

Contrinex Extended Slim Safety Light Curtains (14mm Beam Resolution)



Features

- No blind zone
- Beam coding, EDM, start and restart interlock configurable functions
- Protected height: 170mm to 1290mm [6.69 to 50.79 in]
- Operating range: 0.4 to 5.0 m [1.31 to 16.4 ft]
- Type 4 according to IEC 61496-1/2
- SIL 3 according to IEC 61508
- Category 4, PLe according to EN/ISO 13849-1
- Permanent autocontrol and optical sync
- Wireless configuration through Bluetooth®

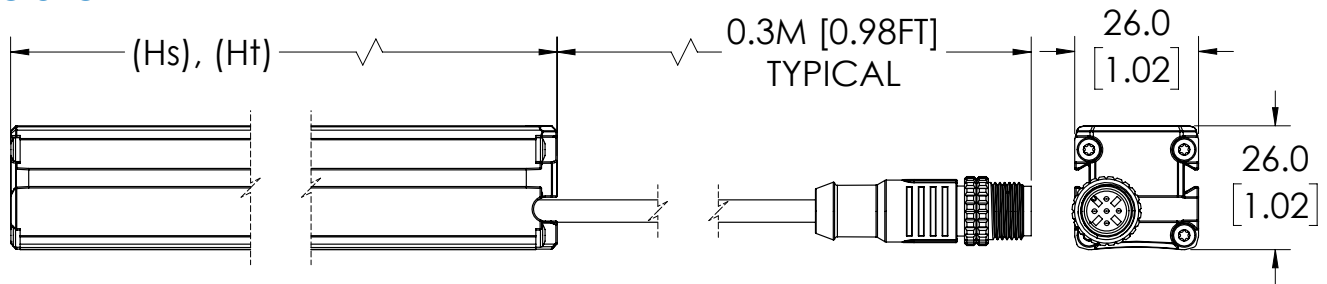


Contrinex 14mm [0.55 in] Resolution Extended Slim Safety Light Curtains Selection Chart (Sender/Receiver Pair)

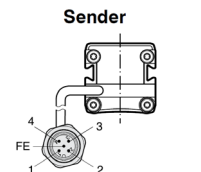
Part Number	Price	Description	Protective Height (Hs) mm [in]	Total Height (Ht) mm [in]	Number of Beams	Current Consumption (mA max)	Response Time (ms)	MTTFd (years)	DCavg (%)	Weight g [lb]
YBES-14K4-0170-P012	\$563.00	Sender/Receiver Pair	170 [6.69]	170 [6.69]	16	30 (S), 35 (R)	9.6	2780	96.99	300 [0.66]
YBES-14K4-0330-P012	\$713.00	Sender/Receiver Pair	330 [12.99]	330 [12.99]	32	30 (S), 35 (R)	13.2	2364	97.29	520 [1.14]
YBES-14K4-0490-P012	\$974.00	Sender/Receiver Pair	490 [19.29]	490 [19.29]	48	30 (S), 35 (R)	16.8	2055	97.52	740 [1.63]
YBES-14K4-0650-P012	\$1,301.00	Sender/Receiver Pair	650 [25.59]	650 [25.59]	64	30 (S), 35 (R)	20.4	1818	97.69	980 [2.16]
YBES-14K4-0810-P012	\$1,513.00	Sender/Receiver Pair	810 [31.89]	810 [31.89]	80	30 (S), 35 (R)	24	1630	97.82	1200 [2.65]
YBES-14K4-0970-P012	\$1,715.00	Sender/Receiver Pair	970 [38.19]	970 [38.19]	96	30 (S), 35 (R)	27.6	1477	97.93	1420 [3.13]
YBES-14K4-1130-P012	\$2,121.00	Sender/Receiver Pair	1130 [44.49]	1130 [44.49]	112	30 (S), 35 (R)	31.2	1351	98.02	1640 [3.62]
YBES-14K4-1290-P012	\$2,448.00	Sender/Receiver Pair	1290 [50.79]	1290 [50.79]	128	30 (S), 35 (R)	34.8	1244	98.10	1860 [4.10]

Dimensions

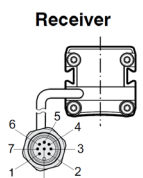
mm [in]



Assignment	Function	Pins/Wires On Sender		Pins/Wires On Receiver		
		M12	Cable	M12	292 Cable	295 Cable
Supply Voltage	24VDC	1	Brown	2	Brown	White
Supply Voltage	0V	3	Blue	7	Blue	Violet
Test Mode	24V: Test Inactive; 0V: Test Active	4	Black	—	—	—
Output	OSSD1 (Output Single Switching Device)	—	—	5	Gray	Gray
Output	OSSD2 (Output Single Switching Device)	—	—	6	Pink	Pink
Earth Ground	Shield (Ground)	FE	Gray	FE	Red	Orange
EDM	EDM Input	—	—	4	Yellow	Black
Restart Interlock	Input For Restart Button	—	—	1	White	Brown
Not Used	—	2	White	3	Green	Blue



M12 pigtail, 0.3 m, 5 pins



M12 pigtail, 0.3 m, 8 pins

Note: Cable color represents standard industrial pinout. Confirm the specific color and pinout during installation.

Contrinex Extended Slim Safety Light Curtains (14mm Beam Resolution)

Contrinex Extended Slim Safety Light Curtains YBES-14K4-xxxx-P012 Specifications		
Resolution		14mm [0.55 in]
Beam Axis Interval		10mm [0.39 in]
Effective Aperture Angle		< ± 2.5° (when operating distance ≥ 3m [9.84 ft])
Operating Range		0.4-5 m [1.31-16.4 ft]
Supply Voltage		24VDC ± 20%
Polarity		2 PNP outputs
Output Protection		Short-circuit, overload protected
Output Monitoring		Cross-circuit monitored
Output Current		Maximum 400mA per output (at 55°C [131°F])
Output Voltage ON Minimum		-2V @ 400mA of the operating voltage
Output Voltage OFF Maximum		1.0 V
Output Monitoring Frequency		5Hz
Leakage Current In OFF State		< 2mA
Maximum Load Inductance		100mH
Sender Wavelength		IR 850nm
Safety Level		Cat. 4, PLe (EN/ISO 13849-1), Type 4 (IEC 61496-1/-2), SIL 3 (IEC 61508-1/-2/-3), SILCL3 (IEC 62061:A2)
Electrical Protection Class		III (IEC 61140)
Startup Delay		< 3s
Vibration Resistance		10 to 55 Hz, 0.35 mm amplitude, 1 octave/min, 20 sweeps for each axis
Shock Resistance		10g during 16ms, 1000 times for each axis
Light Immunity		Incandescent lamp: 3000 lx max. (light intensity on receiver surface); xenon flash tube: flash duration 1.2 ms max. with a frequency of 2Hz max. (IEC 61496-2)
Ambient Temperature Range		0 to +55°C (32 to 131°F)
Storage Temperature Range		-25 to +70°C (-13 to +158°F)
Air Humidity		15-95% (non-condensing)
Enclosure Rating		IP65 (EN 60529/A1)
Housing Material		Aluminum profile, PC front screen, upper and lower cover PA + 30% fiberglass
Cable Runs		100m [328 ft] max. (at 10nF capacitive load)
Reference Standards	Safety	IEC 61496 -1/-2, IEC 61508-1/-2/-3, IEC 62061:A2, ISO 13849-1, EN 60204-1, EN 50178
	Environment	EN 60068-2-1, 2, 3, 6, 27
	EMC	EN 61000-4-2, 3, 5, 6
	Radio Disturbance	EN 55011/A2
	Bluetooth®	Low energy (LE), V5.0 (compatible 4.1 or later)
EDM (External Device Monitoring)		Enabled or disabled
Start and Restart Interlock		Automatic or manual
Beam Coding		3 selectable codes
Configuration		Through Bluetooth® with ContriApp, range <20m
Connection		Receiver: 8-pole M12 pigtail (0.3 m [0.98 ft]). Sender: 5-pole M12 pigtail (0.3 m [0.98 ft]).

Contrinex Safety Light Curtains YBxS Accessories

Contrinex Safety Light Curtains YBxS Accessories					
Part Number	Price	Description	Material	Mounting	Use With
<u>YXW-0005-000</u>	\$11.00	Contrinex mounting bracket. Package of 2.	Glass fiber reinforced polyamide	Top and bottom mount	YBxS series light curtains
<u>YXW-0006-000</u>	\$23.00	Contrinex mounting bracket. Package of 2.	Stainless steel	Side mount	YBxS series light curtains
<u>YXW-0007-000</u>	\$21.00	Contrinex mounting bracket. Package of 2.	Stainless steel	Side or end mount	YBxS series light curtains

**YXW-0005-000****YXW-0006-000****YXW-0007-000**

Warning: Safety products sold by AutomationDirect are Safety components only.

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