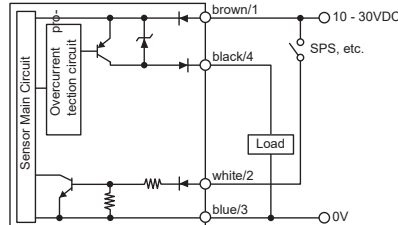



Original operating manual: EPE-AAZ-ZZZ-WO
Laser distance sensor



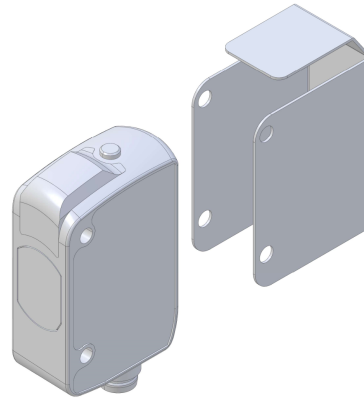
- For use in Ex Zone 2
- Versatility for a wide range of industrial sectors and applications
- Robust and durable

II 3G Ex ec IIB T4 Gc

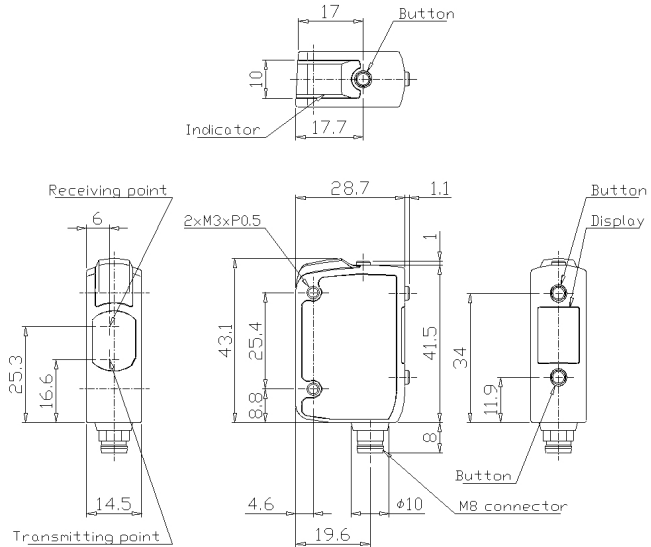
Technical Data	Type	EPE-AAZ-ZZZ-WO									
Usage		Detection of position, contrast and transparency									
Gas Ex protection designation		II 3G Ex ec IIB T4 Gc									
For use in Ex Zones		Zone 2									
Light Source		Red laser class 1 (660nm)									
Original device type		LR-ZB100CP (KEYENCE)									
Output type		PNP									
Supply voltage, Ue		10 to 30 VDC, with 10% ripple (S-S), Class 2 or LPS									
Absolute maximum supply voltage, Um		30VDC									
Power consumption		Max. 450mW (max. 18mA at 24V), max. 34 mA at 12V)									
Housing		SUS316L, Optics cover: PMMA with scratch resistant coating, Collar/connector ring: FKM									
Enclosure rating		IP68									
Ambient working temperature range, T _{amb}		-10°C up to +50°C									
Storage temperature range		-25°C up to +75°C									
Relative humidity		35% ... 85%									
EMC, shock and vibration resistance		Vibration: 10 to 55 Hz, double amplitude 1.5mm, 2 hours each in X, Y and Z direction									
Socket		M8 connector, 4-pin									
Accessories		Included	Optional								
		<ul style="list-style-type: none"> • 1x Safety lock device, mount at the cable connection, for locking the connection. • 1x Warning plate "WARNING - Explosion Hazard - Do Not Disconnect While Circuit Is Live Unless Area Is Known To Be Non-Hazardous", self-sealing, for gluing on the cable connector. 									
EX related markings		<p>CE Typ: EPE-AAZ-ZZZ-WO Gas: Ⓜ II 3G Ex ec IIB T4 Gc ATEX: Tamb: Manufacturing date:</p>	<p>Manufacturer with Address Electrical data according table Manufacturer declaration according to ATEX directive 2014/34/EU -10°C up to +50°C Number 5 to 8 of the Serial Number (Year / CW)</p>								
Output circuitry											
Wiring and Connection		<p>Connector M8 View of the connector on the sensor</p> 	<table border="1"> <tr> <td>10 - 30VDC</td> <td>1</td> </tr> <tr> <td>Input</td> <td>2</td> </tr> <tr> <td>0V</td> <td>3</td> </tr> <tr> <td>Output</td> <td>4</td> </tr> </table>	10 - 30VDC	1	Input	2	0V	3	Output	4
10 - 30VDC	1										
Input	2										
0V	3										
Output	4										

EPE-AAZ-ZZZ-WO_e1/2020-11-19/PDL

Housing



Dimensions



Operating Manual / EC-/EU-declaration of conformity

Intended Use

Detection of position, contrast and transparency

Installation prescriptions for Ex hazardous locations

WARNING! The plug may neither be plugged in nor unplugged if the device is live and/or an explosive atmosphere is present around the device. In addition, the supplied protective plate must be mounted and screwed onto the sensor)

The sensors of the type EPE-AAZ-ZZZ-WO may only be used in the Ex Zone 2. The valid rules and installation regulations regarding explosion protection must be observed (EN 60079-14). The local equipotential bonding must be corrosion-resistant and permanently ensured. The sensor must be permanently and corrosion-resistant earthed via the fastening screws on the housing. The maximum permissible limit voltage $U_m = 30VDC$ must not be exceeded. The cables must be laid or protected so that they cannot be damaged. The cable end must be installed outside the Ex-area. The plugs may only be connected or disconnected when the connecting cable is not live. When installing the device, the enclosed disconnecting fuse must be fitted and the enclosed warning label "Do not disconnect while under voltage!" must be stuck on the cable socket of the connecting cable.

General Installation Prescriptions

In order to calibrate the sensor, it may be mounted on the machine without a protective plate as long as there is no Ex-atmosphere. Then the sensor must be dismantled and mounted again with the protective plate. The protective plate is part of the Ex-protection concept and for this reason the sensor must not be used without protective plate. Matrix Elektronik AG will not be held responsible if the operator of the system uses the sensor without the protective plate and an accident occurs. The limit values must be observed. The pin assignment must be observed without fail. The cable shield must be connected briefly. The shield must be connected to protective earth (PE) over a wide area. The sensor cables must not be laid parallel to high voltage and power cables.

Function and serviceconfiguration

The function and settings of the sensor are described in the enclosed data sheet of the type LR-ZB100CP (KEYENCE).

Maintenance

The sensor is maintenance-free. The sensitive area must be kept clean and protected from moisture. If the sensor is dirty, it must be cleaned carefully. No aggressive cleaning agents must be used. Repairs may only be carried out by the manufacturer.

General safety informations

WARNING! If the connecting cable is connected or removed when it is live, there is a danger of ignition ;

General notes, disposal

We reserve the right to make changes. The sensors are built as environmentally friendly as possible. They contain no environmentally harmful substances. Irreparable or no longer used devices must be disposed of according to the valid regulations.

EU-Declaration of Conformity

ATEX certification of quality management system, type production of Ex devices, in accordance to the directive 2014/34/EU, CE 0158. Certification No. BVS 18 ATEX ZQS / E118, QAR No. DE/BVS/QAR13.0004/04. Mr. Pablo Ledergerber, Matrix Elektronik AG, is authorized to generate of documentation.

The conformity of the devices with all used standards and directives and the EC-type examination certificate and the observation of the Quality Management System ISO 9001:2015 with the ATEX module "Production", declares:

Ehrendingen, 19.11.2020

Pablo Ledergerber, Matrix Elektronik AG

EPE-AAZ-ZZZ-WO_e1/2020-11-19/PDL

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