

*More than 72 m<sup>2</sup> safely monitored, with 5.5 m over 275°*  
*High detection performances in compact size*  
*Advanced dust filtering*

- Dimensions (w,d,h): 102 , 112.5, 152 mm
- I/O connection with standard 8 pins female M12 cable
- 1 Warning zone
- 70 mm detection capability
- 3 zone sets available ( 1safety + 1 warning zone each )
- Metal brackets allowing full orientation and fast replacement
- Auto/Manual restart available
- Colour graphic display for monitoring and diagnostics



## APPLICATIONS

- Robot cells (pick and place, inspection, testing, welding, etc)
- Palletizers / depalletizers
- Open machinery, process lines
- Automated Guided Vehicles (AGV)
- Automated Guided Carts (AGC)
- Mobile Industrial Robots

## INDUSTRIES

Automotive, Material handling, Secondary Packaging,  
 Food, Wood, Ceramics



	FINGER	HAND	ARM	BODY
TYPE 3				•

## SLS-B5

MODEL		MAX SAFETY RANGE	
B	Basic, 3 zone sets	5	5.5 m (70 mm detection capability)

## TECHNICAL DATA

### SLS-B5

#### GENERAL DATA

Type (EN61496-1)	3
PL (EN ISO 13849-1)	d
SIL (IEC 61508)	2

#### DETECTION DATA

Detection capability	70 mm
Angular resolution	0.1°
Safety zone operating range	0.05 ... 5.5 m
Warning zone max operating range	0.05 ... 40 m
Max. opening angle	275°
Min. response time	62 ms

#### ELECTRICAL DATA

Power supply (Vdd)	24 Vdc ± 20%
Safety Outputs (OSSDs)	2
Output current	0.25 A max / each OSSD
Capacitive load	2.2 µF @ 24Vdc max
Standard Output	1 (configurable)*
Inputs	max 3 (configurable)*
Load current	6 ... 15 mA
Input saturation voltage	> 15 V
Capacitive Load	22 µF

#### MECHANICAL AND ENVIRONMENTAL DATA

Operating temperature	0 ... +50 °C
Storage temperature	-20° ... 70°C
Humidity	15 ... 95 % (no condensation)
Mechanical protection	IP 65 (EN 60529)

#### CONFIGURABLE PARAMETERS

Response time	Min: 62 ms; Max: 482
Zone sets number	Max: 3
Zone set switching time	Min: 30 ms; Max: 5000 ms

#### FUNCTIONS

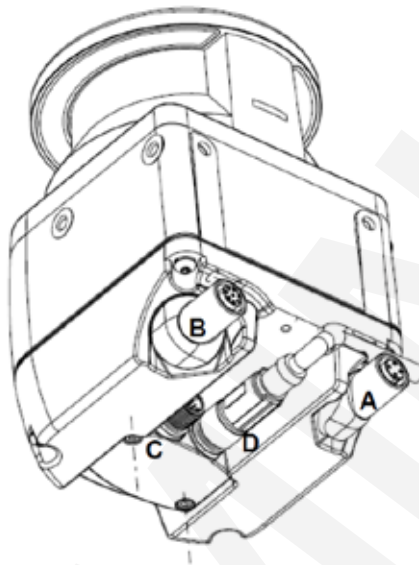
Manual / automatic restart
Dynamic switching between zone sets
Warning area intrusion detection

#### NOTES

(\*1) If the standard output is used, the inputs number is 2

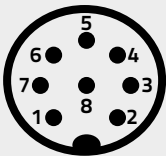
## CONNECTIONS

	Connector	Function
A	M12 4 pole rotatable side connector	Programming and monitoring of safety laser scanner with DL Sentinel
B	M12 8 pole rotatable side connector	Not used on SLS-B5
C	M12 12 poles connector on the memory group.	Not used on SLS-B5
D	M12 8 poles connector on the memory group.	Machine interface: power supply and inputs/outputs



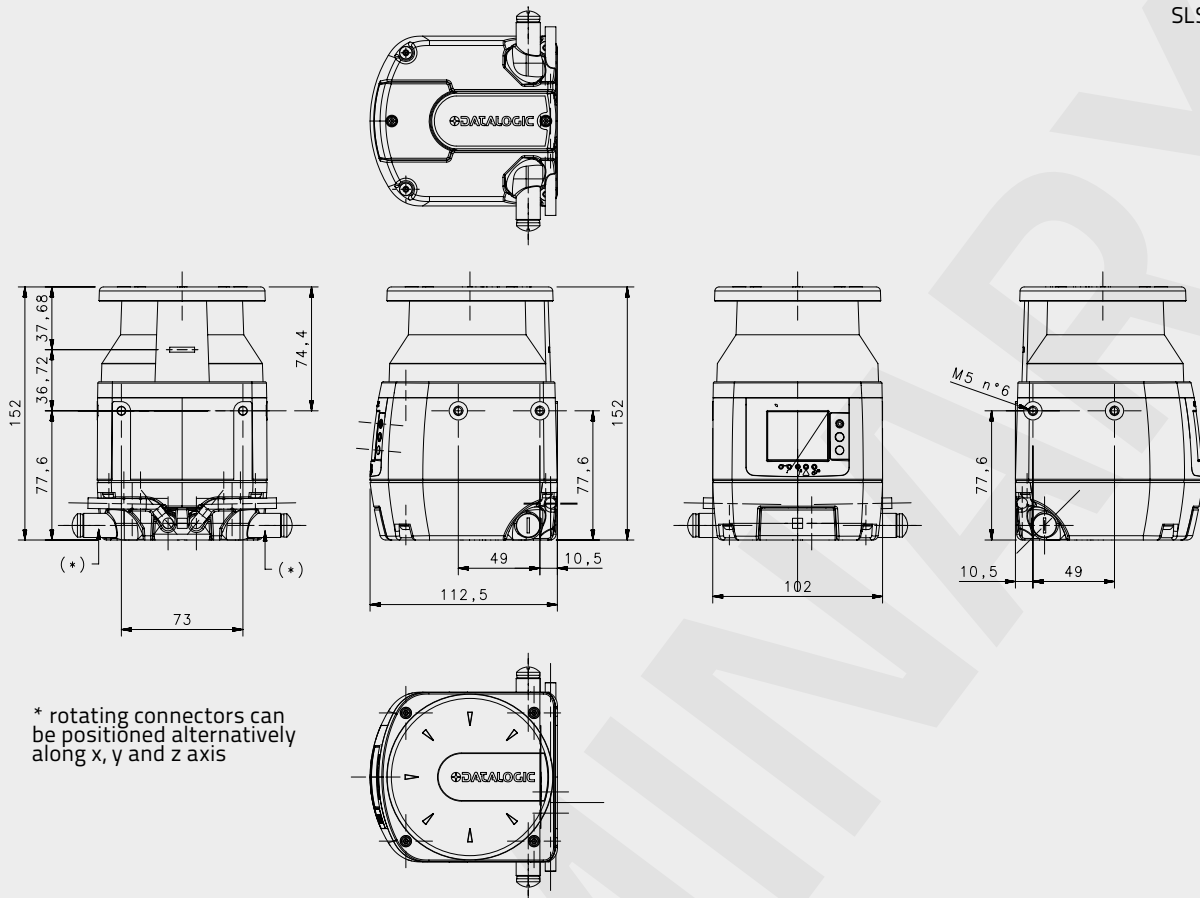
CONNECTOR (M12, 8-POLE)

	SIGNAL	DESCRIPTION	COLOR	PIN NUMBER
POWER	POWER SUPPLY	24Vdc	BROWN	2
	GND_ISO	0 V	BLUE	7
INPUTS	MULTI IN	Selectable by GUI	GREEN	3
	MULTI IN	Selectable by GUI	YELLOW	4
INPUT/OUTPUT	MULTI IN/OUT	Selectable by GUI	WHITE	1
SAFETY OUTPUTS	OSSD11	Safety Output	GRAY	5
	OSSD12	Safety Output	PINK	6
OTHER	F_EARTH	Functional Earth	RED	8



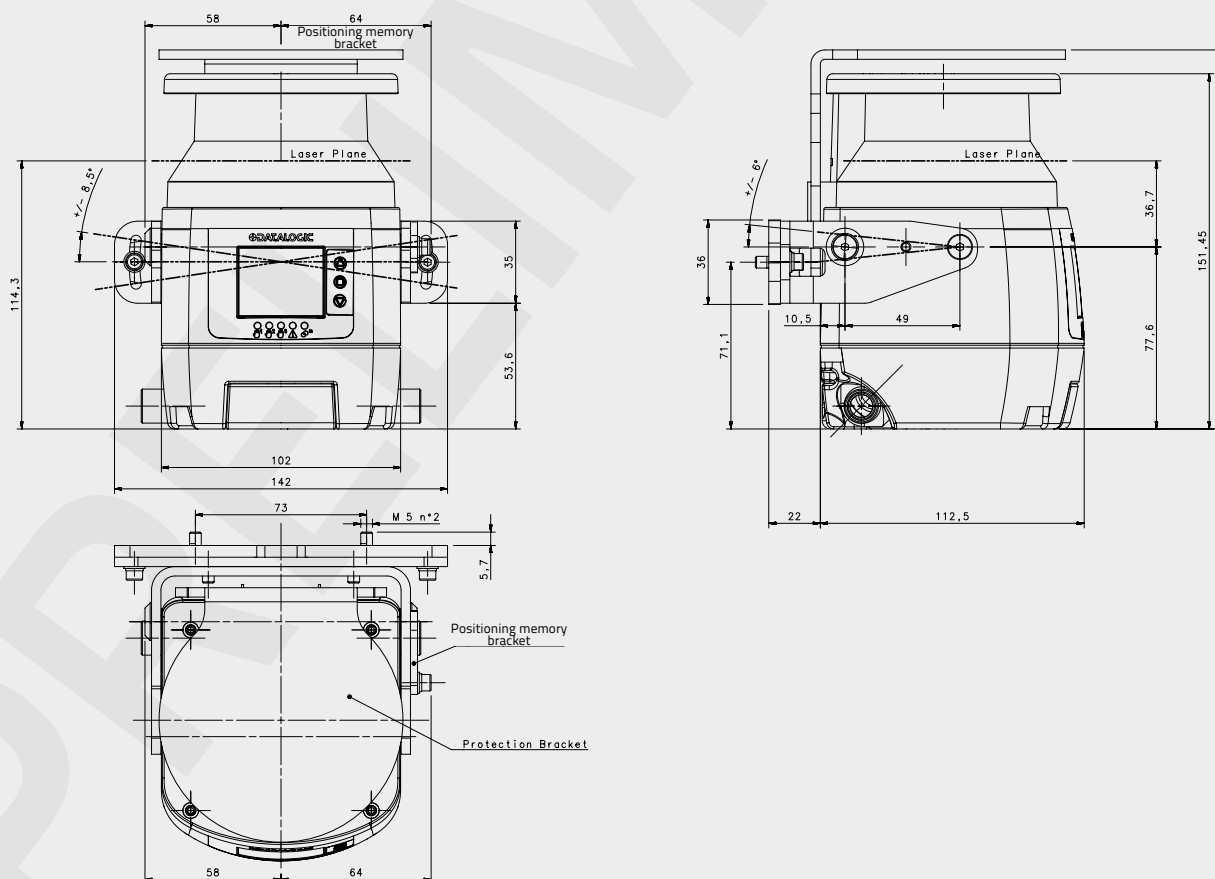
## DIMENSIONS

SLS-B5



\* rotating connectors can be positioned alternatively along x, y and z axis

SLS-B5 with brackets



## MODEL SELECTION AND ORDER INFORMATION

MODEL	PRODUCT DESCRIPTION	ORDER NO.
SLS-B5	LASER SENTINEL Standalone Base 5.5m 3 zone sets	958001100

## CABLES

	MODEL	LENGTH	CODE
ETHERNET CABLE TO HOST	CAB-ETH-M01 M12-IP67 ETHERNET CAB. (1M)	1 m	95A051346
	CAB-ETH-M03 M12-IP67 ETHERNET CAB. (3M)	3 m	95A051347
	CAB-ETH-M05 M12-IP67 ETHERNET CAB. (5M)	5 m	95A051348
	CAB-ETH-M10 M12-IP67 ETHERNET CAB. (10M)	10 m	95A051391

### NOTES

Ethernet cable to host is used for programming and monitoring LASER SENTINEL with the DL Sentinel

	MODEL	LENGTH	CODE
MAIN CABLE	CS-A1-06-U-03	1 m	95ASE1220
	CS-A1-06-U-05	3 m	95ASE1230
	CS-A1-06-U-10	5 m	95ASE1240
	CS-A1-06-U-15	10 m	95ASE1250
	CS-A1-06-U-25	25 m	95ASE1260

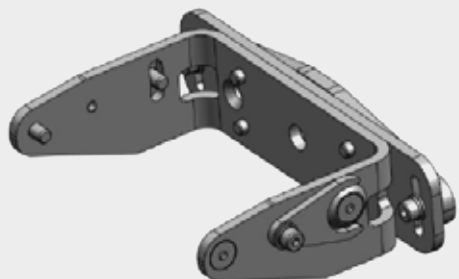
### NOTES

Main cable is needed for power supply and inputs/outputs

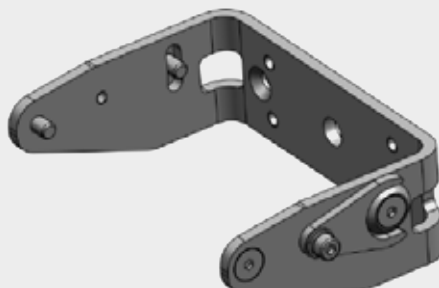
## ACCESSORIES

	SLS-B5	ORDER NUMBER
<b>BRACKETS</b>		
Complete bracket system	SLS-BRACKET-A	95ASE2920
Pitch regulation bracket system	SLS-BRACKET-B	95ASE2930
Head protective bracket	SLS-BRACKET-C	95ASE2940
<b>SAFETY UNITS</b>		
Safety Unit	SE-SR2	95ASE2270
<b>OTHERS</b>		
Liquid cleaner in spray bottle ( 1 lt )	SLS-CLEANER	95ASE2990
Cleaning cloth ( 22 cm x 22 cm ), 100 pcs.	SLS-CLOTH	95ASE3000

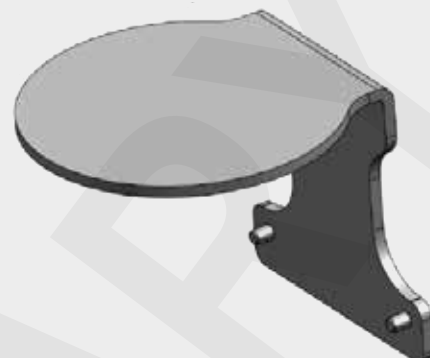
## BRACKETS



SLS-BRACKET-A



SLS-BRACKET-B



SLS-BRACKET-C

The colour graphical display of LASER SENTINEL shows if any person has been detected in the safety or warning areas, causing by consequence the stopping of the machine or the warning signal to activate.

The presence of 11 angular sectors allow to show the direction in which the person has been detected, and its colour indicate if it has been inside the safety (red) or the warning zone (yellow).

DISPLAYED ICON	NAME	DESCRIPTION
	Device On	The device is correctly functioning (OSSDs GO Condition). No presence detected in the Safety and Warning Area. (Configuration accepted)
	Warning Zone Signal	The device is correctly functioning. The device has detected a presence in the Warning Area (Configuration accepted)
	Safety Zone Signal	The device is correctly functioning (OSSDs STOP Condition). The device has detected a presence in the Safety Zone. (Configuration accepted)