

DATASENSOR

value through detection

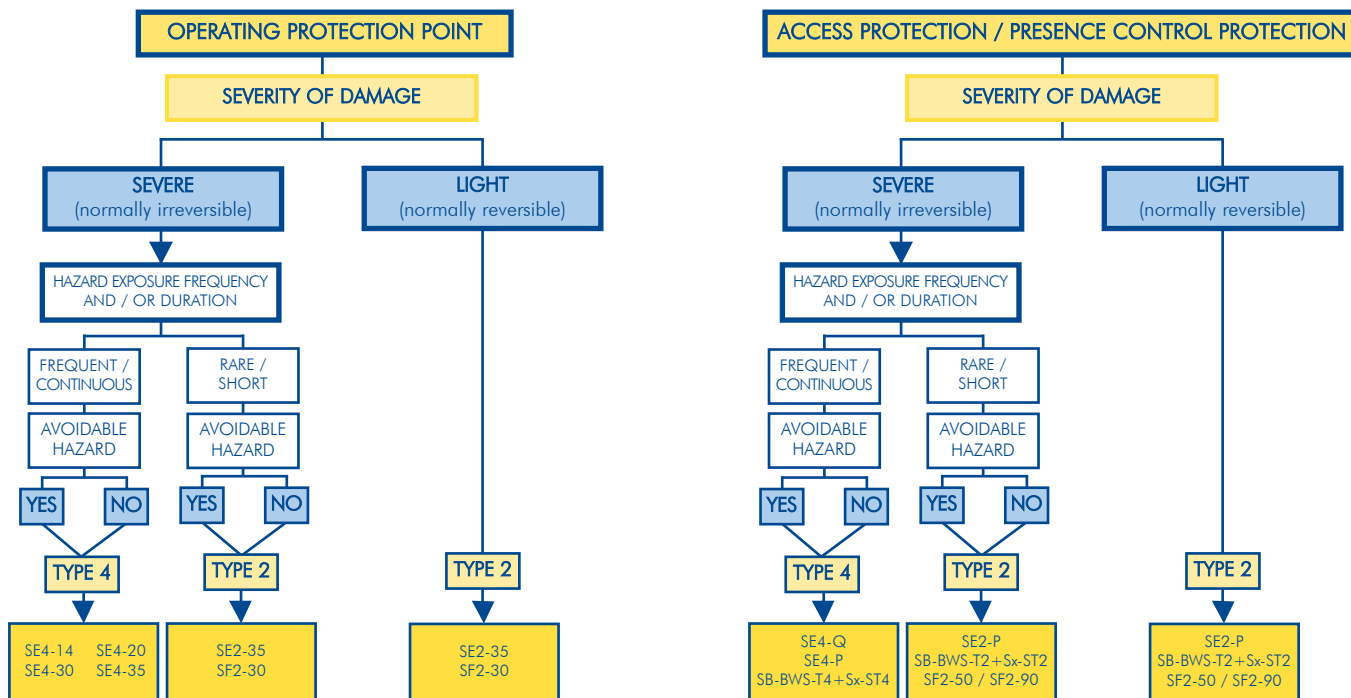


PHOTOELECTRIC SAFETY DEVICES










SELECTION GUIDE

According to EN 954-1*



* The given information is indicative and synthetic; it is compulsory to refer to the complete EN 954 standard for a correct risk and safety type evaluation.

	RESOLUTION (mm)	OPERATING RANGE (m)		
	SE2-30	30	15	TYPE 2 TYPE 4
	SE2-35	35	15	
	SE4-14	14	6	TYPE 2 TYPE 4
	SE4-20	20	6	
	SE4-30	30	15	
	SE4-35	35	15	
	SF2-50	50	15	TYPE 2 TYPE 4
	SF2-90	90	15	
	SE2-P		50	TYPE 2 TYPE 4
	SB-BWS-T2 + Sx-ST2		up to 50 *	TYPE 2 TYPE 4
		* 8 m with S5/S10-ST2; 50 m with S30-ST2		
	SE4-Q		25	TYPE 2 TYPE 4
	SE4-P		50	
	SB-BWS-T4 + Sx-ST4		up to 50 *	TYPE 2 TYPE 4
		* 8 m with S5/S10-ST4; 40 m with SL5-ST4; 50 m with S30-ST4		

OPERATING PROTECTION POINT: TYPE 2

SE2-35

SF2-30



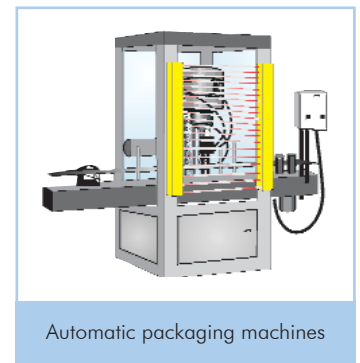
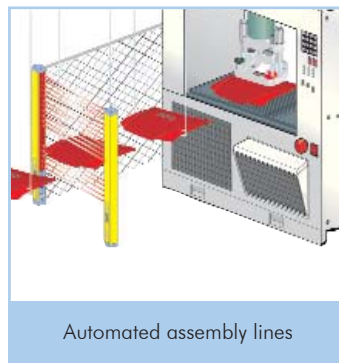
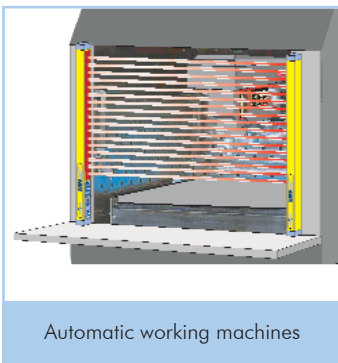
According to IEC 61496-1/ IEC 61496-2



POWER SUPPLY	24 Vdc	24 Vdc
RESOLUTION	35 mm	30 mm
OPERATING RANGE	0.2 ... 15 m	0.2 ... 15 m
CONTROLLED HEIGHT	150 ... 1650 mm	150 ... 1500 mm
RESPONSE TIME	15 ... 32 ms	24 ms max.
OUTPUT	2 transistor PNP	2 transistor PNP
CONNECTION	Rx:M12 8-poles; Tx:M12 4-poles	Rx:M12 5-poles; Tx:M12 4-poles
DIMENSIONS	35 x 40 mm	31 x 32 mm
DEVICE FUNCTIONS	Test Manual/auto reset selection Total/partial Muting selection Override	Test Manual reset Automatic reset
CERTIFICATIONS	CE TUV e UL US LISTED	CE TUV e UL US LISTED

APPLICATIONS

OPERATING PROTECTION POINT



Automatic machines for packing and packaging
Automatic warehousing and materials handling
Automated assembly lines (pick and place)
Textile, ceramic, wood and leather industry

ACCESSORIES

CONNECTOR CABLES

SHIELDED CABLES	<p>CV series</p> <p>M12 axial and radial connector cables with 3, 4, 8 poles Cable lengths: 3, 5, 10, 15, 25 m Cable material: PVC The use of shielded cables is compulsory for the safety devices of the SE2 and SE4 series, suggested for the Sx-ST2/ST4</p>
UNSHIELDED CABLES	<p>CS series</p> <p>M12 axial and radial connector cables with 3, 4, 5 poles Cable lengths: 3, 5, 7, 10 m Cable material: PVC M12 4-poles non-cabled connectors are available</p>



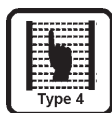
OPERATING PROTECTION POINT: TYPE 4

SE4-14

SE4-20

SE4-30

SE4-35

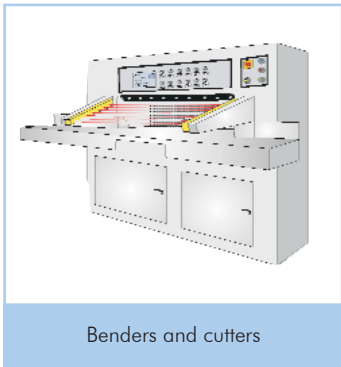


According to IEC 61496-1/
IEC 61496-2

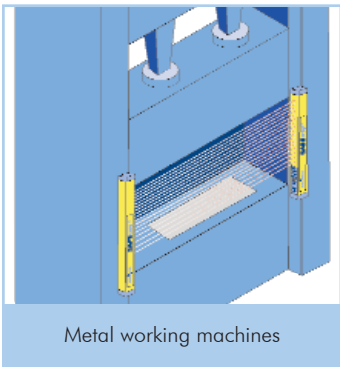
POWER SUPPLY	24 Vdc	24 Vdc	24 Vdc	24 Vdc
RESOLUTION	14 mm	20 mm	30 mm	35 mm
OPERATING RANGE	0.2 ... 6 m	0.2 ... 6 m	0.2 ... 15 m	0.2 ... 15 m
CONTROLLED HEIGHT	150 ... 900 mm	150 ... 1650 mm	150 ... 1650 mm	150 ... 1650 mm
RESPONSE TIME	18 ... 39 ms	16 ... 39 ms	15 ... 32 ms	15 ... 32 ms
OUTPUT	2 transistor PNP	2 transistor PNP	2 transistor PNP	2 transistor PNP
CONNECTION	Rx:M12 8-poles; Tx:M12 4-poles	Rx:M12 8-poles; Tx:M12 4-poles	Rx:M12 8-poles; Tx:M12 4-poles	Rx:M12 8-poles; Tx:M12 4-poles
DIMENSIONS	35 x 40 mm	35 x 40 mm	35 x 40 mm	35 x 40 mm
DEVICE FUNCTIONS	Test Manual/auto reset selection Total/partial Muting selection Override	Test Manual/auto reset selection Total/partial Muting selection Override	Test Manual/auto reset selection Total/partial Muting selection Override	Test Manual/auto reset selection Total/partial Muting selection Override
OTHER FUNCTIONS	SafetyBUS p[®]		SafetyBUS p[®]	
CERTIFICATIONS				

APPLICATIONS

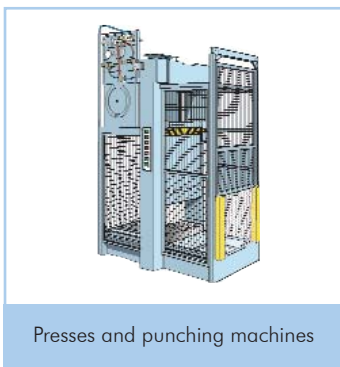
OPERATING PROTECTION POINT



Benders and cutters



Metal working machines



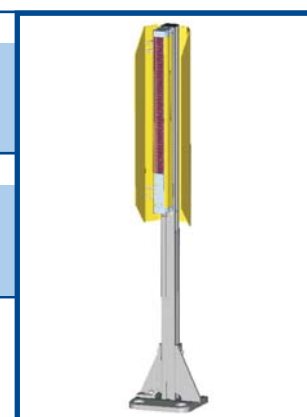
Presses and punching machines

Benders and cutters
 Metal, plastic and leather working machines
 Presses and punching machines
 Metal forming, milling and drilling machines

ACCESSORIES

COLUMN AND FLOOR STANDS / PROTECTIVE STANDS

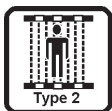
COLUMN AND FLOOR STANDS	SE-S series To be used with the SE2, SE4, SF2 safety light curtains series and SE-DM deviating mirror series Available in different heights: 800, 1000 and 1200 mm with 30 x 30 mm profile dimensions 1500 and 1800 mm with 45 x 45 mm profile dimensions Ground fixing plate dimensions: 240 x 240 mm
PROTECTIVE STANDS	SE-P series To be used with the SE2, SE4 and SF2 safety light curtains series Available in different heights ranging from 273 mm to 1743 mm



PRESENCE CONTROL PROTECTION: TYPE 2

SF2-50

SF2-90



PRELIMINARY

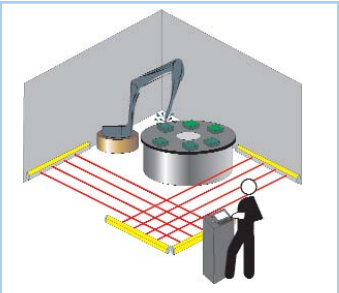


According to IEC 61496-1/ IEC 61496-2

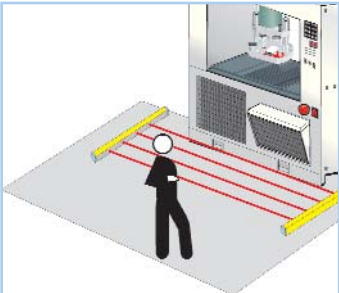
POWER SUPPLY	24 Vdc	24 Vdc
RESOLUTION	50 mm	90 mm
OPERATING RANGE	0.2 ... 15 m	0.2 ... 15 m
CONTROLLED HEIGHT	300 ... 1500 mm	300 ... 1500 mm
RESPONSE TIME	24 ms max.	24 ms max.
OUTPUT	2 transistor PNP	2 transistor PNP
CONNECTION	Rx:M12 5-poles; Tx:M12 4-poles	Rx:M12 5-poles; Tx:M12 4-poles
DIMENSIONS	31 x 32 mm	31 x 32 mm
DEVICE FUNCTIONS	Test Automatic reset	Test Automatic reset
CERTIFICATIONS	CE (pending)	CE (pending)

APPLICATIONS

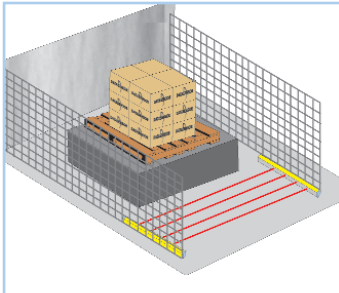
PRESENCE CONTROL PROTECTION



Robot areas



Working areas



Storage and stacking areas

Robot areas
 Transfer areas
 Palletising areas
 Storage and stacking areas

ACCESSORIES

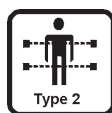
FIXING BRACKETS / SAFETY RELAYS

FIXING BRACKETS	<p>ST series</p> <p>The fixing brackets are supplied together with the safety light curtains of the SE2, SE4 and SF2 series. Standard fixing brackets (4 pcs kit) are available for the SE2 and SE4 safety light curtains, as well as orientable, anti-vibration supports and anti-scratch fixing brackets for the SF2 series.</p>
SAFETY RELAYS	<p>SE-SR2 series</p> <p>Type 4 safety relays - safety contacts: 3 NO 1 NC To be used with the SE2, SE4 and SF2 safety light curtain series</p>
<div style="background-color: red; color: white; padding: 5px; display: inline-block;">PRELIMINARY</div>	

ACCESS PROTECTION: TYPE 2

SE2-P

SB-BWS-T2+Sx-ST2



According to IEC 61496-1/ IEC 61496-2



SB-BWS-T2 control unit
S5-ST2 M18 plastic safety sensors
S10-ST2 M18 metal safety sensors
S30-ST2 maxi safety sensors

POWER SUPPLY	24 Vdc	24 Vdc
N° BEAMS	2-3-4	up to 2
OPERATING RANGE	0.5 ... 50 m	up to 50 m
CONTROLLED HEIGHT	500-800-900-1200 mm	500 mm
RESPONSE TIME	14 ms	22 ms max.
OUTPUT	2 transistor PNP	2 relay
CONNECTION	Rx:M12 8-poles; Tx:M12 4-poles	SAFETY SENSORS 3-pole shielded cable S5/S10-ST2 M12 connector – S5/S10/S30-ST2 Terminal block – S30-ST2
DIMENSIONS	35 x 40 mm	
DEVICE FUNCTIONS	Test Manual/auto reset selection Total/partial Muting selection Override	Test Manual reset
CERTIFICATIONS	CE TÜV e UL RGS LISTEN	CE TÜV

APPLICATIONS

ACCESS PROTECTION

Robots

Automatic warehouses

Transfer areas

Palletisers / depalletisers
Automatic warehouses
Access control, working areas and robots
Conveyors

ACCESSORIES

DEVIATING MIRRORS / LASER POINTER

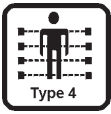
DEVIATING MIRRORS	<p>SE-DM series</p> <p>To be used with safety light curtains of the SE2, SE4, SF2 series and Sx-ST2/ST4 monobeam safety photosensor series</p> <p>Available in different heights ranging from 150 mm to 1800 mm</p> <p>Deviating mirrors dimensions: 124 mm width, 6 mm depth</p>	
LASER POINTER	<p>SE-LP series</p> <p>To be used with SE2 and SE4 safety light curtain series</p>	

ACCESS PROTECTION: TYPE 4

SE4-Q

SE4-P

SB-BWS-T4+Sx-ST4



According to IEC 61496-1/ IEC 61496-2

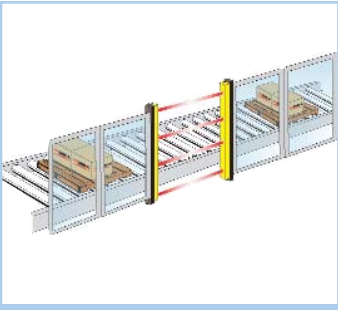


SB-BWS-T4 control unit
 S5-ST4 M18 plastic safety sensors
 S10-ST4 M18 metal safety sensors
 SL5-ST4 laser M18 plastic safety sensors
 S30-ST4 maxi safety sensors

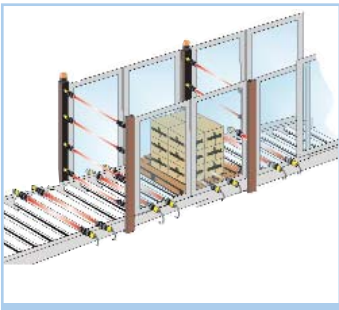
POWER SUPPLY	24 Vdc	24 Vdc	24 Vdc
N° BEAMS	2-3-4	2-3-4	2-3-4
OPERATING RANGE	0.5 ... 25 m	4 ... 50 m	up to 50 m
CONTROLLED HEIGHT	500-800-900-1200 mm	500-800-900-1200 mm	
RESPONSE TIME	14 ms	14 ms	32 ms max.
OUTPUT	2 transistor PNP	2 transistor PNP	2 relay
CONNECTION	Rx:M12 8-poles; Tx:M12 4-poles	Rx:M12 8-poles; Tx:M12 4-poles	SAFETY SENSORS 3-pole shielded cable S5/S10-ST4 M12 connector – S5/S10/S30/SL5-ST4 Terminal block – S30-ST4
DIMENSIONS	35 x 40 mm	35 x 40 mm	
DEVICE FUNCTIONS	Test Manual/auto reset selection Total/partial Muting selection Override	Test Manual/auto reset selection Total/partial Muting selection Override	Test Manual/auto reset selection Total/partial Muting selection Double Muting/Override
OTHER FUNCTIONS	SafetyBUS p	SafetyBUS p	
CERTIFICATIONS	CE, TÜV, UL LISTED	CE, TÜV, UL LISTED	CE, TÜV

APPLICATIONS

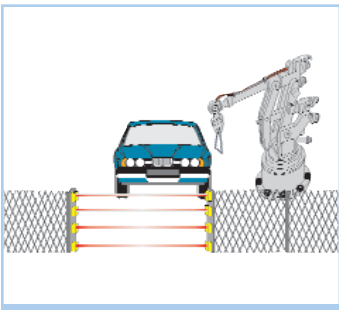
ACCESS PROTECTION



Conveyors



Palletisers



Assembly robotised lines

Palletisers / depalletisers
 Automatic warehouses
 Access control, working areas and robots
 Conveyors

ACCESSORIES

MUTING DEVICES / TEST PIECES

MUTING DEVICES	LMS series Muting lamps: standard, tower modular, with horizontal and vertical mounting Muting sensors: DATASENSOR non-safety sensors can be used (refer to relative documentation)
TEST PIECES	TP series Versions with 14, 20, 30 and 35 mm diameter





DATASENSOR SpA is the Italian leading company in the production and sales of optoelectronic devices for detection, safety, measurement and inspection for industrial automation. The range includes complementary products, such as temperature controllers and ultrasonic sensors. The **DATASENSOR** worldwide presence is guaranteed by the subsidiaries in France, Germany, Spain and UK, as well as a widespread network of local distributors, including selected Qualified Automation Partners (QAPs). Thanks to its unique technology of the product and production process, **DATASENSOR** can boast an active partnership with the main companies operating in the world of automation.

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