



### 1. Color differentiation of threads

Different colored threads, used for sewing leather together, should be controlled on sewing machines. For this purpose, a color sensor type **SPECTRO-3-FIO-JR** in connection with an optical fiber type **R-S-R2.1-(6x1)-1200-67°** is used. At this, the distance from the optical fiber to the thread is approximately 20mm and the long axis of the aperture and the direction of the thread includes an angle of around 15°. Furthermore, the spot size at this distance is roughly 10mm x 3mm. The threads can be proper color differentiated as shown in the screen shots.

