velocity

$$\vec{v} = \sqrt{\frac{GM}{\alpha}} \cdot \langle \epsilon \sin\theta \hat{r}, (1+\epsilon)\hat{\theta} \rangle$$

```
widevec {v} =  sqrt{ {G M} over {%alpha}} cdot left langle { %epsilon sin %theta widehat {r} , (1+%epsilon)widehat {%theta} } right rangle
```