## 1. Color sensor SPECTRO-3-28-45 $/ 0^{\circ}$-JR

The color sensor type SPECTRO-3-28$45^{\circ} / 0^{\circ}-\mathrm{JR}$ comes with a ring arrangement of warm white LEDs. At this juncture the LEDs are directed symmetrically under an angle of $45^{\circ}$ to the vertical axis. Furthermore, the optical axis of all LEDs intersects at a distance of 28 mm from the sensor. It should be pointed out, that the sensor suppresses the direct reflection to a high degree and the measurement result is nearly independent of the angular alignment of the object in relation to the symmetrical axis of the color sensor.


