## 1. Paper edge position control

The position of the edge of a paper line must be controlled in a range of 50 mm . The system should deliver an analogue signal ( $0 \mathrm{~V} \ldots+10 \mathrm{~V}$ ) which is proportional to the position of the edge of the paper. For the investigations the L-LAS-TB-50-T/R with a laser light curtain of 50 mm length is used. The width of the laser light curtain is around 10 mm . The receiver comes with an entrance aperture of $50 \mathrm{~mm} x$ 0.5 mm and an interference filter avoids any influences from ambient light. The resolution of the system is about $15 \mu \mathrm{~m}$ and the scan frequency is 600 Hz . As shown in the screen shots, the edge of the paper line can be proper detected.


