

# Contrinex Extended Slim Safety Light Curtains (30mm Beam Resolution)

## Features

- No blind zone
- Beam coding, EDM, start and restart interlock configurable functions
- Protective height: 170 to 1610 mm [6.69 to 63.39 in]
- Operating range: 0.25 to 5 m [0.82 to 16.4 ft]
- Type 4 according to IEC 61496-1/2
- SIL 3 according to IEC 61508
- Category 4, PL e according to EN/ISO 13849-1
- Permanent autocontrol and optical sync
- Wireless configuration through Bluetooth®

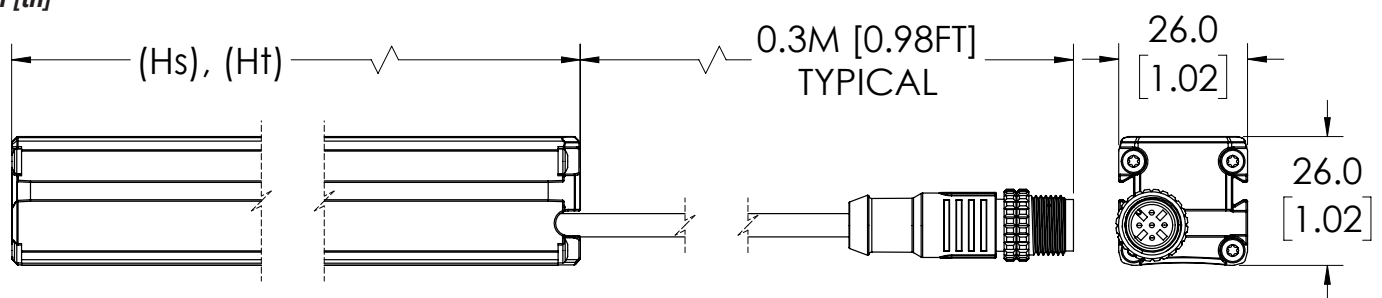


## Contrinex 30mm [1.18 in] Resolution Extended Slim Safety Light Curtains Selection Chart (Sender/Receiver Pair)

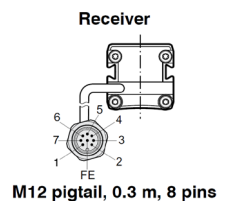
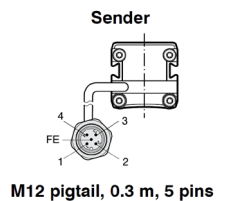
Part Number	Price	Description	Protective Height (Hs) mm [in]	Total Height Ht mm [in]	Number of Beams	Current Consumption (mA max)	Response Time (ms)	MTTFd (years)	DCavg (%)	Weight g [lb]
<a href="#">YBES-30K4-0170-P012</a>	\$540.00	Sender/Receiver Pair	170 [6.69]	170 [6.69]	8	30 (S), 35 (R)	7.8	3049	96.80	300 [0.66]
<a href="#">YBES-30K4-0330-P012</a>	\$626.00	Sender/Receiver Pair	330 [12.99]	330 [12.99]	16	30 (S), 35 (R)	9.6	2780	96.99	520 [1.14]
<a href="#">YBES-30K4-0490-P012</a>	\$751.00	Sender/Receiver Pair	490 [19.29]	490 [19.29]	24	30 (S), 35 (R)	11.4	2555	97.16	740 [1.63]
<a href="#">YBES-30K4-0650-P012</a>	\$993.00	Sender/Receiver Pair	650 [25.59]	650 [25.59]	32	30 (S), 35 (R)	13.2	2364	97.29	980 [2.16]
<a href="#">YBES-30K4-0810-P012</a>	\$1,088.00	Sender/Receiver Pair	810 [31.89]	810 [31.89]	40	30 (S), 35 (R)	15	2199	97.41	1200 [2.65]
<a href="#">YBES-30K4-0970-P012</a>	\$1,195.00	Sender/Receiver Pair	970 [38.19]	970 [38.19]	48	30 (S), 35 (R)	16.8	2055	97.52	1420 [3.13]
<a href="#">YBES-30K4-1130-P012</a>	\$1,301.00	Sender/Receiver Pair	1130 [44.49]	1130 [44.49]	56	30 (S), 35 (R)	18.6	1930	97.61	1640 [3.62]
<a href="#">YBES-30K4-1290-P012</a>	\$1,340.00	Sender/Receiver Pair	1290 [50.79]	1290 [50.79]	64	30 (S), 35 (R)	20.4	1818	97.69	1860 [4.10]
<a href="#">YBES-30K4-1450-P012</a>	\$1,475.00	Sender/Receiver Pair	1450 [57.09]	1450 [57.09]	72	30 (S), 35 (R)	22.2	1719	97.76	2080 [4.59]
<a href="#">YBES-30K4-1610-P012</a>	\$1,629.00	Sender/Receiver Pair	1610 [63.39]	1610 [63.39]	80	30 (S), 35 (R)	24	1630	97.82	2300 [5.07]

## 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



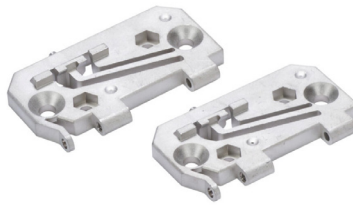
Note: Cable color represents standard industrial pinout. Confirm the specific color and pinout during installation.

# Contrinex Extended Slim Safety Light Curtains (30mm Beam Resolution)

Contrinex Extended Slim Safety Light Curtains YBES-30x4-xxxx-P012 Specifications		
<b>Resolution</b>	<b>30mm [1.18 in]</b>	
<b>Beam Axis Interval</b>	20mm [0.79 in]	
<b>Effective Aperture Angle</b>	< ± 2.5° (when operating distance ≥ 3 m [9.84 ft])	
<b>Operating Range</b>	0.25-5 m [0.82-16.4 ft]	
<b>Supply Voltage</b>	24VDC ± 20%	
<b>Polarity</b>	2 PNP outputs	
<b>Output Protection</b>	Short-circuit, overload protected	
<b>Output Monitoring</b>	Cross-circuit monitored	
<b>Output Current</b>	Maximum 400mA per output (at 55°C [131°F])	
<b>Output Voltage ON Minimum</b>	-2V @ 400mA of the operating voltage	
<b>Output Voltage OFF Maximum</b>	1.0 V	
<b>Output Monitoring Frequency</b>	5Hz	
<b>Leakage Current In OFF State</b>	< 2mA	
<b>Maximum Load Inductance</b>	100mH	
<b>Sender Wavelength</b>	IR 850nm	
<b>Safety Level</b>	Cat. 4, PLe (EN/ISO 13849-1), Type 4 (IEC 61496-1/-2), SIL 3 (IEC 61508-1/-2/-3), SILCL3 (IEC 62061:A2)	
<b>Electrical Protection Class</b>	III (IEC 61140)	
<b>Startup Delay</b>	< 3s	
<b>Vibration Resistance</b>	10 to 55 Hz, 0.35 mm amplitude, 1 octave/min, 20 sweeps for each axis	
<b>Shock Resistance</b>	10g during 16ms, 1000 times for each axis	
<b>Light Immunity</b>	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)	
<b>Ambient Temperature Range</b>	0 to +55°C (32 to 131°F)	
<b>Storage Temperature Range</b>	-25 to +70°C (-13 to +158°F)	
<b>Air Humidity</b>	15-95% (non-condensing)	
<b>Enclosure Rating</b>	IP65 (EN 60529/A1)	
<b>Housing Material</b>	Aluminum profile, PC front screen, upper and lower cover PA + 30% fiberglass	
<b>Cable Runs</b>	100m [328 ft]max. (at 10nF capacitive load)	
<b>Reference Standards</b>	<b>Safety</b>	IEC 61496 -1/-2, IEC 61508-1/-2/-3, IEC 62061:A2, ISO 13849-1, EN 60204-1, EN 50178
	<b>Environment</b>	EN 60068-2-1, 2, 3, 6, 27
	<b>EMC</b>	EN 61000-4-2, 3, 5, 6
	<b>Radio Disturbance</b>	EN 55011/A2
	<b>Bluetooth®</b>	Low energy (LE), V5.0 (compatible 4.1 or later)
<b>EDM (External Device Monitoring)</b>	Enabled or disabled	
<b>Start and Restart Interlock</b>	Automatic or manual	
<b>Beam Coding</b>	3 selectable codes	
<b>Configuration</b>	Through Bluetooth® with ContriApp, range <20m	
<b>Connection</b>	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
<a href="#"><u>YXW-0005-000</u></a>	\$11.00	Contrinex mounting bracket. Package of 2.	Glass fiber reinforced polyamide	Top and bottom mount	YBxS series light curtains
<a href="#"><u>YXW-0006-000</u></a>	\$23.00	Contrinex mounting bracket. Package of 2.	Stainless steel	Side mount	YBxS series light curtains
<a href="#"><u>YXW-0007-000</u></a>	\$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.