

The group G is isomorphic to the group labelled by [32, 17] in the Small Groups library.
Ordinary character table of $G \cong C16 : C2$:

	$1a$	$16a$	$2a$	$8a$	$4a$	$2b$	$16b$	$16c$	$16d$	$8b$	$4b$	$8c$	$8d$	$4c$	$16e$	$16f$	$16g$	$8e$	$8f$	$16h$
χ_1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
χ_2	1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	1	-1	-1	1	1
χ_3	1	-1	1	1	1	1	-1	-1	-1	1	1	1	1	1	-1	-1	-1	1	1	-1
χ_4	1	1	-1	1	1	1	-1	1	1	-1	-1	1	1	1	-1	-1	1	-1	1	-1
χ_5	1	$-E(4)$	-1	-1	1	1	$E(4)$	$E(4)$	$-E(4)$	1	-1	-1	-1	1	$-E(4)$	$E(4)$	$E(4)$	1	-1	$-E(4)$
χ_6	1	$E(4)$	-1	-1	1	1	$-E(4)$	$-E(4)$	$E(4)$	1	-1	-1	-1	1	$E(4)$	$-E(4)$	$-E(4)$	1	-1	$E(4)$
χ_7	1	$-E(4)$	1	-1	1	1	$-E(4)$	$E(4)$	$-E(4)$	-1	1	-1	-1	1	$E(4)$	$-E(4)$	$E(4)$	-1	-1	$E(4)$
χ_8	1	$E(4)$	1	-1	1	1	$E(4)$	$-E(4)$	$E(4)$	-1	1	-1	-1	1	$-E(4)$	$E(4)$	$-E(4)$	-1	-1	$-E(4)$
χ_9	1	$-E(8)$	-1	$E(4)$	-1	1	$E(8)$	$-E(8)^3$	$E(8)$	$-E(4)$	1	$-E(4)$	$E(4)$	-1	$E(8)^3$	$-E(8)$	$E(8)^3$	$E(4)$	$-E(4)$	$-E(8)^3$
χ_{10}	1	$-E(8)^3$	-1	$-E(4)$	-1	1	$E(8)^3$	$-E(8)$	$E(8)^3$	$E(4)$	1	$E(4)$	$-E(4)$	-1	$E(8)$	$-E(8)^3$	$E(8)$	$-E(4)$	$E(4)$	$-E(8)$
χ_{11}	1	$E(8)^3$	-1	$-E(4)$	-1	1	$-E(8)^3$	$E(8)$	$-E(8)^3$	$E(4)$	1	$E(4)$	$-E(4)$	-1	$-E(8)$	$E(8)^3$	$-E(8)$	$-E(4)$	$E(4)$	$E(8)$
χ_{12}	1	$E(8)$	-1	$E(4)$	-1	1	$-E(8)$	$E(8)^3$	$-E(8)$	$-E(4)$	1	$-E(4)$	$-E(4)$	-1	$-E(8)^3$	$E(8)$	$-E(8)^3$	$E(4)$	$-E(4)$	$E(8)^3$
χ_{13}	1	$-E(8)$	1	$E(4)$	-1	1	$-E(8)$	$-E(8)^3$	$E(8)$	$E(4)$	-1	$-E(4)$	$E(4)$	-1	$-E(8)^3$	$E(8)$	$E(8)^3$	$-E(4)$	$-E(4)$	$E(8)^3$
χ_{14}	1	$-E(8)^3$	1	$-E(4)$	-1	1	$-E(8)^3$	$-E(8)$	$E(8)^3$	$-E(4)$	-1	$E(4)$	$-E(4)$	-1	$-E(8)$	$E(8)^3$	$E(8)$	$E(4)$	$E(4)$	$E(8)$
χ_{15}	1	$E(8)^3$	1	$-E(4)$	-1	1	$E(8)^3$	$E(8)$	$-E(8)^3$	$-E(4)$	-1	$E(4)$	$-E(4)$	-1	$E(8)$	$-E(8)^3$	$-E(8)$	$E(4)$	$E(4)$	$-E(8)$
χ_{16}	1	$E(8)$	1	$E(4)$	-1	1	$E(8)$	$E(8)^3$	$-E(8)$	$E(4)$	-1	$-E(4)$	$E(4)$	-1	$E(8)^3$	$-E(8)$	$-E(8)^3$	$-E(4)$	$-E(4)$	$-E(8)^3$
χ_{17}	2	0	0	$-2 * E(8)$	$2 * E(4)$	-2	0	0	0	0	0	$-2 * E(8)^3$	$2 * E(8)$	$-2 * E(4)$	0	0	0	0	$2 * E(8)^3$	0
χ_{18}	2	0	0	$-2 * E(8)^3$	$-2 * E(4)$	-2	0	0	0	0	0	$-2 * E(8)$	$2 * E(8)^3$	$2 * E(4)$	0	0	0	0	$2 * E(8)$	0
χ_{19}	2	0	0	$2 * E(8)^3$	$-2 * E(4)$	-2	0	0	0	0	0	$2 * E(8)$	$-2 * E(8)^3$	$2 * E(4)$	0	0	0	0	$-2 * E(8)$	0
χ_{20}	2	0	0	$2 * E(8)$	$2 * E(4)$	-2	0	0	0	0	0	$-2 * E(8)^3$	$-2 * E(8)$	$-2 * E(4)$	0	0	0	0	$-2 * E(8)^3$	0

Trivial source character table of $G \cong C16 : C2$ 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}
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}
Representatives $n_j \in N_i$	$1a$	$1a$	$1a$	$1a$	$1a$	$1a$	$1a$	$1a$	$1a$	$1a$	$1a$	$1a$	$1a$
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 1 \cdot \chi_9 + 1 \cdot \chi_{10} + 1 \cdot \chi_{11} + 1 \cdot \chi_{12} + 1 \cdot \chi_{13} + 1 \cdot \chi_{14} + 1 \cdot \chi_{15} + 1 \cdot \chi_{16} + 2 \cdot \chi_{17} + 2 \cdot \chi_{18} + 2 \cdot \chi_{19} + 2 \cdot \chi_{20}$	32	0	0	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 1 \cdot \chi_9 + 1 \cdot \chi_{10} + 1 \cdot \chi_{11} + 1 \cdot \chi_{12} + 1 \cdot \chi_{13} + 1 \cdot \chi_{14} + 1 \cdot \chi_{15} + 1 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20}$	16	16	0	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 1 \cdot \chi_{13} + 1 \cdot \chi_{14} + 1 \cdot \chi_{15} + 1 \cdot \chi_{16} + 1 \cdot \chi_{17} + 1 \cdot \chi_{18} + 1 \cdot \chi_{19} + 1 \cdot \chi_{20}$	16	0	8	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20}$	8	8	0	8	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 1 \cdot \chi_{13} + 1 \cdot \chi_{14} + 1 \cdot \chi_{15} + 1 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20}$	8	8	8	0	8	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 1 \cdot \chi_9 + 1 \cdot \chi_{10} + 1 \cdot \chi_{11} + 1 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20}$	8	8	0	0	0	8	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20}$	4	4	0	4	0	0	4	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20}$	4	4	4	4	4	4	0	4	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20}$	4	4	0	4	0	0	0	4	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20}$	2	2	2	2	2	2	2	2	2	2	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20}$	2	2	0	2	0	0	2	0	0	0	2	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20}$	2	2	0	2	0	0	2	0	0	0	0	2	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20}$	1	1	1	1	1	1	1	1	1	1	1	1	1

$$P_1 = \text{Group}([\emptyset]) \cong 1$$

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

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

$$P_4 = \text{Group}([(1, 6)(2, 10)(3, 13)(4, 15)(5, 16)(7, 19)(8, 21)(9, 22)(11, 24)(12, 25)(14, 26)(17, 28)(18, 29)(20, 30)(23, 31)(27, 32), (1, 5, 6, 16)(2, 9, 10, 22)(3, 12, 13, 25)(4, 14, 15, 26)(7, 18, 19, 29)(8, 20, 21, 30)(11, 23, 24, 31)(17, 27, 28, 32)]) \cong C4$$

$$P_5 = \text{Group}([(1, 6)(2, 10)(3, 13)(4, 15)(5, 16)(7, 19)(8, 21)(9, 22)(11, 24)(12, 25)(14, 26)(17, 28)(18, 29)(20, 30)(23, 31)(27, 32), (1, 3)(2, 7)(4, 11)(5, 12)(6, 13)(8, 17)(9, 18)(10, 19)(14, 23)(15, 24)(16, 25)(20, 27)(21, 28)(22, 29)(26, 31)(30, 32)]) \cong C2 \times C2$$

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

$$P_7 = \text{Group}([(1, 6)(2, 10)(3, 13)(4, 15)(5, 16)(7, 19)(8, 21)(9, 22)(11, 24)(12, 25)(14, 26)(17, 28)(18, 29)(20, 30)(23, 31)(27, 32), (1, 5, 6, 16)(2, 9, 10, 22)(3, 12, 13, 25)(4, 14, 15, 26)(7, 18, 19, 29)(8, 20, 21, 30)(11, 23, 24, 31)(17, 27, 28, 32), (1, 4, 5, 14, 6, 15, 16, 26)(2, 8, 9, 20, 10, 21, 22, 30)(3, 11, 12, 23, 13, 24, 25, 31)(7, 17, 18, 27, 19, 28, 29, 32)]) \cong C8$$

$$P_8 = \text{Group}([(1, 6)(2, 10)(3, 13)(4, 15)(5, 16)(7, 19)(8, 21)(9, 22)(11, 24)(12, 25)(14, 26)(17, 28)(18, 29)(20, 30)(23, 31)(27, 32), (1, 5, 6, 16)(2, 9, 10, 22)(3, 12, 13, 25)(4, 14, 15, 26)(7, 18, 19, 29)(8, 20, 21, 30)(11, 23, 24, 31)(17, 27, 28, 32), (1, 3)(2, 7)(4, 11)(5, 12)(6, 13)(8, 17)(9, 18)(10, 19)(14, 23)(15, 24)(16, 25)(20, 27)(21, 28)(22, 29)(26, 31)(30, 32)]) \cong C4 \times C2$$

$$P_9 = \text{Group}([(1, 6)(2, 10)(3, 13)(4, 15)(5, 16)(7, 19)(8, 21)(9, 22)(11, 24)(12, 25)(14, 26)(17, 28)(18, 29)(20, 30)(23, 31)(27, 32), (1, 5, 6, 16)(2, 9, 10, 22)(3, 12, 13, 25)(4, 14, 15, 26)(7, 18, 19, 29)(8, 20, 21, 30)(11, 23, 24, 31)(17, 27, 28, 32), (1, 11, 5, 23, 6, 24, 16, 31)(2, 17, 9, 27, 10, 28, 22, 32)(3, 4, 12, 14, 13, 15, 25, 26)(7, 8, 18, 20, 19, 21, 29, 30)]) \cong C8$$

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

$$P_{11} = \text{Group}([(1, 6)(2, 10)(3, 13)(4, 15)(5, 16)(7, 19)(8, 21)(9, 22)(11, 24)(12, 25)(14, 26)(17, 28)(18, 29)(20, 30)(23, 31)(27, 32), (1, 5, 6, 16)(2, 9, 10, 22)(3, 12, 13, 25)(4, 14, 15, 26)(7, 18, 19, 29)(8, 20, 21, 30)(11, 23, 24, 31)(17, 27, 28, 32), (1, 4, 5, 14, 6, 15, 16, 26)(2, 8, 9, 20, 10, 21, 22, 30)(3, 11, 12, 23, 13, 24, 25, 31)(7, 17, 18, 27, 19, 28, 29, 32), (1, 2, 4, 8, 5, 9, 14, 20, 6, 10, 15, 21, 16, 22, 26, 30)(3, 19, 11, 28, 12, 29, 23, 32, 13, 7, 24, 17, 25, 18, 31, 27)]) \cong C16$$

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