

OK630181

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)	55 °C
Ambient temperature (MIN)	-20 °C
Degree of protection (IP)	IP64
Housing design	Cuboid
Housing material	Aluminium
Sensor height	38 mm
Sensor length	65 mm
Sensor width	65 mm
Storage temperature	85 °C
Storage temperature	-20 °C
With fiber optics connection	Yes
With interchangeable lens	No

ELECTRICAL DATA

Analogue output 0 mA ... 20 mA	No
Analogue output 0 V ... 10 V	Yes
Analogue output -10 V ... +10 V	No
Analogue output 4 mA ... 20 mA	Yes
Equipment protection class	Protection class 3
High scanning frequency	Yes
Large sensing range	Yes
Max. output current	100 mA
No-load current	160 mA
Number of pins	8
Operating voltage (MAX)	24 V
Operating voltage (MIN)	24 V
Programmable via software	Yes
Rated control supply voltage U_s at DC (MAX)	24 V
Rated control supply voltage U_s at DC (MIN)	24 V
Reverse polarity protection	Yes
Sensing range (MAX)	500 mm

ELECTRICAL DATA

Sensing range (MIN)	1 mm
Setting procedure	Parameterization
Short-circuit-proof	Yes
Switching frequency	60000 Hz
Type of communication interface	Connector M5
Type of electrical connection	Connector M9
Type of switching function	Programmable/configurable
Type of switching output	PNP/NPN
Voltage type	DC
With blanking function	No
With communication interface, RS-232	Yes
With LED display	Yes
With time function	Yes

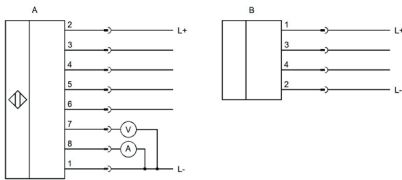
OPTICAL DATA

Detection of fluorescent materials	Yes
Light source	Other
Transmitted light applications	Yes
Turbidity inspection	Yes

OTHER DATA

For counting tasks	Yes
--------------------	-----

CONNECTION

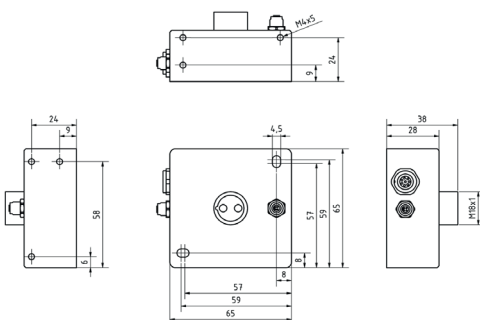


Colors: A: M9: 1 = WH (white), 2 = BN (brown), 3 = GN (green), 4 = YE (yellow), 5 = GY (gray), 6 = PK (pink), 7 = BU (blue), 8 = RD (red)

Functions: A: M9: 1 = L-, 2 = L+, 3 = in 0 (ext. trigger), 4 = in 1 (teach/reset), 5 = out 0, 6 = out 1, 7 = 4-20mA, 8 = 0-10V

B: M5: 1 = L+, 2 = L-, 3 = RxD, 4 = TxD

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.