

Type			Through-beam type	Retro-reflective type	Diffuse-reflective type	Limited diffuse reflective type	Wide angle diffuse reflective type
Model	NPN	Cable type	Z3T-2500N	Z3R-400N	Z3D-100N	Z3D-L09N	Z3D-W20N
		Connector type	Z3T-2500CN4	Z3R-400CN4	Z3D-100CN4	Z3D-L09CN4	Z3D-W20CN4
	PNP	Cable type	Z3T-2500P	Z3R-400P	Z3D-100P	Z3D-L09P	Z3D-W20P
		Connector type	Z3T-2500CP4	Z3R-400CP4	Z3D-100CP4	Z3D-L09CP4	Z3D-W20CP4
Sensing distance			25 m	0.01 to 4 m ^{*1}	0 to 1 m ^{*2}	10 to 90 mm ^{*3}	1 to 200 mm ^{*4}
Light source			4 element red LED, wavelength 632 nm				
Spot size			Approx. ø1800 mm (at distance of 25 m)	Approx. ø280 mm (at distance of 4 m)	Approx. ø75 mm (at distance of 1 m)	Approx. ø8 mm (at distance of 90 mm)	Approx. □45 mm (at distance of 50 mm)
Response time			500 µs or less				
Hysteresis			—	—	20% Max.	10% Max.	20% Max.
Distance adjustment			1-turn potentiometer				
Indicators			Output indicator: orange LED, Stability indicator: green LED (no indicator equipped on through-beam type emitter)				
Control output			NPN/PNP type Open collector Max. 100 mA/30 VDC				
Output mode			Light ON / Dark ON selection switch				
Connection type			Cable type: Cable length: 2 m ø3.8 mm / Connector type: M8, 4-pin				
Rating	Supply voltage		10 to 30 VDC, including 10% ripple (p-p)				
	Current consumption		Emitter: 20 mA or less Receiver: 15 mA or less	20 mA or less	25 mA or less	20 mA or less	20 mA or less
Applicable regulations			EMC directive (2004/108/EC)				
Applicable standards			EN 60947-5-2				
Company standards			Noise resistance: Feilen Level 3 cleared				
Environmental resistance	Ambient temperature/humidity		-25 to +55°C (no freezing) / 35 to 85% RH (no condensation)				
	Ambient illuminance		Sunlight: 10,000 lx Incandescent lamp: 3,000 lx				
	Vibration resistance		10 to 55 Hz; double amplitude 1.5 mm; 2 hours in each of the X, Y, and Z directions				
	Shock resistance		Approx. 100 G (1000 m/s ²); 3 times in each of the X, Y, and Z directions				
	Degree of protection		IP67				
Material			Housing: ABS, Front cover: PMMA				
Weight without cable			Approx. 10 g				
Included accessories			Instruction manual				

*1. With the V-61 reflector

*2. Using a 200 × 200 mm white sheet of paper.

*3. Using a 100 × 100 mm white sheet of paper.

*4. Using a 300 × 300 mm white sheet of paper.

● Specifications are subject to change without prior notice for product improvement purposes.

Photoelectric
SensorsSpecialized
Photoelectric
SensorsLaser
Displacement
SensorsSensors with
Built-in
Amplifier

Z3

Z-M

Z2

E

J

K

S

S2

C-R

C2

PLN