CATALOG

Safety

DATALOGIC

EMPOWER YOUR VISION
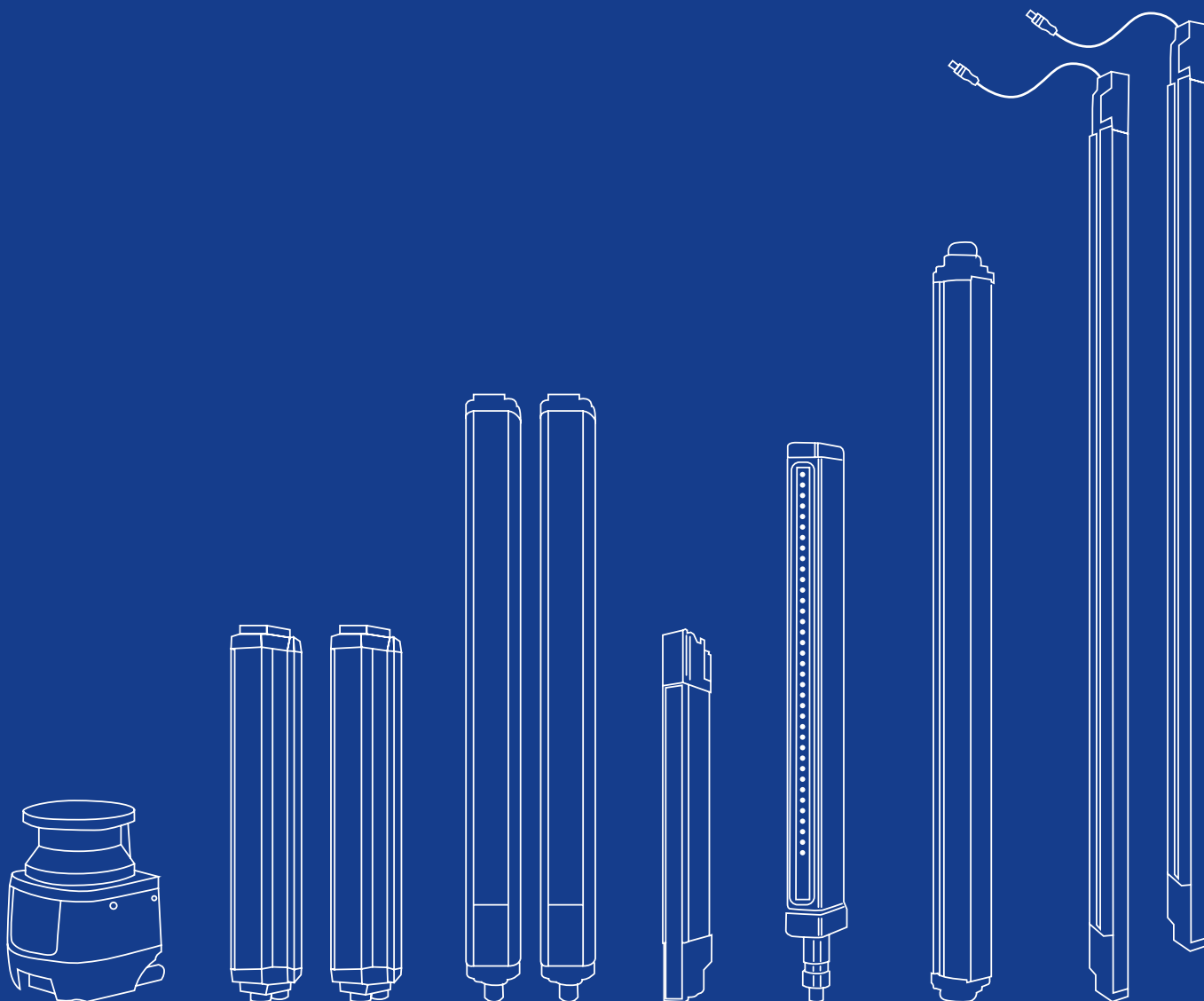
SAFETY LASER SCANNER

LASER SENTINEL™ ENHANCED

◆DATALOGIC

Safety laser scanner based on Time Of Flight measurement

More than 72 m² safely monitored, with 5.5 m over 275°

High detection performances in compact size

Advanced dust filtering

Easy programming with intuitive Graphic User Interface

- Dimensions (w,d,h): 102 , 112.5, 152 mm
- I/O connection with standard M12 cables
- Up to 3 simultaenous safety zones
- 2 Warning zones up to 40 m
- 30/40/50/70/150 mm selectable detection capability
- Up to 70 zone sets
- Partial dynamic muting
- Metal brackets allowing full orientation and fast replacement
- Advanced measurement data protocol
- Colour graphic display for monitoring and diagnostics
- Speed measurement with encoder inputs

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**

CE TÜV cULus LISTED

	FINGER	HAND	ARM	BODY
Type 3		x	x	x

SLS M5 - E - 0812 - E

MODEL		MAX SAFETY RANGE		ENCODER INPUTS		I/O CONNECTORS		ENHANCED VERSION	
SA	Standalone	5	5.5 m	E	Encoder inputs on secondary connector	08	M12 8-pin male	E	Master/Slave Enhanced version
M	Master	3	3 m	--	Not present	0812	M12 8-pin male OR M12 12-pin male	--	Standalone Enhanced version (*)
R	Slave (or Remote)					1708	M12 17-pin male AND M12 8-pin male		

(*) only for models produced after 31/01/2020

TECHNICAL DATA

	SLS-SA3-08 SLS-SA5-08	SLS-M3-0812-E SLS-M5-0812-E		SLS-M3-1708-E SLS-M5-1708-E		SLS-M5-E-1708-E	SLS-R3-E SLS-R5-E
Connector used	M12 8-pin	M12 8-pin	M12 12-pin	M12 17-pin	M12 17-pin + M12 8-pin	M12 17-pin + M12 8-pin high speed	N/A
GENERAL DATA							
Type (EN61496-1)	3						
PL (EN ISO 13849-1)	d						
SIL (IEC 61508)	2						
DETECTION DATA							
Detection capability	30/40/50/70/150 mm selectable						
Angular resolution	0,1°						
Safety zone operating range	See Safety operating range table						
Warning zone max. operating range	40 m						
Max. number of symultaneous safety zones	1	1	2	3			Depending on connected Master
Max. number of symultaneous warning zones	2	1	2	2 (if safety zones < 3) 1 (if safety zones = 3)			Depending on connected Master
Max. opening angle	275°						
Tolerance zone	100 mm						
ELECTRICAL DATA							
Power supply (Vdd)	24 Vdc ± 20%						
Output current	0.25 A max / each OSSD						N/A
Output Capacitive load	2.2 uF @ 24Vdc max						N/A
Input Load current	6 ... 15 mA						N/A
Input saturation voltage	> 15 V						N/A
Input Capacitive Load	22 uF						N/A
MECHANICAL AND ENVIRONMENTAL DATA							
Operating temperature	-10 ...+50 °C						
Storage temperature	-20 ... 70°C						
Humidity	15 ... 95 % (no condensation)						
Mechanical protection	IP 65 (EN 60529)						
Housing material	Painted Aluminium, Polycarbonate						
Window material	PMMA						
INPUTS/OUTPUTS CONFIGURATION DATA							
Connector	M12 8-pin	M12 8-pin	M12 12-pin	M12 17-pin	M12 17-pin + M12 8-pin	M12 17-pin + M12 8-pin	
Safety Outputs (OSSDs)	1 x 2	1 x 2	2 x 2	3 x 2	3 x 2	3 x 2	N/A
Configurable Inputs	0	2	1	4	12	8	N/A
Configurable Outputs	0	0	v	2	2	2	N/A
Configurable Inputs/Output	3	1	4	2	2	2	N/A
High speed inputs (100kHz)	N/A					4	N/A
Total configurable I/O	5	5	7	10	18	18	N/A
CONFIGURABLE PARAMETERS							
Response time							
for main unit	Min: 62 ms; Max: 482 ms						
for any additional slave unit	10 ms						
Connector used	M12 8-pin	M12 8-pin	M12 12-pin	M12 17-pin	M12 17-pin + M12 8-pin	M12 17-pin + M12 8-pin high speed	
Max. Zone sets number in any activation order (*1):							
with 1 safety zone	3	3	10	20	70	70	
with 1 safety zone + 1 warning zone	2	2	6	20	70	70	
with 1 safety zone + 2 warning zones	N/A	N/A	3	20	70	70	
with 2 safety zones	N/A	N/A	3	20	70	70	N/A
with 2 safety zones + 1 warning zone	N/A	N/A	2	10	70	70	
with 2 safety zones + 2 warning zones	N/A	N/A	1	6	70	70	
with 3 safety zones	N/A	N/A	N/A	6	70	70	
Max. Zone sets number in a particular activation order with 1 safety zone (*2):	6	N/A					
Zone set input switching time	Min: 30 ms; Max: 5000 ms						
FUNCTIONS							
Manual /automatic restart	Yes						
Reset (power cycle)	Yes						
EDM (External Device Monitoring)	Yes						
Total Muting (monodirectional or bidirectional)	Yes						
Partial muting, dynamic for 1st OSSDs couple	Yes						
Reference Points	Yes						
Override	Yes (*3)	Yes					N/A
Muting Lamp	Yes (*3)	Yes					
Muting Enable	Yes (*3)	Yes					
Clean Window Alarm	Yes						
Generic Fault Alarm	Yes						
Shut off	Yes						
Advanced measurement data	Yes (*4)	Yes (*5)					
Measurement data max. angular resolution	0.1°					0.5°	
APPLICATIONS							
Horizontal static	Yes						
Vertical static	Yes						
Moving (simple AGVs)	Yes						
Moving (medium complexity AGVs)	No	Yes					

NOTES

(*1) The max number of zone sets switching is reached when all inputs are used for zone set switching. Using 8 inputs or encoder speed measurement the max. number of zone set of 70 can be reached.

(*2) With 1 safety zone only, up to 3 zone sets are available in any activation order. Up to 6 are available only using some allowed activation order. Refer to Manual and GUI for details.

(*3) Ovverride input, Muting Enable input and Muting Lamp output on SLS-SAx are mutually exclusive

(*4) Using the programming connector on the front of the device

(*5) Using the rotating connector in the back of the device

(*6) Only using 12-pin connector

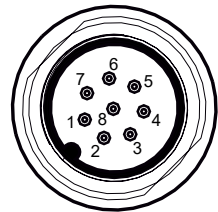(*7) To use more than 2 OSSDs, they have to be selected between configurable outputs

SAFETY OPERATING RANGE

Detection Capability	SLS-SA3-08 SLS-M3-xxxx-E SLS-R3-E	SLS-SA5-08 SLS-M5-xxxx-E SLS-M5-E-xxxx-E SLS-R5-E
Detection Capability	Safety Operating Range	
30 mm	0.05 ... 2.5 m	
40 mm		0.05 ... 3 m
50 mm	0.05 ... 3 m	0.05 ... 4 m
70 mm		0.05 ... 5.5 m
150 mm		

CONNECTIONS

CONNECTOR	CHARACTERISTICS	SLS-SAx	SLS-Mx-0812-E	SLS-Mx-(E-)-1708-E	SLS-Rx-E
A	M12 4-pins female	Ethernet port	Ethernet port	Ethernet port	N/A
B	M12 8-pins female	Not Present	Safe Connection to Slave device	Safe Connection to Slave device	Safe connection to next Slave device
D	M12 12 poles male	Not Present	Power and digital I/O in alternative to D	N/A	N/A
C	M12 8 poles male	Power supply and digital I/O	Power and digital I/O in alternative to C	N/A	N/A
E	M12 8-pins female	N/A	N/A	N/A	Safe connection to Master or previous Slave device
F	M12 17-pins male	N/A	N/A	Power and digital I/O alone or in combination with D	N/A
G	M12 8 poles male	N/A	N/A	Digital inputs in addition to F	N/A

SLS-x (Master)

SLS-Sx (Standalone)

SLS-Mx-(E-)1708-E

SLS-Rx-E
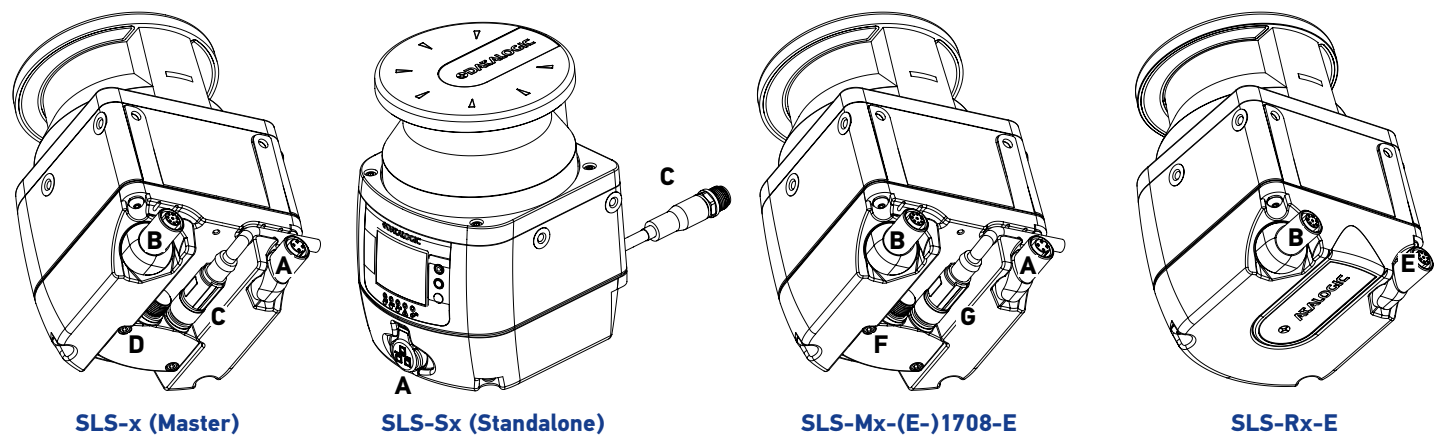
C CONNECTOR (M12, 8-Pins)				
	SIGNAL	DESCRIPTION	COLOR	PIN NUMBER
POWER	POWER SUPPLY	24Vdc	BROWN	2
	GND_ISO	0 V	BLUE	7
INPUT/OUTPUT	MULTI IN/OUT	Selectable by GUI	WHITE	1
	MULTI IN/OUT (*)	Selectable by GUI	GREEN	3
	MULTI IN/OUT (*)	Selectable by GUI	YELLOW	4
SAFETY OUTPUTS	OSSD11	Safety Output	GRAY	5
	OSSD12	Safety Output	PINK	6
OTHER	F_EARTH	Functional Earth	RED	8

NOTE

(*) Only MULTI IN and SLS-Mx

DATALOGIC

D CONNECTOR (M12, 12-Pins)
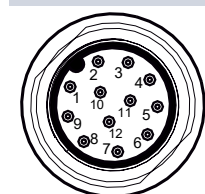
	SIGNAL	DESCRIPTION	COLOR	PIN NUMBER
POWER	POWER SUPPLY	24Vdc	BROWN	1
	POWER SUPPLY	24Vdc	GREEN	4
	GND_ISO	0 V	BLUE	2
	GND_ISO	0 V	YELLOW	6
INPUT	MULTI IN	Selectable by GUI	WHITE	3
INPUT/OUTPUT	MULTI IN/OUT	Selectable by GUI	BLACK	7
	MULTI IN/OUT	Selectable by GUI	RED	9
	MULTI IN/OUT	Selectable by GUI	VIOLET	10
	MULTI IN/OUT	Selectable by GUI	GREY/PINK	11
SAFETY OUTPUTS	OSSD11	Safety Output	GRAY	8
	OSSD12	Safety Output	PINK	5
OTHER	F_EARTH	Functional Earth	RED/BLUE	12

F CONNECTOR (M12, 17-Pins)
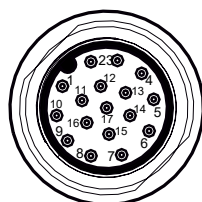
	SIGNAL	DESCRIPTION	COLOR	PIN NUMBER
POWER	POWER SUPPLY	24Vdc	BROWN	1
	POWER SUPPLY	24Vdc	BROWN	10
	POWER SUPPLY	24Vdc	BROWN	11
	GND_ISO	0 V	BLUE	2
	GND_ISO	0 V	BLUE	3
	GND_ISO	0 V	BLUE	12
INPUT	MULTI IN	Selectable by GUI	ORANGE	6
	MULTI IN	Selectable by GUI	BLACK	7
	MULTI IN	Selectable by GUI	WHITE	14
	MULTI IN	Selectable by GUI	VIOLET	17
OUTPUT	MULTI OUT	Selectable by GUI	GREEN	4
	MULTI OUT	Selectable by GUI	YELLOW	15
INPUT/OUTPUT	MULTI IN/OUT	Selectable by GUI	WHITE/BLACK	5
	MULTI IN/OUT	Selectable by GUI	RED	9
SAFETY OUTPUTS	OSSD11	Safety Output	GRAY	13
	OSSD12	Safety Output	PINK	8
OTHER	F_EARTH	Functional Earth	YELLOW/GREEN	16

G CONNECTOR (M12, 8-Pins)
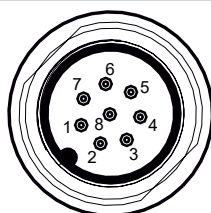
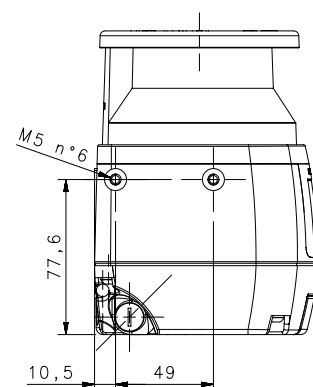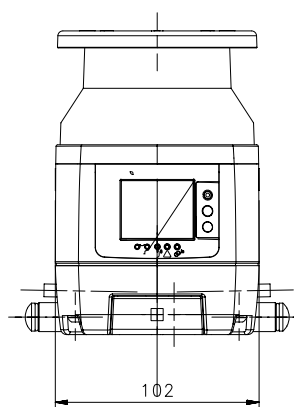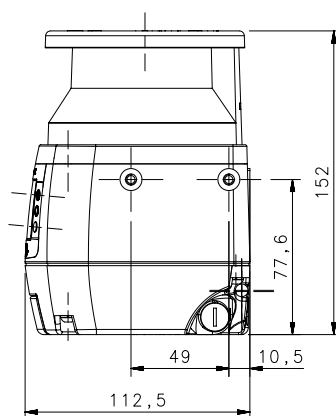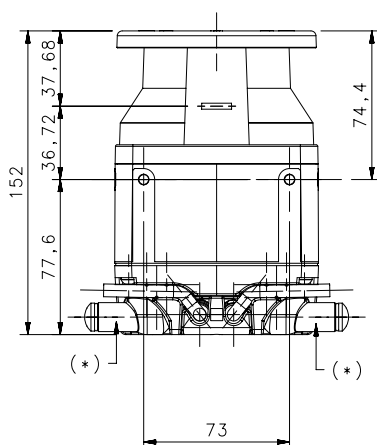|	SIGNAL	DESCRIPTION	COLOR	PIN NUMBER
HIGH SPEED INPUTS (*)	HIGH SPEED INPUT	Encoder input 11	GRAY	4
	HIGH SPEED INPUT	Encoder input 12	PINK	6
	HIGH SPEED INPUT	Encoder input 21	YELLOW	5
	HIGH SPEED INPUT	Encoder input 22	RED	8
INPUTS	MULTI IN	Selectable by GUI	GREEN	3
	MULTI IN	Selectable by GUI	BLUE	7
	MULTI IN	Selectable by GUI	BROWN	2
	MULTI IN	Selectable by GUI	WHITE	1

NOTE

(*) Only for SLS-M5-E-1708-E. Otherwise they are standard digital inputs selectable by GUI

SELECTABLE INPUTS AND OUPUTS

IN /OUT	Signal	SLS-Sax	SLS-Mx-0812-E		SLS-Mx-1708-E		SLS-M5-E-1708-E	NOTES
		8-pin	8-pin	12 pin	17-pin	17 + 8 pin	17 + 8 pin	
MULTI IN	Reset		YES	YES	YES	YES		
	Restart		YES	YES	YES	YES		
	Reset/Restart		YES	YES	YES	YES		
	EDM		YES	YES	YES	YES		
	Area Switch 1		YES	YES	YES	YES		
	Area Switch 2		YES	YES	YES	YES		
	Area Switch 3		YES	YES	YES	YES		
	Area Switch 4	N/A	N/A	YES				
	Area Switch 5	N/A	N/A	YES				
	Muting Enable 1		YES	YES	YES	YES		
	Muting 11		YES	YES	YES	YES		In order to activate muting, both muting inputs must be used
	Muting 12		YES	YES	YES	YES		
	Override 11		YES	YES	YES	YES		
	Override 12		YES	YES	YES	YES		
	Muting Enable 2	N/A	N/A	N/A	YES	YES		
	Muting 21	N/A	N/A	N/A	YES	YES		In order to activate muting, both muting inputs must be used
	Muting 22	N/A	N/A	N/A	YES	YES		
	Override 21	N/A	N/A	N/A	YES	YES		
	Override 22	N/A	N/A	N/A	YES	YES		
MULTI OUT	Warning 1		YES	YES	YES	YES		
	Warning 2	YES	NO		YES	YES		
	Muting lamp 1		YES	YES	YES	YES		Can be used in combination with muting function
	Muting lamp 2	N/A	N/A	N/A	YES	YES		
	Override status 1		YES	YES	YES	YES		
	Override status 2	N/A	N/A	N/A	YES	YES		
	Alarm 1		YES	YES	YES	YES		Clean Window Alarm
	Alarm 2		YES	YES	YES	YES		General Fault Alarm
OSSDs	OSSD 11		YES	YES	YES	YES		
	OSSD 12		YES	YES	YES	YES		
	OSSD 21	N/A	N/A	N/A	YES	YES		
	OSSD 22	N/A	N/A	N/A	YES	YES		
	OSSD 31	N/A	N/A	N/A		YES	YES	
	OSSD 32	N/A	N/A	N/A		YES	YES	

DIMENSIONS

SLS-Mx

152 37,68 36,72 74,4 77,6 (*) (*) 73 49 10,5 112,5 152 77,6 102 M5 n°6 77,6 10,5 49
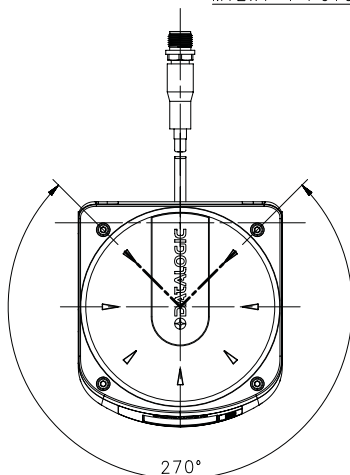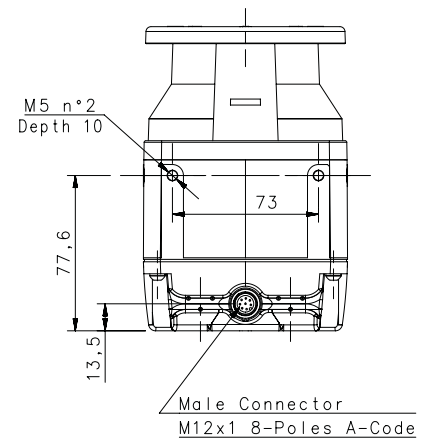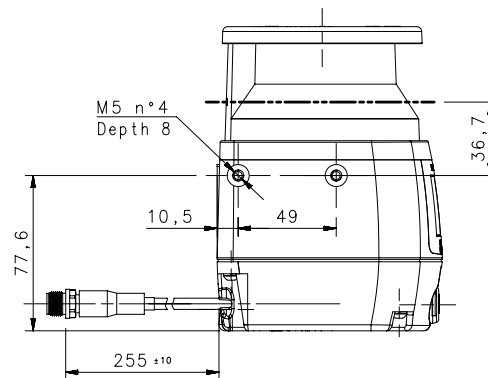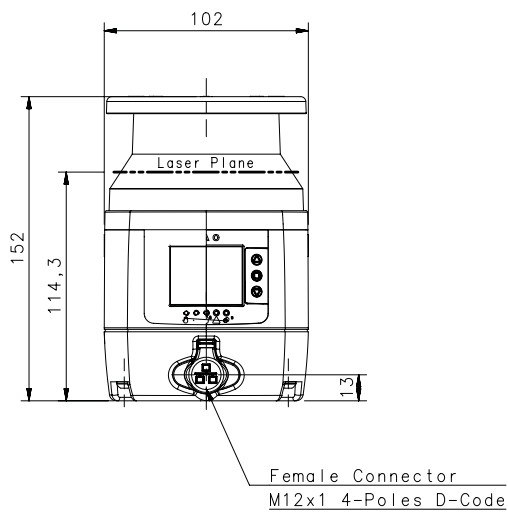
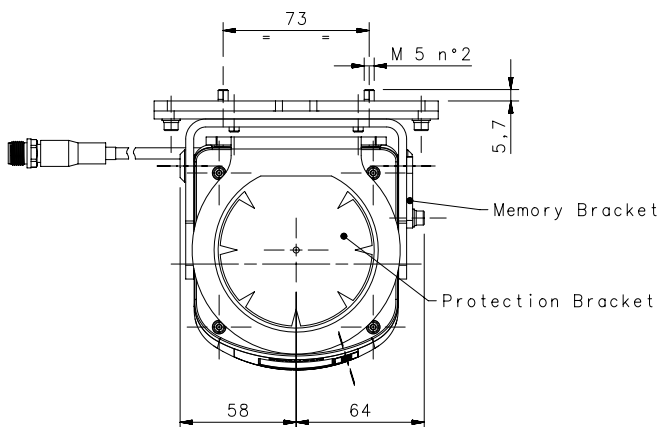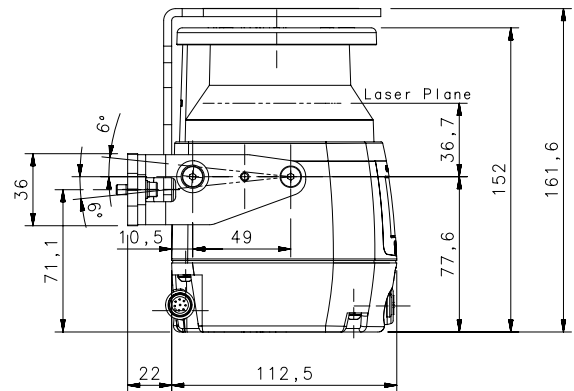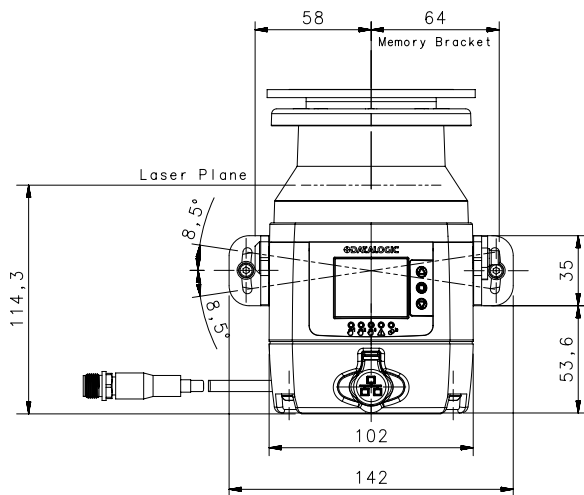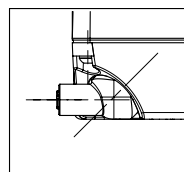* rotating connectors can be positioned alternatively along x, y and z axis

◆DATALOGIC

58
64

Positioning memory bracket

Laser Plane

+/- 8,5°

114,3

35

53,6

102

142

73

M 5 n°2

5,7

Positioning memory bracket

Protection Bracket

58
64

+/- 6°

Laser Plane

36,7

151,45

36

71,1

10,5

49

77,6

22

112,5

102

Laser Plane

152

114,3

13

Female Connector
M12x1 4-Poles D-Code

M5 n°4
Depth 8

36,7

77,6

10,5

49

255 ±10

M5 n°2
Depth 10

73

77,6

13,5

Male Connector
M12x1 8-Poles A-Code

270°

DIMENSIONS

58 | 64
Memory Bracket

Laser Plane

8,5°
8,5°
8,5°

114,3

35

53,6

102

142

6°
9°

36

71,1

Laser Plane

36,7

152

161,6

77,6

10,5 | 49

22 | 112,5

73
= | =

M 5 n°2

5,7

Memory Bracket

Protection Bracket

58 | 64

FIXING
N°2 Holes M5
Depth □6 mm
Drilling Distance 73 mm

SLS-Rx

102

48,5

Laser plane

152

95

114,3

119,2

112,5

Laser plane

M5 n°4
Depth 8mm

36,7

77,6

8,75

10,5 | 49

M5 n°2
Depth 10mm

77,6

73

Rotating
connectors

270°
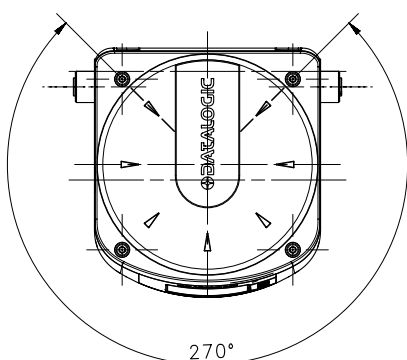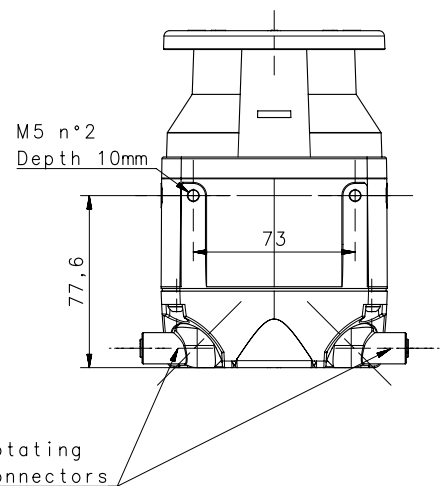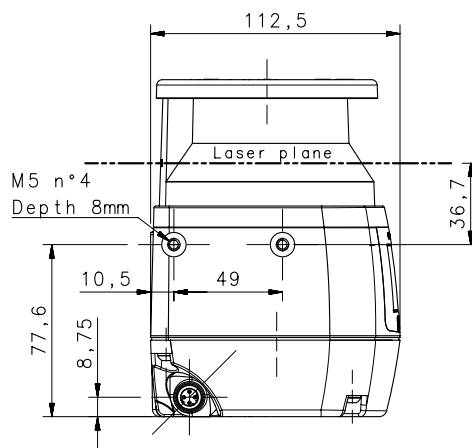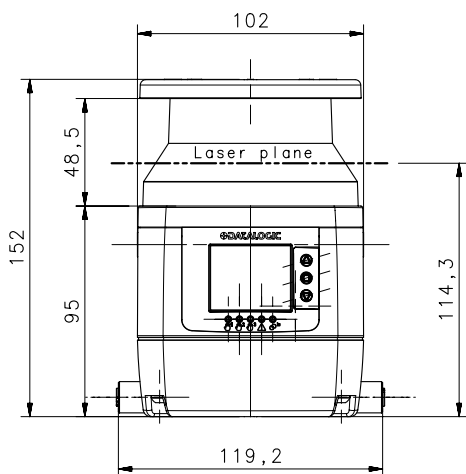
Rotating connectors 120°

MODEL SELECTION - ORDER INFORMATION

	MODEL	PRODUCT DESCRIPTION	ORDER NO.
STANDALONE	SLS-SA3-08	Standalone 3m 6 zone sets enhanced	958001080
	SLS-SA5-08	Standalone 5.5m 6 zone sets enhanced	958001090
MASTER	SLS-M3-0812-E	Master 3m 10 zone sets enhanced	958001020
	SLS-M5-0812-E	Master 5.5m 10 zone sets enhanced	958001110
	SLS-M3-1708-E	Master 3m 70 zone sets enhanced	958001010
	SLS-M5-1708-E	Master 5.5m 70 zone sets enhanced	958001030
	SLS-M5-E-1708-E	Master 5.5m encoder 70 zone sets enhanced	958001050
SLAVE	SLS-R3-E	Remote 3m enhanced	958001060
	SLS-R5-E	Remote 5.5m enhanced	958001120

NOTE: the standalone models have enhanced features if produced after 31.01.2020

ACCESSORIES

	SLS-B5 / SLS-SAx	ORDER NUMBER
BRACKETS		
Complete bracket system	SLS-BRACKET-A	95ASE2920
Pitch regulation bracket system	SLS-BRACKET-B	95ASE2930
Head protective bracket	SLS-BRACKET-C	95ASE2940
SAFETY UNITS		
Safety Unit	SE-SR2	95ACC6170
MAINTENANCE ACCESSORIES		
Replacement window	SLS-WINDOW (*1)	95ASE2971
Memory group M12 8/12 pins	SLS-MG-0812 (*2)	95ASE2960
Memory group M12 17/8 pins	SLS-MG-1708 (*3)	95ASE2950
Liquid cleaner in spray bottle (1 lt)	SLS-CLEANER	95ASE2990
Cleaning cloth (22 cm x 22 cm), 100 pcs.	SLS-CLOTH	95ASE3000

Note

*1) The replacement of window is available only for SLS-Mx-xxxx-E, SLS-Rx-E (Enhanced models) and SLS-SAx produced after 31.1.2020
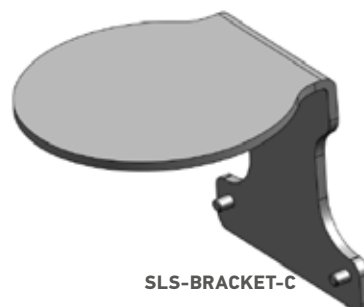
*2) Only for SLS-Mx-0812-E

*3) Only for SLS-Mx-1708-E and SLS-Mx-E-1708-E

SLS-BRACKET-A   SLS-BRACKET-B   SLS-BRACKET-C

CABLES

	MODEL	1st end	2nd end	LENGHT	CODE
MAIN CABLES	CS-A1-06-U-03	8 pin female	free wires	3 m	95ASE1220
	CS-A1-06-U-05			5 m	95ASE1230
	CS-A1-06-U-10			10 m	95ASE1240
	CS-A1-06-U-15			15 m	95ASE1250
	CS-A1-06-U-25			25 m	95ASE1260
	CS-A1-10-U-03	12 pin female	free wires	3 m	95A252720
	CS-A1-10-U-05			5 m	95A252730
	CS-A1-10-U-10			10 m	95A252740
	CS-A1-10-U-15			15 m	95A252750
	CS-A1-10-U-25			25 m	95A252760
	CS-A1-15-U-03	17 pin female	free wires	3 m	95ASE3010
	CS-A1-15-U-05			5 m	95ASE3020
	CS-A1-15-U-10			10 m	95ASE3030
	CS-A1-15-U-15			15 m	95ASE3040
	CS-A1-15-U-25			25 m	95ASE3050
ETHERNET TO HOST CABLES	CAB-ETH-M01 M12-IP67 ETHERNET CAB. (1M)	4 pin male	RJ45	1 m	93A051346
	CAB-ETH-M03 M12-IP67 ETHERNET CAB. (3M)			3 m	93A051347
	CAB-ETH-M05 M12-IP67 ETHERNET CAB. (5M)			5 m	93A051348
	CAB-ETH-M10 M12-IP67 ETHERNET CAB. (10M)			10 m	93A051391
CABLES TO REMOTE	SLS-CABLE-R-5	8 pin male	8 pin male	5 m	95ASE2890
	SLS-CABLE-R-10			10 m	95ASE2900
	SLS-CABLE-R-20			20 m	95ASE2910

NOTES

ETHERNET TO HOST CABLES are used for programming and monitoring the device with DL Sentinel, and for reading the measurement data.
CABLES TO REMOTE are used to connect the Master models to the Slaves like in the following picture

S2   S1   M   CONFIG PC CAB-ETH-MX

OUT — IN   OUT — IN   OUT — IN

SLS-CABLE-R-X   SLS-CABLE-R-X
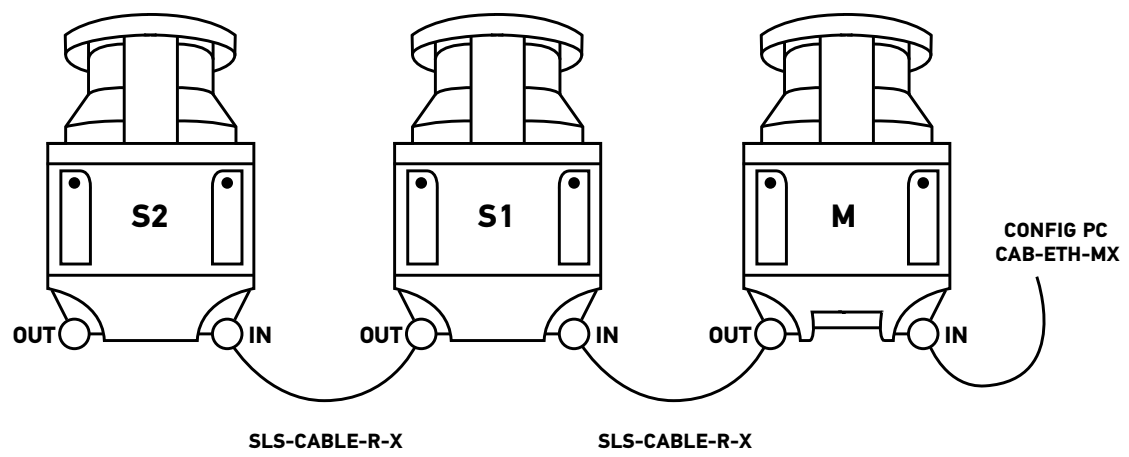
The colour graphical display of LASER SENTINEL shows if any person has been detected in the safety or warning areas, causing by consequnce the stopping of the machine or the warning signal to activate.
The presence of 11 angular sectors allow to show the direction in which the person has been detected, and its colour indicate if it has been inside the safety (red) or the warning zone (yellow).

DISPLAYED ICON	NAME	DESCRIPTION
GO	**ON state**	The device is correctly functioning (OSSDs GO Condition). No presence detected in the Safety and Warning Area. (Configuration accepted)
WARNING	**OFF State for intrusion in Safety Area**	The device is correctly functioning. The device has detected a presence in the Warning Area (Configuration accepted)
STOP	**Warning for intrusion in Warning Area**	The device is correctly functioning (OSSDs STOP Condition). The device has detected a presence in the Safety Zone. (Configuration accepted)
REFERENCE	**OFF State for Reference Points**	The device has detected that Reference Points have moved. The Display Sector in the direction of the moved reference point is lit in blue.

LED NUMBER	SYMBOL	DEFINITION	COLOR	MEANING	OUTPUT STATUS
1	1	Object Detection in Safety Zone 1 (OSSD 11/12).	GREEN	No object detected	OSSDs OFF
			RED	Object detected	OSSDs ON
2	2	Object Detection in Safety Zone 2 (OSSD 21/22).	GREEN	No object detected	OSSDs OFF
			RED	Object detected	OSSDs ON
3	3	Object Detection in Safety Zone 3 or Warning Zone 2	AMBER	Object detected	OSSDs OFF Warning 2 ON/OFF if set up
			OFF	No object detected	OSSDs ON Warning 2 output varies depending on warning function configuration
4	⚠	Object Detection in Warning Zone 1	AMBER	Object detected in Warning Zone 1	Warning 1 output varies depending on warning function configuration
			OFF	No object detected in Warning Zone 1	Warning 1 output varies depending on warning function configuration
5	⟳In	Interlock	AMBER	No Object detected in Safety Zone Device waiting for Manual Restart (LED1 RED)	OSSDs OFF
			OFF	No Object detected in Safety Zone Device in ON Status (LED 1 GREEN)	OSSDs ON
				Object detected in Safety Zone Device in OFF Status (LED 1 RED)	OSSDs OFF

Rev. 07, 05/2020

LIDAR
Light Detection and Ranging

LIDAR GUIDANCE SCANNER

⬦DATALOGIC

Compact, reliable and rugged Navigation Lidar for automated guided vehicles

ToF technology on infrared laser

2D Measurement data for natural or marker navigation

360° measurement for all-round scanning

Differentiation between natural objects and reflectors

Compact design for easy mechanical integration

Simple and quick configuration and monitoring

- High precision and reliable measurement up to 50 meters
- 60,000 measured points per second
- Up to 25 Hz selectable rotation frequency
- 0.06° angle resolution
- Dimensions: 95 x 97 x 116 mm

⬦DATALOGIC

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APPLICATIONS

- Automated Guided Vehicles (AGV)
- Automated Guided Carts (AGC)
- Automated Mobile Robots (AMR)
- Automated Guided Forklifts (AGF)
- Laser Guided Vehicles (LGV)

INDUSTRIES

- **Intralogistics**
- **Material handling**
- **Manufacturing**

LGS-N50

MODEL	
N	Lidar Guidance Scanner for Navigation

MAX MEASUREMENT RANGE	
50	50 m (with 80% reflectivity)

TECHNICAL DATA

LGS-N50	
MEASUREMENT	
Scanning Angle	360°
Measurement range	0.2 - 2 m with 1.8% reflectivity
	0.2 - 15 m with 10% reflectivity
	0.2 - 50 m with 80% reflectivity
Scanning rate (selectable through web server)	10/15/20/25 Hz
Measurement rate	60000 points per second
Angular resolution	0.06° at 10Hz
	0.09° at 15Hz
	0.12° at 20Hz
	0.15°at 25Hz
Linear resolution	1 mm
Absolute measurement accuracy	±30 mm with 90% reflectivity
Repeat measurement accuracy	< 20 mm with 90% reflectivity
Response time	100/66/50/40 ms
ELECTRICAL DATA	
Power supply	12 ... 32 Vdc
Power consumption	7 W (at 25°C and 15 Hz)
Output current	30 mA
MECHANICAL AND ENVIRONMENTAL	
Dimentions (width, depth, height)	95 x 97 x 116 mm
Operating temperature	-20 ...+50 °C
Storage temperature	-30 ... 70°C
Relative humidity	15 ... 95 % (no condensation)
Mechanical protection	IP 66
Ambient light limit	80000 Lux
Housing material	Aluminum alloy and polycarbonate
Window material	Polycarbonate
Weight	900 g
COMMUNICATION	
Communication interface	IEEE 802.3u 100Mbps Ethernet
Communication protocol	TCP/IP
Data transmission protocol	UDP/IP
Transmitted information	Angle of the measured point (in 0.01°)
	Distance of the measured point (in mm)
	Signal intensity (0...65535)
	Time stamp in ms with 24-hour cycle
	Rotation rate
Transmitted diagnostic	Motor fault
	Voltage fault
	Temperature fault
CONFIGURATION	
Configuration software	Any web browser (configuration throuth web server)
Monitoring software	LGS Viewer
USER INTERFACE	
Power indicator	Green LED
Fault indicators	Red LED
LASER	
Laser Safety Class	Class 1 (IEC 60825-1)
Wavelength	905±20 nm (infrared)
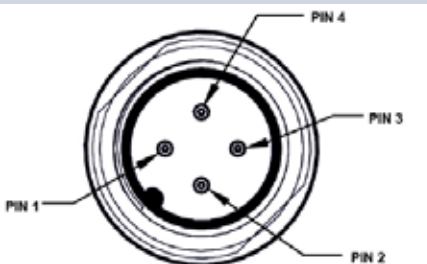
CONNECTIONS
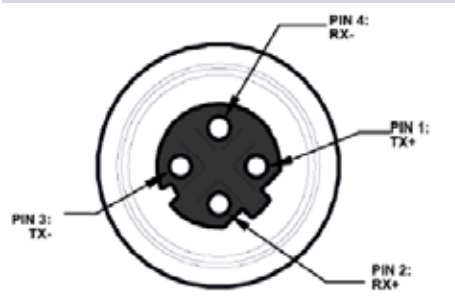
CONNECTOR	CHARACTERISTICS
Power	M12 4-pins male
Multi-function	M12 8-pins male
Ethernet	M12 4 poles D-coded female

Power:
DC 12~32V/2A

PC Settings (default):
DHCP: off
IP: 192.168.1 . 10
Mask: 255.255.255.0

Ethernet (RJ-45)
Special cable

Power   Multi-Function   Ethernet
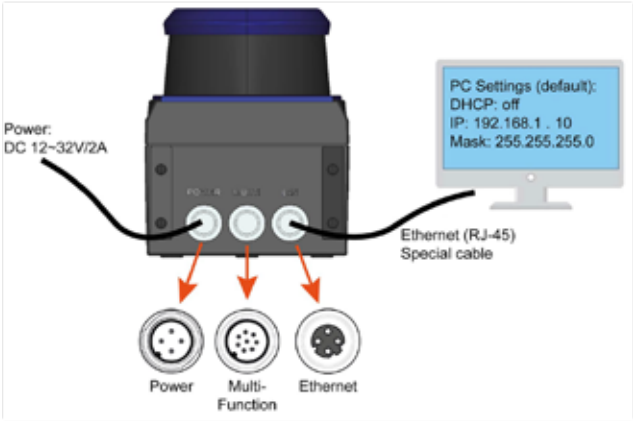
POWER CONNECTOR (M12, 4-Pins)				
	SIGNAL	DESCRIPTION	COLOR	PIN NUMBER
POWER	+ Vcc	24Vdc	BROWN	1
	GND	0 V	BLUE	3
DIAGNOSTIC OUTPUT	Q1	Temperature out of range	BLACK	4
	Q2	Generic failure	WHITE	2

PIN 4: RX-
PIN 1: TX+
PIN 3: TX-
PIN 2: RX+

ETHERNET CONNECTOR (M12, 4-Pins)		
	SIGNAL	PIN NUMBER
COMMUNICATION SIGNALS	TX +	1
	RX +	2
	TX -	3
	RX -	4

DIMENSIONS
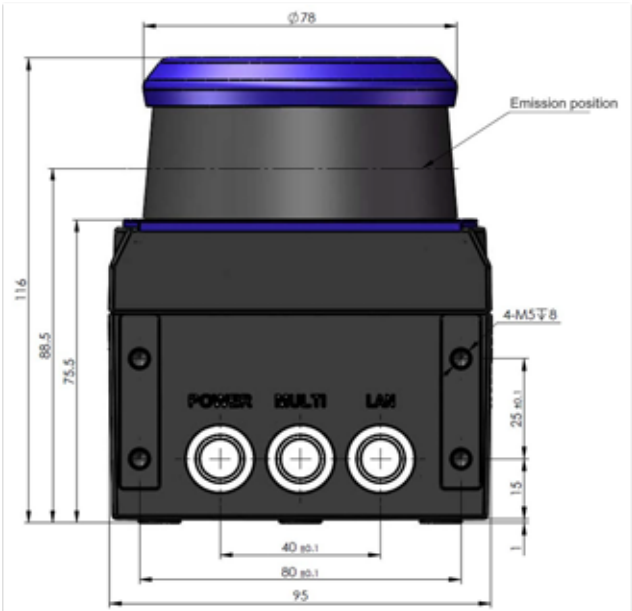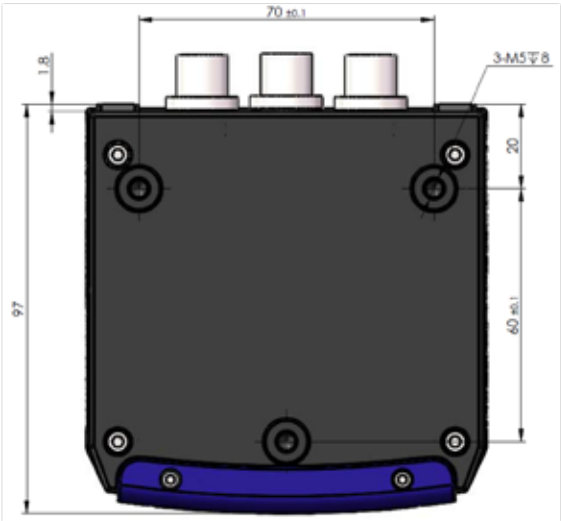
MODEL SELECTION - ORDER INFORMATION

MODEL	PRODUCT DESCRIPTION	ORDER NO.
LGS-N50	Navigation LIDAR 360° 50 m	958200001

ACCESSORIES

MAINTENANCE ACCESSORIES		
DESCRIPTION	**MODEL**	**ORDER NO.**
Liquid cleaner in spray bottle (1 lt)	SLS-CLEANER	95ASE2990
Cleaning cloth (22 cm x 22 cm), 100 pcs.	SLS-CLOTH	95ASE3000

CABLES

	MODEL	1st end	2nd end	LENGTH	CODE
POWER CABLE	CS-A1-02-U-03	4 pin female	free wires	3 m	95ASE1120
	CS-A1-02-U-05			5 m	95ASE1130
	CS-A1-02-U-10			10 m	95ASE1140
	CS-A1-02-U-15			15 m	95ASE1150
	CS-A1-02-U-25			25 m	95ASE1160
ETHERNET TO HOST CABLES	CAB-ETH-M01 M12-IP67 ETHERNET CAB. (1M)	4 pin male	RJ45	1 m	93A051346
	CAB-ETH-M03 M12-IP67 ETHERNET CAB. (3M)			3 m	93A051347
	CAB-ETH-M05 M12-IP67 ETHERNET CAB. (5M)			5 m	93A051348
	CAB-ETH-M10 M12-IP67 ETHERNET CAB. (10M)			10 m	93A051391

LED NUMBER	COLOR	DESCRIPTION
PWR	GREEN	Shows the status of powered devices. OFF = no power; ON = powered
Q1	RED	Blinks when the temperature is out of range.
Q2	RED	Blinks when a diagnostic internal test fails.
ERR	RED	Shows the unavailability of the device. OFF: device available; Blinking: device not yet available; ON: Device unavailable for internal error.

Rev. 00, 01/2021

DATALOGIC

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