$$\widehat{\frac{\mathrm{i}\xi_\alpha}{t^3}K_0(\xi)}(p)$$

even

$$\mathrm{i}\frac{\partial}{\partial k^\alpha}\left(\frac{\omega^2}{2k}+\frac{k}{2}\right)$$

$$\widehat{\frac{\xi_\alpha\xi_\beta}{t^4}K_0(\xi)}(p)$$

odd

$$\frac{\partial^2}{\partial k^\alpha \partial k^\beta}\left(\frac{\omega^3}{6k}+\frac{k\omega}{2}\right)$$