

# 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®

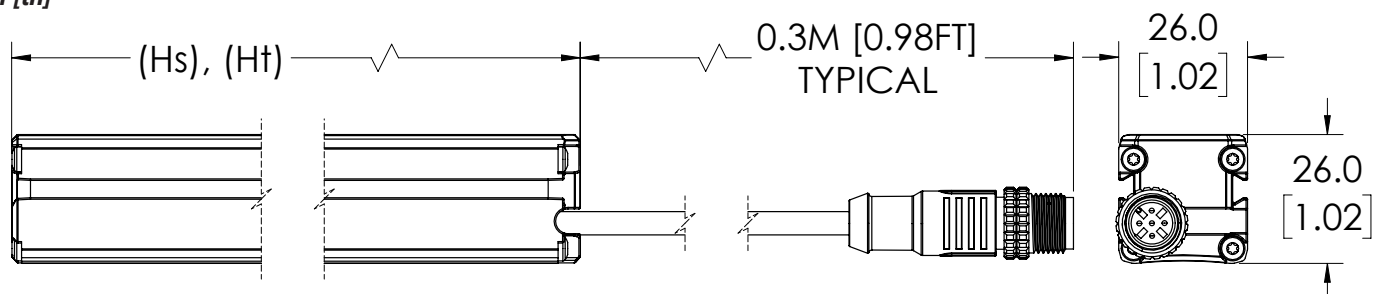


**Contrinex 30mm [1.18 in] Resolution Extended Slim Safety Light Curtains Selection Chart (Sender/Receiver Pair)**

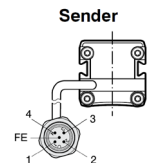
| Part Number                         | Price      | Description          | Protective Height (Hs) mm [in] | Total Height Ht mm [in] | Number of Beams | Current Consumption (mA max) | Response Time (ms) | MTTFd (years) | DCavg (%) | Weight g [lb] |
|-------------------------------------|------------|----------------------|--------------------------------|-------------------------|-----------------|------------------------------|--------------------|---------------|-----------|---------------|
| <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

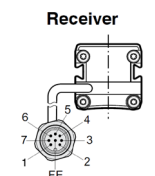
mm [in]



| 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 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 (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>              | \$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**

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