KEYENCE

Safety Interlock Switches
GS Series

Machine Safety Made Simple

Achieve the Top Safety Standards

PLe	Category4	SIL3	Type4

Locking Type

Innovative Safety Options for Any Situation

Non-Contact Type

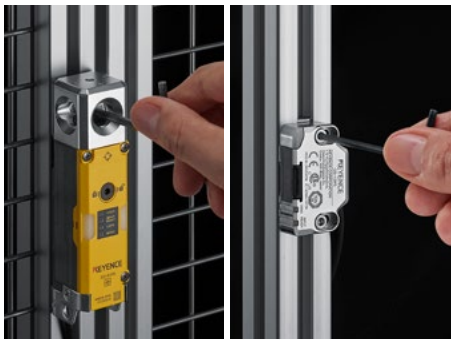
Safety Interlock Switches
GS Series

INTUITIVE DESIGN

- Compact Size
- Robust Construction
- Highly Visible Indicators

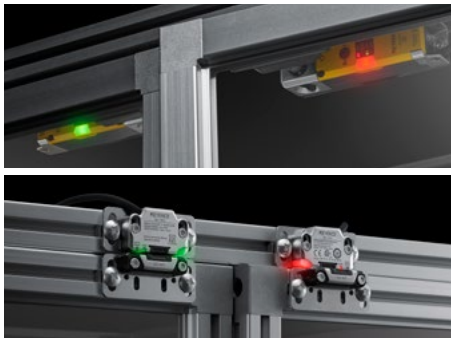
VERSATILE MOUNTING

- Flexible & Direct Installation
- Reliable & Consistent Alignment
- Dedicated Brackets



SEAMLESS SYSTEM INTEGRATION

- Built-in Cascading
- Additional I/O for Monitoring
- Simplified System Wiring



INTUITIVE DESIGN

Two Unique Styles

Locking Type

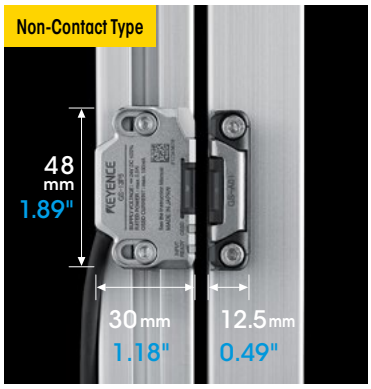
Prevent unintended access to hazardous areas, and costly machine stoppage, by locking these units during machine operation.

Non-Contact Type

Confirm all access points are closed during machine operation and trigger appropriate machine stoppage if any of them are opened.

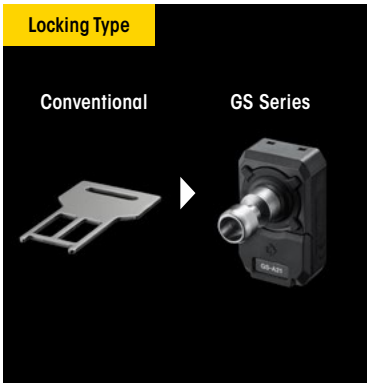
Compact Size

Both models feature small physical footprints to ensure they are able to be integrated into any machine. The unobtrusive designs help to increase mounting versatility and also prevent tampering or potential damage.



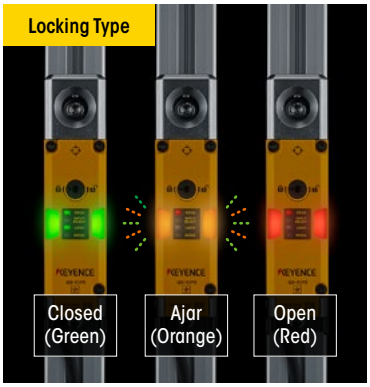
Robust Construction

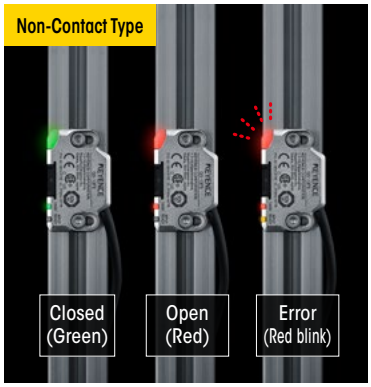
The locking type ensures operators cannot forcibly enter hazardous areas by maintaining an impressive 2000N holding force when locked. The non-contact type features a durable metal housing that ensures lasting operation even when exposed to direct impacts.



Highly Visible Indicators

Easily recognize the open/close status of all access points with just a quick glance. With their large size, high brightness, and angular cut, the GS Series built-in indicators can be seen from a distance and from multiple directions for instant status identification.

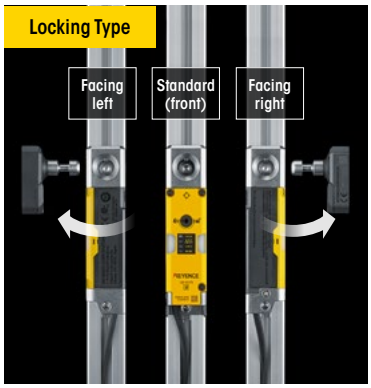




VERSATILE MOUNTING

Direct & Flexible Installation

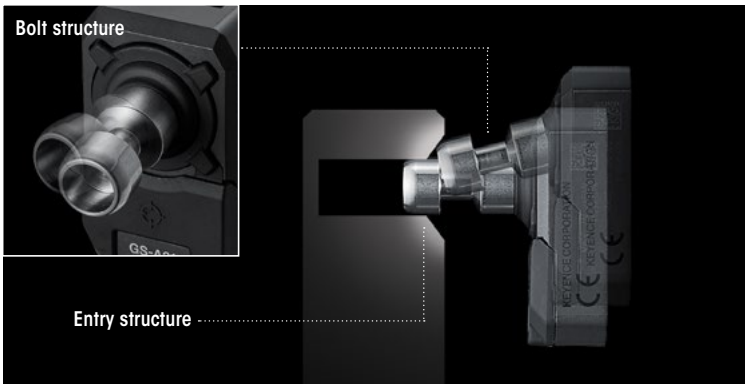
Mounting has never been easier. Both the locking type and the non-contact type can be directly mounted to a machine frame with their built-in mounting holes. Along with this, both types can be rotated to accommodate any door style.



Articulated Actuator

Locking Type Only

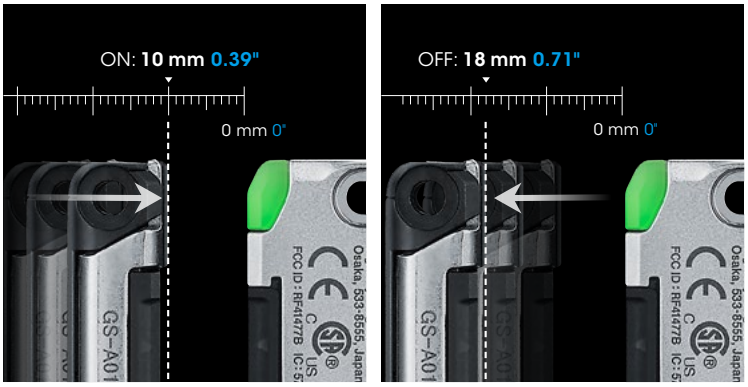
The GS Series locking type models provide a level of flexibility that is unmatched by other locking type interlocks on the market. Not only do they feature a fully articulated locking bolt, but they also offer beveled entry points to ensure mating even as a door sags.



Stable & Reliable Detection

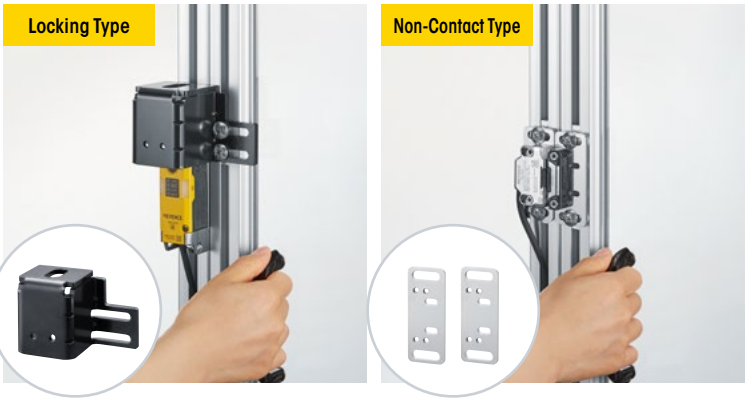
Non-Contact Type Only

The GS Series non-contact type models help prevent nuisance trips and machine stoppage due to improper closure, vibration, door sag, and more. This is because these models offer a forgiving ON-OFF range of up to 18 mm (0.7"), ensuring reliable detection and safe machine operation.



Variety of Dedicated Brackets

It is no longer necessary to fabricate costly brackets for your safety interlocks. From robust designs to slim profiles, the GS Series provides a range of dedicated brackets that will fit a variety of machine setups.

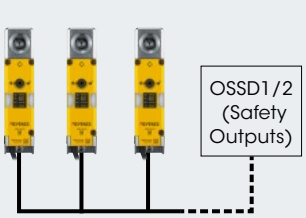


SEAMLESS SYSTEM INTEGRATION

Simplified Wiring Through Cascading

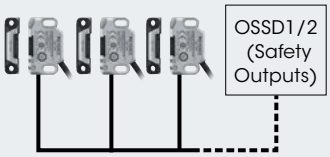
Wiring has never been simpler or easier than with the GS Series and its built-in cascading function. Connect together safety interlocks throughout the machine and cut the total number of safety outputs down to a single pair of OSSDs.

Locking Type



Cascade:
Up to 25 units

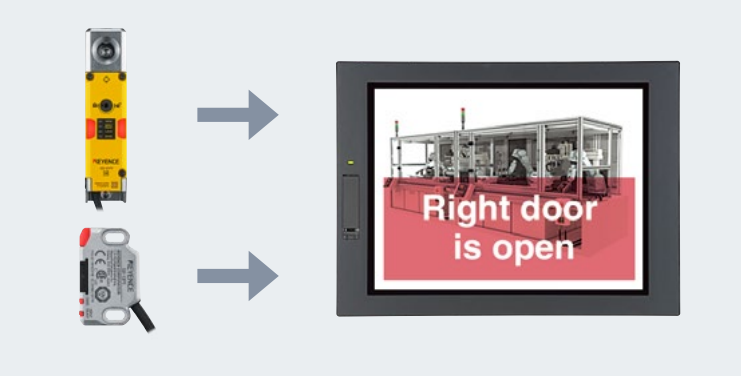
Non-Contact Type



Cascade:
Up to 30 units

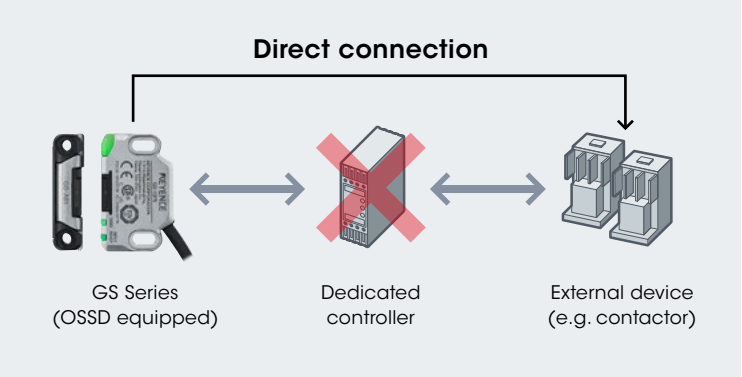
Additional I/O for Monitoring

Even when several units are cascaded together, it is possible to quickly identify which access point is open using an additional auxiliary output from each safety interlock. These outputs can be tied to a PLC, HMI, light, etc. to easily identify the open access point.



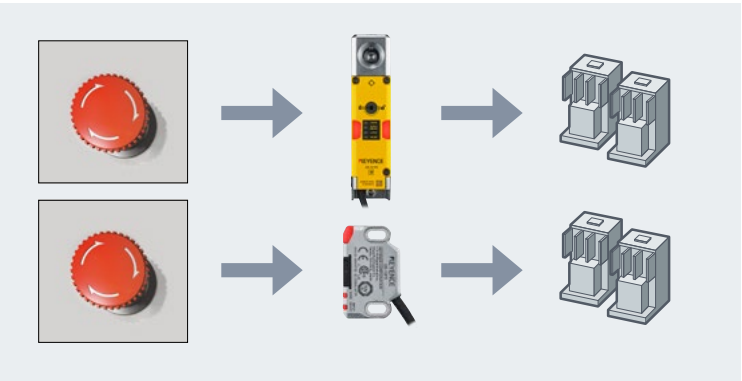
No Additional Relay Necessary

The GS Series enables all-in-one safety wiring by utilizing two OSSD safety outputs along with EDM and manual reset built into specific models. This eliminates the need for a dedicated safety interlock relay or control box, as these GS models can be wired directly to a safety circuit.



E-Stop Compatible

Reduce wiring even further by integrating E-Stops into your safety interlock system. Specific GS models offer safety inputs that can be used to place E-Stops directly in series with the safety interlocks. This helps to further reduce wiring while maintaining safety.



ADDITIONAL FEATURES

Dedicated Handle

Locking Type Only

The GS-Series offers a dedicated handle for the locking type safety interlocks. This sturdy two-action handle is great for new builds or machine redesigns, and provides a complete solution for access point entry and locking.

The rugged design prevent tampering

Simply squeeze and slide to open

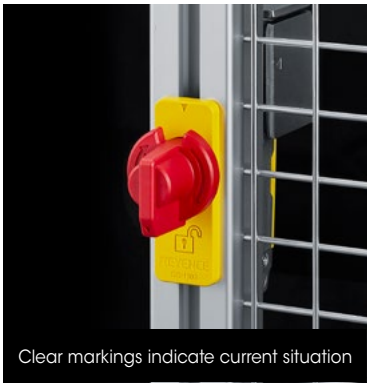
Escape Release

Locking Type Only

In the event that an operator finds themselves stuck inside of a hazardous area, the escape release can be used to effortlessly open a locked access point and disable power to the hazardous machinery.

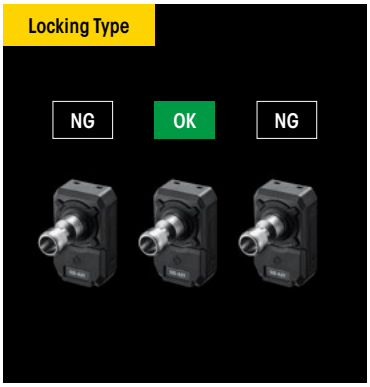
* M12 Connector type only

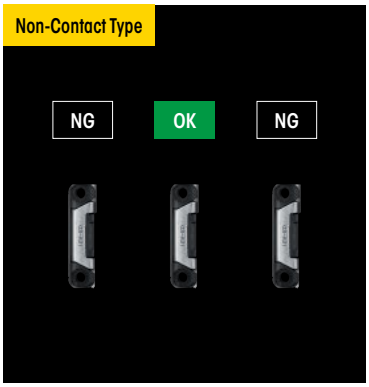

Highly visible and intuitive design


Clear markings indicate current situation

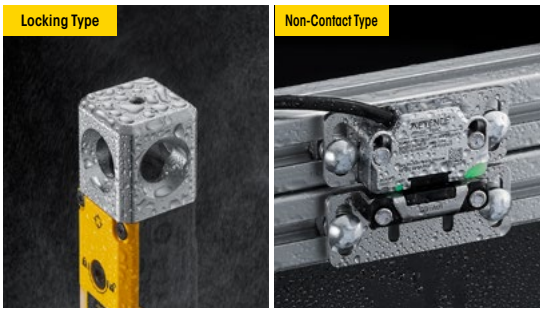
Flexible Unit Coding

The GS Series offers two levels of actuator coding. On LOW, the unit will recognize any GS actuator that it encounters. On HIGH, the unit can be set to only recognize one specific actuator to prevent tampering or confusion.





Superior Environmental Resistance



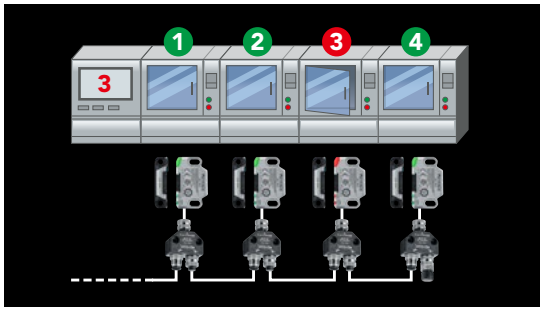
All models meet IP65/67/69K and NEMA 3, 4X, 12, & 13 ratings for superior environmental resistance.

Achieve PLe Level of Safety

Each GS Series unit conforms to the highest level of safety standards to ensure proper machine safety.

Simplified Connections

Non-Contact Type Only



Make cascading even easier with the use of Y-shaped connectors and standard M12 cables.

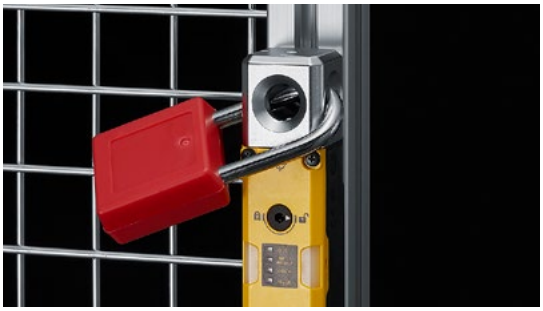
2000N Holding Force

Locking Type Only

The 2000N holding force of the locking type ensures workers cannot force their way into locked areas.

Lock-Out / Tag-Out Ready

Locking Type Only



The metal head is designed to enable easy lock-out/ tag-out to maintain safety during maintenance periods.

Auxiliary (Manual) Release

Locking Type Only

All locking type units feature a manual release to allow access and shut down the machine when necessary.

Selecting a Safety Interlock Switch

STEP 1 Select the appropriate style

1 2 3 4

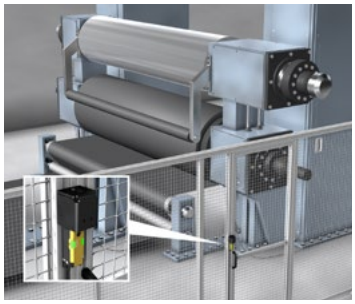
A lock is necessary (Locking Type)

Power-to-Release

Key Features

- Signals required to release locking mechanism
- Remains locked if unit power is lost
- Ideal for high inertia machines that can remain hazardous after power is lost or removed.

Properly guard machines with long stop times.



Power-to-Lock

Key Features

- Signals required to engage locking mechanism
- Lock is disengaged if unit power is lost
- Ideal for machines that stop being hazardous once power is lost or removed.

Guard machines that stop immediately upon loss of power.

A lock is not necessary (Non-Contact Type)

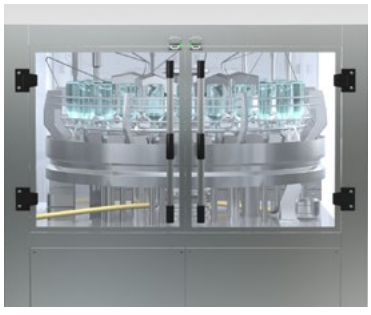
Non-Contact Type

Key Features

- Easily identify door open status
- Contamination resistant design
- Ideal for doors or gates that will remain closed without a locking mechanism
- Also useful for confirming origin position of moving machinery

Door Switch:

Monitor door status without concern for build-up or damage.



Origin Sensor:

Ensure moving components are located in the correct home positions.

STEP 2

Select the appropriate model

1 2 3 4

	Locking type (Power-to-release type) GS-50 Series	Locking type (Power-to-lock type) GS-70 Series	Non-contact type GS-10 Series
			

Choose the type according to the necessary functions

		Power-to-release		Power-to-lock		Non-contact type		
		Standard type	High performance type	Standard type	High performance type	Simple function type	Standard type	High performance type
OSSDs	Redundant safety outputs	✓	✓	✓	✓	✓	✓	✓
Switching OSSDs	(Locking Type) OSSDs can be linked to Open/Close status	—	—	—	✓	—	—	—
AUX output(s)	Additional output(s) to monitor status	1	2	1	2*1	1	1	1
Cascade	Connect multiple units in series	✓	✓	✓	✓	—	✓	✓
Y-shaped connector	Easy to use connector for cascading	—	—	—	—	—	✓*2	—
Interlock	Enable manual reset through unit	—	✓	—	✓	—	—	✓
EDM	Monitor external devices for faults	—	✓	—	✓	—	—	✓
Switching encoding level	Control actuator pairing	✓	✓	✓	✓	✓	✓	✓
Lock control input(s)	Number of locking signals required	1	2	1	1	—	—	—
Manual release	Disengage lock through face of unit	✓	✓	✓	✓	—	—	—
Escape release compatible*3	Disengage lock from inside hazardous area	✓*2	✓	✓*2	✓	—	—	—
Handle compatible*4	Integrate with two-action handle	✓	✓	✓	✓	—	—	—

Select a unit based on cable and output preferences

		Power-to-release		Power-to-lock		Non-contact type		
		Standard type	High performance type	Standard type	High performance type	Simple function type	Standard type	High performance type
Standard cable (5 m 16.40')	PNP	GS-51P5	—	GS-71P5	—	—	GS-11P5	GS-13P5
	NPN	GS-51N5	—	GS-71N5	—	—	GS-11N5	—
Standard cable (10 m 32.81')	PNP	GS-51P10	—	GS-71P10	—	—	GS-11P10	—
	NPN	GS-51N10	—	GS-71N10	—	—	GS-11N10	—
M12 connector type	PNP	GS-51PC	GS-53PC	GS-71PC	GS-73PC	GS-10PC	GS-11PC	GS-13PC
	NPN	—	—	—	—	—	—	—

*1 If you choose open/close link mode for OSSD operation, number of AUX outputs is one. *2 Compatible with M12 connector type only
*3 Compatible with KEYENCE optional escape release (GS-H02) *4 Compatible with KEYENCE optional handle (GS-H01)

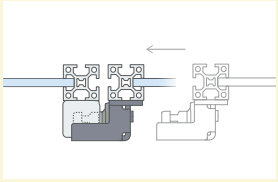
STEP 3

Select the appropriate brackets

1 2 3 4

Sliding door

Locking type



For main unit

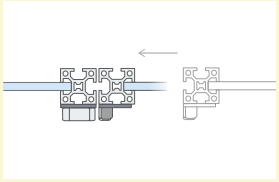
No bracket

For actuator

Mounting bracket for sliding door (right side slides)

GS-B33*

Non-contact type



For main unit

Flat mounting bracket

GS-B11

For actuator

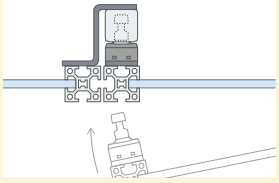
Flat mounting bracket

GS-B11

*Mounting bracket for sliding door (left side slides) GS-B43 is also available.

Hinged door (attachment on the inside)

Locking type

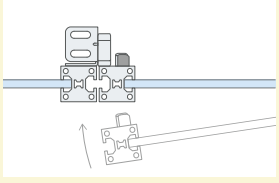


For main unit & actuator

Mounting bracket (attachment on the inside)

GS-B21

Non-contact type



For main unit

L-shaped mounting bracket

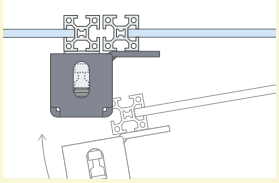
GS-B01

For actuator

No bracket

Hinged door (attachment on the front side)

Locking type



For main unit

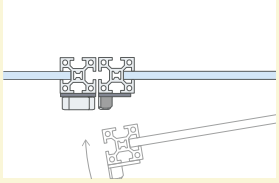
No bracket

For actuator

Hinged door mounting bracket (right-open)

GS-B31*

Non-contact type



For main unit

Flat mounting bracket

GS-B11

For actuator

Flat mounting bracket

GS-B11

*Hinged door mounting bracket (left-open) GS-B41 is also available.

STEP 4

Select additional components

1 2 3 4

Cables for M12 connector type models

	Type	Length	Model	Weight
Standard 	Simple function type (5-pin)	5 m 16.40'	**GS-P5C5**	Approx. 200 g
		10 m 32.81'	**GS-P5C10**	Approx. 390 g
	Standard type (8-pin)	5 m 16.40'	**GS-P8C5**	Approx. 230 g
		10 m 32.81'	**GS-P8C10**	Approx. 420 g
	High performance type (12-pin)	5 m 16.40'	**GS-P12C5**	Approx. 250 g
		10 m 32.81'	**GS-P12C10**	Approx. 480 g
		20 m 65.62'	**GS-P12C20**	Approx. 950 g
For extension 	Simple function type (5-pin)	5 m 16.40'	**GS-P5CC5**	Approx. 310 g
		10 m 32.81'	**GS-P5CC10**	Approx. 580 g
	Standard type (8-pin)	1 m 3.28'	**GS-P8CC1**	Approx. 70 g
		5 m 16.40'	**GS-P8CC5**	Approx. 240 g
		10 m 32.81'	**GS-P8CC10**	Approx. 450 g

Locking type accessories

Replacement Actuator
GS-A21
Approx. 60 g

Dedicated Handle
GS-H01
Approx. 1070 g

Escape Release
GS-H02
Approx. 90 g

Non-contact type accessories

Replacement Actuator
GS-A01
Approx. 15 g

Y-Shaped Connector
GS-Y01
Approx. 50 g

End Terminal for Y-Shaped Connector
GS-Y02
Approx. 15 g

Locking Type

Model			GS-51P5	GS-51N5	GS-51P10	GS-51N10	GS-51PC	GS-53PC	GS-71P5	GS-71N5	GS-71P10	GS-71N10	GS-71PC	GS-73PC
Lock type			Power-to-release type						Power-to-lock type					
Type			Standard type					Advanced function type	Standard type					Advanced function type
Output type			PNP	NPN	PNP	NPN	PNP	PNP	PNP	NPN	PNP	NPN	PNP	PNP
Response time (ms)*1*2	Lock	Lock→Unlock	220 ms						320 ms					
		Unlock→Lock	220 ms*3											
Lock	Locking force (Fzh)		Min. 2,000 N											
	Alignment tolerance of lock		±2 mm ±0.08"											
	Mechanical life-span		1 million cycles or more (with door operation speed of 1 m/s)											
	Acceptable operation frequency*4		1 Hz											
	Door radius		Min. 250 mm 9.84"											
	Auxiliary release*5		Front, back											
Cascading			Max. 25 units											
Control output (OSSD output)	Output		Transistor outputs × 2											
	Max. load current		PNP: Max. 150 mA, NPN: Max. 100 mA											
	Residual voltage (during ON)		Max 2.5 V (with a cable length of 5 m 16.40')											
	OFF state voltage		Max 2.0 V (with a cable length of 5 m 16.40')											
	Leakage current		Max. 0.5 mA											
	Max. capacitive load		2.2 µF											
	Load wiring resistance		Max. 2.5 Ω											
AUX (Non-safety related output)	Output		Transistor output											
	Number of outputs		1					2	1					2*6
	Max. load current		50 mA											
	Residual voltage (during ON)		Max 2.5 V (with a cable length of 5 m 16.40')											
External input (Short-circuit current)	Safety input		Approx.1.5 mA × 2											
	Reset/EDM input		—					Approx. 10 mA × 1	—					Approx. 10 mA × 1
	Lock control input		Approx. 2.5 mA × 1					Approx. 2.5 mA × 2	Approx. 2.5 mA × 1					
	OSSD operation switching input		—											Approx. 2.5 mA × 2 *7
Power supply	Power voltage		24 V DC ±20 % (Ripple P-P 10 % or less, Class2)											
	Power consumption		3.4 W *8											
Protection circuit			Reverse current protection, short-circuit protection and surge protection for each output											
Environmental resistance	Enclosure rating		IP65/67(IEC60529), IP69K(ISO 20653) (TÜV SÜD certified), Enclosure Type 3/4X/12/13 (NEMA250)											
	Operating ambient temperature		-20°C to +55C° -4°F to 131°F (No freezing)											
	Storage temperature		-25°C to +70°C -13°F to 158°F (No freezing) *9											
	Operating relative humidity		5% to 95%RH											
	Storage relative humidity		5% to 95%RH											
	Vibration resistance		10 to 55 Hz, Double amplitude 2.0 mm 0.08", 5 minutes in each of the X, Y, and Z directions (IEC 60947-5-3)											
	Shock resistance		30 G in X, Y, Z directions 6 times each axis (IEC 60947-5-3)											
Applicable Standards (Safety)			EN 61508, IEC 61508(SIL2/SIL3) EN 62061, IEC62061(SIL CL2/SIL CL3) EN ISO13849-1: 2015(PLd, Category 2/PLe, Category 4) EN ISO14119(Type4) IEC 60947-5-3, EN 60947-5-3 UL 61010-1, CAN/CSA-C22.2 No.61010-1											
Material	Main unit	Case	SUS304, PPS, PBT, PAR, PA66, NBR											
		Lock	Aluminum alloy, Zinc die cast (Nickel chrome plating)											
		Cable	PVC											
	Actuator	Case	PPS, PBT, NBR											
		Lock	Aluminum alloy, SUS303											
Weight			Approx. 560 g		Approx. 770 g		Approx. 380 g		Approx. 560 g		Approx. 770 g		Approx. 380 g	

*1 Risk time according to IEC60947-5-3 is 150 ms + 2 ms × (number of units cascaded -1).
*2 If the OSSD operation is open/close link mode, Detect → Not detect: 20 ms + 2 ms × (number of units cascaded -1), Not detect → Detect: 30 ms + 25 ms × (number of units cascaded -1)
*3 430 ms when locked at the same time the actuator is detected.
*4 Acceptable door operation frequency is 3 Hz if the OSSD operation is open/close link mode. In that case, operation distance is Sao(OFF → ON) = 3 mm 0.12", Sar(OFF → ON) = 10.5 mm 0.41".
*5 Do not apply excessive torque (0.45N·m or higher).
*6 The number of AUX outputs is 1 when the OSSD operation is open/close link mode.
*7 The number of OSSD operation switching inputs is 1 when the OSSD operation is lock link mode.
*8 Power consumption temporarily increases (Max. 10.5 W, Approx. 0.2 s) when the lock control input(s) is(are) turned ON. After that, current consumption will be within the specification.
*9 When stored for a long period of time, please store it at a temperature of 55°C 131°F or lower.

Mounting brackets

Model	GS-B21	GS-B31	GS-B41	GS-B33	GS-B43
Type	Mounting bracket (attachment on the inside)	Hinged door mounting bracket (right-open)	Hinged door mounting bracket (left-open)	Mounting bracket for sliding door (right side slides)	Mounting bracket for sliding door (left side slides)
Weight	Approx. 590 g	Approx. 380 g	Approx. 380 g	Approx. 260 g	Approx. 260 g

Non-Contact Type

Model			GS-10PC	GS-11P5	GS-11N5	GS-11P10	GS-11N10	GS-11PC	GS-13P5	GS-13PC
Type			Simple function type	Standard type					Advanced function type	
Output type			PNP	PNP	NPN	PNP	NPN	PNP	PNP	PNP
Operating distance	Front	Sao(OFF→ON)	10 mm 0.39"							
		Sar(ON→OFF)	18 mm 0.71"							
	Side	Sao(OFF→ON)	6 mm 0.24"							
		Sar(ON→OFF)	14 mm 0.55"							
Response time (ms)*1	Detection	Detect →Not detect	20 ms + 2 ms × (number of units cascaded -1)							
		Not detect →Detect	30 ms + 25 ms × (number of units cascaded -1)							
Door operation	Acceptable operation frequency		3 Hz							
Cascading	Standard		—	Max. 30 units						
	Using Y-shaped connector		—					Max. 4 units*2	—	
Control output (OSSD output)	Output		Transistor outputs × 2							
	Max. load current		PNP: Max. 150 mA, NPN: Max. 100 mA							
	Residual voltage (during ON)		Max 2.5 V (with a cable length of 5 m 16.40')							
	OFF state voltage		Max 2.0 V (with a cable length of 5 m 16.40')							
	Leakage current		Max. 500 µA							
	Max. capacitive load		2.2 µF							
	Load wiring resistance		Max.2.5Ω							
AUX (Non-safety related output)	Output		Transistor output							
	Number of outputs		1							
	Max. load current		50 mA							
	Residual voltage (during ON)		Max 2.5 V (with a cable length of 5 m 16.40')							
External input (Short-circuit current)	Safety input		—	Approx. 1.5 mA × 2						
	Reset/EDM input		—						Approx. 5.0 mA × 1	
Power supply	Power voltage		24 V DC ±20 % (Ripple P-P 10 % or less, Class2)							
	Power consumption		0.8 W							
Protection circuit			Reverse current protection, short-circuit protection and surge protection for each output							
Environmental resistance	Enclosure rating		IP65/67(IEC60529), IP69K(ISO20653) (TÜV SÜD certified) Enclosure Type 3/4X/12/13 (NEMA250)							
	Operating ambient temperature		-20°C to +55°C -4°F to 131°F (No freezing)							
	Storage temperature		-25°C to +70°C -13°F to 158°F (No freezing) *3							
	Operating relative humidity		5% to 95%RH							
	Storage relative humidity		5% to 95%RH							
	Vibration resistance		10 to 55 Hz, Double amplitude 3.0 mm 0.12", 5 minutes in each of the X, Y, and Z directions (IEC 60947-5-3)							
	Shock resistance		30 G in X, Y, Z directions 6 times each axis (IEC 60947-5-3)							
Applicable Standards (Safety)			EN 61508, IEC 61508 (SIL3) EN 6206, IEC62061 (SIL CL3) EN ISO13849-1: 2015 (PLe, Category 4) EN ISO14119 (Type4) IEC 60947-5-3, EN 60947-5-3 UL 61010-1, CAN/CSA-C22.2 No.61010-1							
Material	Sensor main unit	Case	Zinc die cast (Nickel chrome plating), PBT, PAR							
		Cable	PVC							
	Actuator	Case	SUS430, SUS304, PBT							
Weight			Approx. 80 g	Approx. 270 g		Approx. 480 g		Approx. 80 g	Approx. 280 g	Approx. 80 g

*1 Risk time according to IEC60947-5-3 is 150 ms + 2 ms × (number of units cascaded -1).
*2 When AUX outputs of each unit are not used, it is possible to cascade up to 10 units.
*3 When stored for a long period of time, please store it at a temperature of 55°C 131°F or lower.

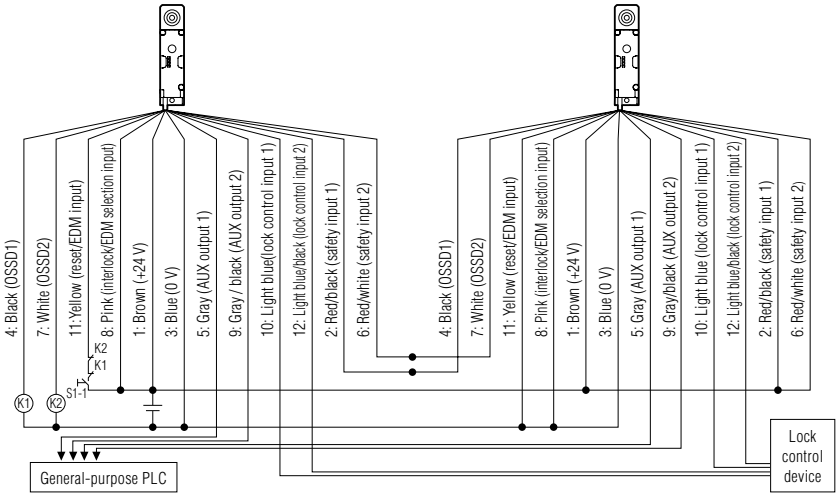
Mounting brackets

Model	GS-B01	GS-B11
Type	L-shaped mounting bracket	Flat mounting bracket
Weight	Approx. 80 g	Approx. 60 g

Explanatory notes				
S1-1	Reset switch (NO)		Safety PLC	Control systems related to safety.
K1, K2	External device (force guided relay, magnetic connector, etc.)		General-purpose PLC	Used for monitoring, not for controlling systems related to safety.

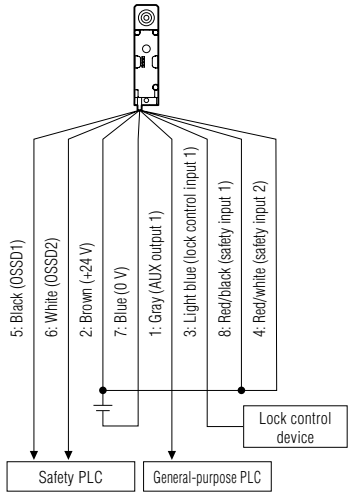
Locking type (Power-to-release) GS-50 Series Examples

Cascade Example: 1st Unit
GS-53PC
PNP output
Advanced function type
Power-to-release type
Interlock : Manual
EDM : Used
Cascade connection : Yes



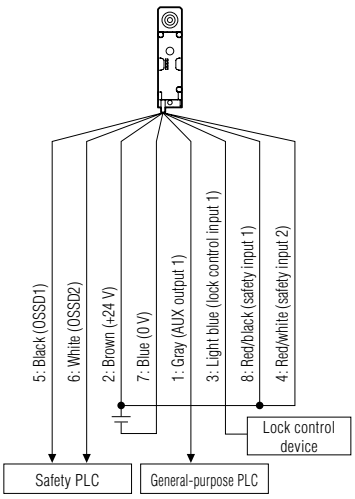
Cascade Example: 2nd Unit
GS-53PC
PNP output
Advanced function type
Power-to-release type
Interlock : Automatic
EDM : Not used
Cascade connection : No

Single Unit Example
GS-51P5
PNP output
Standard type
Power-to-release type
Cascade connection: No

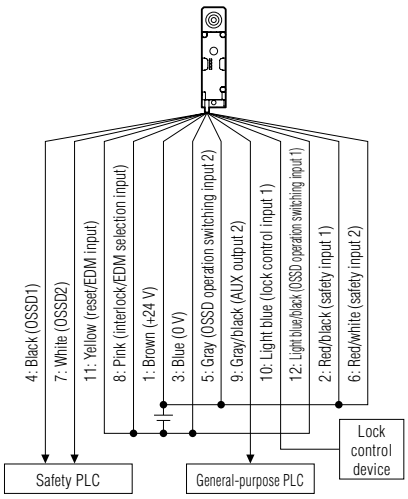


Locking type (Power-to-lock) GS-70 Series Examples

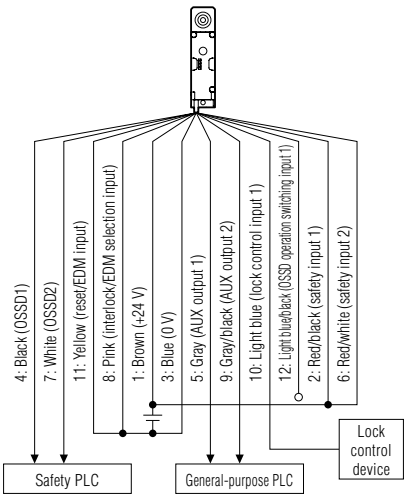
Single Unit Example
GS-71P5
PNP output
Standard type
Power-to-lock type
Cascade connection: No



Single Unit Example
GS-73PC
PNP output
Advanced function type
Power-to-lock type
Interlock: Automatic
EDM: Not used
Cascade connection: No
OSSD operation: Open/close link



Single Unit Example
GS-73PC
PNP output
Advanced function type
Power-to-lock type
Interlock: Automatic
EDM: Not used
Cascade connection: No
OSSD operation: Lock link



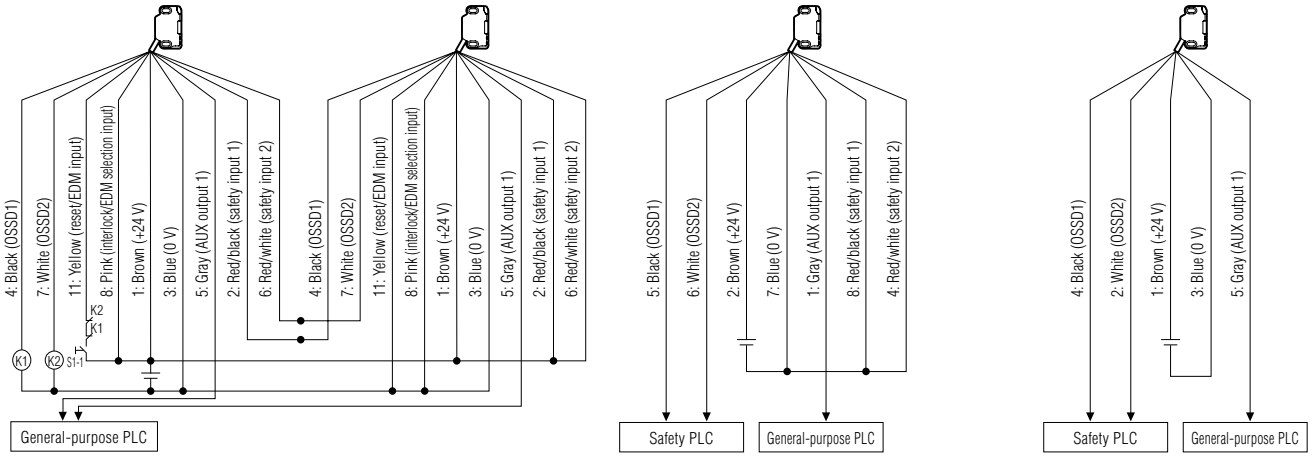
Non-contact type GS-10 Series Examples

Cascade Example: 1st Unit
GS-13PC
PNP output
Advanced function type
Interlock : Manual
EDM : Used
Cascade connection : Yes

Cascade Example: 2nd Unit
GS-13PC
PNP output
Advanced function type
Interlock : Automatic
EDM : Not used
Cascade connection : No

Single Unit Example
GS-11N5
NPN output
Standard type
Interlock : Automatic
EDM : Not used
Cascade connection : No

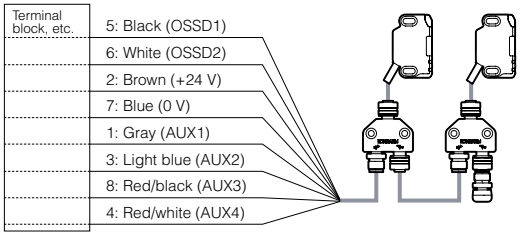
Single Unit Example
GS-10PC
PNP output
Simple function type



Tip Make wiring easier by using the Y-shaped connectors for double door setups.

For a double door system, generally the system stops when one of the doors opens.
By using the Y-shaped connectors, this process can be made very easy using simple M12 cables. This also provide the additional AUX outputs to identify which door is open (for up to 4 doors).

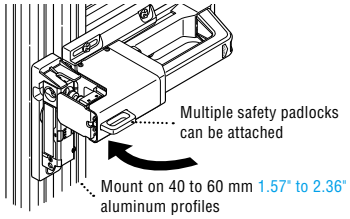
Configuration		
Non-contact type, standard type M12 connector type	**GS-11PC**	×2
Y-shape connector	**GS-Y01**	×2
End connector	**GS-Y02**	×1
M12 connector cable Standard 5 m 16.40'	**GS-P8C5**	×1
M12 connector cable for extension 1 m 3.28'	**GS-P8CC1**	×1



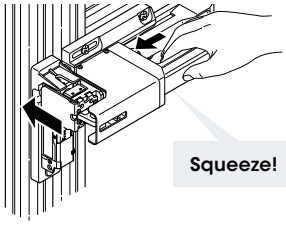
Tip Two-action handle ensures a high level of safety.

Unlike ordinary handles, the GS-H01 is a two-action handle. Even if the door is unintentionally or accidentally closed, the machine will not automatically start. This is because it is necessary to squeeze and slide the handle into place once the door is closed to restart machine operation.

[**1**] Lock is not engaged by just closing the door

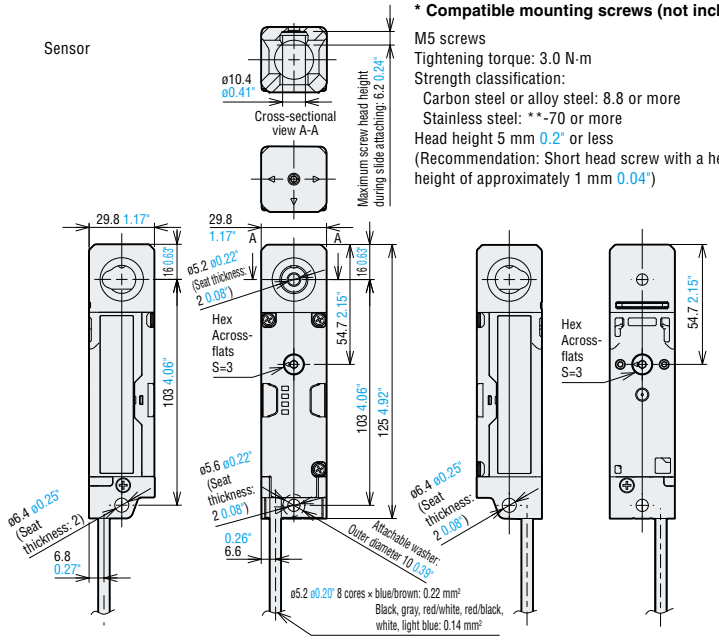


[**2**] Lock is engaged after handle is squeezed and slid



GS-50/70 Series

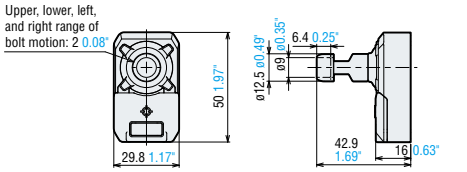
Sensor



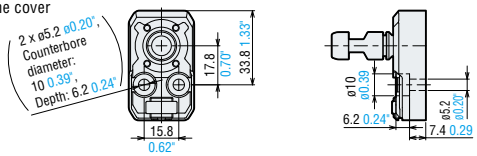
*** Compatible mounting screws (not included)**

M5 screws
Tightening torque: 3.0 N·m
Strength classification:
Carbon steel or alloy steel: 8.8 or more
Stainless steel: **-70 or more
Head height 5 mm 0.2" or less
(Recommendation: Short head screw with a head height of approximately 1 mm 0.04")

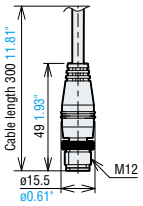
Actuator



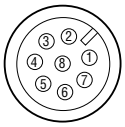
Without the cover



M12 Connector type
GS-51PC/53PC/71PC/73PC

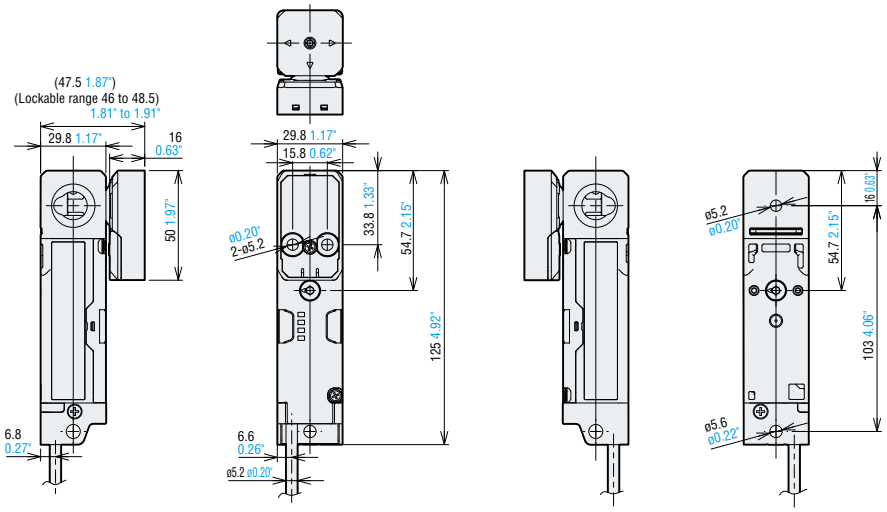


Standard type
(M12 8 pin male)

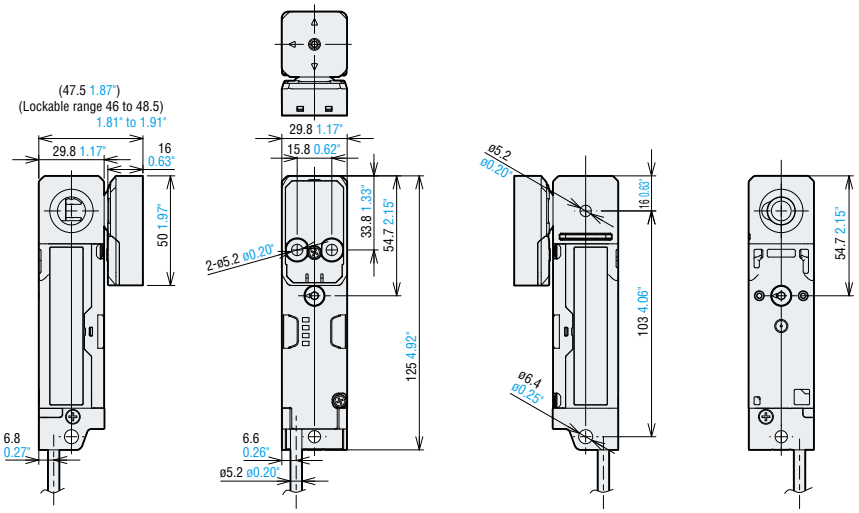


Advanced function type
(M12 12 pin male)

Sensor + Actuator
(Installed facing front)



Sensor + Actuator
(Installed facing right)

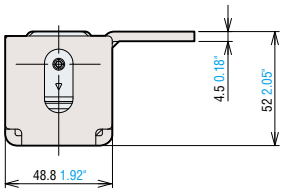


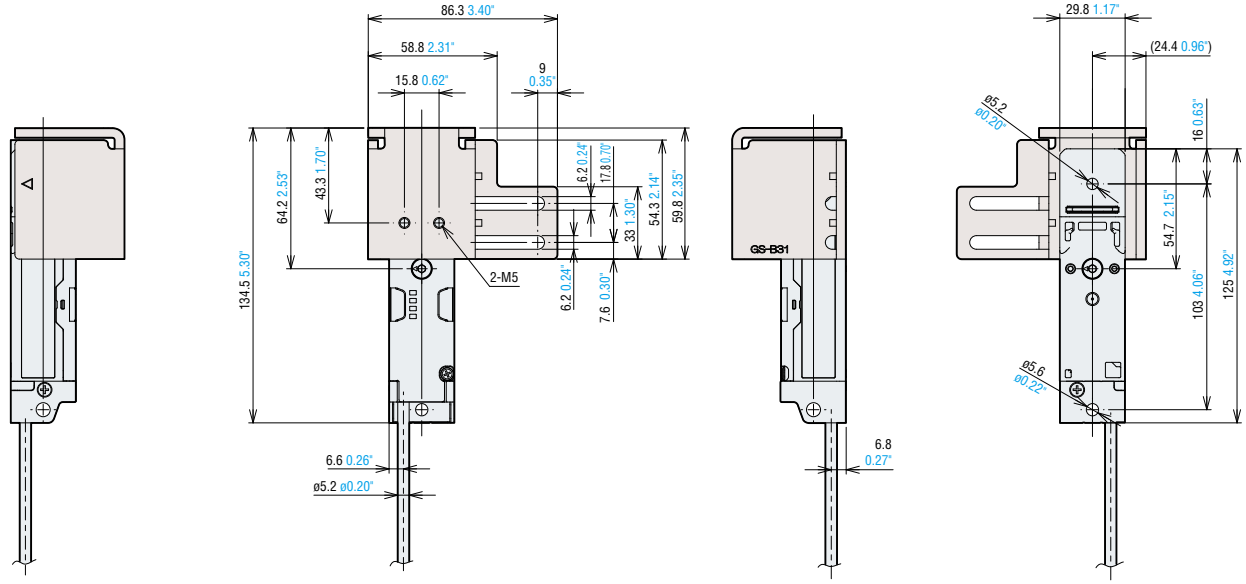
Unit: mm inch

GS-50/70 Series + GS-B31

Sensor + Actuator + Bracket
(Installed facing front,
installed outside of door)

Accessories: M5 hexagon socket head cap screw
for attaching the actuator × 2

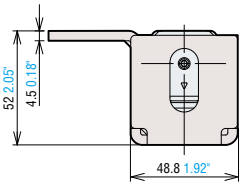


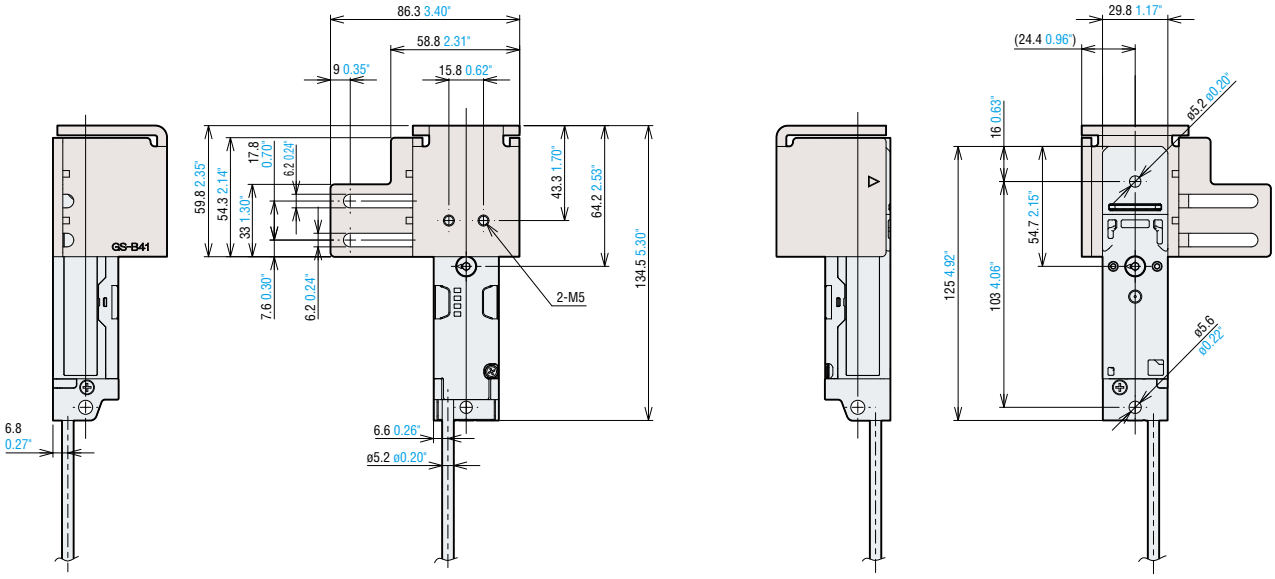


GS-50/70 Series + GS-B41

Sensor + Actuator + Bracket
(Installed facing front,
installed outside of door)

Accessories: M5 hexagon socket head
cap screw for attaching the actuator × 2

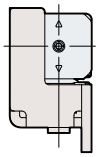


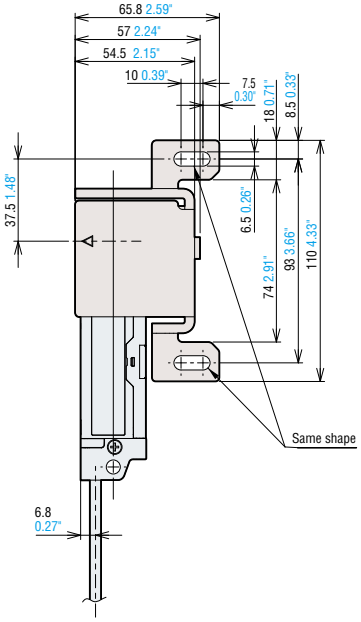


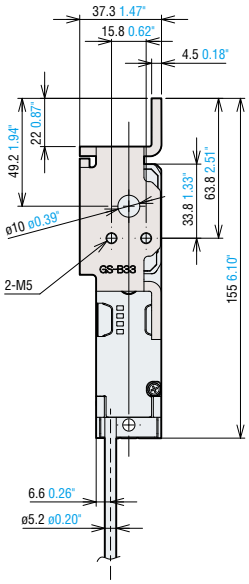
GS-50/70 Series + GS-B33

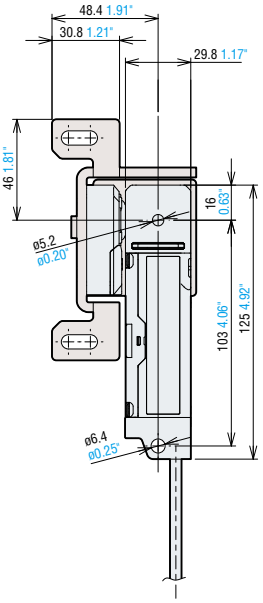
Sensor + Actuator + Bracket
(Installed facing left, installed outside of door)

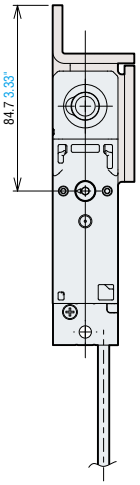
Accessories: M5 hexagon socket head cap screw for attaching the actuator × 2







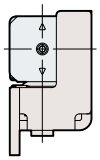


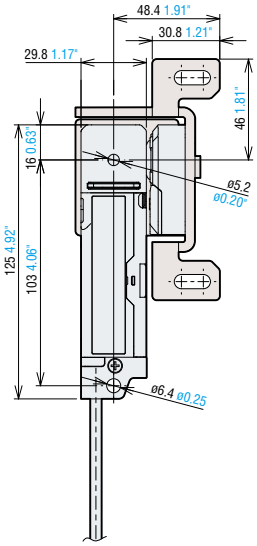


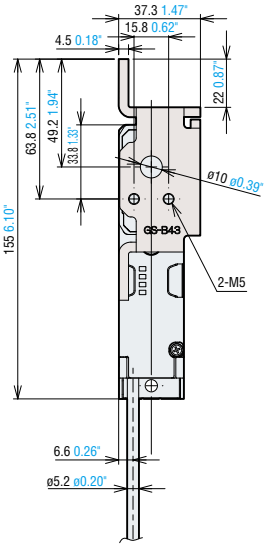
GS-50/70 Series + GS-B43

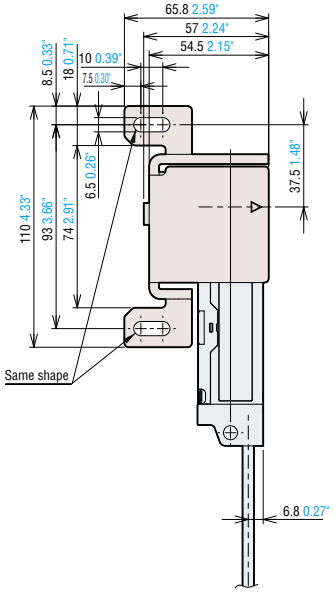
Sensor + Actuator + Bracket
(Installed facing left, installed outside of door)

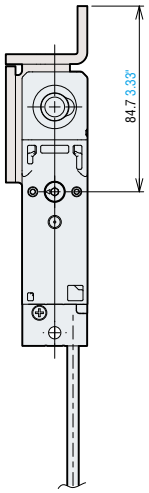
Accessories: M5 hexagon socket head cap screw for attaching the actuator × 2









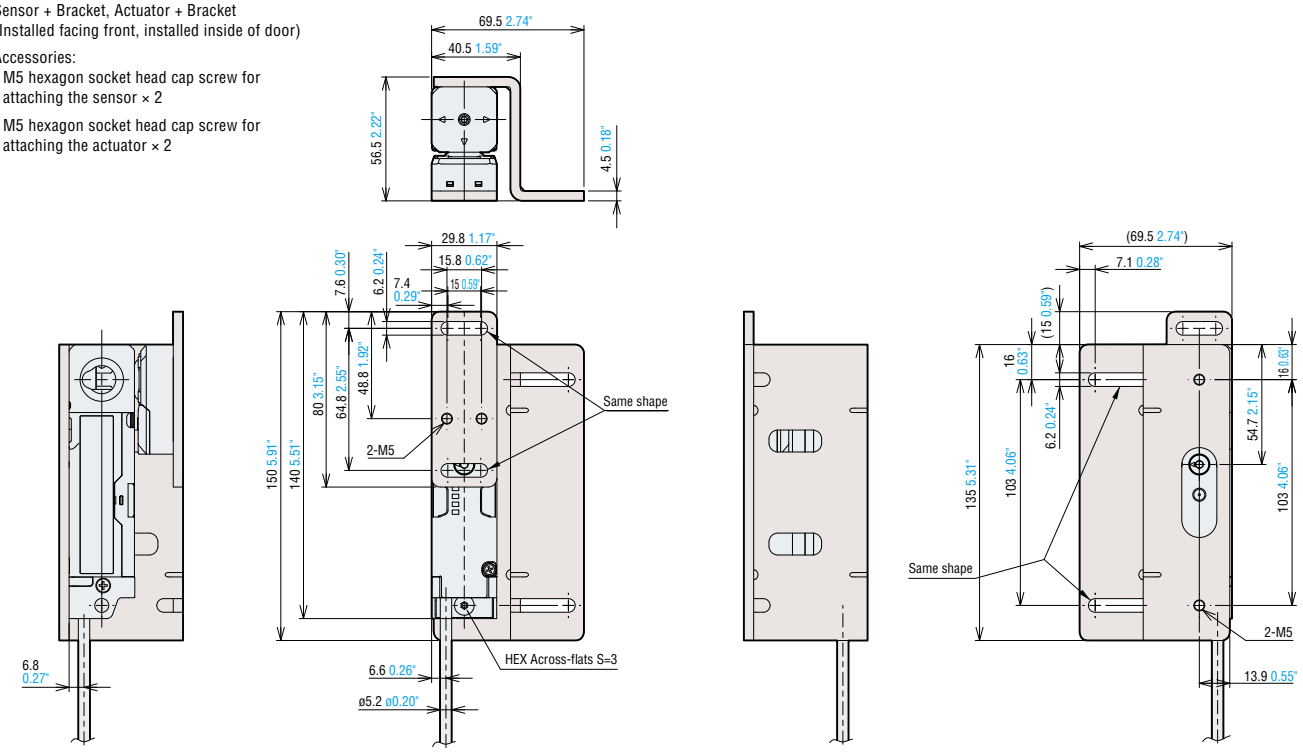


Unit: mm inch

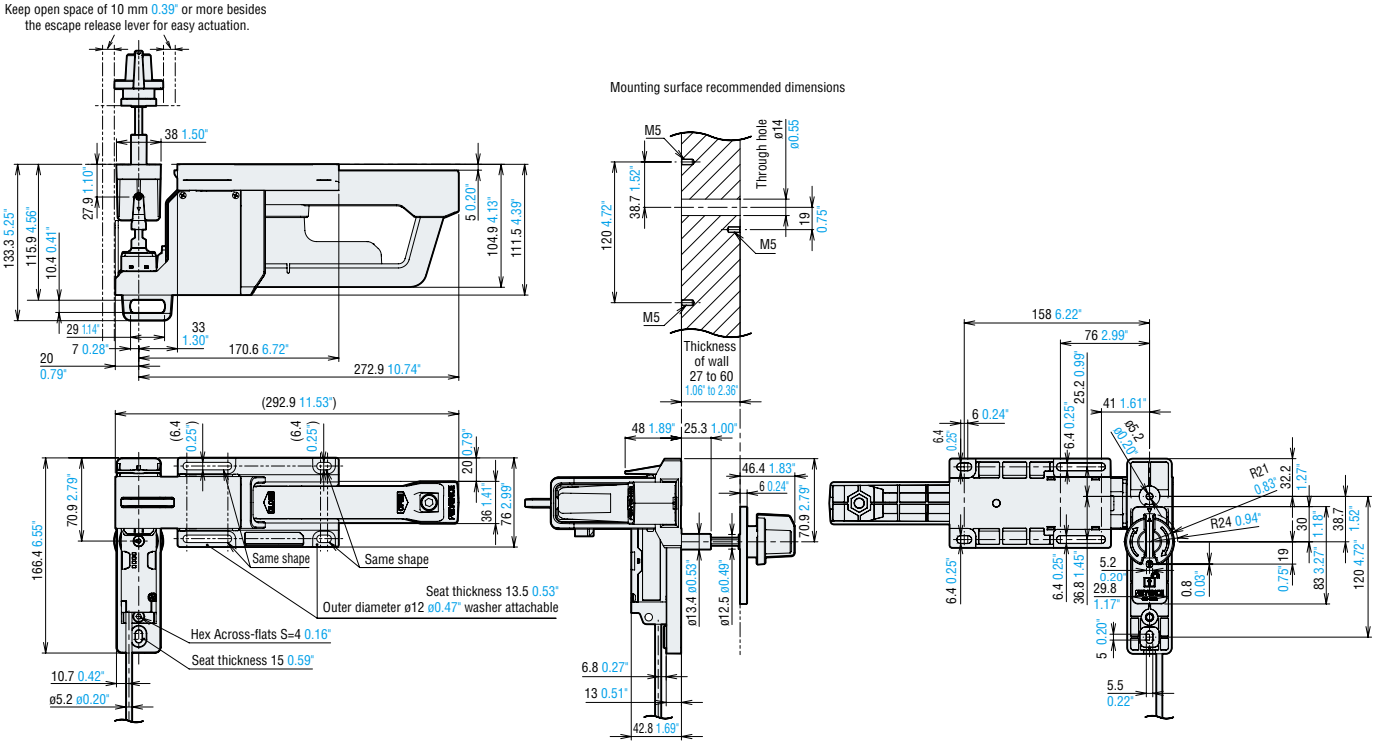
GS-50/70 Series + GS-B21

Sensor + Bracket, Actuator + Bracket
(Installed facing front, installed inside of door)

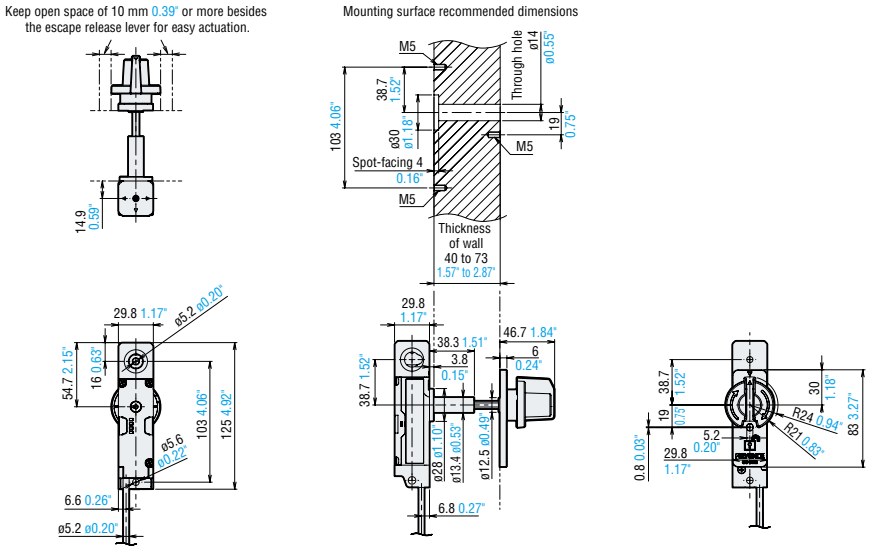
Accessories:
- M5 hexagon socket head cap screw for attaching the sensor × 2
- M5 hexagon socket head cap screw for attaching the actuator × 2



GS-50/70 Series + GS-H01 + GS-H02

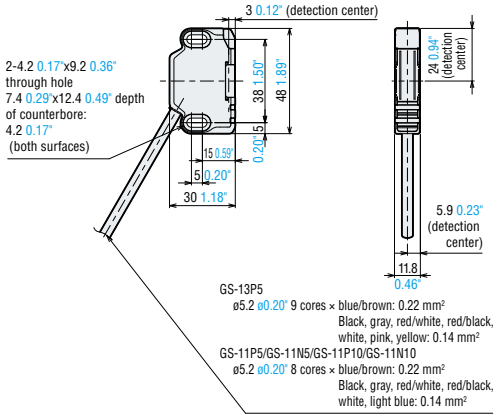


GS-50/70 Series + GS-H02

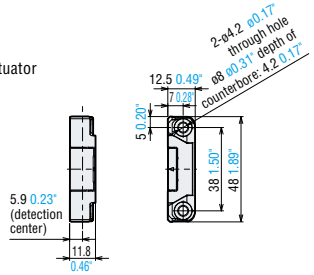


GS-10 Series

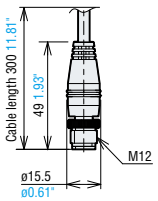
Sensor



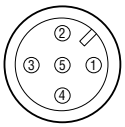
Actuator



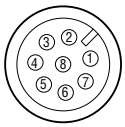
M12 Connector type
GS-10PC/11PC/13PC



Simple function type (M12 5 pin male)

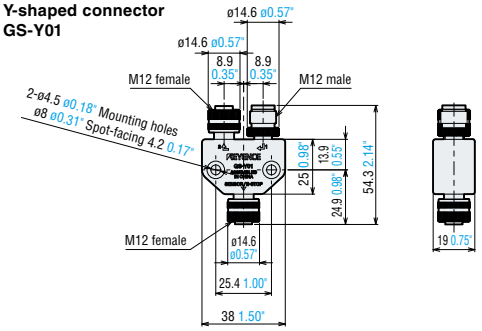


Standard type (M12 8 pin male)

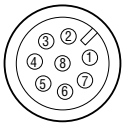


Advanced function type (M12 12 pin male)

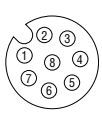
Y-shaped connector
GS-Y01



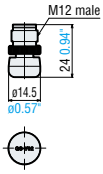
M12 8 pin male



M12 8 pin female



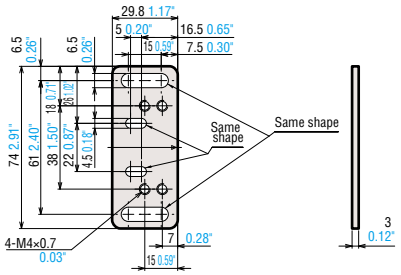
End terminal for Y-shaped connector
GS-Y02



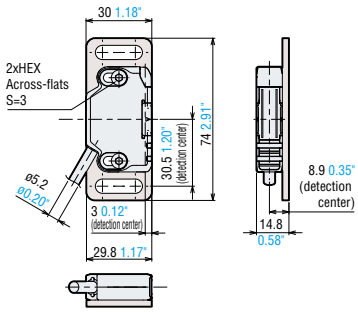
Unit: mm inch

GS-10 Series + GS-B11 Accessories: M4 hexagon socket head cap screw × 2

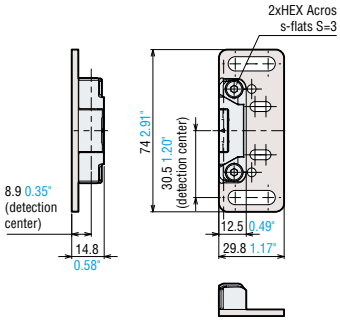
Bracket



Bracket + Sensor

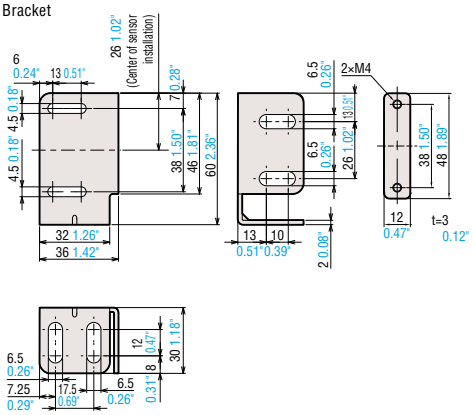


Bracket + Actuator

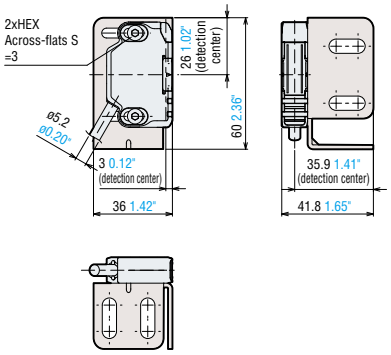


GS-10 Series + GS-B01 Accessories: M4 hexagon socket head cap screw × 2

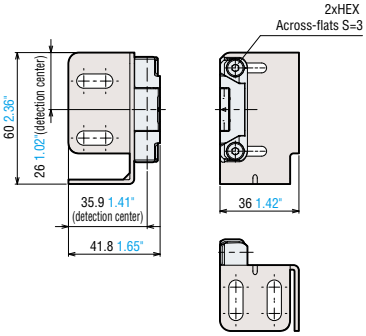
Bracket



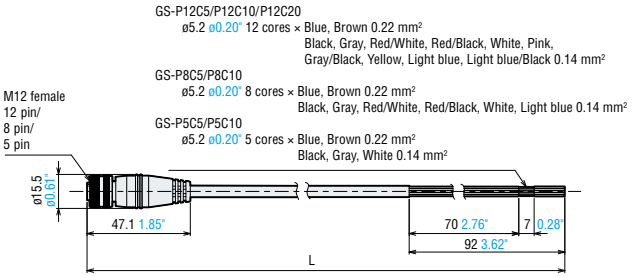
Bracket + Sensor



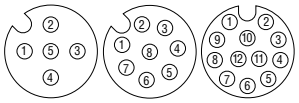
Bracket + Actuator



Standard cable

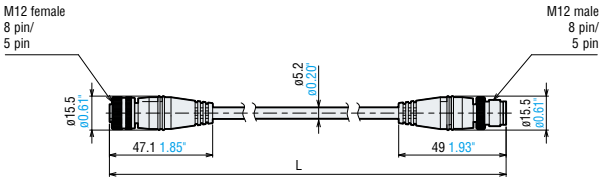


Models	L(mm inch)
GS-P5C5	5000 196.85"
GS-P5C10	10000 393.70"
GS-P8C5	5000 196.85"
GS-P8C10	10000 393.70"
GS-P12C5	5000 196.85"
GS-P12C10	10000 393.70"
GS-P12C20	20000 787.40"



Number	Color		
	5 pin	8 pin	12 pin
①	Brown	Gray	Brown
②	White	Brown	Red/Black
③	Blue	Light blue	Blue
④	Black	Red/White	Black
⑤	Gray	Black	Gray
⑥	–	White	Red/White
⑦	–	Blue	White
⑧	–	Red/Black	Pink
⑨	–	–	Gray/Black
⑩	–	–	Light blue
⑪	–	–	Yellow
⑫	–	–	Light blue/Black

Extension cable

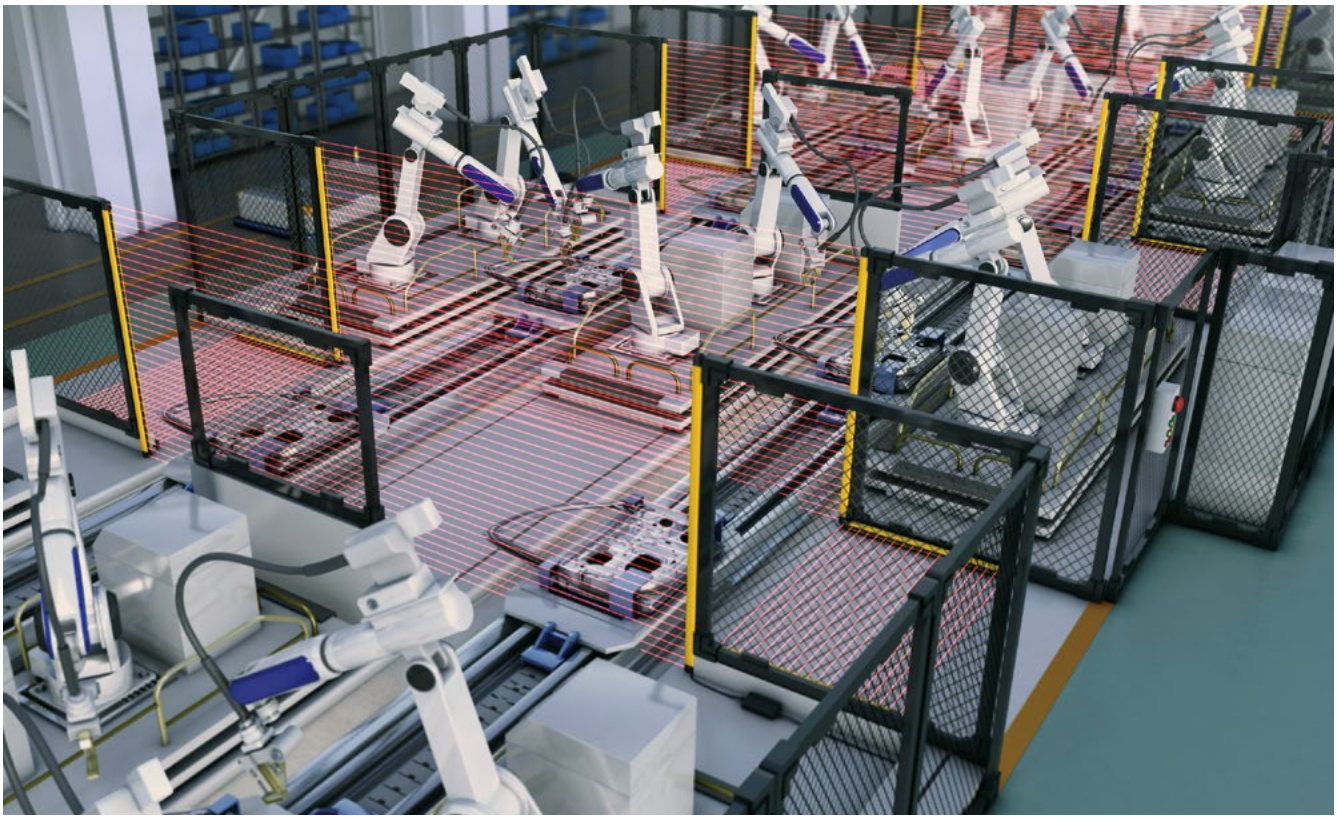


Models	L(mm inch)
GS-P5CC5	5000 196.85"
GS-P5CC10	10000 393.70"
GS-P8CC1	1000 39.37"
GS-P8CC5	5000 196.85"
GS-P8CC10	10000 393.70"

CAD DATA DOWNLOAD
www.keyence.com/CADG

GL-R SERIES

Global Standard for Light Curtains



Robust Housing

The GL-R Series features a recessed lens, extruded aluminum housing, and high enclosure ratings to ensure lasting operation in any environment.

High Powered

Whether detecting over a long range or in an area with high debris and build-up, the GL-R Series provides high power to maintain stable detection and eliminate nuisance trips.

Easy to Align

Alignment has never been easier! The GL-R Series offers built-in indicators for easy visual alignment, as well as an optional laser alignment tool for more difficult setups.

STANDARD TYPE

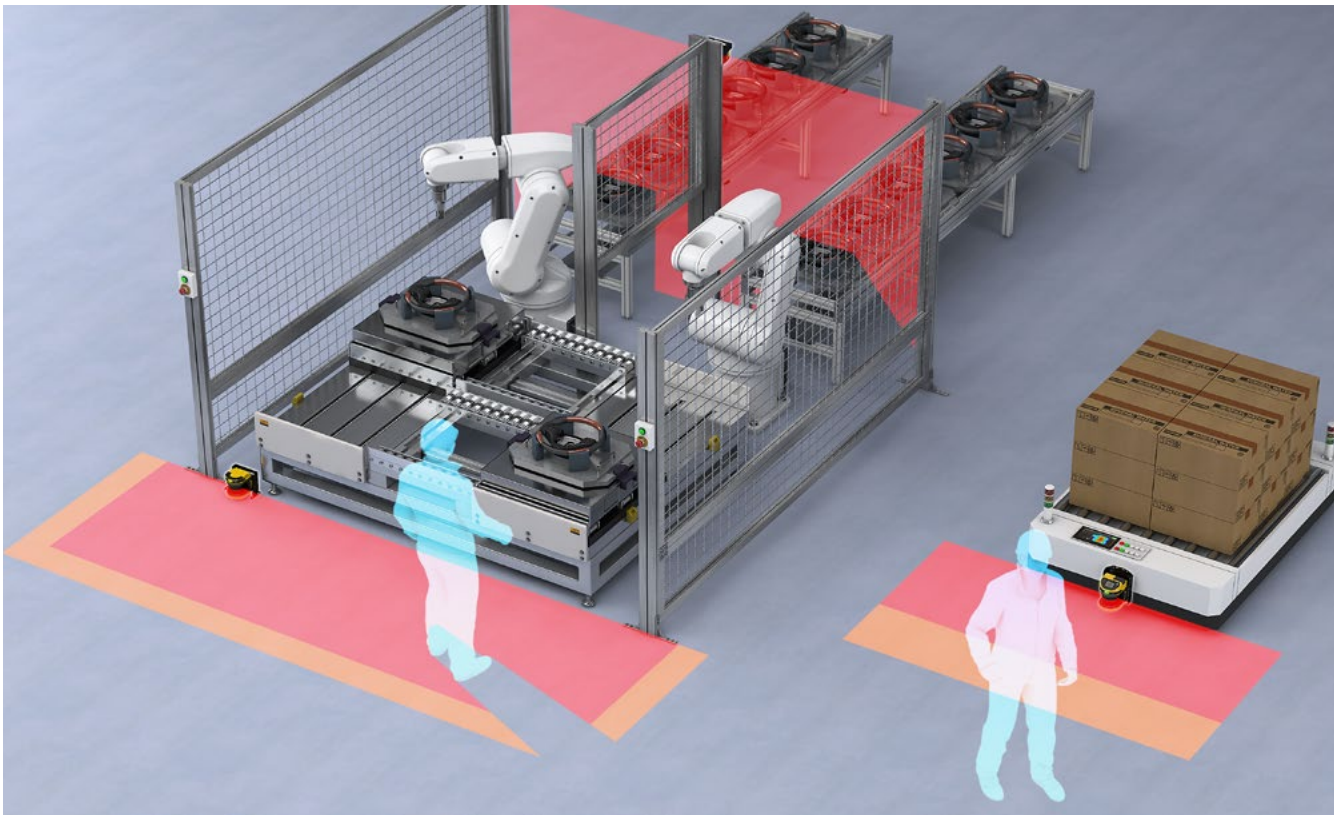
GL-RF
(Detection capability: ø14 mm ø0.55")

GL-RH
(Detection capability: ø25 mm ø0.98")

GL-RL
(Detection capability: ø45 mm ø1.77")

SZ-V SERIES

Industry Leading Safety Scanner



Fully Customizable Setup

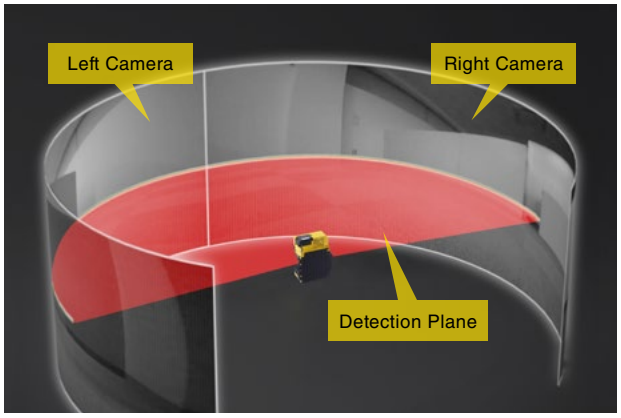
From area monitoring to access protection to collision prevention, the SZ-V Series offers a fully customizable safety solution for any situation.

Seperate Display

Easily monitor scanner operation and status without entering the hazardous area by utilizing the SZ-V Series detachable display.

World's First Built-in Camera

Quickly identify the cause of any recent trip by actually seeing what entered the protected area through either pictures or even videos.



Locking Type

Non-Contact Type

Safety Interlock Switches
GS Series

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SAFETY INFORMATION
Please read the instruction manual carefully in order to safely operate any KEYENCE product.

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