



1. Differentiation of a one-color and a two-color cable

During the production of cables a differentiation between one-color and two-color cables is necessary. The production maximum speed of the cable is approximately 15 m/s and the diameter of the smallest cable is around 1.35 mm. The cable is rotating around the axis in 0.5 seconds 360° at this velocity. The color stripe of the two-color cable has a width of about 0.8 mm. The color sensor **SPECTRO-3-FIO-CL** in connection with an optical fiber **R-S-A1.1-(1.5)-1200-67°** and an optical front end **KL-4** generates at a distance of 11 mm a white light spot, 0.7 mm in diameter, onto the surface of the cable. Thus the color stripe can be proper detected.

