Table 9.1.8.1. *The 24 'Symmetrische Sorten'*

In the centred monoclinic lattices, the set $\{\mathbf{a}, \mathbf{c}, \mathbf{a}+\mathbf{c}\} = \{\mathbf{p}, \mathbf{q}, \mathbf{r}\}$ of the three shortest vectors in the **ac** plane is used to describe the metrical conditions. These vectors are renamed according to their relation to the projection of the centring point in the **ac** plane: **p** designates the vector that crosses the projection of the centring point, **q** is the shorter one of the two others and **r** labels the third one.

Delaunay symbol	Bravais type	Metrical conditions (parameters of conventional cells)	Voronoi type	Notation of the scalar products according to equation (9.1.8.1)						Transformation matrix ***P***
				12	13	14	23	24	34	
*K*1	*cI*	–	I	12	12	12	12	12	12	011/101/110
*K*2	*cF*	–	III	0	13	13	13	13	0	$1\bar{1}1$/111/002
*K*3	*cP*	–	V	0	0	14	14	14	0	100/001/011
				0	0	14	0	14	14	100/010/001
H	*hP*	–	IV	12	0	12	0	12	34	100/010/001
*R*1	*hR*	$2c^2 < 3a^2$	I	12	12	14	12	14	14	$101/\bar{1}11/0\bar{1}1$
*R*2	*hR*	$2c^2 > 3a^2$	III	0	13	13	13	24	0	101/003/012
*Q*1	*tI*	$c^2 < 2a^2$	I	12	13	13	13	13	12	011/101/110
*Q*2	*tI*	$c^2 > 2a^2$	II	0	13	13	13	13	34	101/011/002
*Q*3	*tP*	–	V	0	0	14	0	14	34	100/010/001
				0	0	14	14	24	0	100/001/011
				0	0	14	23	0	23	001/110/010
*O*1	*oF*	–	I	12	13	13	13	13	34	$1\bar{1}1$/111/002
*O*2	*oI*	$a^2 + b^2 > c^2$	I	12	13	14	14	13	12	011/101/110
*O*3	*oI*	$a^2 + b^2 < c^2$	II	0	13	13	23	23	34	101/011/002
*O*4	*oI*	$a^2 + b^2 = c^2$	III	0	13	14	14	13	0	011/101/110
				0	13	13	23	23	0	101/011/002
*O*5	*o*(*AB*)*C*	–	IV	12	0	14	0	12	34	200/110/001
				12	0	14	0	14	34	$110/\bar{1}10$/001
*O*6	*oP*	–	V	0	0	14	0	24	34	100/010/001
				0	0	14	23	24	0	100/001/011
*M*1	*m*(*AC*)*I*	$b^2 > p^2$	I	12	13	14	13	14	34	$\bar{1}10/\bar{1}\bar{1}0/\bar{1}01$
*M*2	*m*(*AC*)*I*	$p^2 > b^2 > r^2 - q^2$	I	12	13	14	14	13	34	$01\bar{1}/110/10\bar{1}$
*M*3	*m*(*AC*)*I*	$r^2 - q^2 > b^2$	II	0	13	14	23	23	34	$\bar{1}01/\bar{1}10/\bar{2}00$
*M*4	*m*(*AC*)*I*	$b^2 = p^2$	II	0	13	14	14	13	34	$01\bar{1}/110/10\bar{1}$
				0	13	14	13	14	34	$\bar{1}10/\bar{1}\bar{1}0/\bar{1}01$
*M*5	*m*(*AC*)*I*	$b^2 = r^2 - q^2$	III	0	13	14	23	23	0	$\bar{1}01/\bar{1}10/\bar{2}00$
				0	13	14	23	13	0	$10\bar{1}/1\bar{1}0/0\bar{1}\bar{1}$
*M*6	*mP*	–	IV	0	13	14	0	24	34	100/010/001
*T*1	*aP*	–	I	12	13	14	23	24	34	100/010/001
*T*2	*aP*	–	II	0	13	14	23	24	34	100/010/001
*T*3	*aP*	–	III	0	13	14	23	24	0	100/010/001

references