



### 1. Hole presence control on catheter tubes

The presence of holes on catheter tubes should be controlled. For this purpose a color sensor type **SPECTRO-3-POF-SLE** in connection with an optical fiber type **POF-R-60-M5x0.5-(0.5)-2000** will be used. At this, the distance from the optical frontend to the catheter tube is approximately 7mm and the spot size at this distance is around 2.5mm in diameter. The presence of the hole can be proper detected as shown in the screen shots.

