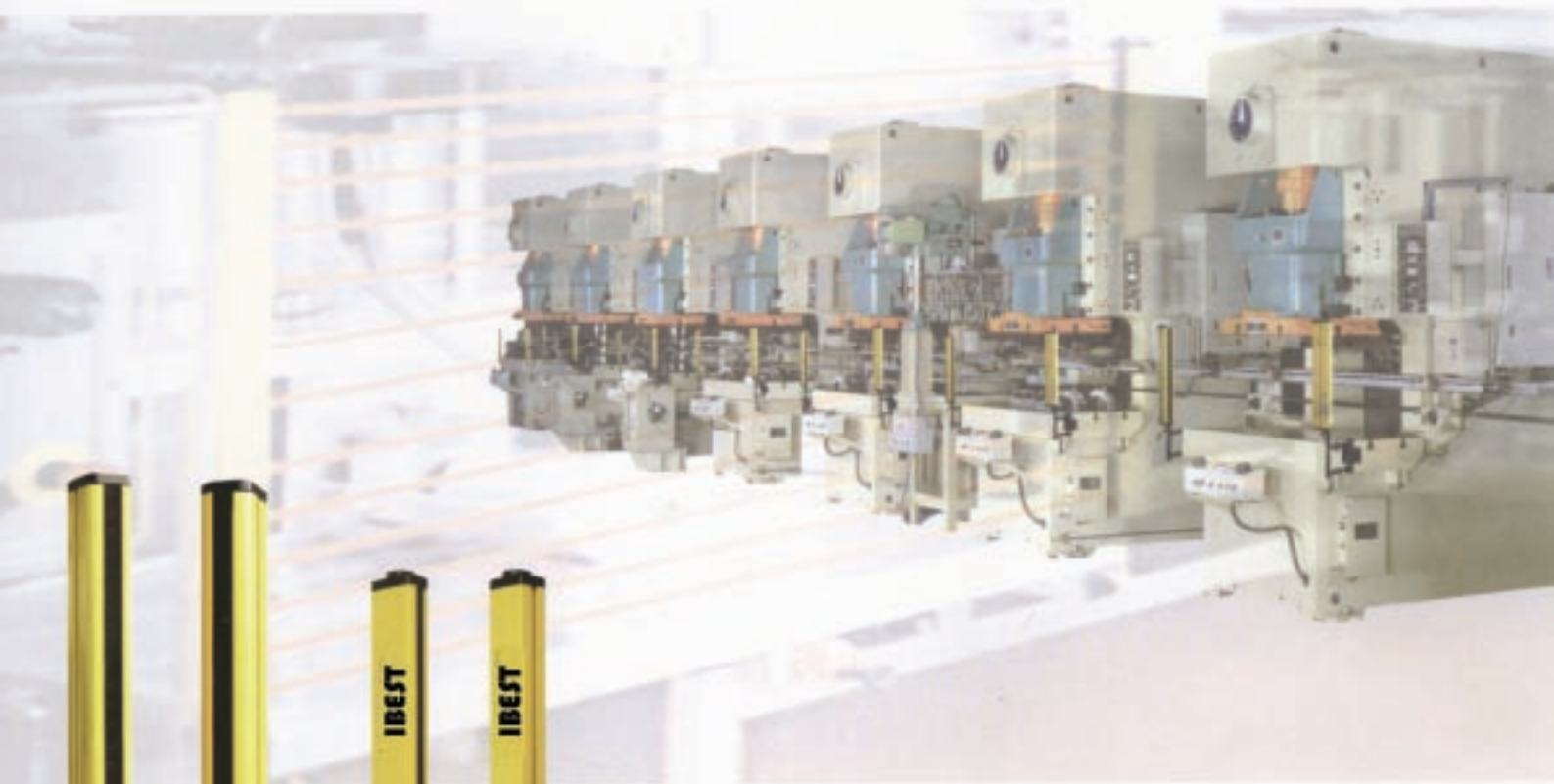
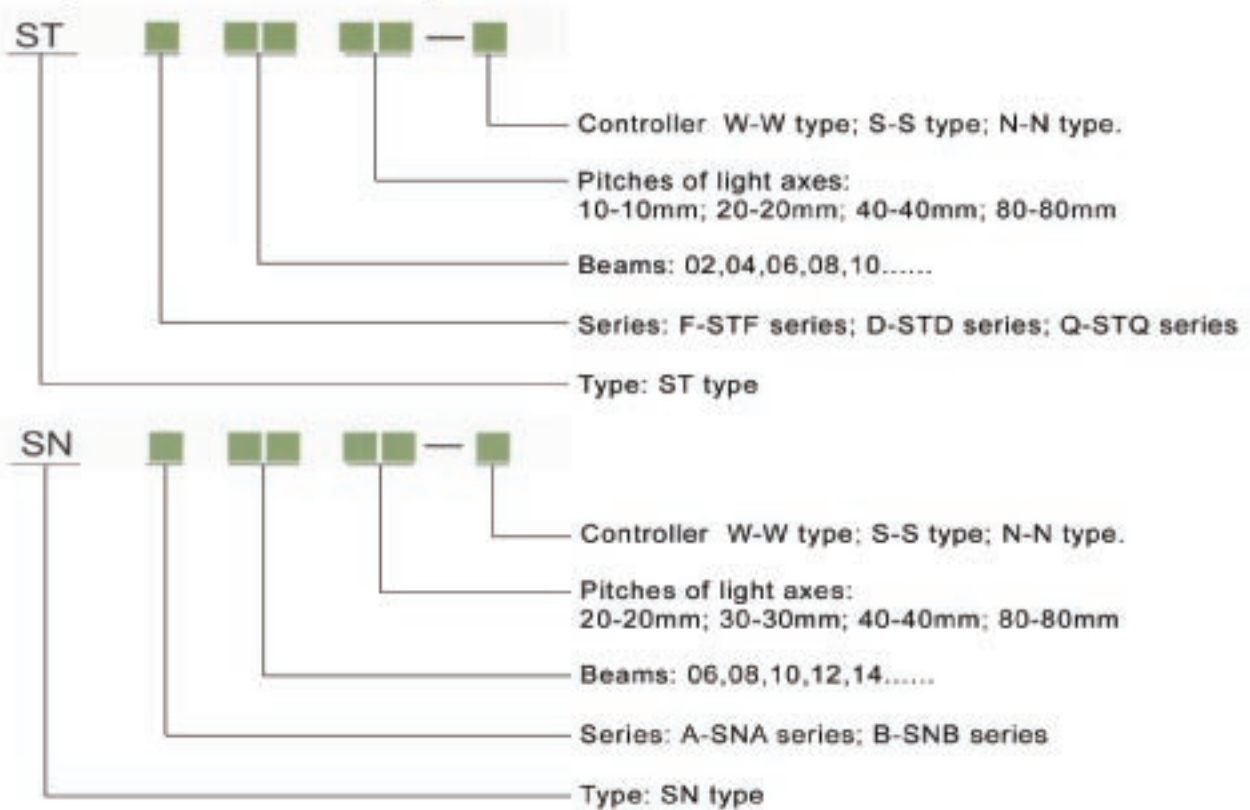


PHOTO LIGHT CURTAIN



Explanations for specifications



Explanation for choosing and the ordering

- >STF series photoelectric protector is reflection type; it is suitable the danger area or the protection length within 3 meter;
- >STD series photoelectric protector is correlation type, it is suitable the danger area or the protection length within 10 meter;
- >The STQ series photoelectric protector is in the STD series foundation, using mirror(s), forms the multi-sides protection. When both sides protection, the protection length sum total does not surpass 12 meters; when three sides protections, the protection length sum total does not surpass 8 meters.
- >SNA series photoelectric protector is correlation type, it is suitable the danger area or the protection length within 2 meter;
- >SNB series photoelectric protector is correlation type, it is suitable the danger area or the protection length within 5 meter;
- >According to object which needs to protect, definite light axis pitch size of the protection light curtain.
- >The protection height should not be smaller than:
Press slide travel + adjustment quantity.
- >The controller may act according to the installment and the conveniences request, selects W, S or N type
- >The installation mode may select according to the installment and the conveniences request.
- >If does not have to request specially, the product will provide the standard length cable.

Safe light curtain through infrared light, has the protection light grating. when interdicted, the Device sends out the interrupting signal, to control mechanical device stop working which has The potential hazard to cause injury to operators in the working conditions and protects operators' personal safety effectively.

- * Various protection height and resolution, optional selection for users.
- * LED indicator for working status and malfunction.
- * Auto inspection function to avoid output wrong signals to control circuit.
- * Dual relay and to avoid output wrong signals for safety purpose.
- * Reset function: when light grating interdicted, equipment isn't able to work unless operator press reset Button, for protecting safety of operator.
- * Output NPN or PNP.
- * Fast response: <20ms.
- * Easy connection: with plug in connector and cable.
- * High anti-interference: free from magnetic signals, stroboscopic light, welding arc other ambient light.
- * Common application, long endurance, easy to adjust light beam, high anti vibration.
- * When protection areas are not in a parallel (e.g: vertical and horizontal), light curtain can be used in series.

Manufacturing Equipments:



Certificates:



Who has the safety device protected?



health, safety

Has protected the worker



perfectly, happy

Has protected worker's family



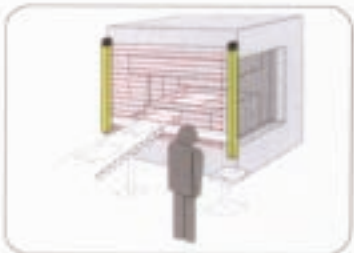
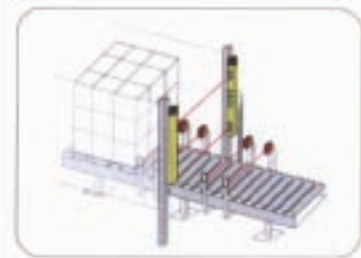
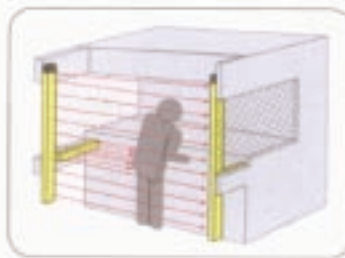
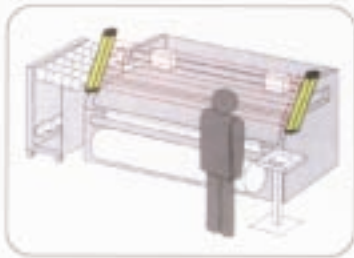
security, high efficiency

Has protected enterprise itself



light-hearted, free

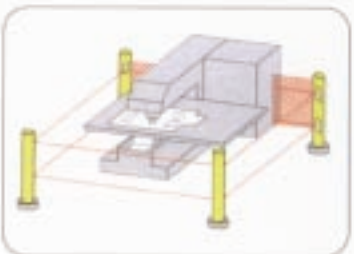
Has protected the boss



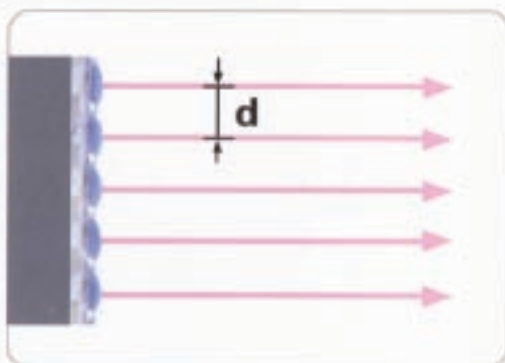
Application Scope

Mainly uses in the machine-finishing profession, with mechanical device necessary, protects operator's personal safety

- >Presswork machinery,
- >Shearing equipment,
- >Metal cutting equipment,
- >Automated assembly line,
- >Automated solder line,
- >Machinery transmission equipment,
- >Other dangerous regions,
- >Three-dimensional garage,
- >Rubber, plastic processing machinery,
- >Machinery carrying equipment.



The relations of light axis pitch and protection objects



d is light axis pitch

d=10mm, uses in protecting finger

d=20mm, uses in protecting hand

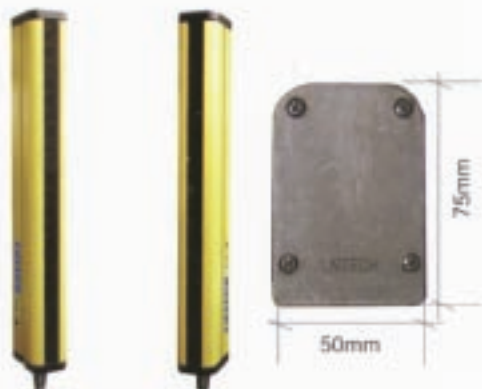
d=30,40mm, uses in protecting arm

d=80mm, uses in protecting body

Characteristics



Outline of SNA/SNB emitter/receiver



Outline of STF/STD/STQ sensor/emitter/receiver

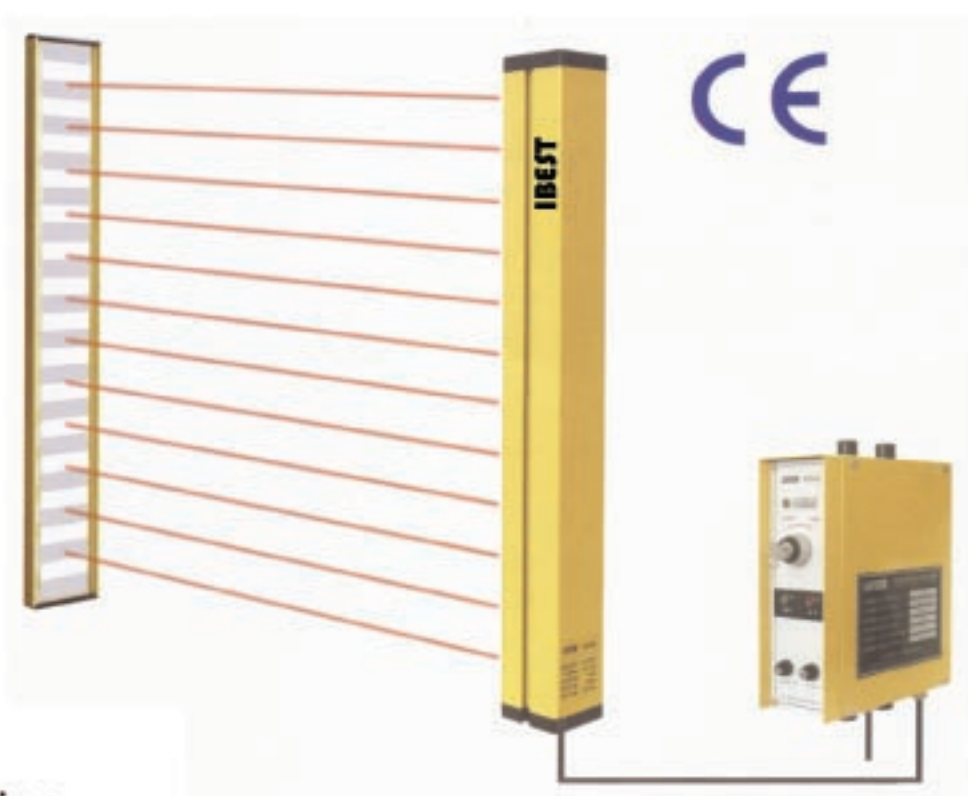


two sets of mitters and receivers form an L-shaped guard zone.



Two-digit diagnostics display visible on sensor/receiver

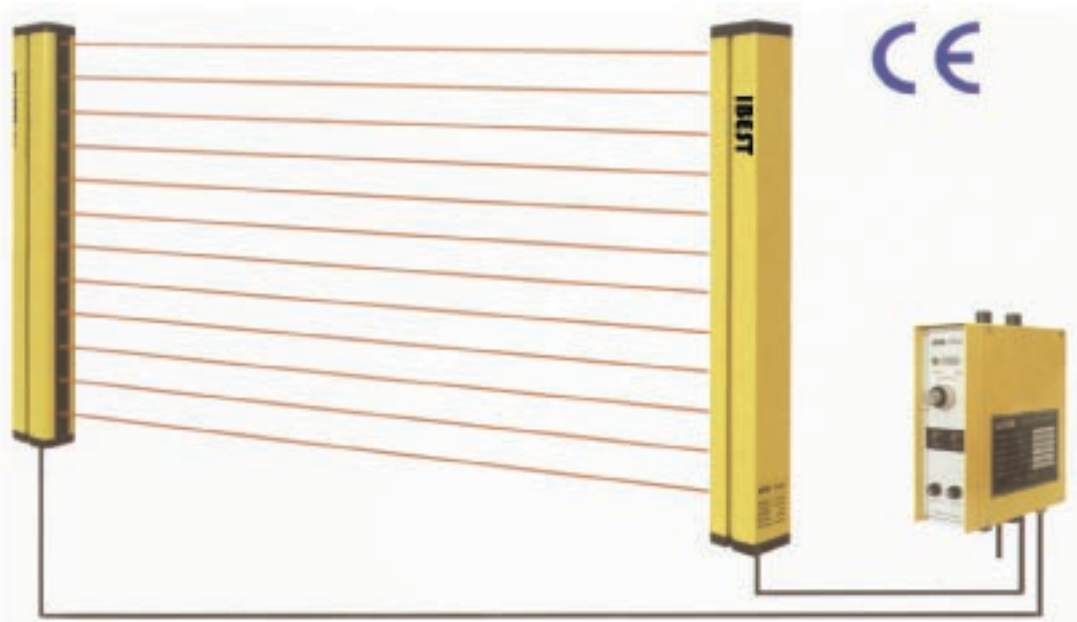
1. The product structure is simple, the wiring is convenient
The signal cable uses the whorl type aviation plug-in unit connection
2. The product specification is enough to select
STF series, protection height 120-1560mm, protection range, 0.4-3m;
STD series, protection height 120-1560mm, protection range, 0-10m;
STQ series, protection height 120-1560mm,
protection range, 0-12m(2 sides), 0-8000mm(3 sides);
SNA series, protection height 100-1560mm, protection range, 0-2m;
SNB series, protection height 100-1560mm, protection range, 0-5m;
4. The product self-checking function is perfect
When the photoelectric protector loses the electricity or oneself appears the breakdown, the product can insure does not transmission incorrect signal to the electric circuit controlled
5. Product running status instruction
Product running status is instructed through indicating lamp and LED and may use this instruction assistance sensors to align and to carry on the fault analysis.
6. The product has the fast response ability
Response time 20ms, enabled the system the greatest degree to avoid the danger.
7. The product uses the double relay safety signal output
The product can guarantee to the electric appliance which controls does not output the incorrect signal, so that the security is strengthened maximum limit.
8. May provide NPN or the PNP output. This time the user should insure the following control circuit of the mechanical device be safe and reliable.
9. May establish the self-preservation function (user choice)
When the light curtain is interrupted, the press slide stops movement. While the light curtain restores passing, the press slide cannot move again, until the reset button is press down.
10. The product has better anti-jamming ability
To the electromagnetism signal, the intense lamp light, the arc of welding has better anti-jamming ability
11. The product vibration-proof performance is good and is easy to use.
12. The product service life is long (relay removable).



STF series

- >Protection range, 400-3000mm;
- >Specification STFxx40 (xx=04,06,08,10.....40)
- >Protection height=(xx-1)*40mm, 120.....1560mm
- >Light axis pitch 40mm
- >The product uses the reflection type design, the structure is reliable, the contour is artistic, Installation and use is easy.
- >The product consists of a sensor, a reflector, a controller and a signal cable.
- >The emitting light unit and receiving light unit is concentrated in the sensor, Through reflector reflecting light, forms the protection light curtain.





STD series

>Protection range, 0-10000mm;

>Specification

STDxx10 (xx=24,32,40,48.....136)

STDxx20 (xx=08,12,16,20.....72)

STDxx40 (xx=04,06,08,10.....40)

STDxx80 (xx=02,04,06,08.....40)

>Light axis pitch 10mm, 20mm, 40mm, 80mm

>Protection height

Height=(xx-1)×light axis pitch

STDxx10 230,310,390,470.....1350mm

STDxx20 140,220,300,380.....1420mm

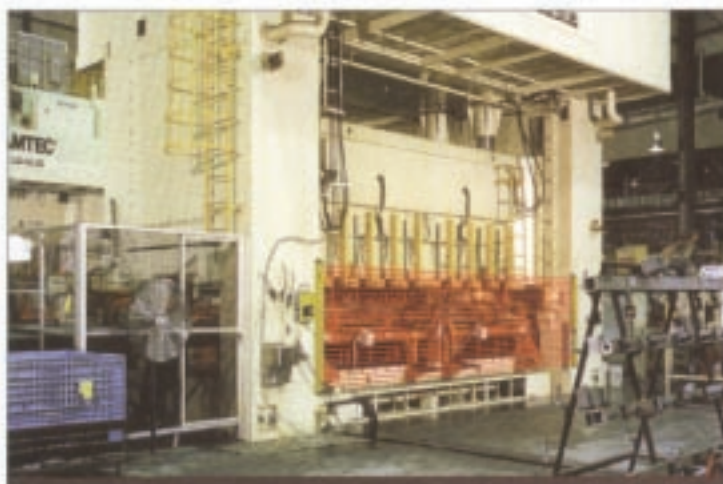
STDxx40 120,200,280,360.....1560mm

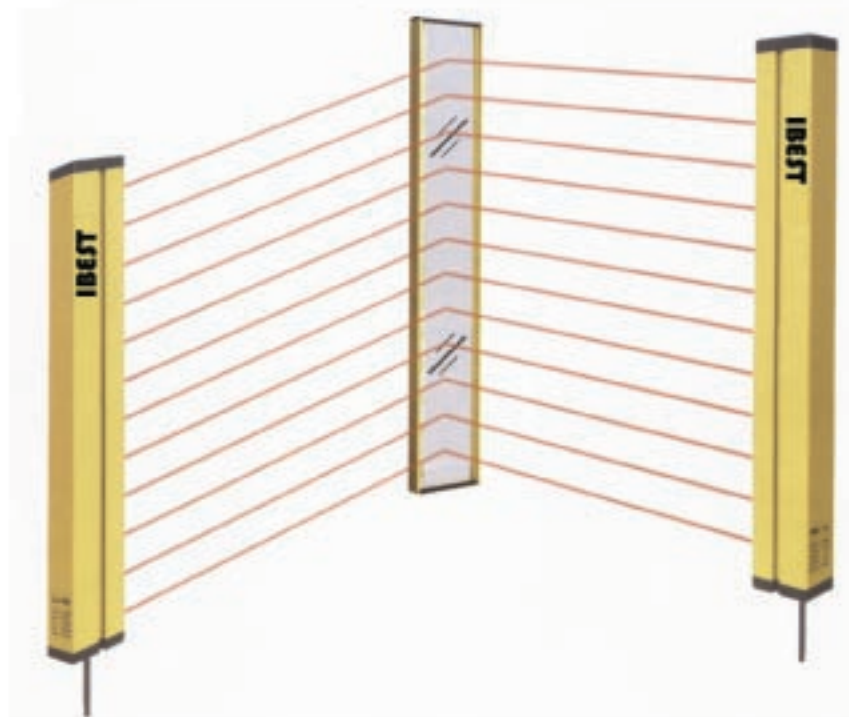
STDxx80 80,240,400,560.....3120mm

>The product uses the separate emitter, receiver design, the structure is reliable, the contour is artistic, Installation and use is easy.

>The product consists of an emitter, a receiver, a controller and two signal cables.

>The emitter launches light to receiver, forms the protection light curtain.



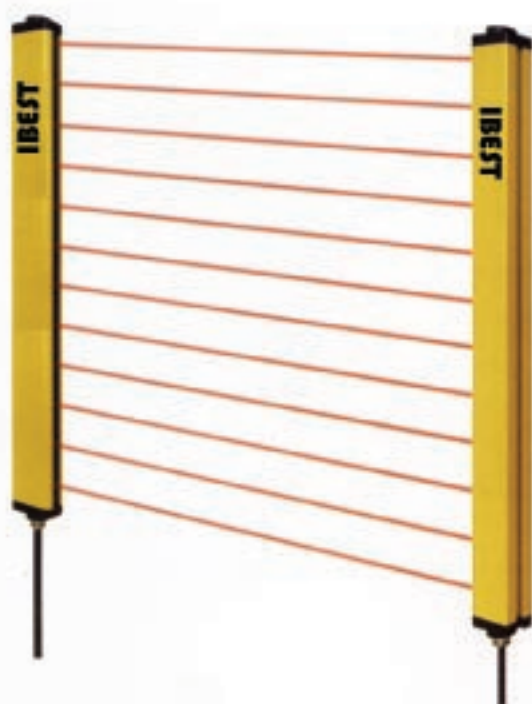


STQ series

- >Protection range
0-12000mm(2 sides), 0-8000mm(3 sides);
- >Specification
STQxx10(xx=24,32,40,48.....136)
STQxx20(xx=08,12,16,20.....72)
STQxx40(xx=04,06,08,10.....40)
STQxx80(xx=02,04,06,08.....40)
- >Light axis
pitch10mm,20mm,40mm,80mm
- >Protection height
Height=(xx-1)×light axis pitch
STQxx10 230,310,390,470.....1350mm
STQxx20 140,220,300,380.....1420mm

- STQxx40 120,200,280,360.....1560mm
STQxx80 80,240,400,560.....3120mm
- >The product uses the separate emitter, receiver design, the structure is reliable, the contour is artistic, Installation and use is easy.
- >The product consists of an emitter, a receiver, one or two mirrors a controller and two signal cables.
- >The emitter launches light to mirror, through reflecting to receiver, forms two or three protection light curtains.

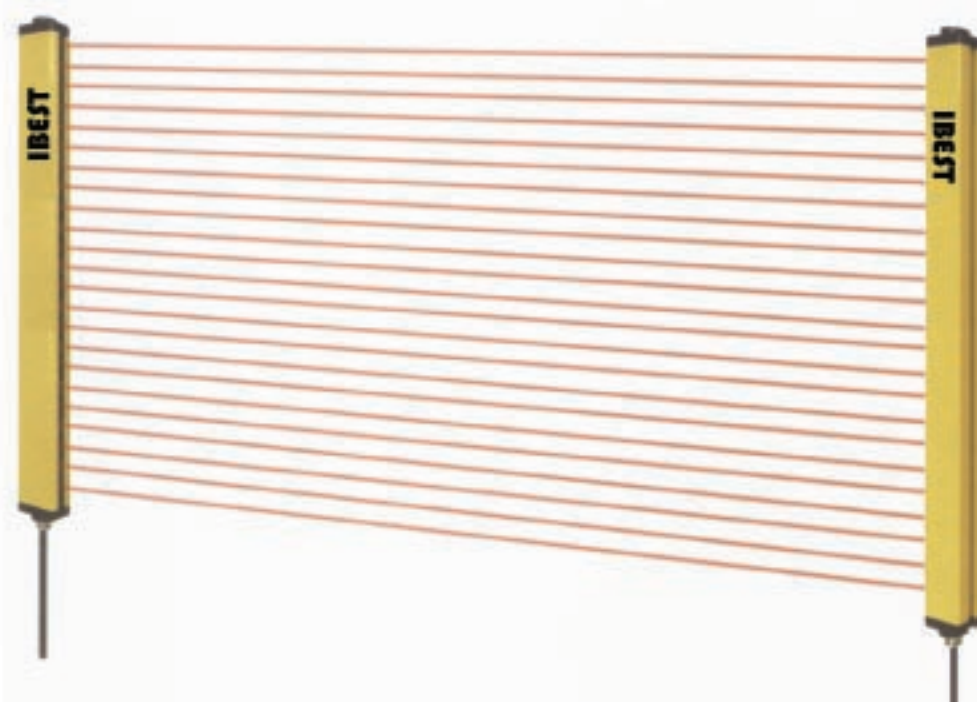




SNA series

- >Protection range, 0-2000mm;
- >Specification
 - SNAXx20 (xx=06,08,10,12.....40)
 - SNAXx30 (xx=06,08,10,12.....40)
 - SNAXx40 (xx=04,06,08,10.....40)
 - SNAXx80 (xx=02,04,06,08.....40)
- >Light axis pitch
 - 10mm,20mm,40mm,80mm
- >Protection height
 - Height=(xx-1)×light axis pitch
 - SNAXx20 100,140,180,220.....780mm
 - SNAXx30 150,210,270,330.....1170mm
 - SNAXx40 120,200,280,360.....1560mm
 - SNAXx80 80,240,400,560.....3120mm
- >The product uses the separate emitter, receiver design, the structure is reliable, the contour is artistic, Installation and use is easy.
- >The product consists of an emitter, a receiver, a controller and two signal cables.
- >The emitter launches light to receiver, forms the protection light curtain.

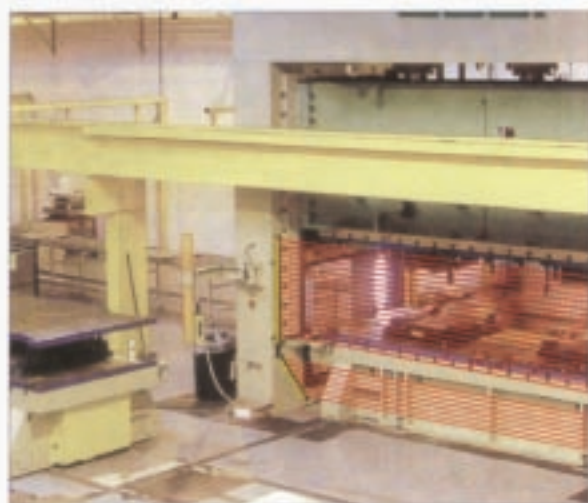




SNB series

- >Protection range 0-5000mm;
- >Specification
 - SNBxx20 (xx=06,08,10,12.....40)
 - SNBxx30 (xx=06,08,10,12.....40)
 - SNBxx40 (xx=04,06,08,10.....40)
 - SNBxx80 (xx=02,04,06,08.....40)
- >Light axis pitch
 - 10mm, 20mm, 40mm, 80mm
- >Protection height
 - Height=(xx-1)×light axis pitch
 - SNBxx20 100,140,180,220.....780mm

- SNBxx30 150,210,270,330.....1170mm
- SNBxx40 120,200,280,360.....1560mm
- SNBxx80 80,240,400,560.....3120mm
- >The product uses the separate emitter, receiver design, the structure is reliable, the contour is artistic, Installation and use is easy.
- >The product consists of a emitter, a receiver, a controller and two signal cables.
- >The emitter launches light to receiver, forms the protection light curtain.





W type controller



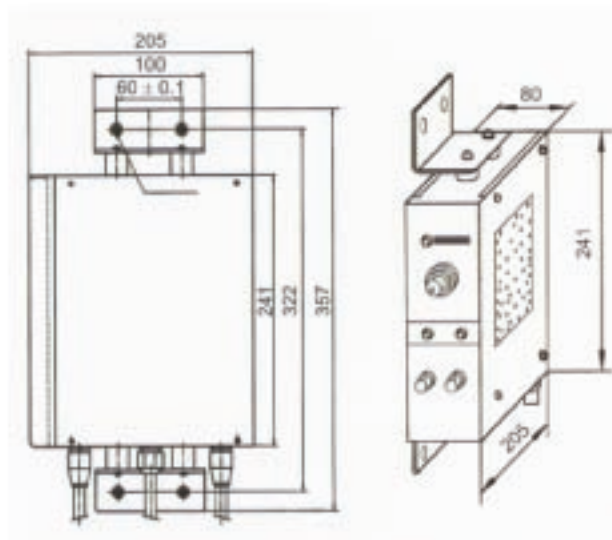
S type controller



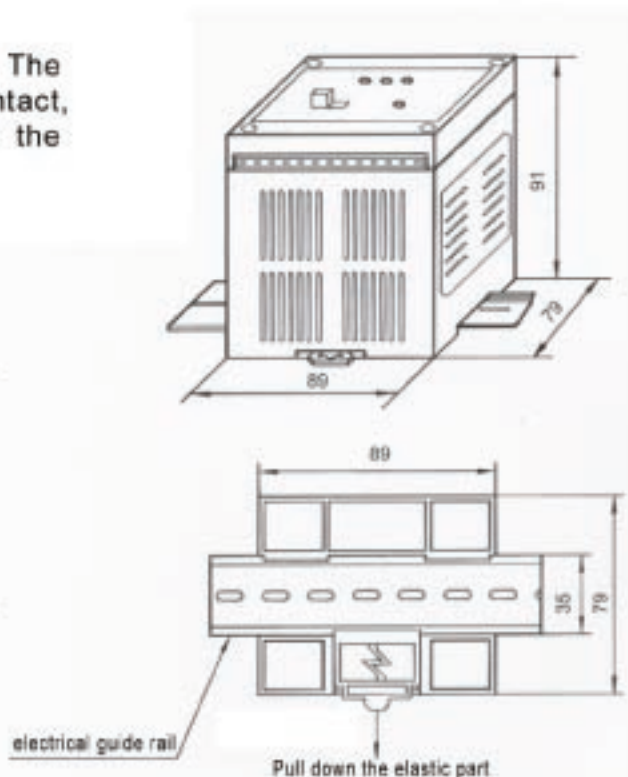
N type controller

Controllers

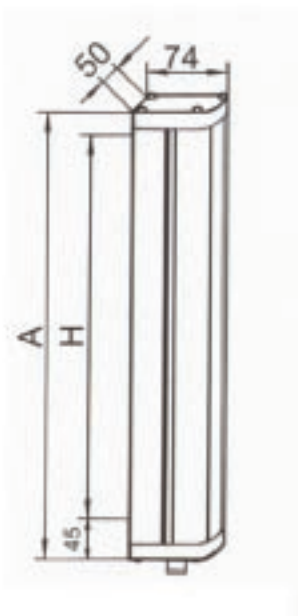
- >W type: Outside installation controller is beautiful and dignified, May install directly on the body of press or equipment.
- >N type: Inside installation controller is beautiful and small, May install inside the electrical case of press or equipment.
- >S type: Outside installation and two-sided controlling controller is beautiful and dignified, May install directly on the body of press or equipment.
- Note: W, N type controller only can realize the one-sided control
- >The controller provides the power for the sensor (or emitter, receiver), Processes the signal transmitted by sensor (or receiver).
- >W, S type controller standard control cable length is 2.5m;
- >N type controller standard control cable length is 1.0m.
- >W type controller is supplied by AC220V/110V(switching) or DC24V
- >N type, S type controller is supplied by AC85-264V or DC24V
- >The controller outputs uses double relay, The normal output is the normally opened contact, May act according to requests to provide the normally closed contact.



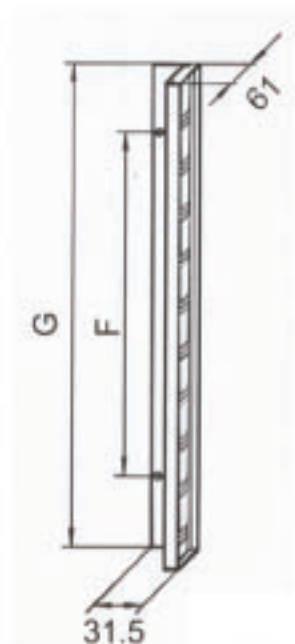
Sides of W, S type controller



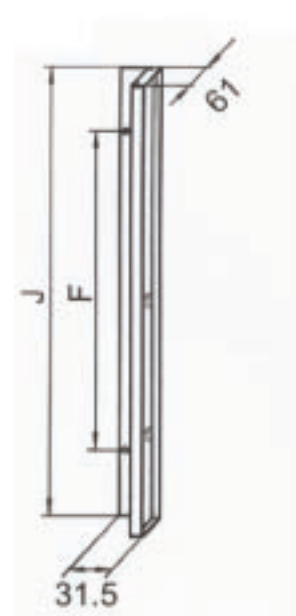
Sides of N type controller



a sensor/emitter/receiver of ST type



a reflector of ST type



a mirror of ST type

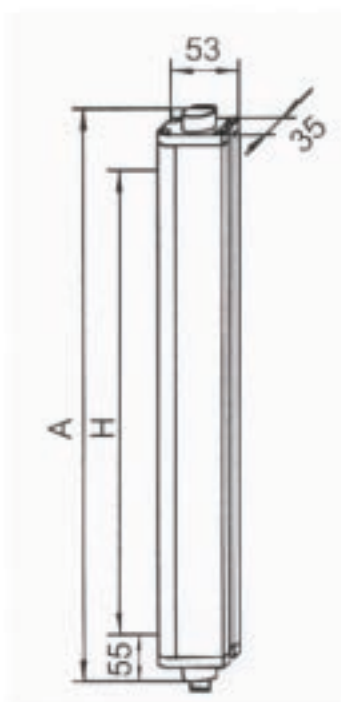
Sizes of ST type parts

unit: mm

Beams	light axis pitch 40					light axis pitch 20			light axis pitch 10		
	A	H	F	G	J	Beams	A	H	Beams	A	H
4	210	120	110	210	300	8	210	140	24	290	230
6	290	200	190	290	380	12	290	220	32	370	310
8	370	280	270	370	460	16	370	300	40	450	390
10	450	360	330	450	540	20	450	380	48	530	470
12	530	440	420	530	620	24	530	460	56	610	550
14	610	520	500	610	700	28	610	540	64	690	630
16	690	600	580	690	780	32	690	620	72	770	710
18	770	680	620	850	860	36	770	700	80	850	790
20	850	760	700	950	940	40	850	780	88	930	870
22	930	840	750	1050	1020	48	1010	940	96	1010	950
24	1010	920	800	1150	1100	56	1170	1100	104	1090	1030
26	1090	1000	850	1200	1180	64	1330	1260	112	1170	1110
28	1170	1080	900	1300	1260	72	1490	1420	120	1250	1190
30	1250	1160	950	1400	1340				128	1330	1270
32	1330	1240	1000	1500	1420				136	1410	1350
34	1410	1320	1050	1600	1500						
36	1490	1400	1100	1700	1580						
38	1570	1480	1150	1750	1600						
40	1650	1560	1200	1800	1740						

Sizes of SN type parts

unit: mm



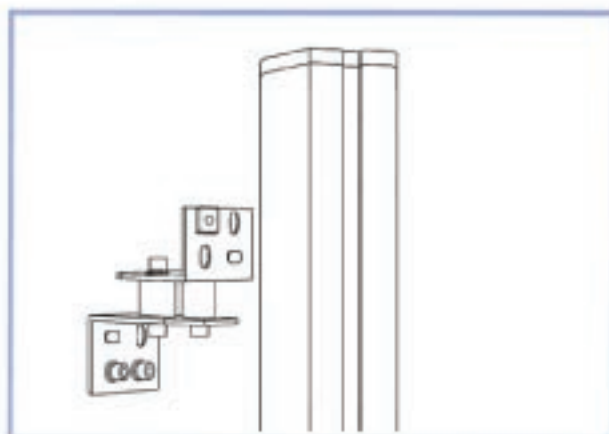
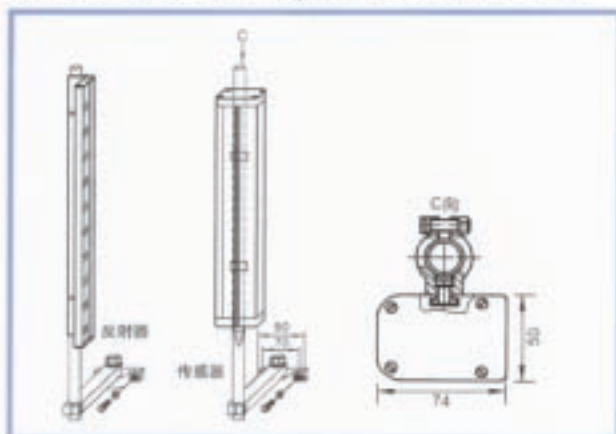
a emitter/receiver of SN type

Beams	light axis pitch 40		light axis pitch 30		light axis pitch 20	
	A	H	A	H	A	H
4	225	120				
6	305	200	245	150	185	100
8	385	280	305	210	225	140
10	465	360	365	270	265	180
12	545	440	425	330	305	220
14	625	520	485	390	345	260
16	705	600	545	450	385	300
18	785	680	605	510	425	340
20	865	760	665	570	465	380
22	945	840	725	630	505	420
24	1025	920	785	690	545	460
26	1105	1000	845	750	585	500
28	1185	1080	905	810	625	540
30	1265	1160	965	870	665	580
32	1345	1240	1025	930	705	620
34	1425	1320	1085	990	745	660
36	1505	1400	1145	1050	785	700
38	1585	1480	1205	1110	825	740
40	1665	1560	1265	1170	865	780

Technical data

Operating power	W type: AC220V/AC110V±15% 50/60Hz, DC24V
	N type: AC85V--264V 50/60Hz
	S type: AC85V--264V 50/60Hz
Output contact capacity	AC250V5A
Power consumption	<15W
Ambient temperature	-10℃ to 45℃
Humidity	20℃, <85%RH
Response Time	<20ms
Insulating resistance	>100MΩ
Dielectric strength	AC1500V, one minute, no sparkle appears
Resistance to light interference	10000LUX(angle of incidence ≥ 5°)
Life of relay	>1,000,000 times

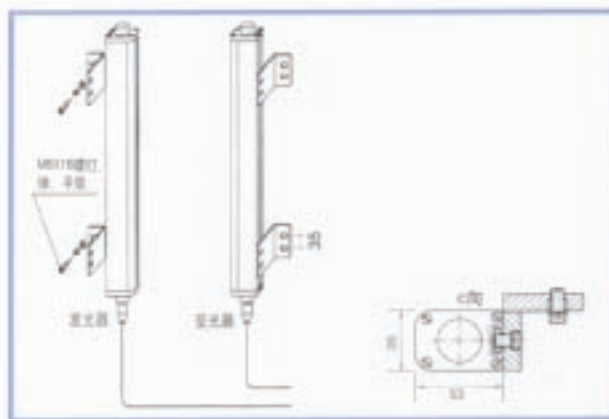
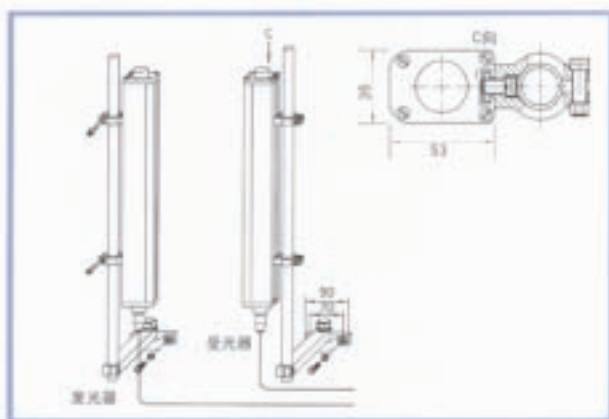
Method of ST type installation



- The installation mode by steel-tube support
The sensor, reflector is installed separately on the steel pipe the steel pipe is fixed separately on the press through the support radius arm and a rest base, It may adjust height and angle until be fixed. Generally it is suitable in open type press and the hydraulic press

- The installation mode by double L-shape brackets
The sensor(or emitter, receiver), the reflector is fixed on the press through double L-shape brackets which may adjust angle. When the equipment vibrates in a big way, may install the rubber units which can be absorbed shock. Generally it is suitable in the frame structural closed press.

Method of SN type installation



- The installation mode by steel-tube support
The emitter, receiver is installed separately on the steel pipe the steel pipe is fixed separately on the press through the support radius arm and a rest base, It may adjust height and angle until be fixed. Generally it is suitable in open type press and the hydraulic press

- The installation mode by L-shape brackets
The sensor(or emitter, receiver), the reflector is fixed directly on the press through an L-shape brackets. Generally it is suitable in the frame structural closed press.

Specifications list of ST type

We work hard to make a safer workplace for you!

Light axis pitch 40mm					Light axis pitch 20mm			Light axis pitch 10mm		
Beams	STF	STD	STQ	Protection height	Beams	STD/STQ	Protection height	Beams	STD/STQ	Protection height
4	STF0440	STD0440	STQ0440	120	8	STD0820	140	24	STD2410	230
6	STF0640	STD0640	STQ0640	200	12	STD1220	220	32	STD3210	310
8	STF0840	STD0840	STQ0840	280	16	STD1620	300	40	STD4010	390
10	STF1040	STD1040	STQ1040	360	20	STD2020	380	48	STD4810	470
12	STF1240	STD1240	STQ1240	440	24	STD2420	460	56	STD5610	550
14	STF1440	STD1440	STQ1440	520	28	STD2820	540	64	STD6410	630
16	STF1640	STD1640	STQ1640	600	32	STD3220	620	72	STD7210	710
18	STF1840	STD1840	STQ1840	680	36	STD3620	700	80	STD8010	790
20	STF2040	STD2040	STQ2040	760	40	STD4020	780	88	STD8810	870
22	STF2240	STD2240	STQ2240	840	48	STD4820	940	96	STD9610	950
24	STF2440	STD2440	STQ2440	920	56	STD5620	1100	104	STD10410	1030
26	STF2640	STD2640	STQ2640	1000	64	STD6420	1260	112	STD11210	1110
28	STF2840	STD2840	STQ2840	1080	72	STD7220	1420	120	STD12010	1190
30	STF3040	STD3040	STQ3040	1160				128	STD12810	1270
32	STF3240	STD3240	STQ3240	1240				136	STD13610	1350
34	STF3440	STD3440	STQ3440	1320						
36	STF3640	STD3640	STQ3640	1400						
38	STF3840	STD3840	STQ3840	1480						
40	STF4040	STD4040	STQ4040	1560						

Note: The products of light axis pitch 80mm have not listed in the table

Specifications list of SN type

Beams	Light axis pitch 20mm			Light axis pitch 30mm			Light axis pitch 40mm		
	SNA	SNB	Protection height	SNA	SNB	Protection height			Protection height
4							SNA0440	SNB0440	120
6	SNA0620	SNB0620	100	SNA0630	SNB0630	150	SNA0640	SNB0640	200
8	SNA0820	SNB0820	140	SNA0830	SNB0830	210	SNA0840	SNB0840	280
10	SNA1020	SNB1020	180	SNA1030	SNB1030	270	SNA1040	SNB1040	360
12	SNA1220	SNB1220	220	SNA1230	SNB1230	330	SNA1240	SNB1240	440
14	SNA1420	SNB1420	260	SNA1430	SNB1430	390	SNA1440	SNB1440	520
16	SNA1620	SNB1620	300	SNA1630	SNB1630	450	SNA1640	SNB1640	600
18	SNA1820	SNB1820	340	SNA1830	SNB1830	510	SNA1840	SNB1840	680
20	SNA2020	SNB2020	380	SNA2030	SNB2030	570	SNA2040	SNB2040	760
22	SNA2220	SNB2220	420	SNA2230	SNB2230	630	SNA2240	SNB2240	840
24	SNA2420	SNB2420	460	SNA2430	SNB2430	690	SNA2440	SNB2440	920
26	SNA2620	SNB2620	500	SNA2630	SNB2630	750	SNA2640	SNB2640	1000
28	SNA2820	SNB2820	540	SNA2830	SNB2830	810	SNA2840	SNB2840	1080
30	SNA3020	SNB3020	580	SNA3030	SNB3030	870	SNA3040	SNB3040	1160
32	SNA3220	SNB3220	620	SNA3230	SNB3230	930	SNA3240	SNB3240	1240
34	SNA3420	SNB3420	660	SNA3430	SNB3430	990	SNA3440	SNB3440	1320
36	SNA3620	SNB3620	700	SNA3630	SNB3630	1050	SNA3640	SNB3640	1400
38	SNA3820	SNB3820	740	SNA3830	SNB3830	1110	SNA3840	SNB3840	1480
40	SNA4020	SNB4020	780	SNA4030	SNB4030	1170	SNA4040	SNB4040	1560

Note: The products of light axis pitch 80mm have not listed in the table