



## Digital Multifunction Pre Vision Line-sensor

### Series MCD2

- Teach-In
- 3 Switching outputs
- Integrated illumination
- Analog output

#### Principal features:

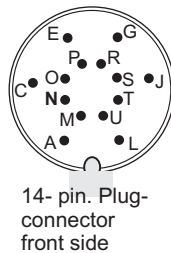
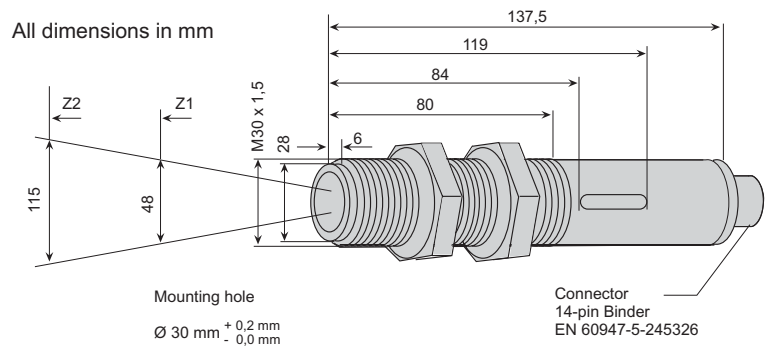
- Line sensor **256 pixel**
- Analog output **4-20 mA**
- Digital output for:  
IO, to HIGH, to LOW (PNP)
- Min- / Max-values teachable
- Background or integrated illumination
- 5 different programs
- View angle **13°**
- Adjustment monitor
- Trigger output for external illumination
- Measuring rate **~150 Hz**
- Supply **24 VDC**
- Degree of protection **IP 65**
- $\phi$

#### Applications:

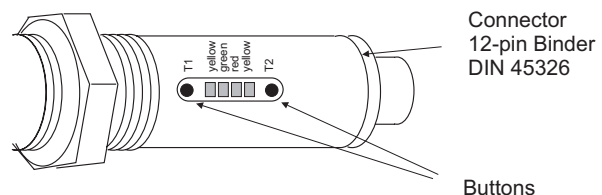
- Geometrie control
- Edge control
- Plate measurement
- $\emptyset$ - control
- Position control
- Drill break off control
- Detection of cracks and gaps
- Hight measurement

#### Advantages:

- No PC necessary
- Easy teach-in of highest and lowest signal
- Digital edge evaluation
- Fast measuring frequency of 150 Hz
- Internal IR illumination to switch on
- Various external illumination available



Pin	Signal name	Cable	Function
A	NC	white	N.C.
C	VCC <sub>in</sub>	brown	Positive power supply of sensor (7-30 VDC, / 0,3 W)
E	NC	green	N.C.
G	NC	yellow	N.C.
J	4-20 mA LOW	grey	GND of analog output (4-20 mA current output)
L	Trigger illumination	pink	Opto-coupled switching output for triggering an external illumination
M	GND <sub>in</sub>	blue	GND of the sensor
N	4-20 mA HIGH	red	Positive connector of analog output (4-20 mA current output)
O	Object OK	black	Opto-coupled switching output "object OK" (object-size stays within the teached tolerance)
P	NC	violett	N.C.
R	Object to small	grey/pink	Opto-coupled switching output "object to small" (object-size is smaller than teached tolerance)
S	GND <sub>extern</sub>	red/blue	GND of the opto-coupled switching outputs
T	Object to big	white/green	Opto-coupled switching output "object to big" (object-size is bigger than teached tolerance)
U	V <sub>extern</sub>	brown/green	Positive supply of the optocoupled switching outputs (5-45 VDC / 1,5 W)



<b>Spezifical data</b>		MCD2
	Sensortype	Line sensor with 256 pixel
	Measuring principle	back- and frontlight measuring
	Measuring range	48-115 mm (depending on measuring distance)
	Measuring distance	200-500 mm
	View angle	± 6.5°
	Resolution (geometrical)	± 0.19 mm to ± 0.45 mm / pixel
<b>Electrical data</b>	Illumination	2 internal IR-LEDs (875 nm, switchable) or external illumination via trigger output (see accessories)
	Supply voltage	24 V ± 30%
	Power consumption	~ 300 mW
	Measuring frequency	150 Hz
<b>Data on ambiente conditions</b>	Outputs	3 optocoupled switching outputs 5-45 V / 1,5 W ("to small", "OK", "to big") 1 optocoupled trigger output for extern. illumination 1 Analog output 4-20 mA (max 400 W)
	Max. operating temperature	0 to +40 °C
	Max. storage temperature	- 20 to +70 °C
<b>Mechanical data</b>	Degree of protection	IP 65
	Weight	approx. 150 g
	Housing	Nickel plated brass with M30x1.5 mm thread
	Connection	14-pin plug-connector (EN 60947-5-2)

Line sensor	Part. No.	Accessories	Part. No.
MCD2	MCD2BR3E	Mounting bracket right	INRMCD2
		Mounting bracket left	INLMCD2
Accessories	Part. No.		
Cable 2 m	INMCD22E	Reflector 50x220	OXMCD2
Cable 5 m	INMCD25E		

For external illumination see separate data-sheet

