

## OK500320

### OPTICAL SENSORS • CONTRAST SCANNERS

Contrast scanners are capable to distinguish the the visual differences (e.g. reflectivity, brightness differences) between adjacent areas. In general, the devices project a light spot on an object's surface and analyze the reflected light. Fiber optic amplifier versions can be used in addition to the incident light mode also in the transmitted light mode. Contrast scanners are versatile. They can be used, among other things, for position control of printing or color marks, distinction of brightness variations or in the intensity control of luminous objects (like LEDs, displays etc.).



#### MECHANICAL DATA

Ambient temperature (MAX)	60 °C
Ambient temperature (MIN)	-10 °C
Degree of protection (IP)	IP67
Housing design	Cuboid
Housing material	Zinc die-cast
Material of optical surface	PC
Sensor height	15 mm
Sensor length	40 mm
Sensor width	50 mm
With fiber optics connection	No
With interchangeable lens	No

#### ELECTRICAL DATA

Analogue output 0 mA ... 20 mA	No
Analogue output 0 V ... 10 V	No
Analogue output -10 V ... +10 V	No
Analogue output 4 mA ... 20 mA	No
Max. output current	200 mA
No-load current	40 mA
Number of pins	4
Operating voltage (MAX)	35 V
Operating voltage (MIN)	10 V
Rated control supply voltage $U_s$ at DC (MAX)	35 V
Rated control supply voltage $U_s$ at DC (MIN)	10 V
Setting procedure	Teach-In
Switching frequency	3000 Hz
Type of electrical connection	Connector M12
Type of switching function	Push-pull
Type of switching output	PNP/NPN
Voltage drop	2 V
Voltage type	DC

**ELECTRICAL DATA**

With blanking function	No
With LED display	Yes
With time function	No

**OPTICAL DATA**

Detection of print marks	Yes
Light source	White light
Light spot	7 mm <sup>2</sup>
Nominal sensing range	30 mm

**DIMENSIONAL DRAWING****INSTALLATION**

Mounting / Installation may only be carried out by a qualified electrician!

**DISPOSAL****SAFETY WARNINGS**

Before initial operation, please make sure to follow all safety instructions that may be provided in the product information!

Never use these devices in applications where the safety of a person depends on their functionality.