



### 1. Detection of hologram reference marks

Hologram reference marks should be detected. There are red as well as green reflecting reference marks which should be detected with the same adjustment. 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 front end type **KL-D-0°/42°-9-A2.0** will be used. At this, the distance from the front end to the hologram reference mark is approximately 9mm and the spot size at this distance is around 1mm in diameter. The hologram reference marks can be proper detected, even at high speed, as shown in the screen shots.

