* Rank 0 tensor. * Rank 1 tensor.

$$\begin{bmatrix} 0 & 0 & T_z \end{bmatrix}$$

$T_z = T_{pz}^{(1)}$

* Rank 2 tensor (s).

$$\begin{bmatrix} T_{xx} & T_{xy} & 0 \\ T_{xy} & -T_{xx} & 0 \\ 0 & 0 & 0 \end{bmatrix}$$

$T_{xx} = T_{dv}^{(1)}$

$T_{xy} = T_{dxy}^{(1)}$

* Rank 2 tensor (a). * Rank 3 tensor (s).

$$\begin{bmatrix} 0 & 0 & T_{xxz} \\ 0 & 0 & T_{xxz} \\ 0 & 0 & T_{zzz} \\ T_{yzx} & T_{yzy} & 0 \\ T_{yzy} & -T_{yzx} & 0 \\ 0 & 0 & 0 \end{bmatrix}$$

$T_{xxz} = -T_{faz}^{(1)} + T_{pz}^{(1)}$

$T_{zzz} = 2T_{faz}^{(1)} + T_{pz}^{(1)} + 2T_{pz}^{(2)}$

$T_{yzx} = -3M_{du}^{(1)}$

$T_{yzy} = -T_{faz}^{(1)} + T_{pz}^{(2)}$

* Rank 3 tensor (a).

$$\begin{bmatrix} T_{yzx} & T_{yzy} & 0 \\ -T_{yzy} & T_{yzx} & 0 \\ 0 & 0 & T_{xyz} \end{bmatrix}$$

$T_{yzx} = -M_{du}^{(2)} + M_s^{(1)}$

$T_{yzy} = T_{pz}^{(3)}$

$T_{xyz} = 2M_{du}^{(2)} + M_s^{(1)}$

* Rank 4 tensor (sss).

$$\begin{bmatrix} T_{xxxx} & 0 & T_{xxzz} & 0 & 0 & T_{xxxy} \\ 0 & -T_{xxxx} & -T_{xxzz} & 0 & 0 & T_{xxxy} \\ T_{xxzz} & -T_{xxzz} & 0 & 0 & 0 & T_{zzxy} \\ 0 & 0 & 0 & T_{yzyz} & T_{yzzx} & 0 \\ 0 & 0 & 0 & T_{yzzx} & -T_{yzyz} & 0 \\ T_{xxxy} & T_{xxxy} & T_{zzxy} & 0 & 0 & 0 \end{bmatrix}$$

$T_{xxxx} = 2T_{dv}^{(1)} + 4T_{dv}^{(2)} + T_{gv}^{(1)}$

$T_{xxzz} = T_{dv}^{(1)} - T_{gv}^{(1)}$

$T_{xxxy} = T_{dxy}^{(1)} + 2T_{dxy}^{(2)} - T_{gbz}^{(1)}$

$T_{zzxy} = T_{dxy}^{(1)} + 2T_{gbz}^{(1)}$

$T_{yzyz} = -T_{dv}^{(2)} + T_{gv}^{(1)}$

$T_{yzzx} = T_{dxy}^{(2)} + 2T_{gbz}^{(1)}$

* Rank 4 tensor (ssa).

$$
\begin{bmatrix}
0 & T_{xxyy} & T_{xxzz} & 0 & 0 & T_{xxxy} \\
-T_{xxyy} & 0 & -T_{xxzz} & 0 & 0 & T_{xxxy} \\
-T_{xxzz} & T_{xxzz} & 0 & 0 & 0 & T_{zzxy} \\
0 & 0 & 0 & 0 & 0 & 0 \\
0 & 0 & 0 & 0 & 0 & 0 \\
-T_{xxxy} & -T_{xxxy} & -T_{zzxy} & 0 & 0 & 0
\end{bmatrix}
$$

$$T_{xxyy} = 4M_{f3}^{(1)} - 2T_{dv}^{(3)}$$
$$T_{xxzz} = -4M_{f3}^{(1)} - T_{dv}^{(3)}$$
$$T_{xxxy} = 2M_{fbz}^{(1)} + T_{dxy}^{(3)}$$
$$T_{zzxy} = -4M_{fbz}^{(1)} + T_{dxy}^{(3)}$$

* Rank 4 tensor (aas).

$$
\begin{bmatrix}
T_{yzyz} & T_{yzzx} & 0 \\
T_{yzzx} & -T_{yzyz} & 0 \\
0 & 0 & 0
\end{bmatrix}
$$

$$T_{yzyz} = 2T_{dv}^{(4)}$$
$$T_{yzzx} = 2T_{dxy}^{(4)}$$

* Rank 4 tensor (aaa). * Rank 4 tensor (sa).

$$
\begin{bmatrix}
0 & 0 & T_{xxxy} \\
0 & 0 & -T_{xxxy} \\
0 & 0 & 0 \\
T_{yzyz} & T_{yzzx} & 0 \\
-T_{yzzx} & T_{yzyz} & 0 \\
0 & 0 & T_{xyxy}
\end{bmatrix}
$$

$$T_{xxxy} = M_{fbz}^{(2)} - 2T_{dxy}^{(5)}$$
$$T_{yzyz} = M_{f3}^{(2)} - T_{dv}^{(5)}$$
$$T_{yzzx} = -M_{fbz}^{(2)} - T_{dxy}^{(5)}$$
$$T_{xyxy} = M_{f3}^{(2)} + 2T_{dv}^{(5)}$$

* Rank 4 tensor (as).

$$
\begin{bmatrix}
0 & 0 & 0 & T_{yzyz} & T_{yzzx} & 0 \\
0 & 0 & 0 & -T_{yzzx} & T_{yzyz} & 0 \\
T_{xyxx} & -T_{xyxx} & 0 & 0 & 0 & T_{xyxy}
\end{bmatrix}
$$

$$T_{yzyz} = M_{f3}^{(3)} - T_{dv}^{(6)}$$
$$T_{yzzx} = M_{fbz}^{(3)} + T_{dxy}^{(6)}$$
$$T_{xyxx} = M_{fbz}^{(3)} - 2T_{dxy}^{(6)}$$
$$T_{xyxy} = M_{f3}^{(3)} + 2T_{dv}^{(6)}$$

* Rank 4 tensor (s).

$$
\begin{bmatrix}
T_{xxxx} & T_{xxyy} & T_{xxzz} & 0 & 0 & T_{xxxy} & 0 & 0 & T_{xxyx} \\
-T_{xxyy} & -T_{xxxx} & -T_{xxzz} & 0 & 0 & T_{xxyx} & 0 & 0 & T_{xxxy} \\
T_{zzxx} & -T_{zzxx} & 0 & 0 & 0 & T_{zzxy} & 0 & 0 & T_{zzxy} \\
0 & 0 & 0 & T_{yzyz} & T_{yzzx} & 0 & T_{yzzy} & T_{yzxz} & 0 \\
0 & 0 & 0 & T_{yzxz} & -T_{yzzy} & 0 & T_{yzzx} & -T_{yzyz} & 0 \\
T_{xyxx} & T_{xyxx} & T_{xyzz} & 0 & 0 & T_{xyxy} & 0 & 0 & -T_{xyxy}
\end{bmatrix}
$$

$$T_{xxxx} = 2T_{dv}^{(1)} + 4T_{dv}^{(2)} + T_{gv}^{(1)}$$

$$T_{xxyy} = 4M_{f3}^{(1)} - 2T_{dv}^{(3)}$$

$$T_{xxzz} = -4M_{f3}^{(1)} + T_{dv}^{(1)} - T_{dv}^{(3)} - T_{gv}^{(1)}$$

$$T_{xxxy} = 2M_{fbz}^{(1)} + M_{fbz}^{(2)} + T_{dxy}^{(1)} + 2T_{dxy}^{(2)} + T_{dxy}^{(3)} - 2T_{dxy}^{(5)} - T_{gbz}^{(1)}$$

$$T_{xxyx} = 2M_{fbz}^{(1)} - M_{fbz}^{(2)} + T_{dxy}^{(1)} + 2T_{dxy}^{(2)} + T_{dxy}^{(3)} + 2T_{dxy}^{(5)} - T_{gbz}^{(1)}$$

$$T_{zzxx} = 4M_{f3}^{(1)} + T_{dv}^{(1)} + T_{dv}^{(3)} - T_{gv}^{(1)}$$

$$T_{zzxy} = -4M_{fbz}^{(1)} + T_{dxy}^{(1)} + T_{dxy}^{(3)} + 2T_{gbz}^{(1)}$$

$$T_{yzyz} = M_{f3}^{(2)} - T_{dv}^{(2)} - T_{dv}^{(5)} + T_{gv}^{(1)}$$

$$T_{yzzx} = -M_{fbz}^{(2)} + T_{dxy}^{(2)} - T_{dxy}^{(5)} + 2T_{gbz}^{(1)}$$

$$T_{yzzy} = -M_{f3}^{(2)} - T_{dv}^{(2)} + T_{dv}^{(5)} + T_{gv}^{(1)}$$

$$T_{yzxz} = M_{fbz}^{(2)} + T_{dxy}^{(2)} + T_{dxy}^{(5)} + 2T_{gbz}^{(1)}$$

$$T_{xyxx} = -2M_{fbz}^{(1)} + T_{dxy}^{(1)} + 2T_{dxy}^{(2)} - T_{dxy}^{(3)} - T_{gbz}^{(1)}$$

$$T_{xyzz} = 4M_{fbz}^{(1)} + T_{dxy}^{(1)} - T_{dxy}^{(3)} + 2T_{gbz}^{(1)}$$

$$T_{xyxy} = M_{f3}^{(2)} + 2T_{dv}^{(5)}$$

* Rank 4 tensor (a).

$$\begin{bmatrix} 0 & 0 & 0 & T_{yzyz} & T_{yzzx} & 0 & T_{yzzy} & T_{yzxz} & 0 \\ 0 & 0 & 0 & -T_{yzxz} & T_{yzzy} & 0 & -T_{yzzx} & T_{yzyz} & 0 \\ T_{xyxx} & -T_{xyxx} & 0 & 0 & 0 & T_{xyxy} & 0 & 0 & T_{xyxy} \end{bmatrix}$$

$$T_{yzyz} = M_{f3}^{(3)} + 2T_{dv}^{(4)} - T_{dv}^{(6)}$$

$$T_{yzzx} = M_{fbz}^{(3)} + 2T_{dxy}^{(4)} + T_{dxy}^{(6)}$$

$$T_{yzzy} = M_{f3}^{(3)} - 2T_{dv}^{(4)} - T_{dv}^{(6)}$$

$$T_{yzxz} = M_{fbz}^{(3)} - 2T_{dxy}^{(4)} + T_{dxy}^{(6)}$$

$$T_{xyxx} = M_{fbz}^{(3)} - 2T_{dxy}^{(6)}$$

$$T_{xyxy} = M_{f3}^{(3)} + 2T_{dv}^{(6)}$$

* Rank 4 tensor (t).

$$\begin{bmatrix} T_{xxxx} & T_{xxxy} & 0 \\ T_{xxxy} & -T_{xxxx} & 0 \\ 0 & 0 & 0 \\ 0 & 0 & T_{yyzz} \\ T_{zzxx} & T_{zzxy} & 0 \\ T_{xxyx} & -T_{yyzz} - T_{zzxx} & 0 \\ T_{yzzx} & T_{yzzy} & 0 \\ 0 & 0 & T_{zxxz} \\ -T_{yzzy} - T_{zxxz} & T_{xyyy} & 0 \\ 0 & 0 & -\frac{T_{xxxy}}{2} - \frac{T_{xyyx}}{2} + T_{xyyy} + T_{zzxy} \end{bmatrix}$$

$$T_{xxxx} = 2T_{dv}^{(1)} + 4T_{dv}^{(2)} + T_{gv}^{(1)}$$

$$T_{xxxy} = T_{dxy}^{(1)} + 2T_{dxy}^{(2)} + T_{dxy}^{(3)} - 2T_{dxy}^{(5)} - T_{gbz}^{(1)}$$

$$T_{yyzz} = -T_{dv}^{(1)} + T_{dv}^{(3)} + T_{gv}^{(1)}$$

$$T_{zzxx} = T_{dv}^{(1)} + T_{dv}^{(3)} - T_{gv}^{(1)}$$

$$T_{zzxy} = T_{dxy}^{(1)} + T_{dxy}^{(3)} + 2T_{gbz}^{(1)}$$

$$T_{xxyx} = T_{dxy}^{(1)} + 2T_{dxy}^{(2)} + T_{dxy}^{(3)} + 2T_{dxy}^{(5)} - T_{gbz}^{(1)}$$

$$T_{yzzx} = T_{dxy}^{(2)} - T_{dxy}^{(5)} + 2T_{gbz}^{(1)}$$

$$T_{yzzy} = -T_{dv}^{(2)} + T_{dv}^{(5)} + T_{gv}^{(1)}$$

$$T_{zxxz} = T_{dv}^{(2)} + T_{dv}^{(5)} - T_{gv}^{(1)}$$

$$T_{xyyy} = T_{dxy}^{(1)} + 2T_{dxy}^{(2)} - T_{dxy}^{(3)} - T_{gbz}^{(1)}$$