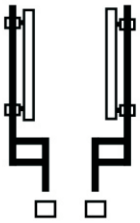
CONTROLLERS

Control Unit : Wall Mount
(235 x 120 x 50 mm)
(Code : 2CW)

Control Unit : Panel Mount
(96 x 96 x 120 mm)
(Code : 2CP)

Control Unit : Panel Mount
(100 x 70 x 114 mm)
(Code : 2CD)



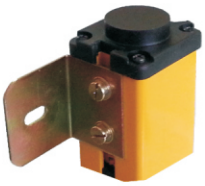
Mounting Stand
Code : MS

Vibration Dampers
Code : VD

FEATURES

- Offers Safety Standard Type 4 when used with Controller.
- Easy to install & can be mounted in any position. Vertical / Horizontal.
- Non-Critical alignment between Emitter & Receiver.
- Blanking / By-Passing individual channel is provided through software.
- System operation is unaffected by mains power fluctuations.
- Machine OFF if screen is too dirty or oily.
- Barrier operates on cyclic scanning photo-electric infra-red techniques.
- Various barrier heights are available for covering 90 mm to 1890 mm .
- Higher covering heights available upon request.
- Use of solid state components & special construction technique ensures that barrier is not affected by normal vibrations & shocks.
- Sensor connections are provided through plug in connectors.
- Self Checking Circuitry with two outputs continuously monitors failure of any of the beam in the system and stop the machine if failure is detected.
- LED Indications are provided for status indication of each channel.
- LED indications are also provided for each output.
- Choice for suitable Control Unit available as per different working conditions.
- Flexible fixing arrangements to suit individual requirement.
- Increases productivity while maintaining required safety.

CLAMPS (ACCESSORIES)



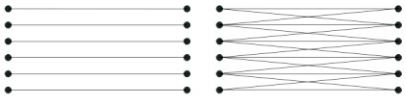
SENSOR SPECIFICATIONS

Power Supply	:	12 - 24 Volts DC
Supply Protection	:	Reverse Polarity Protected
Output	:	Duel Output : PNP or NPN / NO or NC
Output Indications	:	Through LEDs
Channel Indication	:	LED indication for each channel
Response Time	:	On to Off : 10 - 15 m sec. Off to On : 50 - 100 m sec
Restart	:	Automatic
No of beams	:	6, 8, 10, 16, 24, 32, 40, 48, 56, 64 nos.
Beam By Pass	:	Provided in hand/body protection models
Protected Heights	:	90 - 1890 mm
Pitch offered	:	11 - 20 - 30 - 40 - 50 - 90 mm
Adjustable Range	:	Up to 3 meters (Higher range up to 20 meters available)
Electrical Connections	:	Plug in Connector for Emitter & Receiver
Standard Cable length	:	5 meters for emitter, 3 meters for receiver
Operating Temperature	:	Up to 55 Degrees centigrade
Fastening Modes	:	Slide Slot on the back with adjustable height
Cross Section	:	36 x 42 mm
Applicable to	:	Directly work with PLCs / Controllers
Suitable for	:	Machines with quick emergency stop
Protections	:	Output short circuit protected.
Vibration Resistance	:	Amplitude : 0.75 mm (p) Freq : 10 - 55 Hzs
	:	Rate : 1 Octave / min
Operating ambient Light	:	500 Lux (max.) when source is places opposite to receiver
	:	> 3000 lux when source placed at an angle of 20 degrees

CE

TYPE-4

IEC Standard: IEC 61496



Type : Parallel Beam
No of Beams : 6 nos
Active Beams: 6 nos
Min.Range : 300 mm

Type : Cross Beam
No of Beams : 6 nos
Active Beams:16 nos
Min.Range : 500 mm

HAND PROTECTION : MODELS WITH 2 OUTPUTS

Supply : 12 - 24 Volts DC, Output : PNP / NPN
Covered Range : LC : 300 mm - 3/5/10/15/20 m LX : 500 mm - 3/5/10/15/20 m
LED Indication and By-Pass for each beam LX (Pitch50):1- 3/5/10/15/20 m

Protected Height	Parallel Beam		Cross Beam		Pitch	Overall Height
mm	Models	Beam	Models	Beam	mm	mm
150	LC 0630	6	LX 0630	16	30	245
180	LC 1020	10	LX 1020	28	20	295
200	LC 0640	6	LX 0640	16	40	295
210	LC 0830	8	LX 0830	22	30	290
250	LC 0650	6	LX 0650	16	50	345
270	LC 1030	10	LX 1030	28	30	365
280	LC 0840	8	LX 0840	22	40	375
300	LC 1620	16	LX 1620	46	20	405
350	LC 0850	8	LX 0850	22	50	440
360	LC 1040	10	LX 1040	28	40	455
380	LC 2020	20	LX 2020	58	20	485
450	LC 1050	10	LX 1050	28	50	545
450	LC 1630	16	LX 1630	46	30	530
500	LC 2620	26	LX 2620	76	20	615
600	LC 1640	16	LX 1640	46	40	685
620	LC 3220	32	LX 3220	94	20	740
690	LC 2430	24	LX 2430	70	30	770
750	LC 1650	16	LX 1650	46	50	840
780	LC 4020	40	LX 4020	118	20	885
920	LC 2440	24	LX 2440	70	40	1010
930	LC 3230	32	LX 3230	94	30	1010
1150	LC 2450	24	LX 2450	70	50	1240
1170	LC 4030	40	LX 4030	118	30	1255
1240	LC 3240	32	LX 3240	94	40	1335
1410	LC 4830	48	LX 4830	142	30	1485
1550	LC 3250	32	LX 3250	94	50	1640
1560	LC 4040	40	LX 4040	118	40	1660
1650	LC 5630	56	LX 5630	166	30	1715
1890	LC 6430	64	LX 6430	190	30	1970

First two digits of model indicates number of beams and other two indicates pitch
As per Safety Standards models with TWO outputs are prefered
Additional models with multiple of 8 beams may be offered

FINGER PROTECTION : MODELS WITH 2 OUTPUTS

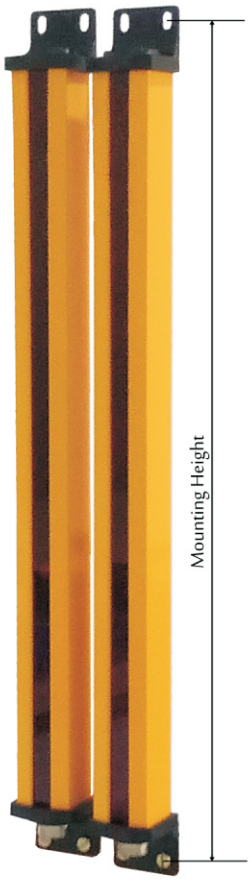
Supply : 12 - 24 Volts DC **LED Indication for final output**
Covered Range : 150 - 3000 mm, **Output : PNP / NPN**

Protected Height	Parallel Beam	Cross Beam		Pitch	Overall Height
mm	mm	Models	Beam	mm	mm
100	NA	FX 1011	28	11	205
165	NA	FX 1611	46	11	275
245	NA	FX 2411	70	11	370
340	NA	FX 3211	94	11	455
430	NA	FX 4011	118	11	545
515	NA	FX 4811	142	11	630
605	NA	FX 5611	166	11	720
695	NA	FX 6411	190	11	805

First two digits of model indicates number of beams and other two indicates pitch | As per Safety Standards models with TWO outputs are prefered | Additional models with multiple of 8 beams offered

SLEEK - SAFETY LIGHT CURTAINS

FOR POWER PRESSES



THE PRODUCT :

Electronic Switches offers Sleek Light Curtains (SLC and SLX series) for Power Presses. These are small size Safety Light Curtains with dimensions (27.5 mm x 26 mm x Model Length). Being small in size they are easily accepted in any type of machines.

SPECIFICATIONS :

HAND Protection : Models with 2 Outputs
Supply : 12 - 24 Volts DC, Covered Range : 300 - 3000 mm,
Duel PNP Output, LED Indication for each channel, By-Pass facility for each beam, Cross Section : 27.5 x 26 mm, Easy Mounting. Control Unit can be used for Relay output & 230 V power supply.

PROTECTED HEIGHT	PARALLEL BEAM		CROSS BEAM		PITCH	MOUNTING HT
mm	Models	Beam	Models	Beam	mm	mm
280	SLC 0840 - 2OP	8	SLX 0840 - 2OP	22	40	385
350	SLC 0850 - 2OP	8	SLX 0850 - 2OP	22	50	455
440	SLC 1240- 2OP	12	SLX 1240- 2OP	34	40	545
550	SLC 1250 - 2OP	12	SLX 1250 - 2OP	34	50	655
600	SLC 1640 - 2OP	16	SLX 1640 - 2OP	46	40	705
750	SLC 1650 - 2OP	16	SLX 1650 - 2OP	46	50	855
760	SLC 2040 - 2OP	20	SLX 2040 - 2OP	58	40	865
920	SLC 2440 - 2OP	24	SLX 2440 - 2OP	70	40	1025
950	SLC 2050 - 2OP	20	SLX 2050 - 2OP	58	50	1055
1080	SLC 2840 - 2OP	28	SLX 2840 - 2OP	82	40	1185
1150	SLC 2450 - 2OP	24	SLX 2450 - 2OP	70	50	1255
1240	SLC 3240 - 2OP	32	SLX 3240 - 2OP	94	40	1345
1350	SLC 2850 - 2OP	28	SLX 2850 - 2OP	82	50	1455
1550	SLC 3250 - 2OP	32	SLX 3250 - 2OP	94	50	1655

Control Unit : Wall Mount
(235 x 120 x 50 mm)
(Code : 2CW)

Control Unit : Panel Mount
(96 x 96 x 120 mm)
(Code : 2CP)

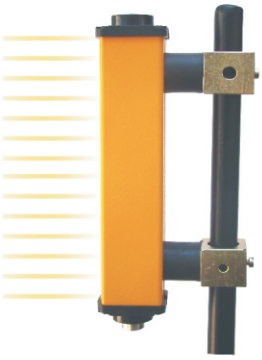
Control Unit : Panel Mount
(100 x 70 x 114 mm)
(Code : 2CD)

BODY PROTECTION AREA SENSOR

Supply : 12 -24 Volts DC, Covered Range : 500 - 3000 mm,
LED indication and Beam By-Pass for each channel, Duel Output,

PROTECTED HEIGHT	DIFFUSED SCAN		PITCH	OVERALL HEIGHT
mm	Models	Beam	mm	mm
270	LC 0490 - 2OP	4	90	405
630	LC 0890 - 2OP	8	90	765
990	LC 1290 - 2OP	12	90	1125
1350	LC 1690 - 2OP	16	90	1485
1710	LC 2090 - 2OP	20	90	1845

DUFFUSED AREA SENSOR



Supply : 12 -24 Volts DC, Covered Range : Up to 1000 mm
Duel PNP Output, LED indication for final output

PROTECTED HEIGHT	DIFFUSED SCAN		PITCH	OVERALL HEIGHT
mm	Models	Beam	mm	mm
210	DA 0830	8	30	295
280	DA 0840	8	40	370
270	DA 1030	10	30	365
360	DA 1040	10	40	455
450	DA 1630	16	30	535
600	DA 1640	16	40	685
690	DA 2430	24	30	770
920	DA 2440	24	40	1005
930	DA 3230	32	30	1010
1240	DA 3240	32	40	1325

RETRO-REFLECTIVE AREA SENSOR

Supply : 12 -24 Volts DC, Covered Range : Up to 500 mm
Duel PNP Output, LED indication for final output

PROTECTED HEIGHT	DIFFUSED SCAN		PITCH	OVERALL HEIGHT
mm	Models	Beam	mm	mm
100	RLC 0620	6	20	185
180	RLC 1020	10	20	295
300	RLC 1620	16	20	405
380	RLC 2020	20	20	485
500	RLC 2620	26	20	615

HAND PROTECTION AREA SENSOR

Supply : 12 -24 Volts DC, Covered Range : Up to 500 mm
Single NPN or PNP Output, LED indication for final output

PROTECTED HEIGHT	DIFFUSED SCAN		PITCH	OVERALL HEIGHT
mm	Models	Beam	mm	mm
90	LC 0430 - 1OP	4	30	180
120	LC 0440 - 1OP	4	40	210
150	LC 0450 - 1OP	4	50	240

SAFETY GUARD : PAPER CUTTING M/C

Model : PCM 03 : For 3 beams | Model : PCM 04 : For 4 beams
Power Supply : 220 VAC or 110 VAC | Output : Relay Contacts @ 2 A (max)| Controller: Metal Enclosure | Sensors : 18D x 75L (mm) | Non critical alignment | Range : 3 Meters (max) | LED indication for each channel | By Pass switches for each beam | Total Guard By-Pass for unit

HEIGHT SENSOR

Sensor Supply : 24V DC | No of Beams : As per requirement | Pitch : 20, 25, 30, 40, 50, 90.mm | Output : 5 Bit / Individual / Analogue | Used for : Conveyer System / Vehicle Height measurement / Object height measurement for automatic storage system / Painting Booths to control spray guns as per height of object

BIN SENSOR

Power Supply : 12 - 24 VDC | Output : PNP - NO | Range : 300 mm with Reflector | Cross section : 36 x 42 mm (Aluminum) | Indications : At the Top of Sensor | Protection : Reverse Polarity / Short Circuit | Application : In Pokayoka system helps to pick up the material from next correct bin.

TWO HAND SAFETY CONTROLLER

Supply : 220 Volts AC | Output : Relay Contacts | Housing : Wall Mount or DIN Rail | Used for Safety of Operator working on Machines | Also used on Mechanical Rolling Key Power Presses

ORDER INFORMATION

Model :	LC	-	1030	-	4	-	03	-	2OP	-	D
	LC LX FX		SLC MODELS		4 3 2 1		O3 O5 10 15 20		CE TYPE 4 2OP 1OP		D CW CP CD

LC	PARALLEL
LX	CROSS
FX	CROSS

MODELS	SAFETY LIGHT CURTAIN

4	OUTPUT - PNP - NC
3	OUTPUT - PNP - NO
2	OUTPUT - NPN - NC
1	OUTPUT - NPN - NO

O3	RANGE - 03 METERS
O5	RANGE - 05 METERS
10	RANGE - 10 METERS
15	RANGE - 15 METERS
20	RANGE - 20 METERS

CE TYPE 4	OUTPUT - 2 OUTPUTS
2 OP	OUTPUT - 2 OUTPUTS
1 OP	OUTPUT - 1 OUTPUT

D	DC TYPE - BUILT-IN CONTROLLER - OUTPUT PNP OR NPN
CW	CONTROL UNIT - WALL MOUNT - 220 VAC - RELAY OUTPUT
CP	CONTROL UNIT - PANEL MOUNT - 220 VAC - RELAY OUTPUT
CD	CONTROLLER - DIN MOUNT - 220 VAC - RELAY OUTPUT