

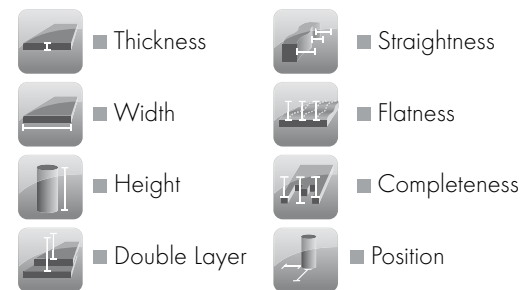


### APPLICATIONS:

#### Single Sensors:



#### Combinations:



## POLARIS SERIES



### HIGH-PRECISION, ROBUST, FLEXIBLE:

POLARIS sensors work by the triangulation principle. Single sensors measure displacement, depending on combination and arrangement you may measure thickness, width, height, straightness, flatness, position or you may check for completeness or double layers.

Based on a Digital Signal Processor (DSP), the intelligent signal processing controls exposure time of the CCD array and laser power in realtime. Due to this concept, LAP laser sensors measure very precise and very fast - even on surfaces with changing colours and reflectivity.

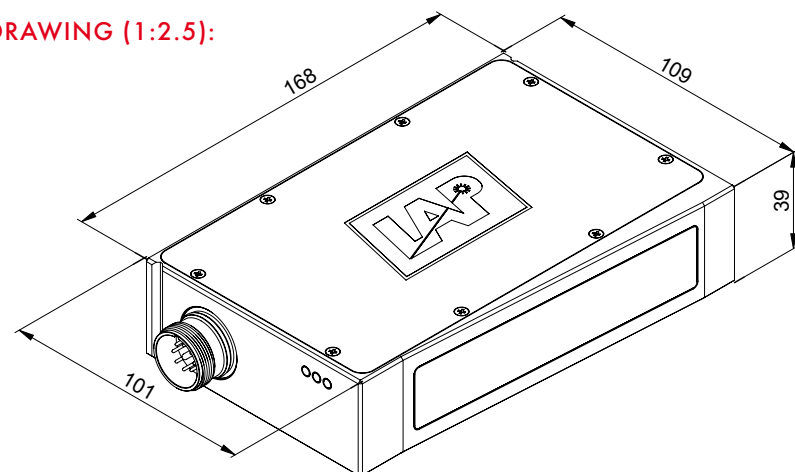
### BENEFITS:

- Highest precision
- Digital from measurement to evaluation
- Fast measurement, up to 4 kHz
- One switching output (option)
- Parametrizable

Technical Data	
Laser type, wavelength	Diode, 670 nm, red
Laserausgangsleistung	1 mW (optional 3 ... 7 mW)
Laser class	2 (high power 3R, 3B)
Sampling frequency	parametrizable, up to 4 kHz
Interfaces	analog 4 ... 20 mA (galv. separated), digital RS485 (optically isolated)
Power supply	18 ... 30 V DC, < 250 mA
Ambient conditions	0 ... 40 °C, 35 ... 85 % rel. humidity, non-condensing
Dimensions (L x W x H)	168 mm x 109 mm x 39 mm
Weight	ca. 1100 g
Enclosure rating	IP 65



### DRAWING (1:2.5):



MODELS				
Type	Measuring Range [mm]	Offset [mm]	Repeatability (time) * [µm]	Measurement uncertainty (Accuracy) [µm] * / % **
POLARIS 10	10	51	± 0,4	± 1 / 0.01
POLARIS 30	30	100	± 1	± 3 / 0.01
POLARIS 70	70	190	± 1,5	± 7 / 0.01
POLARIS 130	130	220	± 3	± 13 / 0.01
POLARIS 250	250	380	± 7	± 25 / 0.01
POLARIS 400	400	440	± 10	± 40 / 0.01

\*according to DIN 32877

\*\*% of measuring range

