International Tables for Crystallography (2006). Vol. A1, Wyckoff relations for space group 6, pp. 444–445.

Pm No. 6 $P1m1$ C_s^1

UNIQUE AXIS b

	Axes	Coordinates	Wyckoff positions $1a$	$1b$	$2c$
I Maximal *translationengleiche* subgroups					
[2] $P1$ (1)			$1a$	$1a$	$2\times1a$
II Maximal *klassengleiche* subgroups					
Enlarged unit cell, non-isomorphic					
[2] $C1m1$ (8)	$2\mathbf{a}, 2\mathbf{b}, \mathbf{c}$	$\frac{1}{2}x, \frac{1}{2}y, z; +(0, \frac{1}{2}, 0)$	$2\times2a$	$4b$	$2\times4b$
[2] $C1m1$ (8)	$2\mathbf{a}, 2\mathbf{b}, \mathbf{c}$	$\frac{1}{2}x, \frac{1}{2}y+\frac{1}{4}, z; +(0, \frac{1}{2}, 0)$	$4b$	$2\times2a$	$2\times4b$
[2] $C1m1$ (8)	$2\mathbf{a}, 2\mathbf{b}, -\mathbf{a}+\mathbf{c}$	$\frac{1}{2}(x+z), \frac{1}{2}y, z; +(0, \frac{1}{2}, 0)$	$2\times2a$	$4b$	$2\times4b$
[2] $C1m1$ (8)	$2\mathbf{a}, 2\mathbf{b}, -\mathbf{a}+\mathbf{c}$	$\frac{1}{2}(x+z), \frac{1}{2}y+\frac{1}{4}, z;$	$4b$	$2\times2a$	$2\times4b$
[2] $A1m1$ (8)	$\mathbf{a}, 2\mathbf{b}, 2\mathbf{c}$	$x, \frac{1}{2}y, \frac{1}{2}z; +(0, \frac{1}{2}, 0);$	$2\times2a$	$4b$	$2\times4b$
[2] $A1m1$ (8)	$\mathbf{a}, 2\mathbf{b}, 2\mathbf{c}$	$x, \frac{1}{2}y+\frac{1}{4}, \frac{1}{2}z; +(0, \frac{1}{2}, 0)$	$4b$	$2\times2a$	$2\times4b$
[2] $P1a1$ (7)	$2\mathbf{a}, \mathbf{b}, \mathbf{c}$	$\frac{1}{2}x, y, z; +(\frac{1}{2}, 0, 0)$	$2a$	$2a$	$2\times2a$
[2] $P1c1$ (7)	$\mathbf{a}, \mathbf{b}, 2\mathbf{c}$	$x, y, \frac{1}{2}z; +(0, 0, \frac{1}{2})$	$2a$	$2a$	$2\times2a$
[2] $P1c1$ (7)	$\mathbf{a}-\mathbf{c}, \mathbf{b}, 2\mathbf{c}$	$x, y, \frac{1}{2}(x+z); +(0, 0, \frac{1}{2})$	$2a$	$2a$	$2\times2a$
Enlarged unit cell, isomorphic					
[2] $P1m1$	$\mathbf{a}, 2\mathbf{b}, \mathbf{c}$	$x, \frac{1}{2}y, z; +(0, \frac{1}{2}, 0)$	$1a; 1b$	$2c$	$2\times2c$
[2] $P1m1$	$\mathbf{a}, 2\mathbf{b}, \mathbf{c}$	$x, \frac{1}{2}y+\frac{1}{4}, z; +(0, \frac{1}{2}, 0)$	$2c$	$1a; 1b$	$2\times2c$
[3] $P1m1$	$\mathbf{a}, 3\mathbf{b}, \mathbf{c}$	$x, \frac{1}{3}y, z; \pm(0, \frac{1}{3}, 0)$	$1a; 2c$	$1b; 2c$	$3\times2c$
[p] $P1m1$	$\mathbf{a}, p\mathbf{b}, \mathbf{c}$ p = prime > 2; $u = 1, \ldots, p-1$	$x, \frac{1}{p}y, z; +(0, \frac{u}{p}, 0)$	$1a; \frac{p-1}{2}\times2c$	$1b; \frac{p-1}{2}\times2c$	$p\times2c$
[2] $P1m1$	$2\mathbf{a}, \mathbf{b}, \mathbf{c}$	$\frac{1}{2}x, y, z; +(\frac{1}{2}, 0, 0)$	$2\times1a$	$2\times1b$	$2\times2c$
[2] $P1m1$	$\mathbf{a}-\mathbf{c}, \mathbf{b}, \mathbf{a}+\mathbf{c}$	$\frac{1}{2}(x-z), y, \frac{1}{2}(x+z); +(\frac{1}{2}, 0, \frac{1}{2})$	$2\times1a$	$2\times1b$	$2\times2c$
[2] $P1m1$	$\mathbf{a}, \mathbf{b}, 2\mathbf{c}$	$x, y, \frac{1}{2}z; +(0, 0, \frac{1}{2})$	$2\times1a$	$2\times1b$	$2\times2c$
[3] $P1m1$	$3\mathbf{a}, \mathbf{b}, \mathbf{c}$	$\frac{1}{3}x, y, z; \pm(\frac{1}{3}, 0, 0)$	$3\times1a$	$3\times1b$	$3\times2c$
[3] $P1m1$	$3\mathbf{a}, \mathbf{b}, -\mathbf{a}+\mathbf{c}$	$\frac{1}{3}(x+z), y, z; \pm(\frac{1}{3}, 0, 0)$	$3\times1a$	$3\times1b$	$3\times2c$
[3] $P1m1$	$3\mathbf{a}, \mathbf{b}, \mathbf{a}+\mathbf{c}$	$\frac{1}{3}(x-z), y, z; \pm(\frac{1}{3}, 0, 0)$	$3\times1a$	$3\times1b$	$3\times2c$
[3] $P1m1$	$\mathbf{a}, \mathbf{b}, 3\mathbf{c}$	$x, y, \frac{1}{3}z; \pm(0, 0, \frac{1}{3})$	$3\times1a$	$3\times1b$	$3\times2c$
[p] $P1m1$	$\mathbf{a}, \mathbf{b}, p\mathbf{c}$ p = prime > 2; $u = 1, \ldots, p-1$	$x, y, \frac{1}{p}z; +(0, 0, \frac{u}{p})$	$p\times1a$	$p\times1b$	$p\times2c$
[p] $P1m1$	$p\mathbf{a}, \mathbf{b}, q\mathbf{a}+\mathbf{c}$ p = prime > 2; $u = 1, \ldots, p-1$; $-\frac{1}{2}(p-1) \le q \le \frac{1}{2}(p-1)$	$\frac{1}{p}(x-qz), y, z; +(\frac{u}{p}, 0, 0)$	$p\times1a$	$p\times1b$	$p\times2c$

	Axes	Coordinates

I Maximal *translationengleiche* subgroups

[2] $P1$

II Maximal *klassengleiche* subgroups

Enlarged unit cell, non-isomorphic

[2] $A11m$	$\mathbf{a}, 2\mathbf{b}, 2\mathbf{c}$	$x, \frac{1}{2}y, \frac{1}{2}z; +(0,0,\frac{1}{2})$
[2] $A11m$	$\mathbf{a}, 2\mathbf{b}, 2\mathbf{c}$	$x, \frac{1}{2}y, \frac{1}{2}z+\frac{1}{4}; +(0,0,\frac{1}{2})$
[2] $A11m$	$\mathbf{a}-\mathbf{b}, 2\mathbf{b}, 2\mathbf{c}$	$x, \frac{1}{2}(x+y), \frac{1}{2}z; +(0,0,\frac{1}{2})$
[2] $A11m$	$\mathbf{a}-\mathbf{b}, 2\mathbf{b}, 2\mathbf{c}$	$x, \frac{1}{2}(x+y), \frac{1}{2}z+\frac{1}{4}; +(0,0,\frac{1}{2})$
[2] $B11m$	$2\mathbf{a}, \mathbf{b}, 2\mathbf{c}$	$\frac{1}{2}x, y, \frac{1}{2}z; +(0,0,\frac{1}{2})$
[2] $B11m$	$2\mathbf{a}, \mathbf{b}, 2\mathbf{c}$	$\frac{1}{2}x, y, \frac{1}{2}z+\frac{1}{4}; +(0,0,\frac{1}{2})$
[2] $P11b$	$\mathbf{a}, 2\mathbf{b}, \mathbf{c}$	$x, \frac{1}{2}y, z; +(0,\frac{1}{2},0)$
[2] $P11a$	$2\mathbf{a}, \mathbf{b}, \mathbf{c}$	$\frac{1}{2}x, y, z; +(\frac{1}{2},0,0)$
[2] $P11a$	$2\mathbf{a}, -\mathbf{a}+\mathbf{b}, \mathbf{c}$	$\frac{1}{2}(x+y), y, z; +(\frac{1}{2},0,0)$

Enlarged unit cell, isomorphic

[2] $P11m$	$\mathbf{a}, \mathbf{b}, 2\mathbf{c}$	$x, y, \frac{1}{2}z; +(0,0,\frac{1}{2})$
[2] $P11m$	$\mathbf{a}, \mathbf{b}, 2\mathbf{c}$	$x, y, \frac{1}{2}z+\frac{1}{4}; +(0,0,\frac{1}{2})$
[3] $P11m$	$\mathbf{a}, \mathbf{b}, 3\mathbf{c}$	$x, y, \frac{1}{3}z; \pm(0,0,\frac{1}{3})$
[p] $P11m$	$\mathbf{a}, \mathbf{b}, p\mathbf{c}$	$x, y, \frac{1}{p}z; +(0,0,\frac{u}{p})$
	$p =$ prime > 2; $u = 1, \ldots, p-1$	
[2] $P11m$	$\mathbf{a}, 2\mathbf{b}, \mathbf{c}$	$x, \frac{1}{2}y, z; +(0,\frac{1}{2},0)$
[2] $P11m$	$\mathbf{a}+\mathbf{b}, -\mathbf{a}+\mathbf{b}, \mathbf{c}$	$\frac{1}{2}(x+y), \frac{1}{2}(-x+y), z; +(\frac{1}{2},\frac{1}{2},0)$
[2] $P11m$	$2\mathbf{a}, \mathbf{b}, \mathbf{c}$	$\frac{1}{2}x, y, z; +(\frac{1}{2},0,0)$
[3] $P11m$	$\mathbf{a}, 3\mathbf{b}, \mathbf{c}$	$x, \frac{1}{3}y, z; \pm(0,\frac{1}{3},0)$
[3] $P11m$	$\mathbf{a}-\mathbf{b}, 3\mathbf{b}, \mathbf{c}$	$x, \frac{1}{3}(x+y), z; \pm(0,\frac{1}{3},0)$
[3] $P11m$	$\mathbf{a}+\mathbf{b}, 3\mathbf{b}, \mathbf{c}$	$x, \frac{1}{3}(-x+y), z; \pm(0,\frac{1}{3},0)$
[3] $P11m$	$3\mathbf{a}, \mathbf{b}, \mathbf{c}$	$\frac{1}{3}x, y, z; \pm(\frac{1}{3},0,0)$
[p] $P11m$	$p\mathbf{a}, \mathbf{b}, \mathbf{c}$	$\frac{1}{p}x, y, z; +(\frac{u}{p},0,0)$
	$p =$ prime > 2; $u = 1, \ldots, p-1$	
[p] $P11m$	$\mathbf{a}+q\mathbf{b}, p\mathbf{b}, \mathbf{c}$	$x, \frac{1}{p}(-qx+y), z; +(0,\frac{u}{p},0)$
	$p =$ prime > 2; $u = 1, \ldots, p-1$;	
	$-\frac{1}{2}(p-1) \le q \le \frac{1}{2}(p-1)$	