



Opto-line 4 safety light curtain

Opto-line 4 safety light curtains have the highest standard level of safety (class 4). In compliance with the EC MACHINE DIRECTIVE (EN 61496), they have been certified with a class 4 Declaration of Conformity by the Ineris testing body.

- . Small housing cross-section of 39 x 47 mm.
- . Intended for finger, hand or arm protection.
- . 2 static outputs (short circuit protected) matching most of safety relays
- . Alignment aid on the device.
- . Optical synchronization : no cable link between emitter and receiver.
- . Use of corner mirrors or cascading device to protect several different planes.



Opto-line 4

BX4 - 14 - .. Safety light curtain	Protective field height 150 to 1685 mm	Scanning range up to 5 m	Protection when using press	Resolution 14 mm	Finger detection	
Catégorie 4						
BX4 - 30 - .. Safety light curtain	Protective field height : 150 to 1850 mm	Scanning range up to 12 m	Protection when using press ...	Resolution 35 mm	Hand detection	

TECHNICAL DATAS

Supply voltage	24 Vdc ± 10%
Power consumption	300 to 400 mA depending on height
ECM compatibility	EC marked
Emitting light source	Modulated infrared light
Scanning range	Up to 5 m for BX4-14- ... Up to 12 m for BX4-30- ...
Beams spacing	8 mm for BX4-14- ... (resolution 14 mm) 25 mm for BX4-30- ... (resolution 35 mm)
Protective field height	150 to 1850 mm (see tab)
" Safety " output	2 static independent outputs 50 mA short-circuit protected
Response time	2,3 to 24,9 mS on shutdown and re-establishment and depending on height of the curtain
Signal output	Provides indications about various states of the device. 50 mA short circuit protected
Test input	by opening the NC contact (simulates intrusion)
Temperature range	0 to 50°C
Housing	Aluminium alloy coated with epoxy painting
Housing rating	IP 65 - Pg7 cable glands
Fixing	Mounting brackets
Connexion	Disconnect plugs
Self checking	Permanent : safety class 4

Opto-line 4 safety light curtains have been certified with a **class 4 EC Declaration of Conformity n° 0080.510.0025.12.00**



Accessories

- . Safety relay
- . Muting relay
- . Expander block

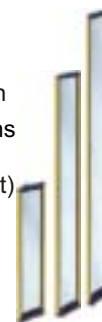
(Product description on request)



Corner mirror

- . Different heights depending on **Opto-line 4** safety light curtains

(Product description on request)



tectra

Opto-électronique

AUTOMATICA

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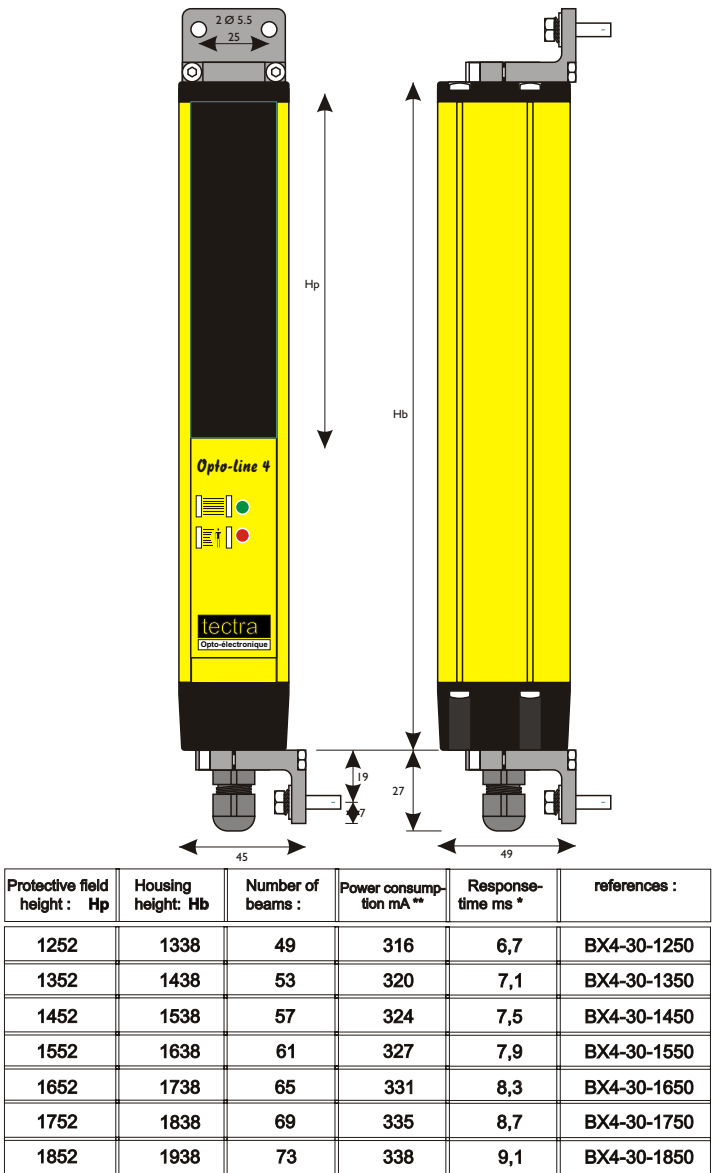
References and Dimensions

BX4-14- light curtain ... finger detection.

Protective field height : Hp	Housing height : Hb	Number of beams :	Power consumption mA **	Response time ms	references :
149	260	17	286	4,7	BX4-14-150
277	388	33	290	7,3	BX4-14-275
405	516	49	294	8,9	BX4-14-405
533	644	65	298	10,5	BX4-14-535
661	772	81	302	12,1	BX4-14-660
789	900	97	306	13,7	BX4-14-790
917	1028	113	400	15,3	BX4-14-915
1045	1156	129	404	16,9	BX4-14-1045
1173	1284	145	408	18,5	BX4-14-1175
1301	1412	161	412	20,1	BX4-14-1300
1429	1540	177	416	21,7	BX4-14-1430
1557	1668	193	420	23,3	BX4-14-1555
1685	1796	209	424	24,9	BX4-14-1685

BX4-30- ...light curtain ... hand detection.

Protective field height : Hp	Housing height : Hb	Number of beams :	Power consumption mA **	Response-time ms *	references :
152	238	5	276	2,3	BX4-30-150
252	338	9	280	2,7	BX4-30-250
352	438	13	284	3,1	BX4-30-350
452	538	17	287	3,5	BX4-30-450
552	638	21	290	3,9	BX4-30-550
652	738	25	294	4,3	BX4-30-650
752	838	29	298	4,7	BX4-30-750
852	938	33	302	5,1	BX4-30-850
952	1038	37	305	5,5	BX4-30-950
1052	1138	41	309	5,9	BX4-30-1050
1152	1238	45	313	6,3	BX4-30-1150



Glossary

. Safety output :

2 static outputs to be involved into the safety process. They are usually connected with a safety relay which drives the switching power.

.Test input :

By opening this input it simulates an intrusion into the hazardous area. Using the test input is not compulsory in a 4 class safety process but it allows to test the whole process.

.Indicating output :

It provides information about various states of the device (no safety relevant function). It can be connected to an automatic device.

. Alignment aid:

After the light curtain has been mounted and connected, 2 LEDs lightening up allow to perfectly adjust the alignment of the whole beams (emitter and receiver) and more particularly alignment of the 1st beam, then of the 1/3 beams of the light curtain..



“Cascading”

Units can be connected in succession in order to realise linked protection zones.

opto-line 4 safety light curtain is in 2 parts. Interconnection between both components by a cable.

Safety relay

- . Reference : LG 5925,48/900
- . Module 22,5 mm
- . Supply voltage : 24 Vdc
- . Relay output : 3NO + 1NC (signalisation)
- . Switching off voltage : 3A / 230Vac
- . Re-start : manual or automatic

