

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®

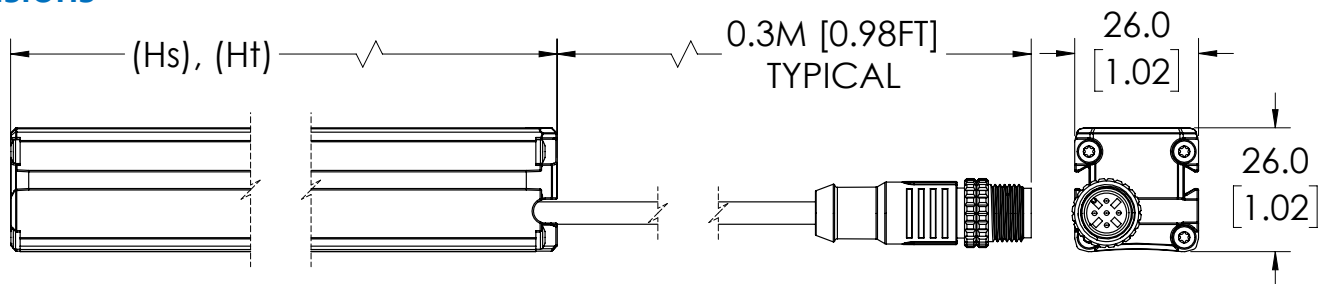


Contrinex 14mm [0.55 in] Resolution Extended Slim Safety Light Curtains Selection Chart (Sender/Receiver Pair)

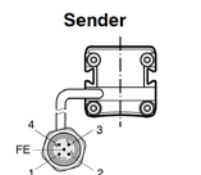
Part Number	Price	Description	Protective Height (Hs) mm [in]	Total Height (Ht) mm [in]	Number of Beams	Current Consumption (mA max)	Response Time (ms)	MTTFd (years)	DCavg (%)	Weight g [lb]
YBES-14K4-0170-P012	\$-.0413y:	Sender/Receiver Pair	170 [6.69]	170 [6.69]	16	30 (S), 35 (R)	9.6	2780	96.99	300 [0.66]
YBES-14K4-0330-P012	\$-.0413z:	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	\$-.0413j:	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	\$-;.00413[:	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	\$-;.00413[:	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	\$-;.00413s:	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	\$-;.00413t:	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	\$-;.00413u:	Sender/Receiver Pair	1290 [50.79]	1290 [50.79]	128	30 (S), 35 (R)	34.8	1244	98.10	1860 [4.10]

Dimensions

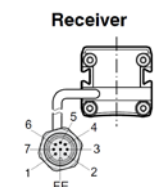
mm [in]



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 Researt 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
	Environment
	EMC
	Radio Disturbance
	Bluetooth®
EDM (External Device Monitoring)	
Start and Restart Interlock	
Beam Coding	
Configuration	
Connection	

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>	\$-4l4d:	Contrinex mounting bracket. Package of 2.	Glass fiber reinforced polyamide	Top and bottom mount	YBxS series light curtains
<u>YXW-0006-000</u>	\$-4l4e:	Contrinex mounting bracket. Package of 2.	Stainless steel	Side mount	YBxS series light curtains
<u>YXW-0007-000</u>	\$-4l4f:	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.

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