

PT98E116

LASER SENSORS • DISTANCE MEASUREMENT

Optical sensors function contactlessly. They detect objects independent of their characteristics (e.g., shape, color, surface structure, material). The basic operating principle is based on the transmission and reception of light. There are three different versions: 1. The through-beam sensor consists of two separate devices, a transmitter and a receiver that are aligned with one another. If the light beam between the two devices is interrupted, the switching output integrated in the receiver changes its status. 2. With the retro-reflective sensor, the transmitter and receiver are located in one device. The emitted light beam is reflected back to the receiver by a reflector that is to be mounted opposite the device. As soon as the light beam is interrupted, the switching output integrated in the device changes its status. 3. With the diffuse reflection sensor, the transmitter and receiver are in one device. The emitted light beam is reflected by the object that is to be detected. As soon as the receiver detects the reflected light, the switching output integrated in the device changes its status.



MECHANICAL DATA

Ambient temperature	-20 °C ... 60 °C
Degree of protection (IP)	IP65
Housing coating	Anodised
Housing design	Cuboid
Housing material	Aluminium
Material of optical surface	Glass
Sensor height	110 mm
Sensor length	255 mm
Sensor width	96 mm
Storage temperature	-20 °C ... 60 °C

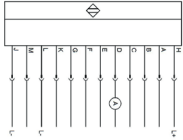
ELECTRICAL DATA

Absolute measuring accuracy	2 mm
IO-Link compatible	No
Laser power	0.9 mW
Measuring method for optical distance measurement	Triangulation
Measuring range length	100 mm ... 100000 mm
No-load current	200 mA
Number of pins	12
Operating voltage	10 ... 30
Scanning function	Light-/dark-on mode
Scanning principle	Push button
Standard for interfaces	RS-232
Supply voltage	10 V ... 30 V
Type of electrical connection	Plug-in connection
Voltage type	DC

OPTICAL DATA

Laser protection class	Class 2
Light beam form	Point
Light source	Laser diode, red light
Resolution	0.1 mm
Wavelength of the sensor	635 nm

CONNECTION



Colors: A = WH (white), B = BN (brown), C = GN (green), D = YE (yellow), E = GY (gray), F = OG (orange), G = BU (blue), H = RD (red), J = BK (black), K = VT (violet), L = BN/WH (brown/white), M = WH/BK (white/black)

Functions: A = RxD, B = n.c., C = trigger, D = 3-21mA, E = n.c., F = TxD, G = Out3, H = L+, J = L-, K = Out2, L = L- analog, M = Out1

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!