For the latest prices, please check AutomationDirect.com.

# 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
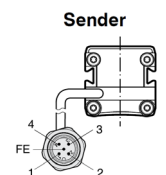- Wireless configuration through Bluetooth®

MADE IN USA

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

Part Number	Price	Description	Protecteive 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]

(Hs), (Ht)   0.3M [0.98FT] TYPICAL   26.0 [1.02]   26.0 [1.02]
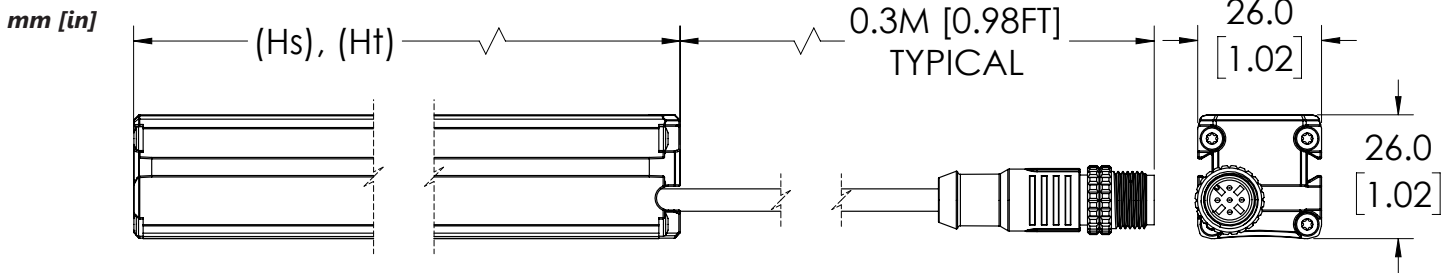
Assignment	Function	Pins/Wires On Sender		Pins/Wires On Receiver		
		M12	Cable	M12	292 Cable	295 Cable
Supply Voltage	24VDC	1	Brown	2	Brown	White
Supply Voltage	0V	3	Blue	7	Blue	Violet
Test Mode	24V: Test Inactive; 0V: Test Active	4	Black	–	–	–
Output	OSSD1 (Output Single Switching Device)	–	–	5	Gray	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 Researt Button	–	–	1	White	Brown
Not Used	–	2	White	3	Green	Blue
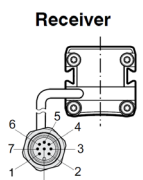
Note: Cable color represents standard industrial pinout. Confirm the specific color and pinout during installation.

Sender

FE

M12 pigtail, 0.3 m, 5 pins

Receiver

FE

M12 pigtail, 0.3 m, 8 pins

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

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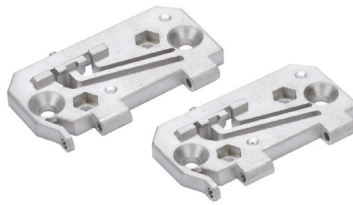
YXW-0005-000   YXW-0006-000   YXW-0007-000

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

The purchaser/installer is solely responsible for the application of these components and ensuring all necessary steps have been taken to assure each application and use meets all performance and applicable safety requirements and/or local, national and/or international safety codes as required by the application. AutomationDirect cannot certify that our products used solely or in conjunction with other AutomationDirect or other vendors' products will assure safety for any application.

Any person using or applying any products sold by AutomationDirect is responsible for learning the safety requirements for their individual application and applying them, and therefore assumes all risks, and accepts full and complete responsibility for the selection and suitability of the product for their respective application. AutomationDirect does not provide design or consulting services, and cannot advise whether any specific application or use of our products would ensure compliance with the safety requirements for any application.