



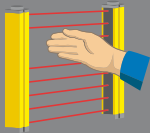
LIGHT CURTAINS EXTENDED

HAND PROTECTION TYPE 4 SLIM

MAIN FEATURES

- ✓ Resolution: 30 mm
- ✓ Operating range: 0.25 ... 10 m*
- ✓ Protective height: 170 ... 1610 mm
- ✓ Wireless configuration through Bluetooth®
- ✓ No blind zone
- ✓ Category 4, PL e according to EN/ISO 13849-1
- ✓ Type 4 according to IEC 61496-1 and -2
- ✓ SIL 3 according to IEC 61508
- ✓ Certified TÜV, CE and UL**
- ✓ Enclosure rating IP 65
- ✓ Housing profile 26 mm x 26 mm
- ✓ Beam coding (3 channels), EDM, start and restart interlock configurable functions
- ✓ Optical synchronization
- ✓ Permanent autocontrol

* Provisional data ** Pending



HAND PROTECTION

LEDS

LED indicators on the YBES **sender** unit



Bluetooth®:

Blue when communication through Bluetooth® is enabled

Quick blinking blue when data are exchanged (1 Hz)

OFF when communication through Bluetooth® is disabled

Beam coding:

Purple when "Beam Coding #1" option is enabled

Yellow when "Beam Coding #2" option is enabled

Cyan when "Beam Coding #3" option is enabled

Test:

Yellow when intrusion simulation is enabled

OFF when there is no intrusion simulation

LED indicators on the YBES **receiver** unit



OSSD:

Green when both OSSD1 and OSSD2 are ON

Red when both OSSD1 and OSSD2 are OFF

Interlock:

Yellow when light curtain is waiting for restart/start

OFF when restart/start is initiated or when automatic restart is configured

Bluetooth®:

Blue when communication through Bluetooth® is enabled

Blinking blue when data are exchanged (1 Hz)

OFF when communication through Bluetooth® is disabled

TECHNICAL DATA

Dimensions	26 mm x 26 mm x Ht
Resolution	30 mm
Protective height	170 ... 1610 mm
Supply voltage range	24 VDC ± 20 %
Current consumption sender	tbd
Current consumption receiver (excl. load)	tbd
Output current	max. 400 mA per output (at 50°C / 122°F)
Safety level (EN/ISO 13849-1)	Category 4, PL _e
Safety type (IEC 61496-1 and -2)	Type 4
Protection class (IEC 61140)	III
Ambient temperature range	0 ... +55°C (+32 ... +131°F)
Storage temperature range	-25 ... +70°C (-13 ... +158°F)
Degree of protection (EN 60529)	IP 65
Housing material	Aluminum profile, PC front screen
Material of optical parts	PMMA
Operating range	0.25 ... 10 m*
Sender wavelength	IR 850 nm

* Provisional data

HOUSING

Aluminum profile 26 mm x 26 mm with dual fixing groove.

ELECTRONIC PROTECTION

Safetindex light curtains are self-protected against overloads and short-circuits. They can also withstand short high-voltage overloads.

CONNECTION

Safetindex light curtains with M12 5-pole (sender) and M12-8 pole (receiver) pigtail are standard.

DOCUMENTATION

Detailed data sheets for these products can be found on the Contrinex website www.contrinex.com or ordered free of charge from our distributors.

Alignment:

Steady orange when no beam is aligned

Blinking orange when less of total beam number are aligned (frequency about 1 Hz)

OFF when all beams are fully aligned

EDM

Orange when EDM is enabled

OFF when EDM is disabled

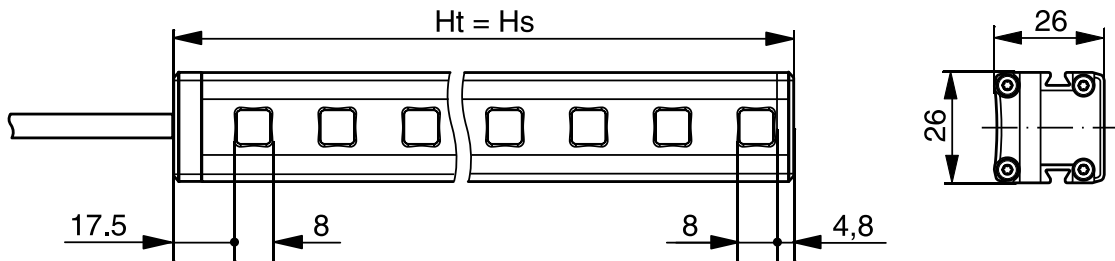
Beam Coding

Purple when "Beam Coding #1" option is enabled

Yellow when "Beam Coding #2" option is enabled

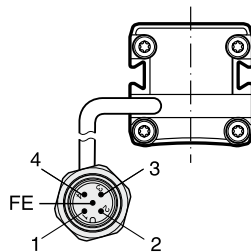
Cyan when "Beam Coding #3" option is enabled

DIMENSIONS



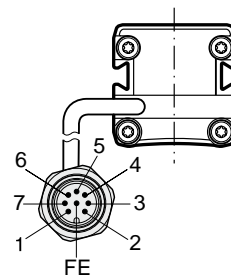
PIN ASSIGNMENT

Sender



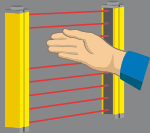
M12 pigtail, 5 pins

Receiver



M12 pigtail, 8 pins

ASSIGNMENT	FUNCTION	PINS/WIRES ON SENDER		PINS/WIRES ON RECEIVER	
		M12	OPEN CABLE	M12	OPEN CABLE
Supply voltage	24 VDC	1	brown	2	brown
Supply voltage	0 V	3	blue	7	blue
Test mode	24 V: test inactive 0 V: test active	4	black	-	-
Output	OSSD1	-	-	5	grey
Output	OSSD2	-	-	6	pink
Functional earth	Shield	FE	gray	FE	red
EDM	EDM input	-	-	4	yellow
Restart Interlock	Input for restart button	-	-	1	white
Not used	-	2	white	3	green



HAND PROTECTION



TYPE-SPECIFIC DATA

Type	0170	0330	0490
Total height (Ht) [mm]	170	330	490
Protective height (Hs) [mm]	170	330	490
Number of beams	8	16	24
Current consumption [mA]	tbd	tbd	tbd
Response time [ms]	5	6	7

PART REFERENCE (BOLD: PREFERRED TYPES)

PNP / Connector M12	Sender	YBES-30S4-0170-P012	YBES-30S4-0330-P012	YBES-30S4-0490-P012
	Receiver	YBES-30R4-0170-P012	YBES-30R4-0330-P012	YBES-30R4-0490-P012
	Kit (sender + receiver)	YBES-30K4-0170-P012	YBES-30K4-0330-P012	YBES-30K4-0490-P012

TYPE-SPECIFIC DATA

Type	0650	0810	0970
Total height (Ht) [mm]	650	810	970
Protective height (Hs) [mm]	650	810	970
Number of beams	32	40	48
Current consumption [mA]	tbd	tbd	tbd
Response time [ms]	8	9	10

PART REFERENCE (BOLD: PREFERRED TYPES)

PNP / Connector M12	Sender	YBES-30S4-0650-P012	YBES-30S4-0810-P012	YBES-30S4-0970-P012
	Receiver	YBES-30R4-0650-P012	YBES-30R4-0810-P012	YBES-30R4-0970-P012
	Kit (sender + receiver)	YBES-30K4-0650-P012	YBES-30K4-0810-P012	YBES-30K4-0970-P012

TYPE-SPECIFIC DATA

Type	1130	1290	1450
Total height (Ht) [mm]	1130	1290	1450
Protective height (Hs) [mm]	1130	1290	1450
Number of beams	56	64	72
Current consumption [mA]	tbd	tbd	tbd
Response time [ms]	11	12	13

PART REFERENCE (BOLD: PREFERRED TYPES)

PNP / Connector M12	Sender	YBES-30S4-1130-P012	YBES-30S4-1290-P012	YBES-30S4-1450-P012
	Receiver	YBES-30R4-1130-P012	YBES-30R4-1290-P012	YBES-30R4-1450-P012
	Kit (sender + receiver)	YBES-30K4-1130-P012	YBES-30K4-1290-P012	YBES-30K4-1450-P012

TYPE-SPECIFIC DATA

Type	1610		
Total height (Ht) [mm]	1610		
Protective height (Hs) [mm]	1610		
Number of beams	80		
Current consumption [mA]	tbd		
Response time [ms]	14		

PART REFERENCE (BOLD: PREFERRED TYPES)

PNP / Connector M12	Sender	YBES-30S4-1610-P012		
	Receiver	YBES-30R4-1610-P012		
	Kit (sender + receiver)	YBES-30K4-1610-P012		