

OKK00180

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 | -20 °C ... 55 °C |
| Degree of protection (IP) | IP64 |
| Housing design | Cuboid |
| Housing material | Aluminium |
| Sensor height | 38 mm |
| Sensor length | 100 mm |
| Sensor width | 65 mm |
| Storage temperature | 85 °C |
| Storage temperature | -20 °C |
| With fiber optics connection | Yes |
| With interchangeable lens | Yes |

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 |
| High scanning frequency | Yes |
| Large sensing range | Yes |
| Max. output current | 100 mA |
| Number of pins | 8 |
| Operating voltage | 21.6 V ... 26.4 V |
| Programmable via software | Yes |
| Rated control supply voltage U_s at DC | 21.6 V ... 26.4 V |
| Reverse polarity protection | Yes |
| Sensing range | 1 mm ... 500 mm |
| Setting procedure | Parameterization |
| Short-circuit-proof | Yes |
| Switching frequency | 60000 Hz |
| Type of communication interface | Connector M5 |
| Type of electrical connection | Connector M9 |

ELECTRICAL DATA

| | |
|--------------------------------------|-----------|
| Type of switching function | Push-pull |
| 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 | No |

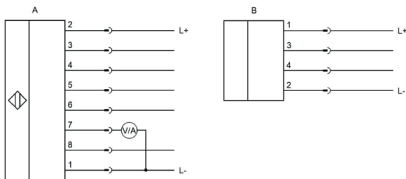
OPTICAL DATA

| | |
|--------------------------------|-------------|
| Detection of print marks | Yes |
| Light color, version 2 | White light |
| Light source | White light |
| Transmitted light applications | Yes |
| Turbidity inspection | Yes |

OTHER DATA

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

CONNECTION

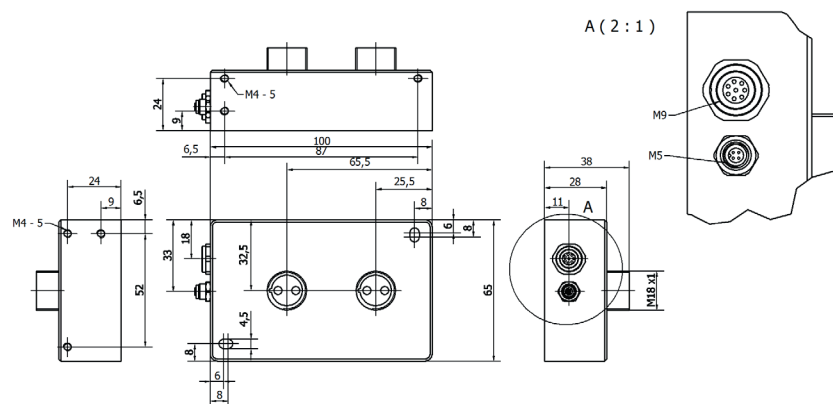


Colors: A: M9: 1 = WH (white), 2 = BN (brown), 3 = GN (green), 4 = YE (yellow), 5 = GY (gray), 6 = PK (pink), 7 = BU (blue), 8 = RD (red)

Functions: A: M9: 1 = L-, 2 = L+, 3 = IN 0, 4 = IN 1, 5 = PNP/NPN NO/NC, 6 = PNP/NPN NO/NC, 7 = 0-10V/4-20mA, 8 = n. c.

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

DIMENSIONAL DRAWING



INSTALLATION

DISPOSAL



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



SAFETY WARNINGS

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