

### 1. Measurement of the height difference of holographic encoder disks

The height of holographic encoder disks must be controlled in a non contact way. Due to the fact that the object surface is extremely shiny the laser displacement sensor type **L-LAS-LT-37-RA** is arranged in the direct reflective way which means that the laser light from the transmitter optics will be reflected from the holographic surface and strikes the receiver optics. Thus sufficient laser light will be projected via the receiver lens onto the line scan sensor element. The distance from the sensor to the object is approximately 37 mm. The surface of the encoder disk can be properly detected and the distance to the object can be measured with an accuracy of a few microns.

