

TOF/Spot

Technical data

FEATURES

- ▶ Time-of-Flight (TOF) sensor
- ▶ Exact distance setting, independent from background
- ▶ Excellent detection capability
- ▶ Small and sleek design
- ▶ Operating range from 0.2 m up to 6 m
- ▶ Easy mounting
- ▶ Insensitive to ambient light up to 100,000 Lux



OPTICAL

Operating range	
- P, C, T and I types	0.2 ... 6 m
- N type	0.2 ... 3 m
Active light spot at 2 m distance	20 mm × 20 mm
Offset	
- C and T types	0.15 m (from background)
Measurement precision	±5% at 2 m ±10 cm over the whole range
Max. ambient light	100,000 Lux

MECHANICAL

Dimensions	Ø 29.5 mm × 35.8 mm
Housing material	Polycarbonate
Housing color	Black
Enclosure rating	IP65
Temperature range	-40 °C ... +60 °C
Relative humidity (non-condensing)	0 ... 95%

ELECTRICAL

Supply voltage U _{Sp}	10 ... 30 VDC
Current consumption at 24 VDC	50 mA
Peak current consumption during power up at 24 VDC	500 mA
Outputs	Solid-state relay or dynamic universal
Max. switching voltage	60 V
Max. switching current	150 mA
Max. power-up time	1 s
Max. response time	60 ms

P = Preset, C = Automatic calibration, N = Potentiometer, T = Teach-in button
I = Initialized (Preset with potentiometer)

CONNECTION CABLE AND ELECTRICAL CONNECTION

Sensor	
Length	0.25 m
Connection	Screwable, M8, 6-pin
Diameter	Ø 4.2 mm
Material	PVC, black
Plug color	Blue

Connection cable	
Length	2 m (other lengths on request)
Connection	Screwable, M8, 6-pin
Diameter	Ø 4.2 mm
Material	PVC, black
Plug color	Blue
Wires	AWG26
• brown	+U _{Sp}
• black	Output A
• green	Output B
• blue	GND (0 V)
• white	Not used
• gray	Logic selector

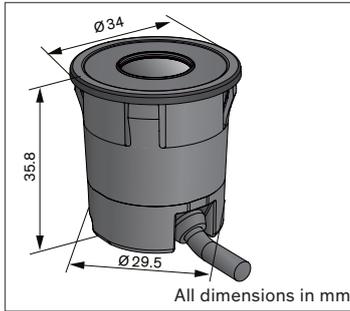
GENERAL

EMC emission	EN 12015:2014 EN 61000-6-3:2007, +A1:2011
EMC immunity	EN 12016:2013 EN 61000-6-2:2019
Vibration	IEC 60068-2-6:2007
Shock	IEC 60068-2-27:2008
RoHS	2011/65/EU
Certificate	CE

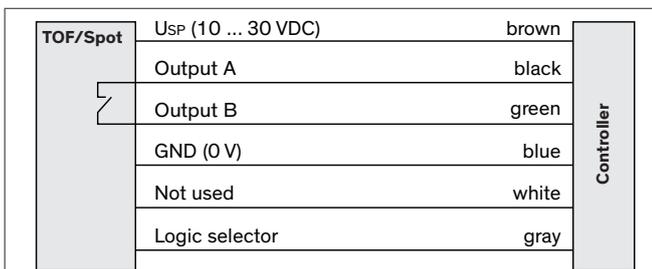


CEDES AG is certified according to ISO 9001: 2015.

Dimensions

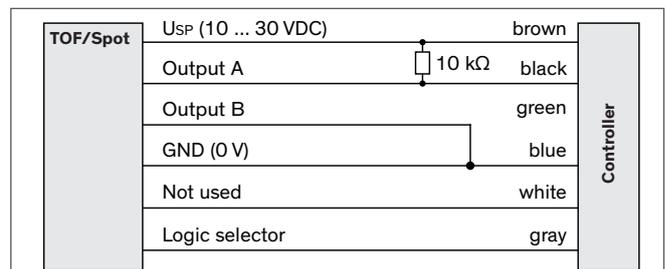


Connection diagram – Solid state relay output



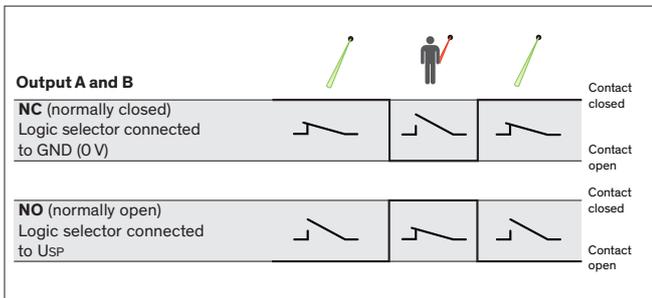
The Output A and Output B are interchangeable.
 Any unconnected (n.c.) wires have to be separated and isolated.

Connection diagram – Dynamic universal output

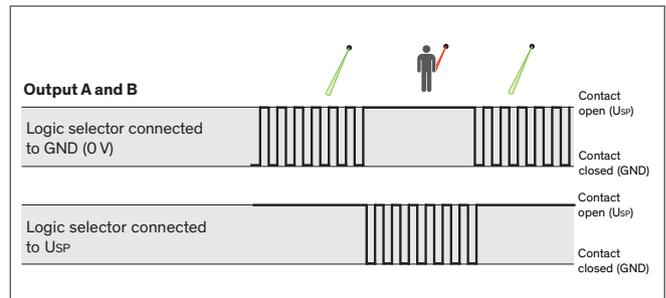


The Output A and Output B are interchangeable.
 Any unconnected (n.c.) wires have to be separated and isolated.

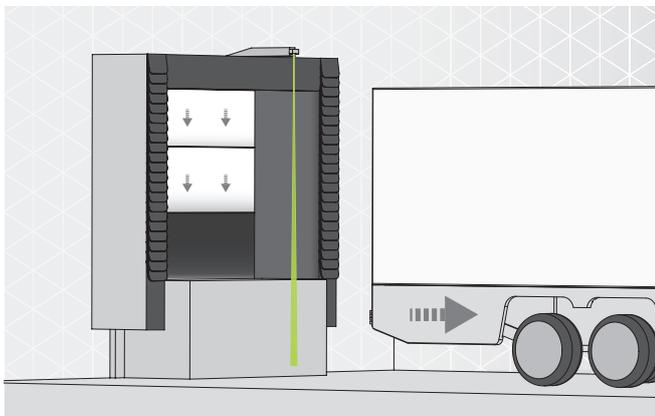
Logic selector – Universal output



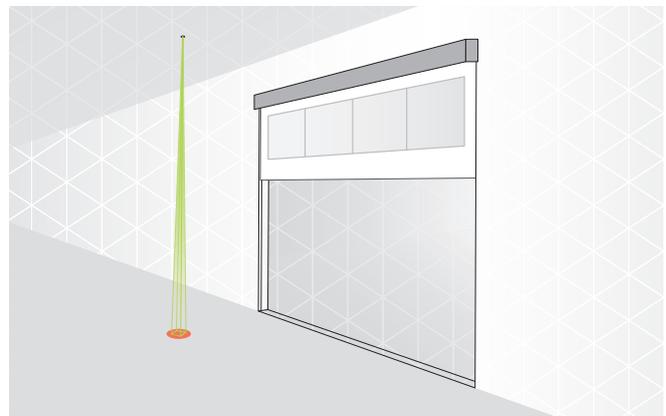
Logic selector – Dynamic universal output



Application examples



Truck detection in loading dock



Replaces 'pull-string' door opening