# -TOR Technical Information

# Intelligent light grid for industrial doors

ALIGA-Tor only uses intelligent light grids as a safety device for high-speed doors. No further safety components, such as high-maintenance safety strips or individual light barriers, are therefore required.

## Variable use for different door sizes

The fully encapsulated light grid with protection class IP67 consists of a transmitter and receiver unit and creates a light curtain from parallel light beams. The system tolerates high door closing speeds and secures an area of up to 2,500 mm clearance.

#### Direct connection to the absolute encoder

The light curtain has a direct connection to the absolute encoder (AWG) installed on the door drive. This enables objects to be recognized directly below the door leaf. In addition, the learning of the door end positions is automated and the door can be stopped at any time. The connection of AWG and light curtain means that the door control unit knows the physical position of the door leaf at all times.

When the door closes, it covers the light beams from the light curtain. It is therefore necessary to block out the light beams that are covered by the gate leaf timely. With the light grids we use with a direct connection to the AWG, light beams can only be masked when the door is in the closing movement and when the position of the masked light beam corresponds to the position of the lower edge of the door leaf.

Incorrect deactivation of the safety functions is therefore practically impossible.

### Longer service life for the door

Another smart feature of the light curtain we use is the division of its detection area into a "danger area" and a "property protection area". The danger area is always a few light beams below the door leaf - if a person or an object comes into the detection area, the door immediately stops hard. Below this danger area, in the so-called property protection area, the door stops softly and thus protects the entire door mechanism.



Picture: www.feig.de