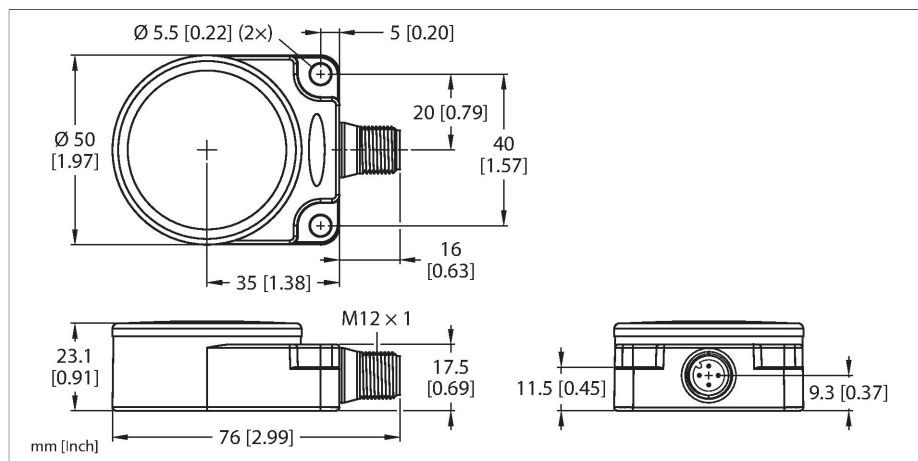


K50Z-FA2000KD-Q8

Photoelectric Sensor – 3D — Time of Flight

With switching outputs



Technical data

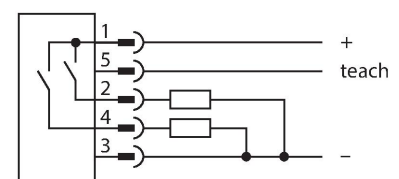
Type	K50Z-FA2000KD-Q8
ID	3814468
Optical data	
Function	3D - ToF
Operating mode	Time-of-Flight
Light type	IR
Wavelength	940 nm
Range	20...2000 mm
Electrical data	
Operating voltage U_B	10...30 VDC
Output function	NO/NC, IO-Link Push-pull, PNP/NPN programmable
Output 2	Switching output
Readiness delay	≤ 2000 ms
Setting option	IO-Link Vision Software and Firmware
IO-Link specification	V 1.1
IO-Link port type	Class A
Communication mode	COM 2 (38.4 kBaud)
Process data width	16 bit
Frame type	Type_2_2
Minimum cycle time	2 ms
Function pin 4	IO-Link
Maximum cable length	20 m
Mechanical data	
Design	Rectangular, K50Z
Dimensions	76 x 50 x 27.18 mm



Features

- Protection class IP67
- M12 × 1 connector, 5-pin
- Field of view: 45 × 45° (1657 × 1657 mm at max. range)
- Resolution: 8 × 8 pixels
- Operating voltage: 10...30 VDC
- Output 1: PNP/NPN switching output, Pulse Pro, IO-Link
- Output 2: PNP/NPN switching output, Pulse Pro, switchable
- Configuration via software

Wiring diagram



Functional principle

The K50Z is an optical sensor based on the principle of time-of-flight technology that measures many points in the field of view. These points are used to calculate and track significant values such as the nearest distance or the average distance. The sensor uses infrared light that is reflected back to an imager with 64 measurement points to evaluate targets within a wide range. The sensor can be configured via IO-Link or using the Banner measurement sensor software. It has two outputs that can be adjusted independently of one another.

Technical data

Housing material	Polycarbonate/ABS, Polycarbonate/ABS, Black
Lens	acrylic
Electrical connection	Connector, M12 × 1
Number of cores	5
Ambient temperature	-10...+50 °C
Special features	Filling level detection
Switching state	LED, Yellow
Display	LED display functions for status of supply voltage, switching states and teach processes. Process indicators via bar graph.
Tests/approvals	
Approvals	CE, UKCA
Approvals	CE UKCA UL Listed