



### 1. Detection of a ravel in a fast moved plastic fiber bundle

A ravel in a fast moved plastic fiber bundle should be detected. For this purpose a contrast sensor type **SPECTRO-1-FIO** in connection with an optical fiber type **D-S-A2.0-(2.5)-1200-67°** and an optical fiber holder type **KL-0/90°-22-A2.0** are used. At this, the optical fiber head is placed in way, that the normal plastic fiber bundle stream does not cover the optical beam. However, if a ravel appears, the optical beam will be partly interrupted and this leads to a decrease of the receiver signal. As shown in the screen shots, the ravel can be proper detected.

