LASER SENTINEL™ ENHANCED
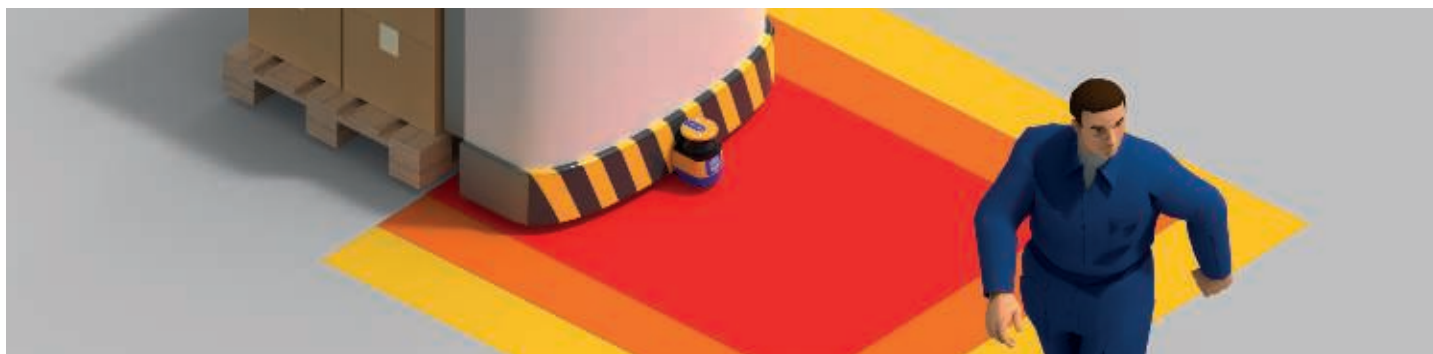## your sentinel for safe area protection
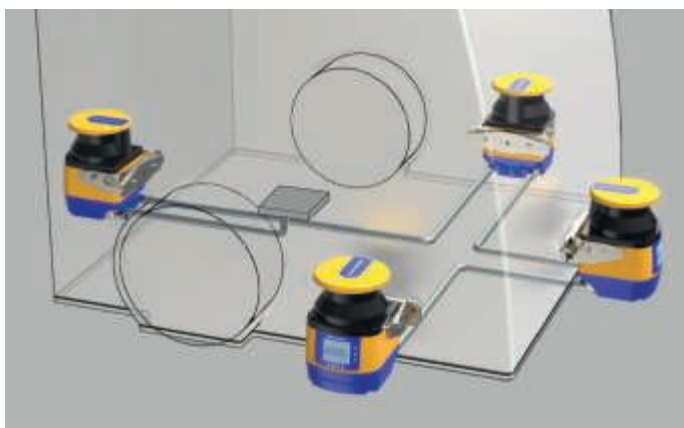

Laser Sentinel Master/Slave

- Safety Laser Scanner Type 3, Pl d, SIL 2
- **Up to 3 simultaneous Safety zones up to 5.5 m** [NEW]
- Up to 2 simultaneous Warning Zones up to 40 m
- **Advanced measurement data on Ethernet** [NEW]
- Display with colour-based Intrusion Detection System
- Configurable outputs for general fault or "clean window" alarm
- 8/12/17 pins M12 connectors for standard cabling
- **Encoder inputs for speed monitoring** [NEW]
- **Partial dynamic muting** [NEW]

- 275° Opening Angle
- **30/40/50/70/150 mm detection capability Selectable by Graphic User Interface** [NEW]
- Muting and Override functions available
- **Up to 70 zone safe set switching** [NEW]
- **Replaceable window** [NEW]
- Master-slave connection includes seamless safe communication and power transmission
- Ethernet port on Master for programming and monitoring of whole system by a single point
- **Fast replacement with memory backup** [NEW]

SLS-M (Master) and up to three SLS-R (Slave) can be connected without need of additional external unit to form a consistent safety system that share safety and warning zones over all devices.
Available functions make it possible to protect static horizontal or vertical applications, as well as moving applications.
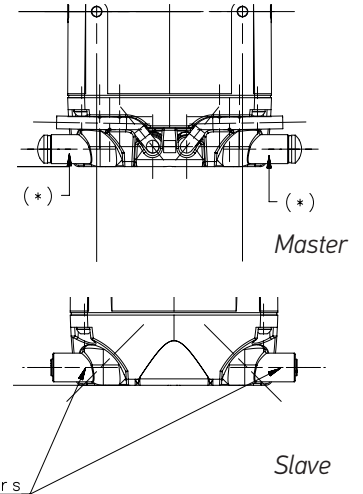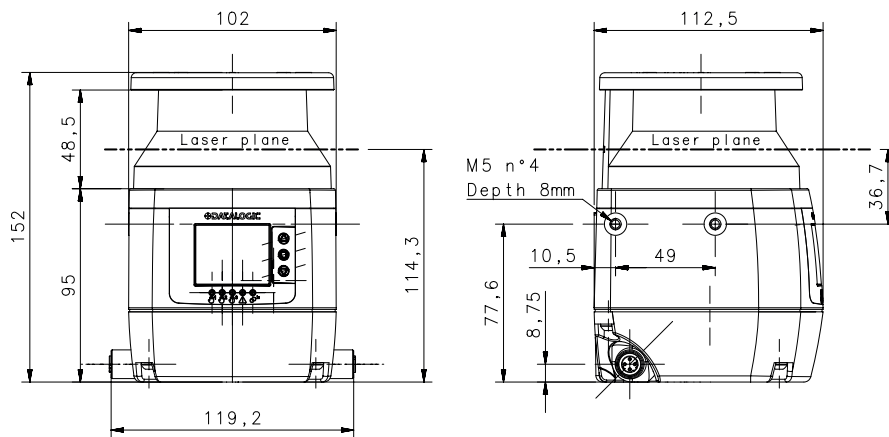
DATASENSING
easing automation challenges

TECHNICAL DATA
MASTER/ SLAVE MODEL (SLS-M/R)

COLOR INTRUSION DETECTION SYSTEM

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	0.05 ... 5.5 m
	Warning zone max operating range	0.05 ... 40 m
	Max. number of simultaneous warning zones	2
	Max. number of simultaneous safety zones	3
	Max. opening angle	275°
	Response time (Configurable)	Min: 62 ms; Max: 482 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 uF @ 24Vdc max
	Configurable Inputs	8pin: 2; 12pin: 4; 17pin: 4; 17+8pin:4
	Configurable Inputs/Outputs	8pin: 1; 12pin:4; 17pin: 6; 17+8pin:14
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)
Functions	Manual / automatic restart	
	Dynamic switching between zone sets	
	Warning area intrusion detection	
	Total Muting (T or L)	
	Reference Points	
	Override	
	Muting Lamp	
	Advanced measurement data	
	"Clean Window" alarm	
	Partial dynamic muting	
	Fast replacement	

GO

STOP

REFPOINT

WARNING

DIMENSIONS

102 · 48,5 · Laser plane · 152 · 9,5 · 114,3 · 119,2

112,5 · Laser plane · M5 n°4 Depth 8mm · 36,7 · 10,5 · 49 · 77,6 · 8,75

Master

Rotating connectors
Slave

I/O CONNECTOR

CONNECTOR (M12, 8-POLE)

		SIGNAL
POWER	2	POWER SUPPLY
	7	GND_ISO
INPUT/OUTPUT	3	MULTI IN
	4	MULTI IN
	1	MULTI IN/OUT
SAFETY OUTPUTS	5	OSSD11
	6	OSSD12
OTHER	8	F_EARTH

CONNECTOR (M12, 12-POLE)

		SIGNAL
POWER	1	POWER SUPPLY
	4	POWER SUPPLY
	2	GND_ISO
	6	GND_ISO
INPUT/OUTPUT	3	MULTI IN
	7	MULTI IN/OUT
	9	MULTI IN/OUT
	10	MULTI IN/OUT
	11	MULTI IN/OUT
SAFETY OUTPUTS	8	OSSD11
	5	OSSD12
OTHER	12	F_EARTH

CONNECTOR (M12, 17-POLE)

		SIGNAL
POWER	1	POWER SUPPLY
	10	POWER SUPPLY
	11	POWER SUPPLY
	2	GND_ISO
	3	GND_ISO
	12	GND_ISO
INPUT	14	MULTI IN
	7	MULTI IN
	6	MULTI IN
	17	MULTI IN
OUTPUT	4	MULTI IN
	15	MULTI IN
INPUT/OUTPUT	4	MULTI IN/OUT
	15	MULTI IN/OUT
SAFETY OUTPUTS	13	OSSD11
	8	OSSD12
OTHER	16	F_EARTH

CONNECTOR (M12, 17+8-POLE)

		SIGNAL
SPEED INPUT	8-4	MULTI IN SPEED
	8-6	MULTI IN SPEED
	8-5	MULTI IN SPEED
	8-8	MULTI IN SPEED
	8-3	MULTI IN SPEED
INPUT	8-7	MULTI IN
	8-2	MULTI IN
	8-1	MULTI IN