Large Index Comparison Magma

September 22, 2018

Group: $C_2 * C_3$

Searching up to index: 5000

How many normal groups are found: 1098

Total Time (in s) in GAP: 670.0 Total Time (in s) in MAGMA: 3095.3

Function	$\operatorname{Count}_{\operatorname{-}\!GAP}$	$Count_MAGMA$	$Time_GAP$	$Time_MAGMA$
LowIndexNormal	1	1	670.0	3095.3
FindPQuotients	527	527	536.6	893.8
FindTQuotients	1	1	78.0	1.2
FindIntersections	526	526	55.3	2200.2
$\operatorname{AddGroup}$	1437	1281	84.2	2934.8
MustCheckP	3436	2143	0.0	0.2
FindPModules	1713	545	536.5	893.5
$SMTX_BasesMaximalSubmodules$	497	492	71.2	3.5
PullBackH	784	761	102.0	15.2

Group: $C_2 * C_8$

Searching up to index : 2000

How many normal groups are found: 8092

Total Time (in s) in GAP: 10777.8 Total Time (in s) in MAGMA: 4248.3

Function	$Count_GAP$	$\operatorname{Count}_{-}\operatorname{MAGMA}$	$\mathrm{Time}_{-}\mathrm{GAP}$	$\operatorname{Time_MAGMA}$
${ m LowIndexNormal}$	1	1	10777.8	4248.3
FindPQuotients	3060	1187	9249.9	1584.5
FindTQuotients	1	1	296.3	0.3

FindIntersections	3059	1186	1231.4	2663.4
AddGroup	13207	4541	2215.5	3959.8
MustCheckP	9463	3391	0.0	0.2
FindPModules	4549	1516	9249.4	1584.1
SMTX_BasesMaximalSubmodules	2482	1096	764.3	4.7
PullBackH	9644	3292	2503.9	15.8