

# 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®

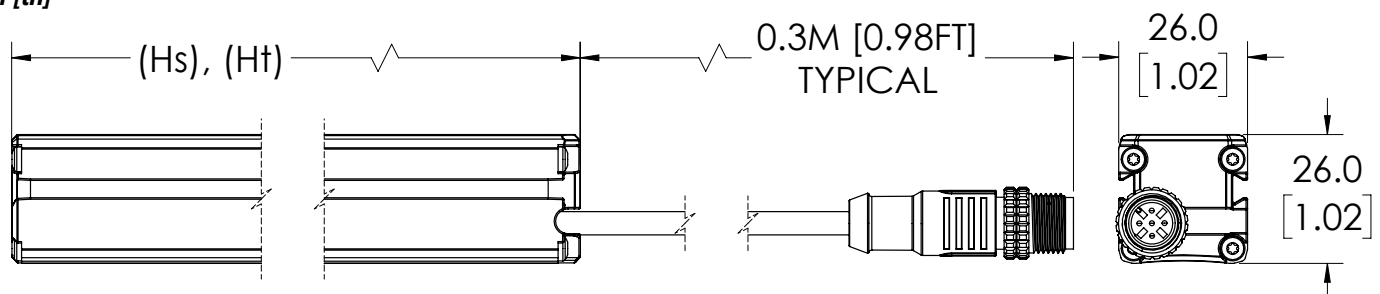


**Contrinex 30mm [1.18 in] Resolution Extended Slim Safety Light Curtains Selection Chart (Sender/Receiver Pair)**

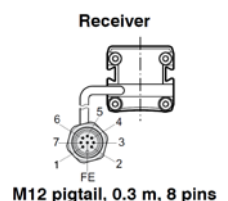
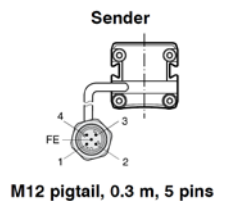
Part Number	Price	Description	Protective Height (Hs) mm [in]	Total Height Ht mm [in]	Number of Beams	Current Consumption (mA max)	Response Time (ms)	MTTFd (years)	DCavg (%)	Weight g [lb]
<a href="#">YBES-30K4-0170-P012</a>	\$-0413v:	Sender/Receiver Pair	170 [6.69]	170 [6.69]	8	30 (S), 35 (R)	7.8	3049	96.80	300 [0.66]
<a href="#">YBES-30K4-0330-P012</a>	\$-0413x:	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>	\$-0413#:	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>	\$-0413!:	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>	\$-00413?:	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>	\$-00413.:	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>	\$-004140:	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>	\$-004141:	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>	\$-004142:	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>	\$-004143:	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 Restart 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		
Resolution		30mm [1.18 in]
Beam Axis Interval		20mm [0.79 in]
Effective Aperture Angle		< ± 2.5° (when operating distance ≥ 3 m [9.84 ft])
Operating Range		0.25-5 m [0.82-16.4 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
<a href="#"><u>YXW-0005-000</u></a>	\$-4l4d:	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>	\$-4l4e:	Contrinex mounting bracket. Package of 2.	Stainless steel	Side mount	YBxS series light curtains
<a href="#"><u>YXW-0007-000</u></a>	\$-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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