_{15}+0\cdot\chi_{16}+0\cdot\chi_{17}+0\cdot\chi_{18}+0\cdot\chi_{19}+0\cdot\chi_{20}$ | 5 | 1 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| $1\cdot\chi_1+0\cdot\chi_2+0\cdot\chi_3+0\cdot\chi_4+0\cdot\chi_5+0\cdot\chi_6+0\cdot\chi_7+1\cdot\chi_8+1\cdot\chi_9+1\cdot\chi_{10}+0\cdot\chi_{11}+0\cdot\chi_{12}+0\cdot\chi_{13}+0\cdot\chi_{14}+0\cdot\chi_{15}+0\cdot\chi_{16}+0\cdot\chi_{17}+0\cdot\chi_{18}+0\cdot\chi_{19}+0\cdot\chi_{20}$ | 5 | 5 | 0 | 0 | 5 | 5 | 0 | 0 | 0 | 0 |
| $0\cdot\chi_1+1\cdot\chi_2+1\cdot\chi_3+1\cdot\chi_4+1\cdot\chi_5+1\cdot\chi_6+0\cdot\chi_7+0\cdot\chi_8+0\cdot\chi_9+0\cdot\chi_{10}+0\cdot\chi_{11}+0\cdot\chi_{12}+0\cdot\chi_{13}+0\cdot\chi_{14}+0\cdot\chi_{15}+0\cdot\chi_{16}+0\cdot\chi_{17}+0\cdot\chi_{18}+0\cdot\chi_{19}+0\cdot\chi_{20}$ | 5 | $-5$ | 0 | 0 | 5 | $-5$ | 0 | 0 | 0 | 0 |
| $1\cdot\chi_1+1\cdot\chi_2+0\cdot\chi_3+0\cdot\chi_4+0\cdot\chi_5+0\cdot\chi_6+0\cdot\chi_7+0\cdot\chi_8+0\cdot\chi_9+0\cdot\chi_{10}+0\cdot\chi_{11}+0\cdot\chi_{12}+1\cdot\chi_{13}+1\cdot\chi_{14}+1\cdot\chi_{15}+1\cdot\chi_{16}+1\cdot\chi_{17}+1\cdot\chi_{18}+1\cdot\chi_{19}+1\cdot\chi_{20}$ | 10 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 |
| $1\cdot\chi_1+1\cdot\chi_2+0\cdot\chi_3+0\cdot\chi_4+0\cdot\chi_5+0\cdot\chi_6+0\cdot\chi_7+0\cdot\chi_8+0\cdot\chi_9+0\cdot\chi_{10}+0\cdot\chi_{11}+0\cdot\chi_{12}+1\cdot\chi_{13}+1\cdot\chi_{14}+1\cdot\chi_{15}+1\cdot\chi_{16}+1\cdot\chi_{17}+1\cdot\chi_{18}+1\cdot\chi_{19}+1\cdot\chi_{20}$ | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 |
| $1\cdot\chi_1+0\cdot\chi_2+0\cdot\chi_3+0\cdot\chi_4+0\cdot\chi_5+0\cdot\chi_6+0\cdot\chi_7+0\cdot\chi_8+0\cdot\chi_9+0\cdot\chi_{10}+0\cdot\chi_{11}+0\cdot\chi_{12}+0\cdot\chi_{13}+0\cdot\chi_{14}+0\cdot\chi_{15}+0\cdot\chi_{16}+0\cdot\chi_{17}+0\cdot\chi_{18}+0\cdot\chi_{19}+0\cdot\chi_{20}$ | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| $0\cdot\chi_1+1\cdot\chi_2+0\cdot\chi_3+0\cdot\chi_4+0\cdot\chi_5+0\cdot\chi_6+0\cdot\chi_7+0\cdot\chi_8+0\cdot\chi_9+0\cdot\chi_{10}+0\cdot\chi_{11}+0\cdot\chi_{12}+0\cdot\chi_{13}+0\cdot\chi_{14}+0\cdot\chi_{15}+0\cdot\chi_{16}+0\cdot\chi_{17}+0\cdot\chi_{18}+0\cdot\chi_{19}+0\cdot\chi_{20}$ | 1 | $-1$ | 1 | $-1$ | 1 | 1 | $-1$ | 1 | 1 | $-1$ |

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

$P_2 = Group([(1,3,7,13,21)(2,5,10,17,26)(4,8,14,22,31)(6,11,18,27,35)(9,15,23,32,39)(12,19,28,36,42)(16,24,33,40,45)(20,29,37,43,47)(25,34,41,46,49)(30,38,44,48,50)]) \cong$ C5

$P_3 = Group([(1,16,4,25,9)(2,20,6,30,12)(3,24,8,34,15)(5,29,11,38,19)(7,33,14,41,23)(10,37,18,44,28)(13,40,22,46,32)(17,43,27,48,36)(21,45,31,49,39)(26,47,35,50,42)]) \cong$ C5

$P_4 = Group([(1,24,14,46,39)(2,29,18,48,42)(3,33,22,49,9)(4,34,23,13,45)(5,37,27,50,12)(6,38,28,17,47)(7,40,31,25,15)(8,41,32,21,16)(10,43,35,30,19)(11,44,36,26,20)]) \cong$ C5

$P_5 = Group([(1,8,23,40,49)(2,11,28,43,50)(3,14,32,45,25)(4,15,33,46,21)(5,18,36,47,30)(6,19,37,48,26)(7,22,39,16,34)(9,24,41,13,31)(10,27,42,20,38)(12,29,44,17,35)]) \cong$ C5

$P_6 = Group([(1,3,7,13,21)(2,5,10,17,26)(4,8,14,22,31)(6,11,18,27,35)(9,15,23,32,39)(12,19,28,36,42)(16,24,33,40,45)(20,29,37,43,47)(25,34,41,46,49)(30,38,44,48,50),(1,16,4,25,9)(2,20,6,30,12)(3,24,8,34,15)(5,29,11,38,19)(7,33,14,41,23)(10,37,18,44,28)(13,40,22,46,32)(17,43,27,48,36)(21,45,31,49,39)(26,47,35,50,42)]) \cong$ C5 x C5

$N_1 = Group([(1,2)(3,5)(4,30)(6,25)(7,10)(8,38)(9,20)(11,34)(12,16)(13,17)(14,44)(15,29)(18,41)(19,24)(21,26)(22,48)(23,37)(27,46)(28,33)(31,50)(32,43)(35,49)(36,40)(39,47)(42,45),(1,3,7,13,21)(2,5,10,17,26)(4,8,14,22,31)(6,11,18,27,35)(9,15,23,32,39)(12,19,28,36,42)(16,24,33,40,45)(20,29,37,43,47)(25,34,41,46,49)(30,38,44,48,50),(1,4,9,16,25)(2,6,12,20,30)(3,8,15,24,34)(5,11,19,29,38)(7,14,23,33,41)(10,18,28,37,44)(13,22,32,40,46)(17,27,36,43,48)(21,31,39,45,49)(26,35,42,47,50)]) \cong$ C5 x D10

$N_2 = Group([(1,3,7,13,21)(2,5,10,17,26)(4,8,14,22,31)(6,11,18,27,35)(9,15,23,32,39)(12,19,28,36,42)(16,24,33,40,45)(20,29,37,43,47)(25,34,41,46,49)(30,38,44,48,50),(1,2)(3,5)(4,30)(6,25)(7,10)(8,38)(9,20)(11,34)(12,16)(13,17)(14,44)(15,29)(18,41)(19,24)(21,26)(22,48)(23,37)(27,46)(28,33)(31,50)(32,43)(35,49)(36,40)(39,47)(42,45),(1,4,9,16,25)(2,6,12,20,30)(3,8,15,24,34)(5,11,19,29,38)(7,14,23,33,41)(10,18,28,37,44)(13,22,32,40,46)(17,27,36,43,48)(21,31,39,45,49)(26,35,42,47,50)]) \cong$ C5 x D10

$N_3 = Group([(1,16,4,25,9)(2,20,6,30,12)(3,24,8,34,15)(5,29,11,38,19)(7,33,14,41,23)(10,37,18,44,28)(13,40,22,46,32)(17,43,27,48,36)(21,45,31,49,39)(26,47,35,50,42)(1,2)(3,5)(4,30)(6,25)(7,10)(8,38)(9,20)(11,34)(12,16)(13,17)(14,44)(15,29)(18,41)(19,24)(21,26)(22,48)(23,37)(27,46)(28,33)(31,50)(32,43)(35,49)(36,40)(39,47)(42,45),(1,3,7,13,21)(2,5,10,17,26)(4,8,14,22,31)(6,11,18,27,35)(9,15,23,32,39)(12,19,28,36,42)(16,24,33,40,45)(20,29,37,43,47)(25,34,41,46,49)(30,38,44,48,50)]) \cong$ C5 x D10

$N_4 = Group([(1,24,14,46,39)(2,29,18,48,42)(3,33,22,49,9)(4,34,23,13,45)(5,37,27,50,12)(6,38,28,17,47)(7,40,31,25,15)(8,41,32,21,16)(10,43,35,30,19)(11,44,36,26,20)]) \cong$ C5 x C5

$N_5 = Group([(1,8,23,40,49)(2,11,28,43,50)(3,14,32,45,25)(4,15,33,46,21)(5,18,36,47,30)(6,19,37,48,26)(7,22,39,16,34)(9,24,41,13,31)(10,27,42,20,38)(12,29,44,17,35)]) \cong$ C5 x C5

$N_6 = Group([(1,16,4,25,9)(2,20,6,30,12)(3,24,8,34,15)(5,29,11,38,19)(7,33,14,41,23)(10,37,18,44,28)(13,40,22,46,32)(17,43,27,48,36)(21,45,31,49,39)(26,47,35,50,42),(1,3,7,13,21)(2,5,10,17,26)(4,8,14,22,31)(6,11,18,27,35)(9,15,23,32,39)(12,19,28,36,42)(16,24,33,40,45)(20,29,37,43,47)(25,34,41,46,49)(30,38,44,48,50),(1,2)(3,5)(4,30)(6,25)(7,10)(8,38)(9,20)(11,34)(12,16)(13,17)(14,44)(15,29)(18,41)(19,24)(21,26)(22,48)(23,37)(27,46)(28,33)(31,50)(32,43)(35,49)(36,40)(39,47)(42,45)]) \cong$ C5 x D10