

Safetinx

Safety light curtains

HANDPROTECTION





**LIGHT CURTAINS
HAND PROTECTION
30 MM**

MAIN FEATURES

- Resolution: 30 mm
- Operating range: 0.25 ... 12 m
- Protective height: 279 ... 1827 mm
- Category 4, PL e according to EN/ISO 13849-1 (former EN 954-1)
- Type 4 according to IEC 61496-1 and -2
- Certified TÜV, CE and UL
- Impervious: degrees of protection **IP 65, IP 67 & IP 69K**
- 2-channel selection
- Optical synchronization
- Permanent autocontrol

TECHNICAL DATA

Dimensions	42 x 48 x Ht mm
Supply voltage range	24 VDC ± 20 %
Current consumption sender	50 mA max. / 1.5 W max.
Current consumption receiver (excl. load)	160 mA max. / 4.7 W max.
Output current	0.2 A max. per output
Safety level (EN/ISO 13849-1)	Category 4, PL e
Safety type (IEC 61496-1 and -2)	Type 4
Protection class (IEC 61140)	III
Ambient temperature range	0 ... +50 °C (+32 ... +122 °F)
Storage temperature range	-25 ... +70 °C (-13 ... +158 °F)
Degree of protection (EN 60529)	IP 65 & IP 67 / IP 65, IP 67 & IP 69K (-69K)
Housing material	Aluminum
Material of optical parts	PMMA
Operating range	0.25 ... 12 m
Sender wavelength	IR 880 nm

HOUSING

Aluminum profile 42 x 48 mm with dual fixing groove. IP 69K models totally impervious.

ELECTRONIC PROTECTION

Safetinx light curtains are self-protected against overloads and short-circuits. They can also withstand short high-voltage overloads.

CONNECTION

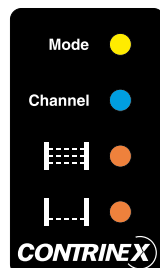
Safetinx light curtains with M12 5-pole connector are standard. Versions with PUR cable, 2 m, 5 m or 10 m long, are available on request.

DOCUMENTATION

Detailed data sheets for these products can be found on the Contrinex website www.contrinex.com or ordered free of charge from our distributors.

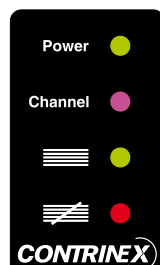
LEDS

LED indicators on the YBB **sender** unit



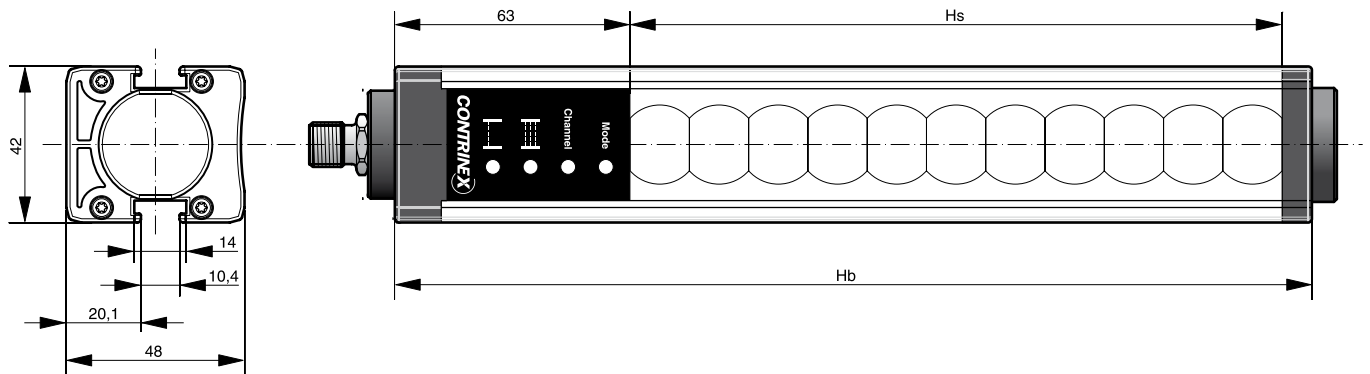
- Mode : yellow when test mode is active
- Channel : blue when channel 1 is selected
purple when channel 2 is selected
- Alignment : steady orange when the screen is not fully aligned
flashing orange when the first third of the screen is aligned
off when screen is fully aligned
- Alignment : steady orange when the lowest beam is not aligned
flashing orange when the lowest beam is aligned
off when screen is fully aligned

LED indicators on the YBB **receiver** unit

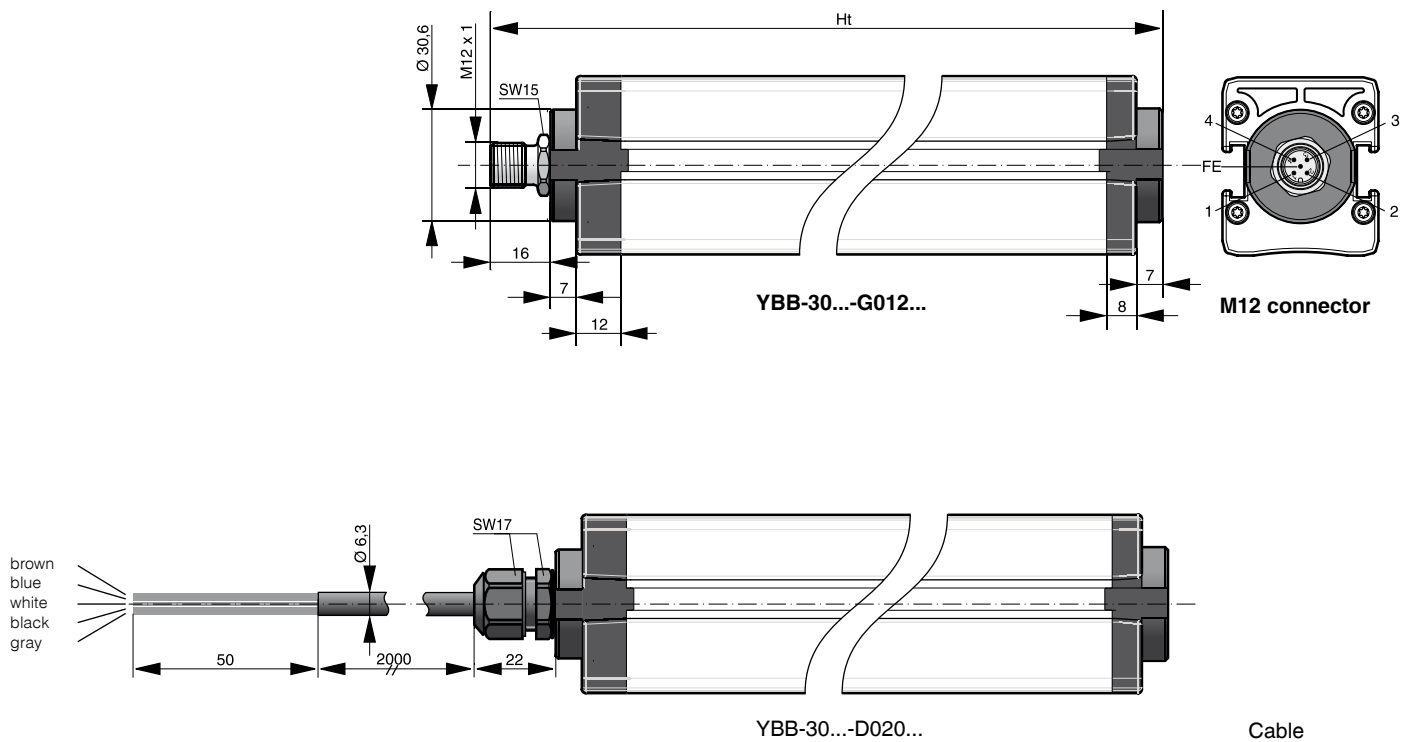


- Power : green when power is ON
- Channel : blue when channel 1 is selected
purple when channel 2 is selected
- Status : green when OSSD outputs are ON
red when OSSD outputs are OFF

DIMENSIONS



PIN ASSIGNMENT



ASSIGNMENT	FUNCTION	PINS/WIRES ON SENDER		PINS/WIRES ON RECEIVER	
		M12 CONNECTOR	CABLE	M12 CONNECTOR	CABLE
Supply voltage	24 VDC for channel 1 / 0 V for channel 2	1	brown	1	brown
Supply voltage	0 V for channel 1 / 24 VDC for channel 2	3	blue	3	blue
Test mode	0 V: test active / 24 V: test inactive	4	black	-	-
Output	OSSD1	-	-	2	white
Output	OSSD2	-	-	4	black
Functional earth	Shield	FE	gray	FE	gray

www.contrinex.com



**LIGHT CURTAINS
HAND PROTECTION (30 MM)
AVAILABLE MODELS**



TYPE-SPECIFIC DATA

Type	0250	0400	0500
Total height (Ht) [mm] *	380	509	638
Housing height (Hb) [mm]	350	479	608
Protective height (Hs) [mm]	279	408	537
Number of beams	17	25	33
Current consumption [mA]	125	130	130
Response time [ms]	5.2	6.8	8.4

PART REFERENCES (BOLD: PREFERRED TYPES)

IP 65 & IP 67	PNP / Connector M12	Sender	YBB-30S4-0250-G012	YBB-30S4-0400-G012	YBB-30S4-0500-G012
			Receiver	YBB-30R4-0250-G012	YBB-30R4-0400-G012
IP 65, IP 67 & IP 69K	PNP / PUR-cable 2 m	Sender	YBB-30S4-0250-D020	YBB-30S4-0400-D020	YBB-30S4-0500-D020
		Receiver	YBB-30R4-0250-D020	YBB-30R4-0400-D020	YBB-30R4-0500-D020
	PNP / PUR-cable 5 m	Sender	YBB-30S4-0250-D050	YBB-30S4-0400-D050	YBB-30S4-0500-D050
		Receiver	YBB-30R4-0250-D050	YBB-30R4-0400-D050	YBB-30R4-0500-D050
PNP / PUR-cable 10 m	Sender	YBB-30S4-0250-D100	YBB-30S4-0400-D100	YBB-30S4-0500-D100	
	Receiver	YBB-30R4-0250-D100	YBB-30R4-0400-D100	YBB-30R4-0500-D100	
IP 65, IP 67 & IP 69K	PNP / Connector M12	Sender	YBB-30S4-0250-G012-69K	YBB-30S4-0400-G012-69K	YBB-30S4-0500-G012-69K
		Receiver	YBB-30R4-0250-G012-69K	YBB-30R4-0400-G012-69K	YBB-30R4-0500-G012-69K
	PNP / PUR-cable 2 m	Sender	YBB-30S4-0250-D020-69K	YBB-30S4-0400-D020-69K	YBB-30S4-0500-D020-69K
		Receiver	YBB-30R4-0250-D020-69K	YBB-30R4-0400-D020-69K	YBB-30R4-0500-D020-69K
	PNP / PUR-cable 5 m	Sender	YBB-30S4-0250-D050-69K	YBB-30S4-0400-D050-69K	YBB-30S4-0500-D050-69K
		Receiver	YBB-30R4-0250-D050-69K	YBB-30R4-0400-D050-69K	YBB-30R4-0500-D050-69K
	PNP / PUR-cable 10 m	Sender	YBB-30S4-0250-D100-69K	YBB-30S4-0400-D100-69K	YBB-30S4-0500-D100-69K
		Receiver	YBB-30R4-0250-D100-69K	YBB-30R4-0400-D100-69K	YBB-30R4-0500-D100-69K

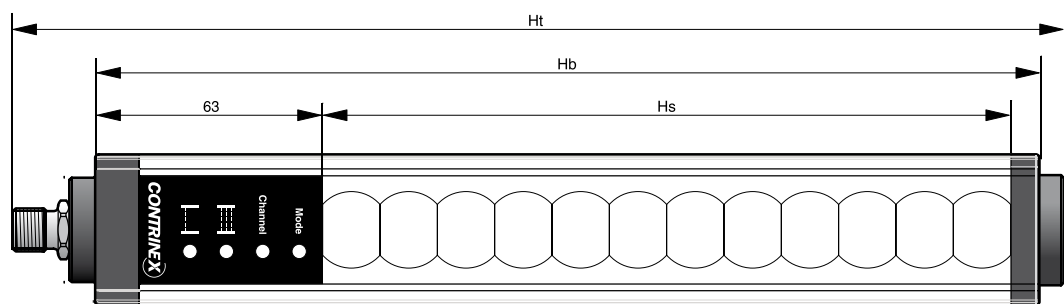
TYPE-SPECIFIC DATA

Type	1200	1300	1400
Total height (Ht) [mm] *	1283	1412	1541
Housing height (Hb) [mm]	1253	1382	1511
Protective height (Hs) [mm]	1182	1311	1440
Number of beams	73	81	89
Current consumption [mA]	150	155	160
Response time [ms]	16.4	18	19.6

PART REFERENCES (BOLD: PREFERRED TYPES)

IP 65 & IP 67	PNP / Connector M12	Sender	YBB-30S4-1200-G012	YBB-30S4-1300-G012	YBB-30S4-1400-G012
			Receiver	YBB-30R4-1200-G012	YBB-30R4-1300-G012
IP 65, IP 67 & IP 69K	PNP / PUR-cable 2 m	Sender	YBB-30S4-1200-D020	YBB-30S4-1300-D020	YBB-30S4-1400-D020
		Receiver	YBB-30R4-1200-D020	YBB-30R4-1300-D020	YBB-30R4-1400-D020
	PNP / PUR-cable 5 m	Sender	YBB-30S4-1200-D050	YBB-30S4-1300-D050	YBB-30S4-1400-D050
		Receiver	YBB-30R4-1200-D050	YBB-30R4-1300-D050	YBB-30R4-1400-D050
PNP / PUR-cable 10 m	Sender	YBB-30S4-1200-D100	YBB-30S4-1300-D100	YBB-30S4-1400-D100	
	Receiver	YBB-30R4-1200-D100	YBB-30R4-1300-D100	YBB-30R4-1400-D100	
IP 65, IP 67 & IP 69K	PNP / Connector M12	Sender	YBB-30S4-1200-G012-69K	YBB-30S4-1300-G012-69K	YBB-30S4-1400-G012-69K
		Receiver	YBB-30R4-1200-G012-69K	YBB-30R4-1300-G012-69K	YBB-30R4-1400-G012-69K
	PNP / PUR-cable 2 m	Sender	YBB-30S4-1200-D020-69K	YBB-30S4-1300-D020-69K	YBB-30S4-1400-D020-69K
		Receiver	YBB-30R4-1200-D020-69K	YBB-30R4-1300-D020-69K	YBB-30R4-1400-D020-69K
	PNP / PUR-cable 5 m	Sender	YBB-30S4-1200-D050-69K	YBB-30S4-1300-D050-69K	YBB-30S4-1400-D050-69K
		Receiver	YBB-30R4-1200-D050-69K	YBB-30R4-1300-D050-69K	YBB-30R4-1400-D050-69K
	PNP / PUR-cable 10 m	Sender	YBB-30S4-1200-D100-69K	YBB-30S4-1300-D100-69K	YBB-30S4-1400-D100-69K
		Receiver	YBB-30R4-1200-D100-69K	YBB-30R4-1300-D100-69K	YBB-30R4-1400-D100-69K

* Total height given with M12 connector. For cable version, add 6 mm.



0700	0800	0900	1000
767	896	1025	1154
737	866	995	1124
666	795	924	1053
41	49	57	65
135	140	140	145
10	11.6	13.2	14.8

YBB-30S4-0700-G012	YBB-30S4-0800-G012	YBB-30S4-0900-G012	YBB-30S4-1000-G012
YBB-30R4-0700-G012	YBB-30R4-0800-G012	YBB-30R4-0900-G012	YBB-30R4-1000-G012
YBB-30S4-0700-D020	YBB-30S4-0800-D020	YBB-30S4-0900-D020	YBB-30S4-1000-D020
YBB-30R4-0700-D020	YBB-30R4-0800-D020	YBB-30R4-0900-D020	YBB-30R4-1000-D020
YBB-30S4-0700-D050	YBB-30S4-0800-D050	YBB-30S4-0900-D050	YBB-30S4-1000-D050
YBB-30R4-0700-D050	YBB-30R4-0800-D050	YBB-30R4-0900-D050	YBB-30R4-1000-D050
YBB-30S4-0700-D100	YBB-30S4-0800-D100	YBB-30S4-0900-D100	YBB-30S4-1000-D100
YBB-30R4-0700-D100	YBB-30R4-0800-D100	YBB-30R4-0900-D100	YBB-30R4-1000-D100
YBB-30S4-0700-G012-69K	YBB-30S4-0800-G012-69K	YBB-30S4-0900-G012-69K	YBB-30S4-1000-G012-69K
YBB-30R4-0700-G012-69K	YBB-30R4-0800-G012-69K	YBB-30R4-0900-G012-69K	YBB-30R4-1000-G012-69K
YBB-30S4-0700-D020-69K	YBB-30S4-0800-D020-69K	YBB-30S4-0900-D020-69K	YBB-30S4-1000-D020-69K
YBB-30R4-0700-D020-69K	YBB-30R4-0800-D020-69K	YBB-30R4-0900-D020-69K	YBB-30R4-1000-D020-69K
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YBB-30S4-0700-D100-69K	YBB-30S4-0800-D100-69K	YBB-30S4-0900-D100-69K	YBB-30S4-1000-D100-69K
YBB-30R4-0700-D100-69K	YBB-30R4-0800-D100-69K	YBB-30R4-0900-D100-69K	YBB-30R4-1000-D100-69K

1600	1700	1800
1670	1799	1928
1640	1769	1898
1569	1698	1827
97	105	113
160	165	170
21.2	22.8	24.4



YBB-30S4-1600-G012	YBB-30S4-1700-G012	YBB-30S4-1800-G012
YBB-30R4-1600-G012	YBB-30R4-1700-G012	YBB-30R4-1800-G012
YBB-30S4-1600-D020	YBB-30S4-1700-D020	YBB-30S4-1800-D020
YBB-30R4-1600-D020	YBB-30R4-1700-D020	YBB-30R4-1800-D020
YBB-30S4-1600-D050	YBB-30S4-1700-D050	YBB-30S4-1800-D050
YBB-30R4-1600-D050	YBB-30R4-1700-D050	YBB-30R4-1800-D050
YBB-30S4-1600-D100	YBB-30S4-1700-D100	YBB-30S4-1800-D100
YBB-30R4-1600-D100	YBB-30R4-1700-D100	YBB-30R4-1800-D100
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