

The modular system for extraordinary flexibility

MICROMOTE – HIGH OPTICAL PERFORMANCE IN THE SMALLEST SPACE

Application example for wafer mapping – Sensor integrated in the end effector

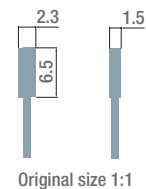
Installation in what are sometimes extremely thin end effectors represents massive challenges for the mechanical properties of sensors. Here precision in the smallest possible space is required while still meeting the demands of each individual customer.

The modular kit system of the Micromote photoelectric sensors from Balluff lets you perfectly match the optical sensor heads to such specific mechanical installation situations.

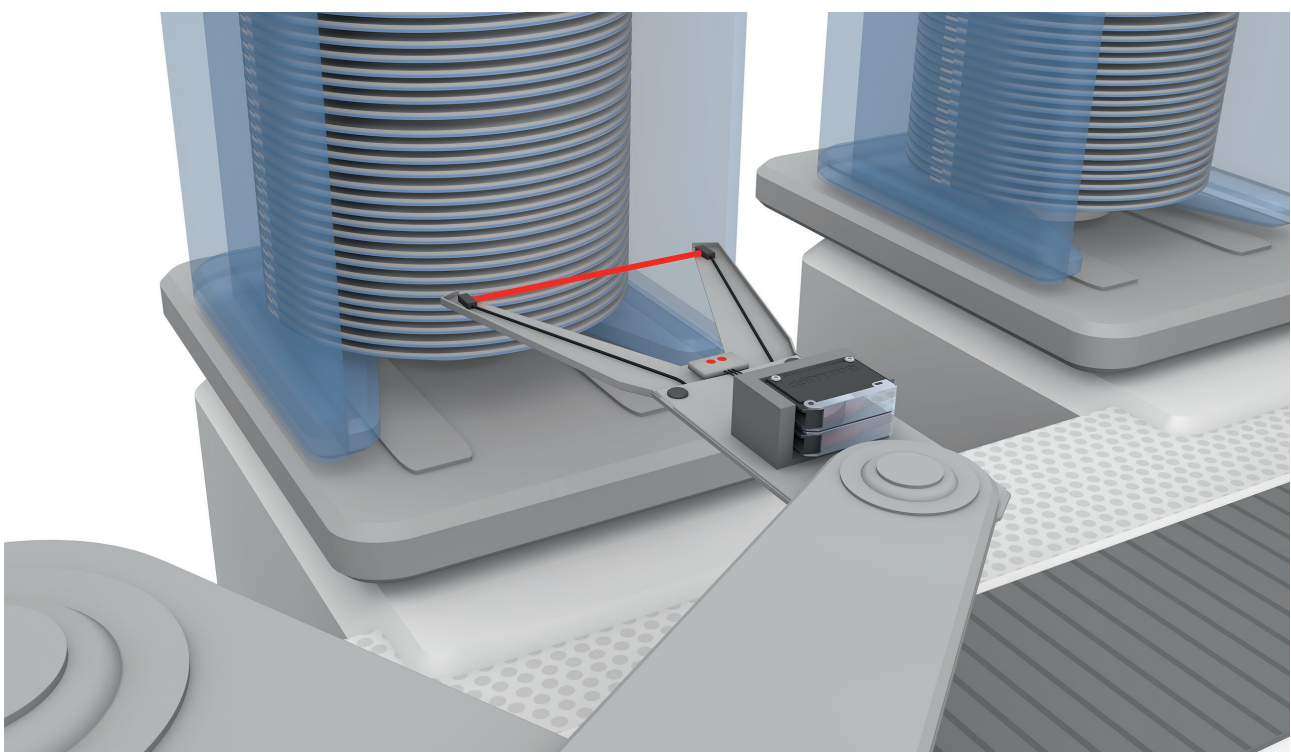
Our Micromote sensors also ensure that full slots, double wafers or incorrectly positioned wafers are reliably detected at all times.

The extremely controlled and focused light spot with outstanding homogeneity lets you precisely detect the edges of the few μm thick wafers.

The patented optical lens technology means we can adapt the beam angle and focusing to your specific requirements.

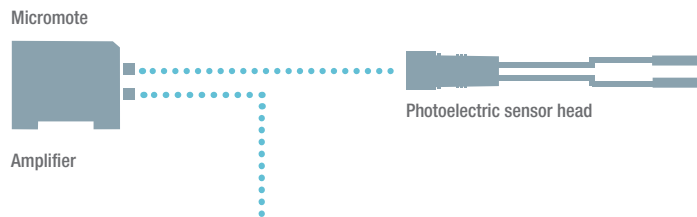


Wafer mapping



Mini sizes – for versatile use

Micromote sensors from Balluff are especially small for the most flexible possible use, so that they are an ideal alternative to fiber optics. They combine an external processor unit (amplifier) with an exceptionally small photoelectric sensor head. A highly flexible connection cable connects the amplifier to the sensor head.



The modular system – for flexible combination

The modular system of the Micromote sensors with innovative sensor elements conforms to individual requirements. Each sensor can be operated using a variety of amplifiers. Numerous housing form factors ensure especially great design freedom even when space is at a premium.

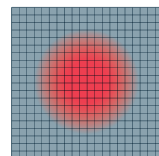


Microspot – extremely precise

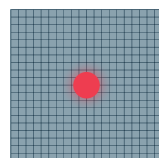
Precise micro-photoelectric elements ensure high process accuracy in any application.

In this series we can produce LEDs with 3° beam angles and circular light spots. And most importantly: the manufacturing tolerances are vanishingly small.

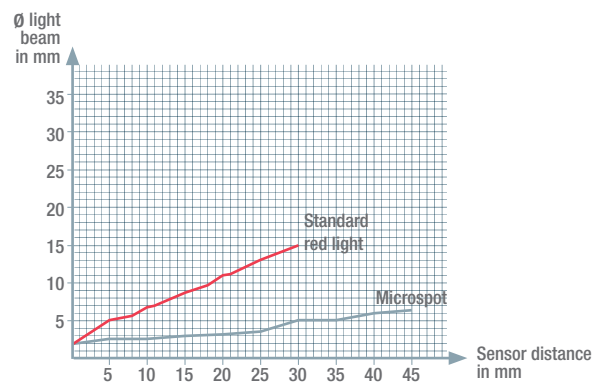
Test setup from 25 mm distance



Standard red light



Microspot



Unique solution package for individual requirements

The interplay between optical and mechanical properties of the Micromote sensors offers you a unique solution package that you can adapt to your specific application, especially in applications where design-in and miniaturization play an important role.

Features

- Great design freedom, thanks to high degree of miniaturization and individual specification
- Highly flexible sensor cable for drag chain compatibility
- Can be adapted to a wide range of applications using various light types and wavelengths
- Greatest possible flexibility thanks to comprehensive modular system
- Light array sensor for wide monitoring range
- Cable with 90 kg tensile loading strength