

Supplement 1: Maximal subgroups of the layer groups

This supplement lists the maximal subgroups of the 80 layer groups with prime or prime-square index up to 7. Much of this information can also be found in the International Tables for Crystallography Volume E and on the Bilbao Crystallographic Server (the MAXSUB program). However, the tables here include additional information useful for classifying steady-state symmetry-breaking bifurcations, and in particular the relevant factor groups.

Each table is captioned with the name of the parent layer group G . Each row of the table corresponds to a particular maximal subgroup H of that parent group. Columns from left to right give i) the number of the subgroup; ii) the Hermann-Mauguin symbol of the subgroup; iii) the index of the subgroup in the parent group; iv) the type of subgroup, either ‘t’ for translationengleiche (translations retained) or ‘k’ for klassengleiche (translations reduced); v) the factor group G/N ; vi) the normal core N of the subgroup H in G (the largest normal subgroup of G contained in H); vii) the Hermann-Mauguin symbol of the normal core; viii) the image of the subgroup H under the natural homomorphism from G to the cosets gN ; ix) the corresponding classification of a steady-state bifurcation from the group G to its subgroup H . Axial isotropy subgroups are generically associated with either pitchfork or transcritical bifurcations. Where the table lists pitchfork, a pitchfork bifurcation is necessitated by the symmetry. Where the table lists transcritical, a transcritical bifurcation may be associated with the transition, although in certain degenerate cases these transitions can also be pitchforks. Some subgroups are associated with complex irreps (marked as “(complex)”): these subgroups cannot be associated with steady-state bifurcations. For some of the larger factor groups, the given group-subgroup transition is associated with more than one irrep, and potentially both bifurcations types (marked as “pfork + trans”).

Table 1: Maximal subgroups of $p1$ (No. 1)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
1	$p1$	2	k	C_2	1	$p1$	C_1	pitchfork
1	$p1$	3	k	C_3	1	$p1$	C_1	(complex)
1	$p1$	5	k	C_5	1	$p1$	C_1	(complex)
1	$p1$	7	k	C_7	1	$p1$	C_1	(complex)

Table 2: Maximal subgroups of $p\bar{1}$ (No. 2)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
1	$p1$	2	t	C_2	1	$p1$	C_1	pitchfork
2	$p\bar{1}$	2	k	C_2	2	$p\bar{1}$	C_1	pitchfork
2	$p\bar{1}$	3	k	D_3	1	$p1$	C_2	transcritical
2	$p\bar{1}$	5	k	D_5	1	$p1$	C_2	pitchfork
2	$p\bar{1}$	7	k	D_7	1	$p1$	C_2	pitchfork

Table 3: Maximal subgroups of $p112$ (No. 3)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
1	$p1$	2	t	C_2	1	$p1$	C_1	pitchfork
3	$p112$	2	k	C_2	3	$p112$	C_1	pitchfork
3	$p112$	3	k	D_3	1	$p1$	C_2	transcritical
3	$p112$	5	k	D_5	1	$p1$	C_2	pitchfork
3	$p112$	7	k	D_7	1	$p1$	C_2	pitchfork

Table 4: Maximal subgroups of $p11m$ (No. 4)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
1	$p1$	2	t	C_2	1	$p1$	C_1	pitchfork
4	$p11m$	2	k	C_2	4	$p11m$	C_1	pitchfork
4	$p11m$	3	k	C_3	4	$p11m$	C_1	(complex)
4	$p11m$	5	k	C_5	4	$p11m$	C_1	(complex)
4	$p11m$	7	k	C_7	4	$p11m$	C_1	(complex)
5	$p11a$	2	k	C_2	5	$p11a$	C_1	pitchfork

Table 5: Maximal subgroups of $p11a$ (No. 5)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
1	$p1$	2	t	C_2	1	$p1$	C_1	pitchfork
5	$p11a$	2	k	C_2	5	$p11a$	C_1	pitchfork
5	$p11a$	3	k	C_3	5	$p11a$	C_1	(complex)
5	$p11a$	5	k	C_5	5	$p11a$	C_1	(complex)
5	$p11a$	7	k	C_7	5	$p11a$	C_1	(complex)

Table 6: Maximal subgroups of $p112/m$ (No. 6)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
2	$p\bar{1}$	2	t	C_2	2	$p\bar{1}$	C_1	pitchfork
3	$p112$	2	t	C_2	3	$p112$	C_1	pitchfork
4	$p11m$	2	t	C_2	4	$p11m$	C_1	pitchfork
6	$p112/m$	2	k	C_2	6	$p112/m$	C_1	pitchfork
6	$p112/m$	3	k	D_3	4	$p11m$	C_2	transcritical
6	$p112/m$	5	k	D_5	4	$p11m$	C_2	pitchfork
6	$p112/m$	7	k	D_7	4	$p11m$	C_2	pitchfork
7	$p112/a$	2	k	C_2	7	$p112/a$	C_1	pitchfork

Table 7: Maximal subgroups of $p112/a$ (No. 7)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
2	$p\bar{1}$	2	t	C_2	2	$p\bar{1}$	C_1	pitchfork
3	$p112$	2	t	C_2	3	$p112$	C_1	pitchfork
5	$p11a$	2	t	C_2	5	$p11a$	C_1	pitchfork
7	$p112/a$	2	k	C_2	7	$p112/a$	C_1	pitchfork
7	$p112/a$	3	k	D_3	5	$p11a$	C_2	transcritical
7	$p112/a$	5	k	D_5	5	$p11a$	C_2	pitchfork
7	$p112/a$	7	k	D_7	5	$p11a$	C_2	pitchfork

Table 8: Maximal subgroups of $p211$ (No. 8)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
1	$p1$	2	t	C_2	1	$p1$	C_1	pitchfork
8	$p211$	2	k	C_2	8	$p211$	C_1	pitchfork
8	$p211$	3	k	C_3	8	$p211$	C_1	(complex)
8	$p211$	3	k	D_3	1	$p1$	C_2	transcritical
8	$p211$	5	k	C_5	8	$p211$	C_1	(complex)
8	$p211$	5	k	D_5	1	$p1$	C_2	pitchfork
8	$p211$	7	k	C_7	8	$p211$	C_1	(complex)
8	$p211$	7	k	D_7	1	$p1$	C_2	pitchfork
9	$p2_111$	2	k	C_2	9	$p2_111$	C_1	pitchfork
10	$c211$	2	k	C_2	10	$c211$	C_1	pitchfork

Table 9: Maximal subgroups of $p2_111$ (No. 9)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
1	$p1$	2	t	C_2	1	$p1$	C_1	pitchfork
9	$p2_111$	2	k	C_2	9	$p2_111$	C_1	pitchfork
9	$p2_111$	3	k	C_3	9	$p2_111$	C_1	(complex)
9	$p2_111$	3	k	D_3	1	$p1$	C_2	transcritical
9	$p2_111$	5	k	C_5	9	$p2_111$	C_1	(complex)
9	$p2_111$	5	k	D_5	1	$p1$	C_2	pitchfork
9	$p2_111$	7	k	C_7	9	$p2_111$	C_1	(complex)
9	$p2_111$	7	k	D_7	1	$p1$	C_2	pitchfork

Table 10: Maximal subgroups of $c211$ (No. 10)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
1	$p1$	2	t	C_2	1	$p1$	C_1	pitchfork
8	$p211$	2	k	C_2	8	$p211$	C_1	pitchfork
9	$p2_111$	2	k	C_2	9	$p2_111$	C_1	pitchfork
10	$c211$	3	k	C_3	10	$c211$	C_1	(complex)
10	$c211$	3	k	D_3	1	$p1$	C_2	transcritical
10	$c211$	5	k	C_5	10	$c211$	C_1	(complex)
10	$c211$	5	k	D_5	1	$p1$	C_2	pitchfork
10	$c211$	7	k	C_7	10	$c211$	C_1	(complex)
10	$c211$	7	k	D_7	1	$p1$	C_2	pitchfork

Table 11: Maximal subgroups of $pm11$ (No. 11)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
1	$p1$	2	t	C_2	1	$p1$	C_1	pitchfork
11	$pm11$	2	k	C_2	11	$pm11$	C_1	pitchfork
11	$pm11$	3	k	C_3	11	$pm11$	C_1	(complex)
11	$pm11$	3	k	D_3	1	$p1$	C_2	transcritical
11	$pm11$	5	k	C_5	11	$pm11$	C_1	(complex)
11	$pm11$	5	k	D_5	1	$p1$	C_2	pitchfork
11	$pm11$	7	k	C_7	11	$pm11$	C_1	(complex)
11	$pm11$	7	k	D_7	1	$p1$	C_2	pitchfork
12	$pb11$	2	k	C_2	12	$pb11$	C_1	pitchfork
13	$cm11$	2	k	C_2	13	$cm11$	C_1	pitchfork

Table 12: Maximal subgroups of $pb11$ (No. 12)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
1	$p1$	2	t	C_2	1	$p1$	C_1	pitchfork
12	$pb11$	2	k	C_2	12	$pb11$	C_1	pitchfork
12	$pb11$	3	k	C_3	12	$pb11$	C_1	(complex)
12	$pb11$	3	k	D_3	1	$p1$	C_2	transcritical
12	$pb11$	5	k	C_5	12	$pb11$	C_1	(complex)
12	$pb11$	5	k	D_5	1	$p1$	C_2	pitchfork
12	$pb11$	7	k	C_7	12	$pb11$	C_1	(complex)
12	$pb11$	7	k	D_7	1	$p1$	C_2	pitchfork

Table 13: Maximal subgroups of $cm11$ (No. 13)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
1	$p1$	2	t	C_2	1	$p1$	C_1	pitchfork
11	$pm11$	2	k	C_2	11	$pm11$	C_1	pitchfork
12	$pb11$	2	k	C_2	12	$pb11$	C_1	pitchfork
13	$cm11$	3	k	C_3	13	$cm11$	C_1	(complex)
13	$cm11$	3	k	D_3	1	$p1$	C_2	transcritical
13	$cm11$	5	k	C_5	13	$cm11$	C_1	(complex)
13	$cm11$	5	k	D_5	1	$p1$	C_2	pitchfork
13	$cm11$	7	k	C_7	13	$cm11$	C_1	(complex)
13	$cm11$	7	k	D_7	1	$p1$	C_2	pitchfork

Table 14: Maximal subgroups of $p2/m11$ (No. 14)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
2	$p\bar{1}$	2	t	C_2	2	$p\bar{1}$	C_1	pitchfork
8	$p211$	2	t	C_2	8	$p211$	C_1	pitchfork
11	$pm11$	2	t	C_2	11	$pm11$	C_1	pitchfork
14	$p2/m11$	2	k	C_2	14	$p2/m11$	C_1	pitchfork
14	$p2/m11$	3	k	D_3	8	$p211$	C_2	transcritical
14	$p2/m11$	3	k	D_3	11	$pm11$	C_2	transcritical
14	$p2/m11$	5	k	D_5	8	$p211$	C_2	pitchfork
14	$p2/m11$	5	k	D_5	11	$pm11$	C_2	pitchfork
14	$p2/m11$	7	k	D_7	11	$pm11$	C_2	pitchfork
14	$p2/m11$	7	k	D_7	8	$p211$	C_2	pitchfork
15	$p2_1/m11$	2	k	C_2	15	$p2_1/m11$	C_1	pitchfork
16	$p2/b11$	2	k	C_2	16	$p2/b11$	C_1	pitchfork
18	$c2/m11$	2	k	C_2	18	$c2/m11$	C_1	pitchfork

Table 15: Maximal subgroups of $p2_1/m11$ (No. 15)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
2	$p\bar{1}$	2	t	C_2	2	$p\bar{1}$	C_1	pitchfork
9	$p2_111$	2	t	C_2	9	$p2_111$	C_1	pitchfork
11	$pm11$	2	t	C_2	11	$pm11$	C_1	pitchfork
15	$p2_1/m11$	2	k	C_2	15	$p2_1/m11$	C_1	pitchfork
15	$p2_1/m11$	3	k	D_3	11	$pm11$	C_2	transcritical
15	$p2_1/m11$	3	k	D_3	9	$p2_111$	C_2	transcritical
15	$p2_1/m11$	5	k	D_5	9	$p2_111$	C_2	pitchfork
15	$p2_1/m11$	5	k	D_5	11	$pm11$	C_2	pitchfork
15	$p2_1/m11$	7	k	D_7	9	$p2_111$	C_2	pitchfork
15	$p2_1/m11$	7	k	D_7	11	$pm11$	C_2	pitchfork
17	$p2_1/b11$	2	k	C_2	17	$p2_1/b11$	C_1	pitchfork

Table 16: Maximal subgroups of $p2/b11$ (No. 16)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
2	$p\bar{1}$	2	t	C_2	2	$p\bar{1}$	C_1	pitchfork
8	$p211$	2	t	C_2	8	$p211$	C_1	pitchfork
12	$pb11$	2	t	C_2	12	$pb11$	C_1	pitchfork
16	$p2/b11$	2	k	C_2	16	$p2/b11$	C_1	pitchfork
16	$p2/b11$	3	k	D_3	8	$p211$	C_2	transcritical
16	$p2/b11$	3	k	D_3	12	$pb11$	C_2	transcritical
16	$p2/b11$	5	k	D_5	8	$p211$	C_2	pitchfork
16	$p2/b11$	5	k	D_5	12	$pb11$	C_2	pitchfork
16	$p2/b11$	7	k	D_7	8	$p211$	C_2	pitchfork
16	$p2/b11$	7	k	D_7	12	$pb11$	C_2	pitchfork
17	$p2_1/b11$	2	k	C_2	17	$p2_1/b11$	C_1	pitchfork

Table 17: Maximal subgroups of $p2_1/b11$ (No. 17)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
2	$p\bar{1}$	2	t	C_2	2	$p\bar{1}$	C_1	pitchfork
9	$p2_111$	2	t	C_2	9	$p2_111$	C_1	pitchfork
12	$pb11$	2	t	C_2	12	$pb11$	C_1	pitchfork
17	$p2_1/b11$	3	k	D_3	12	$pb11$	C_2	transcritical
17	$p2_1/b11$	3	k	D_3	9	$p2_111$	C_2	transcritical
17	$p2_1/b11$	5	k	D_5	9	$p2_111$	C_2	pitchfork
17	$p2_1/b11$	5	k	D_5	12	$pb11$	C_2	pitchfork
17	$p2_1/b11$	7	k	D_7	12	$pb11$	C_2	pitchfork
17	$p2_1/b11$	7	k	D_7	9	$p2_111$	C_2	pitchfork

Table 18: Maximal subgroups of $c2/m11$ (No. 18)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
2	$p\bar{1}$	2	t	C_2	2	$p\bar{1}$	C_1	pitchfork
10	$c211$	2	t	C_2	10	$c211$	C_1	pitchfork
13	$cm11$	2	t	C_2	13	$cm11$	C_1	pitchfork
14	$p2/m11$	2	k	C_2	14	$p2/m11$	C_1	pitchfork
15	$p2_1/m11$	2	k	C_2	15	$p2_1/m11$	C_1	pitchfork
16	$p2/b11$	2	k	C_2	16	$p2/b11$	C_1	pitchfork
17	$p2_1/b11$	2	k	C_2	17	$p2_1/b11$	C_1	pitchfork
18	$c2/m11$	3	k	D_3	13	$cm11$	C_2	transcritical
18	$c2/m11$	3	k	D_3	10	$c211$	C_2	transcritical
18	$c2/m11$	5	k	D_5	13	$cm11$	C_2	pitchfork
18	$c2/m11$	5	k	D_5	10	$c211$	C_2	pitchfork
18	$c2/m11$	7	k	D_7	13	$cm11$	C_2	pitchfork
18	$c2/m11$	7	k	D_7	10	$c211$	C_2	pitchfork

Table 19: Maximal subgroups of $p222$ (No. 19)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
3	$p112$	2	t	C_2	3	$p112$	C_1	pitchfork
8	$p211$	2	t	C_2	8	$p211$	C_1	pitchfork
19	$p222$	2	k	C_2	19	$p222$	C_1	pitchfork
19	$p222$	3	k	D_3	8	$p211$	C_2	transcritical
19	$p222$	5	k	D_5	8	$p211$	C_2	pitchfork
19	$p222$	7	k	D_7	8	$p211$	C_2	pitchfork
20	$p2_122$	2	k	C_2	20	$p2_122$	C_1	pitchfork
22	$c222$	2	k	C_2	22	$c222$	C_1	pitchfork

Table 20: Maximal subgroups of $p2_122$ (No. 20)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
3	$p112$	2	t	C_2	3	$p112$	C_1	pitchfork
8	$p211$	2	t	C_2	8	$p211$	C_1	pitchfork
9	$p2_111$	2	t	C_2	9	$p2_111$	C_1	pitchfork
20	$p2_122$	2	k	C_2	20	$p2_122$	C_1	pitchfork
20	$p2_122$	3	k	D_3	8	$p211$	C_2	transcritical
20	$p2_122$	3	k	D_3	9	$p2_111$	C_2	transcritical
20	$p2_122$	5	k	D_5	8	$p211$	C_2	pitchfork
20	$p2_122$	5	k	D_5	9	$p2_111$	C_2	pitchfork
20	$p2_122$	7	k	D_7	9	$p2_111$	C_2	pitchfork
20	$p2_122$	7	k	D_7	8	$p211$	C_2	pitchfork
21	$p2_12_12$	2	k	C_2	21	$p2_12_12$	C_1	pitchfork

Table 21: Maximal subgroups of $p2_12_12$ (No. 21)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
3	$p112$	2	t	C_2	3	$p112$	C_1	pitchfork
9	$p2_111$	2	t	C_2	9	$p2_111$	C_1	pitchfork
21	$p2_12_12$	3	k	D_3	9	$p2_111$	C_2	transcritical
21	$p2_12_12$	5	k	D_5	9	$p2_111$	C_2	pitchfork
21	$p2_12_12$	7	k	D_7	9	$p2_111$	C_2	pitchfork

Table 22: Maximal subgroups of $c222$ (No. 22)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
3	$p112$	2	t	C_2	3	$p112$	C_1	pitchfork
10	$c211$	2	t	C_2	10	$c211$	C_1	pitchfork
19	$p222$	2	k	C_2	19	$p222$	C_1	pitchfork
20	$p2_122$	2	k	C_2	20	$p2_122$	C_1	pitchfork
21	$p2_12_12$	2	k	C_2	21	$p2_12_12$	C_1	pitchfork
22	$c222$	3	k	D_3	10	$c211$	C_2	transcritical
22	$c222$	5	k	D_5	10	$c211$	C_2	pitchfork
22	$c222$	7	k	D_7	10	$c211$	C_2	pitchfork

Table 23: Maximal subgroups of $pmm2$ (No. 23)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
3	$p112$	2	t	C_2	3	$p112$	C_1	pitchfork
11	$pm11$	2	t	C_2	11	$pm11$	C_1	pitchfork
23	$pmm2$	2	k	C_2	23	$pmm2$	C_1	pitchfork
23	$pmm2$	3	k	D_3	11	$pm11$	C_2	transcritical
23	$pmm2$	5	k	D_5	11	$pm11$	C_2	pitchfork
23	$pmm2$	7	k	D_7	11	$pm11$	C_2	pitchfork
24	$pma2$	2	k	C_2	24	$pma2$	C_1	pitchfork
26	$cmm2$	2	k	C_2	26	$cmm2$	C_1	pitchfork

Table 24: Maximal subgroups of $pma2$ (No. 24)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
3	$p112$	2	t	C_2	3	$p112$	C_1	pitchfork
11	$pm11$	2	t	C_2	11	$pm11$	C_1	pitchfork
12	$pb11$	2	t	C_2	12	$pb11$	C_1	pitchfork
24	$pma2$	2	k	C_2	24	$pma2$	C_1	pitchfork
24	$pma2$	3	k	D_3	12	$pb11$	C_2	transcritical
24	$pma2$	3	k	D_3	11	$pm11$	C_2	transcritical
24	$pma2$	5	k	D_5	12	$pb11$	C_2	pitchfork
24	$pma2$	5	k	D_5	11	$pm11$	C_2	pitchfork
24	$pma2$	7	k	D_7	12	$pb11$	C_2	pitchfork
24	$pma2$	7	k	D_7	11	$pm11$	C_2	pitchfork
25	$pba2$	2	k	C_2	25	$pba2$	C_1	pitchfork

Table 25: Maximal subgroups of $pba2$ (No. 25)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
3	$p112$	2	t	C_2	3	$p112$	C_1	pitchfork
12	$pb11$	2	t	C_2	12	$pb11$	C_1	pitchfork
25	$pba2$	3	k	D_3	12	$pb11$	C_2	transcritical
25	$pba2$	5	k	D_5	12	$pb11$	C_2	pitchfork
25	$pba2$	7	k	D_7	12	$pb11$	C_2	pitchfork

Table 26: Maximal subgroups of $cmm2$ (No. 26)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
3	$p112$	2	t	C_2	3	$p112$	C_1	pitchfork
13	$cm11$	2	t	C_2	13	$cm11$	C_1	pitchfork
23	$pmm2$	2	k	C_2	23	$pmm2$	C_1	pitchfork
24	$pma2$	2	k	C_2	24	$pma2$	C_1	pitchfork
25	$pba2$	2	k	C_2	25	$pba2$	C_1	pitchfork
26	$cmm2$	3	k	D_3	13	$cm11$	C_2	transcritical
26	$cmm2$	5	k	D_5	13	$cm11$	C_2	pitchfork
26	$cmm2$	7	k	D_7	13	$cm11$	C_2	pitchfork

Table 27: Maximal subgroups of $pm2m$ (No. 27)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
4	$p11m$	2	t	C_2	4	$p11m$	C_1	pitchfork
8	$p211$	2	t	C_2	8	$p211$	C_1	pitchfork
11	$pm11$	2	t	C_2	11	$pm11$	C_1	pitchfork
27	$pm2m$	2	k	C_2	27	$pm2m$	C_1	pitchfork
27	$pm2m$	3	k	D_3	4	$p11m$	C_2	transcritical
27	$pm2m$	3	k	C_3	27	$pm2m$	C_1	(complex)
27	$pm2m$	5	k	D_5	4	$p11m$	C_2	pitchfork
27	$pm2m$	5	k	C_5	27	$pm2m$	C_1	(complex)
27	$pm2m$	7	k	C_7	27	$pm2m$	C_1	(complex)
27	$pm2m$	7	k	D_7	4	$p11m$	C_2	pitchfork
28	$pm2_1b$	2	k	C_2	28	$pm2_1b$	C_1	pitchfork
29	$pm2_1m$	2	k	C_2	29	$pm2_1m$	C_1	pitchfork
30	$pb2b$	2	k	C_2	30	$pb2b$	C_1	pitchfork
31	$pm2a$	2	k	C_2	31	$pm2a$	C_1	pitchfork
35	$cm2m$	2	k	C_2	35	$cm2m$	C_1	pitchfork
36	$cm2e$	2	k	C_2	36	$cm2e$	C_1	pitchfork

Table 28: Maximal subgroups of $pm2_1b$ (No. 28)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
5	$p11a$	2	t	C_2	5	$p11a$	C_1	pitchfork
9	$p2_111$	2	t	C_2	9	$p2_111$	C_1	pitchfork
11	$pm11$	2	t	C_2	11	$pm11$	C_1	pitchfork
28	$pm2_1b$	2	k	C_2	28	$pm2_1b$	C_1	pitchfork
28	$pm2_1b$	3	k	C_3	28	$pm2_1b$	C_1	(complex)
28	$pm2_1b$	3	k	D_3	5	$p11a$	C_2	transcritical
28	$pm2_1b$	5	k	C_5	28	$pm2_1b$	C_1	(complex)
28	$pm2_1b$	5	k	D_5	5	$p11a$	C_2	pitchfork
28	$pm2_1b$	7	k	C_7	28	$pm2_1b$	C_1	(complex)
28	$pm2_1b$	7	k	D_7	5	$p11a$	C_2	pitchfork
32	$pm2_1n$	2	k	C_2	32	$pm2_1n$	C_1	pitchfork

Table 29: Maximal subgroups of $pm2_1m$ (No. 29)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
4	$p11m$	2	t	C_2	4	$p11m$	C_1	pitchfork
9	$p2_111$	2	t	C_2	9	$p2_111$	C_1	pitchfork
12	$pb11$	2	t	C_2	12	$pb11$	C_1	pitchfork
29	$pm2_1m$	2	k	C_2	29	$pm2_1m$	C_1	pitchfork
29	$pm2_1m$	3	k	C_3	29	$pm2_1m$	C_1	(complex)
29	$pm2_1m$	3	k	D_3	4	$p11m$	C_2	transcritical
29	$pm2_1m$	5	k	C_5	29	$pm2_1m$	C_1	(complex)
29	$pm2_1m$	5	k	D_5	4	$p11m$	C_2	pitchfork
29	$pm2_1m$	7	k	C_7	29	$pm2_1m$	C_1	(complex)
29	$pm2_1m$	7	k	D_7	4	$p11m$	C_2	pitchfork
33	$pb2_1a$	2	k	C_2	33	$pb2_1a$	C_1	pitchfork

Table 30: Maximal subgroups of $pb2b$ (No. 30)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
5	$p11a$	2	t	C_2	5	$p11a$	C_1	pitchfork
8	$p211$	2	t	C_2	8	$p211$	C_1	pitchfork
12	$pb11$	2	t	C_2	12	$pb11$	C_1	pitchfork
30	$pb2b$	2	k	C_2	30	$pb2b$	C_1	pitchfork
30	$pb2b$	3	k	C_3	30	$pb2b$	C_1	(complex)
30	$pb2b$	3	k	D_3	5	$p11a$	C_2	transcritical
30	$pb2b$	5	k	C_5	30	$pb2b$	C_1	(complex)
30	$pb2b$	5	k	D_5	5	$p11a$	C_2	pitchfork
30	$pb2b$	7	k	C_7	30	$pb2b$	C_1	(complex)
30	$pb2b$	7	k	D_7	5	$p11a$	C_2	pitchfork
34	$pb2n$	2	k	C_2	34	$pb2n$	C_1	pitchfork

Table 31: Maximal subgroups of $pm2a$ (No. 31)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
5	$p11a$	2	t	C_2	5	$p11a$	C_1	pitchfork
8	$p211$	2	t	C_2	8	$p211$	C_1	pitchfork
11	$pm11$	2	t	C_2	11	$pm11$	C_1	pitchfork
31	$pm2a$	2	k	C_2	31	$pm2a$	C_1	pitchfork
31	$pm2a$	3	k	C_3	31	$pm2a$	C_1	(complex)
31	$pm2a$	3	k	D_3	5	$p11a$	C_2	transcritical
31	$pm2a$	5	k	C_5	31	$pm2a$	C_1	(complex)
31	$pm2a$	5	k	D_5	5	$p11a$	C_2	pitchfork
31	$pm2a$	7	k	C_7	31	$pm2a$	C_1	(complex)
31	$pm2a$	7	k	D_7	5	$p11a$	C_2	pitchfork
32	$pm2_1n$	2	k	C_2	32	$pm2_1n$	C_1	pitchfork
33	$pb2_1a$	2	k	C_2	33	$pb2_1a$	C_1	pitchfork
34	$pb2n$	2	k	C_2	34	$pb2n$	C_1	pitchfork

Table 32: Maximal subgroups of $pm2_1n$ (No. 32)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
5	$p11a$	2	t	C_2	5	$p11a$	C_1	pitchfork
9	$p2_111$	2	t	C_2	9	$p2_111$	C_1	pitchfork
11	$pm11$	2	t	C_2	11	$pm11$	C_1	pitchfork
32	$pm2_1n$	3	k	C_3	32	$pm2_1n$	C_1	(complex)
32	$pm2_1n$	3	k	D_3	5	$p11a$	C_2	transcritical
32	$pm2_1n$	5	k	C_5	32	$pm2_1n$	C_1	(complex)
32	$pm2_1n$	5	k	D_5	5	$p11a$	C_2	pitchfork
32	$pm2_1n$	7	k	C_7	32	$pm2_1n$	C_1	(complex)
32	$pm2_1n$	7	k	D_7	5	$p11a$	C_2	pitchfork

Table 33: Maximal subgroups of $pb2_1a$ (No. 33)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
5	$p11a$	2	t	C_2	5	$p11a$	C_1	pitchfork
9	$p2_111$	2	t	C_2	9	$p2_111$	C_1	pitchfork
12	$pb11$	2	t	C_2	12	$pb11$	C_1	pitchfork
33	$pb2_1a$	3	k	C_3	33	$pb2_1a$	C_1	(complex)
33	$pb2_1a$	3	k	D_3	5	$p11a$	C_2	transcritical
33	$pb2_1a$	5	k	C_5	33	$pb2_1a$	C_1	(complex)
33	$pb2_1a$	5	k	D_5	5	$p11a$	C_2	pitchfork
33	$pb2_1a$	7	k	C_7	33	$pb2_1a$	C_1	(complex)
33	$pb2_1a$	7	k	D_7	5	$p11a$	C_2	pitchfork

Table 34: Maximal subgroups of $pb2n$ (No. 34)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
5	$p11a$	2	t	C_2	5	$p11a$	C_1	pitchfork
8	$p211$	2	t	C_2	8	$p211$	C_1	pitchfork
12	$pb11$	2	t	C_2	12	$pb11$	C_1	pitchfork
34	$pb2n$	3	k	C_3	34	$pb2n$	C_1	(complex)
34	$pb2n$	3	k	D_3	5	$p11a$	C_2	transcritical
34	$pb2n$	5	k	C_5	34	$pb2n$	C_1	(complex)
34	$pb2n$	5	k	D_5	5	$p11a$	C_2	pitchfork
34	$pb2n$	7	k	C_7	34	$pb2n$	C_1	(complex)
34	$pb2n$	7	k	D_7	5	$p11a$	C_2	pitchfork

Table 35: Maximal subgroups of $cm2m$ (No. 35)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
4	$p11m$	2	t	C_2	4	$p11m$	C_1	pitchfork
10	$c211$	2	t	C_2	10	$c211$	C_1	pitchfork
13	$cm11$	2	t	C_2	13	$cm11$	C_1	pitchfork
27	$pm2m$	2	k	C_2	27	$pm2m$	C_1	pitchfork
29	$pm2_1m$	2	k	C_2	29	$pm2_1m$	C_1	pitchfork
32	$pm2_1n$	2	k	C_2	32	$pm2_1n$	C_1	pitchfork
34	$pb2n$	2	k	C_2	34	$pb2n$	C_1	pitchfork
35	$cm2m$	3	k	C_3	35	$cm2m$	C_1	(complex)
35	$cm2m$	3	k	D_3	4	$p11m$	C_2	transcritical
35	$cm2m$	5	k	C_5	35	$cm2m$	C_1	(complex)
35	$cm2m$	5	k	D_5	4	$p11m$	C_2	pitchfork
35	$cm2m$	7	k	C_7	35	$cm2m$	C_1	(complex)
35	$cm2m$	7	k	D_7	4	$p11m$	C_2	pitchfork

Table 36: Maximal subgroups of $cm2e$ (No. 36)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
5	$p11a$	2	t	C_2	5	$p11a$	C_1	pitchfork
10	$c211$	2	t	C_2	10	$c211$	C_1	pitchfork
13	$cm11$	2	t	C_2	13	$cm11$	C_1	pitchfork
28	$pm2_1b$	2	k	C_2	28	$pm2_1b$	C_1	pitchfork
30	$pb2b$	2	k	C_2	30	$pb2b$	C_1	pitchfork
31	$pm2a$	2	k	C_2	31	$pm2a$	C_1	pitchfork
33	$pb2_1a$	2	k	C_2	33	$pb2_1a$	C_1	pitchfork
36	$cm2e$	3	k	C_3	36	$cm2e$	C_1	(complex)
36	$cm2e$	3	k	D_3	5	$p11a$	C_2	transcritical
36	$cm2e$	5	k	C_5	36	$cm2e$	C_1	(complex)
36	$cm2e$	5	k	D_5	5	$p11a$	C_2	pitchfork
36	$cm2e$	7	k	C_7	36	$cm2e$	C_1	(complex)
36	$cm2e$	7	k	D_7	5	$p11a$	C_2	pitchfork

Table 37: Maximal subgroups of $pmmm$ (No. 37)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
6	$p112/m$	2	t	C_2	6	$p112/m$	C_1	pitchfork
14	$p2/m11$	2	t	C_2	14	$p2/m11$	C_1	pitchfork
19	$p222$	2	t	C_2	19	$p222$	C_1	pitchfork
23	$pmm2$	2	t	C_2	23	$pmm2$	C_1	pitchfork
27	$pm2m$	2	t	C_2	27	$pm2m$	C_1	pitchfork
37	$pmmm$	2	k	C_2	37	$pmmm$	C_1	pitchfork
37	$pmmm$	3	k	D_3	27	$pm2m$	C_2	transcritical
37	$pmmm$	5	k	D_5	27	$pm2m$	C_2	pitchfork
37	$pmmm$	7	k	D_7	27	$pm2m$	C_2	pitchfork
38	$pmaa$	2	k	C_2	38	$pmaa$	C_1	pitchfork
40	$pmam$	2	k	C_2	40	$pmam$	C_1	pitchfork
41	$pmma$	2	k	C_2	41	$pmma$	C_1	pitchfork
47	$cmmm$	2	k	C_2	47	$cmmm$	C_1	pitchfork
48	$cmme$	2	k	C_2	48	$cmme$	C_1	pitchfork

Table 38: Maximal subgroups of $pmaa$ (No. 38)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
7	$p112/a$	2	t	C_2	7	$p112/a$	C_1	pitchfork
14	$p2/m11$	2	t	C_2	14	$p2/m11$	C_1	pitchfork
16	$p2/b11$	2	t	C_2	16	$p2/b11$	C_1	pitchfork
19	$p222$	2	t	C_2	19	$p222$	C_1	pitchfork
24	$pma2$	2	t	C_2	24	$pma2$	C_1	pitchfork
30	$pb2b$	2	t	C_2	30	$pb2b$	C_1	pitchfork
31	$pm2a$	2	t	C_2	31	$pm2a$	C_1	pitchfork
38	$pmaa$	2	k	C_2	38	$pmaa$	C_1	pitchfork
38	$pmaa$	3	k	D_3	30	$pb2b$	C_2	transcritical
38	$pmaa$	3	k	D_3	31	$pm2a$	C_2	transcritical
38	$pmaa$	5	k	D_5	31	$pm2a$	C_2	pitchfork
38	$pmaa$	5	k	D_5	30	$pb2b$	C_2	pitchfork
38	$pmaa$	7	k	D_7	30	$pb2b$	C_2	pitchfork
38	$pmaa$	7	k	D_7	31	$pm2a$	C_2	pitchfork
39	$pban$	2	k	C_2	39	$pban$	C_1	pitchfork
42	$pman$	2	k	C_2	42	$pman$	C_1	pitchfork
43	$pbaa$	2	k	C_2	43	$pbaa$	C_1	pitchfork

Table 39: Maximal subgroups of $pban$ (No. 39)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
7	$p112/a$	2	t	C_2	7	$p112/a$	C_1	pitchfork
16	$p2/b11$	2	t	C_2	16	$p2/b11$	C_1	pitchfork
19	$p222$	2	t	C_2	19	$p222$	C_1	pitchfork
25	$pba2$	2	t	C_2	25	$pba2$	C_1	pitchfork
34	$pb2n$	2	t	C_2	34	$pb2n$	C_1	pitchfork
39	$pban$	3	k	D_3	34	$pb2n$	C_2	transcritical
39	$pban$	5	k	D_5	34	$pb2n$	C_2	pitchfork
39	$pban$	7	k	D_7	34	$pb2n$	C_2	pitchfork

Table 40: Maximal subgroups of $pmam$ (No. 40)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
6	$p112/m$	2	t	C_2	6	$p112/m$	C_1	pitchfork
15	$p2_1/m11$	2	t	C_2	15	$p2_1/m11$	C_1	pitchfork
16	$p2/b11$	2	t	C_2	16	$p2/b11$	C_1	pitchfork
20	$p2_122$	2	t	C_2	20	$p2_122$	C_1	pitchfork
24	$pma2$	2	t	C_2	24	$pma2$	C_1	pitchfork
27	$pm2m$	2	t	C_2	27	$pm2m$	C_1	pitchfork
29	$pm2_1m$	2	t	C_2	29	$pm2_1m$	C_1	pitchfork
40	$pmam$	2	k	C_2	40	$pmam$	C_1	pitchfork
40	$pmam$	3	k	D_3	27	$pm2m$	C_2	transcritical
40	$pmam$	3	k	D_3	29	$pm2_1m$	C_2	transcritical
40	$pmam$	5	k	D_5	29	$pm2_1m$	C_2	pitchfork
40	$pmam$	5	k	D_5	27	$pm2m$	C_2	pitchfork
40	$pmam$	7	k	D_7	29	$pm2_1m$	C_2	pitchfork
40	$pmam$	7	k	D_7	27	$pm2m$	C_2	pitchfork
43	$pbaa$	2	k	C_2	43	$pbaa$	C_1	pitchfork
44	$pbam$	2	k	C_2	44	$pbam$	C_1	pitchfork
45	$pbma$	2	k	C_2	45	$pbma$	C_1	pitchfork

Table 41: Maximal subgroups of $pmma$ (No. 41)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
7	$p112/a$	2	t	C_2	7	$p112/a$	C_1	pitchfork
14	$p2/m11$	2	t	C_2	14	$p2/m11$	C_1	pitchfork
15	$p2_1/m11$	2	t	C_2	15	$p2_1/m11$	C_1	pitchfork
20	$p2_122$	2	t	C_2	20	$p2_122$	C_1	pitchfork
23	$pmm2$	2	t	C_2	23	$pmm2$	C_1	pitchfork
28	$pm2_1b$	2	t	C_2	28	$pm2_1b$	C_1	pitchfork
31	$pm2a$	2	t	C_2	31	$pm2a$	C_1	pitchfork
41	$pmma$	2	k	C_2	41	$pmma$	C_1	pitchfork
41	$pmma$	3	k	D_3	31	$pm2a$	C_2	transcritical
41	$pmma$	3	k	D_3	28	$pm2_1b$	C_2	transcritical
41	$pmma$	5	k	D_5	31	$pm2a$	C_2	pitchfork
41	$pmma$	5	k	D_5	28	$pm2_1b$	C_2	pitchfork
41	$pmma$	7	k	D_7	28	$pm2_1b$	C_2	pitchfork
41	$pmma$	7	k	D_7	31	$pm2a$	C_2	pitchfork
42	$pman$	2	k	C_2	42	$pman$	C_1	pitchfork
45	$pbma$	2	k	C_2	45	$pbma$	C_1	pitchfork
46	$pmmn$	2	k	C_2	46	$pmmn$	C_1	pitchfork

Table 42: Maximal subgroups of $pman$ (No. 42)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
7	$p112/a$	2	t	C_2	7	$p112/a$	C_1	pitchfork
14	$p2/m11$	2	t	C_2	14	$p2/m11$	C_1	pitchfork
17	$p2_1/b11$	2	t	C_2	17	$p2_1/b11$	C_1	pitchfork
20	$p2_122$	2	t	C_2	20	$p2_122$	C_1	pitchfork
24	$pma2$	2	t	C_2	24	$pma2$	C_1	pitchfork
32	$pm2_1n$	2	t	C_2	32	$pm2_1n$	C_1	pitchfork
34	$pb2n$	2	t	C_2	34	$pb2n$	C_1	pitchfork
42	$pman$	3	k	D_3	32	$pm2_1n$	C_2	transcritical
42	$pman$	3	k	D_3	34	$pb2n$	C_2	transcritical
42	$pman$	5	k	D_5	34	$pb2n$	C_2	pitchfork
42	$pman$	5	k	D_5	32	$pm2_1n$	C_2	pitchfork
42	$pman$	7	k	D_7	32	$pm2_1n$	C_2	pitchfork
42	$pman$	7	k	D_7	34	$pb2n$	C_2	pitchfork

Table 43: Maximal subgroups of $pbaa$ (No. 43)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
7	$p112/a$	2	t	C_2	7	$p112/a$	C_1	pitchfork
16	$p2/b11$	2	t	C_2	16	$p2/b11$	C_1	pitchfork
17	$p2_1/b11$	2	t	C_2	17	$p2_1/b11$	C_1	pitchfork
20	$p2_122$	2	t	C_2	20	$p2_122$	C_1	pitchfork
25	$pba2$	2	t	C_2	25	$pba2$	C_1	pitchfork
30	$pb2b$	2	t	C_2	30	$pb2b$	C_1	pitchfork
33	$pb2_1a$	2	t	C_2	33	$pb2_1a$	C_1	pitchfork
43	$pbaa$	3	k	D_3	33	$pb2_1a$	C_2	transcritical
43	$pbaa$	3	k	D_3	30	$pb2b$	C_2	transcritical
43	$pbaa$	5	k	D_5	30	$pb2b$	C_2	pitchfork
43	$pbaa$	5	k	D_5	33	$pb2_1a$	C_2	pitchfork
43	$pbaa$	7	k	D_7	33	$pb2_1a$	C_2	pitchfork
43	$pbaa$	7	k	D_7	30	$pb2b$	C_2	pitchfork

Table 44: Maximal subgroups of $pbam$ (No. 44)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
6	$p112/m$	2	t	C_2	6	$p112/m$	C_1	pitchfork
17	$p2_1/b11$	2	t	C_2	17	$p2_1/b11$	C_1	pitchfork
21	$p2_12_12$	2	t	C_2	21	$p2_12_12$	C_1	pitchfork
25	$pba2$	2	t	C_2	25	$pba2$	C_1	pitchfork
29	$pm2_1m$	2	t	C_2	29	$pm2_1m$	C_1	pitchfork
44	$pbam$	3	k	D_3	29	$pm2_1m$	C_2	transcritical
44	$pbam$	5	k	D_5	29	$pm2_1m$	C_2	pitchfork
44	$pbam$	7	k	D_7	29	$pm2_1m$	C_2	pitchfork

Table 45: Maximal subgroups of $pbma$ (No. 45)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
7	$p112/a$	2	t	C_2	7	$p112/a$	C_1	pitchfork
15	$p2_1/m11$	2	t	C_2	15	$p2_1/m11$	C_1	pitchfork
17	$p2_1/b11$	2	t	C_2	17	$p2_1/b11$	C_1	pitchfork
21	$p2_12_12$	2	t	C_2	21	$p2_12_12$	C_1	pitchfork
24	$pma2$	2	t	C_2	24	$pma2$	C_1	pitchfork
28	$pm2_1b$	2	t	C_2	28	$pm2_1b$	C_1	pitchfork
33	$pb2_1a$	2	t	C_2	33	$pb2_1a$	C_1	pitchfork
45	$pbma$	3	k	D_3	28	$pm2_1b$	C_2	transcritical
45	$pbma$	3	k	D_3	33	$pb2_1a$	C_2	transcritical
45	$pbma$	5	k	D_5	28	$pm2_1b$	C_2	pitchfork
45	$pbma$	5	k	D_5	33	$pb2_1a$	C_2	pitchfork
45	$pbma$	7	k	D_7	28	$pm2_1b$	C_2	pitchfork
45	$pbma$	7	k	D_7	33	$pb2_1a$	C_2	pitchfork

Table 46: Maximal subgroups of $pmmn$ (No. 46)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
7	$p112/a$	2	t	C_2	7	$p112/a$	C_1	pitchfork
15	$p2_1/m11$	2	t	C_2	15	$p2_1/m11$	C_1	pitchfork
21	$p2_12_12$	2	t	C_2	21	$p2_12_12$	C_1	pitchfork
23	$pmm2$	2	t	C_2	23	$pmm2$	C_1	pitchfork
32	$pm2_1n$	2	t	C_2	32	$pm2_1n$	C_1	pitchfork
46	$pmmn$	3	k	D_3	32	$pm2_1n$	C_2	transcritical
46	$pmmn$	5	k	D_5	32	$pm2_1n$	C_2	pitchfork
46	$pmmn$	7	k	D_7	32	$pm2_1n$	C_2	pitchfork

Table 47: Maximal subgroups of $cmmm$ (No. 47)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
6	$p112/m$	2	t	C_2	6	$p112/m$	C_1	pitchfork
18	$c2/m11$	2	t	C_2	18	$c2/m11$	C_1	pitchfork
22	$c222$	2	t	C_2	22	$c222$	C_1	pitchfork
26	$cmm2$	2	t	C_2	26	$cmm2$	C_1	pitchfork
35	$cm2m$	2	t	C_2	35	$cm2m$	C_1	pitchfork
37	$pmmm$	2	k	C_2	37	$pmmm$	C_1	pitchfork
39	$pban$	2	k	C_2	39	$pban$	C_1	pitchfork
40	$pmam$	2	k	C_2	40	$pmam$	C_1	pitchfork
42	$pman$	2	k	C_2	42	$pman$	C_1	pitchfork
44	$pbam$	2	k	C_2	44	$pbam$	C_1	pitchfork
46	$pmmn$	2	k	C_2	46	$pmmn$	C_1	pitchfork
47	$cmmm$	3	k	D_3	35	$cm2m$	C_2	transcritical
47	$cmmm$	5	k	D_5	35	$cm2m$	C_2	pitchfork
47	$cmmm$	7	k	D_7	35	$cm2m$	C_2	pitchfork

Table 48: Maximal subgroups of $cmme$ (No. 48)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
7	$p112/a$	2	t	C_2	7	$p112/a$	C_1	pitchfork
18	$c2/m11$	2	t	C_2	18	$c2/m11$	C_1	pitchfork
22	$c222$	2	t	C_2	22	$c222$	C_1	pitchfork
26	$cmm2$	2	t	C_2	26	$cmm2$	C_1	pitchfork
36	$cm2e$	2	t	C_2	36	$cm2e$	C_1	pitchfork
38	$pmaa$	2	k	C_2	38	$pmaa$	C_1	pitchfork
41	$pmma$	2	k	C_2	41	$pmma$	C_1	pitchfork
43	$pbaa$	2	k	C_2	43	$pbaa$	C_1	pitchfork
45	$pbma$	2	k	C_2	45	$pbma$	C_1	pitchfork
48	$cmme$	3	k	D_3	36	$cm2e$	C_2	transcritical
48	$cmme$	5	k	D_5	36	$cm2e$	C_2	pitchfork
48	$cmme$	7	k	D_7	36	$cm2e$	C_2	pitchfork

Table 49: Maximal subgroups of $p4$ (No. 49)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
3	$p112$	2	t	C_2	3	$p112$	C_1	pitchfork
49	$p4$	2	k	C_2	49	$p4$	C_1	pitchfork
49	$p4$	5	k	$C_5 \times C_4$	1	$p1$	C_4	pitchfork
49	$p4$	9	k	$C_3^2 \times C_4$	1	$p1$	C_4	transcritical
49	$p4$	49	k	$C_7^2 \times C_4$	1	$p1$	C_4	pitchfork

Table 50: Maximal subgroups of $p\bar{4}$ (No. 50)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
3	$p112$	2	t	C_2	3	$p112$	C_1	pitchfork
50	$p\bar{4}$	2	k	C_2	50	$p\bar{4}$	C_1	pitchfork
50	$p\bar{4}$	5	k	$C_5 \times C_4$	1	$p1$	C_4	pitchfork
50	$p\bar{4}$	9	k	$C_3^2 \times C_4$	1	$p1$	C_4	transcritical
50	$p\bar{4}$	49	k	$C_7^2 \times C_4$	1	$p1$	C_4	pitchfork

Table 51: Maximal subgroups of $p4/m$ (No. 51)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
6	$p112/m$	2	t	C_2	6	$p112/m$	C_1	pitchfork
49	$p4$	2	t	C_2	49	$p4$	C_1	pitchfork
50	$p\bar{4}$	2	t	C_2	50	$p\bar{4}$	C_1	pitchfork
51	$p4/m$	2	k	C_2	51	$p4/m$	C_1	pitchfork
51	$p4/m$	5	k	$C_5 \times C_4$	4	$p11m$	C_4	pitchfork
51	$p4/m$	9	k	$C_3^2 \times C_4$	4	$p11m$	C_4	transcritical
51	$p4/m$	49	k	$C_7^2 \times C_4$	4	$p11m$	C_4	pitchfork
52	$p4/n$	2	k	C_2	52	$p4/n$	C_1	pitchfork

Table 52: Maximal subgroups of $p4/n$ (No. 52)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
7	$p112/a$	2	t	C_2	7	$p112/a$	C_1	pitchfork
49	$p4$	2	t	C_2	49	$p4$	C_1	pitchfork
50	$p\bar{4}$	2	t	C_2	50	$p\bar{4}$	C_1	pitchfork
52	$p4/n$	5	k	$C_5 \times C_4$	5	$p11a$	C_4	pitchfork
52	$p4/n$	9	k	$C_3^2 \times C_4$	5	$p11a$	C_4	transcritical
52	$p4/n$	49	k	$C_7^2 \times C_4$	5	$p11a$	C_4	pitchfork

Table 53: Maximal subgroups of $p422$ (No. 53)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
19	$p222$	2	t	C_2	19	$p222$	C_1	pitchfork
22	$c222$	2	t	C_2	22	$c222$	C_1	pitchfork
49	$p4$	2	t	C_2	49	$p4$	C_1	pitchfork
53	$p422$	2	k	C_2	53	$p422$	C_1	pitchfork
53	$p422$	9	k	$C_3^2 \times D_4$	1	$p1$	D_4	transcritical
53	$p422$	25	k	$C_5^2 \times D_4$	1	$p1$	D_4	pitchfork
53	$p422$	49	k	$C_7^2 \times D_4$	1	$p1$	D_4	pitchfork
54	$p42_12$	2	k	C_2	54	$p42_12$	C_1	pitchfork

Table 54: Maximal subgroups of $p42_12$ (No. 54)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
21	$p2_12_12$	2	t	C_2	21	$p2_12_12$	C_1	pitchfork
22	$c222$	2	t	C_2	22	$c222$	C_1	pitchfork
49	$p4$	2	t	C_2	49	$p4$	C_1	pitchfork
54	$p42_12$	9	k	$C_3^2 \times D_4$	1	$p1$	D_4	transcritical
54	$p42_12$	25	k	$C_5^2 \times D_4$	1	$p1$	D_4	pitchfork
54	$p42_12$	49	k	$C_7^2 \times D_4$	1	$p1$	D_4	pitchfork

Table 55: Maximal subgroups of $p4mm$ (No. 55)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
23	$pmm2$	2	t	C_2	23	$pmm2$	C_1	pitchfork
26	$cmm2$	2	t	C_2	26	$cmm2$	C_1	pitchfork
49	$p4$	2	t	C_2	49	$p4$	C_1	pitchfork
55	$p4mm$	2	k	C_2	55	$p4mm$	C_1	pitchfork
55	$p4mm$	9	k	$C_3^2 \times D_4$	1	$p1$	D_4	transcritical
55	$p4mm$	25	k	$C_5^2 \times D_4$	1	$p1$	D_4	pitchfork
55	$p4mm$	49	k	$C_7^2 \times D_4$	1	$p1$	D_4	pitchfork
56	$p4bm$	2	k	C_2	56	$p4bm$	C_1	pitchfork

Table 56: Maximal subgroups of $p4bm$ (No. 56)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
25	$pba2$	2	t	C_2	25	$pba2$	C_1	pitchfork
26	$cmm2$	2	t	C_2	26	$cmm2$	C_1	pitchfork
49	$p4$	2	t	C_2	49	$p4$	C_1	pitchfork
56	$p4bm$	9	k	$C_3^2 \times D_4$	1	$p1$	D_4	transcritical
56	$p4bm$	25	k	$C_5^2 \times D_4$	1	$p1$	D_4	pitchfork
56	$p4bm$	49	k	$C_7^2 \times D_4$	1	$p1$	D_4	pitchfork

Table 57: Maximal subgroups of $p\bar{4}2m$ (No. 57)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
19	$p222$	2	t	C_2	19	$p222$	C_1	pitchfork
26	$cmm2$	2	t	C_2	26	$cmm2$	C_1	pitchfork
50	$p\bar{4}$	2	t	C_2	50	$p\bar{4}$	C_1	pitchfork
57	$p\bar{4}2m$	9	k	$C_3^2 \times D_4$	1	$p1$	D_4	transcritical
57	$p\bar{4}2m$	25	k	$C_5^2 \times D_4$	1	$p1$	D_4	pitchfork
57	$p\bar{4}2m$	49	k	$C_7^2 \times D_4$	1	$p1$	D_4	pitchfork
59	$p\bar{4}m2$	2	k	C_2	59	$p\bar{4}m2$	C_1	pitchfork
60	$p\bar{4}b2$	2	k	C_2	60	$p\bar{4}b2$	C_1	pitchfork

Table 58: Maximal subgroups of $p\bar{4}2_1m$ (No. 58)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
21	$p2_12_12$	2	t	C_2	21	$p2_12_12$	C_1	pitchfork
26	$cmm2$	2	t	C_2	26	$cmm2$	C_1	pitchfork
50	$p\bar{4}$	2	t	C_2	50	$p\bar{4}$	C_1	pitchfork
58	$p\bar{4}2_1m$	9	k	$C_3^2 \times D_4$	1	$p1$	D_4	transcritical
58	$p\bar{4}2_1m$	25	k	$C_5^2 \times D_4$	1	$p1$	D_4	pitchfork
58	$p\bar{4}2_1m$	49	k	$C_7^2 \times D_4$	1	$p1$	D_4	pitchfork

Table 59: Maximal subgroups of $p\bar{4}m2$ (No. 59)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
22	$c222$	2	t	C_2	22	$c222$	C_1	pitchfork
23	$pmm2$	2	t	C_2	23	$pmm2$	C_1	pitchfork
50	$p\bar{4}$	2	t	C_2	50	$p\bar{4}$	C_1	pitchfork
57	$p\bar{4}2m$	2	k	C_2	57	$p\bar{4}2m$	C_1	pitchfork
58	$p\bar{4}2_1m$	2	k	C_2	58	$p\bar{4}2_1m$	C_1	pitchfork
59	$p\bar{4}m2$	9	k	$C_3^2 \times D_4$	1	$p1$	D_4	transcritical
59	$p\bar{4}m2$	25	k	$C_5^2 \times D_4$	1	$p1$	D_4	pitchfork
59	$p\bar{4}m2$	49	k	$C_7^2 \times D_4$	1	$p1$	D_4	pitchfork

Table 60: Maximal subgroups of $p\bar{4}b2$ (No. 60)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
22	$c222$	2	t	C_2	22	$c222$	C_1	pitchfork
25	$pba2$	2	t	C_2	25	$pba2$	C_1	pitchfork
50	$p\bar{4}$	2	t	C_2	50	$p\bar{4}$	C_1	pitchfork
60	$p\bar{4}b2$	9	k	$C_3^2 \times D_4$	1	$p1$	D_4	transcritical
60	$p\bar{4}b2$	25	k	$C_5^2 \times D_4$	1	$p1$	D_4	pitchfork
60	$p\bar{4}b2$	49	k	$C_7^2 \times D_4$	1	$p1$	D_4	pitchfork

Table 61: Maximal subgroups of $p4/mmm$ (No. 61)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
37	$pmmm$	2	t	C_2	37	$pmmm$	C_1	pitchfork
47	$cmmm$	2	t	C_2	47	$cmmm$	C_1	pitchfork
51	$p4/m$	2	t	C_2	51	$p4/m$	C_1	pitchfork
53	$p422$	2	t	C_2	53	$p422$	C_1	pitchfork
55	$p4mm$	2	t	C_2	55	$p4mm$	C_1	pitchfork
57	$p\bar{4}2m$	2	t	C_2	57	$p\bar{4}2m$	C_1	pitchfork
59	$p\bar{4}m2$	2	t	C_2	59	$p\bar{4}m2$	C_1	pitchfork
61	$p4/mmm$	2	k	C_2	61	$p4/mmm$	C_1	pitchfork
61	$p4/mmm$	9	k	$C_3^2 \times D_4$	4	$p11m$	D_4	transcritical
61	$p4/mmm$	25	k	$C_5^2 \times D_4$	4	$p11m$	D_4	pitchfork
61	$p4/mmm$	49	k	$C_7^2 \times D_4$	4	$p11m$	D_4	pitchfork
62	$p4/nbm$	2	k	C_2	62	$p4/nbm$	C_1	pitchfork
63	$p4/mbm$	2	k	C_2	63	$p4/mbm$	C_1	pitchfork
64	$p4/nmm$	2	k	C_2	64	$p4/nmm$	C_1	pitchfork

Table 62: Maximal subgroups of $p4/nbm$ (No. 62)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
39	$pban$	2	t	C_2	39	$pban$	C_1	pitchfork
48	$cmme$	2	t	C_2	48	$cmme$	C_1	pitchfork
52	$p4/n$	2	t	C_2	52	$p4/n$	C_1	pitchfork
53	$p422$	2	t	C_2	53	$p422$	C_1	pitchfork
56	$p4bm$	2	t	C_2	56	$p4bm$	C_1	pitchfork
57	$p\bar{4}2m$	2	t	C_2	57	$p\bar{4}2m$	C_1	pitchfork
60	$p\bar{4}b2$	2	t	C_2	60	$p\bar{4}b2$	C_1	pitchfork
62	$p4/nbm$	9	k	$C_3^2 \times D_4$	5	$p11a$	D_4	transcritical
62	$p4/nbm$	25	k	$C_5^2 \times D_4$	5	$p11a$	D_4	pitchfork
62	$p4/nbm$	49	k	$C_7^2 \times D_4$	5	$p11a$	D_4	pitchfork

Table 63: Maximal subgroups of $p4/mbm$ (No. 63)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
44	$pbam$	2	t	C_2	44	$pbam$	C_1	pitchfork
47	$cmmm$	2	t	C_2	47	$cmmm$	C_1	pitchfork
51	$p4/m$	2	t	C_2	51	$p4/m$	C_1	pitchfork
54	$p42_12$	2	t	C_2	54	$p42_12$	C_1	pitchfork
56	$p4bm$	2	t	C_2	56	$p4bm$	C_1	pitchfork
58	$p\bar{4}2_1m$	2	t	C_2	58	$p\bar{4}2_1m$	C_1	pitchfork
60	$p\bar{4}b2$	2	t	C_2	60	$p\bar{4}b2$	C_1	pitchfork
63	$p4/mbm$	9	k	$C_3^2 \times D_4$	4	$p11m$	D_4	transcritical
63	$p4/mbm$	25	k	$C_5^2 \times D_4$	4	$p11m$	D_4	pitchfork
63	$p4/mbm$	49	k	$C_7^2 \times D_4$	4	$p11m$	D_4	pitchfork

Table 64: Maximal subgroups of $p4/nmm$ (No. 64)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
46	$pmmn$	2	t	C_2	46	$pmmn$	C_1	pitchfork
48	$cmme$	2	t	C_2	48	$cmme$	C_1	pitchfork
52	$p4/n$	2	t	C_2	52	$p4/n$	C_1	pitchfork
54	$p42_12$	2	t	C_2	54	$p42_12$	C_1	pitchfork
55	$p4mm$	2	t	C_2	55	$p4mm$	C_1	pitchfork
58	$p42_1m$	2	t	C_2	58	$p42_1m$	C_1	pitchfork
59	$p4m2$	2	t	C_2	59	$p4m2$	C_1	pitchfork
64	$p4/nmm$	9	k	$C_3^2 \times D_4$	5	$p11a$	D_4	transcritical
64	$p4/nmm$	25	k	$C_5^2 \times D_4$	5	$p11a$	D_4	pitchfork
64	$p4/nmm$	49	k	$C_7^2 \times D_4$	5	$p11a$	D_4	pitchfork

Table 65: Maximal subgroups of $p3$ (No. 65)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
1	$p1$	3	t	C_3	1	$p1$	C_1	(complex)
65	$p3$	3	k	C_3	65	$p3$	C_1	(complex)
65	$p3$	4	k	A_4	1	$p1$	C_3	transcritical
65	$p3$	7	k	$C_7 \times C_3$	1	$p1$	C_3	(complex)
65	$p3$	25	k	$C_5^2 \times C_3$	1	$p1$	C_3	(complex)

Table 66: Maximal subgroups of $p\bar{3}$ (No. 66)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
2	$p\bar{1}$	3	t	C_3	2	$p\bar{1}$	C_1	(complex)
65	$p3$	2	t	C_2	65	$p3$	C_1	pitchfork
66	$p\bar{3}$	3	k	D_3	65	$p3$	C_2	transcritical
66	$p\bar{3}$	4	k	A_4	2	$p\bar{1}$	C_3	transcritical
66	$p\bar{3}$	7	k	$C_7 \times C_6$	1	$p1$	C_6	pitchfork
66	$p\bar{3}$	25	k	$C_5^2 \times C_6$	1	$p1$	C_6	transcritical

Table 67: Maximal subgroups of $p312$ (No. 67)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
10	$c211$	3	t	D_3	1	$p1$	C_2	transcritical
65	$p3$	2	t	C_2	65	$p3$	C_1	pitchfork
67	$p312$	4	k	S_4	1	$p1$	D_3	transcritical
67	$p312$	25	k	$C_5^2 \times D_3$	1	$p1$	D_3	transcritical
67	$p312$	49	k	$C_7^2 \times D_3$	1	$p1$	D_3	transcritical
68	$p321$	3	k	D_3	65	$p3$	C_2	transcritical

Table 68: Maximal subgroups of $p321$ (No. 68)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
10	$c211$	3	t	D_3	1	$p1$	C_2	transcritical
65	$p3$	2	t	C_2	65	$p3$	C_1	pitchfork
67	$p312$	3	k	C_3	67	$p312$	C_1	(complex)
68	$p321$	4	k	S_4	1	$p1$	D_3	transcritical
68	$p321$	25	k	$C_5^2 \times D_3$	1	$p1$	D_3	transcritical
68	$p321$	49	k	$C_7^2 \times D_3$	1	$p1$	D_3	transcritical

Table 69: Maximal subgroups of $p3m1$ (No. 69)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
13	$cm11$	3	t	D_3	1	$p1$	C_2	transcritical
65	$p3$	2	t	C_2	65	$p3$	C_1	pitchfork
69	$p3m1$	4	k	S_4	1	$p1$	D_3	transcritical
69	$p3m1$	25	k	$C_5^2 \times D_3$	1	$p1$	D_3	transcritical
69	$p3m1$	49	k	$C_7^2 \times D_3$	1	$p1$	D_3	transcritical
70	$p31m$	3	k	D_3	65	$p3$	C_2	transcritical

Table 70: Maximal subgroups of $p31m$ (No. 70)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
13	$cm11$	3	t	D_3	1	$p1$	C_2	transcritical
65	$p3$	2	t	C_2	65	$p3$	C_1	pitchfork
69	$p3m1$	3	k	C_3	69	$p3m1$	C_1	(complex)
70	$p31m$	4	k	S_4	1	$p1$	D_3	transcritical
70	$p31m$	25	k	$C_5^2 \times D_3$	1	$p1$	D_3	transcritical
70	$p31m$	49	k	$C_7^2 \times D_3$	1	$p1$	D_3	transcritical

Table 71: Maximal subgroups of $\bar{p}31m$ (No. 71)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
18	$c2/m11$	3	t	D_3	2	$p\bar{1}$	C_2	transcritical
66	$p\bar{3}$	2	t	C_2	66	$p\bar{3}$	C_1	pitchfork
67	$p312$	2	t	C_2	67	$p312$	C_1	pitchfork
70	$p31m$	2	t	C_2	70	$p31m$	C_1	pitchfork
71	$p\bar{3}1m$	4	k	S_4	2	$p\bar{1}$	D_3	transcritical
71	$p\bar{3}1m$	25	k	$C_5^2 \times D_6$	1	$p1$	D_6	transcritical
71	$p\bar{3}1m$	49	k	$C_7^2 \times D_6$	1	$p1$	D_6	pfork + trans
72	$p\bar{3}m1$	3	k	D_3	69	$p3m1$	C_2	transcritical

Table 72: Maximal subgroups of $p\bar{3}m1$ (No. 72)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
18	$c2/m11$	3	t	D_3	2	$p\bar{1}$	C_2	transcritical
66	$p\bar{3}$	2	t	C_2	66	$p\bar{3}$	C_1	pitchfork
68	$p321$	2	t	C_2	68	$p321$	C_1	pitchfork
69	$p3m1$	2	t	C_2	69	$p3m1$	C_1	pitchfork
71	$p\bar{3}1m$	3	k	D_3	67	$p312$	C_2	transcritical
72	$p\bar{3}m1$	4	k	S_4	2	$p\bar{1}$	D_3	transcritical
72	$p\bar{3}m1$	25	k	$C_5^2 \times D_6$	1	$p1$	D_6	transcritical
72	$p\bar{3}m1$	49	k	$C_7^2 \times D_6$	1	$p1$	D_6	pfork + trans

Table 73: Maximal subgroups of $p6$ (No. 73)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
3	$p112$	3	t	C_3	3	$p112$	C_1	(complex)
65	$p3$	2	t	C_2	65	$p3$	C_1	pitchfork
73	$p6$	3	k	D_3	65	$p3$	C_2	transcritical
73	$p6$	4	k	A_4	3	$p112$	C_3	transcritical
73	$p6$	7	k	$C_7 \times C_6$	1	$p1$	C_6	pitchfork
73	$p6$	25	k	$C_5^2 \times C_6$	1	$p1$	C_6	transcritical

Table 74: Maximal subgroups of $p\bar{6}$ (No. 74)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
4	$p11m$	3	t	C_3	4	$p11m$	C_1	(complex)
65	$p3$	2	t	C_2	65	$p3$	C_1	pitchfork
74	$p\bar{6}$	3	k	C_3	74	$p\bar{6}$	C_1	(complex)
74	$p\bar{6}$	4	k	A_4	4	$p11m$	C_3	transcritical
74	$p\bar{6}$	7	k	$C_7 \times C_3$	4	$p11m$	C_3	(complex)
74	$p\bar{6}$	25	k	$C_5^2 \times C_3$	4	$p11m$	C_3	(complex)

Table 75: Maximal subgroups of $p6/m$ (No. 75)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
6	$p112/m$	3	t	C_3	6	$p112/m$	C_1	(complex)
66	$p\bar{3}$	2	t	C_2	66	$p\bar{3}$	C_1	pitchfork
73	$p6$	2	t	C_2	73	$p6$	C_1	pitchfork
74	$p\bar{6}$	2	t	C_2	74	$p\bar{6}$	C_1	pitchfork
75	$p6/m$	3	k	D_3	74	$p\bar{6}$	C_2	transcritical
75	$p6/m$	4	k	A_4	6	$p112/m$	C_3	transcritical
75	$p6/m$	7	k	$C_7 \times C_6$	4	$p11m$	C_6	pitchfork
75	$p6/m$	25	k	$C_5^2 \times C_6$	4	$p11m$	C_6	transcritical

Table 76: Maximal subgroups of $p622$ (No. 76)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
22	$c222$	3	t	D_3	3	$p112$	C_2	transcritical
67	$p312$	2	t	C_2	67	$p312$	C_1	pitchfork
68	$p321$	2	t	C_2	68	$p321$	C_1	pitchfork
73	$p6$	2	t	C_2	73	$p6$	C_1	pitchfork
76	$p622$	3	k	D_3	67	$p312$	C_2	transcritical
76	$p622$	4	k	S_4	3	$p112$	D_3	transcritical
76	$p622$	25	k	$C_5^2 \times D_6$	1	$p1$	D_6	transcritical
76	$p622$	49	k	$C_7^2 \times D_6$	1	$p1$	D_6	pfork + trans

Table 77: Maximal subgroups of $p6mm$ (No. 77)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
26	$cmm2$	3	t	D_3	3	$p112$	C_2	transcritical
69	$p3m1$	2	t	C_2	69	$p3m1$	C_1	pitchfork
70	$p31m$	2	t	C_2	70	$p31m$	C_1	pitchfork
73	$p6$	2	t	C_2	73	$p6$	C_1	pitchfork
77	$p6mm$	3	k	D_3	69	$p3m1$	C_2	transcritical
77	$p6mm$	4	k	S_4	3	$p112$	D_3	transcritical
77	$p6mm$	25	k	$C_5^2 \times D_6$	1	$p1$	D_6	transcritical
77	$p6mm$	49	k	$C_7^2 \times D_6$	1	$p1$	D_6	pfork + trans

Table 78: Maximal subgroups of $p\bar{6}m2$ (No. 78)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
35	$cm2m$	3	t	D_3	4	$p11m$	C_2	transcritical
67	$p312$	2	t	C_2	67	$p312$	C_1	pitchfork
69	$p3m1$	2	t	C_2	69	$p3m1$	C_1	pitchfork
74	$p\bar{6}$	2	t	C_2	74	$p\bar{6}$	C_1	pitchfork
78	$p\bar{6}m2$	4	k	S_4	4	$p11m$	D_3	transcritical
78	$p\bar{6}m2$	25	k	$C_5^2 \times D_3$	4	$p11m$	D_3	transcritical
78	$p\bar{6}m2$	49	k	$C_7^2 \times D_3$	4	$p11m$	D_3	transcritical
79	$p\bar{6}2m$	3	k	D_3	74	$p\bar{6}$	C_2	transcritical

Table 79: Maximal subgroups of $p\bar{6}2m$ (No. 79)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
35	$cm2m$	3	t	D_3	4	$p11m$	C_2	transcritical
68	$p321$	2	t	C_2	68	$p321$	C_1	pitchfork
70	$p31m$	2	t	C_2	70	$p31m$	C_1	pitchfork
74	$p\bar{6}$	2	t	C_2	74	$p\bar{6}$	C_1	pitchfork
78	$p\bar{6}m2$	3	k	C_3	78	$p\bar{6}m2$	C_1	(complex)
79	$p\bar{6}2m$	4	k	S_4	4	$p11m$	D_3	transcritical
79	$p\bar{6}2m$	25	k	$C_5^2 \times D_3$	4	$p11m$	D_3	transcritical
79	$p\bar{6}2m$	49	k	$C_7^2 \times D_3$	4	$p11m$	D_3	transcritical

Table 80: Maximal subgroups of $p6/mmm$ (No. 80)

Subgroup	HM symbol	Index	Type	Factor group	Core	Core HM	Image	Bifurcation
47	$cmmm$	3	t	D_3	6	$p112/m$	C_2	transcritical
71	$p\bar{3}1m$	2	t	C_2	71	$p\bar{3}1m$	C_1	pitchfork
72	$p\bar{3}m1$	2	t	C_2	72	$p\bar{3}m1$	C_1	pitchfork
75	$p6/m$	2	t	C_2	75	$p6/m$	C_1	pitchfork
76	$p622$	2	t	C_2	76	$p622$	C_1	pitchfork
77	$p6mm$	2	t	C_2	77	$p6mm$	C_1	pitchfork
78	$p\bar{6}m2$	2	t	C_2	78	$p\bar{6}m2$	C_1	pitchfork
79	$p\bar{6}2m$	2	t	C_2	79	$p\bar{6}2m$	C_1	pitchfork
80	$p6/mmm$	3	k	D_3	78	$p\bar{6}m2$	C_2	transcritical
80	$p6/mmm$	4	k	S_4	6	$p112/m$	D_3	transcritical
80	$p6/mmm$	25	k	$C_5^2 \times D_6$	4	$p11m$	D_6	transcritical
80	$p6/mmm$	49	k	$C_7^2 \times D_6$	4	$p11m$	D_6	pfork + trans