

$p1g1$

No. 4

$pg$

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

General position

Multiplicity,  
Wyckoff letter,  
Site symmetry

Coordinates

2  $a$  1

(1)  $x, y$  (2)  $\bar{x}, y + \frac{1}{2}$

I Maximal *translationengleiche* subgroups

[2]  $p1$  (1) 1

II Maximal *klassengleiche* subgroups

• Enlarged unit cell

[2]  $a' = 2a$

$pg$ (4)	$\langle 2 \rangle$	$2a, b$	
$pg$ (4)	$\langle 2 + (1, 0) \rangle$	$2a, b$	$1/2, 0$

[3]  $a' = 3a$

{	$pg$ (4)	$\langle 2 \rangle$	$3a, b$	
	$pg$ (4)	$\langle 2 + (2, 0) \rangle$	$3a, b$	$1, 0$
	$pg$ (4)	$\langle 2 + (4, 0) \rangle$	$3a, b$	$2, 0$

[3]  $b' = 3b$

$pg$ (4)	$\langle 2 + (0, 1) \rangle$	$a, 3b$	
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• Series of maximal isomorphic subgroups

[ $p$ ]  $a' = pa$

$pg$ (4)	$\langle 2 + (2u, 0) \rangle$	$pa, b$	$u, 0$
	$p > 2; 0 \leq u < p$		
	$p$ conjugate subgroups for the prime $p$		

[ $p$ ]  $b' = pb$

$pg$ (4)	$\langle 2 + (0, \frac{p}{2} - \frac{1}{2}) \rangle$	$a, pb$	
	$p > 2$		
	no conjugate subgroups		

I Minimal *translationengleiche* supergroups

[2]  $p2mg$  (7); [2]  $p2gg$  (8)

II Minimal non-isomorphic *klassengleiche* supergroups

• Additional centring translations

[2]  $cm$  (5)

• Decreased unit cell

[2]  $b' = \frac{1}{2}b$   $pm$  (3)