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**Title:** Curvature of the contact distribution

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We define and study both the sectional and  $\varphi$ -sectional curvatures of the contact distribution  $\mathcal{D}$  on a  $K$ -contact manifold  $M$ . We prove that 3-dimensional  $K$ -contact manifolds of constant curvature are the only ones who carry contact distributions of constant curvature. Also, we prove that  $\mathcal{D}$  is of constant  $\varphi$ -sectional curvature if and only if  $M$  is a Sasakian space form.

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