

TLS 500

Technical data

Optical

Max. operating range	6 m
Ø active light spot at 2 m distance	0.24 m
Aperture angle	±3.5°
Min. distance to background	0.2 m
Recalibration time (N-type)	10 s
Recalibration adjust time (P-type)	3 ... 180 s
Max. ambient light	100,000 Lux

Mechanical

Dimensions (w × h × d)	32 × 24 × 22 mm
Housing material	Polycarbonate (UL 94-V0)
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	12 mA
Output	PNP or NPN
Output logic	Light-On (LO) or dark-on (DO)
Max. power-up time	150 ms
Max. response time	150 ms
Max. test response time	150 ms

Connection cable and electrical connection

Length	2 m
Diameter	Ø 3.4 mm
Material	PVC, black
Wires	AWG26
• brown	U _{Sp}
• blue	GND (0 V)
• black	Output
• white	Test input (N- and P-type) If no test signal is available, connect white wire with U _{Sp}

General

EMC emission	EN 61000-6-3:2007
EMC immunity	EN 61000-6-2:2005
Shock	EN 60068-2-27:2008
Vibration	IEC 60068-2-6:2007
RoHS	2011/65/EU
Certificate	CE



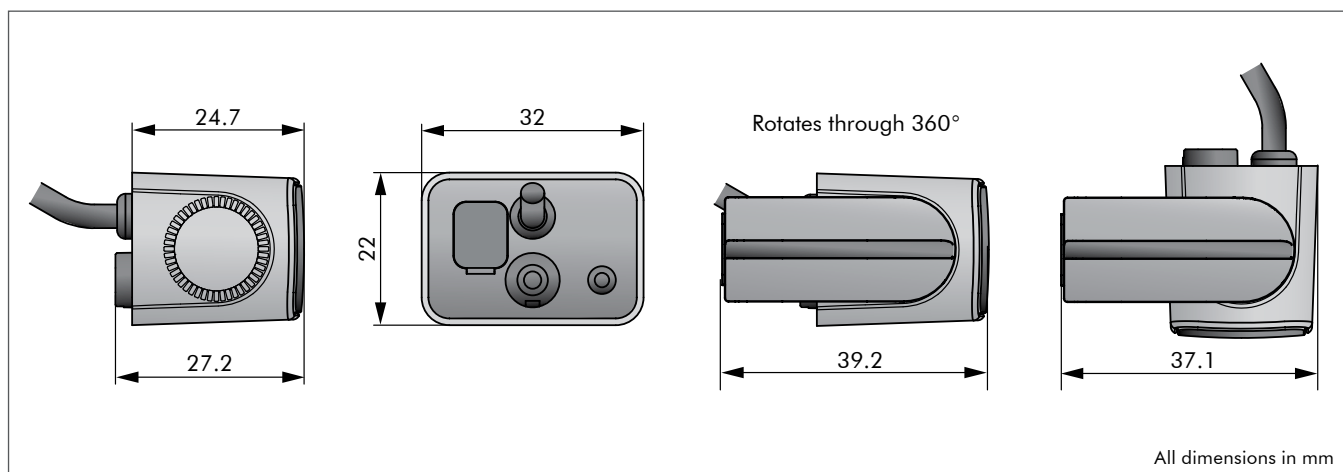
CEDES AG is certified according to ISO 9001: 2008.

Features

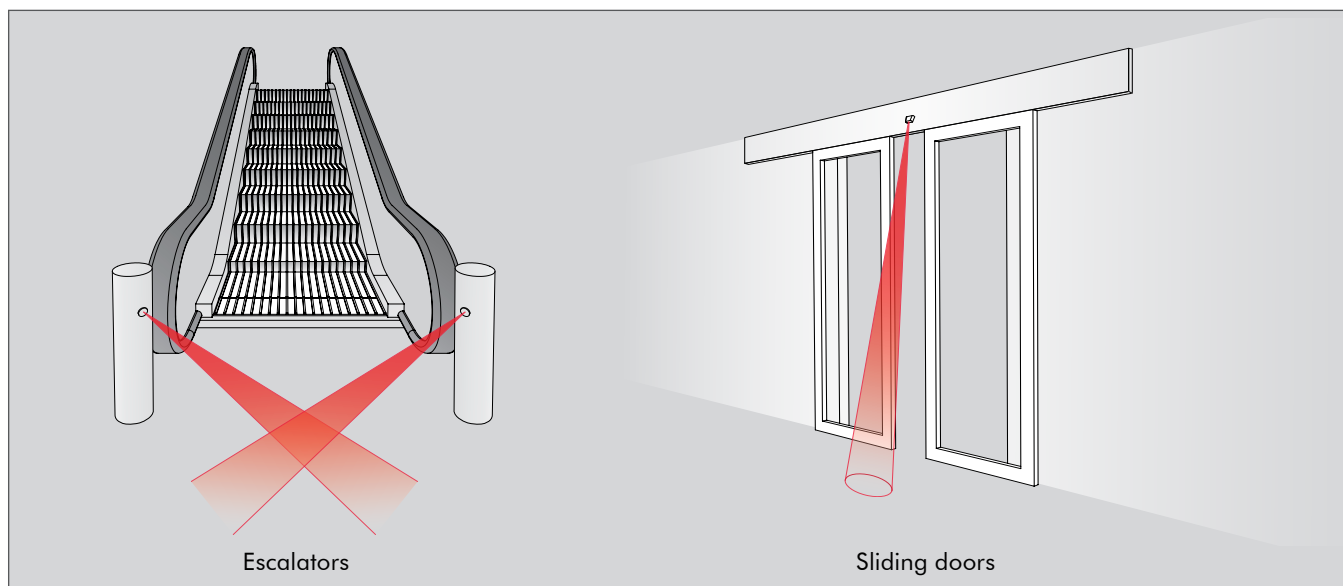
- Intelligent, infrared-based diffuse-reflective sensor
- Excellent detection capability
- PNP or NPN output, light-on or dark-on available
- Small and sleek design
- Plug-and-play
- Operating range up to 6 m
- Easy mounting
- Insensitive to ambient light up to 100,000 Lux
- Test input for N- and P-type



Dimensions



Applications



TLS 500

Ordering information

Complete set

Part No.	Type	Description
110 810	TLS 500-N-PNP-LO	TLS 500, 10 s recalibration time, mounting bracket, screws, screwdriver and installation and operation manual
111 126	TLS 500-N-NPN-DO	TLS 500, 10 s recalibration time, mounting bracket, screws, screwdriver and installation and operation manual
110 828	TLS 500-P-PNP-LO	TLS 500, adjustable recalibration time 3 ... 180 s, mounting bracket, screws, screwdriver and installation and operation manual
111 283	TLS 500-P-NPN-DO	TLS 500, adjustable recalibration time 3 ... 180 s, mounting bracket, screws, screwdriver and installation and operation manual
110 601	TLS 500-VR-NPN-LO	TLS 500, adjustable operating range 0.2 ... 6 m, mounting bracket, screws, screwdriver and installation and operation manual
111 238	TLS 500-VR-NPN-DO	TLS 500, adjustable operating range 0.2 ... 6 m, mounting bracket, screws, screwdriver and installation and operation manual
110 600	TLS 500-VR-PNP-LO	TLS 500, adjustable operating range 0.2 ... 6 m, mounting bracket, screws, screwdriver and installation and operation manual
110 602	TLS 500-VR-PNP-DO	TLS 500, adjustable operating range 0.2 ... 6 m, mounting bracket, screws, screwdriver and installation and operation manual



Single components

Mounting kit

Part No.

111 144

Description

Mounting bracket, 2 × screws and screwdriver



Mounting bracket

Part No.

111 145

Part name

Mounting bracket



Relay-module

Part No.

103 602

Description

Changes the semiconductor output into relay output



Power line converter

Part No.

106 666

Description

85 ... 265 VAC, for 24 V sensors with up to 250 mA current consumption

Changes the semiconductor output into relay output

