



1. Differentiation of pneumatic cylinders

Pneumatic cylinders should be differentiated. At this, the cylinder can be rotated along its axis. For this purpose a color sensor type **SPECTRO-3-FIO-SL** in connection with an optical fiber type **R-S-A2.0-(2.5)-1200-67°** and an optical frontend type **KL-3-A2.0** are used. The distance of the frontend to the color mark is approximately 11 mm and the spot size at this distance around 1.5 mm. The pneumatic cylinders can be proper differentiated as shown in the screen shots.

