

	The ORANGE LED flashes quickly.	A DIP-switch was changed without confirmation.	<b>1</b> Confirm the DIP-settings by a long push on the push button.
	The ORANGE LED flashes 1 x.	The sensor signals an internal fault.	<b>1</b> Cut and restore power supply. <b>2</b> If orange LED flashes again, replace sensor.
	The ORANGE LED flashes 2 x.	Irregularities in the power supply	<b>1</b> Check power supply. <b>2</b> Check wiring.
	The ORANGE LED flashes 4 x.	The sensor receives not enough IR-energy.	<b>1</b> Use the 1 m prism if possible (accessory). <b>2</b> Check the angle of the IR-curtains.
	The ORANGE LED flashes 5 x.	The sensor receives too much IR-energy.	<b>1</b> Use a low energy prism if possible (accessory). <b>2</b> Check the angle of the IR-curtains.
	The ORANGE LED is on.	The sensor encounters a memory problem.	<b>1</b> Cut and restore power supply. <b>2</b> If orange LED lights up again, replace sensor.
	The RED LED flashes quickly after an assisted setup.	The sensor sees the door during the assisted setup.	<b>1</b> Check the angle of the IR-curtains. <b>2</b> Launch a new assisted setup. <b>Attention: Do not stand in the detection field!</b>
	The RED LED lights up sporadically.	The sensor vibrates.	<b>1</b> Check if the sensor is fastened firmly. <b>2</b> Check position of prism and cover.
		The sensor sees the door.	<b>1</b> Launch an assisted setup and adjust the IR angle.
		The sensor is disturbed by lamps or another sensor.	<b>1</b> Choose a different frequency (DIP 2).
		The sensor is disturbed by the rain.	<b>1</b> Choose the critical environment presetting (DIP 1).
	The LED is off.		<b>1</b> Check connections to test output. <b>2</b> If your door controller is not able to test the sensor, connect the red and blue cable to the power supply.*
	The reaction of the door does not correspond to the LED-signal.		<b>1</b> Change the output configuration (DIP 4).

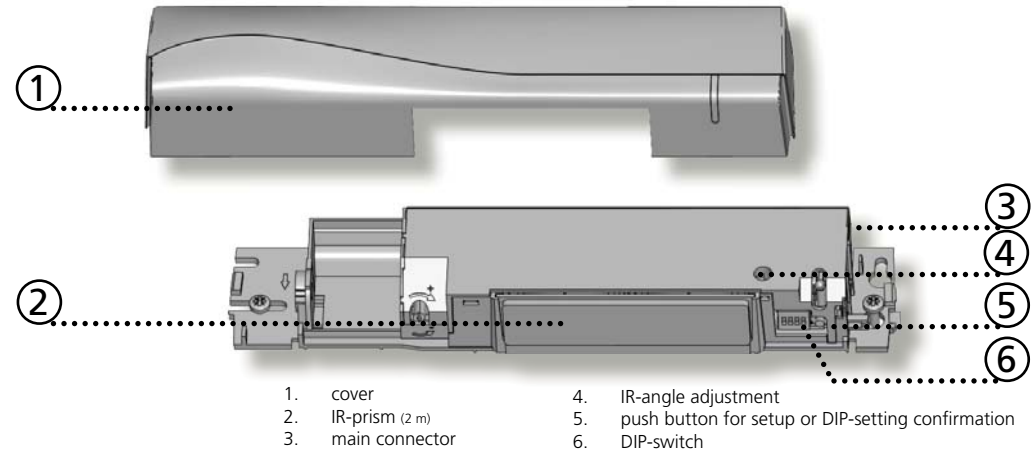
\*excludes EN 16005-conformity of the door system





# VIO-ST

Safety sensor  
for automatic sliding doors

## DESCRIPTION



## TECHNICAL SPECIFICATIONS

Supply voltage:	12 V - 30 V DC -5%/+10% (to be operated from SELV compatible power supplies only)
Power consumption:	< 1.6 W
Mounting height:	1.8 m to 3 m
Sensitivity of the test input:	< 1 V : Log. L; > 10 V: Log. H (max. 30 V)
Temperature range:	-25 °C to +55 °C
Degree of protection:	IP54
Noise:	< 70 dB
Expected lifetime:	20 years
Norm conformity:	MD 2006/42/EC; ROHS 2 2011/65/EU; EN 16005:2012; EN 12978:2009; EN IEC 62061:2005 SIL2; EN 61496-1:2012 ESPE Type 2; EN ISO 13849-1:2008 PL «C» CAT.2 (under the condition that the door control system monitors the sensor at least once per door cycle)
	  RED LED
Detection mode:	Presence Typical response time: <256 ms
Technology:	Active infrared with background analysis Spot diameter: 0.1 m (typ) Number of spots: 24 Number of curtains: 2
Angle:	From -4 ° to +4 ° (adjustable)
Output:	Solid-state-relay (free of potential, free of polarity) Max. contact current: 100 mA Max. contact voltage: 42 V AC/DC
Hold time output signal:	0.3 s to 1 s (not adjustable)
Response time on test request:	Typical: < 5 ms

Specifications are subject to changes without prior notice. All values measured in specific conditions.



BEA hereby declares that the VIO-ST is in conformity with the basic requirements and the other relevant provisions of the directives 2004/108/EC and 2006/42/EC.

Notified Body for EC inspection: 0044 - TÜV NORD CERT GmbH, Langemarckstr. 20, D-45141 Essen

EC-type examination certificate number: 44 205 13 089601

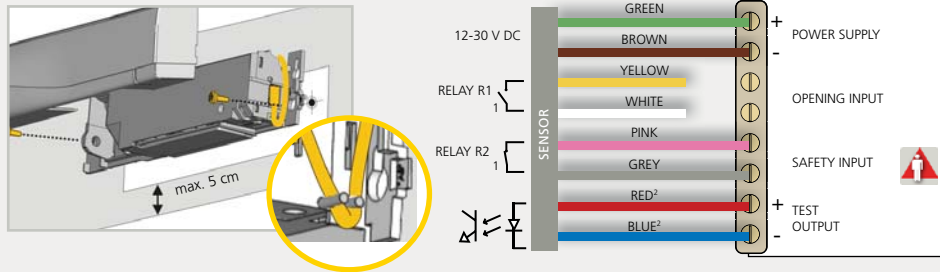
Angleur, June 2013 Jean-Pierre Valkenberg, Authorized representative and responsible for technical documentation

The complete declaration of conformity is available on our website: [www.bea-pedestrian.be](http://www.bea-pedestrian.be)

Only for EC countries: According to the European Guideline 2002/96/EC for Waste Electrical and Electronic Equipment (WEEE)



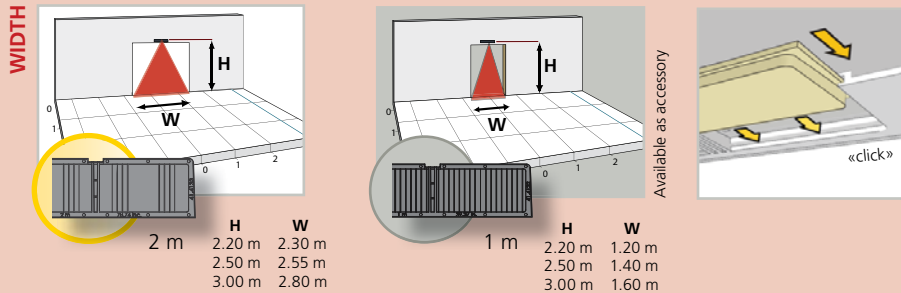
# 1 MOUNTING & WIRING



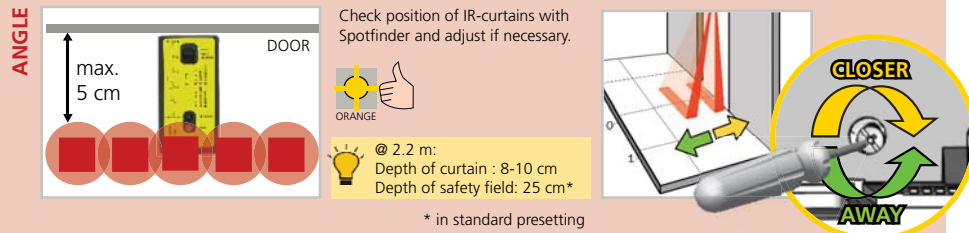
The door control unit and the door cover profile must be correctly earthed.

<sup>1</sup> Output status when sensor is operational  
<sup>2</sup> For compliance with EN 16005, connection to door controller test output is required.

# 2 INFRARED FIELD - SAFETY

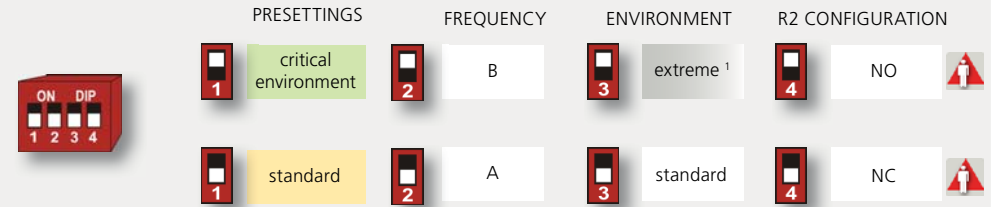


Detection field width indicated according to conditions defined in EN 16005 and including dimension of test body CA.



The size of the detection field varies according to the mounting height of the sensor.

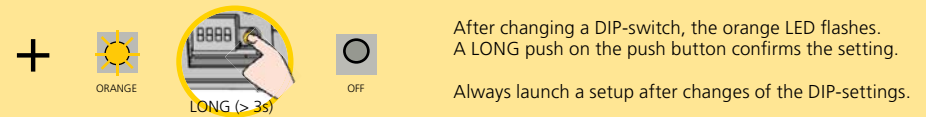
# 3 SETTINGS (by DIP-switch)



<sup>1</sup> Enhanced IR-immunity which excludes EN 16005-conformity of the door system.

**standard:** standard environments (factory setting)

**critical environment:** enhanced immunity for critical environments (rain, snow, lamps...). Only 1 IR-curtain activated.



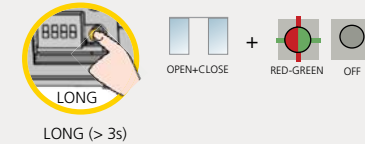
# 4 SETUP

Step outside of the detection field before launching a setup.

## QUICK SETUP



## ASSISTED SETUP



The yellow and white wires have to be connected to launch an assisted setup.

Launch an **ASSISTED SETUP** to verify wiring, position of the curtains and correct functioning of the sensor.

## SAFETY INSTRUCTIONS

- Test the good functioning of the installation before leaving the premises.
- The manufacturer of the door system is responsible for carrying out a risk assessment and installing the sensor and the door system in compliance with applicable national and international regulations and standards on door safety and if applicable, the machinery directive 2006/42/EC.
- The device cannot be used for purposes other than its intended use. All other uses cannot be guaranteed by the manufacturer of the sensor.
- The manufacturer of the sensor cannot be held responsible for incorrect installations or inappropriate adjustments of the sensor.
- Only trained and qualified personnel may install and setup the sensor.
- The warranty is void if unauthorized repairs are made or attempted by unauthorized personnel.
- Avoid touching any electronic and optical components, avoid vibrations, do not cover the sensor and avoid proximity to neon lamps or moving objects.
- It is recommended to clean the optical parts at least once a year or more often if required due to environmental conditions.