$$K_{101}^{2} \quad = \quad \left[\begin{array}{cccccccc}
\frac{-27\,U}{4\,t} & \frac{\frac{-3}{8}\,\mathbf{i}\,\left(-3\,\mathbf{i}+\sqrt{3}\right)\,U}{t} & 0 & \frac{\mathbf{i}\,\sqrt{3}\,U^2}{t^2} & \frac{\frac{3}{4}\,\mathbf{i}\,U^2}{t^2} & \frac{\frac{-3}{4}\,\mathbf{i}\,U}{t} & \frac{9\,\left(\mathbf{i}+\sqrt{3}\right)\,U}{8\,t} & 0 \\
\frac{\frac{3}{8}\,\mathbf{i}\,\left(3\,\mathbf{i}+\sqrt{3}\right)\,U}{t} & \frac{-27\,U}{4\,t} & \frac{-24\,t^2+\left(3+\mathbf{i}\,\sqrt{3}\right)\,U^2}{8\,t^2} & 0 & -3\,\mathbf{i}-\sqrt{3} & \frac{-\left(\left(3\,\mathbf{i}+\sqrt{3}\right)\,U\right)}{8\,t} & \frac{-3\,\sqrt{3}\,U}{4\,t} & \frac{-8\,\sqrt{3}\,t^2+\left(-3\,\mathbf{i}+\sqrt{3}\right)\,U^2}{8\,t^2} \\
0 & \frac{-24\,t^2+\left(3-\mathbf{i}\,\sqrt{3}\right)\,U^2}{8\,t^2} & \frac{-21\,U}{4\,t} & \frac{3\,U}{4\,t} & \frac{3\,\sqrt{3}\,U}{4\,t} & -3\,\mathbf{i}-\sqrt{3} & \frac{8\,\sqrt{3}\,t^2+\left(3\,\mathbf{i}+\sqrt{3}\right)\,U^2}{8\,t^2} & \frac{-\left(\left(3\,\mathbf{i}+4\,\sqrt{3}\right)\,U\right)}{4\,t} \\
\frac{\frac{-\mathbf{i}}{4}\,\sqrt{3}\,U^2}{t^2} & 0 & \frac{3\,U}{4\,t} & \frac{-15\,U}{4\,t} & \frac{-5\,\sqrt{3}\,U}{4\,t} & \frac{-\left(\sqrt{3}\,U^2\right)}{4\,t^2} & 0 & \frac{-\left(\left(3\,\mathbf{i}+2\,\sqrt{3}\right)\,U\right)}{4\,t} \\
\frac{\frac{-3}{4}\,\mathbf{i}\,U^2}{t^2} & 3\,\mathbf{i}-\sqrt{3} & \frac{3\,\sqrt{3}\,U}{4\,t} & \frac{-5\,\sqrt{3}\,U}{4\,t} & \frac{-17\,U}{4\,t} & -4+\frac{U^2}{4\,t^2} & 1-\mathbf{i}\,\sqrt{3} & \frac{\frac{-3}{4}\,\mathbf{i}\,\left(-2\,\mathbf{i}+\sqrt{3}\right)\,U}{t} \\
\frac{\frac{3}{4}\,\mathbf{i}\,U}{t} & \frac{-\left(\left(-3\,\mathbf{i}+\sqrt{3}\right)\,U\right)}{8\,t} & 3\,\mathbf{i}-\sqrt{3} & \frac{-\left(\sqrt{3}\,U^2\right)}{4\,t^2} & -4+\frac{U^2}{4\,t^2} & \frac{-11\,U}{4\,t} & \frac{3\,\left(U-\mathbf{i}\,\sqrt{3}\,U\right)}{8\,t} & -1+\mathbf{i}\,\sqrt{3} \\
\frac{9\,\left(-\mathbf{i}+\sqrt{3}\right)\,U}{8\,t} & \frac{-3\,\sqrt{3}\,U}{4\,t} & \frac{8\,\sqrt{3}\,t^2+\left(-3\,\mathbf{i}+\sqrt{3}\right)\,U^2}{8\,t^2} & 0 & 1+\mathbf{i}\,\sqrt{3} & \frac{3\,\left(U+\mathbf{i}\,\sqrt{3}\,U\right)}{8\,t} & \frac{-13\,U}{4\,t} & \frac{8\,t^2+U^2+3\,\mathbf{i}\,\sqrt{3}\,U^2}{8\,t^2} \\
0 & \frac{-8\,\sqrt{3}\,t^2+\left(3\,\mathbf{i}+\sqrt{3}\right)\,U^2}{8\,t^2} & \frac{\left(3\,\mathbf{i}-4\,\sqrt{3}\right)\,U}{4\,t} & \frac{\left(3\,\mathbf{i}-2\,\sqrt{3}\right)\,U}{4\,t} & \frac{\frac{3}{4}\,\mathbf{i}\,\left(2\,\mathbf{i}+\sqrt{3}\right)\,U}{t} & -1-\mathbf{i}\,\sqrt{3} & \frac{8\,t^2+U^2-3\,\mathbf{i}\,\sqrt{3}\,U^2}{8\,t^2} & \frac{-13\,U}{4\,t}
\end{array}\right]$$