

$pm11$

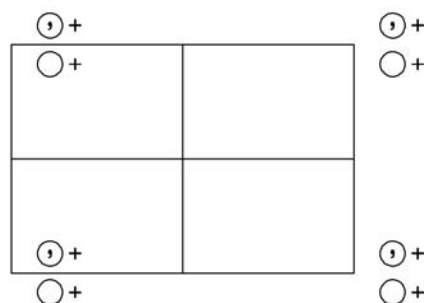
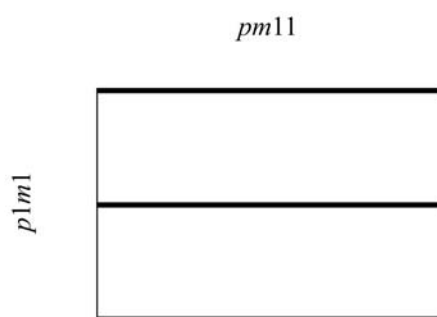
m

Monoclinic/Rectangular

No. 11

$pm11$

Patterson symmetry $p2/m11$



Origin on mirror plane m

Asymmetric unit $0 \leq x \leq \frac{1}{2}; 0 \leq y \leq 1$

Symmetry operations

- (1) 1 (2) $m \ 0,y,z$

Generators selected (1); $t(1,0,0)$; $t(0,1,0)$; (2)

Positions

Multiplicity, Wyckoff letter, Site symmetry	Coordinates	Reflection conditions
2 <i>c</i> 1	(1) x, y, z (2) \bar{x}, y, z	General: no conditions Special: no extra conditions
1 <i>b</i> <i>m</i>	$\frac{1}{2}, y, z$	
1 <i>a</i> <i>m</i>	$0, y, z$	

Symmetry of special projections

Along [001] $p1m1$	Along [100] $\bar{1}111$	Along [010] $\bar{1}m11$
$\mathbf{a}' = \mathbf{a}$ $\mathbf{b}' = \mathbf{b}_p$	$\mathbf{a}' = \mathbf{b}$	$\mathbf{a}' = \mathbf{a}$
Origin at $0, 0, z$	Origin at $x, 0, 0$	Origin at $0, y, 0$

Maximal non-isotypic subgroups

I	$[2] p1(1) 1$
IIa	none
IIb	$[2] cm11(\mathbf{a}' = 2\mathbf{a}, \mathbf{b}' = 2\mathbf{b})(13)$; $[2] pb11(\mathbf{b}' = 2\mathbf{b})(12)$

Maximal isotypic subgroups of lowest index

IIc	$[2] pm11(\mathbf{a}' = 2\mathbf{a})(11)$; $[2] pm11(\mathbf{b}' = 2\mathbf{b})(11)$
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Minimal non-isotypic supergroups

I	$[2] p2/m11(14)$; $[2] p2_1/m11(15)$; $[2] pmm2(23)$; $[2] pma2(24)$; $[2] pm2m(27)$; $[2] pm2_1b(28)$; $[2] pm2a(31)$; $[2] pm2_1n(32)$
II	$[2] cm11(13)$