



1. Color mark detection on optical fibers and color differentiation of optical fibers

The color as well as a color mark should be detected on optical fibers. For this purpose a color sensor type **SPECTRO-3-FIO-JR** in connection with an optical fiber type **R-S-R1.1-(3x0.5)-1200-67°** and with an optical frontend type **KL-5** are used. The distance of the optical front end to the fiber is approximately 11mm and the spot size at this distance around 2mm x 0.3mm. At this, the long axis of the light spot is directed perpendicular to the fiber. The feed speed of the glass fiber is roughly 10 m/s. The color marks as well as the right color can be proper detected.

