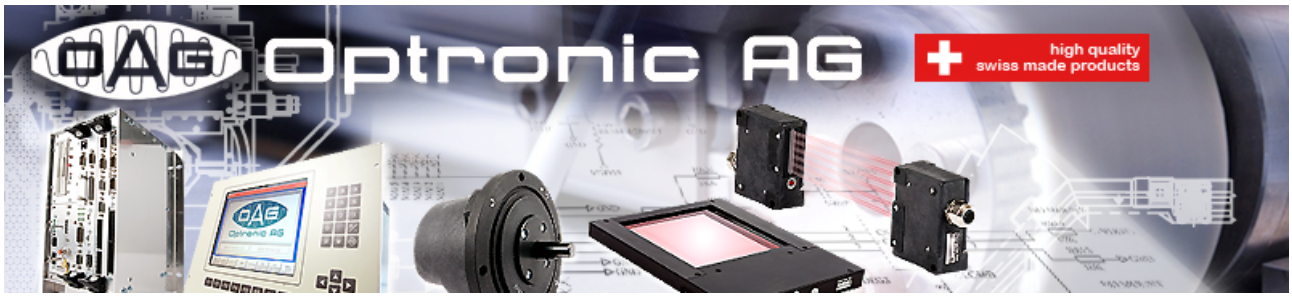
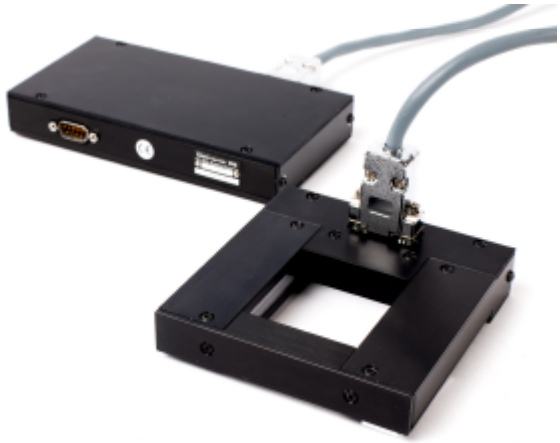


Light Screens LV...M

For Detection and Counting of Any Kind of Small Parts

- high reliability guaranteed by continuous pollution monitoring of the optics, and signaling of parts that are stuck in the light screen
- selective response sensitivity (stepwise definable)
- flexible configuration of the interface according to the user requirements
- smallest detectable part: sphere with diameter 0.6mm
- sensing area without gaps enables position and orientation independent detection
- parts having a complex shape (for example rings and springs) are detected without being counted more than once
- optionally with ejection control to monitor the correct ejection of manufactured parts
- available in various dimensions



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Selective Sensitivity

The sensitivity can be selected in steps by the user, according to the size of object to be detected. Selection is done by use of signal inputs, or a mode switch. Parts that match the selected sensitivity are reliably counted, whereas parts that are four times smaller are suppressed.

When the most sensitive setting is selected, the light screen will – depending on type - always detect a sphere with 0.6 mm diameter.

High Reliability

The natural ongoing pollution of the lens during operation is continuously monitored and does not influenced proper operation, if it is within the allowed range. In particular, the selected sensitivity is not affected.

When light falls below about 25% reserve before maximum allowable pollution, a warning signal is issued. A second monitoring function responds to excessive pollution, or if a part remains longer than permitted in the sensing area

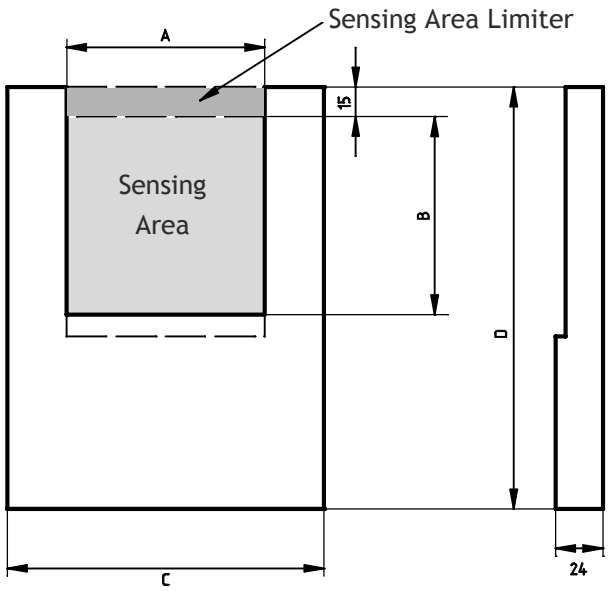
Flexible Interface

The detection output and the two monitoring outputs are realized by isolated switching transistors. For each output, the type of generated signals can be flexibly adjusted via jumpers.

Selection of available standard models

Model and Minimum Response Sensitivity		Sensing Area A x B in mm	External Dimensions C x D in mm
LV100M	1mm	100x100	160x213
LV150M	1mm	150x100	210x213
LV200M	1mm	200x100	260x213
LV250M	1mm	250x100	310x213
LV300M	2mm	300x100	360x213
LV100/50M	0.6mm	100x52	160x165
LV150/50M	0.6mm	150x52	210x165
LV150/150M	2mm	150x150	210x263
LV200/200M	3mm	200x200	260x313
LV250/250M	5mm	250x250	310x363
LV300/200M	4mm	300x200	360x313
LV400/400M	8mm	400x400	460x513
LVE30/30M	0.6mm	30x30	90x91
LVE50/50M	0.6mm	50x50	110x115
LVF30/30M	0.6mm	30x30	90x74
LVF50/50M	0.6mm	50x50	110x 96

For versions LVE...M and LVF…M (shorter models), an external control unit LVA respectively LVB is necessary.



Mounted Sensing Area Limiter:
The sensing area equals the window A x B.

Dismounted Sensing Area Limiter ("U-shaped"):
In the section between the sensing area and the end of the “U-shape”, the sensitivity is not well-defined.