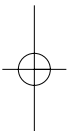
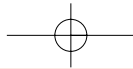





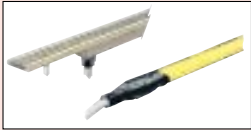
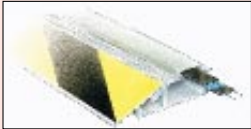



hergalite



SAFETY AND SENSING SOLUTIONS



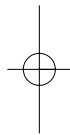


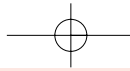
What is hergalite?	Solutions for you	Page HL1
6383 & 6388 Pressure Sensitive Safety Mats		Page HL2-3
6396, 6397 & 6398 Pressure Sensitive Contact Bumpers		Page HL4-5
6376 Pressure Sensitive Optic Safe Edge		Page HL6
6375 Edge Sensor		Page HL7
6375 Ramped Edge Sensor		Page HL8
Machinery Safety Standards		Page HL9
Safety Category Risk Analysis		Page HL10
6302 hergalite Controls		Page HL11-11

❖ In addition to safety systems, herga offers other innovative switching solutions:-

- herga Footswitches**
- hergair Airswitching systems**
- herga Pressure & Vacuum switches**
- herga Hand Controls**

- ❖ Our expertise spans the automotive, medical, packaging, domestic appliance and spa industries.
- ❖ We encourage business partnerships with customers and suppliers to achieve our mutual business goals.
- ❖ Our strong, international distributor network covers the world's major markets.
- ❖ We are an ISO 9002 approved company.
- ❖ We encourage training and continuous improvement in people, products and processes.





❖ hergalite Optic Sensors

Herga's unrivalled experience is the result of over 15 years development in conjunction with international approval authorities and the production of thousands of sensors for use worldwide.

The following pages show why hergalite is the Number One Choice in a variety of markets and the advantages that we can bring to solving your sensing problems.

❖ What is hergalite?

Hergalite senses when light levels are altered while passing through a sensor. Opto-Electronic interfaces within the sensors convert an electrical signal to light and, after passing the light through the sensor, detect the light and return it, as an electrical signal, to a control for processing.

Patented control systems enable stable measurement of very small changes in light levels.

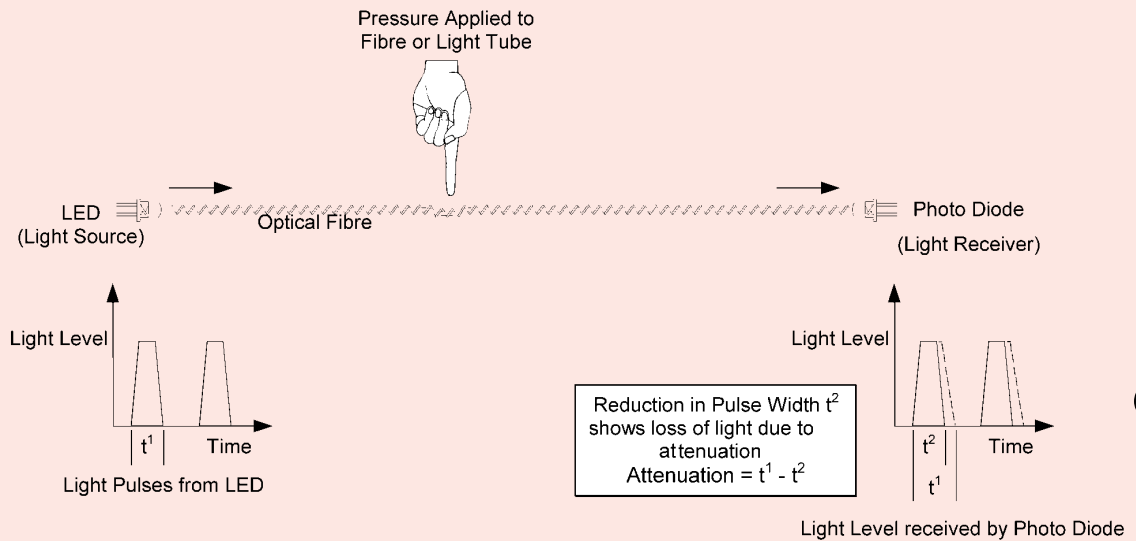
Hergalite is an intrinsic distributed optic sensor.

Intrinsic - because light does not leave the sensor - it is sensed as it passes through the sensor - so there are no problems with mechanical systems, dust or other environmental considerations.

Distributed - because it can be operated anywhere along the length of the sensor which can be from 1cm to 3Km long.

Optic - the light can be guided through the sensor by the use of different types of optical fibre or light tubes depending upon the application.

The choice of light guide and the method of actuation depend upon the application. Where small displacements and frequent operation is required, microbending systems with glass fibres are preferred. Micro bending of the fibre is achieved either with a polymer spiral around the outside or with a ribbed tape system. With large displacement and less frequent operation, plastic fibre offers a low-cost and easy to install alternative. For arduous environments subject to large temperature variations, light tubes can supply an alternative option.



Herga has built up an unrivalled experience in applying the best system for each application and has extensive patent coverage.

❖ hergalite controls

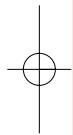
Hergalite controls provide stable, trouble-free operation under all conditions. Patented controls achieve high levels of sensitivity using pulse width measurement and come in a variety of forms for different applications. All systems have been tested to the EMC requirements of the European Directive 89/336/EEC and are designed to comply with the relevant Safety and Low Voltage Directives.

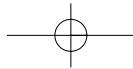
The hergalite controls generate signals, which an interface within the sensors converts to light, and, after passing the light through the sensor, detect the light and returns it, as an electrical signal, to the control for processing. By measuring the width of the returned pulse and comparing it to an internally generated reference, very stable and precise control is achieved. Depending upon the selection of the process system and the configuration of the Output Signal Switching Devices, the control can have an integrity level of up to Category 4 (EN954-1).

For low-cost systems where lower levels of safety are acceptable, very simple systems are available with dry contact or transistor outputs.

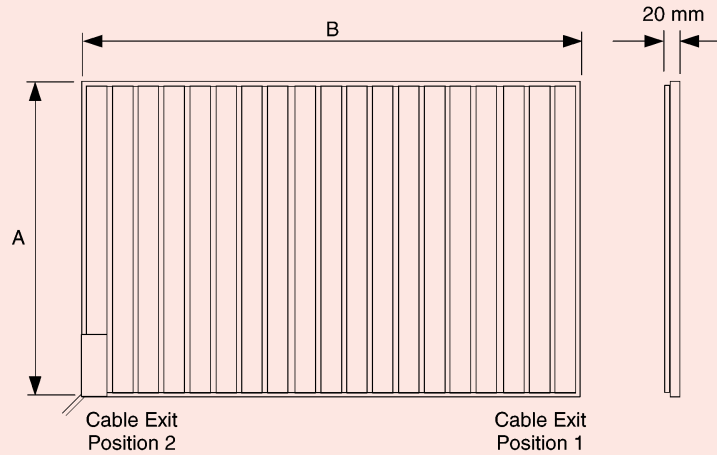
Where changing environmental conditions may alter sensitivity levels, automatic threshold levelling is used to maintain a constant level of sensitivity.

For volume Original Equipment Manufacturers (OEMs), custom control systems can be produced. As a result of the modular control system design, these systems can be designed to meet the requirements of relevant Standards and Directives.





6383/6388 ~ Pressure Sensitive Safety Mats



Benefits

- ❖ Fail safe control
- ❖ Improved sensitivity
- ❖ Rugged construction
- ❖ Simple to install

Our standard mat sizes are available ex stock. These are

- 1000 x 1000 = model 6388-1000-1000-2-1-4
- 1000 x 750 = model 6388-1000-0750-2-1-4
- 1000 x 500 = model 6388-1000-0500-2-1-4

Alternatively - please select your own specification below

638

1. Model Number

- 3 Extra Heavy Duty Pressure Sensing Mat
- 8 Heavy Duty Pressure Sensing Mat

2. Length (B)

In millimetres e.g. 500mm will be written as 0500
1000mm will be written as 1000

3. Width (A)

In millimetres e.g. 500mm will be written as 0500
1000mm will be written as 1000

4. Cable Exit

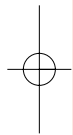
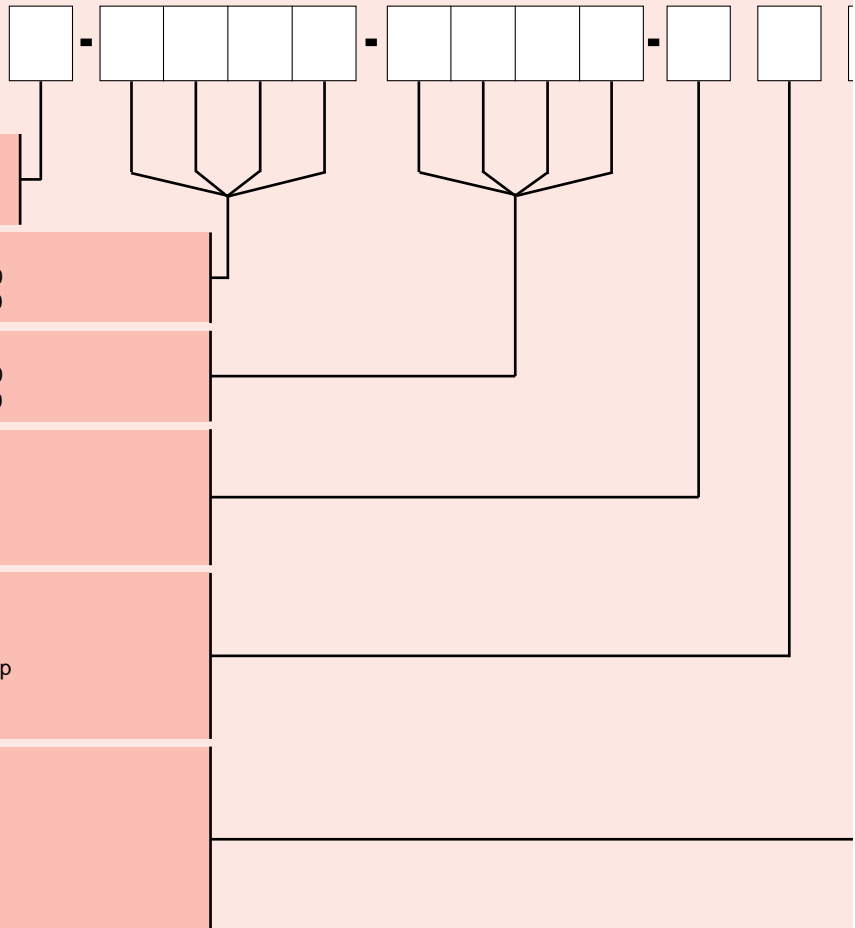
- 1 Cable Exit 1, Construction to IP65
- 2 Cable Exit 2, Construction to IP65
- 3 Cable Exit 1, Construction to IP67
- 4 Cable Exit 2, Construction to IP67

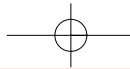
5. Colour/Material Combination

- 1 Blue Steel Tray, Blue Cork/Neoprene Top
- 2 Black Steel Tray, Black Nitrile Top
- 3 Stainless Steel Tray, Blue Cork/Neoprene Top
- 4 Stainless Steel Tray, Black Nitrile Top
- 5 Black Steel Tray, Black Cork/Neoprene Top

6. Cable & Termination

- 1 400mm Cable with Free Wire Ends
- 2 5 Metres Cable with Free Wire Ends
- 3 10 Metres Cable with Free Wire Ends
- 4 400mm Cable with Miniature Round Plug
- 5 5 Metres Cable with Miniature Round Plug
- 6 10 Metres Cable with Miniature Round Plug





6383/6388 ~ Pressure Sensitive Safety Mats

❖ Durability and Sensitivity

Independent tests have shown that the mats will withstand a force of 75Kg on any one part of the mat for over 1 million operations. At the same time, each mat is sensitive enough to detect a load of 15Kg.

❖ Construction

The standard construction consists of a metal base tray, a buffer layer and a top surface, with the sensor sandwiched between the buffer layer and top surface. The top surface is sealed into the base tray against ingress of damp and dirt. The thickness of the mat surface helps to absorb the impact of sharp objects. The sensitivity is maintained right up to the outside edges of the mat surface with the exception of the metal cover, in the immediate area to the cable entry point.

❖ Easy Installation

For easy installation and maintenance, special tamper proof quick-connect plugs, rated IP65 or IP67 are fitted to mat cables as standard. Extension cables can then be taken back to the control unit.

An edge ramp is available in extruded aluminium, with black/yellow marking on the ramp surface. This edging protects the mat against heavy impact loads on the edge, firmly locates the mat and provides a trunking for the connecting cables. Where several mats are used together, sensitivity is maintained along the joints between adjacent mats.

❖ Standard Mat Chemical Resistance

General guide to resistance to:

Water (up to 100 degrees Centigrade)
Soluble Oil in solution
Lubricating Oil
Hydraulic Oil
Paraffin
Petrol

Commonly available grades

Solvents: e.g. Acetone
Trichloroethylene
Turpentine
White Spirit

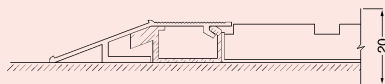
Acids: e.g. Dilute Hydrochloric (20%)
Milk
Beer

Resistance to heavy swarf, sharp objects and heavy loads

R = Recommended
Ro = Recommended, occasional splashing
Rs = Recommended, special modifications required to standard
NR = Not Recommended

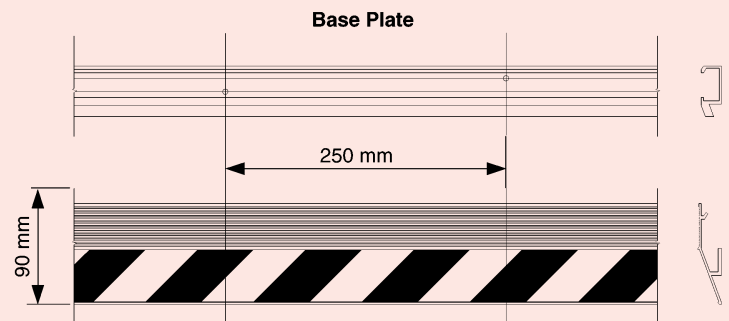
Standard Mats			Notes & Comments
Side A (mm) (In)	Max 1000 (39.4)	Min 200 (8.0)	Special shapes are available, Max size not to exceed 1m ²
Side B (mm) (In)	1400 (55.2)	270 (10.6)	Tread pattern perpendicular to 1000mm side
Cable Length	Standard 400mm cable with miniature round plug		Pre-terminated extension cables are ordered separately e.g. 6361-1Z10-0201 (2m) 6361-1Z10-0801 (8m) 6361-1Z10-0501 (5m) 6361-1Z10-1001 (10m) Maximum total length = 20m
Weight Approx.	24Kg/m ² for cork/neoprene topping		
Mat Topping	Cork Neoprene Mixture	Nitrile	
Sealing Gasket	Cross Linked Neoprene	Nitrile	
Temperature Operating	(0°C to +40°C)		State required temp range if outside standard mat range
Storage	(-25°C to +70°C)		

Mat Edging



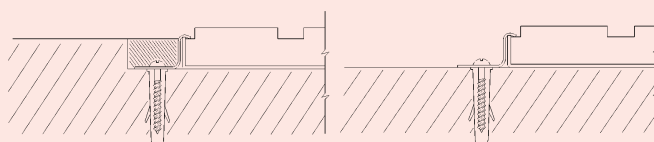
Cross Section

Length (m)	Model Number
1.2	6493-01
2.2	6493-02
3.2	6493-03



Supplied with self-tapping screws for fitting base plate to cover

Fixing Details

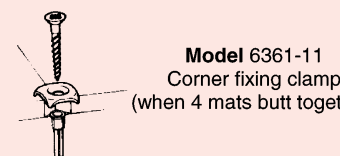


Mat mounted flush with floor

Mat mounted on floor

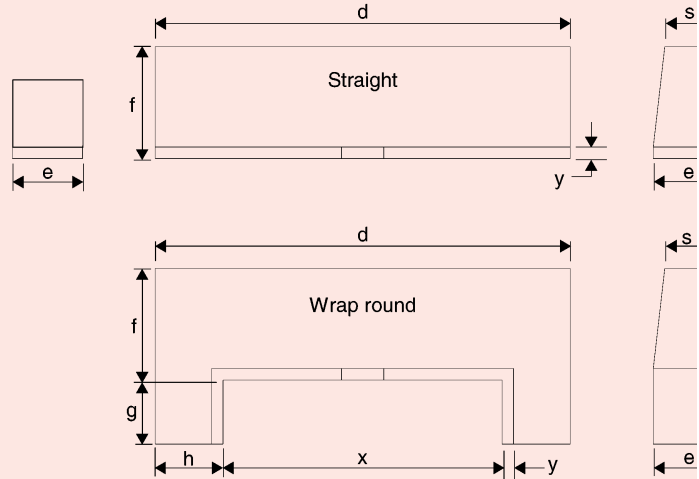
Fixing Clamp
4 Clamps supplied
with every mat

Ø 6.5mm



Model 6361-11
Corner fixing clamp
(when 4 mats butt together)

6396/7/8 ~ Pressure Sensitive Contact Bumpers



Benefits

- ❖ For Automated Guided Vehicles and all moving machinery
- ❖ Tough and resilient
- ❖ Adjustable sensitivity

Benefits

- ❖ Custom designed for all shapes and sizes
- ❖ Fail safe control

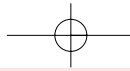
Bumper Dimensions	6396	6397 / 6398
e Aluminium or steel back plate heights	100mm, 150mm or 225mm	65mm
d Bumper width	250mm min. 2500mm max. (see note 1)	250mm min. 2500mm max. (see note 1)
f Bumper depth dependent on vehicle stopping distance (see design manual)	80mm min. 550mm max.	68mm or 118mm
x Maximum vehicle width	Must be accurate to ± 1 mm	Must be accurate to ± 1 mm
g Length of side (if required)	100mm min. 800mm max.	100mm min. 800mm max.
h Depth of side bumper	80mm min. (see note 2)	68mm or 118mm
s Taper Shape	80mm min.	N/A
y Backplate Depth	30mm	18mm
Mounting Details	Minimum M10 studs or M10 nuts NOTE: Inside bumper mountings must be M10 nuts	M6 studs or M5 nuts
Cable	2 metres with no plug unless specified	2 metres with no plug unless specified
Hazard Stripes	when specified follows BS 5378	when specified follows BS 5378
Special Shapes	N/A	Rectangles, hexagons, octagons: sensing on the side or on the top surface.

Note 1

Wider bumpers are made by building two interlocking units and using a 2 channel control or two single units with the electrical interlock in series.

Note 2

The depth of side bumpers can be reduced to 55mm by the use of flat backplates for the side bumpers.



6396/7/8 ~ Pressure Sensitive Contact Bumpers



Bumper Model Range 6396

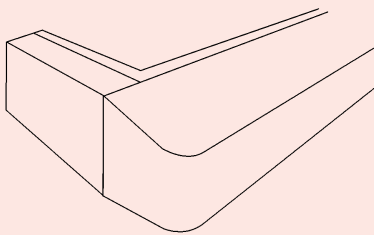
Information required for Quotations/Orders

Please supply outline dimensions as shown on the diagrams on the opposite page. Our Sales Department has computer aided design facilities give prices by return.

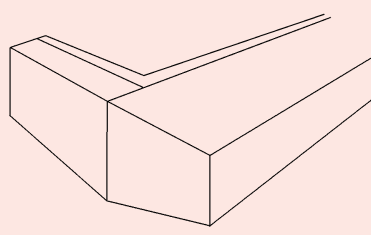
In addition to the outlined dimensions shown, please advise any special dimensions, profiles, whether yellow and black hazard stripes are needed and also the quantity required.

Non standard options available upon request. To proceed with your enquiry full details are given in the contact sensing bumper design manual.

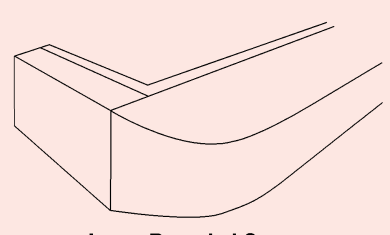
Foam Corner Shapes



Rounded Corner



Squared Off Corner



Large Rounded Corner

Contact pressure on the outside of this bumper operates an optic sensor actuating high integrity controls to stop dangerous machinery. Bumpers can be made in most shapes to give protection when actuated from almost any direction.

The bumper is constructed in polyurethane foam and covered with a durable black urethane coating. Special finishes such as yellow/black hazard stripes are added as required. The bumper is fixed to a fabricated mounting plate which can be bolted direct to the equipment.

On Automatic Guided Vehicles, the sensor can be designed to wrap around the corners and along the sides of the AGV to give protection when the AGV is turning. Additional sensing bumpers can be supplied to go along the sides of the AGV. The system is resistant to mechanical vibration such as when AGV's are operating on rough floors.

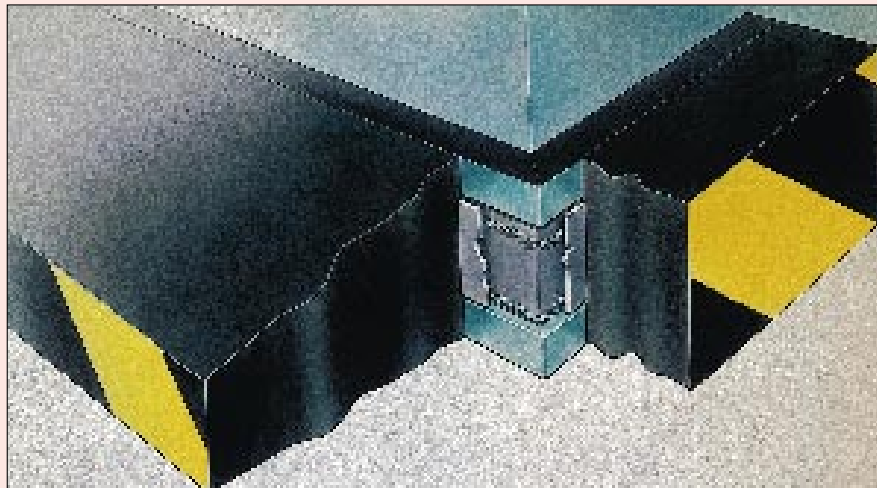
The bumper can be designed so that there is up to 400mm (15.8") overtravel after the sensing element has operated and before the foam is completely compressed.

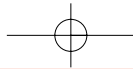
The foam used in the bumper is very resilient. After 1000 full travel operations the permanent deflection is normally less than five per cent. Where quantities justify, bumpers can be supplied with special reinforcing to resist maltreatment, or be covered with special material to cope with weld spat.

The bumper is normally provided with 2m connecting cable to control. Where necessary pre-terminated extension cables are available for connection between the sensor and control.

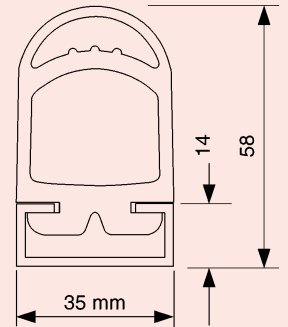
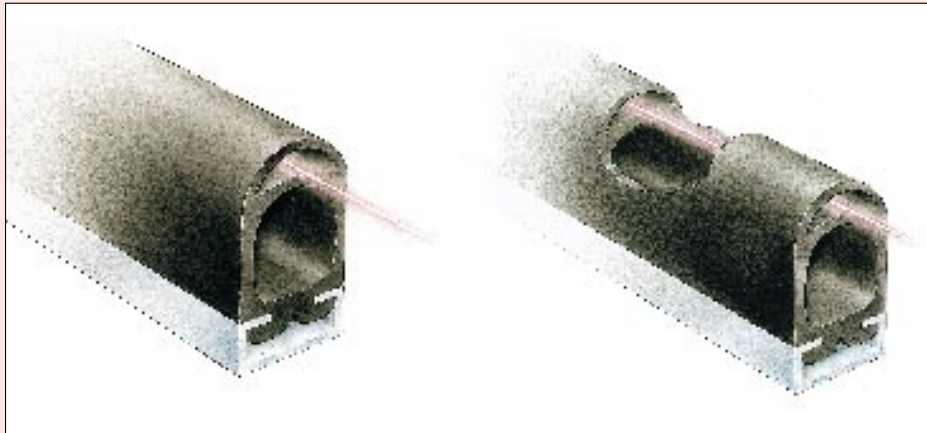
Please specify any special conditions such as weld spat, cutting hydraulic oils or other fluids, which may come in contact with bumper. Herga would be pleased to supply samples of material for evaluation. However, the final responsibility must be with the user.

The 6396 series of bumpers must be used with the wide range of 6 controls.





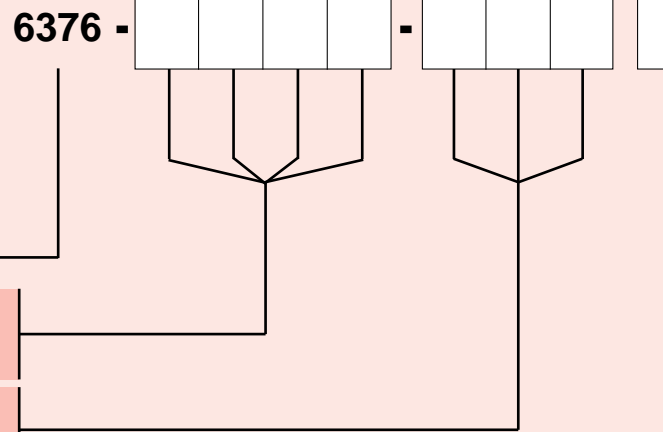
6376 ~ Pressure Sensitive Optic Safe Edge



Benefits

- ❖ Tough construction that will continue to operate with severe damage
- ❖ Wide operating temperature -10°C to 70°C

- ❖ Adjustable sensitivity
- ❖ Compatible with all 6302 hergalite controls



1. Model Number

2. Length

In millimetres e.g. 500mm will be written as 0500
1000mm will be written as 1000

3. Connecting Cable Length

In 100mm Units e.g. 400mm will be written as 040 (Std)
1000mm will be written as 100

4. Cable & Termination

- 0 Free Wire Ends
- 1 Miniature Round Plug

The Optic Safe Edge is a direct replacement for the 6373 Fibre Optic Edge.

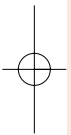
The Safe Edge will detect pressure on the nose of the rubber extrusion over a full 180° arc.

The Infra Red light beam is contained within the rubber extrusion and the Safe Edge will continue to function safely after severe damage to the extrusion. If the damage is severe enough to expose the Infra Red detector to high ambient light, the control unit will default to a safe tripped condition.

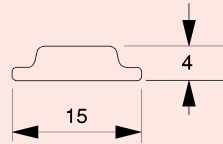
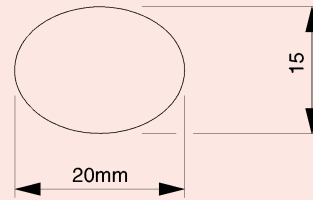
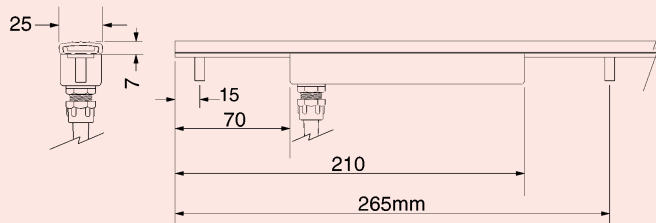
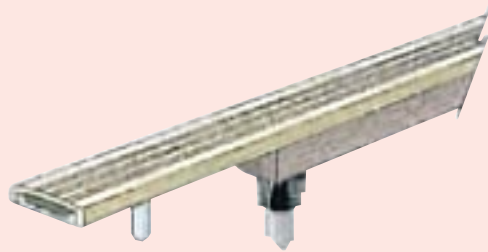
The electronic package used within the herga Safe Edge may be purchased separately to be fitted within a suitable rubber extrusion already used by customers. For quantity OEM customers, suitable flexible end caps can be provided.

As with all herga sensors, one of the range of 6302 control units may be used to generate and decode the light signals within the sensors.

For volume OEM customers, herga is able to manufacture and integrate the customer's control PCB, with the herga control circuit.



6375 ~ Edge Sensor



Benefits - 6375

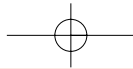
- ❖ Low profile
- ❖ Suitable for outside use

Benefits - 6335

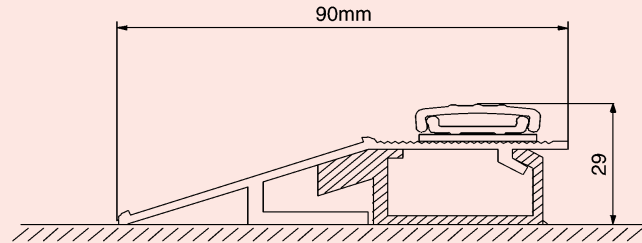
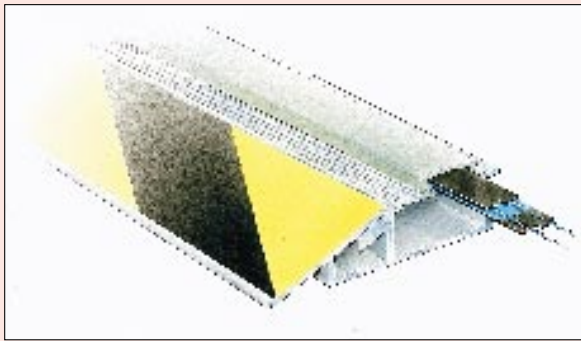
- ❖ Easily customised to users application
- ❖ Flexible, can be shaped around large radii

Model Numbers	6375	6335
Material Edge	PVC	Reinforced PVC Fabric Sleeve
Mounting Strip Length	Aluminium 280mm min. 3.0m max.	N/A 300mm min. 3.0 max.
Mounting Detail	Additional studs pitched no greater than 500mm	Must be fitted inside customer edge extrusion or moulding
Temperature Range	Operating	-10°C to 55°C
	Storage	-25°C to 70°C
Cable Length	5m with plug unless specified	5m with plug unless specified
Cable Exit	Back entry	End entry
Enclosure Rating (sealing amplifier)	IP64	IP64

The above sensor must be used with our wide range of 6302 hergalite controls and the appropriate cable termination



6375 ~ Ramped Edge Sensor

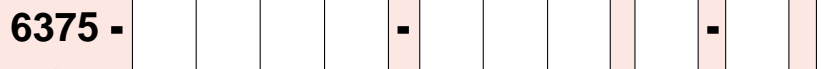


Benefits

- ❖ Rugged, fixed protection for scissor lifts
- ❖ Complies with BS 5323

Benefits

- ❖ Customised to fit any installation
- ❖ Compatible with all 6302 hergalite controls



1. Model Number

2. Length

In millimetres e.g. 500mm will be written as 0500
1000mm will be written as 1000










3. Cable Length

In millimetres e.g. 500mm will be written as 0500
1000mm will be written as 1000

4. Cable & Termination

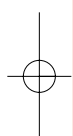
- 0 Free Wire Ends
- 1 Miniature Round Plug

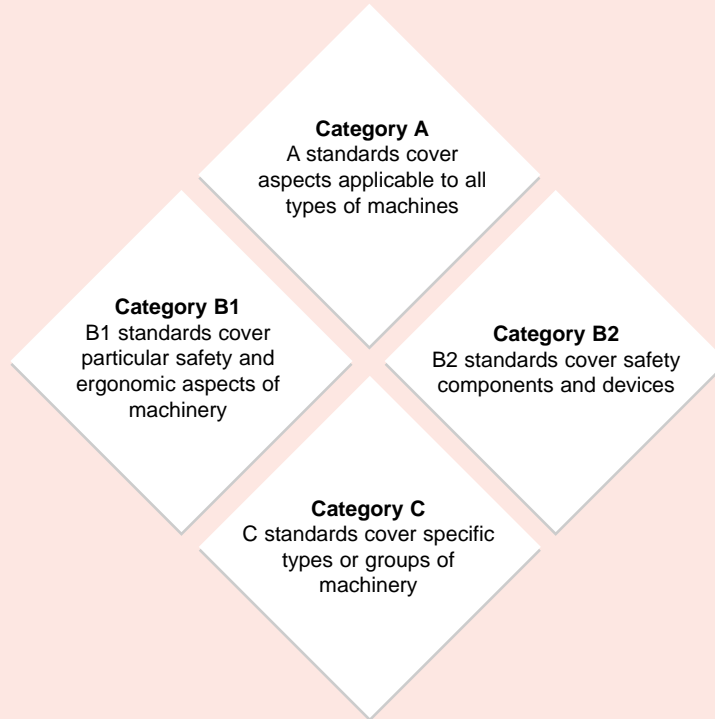
5. Sensor End Mitring

- A  No Mitres
- B  Left Hand External Mitre
- C  Right Hand External Mitre
- D  Both Ends External Mitre
- E  Left Hand Internal Mitre
- F  Right Hand Internal Mitre
- G  Both Ends Internal Mitre
- H  Left Hand External Mitre with Right Hand Internal Mitre
- I  Right Hand External Mitre with Left Hand Internal Mitre

6. Cable Exit End

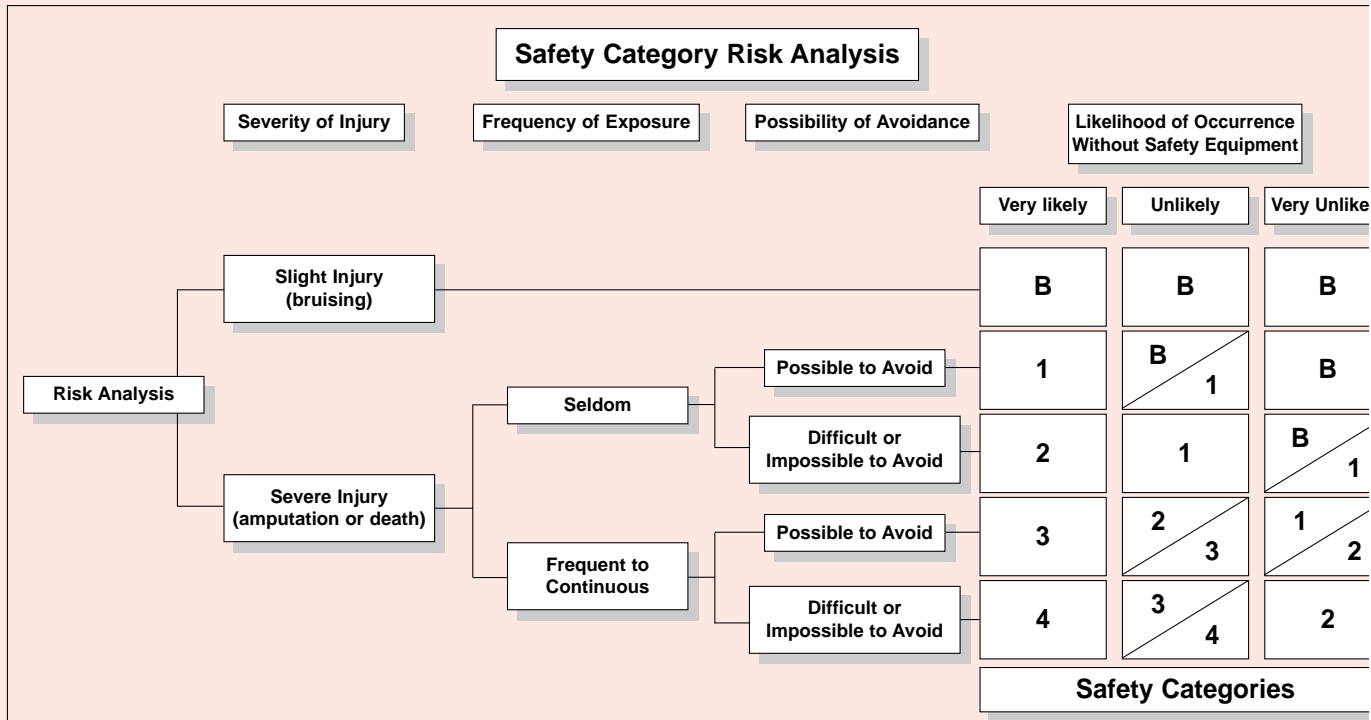
- L Left
- R Right





Category A	Category B1		Category B2
<p>BS EN 292 <i>Safety of Machinery - Basic concepts, general principles for design</i></p> <p>Outlines all of the basic principles including risk assessment, guarding, interlocking, emergency stops, trip devices, safety distances etc. It references to other standards and includes the essential safety requirements from the Machinery Directive</p> <p>EN 50081-1 <i>EMI Compatibility - Emissions</i></p> <p>Gives limits and test procedures for the generation of electrical interference</p> <p>EN 50082-1 <i>EMI Compatibility - Susceptibility</i></p> <p>Gives test procedures and performance limits for the rejection of electrical interference</p>	<p>EN 954-1 <i>Safety of Machinery - Safety related parts of control systems</i></p> <p>Part 1: General principles for design</p> <p>BS EN 294 <i>Safety of Machinery - Safety distances to prevent danger zones being reached by the upper limbs.</i></p> <p>Gives data for calculation of safe aperture sizes and guard positioning</p> <p>EN 811 <i>Safety of Machinery - Safety distances to prevent danger zones being reached by the lower limbs.</i></p> <p>Gives data for calculation of safe aperture sizes and guard positioning</p> <p>prEN 999 <i>Safety of Machinery - Positioning of protective equipment in respect of approach speeds of parts of the human body</i></p> <p>Provides methods for the calculation of minimum safety distances from a hazard for specific safety devices</p>	<p>prEN 61496-1 <i>Safety of Machinery - Electro sensitive protective equipment</i></p> <p>Gives requirements and test procedures for the control and monitoring aspects</p> <p>prEN 1050 <i>Safety of Machinery - Principles for risk assessment</i></p> <p>Summarises the process for assessing the risks during the lifetime of the machinery</p> <p>prEN 349 <i>Safety of Machinery - Minimum distance to avoid crushing parts of the human body</i></p> <p>Gives data for calculation of safe gaps between moving parts</p> <p>BS EN 60204 <i>Safety of Machinery - Electrical equipment of machines</i></p> <p>Part 1: General requirements for safety related aspects of wiring and electrical equipment on machinery</p>	<p>EN 1760-1 <i>Safety of Machinery - Pressure Sensitive Safety Devices</i></p> <p>Pt 1: Mats and Floors Gives requirements and test procedures</p> <p>prEN 1760-2 <i>Safety of Machinery - Pressure Sensitive Safety Devices</i></p> <p>Pt 2: Edges and Bars Gives requirements and test procedures</p> <p>prEN 1760-3 <i>Safety of Machinery - Pressure Sensitive Safety Devices</i></p> <p>Pt 3: Bumpers Gives requirements and test procedures</p>

The above list is a selection of applicable standards.
All hergalite systems are designed and tested to meet the relevant international standards.

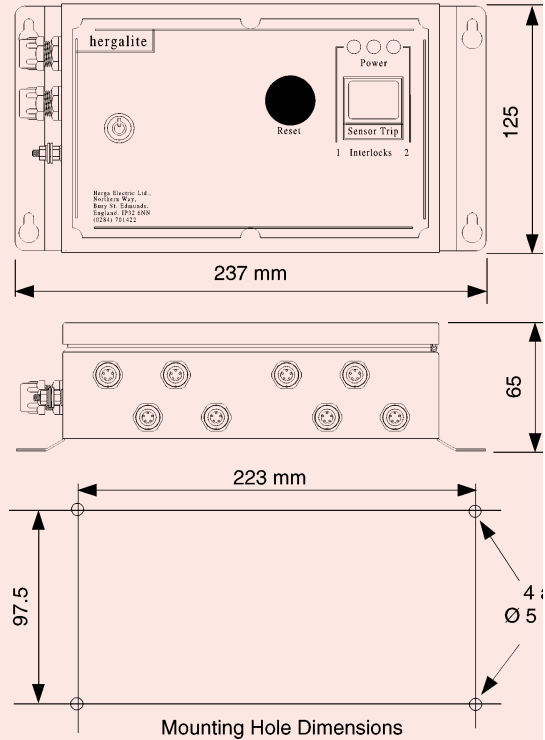


Guide to the Categories for Safety-related parts of Control Systems reference EN 954-1

Safety Category	Basic Requirements	What is achieved		Factors Affecting the Degree of Performance	Techniques used by herga	Validation Methods
		Minimum Accepted Performance	Maximum Achieved Performance			
B	Components able to withstand expected influences	Reliability for normal operation	Reliability for normal operation	Availability of standards, test data, etc.	Use of simple, proven techniques and traceable components	Life testing. Components traceable to approved manufacturers
1	<i>Requirements of Cat. B with Use of well tried (tested or provable) components and safety principles</i>	Enhanced reliability of the safety function over that of a normal device or system	Elimination of fault possibilities	The simplicity or complexity of the system and its principles	Use of simple, proven techniques and traceable components	Life and failure mode testing. Components traceable to approved manufacturers
2	<i>Requirements of Cat. B and the use of well tried safety principles with A safety function check at system start-up and periodically if required</i>	Machine can only start-up when the system is functioning correctly	Machine can only start-up when the system is functioning correctly and faults will be detected by regular checks	The frequency and nature of the checks the more frequent the checks the less time faults remain undetected	As for Cat. B and 1 and both theoretical analysis and practical testing	Fault analysis using FMEA, practical testing and 100% traceable product inspection
3	<i>Requirements of Cat. B and the use of well tried safety principles with A single fault will not cause a loss of safety function</i>	Detection of some single safety critical faults at the next demand on the safety function. - Safety critical faults can accumulate between demands on the safety function - Non-detected non-safety critical faults can accumulate and cause loss of safety function	Detection of ALL single faults (safety critical and non-safety critical) as they occur	The frequency and nature of the checks the more frequent the checks the less time faults remain undetected	As for Cat. B and 1 and both theoretical analysis and practical testing	Fault analysis using FMEA, practical testing and 100% traceable production inspection
4	<i>Requirements of Cat. B and the use of well tried safety principles with Multiple faults, to a maximum of 3 concurrent faults, will not cause a loss of safety function</i>	Detection of single faults in time to prevent the loss of safety function. Foreseeable combinations of faults will not cause loss of safety function	Detection of single faults immediately. No combinations of faults will cause loss of safety function. (this is ideal but rarely achieved in practice)	The simplicity or complexity of the system and its principles. Fewer components and simpler circuits mean less fault combinations	As for Cat. 3 and both theoretical analysis and practical testing. Use of Cat. 4 limited by various sensors	Fault analysis using FMEA, practical testing and 100% traceable production inspection

These notes and the associated Risk Analysis are for guidance only. Individual applications must be inspected and evaluated to ensure that necessary safety requirements are met.

6302-12/13 ~ hergalite Controls



- Benefits**
- ❖ Robust - wall or machine mounted
 - ❖ Protected to IP54
 - ❖ Lockable hinged lid
 - ❖ Designed to meet requirements of EN 954-1 & EN 60204-1
 - ❖ Tested to ensure compliance with EN 50081-1 & EN 50082-1

6302 - 1 [] [] [] [] - [] [] [] 1 []

- 1. Model Number**
- 2. Enclosure**
 - 1 Lockable Steel Enclosure
- 3. Safety Category**
 - 2 Medium Level (Monitoring on Power Up)
 - 3 High Level (Single Fault Detection)
- 4. Reset Facility**
 - 1 Manual Reset
 - 2 Self Reset
- 5. Indication Facility**

With Manual Reset

 - 1 Power & Status LEDs with Local Reset
 - 3 Power & Status LEDs with Local Reset & Remote Indication Facility
 - 5 Power & Status LEDs with Local Reset & Sensor Trip Indication
 - 7 Power & Status LEDs with Local Reset, Remote Indication Facility & Sensor Trip Indication

With Self Reset

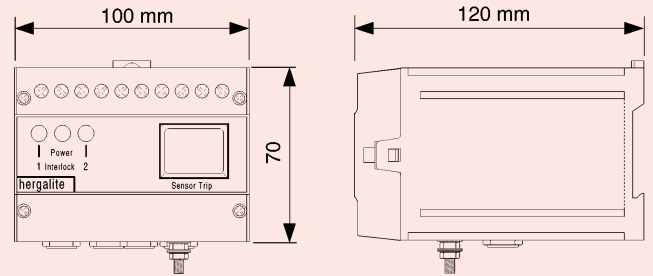
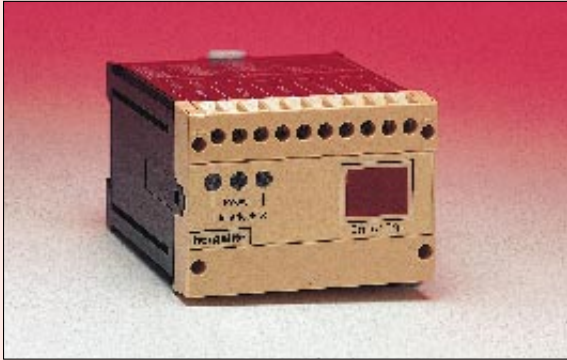
 - 0 Power & Status LEDs
 - 2 Power & Status LEDs with Remote Indication Facility
 - 4 Power & Status LEDs with Sensor Trip Indication
 - 6 Power & Status LEDs with Remote Indication Facility & Sensor Trip Indication
- 6. Number of Sensors to be Connected**

Plug & Socket Connection written as 01, 02, 03, 04, 05, 06, 07 or 08

Terminal Block Connection written As T1 or T2

(Indicator Options 0, 1, 2 or 3 only)
- 7. Supply Voltage**
 - 1 24V dc / 18V ac
- 8. Special Variants**
 - 0 Standard Control

6302-22/23 ~ hergalite Controls



Benefits

- ❖ DIN Rail mounted
- ❖ PLC look-a-like
- ❖ Protected to IP40

Benefits

- ❖ N/O or N/C Selectable Voltage Free Indicator Output
- ❖ Designed to meet requirements of EN 954-1 & EN 60204-1
- ❖ Tested to ensure compliance with EN 50081-1 & EN 50082-1

6302 - 2 [] [] [] - [] [] 1 []

1. Model Number

2. Enclosure

2 DIN Rail Mounted Enclosure for 35 x 7.5mm or 35 x 15mm DIN Rail

3. Safety Category

2 Medium Level (Monitoring on Power Up)
3 High Level (Single Fault Detection)

4. Reset Facility

1 Manual Reset
2 Self Reset

5. Indication Facility

0 Power & Status LEDs
4 Power & Status LEDs with Sensor Trip Indication

6. Number of Sensors to be Connected

Plug & Socket Connection written as 01, 02, 03, or 04

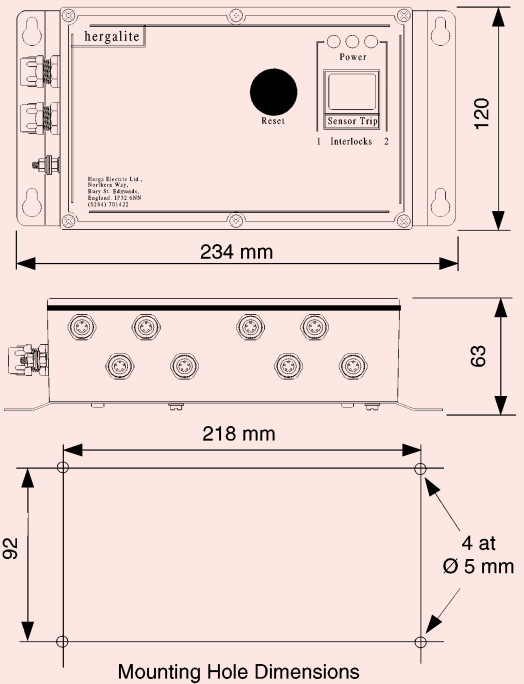
7. Supply Voltage

1 24V dc / 18V ac

8. Special Variants

0 Standard Control

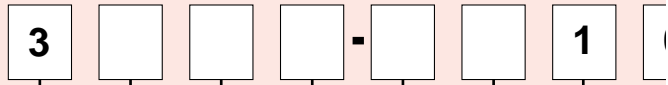
6302-32/33 ~ hergalite Controls



Benefits

- ❖ Robust - wall or machine mounted
- ❖ Protected to IP54
- ❖ Designed to meet requirements of EN 954-1 & EN 60204-1
- ❖ Third party tested to ensure compliance with EN 50081-1 & EN 50082-1

6302 -



1. Model Number

2. Enclosure

3 Diecast Aluminium Enclosure

3. Safety Category

2 Medium Level (Monitoring on Power Up)
3 High Level (Single Fault Detection)

4. Reset Facility

1 Manual Reset
2 Self Reset

5. Indication Facility

With Manual Reset

1 Power & Status LEDs with Local Reset
3 Power & Status LEDs with Local Reset & Remote Indication Facility
5 Power & Status LEDs with Local Reset & Sensor Trip Indication
7 Power & Status LEDs with Local Reset, Remote Indication Facility & Sensor Trip Indication

With Self Reset

0 Power & Status LEDs
2 Power & Status LEDs with Remote Indication Facility
4 Power & Status LEDs with Sensor Trip Indication
6 Power & Status LEDs with Remote Indication Facility & Sensor Trip Indication

6. Number of Sensors to be Connected

Plug & Socket Connection written as 01, 02, 03, 04, 05, 06, 07 or 08
Terminal Block Connection written As T1 or T2
(Indicator Options 0, 1, 2 or 3 only)

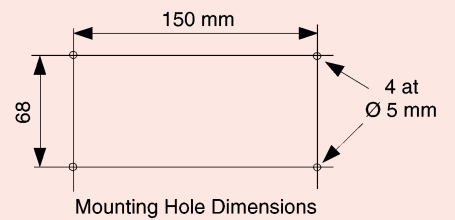
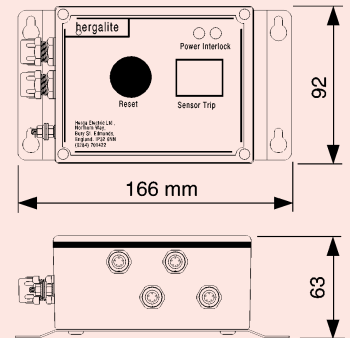
7. Supply Voltage

1 24V dc / 18V ac

8. Special Variants

0 Standard Control

6302-31 ~ hergalite Controls

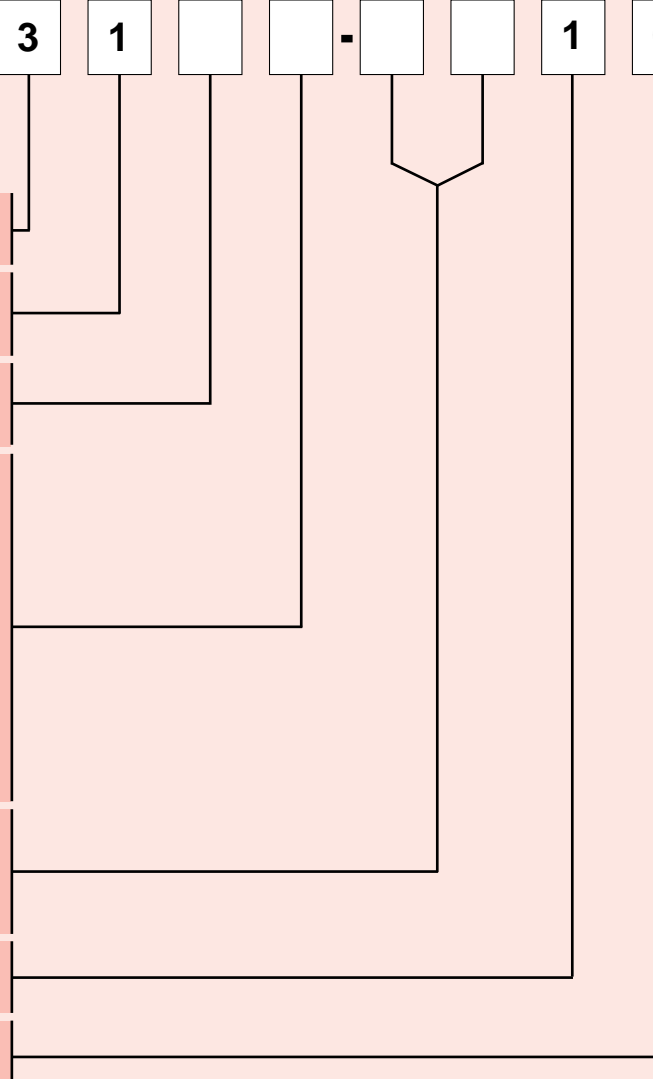


Benefits

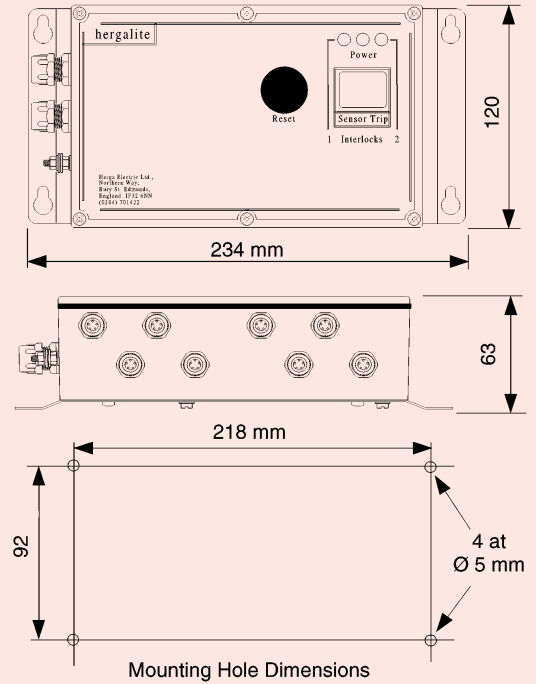
- ❖ Robust - wall or machine mounted
- ❖ Protected to IP54
- ❖ Designed to meet requirements of EN 954-1 & EN 60204-1
- ❖ Third party tested to ensure compliance with EN 50081-1 & EN 50082-1

6302 - 3 1 - - - 1

1. **Model Number**
2. **Enclosure**
3 Diecast Aluminium Enclosure
3. **Safety Category**
1 Well Tried and Proven Design
4. **Reset Facility**
1 Manual Reset
2 Self Reset
5. **Indication Facility**
With Manual Reset
1 Power & Status LEDs with Local Reset
3 Power & Status LEDs with Local Reset & Remote Indication Facility
5 Power & Status LEDs with Local Reset & Sensor Trip Indication
7 Power & Status LEDs with Local Reset, Remote Indication Facility & Sensor Trip Indication
With Self Reset
0 Power & Status LEDs
2 Power & Status LEDs with Remote Indication Facility
4 Power & Status LEDs with Sensor Trip Indication
6 Power & Status LEDs with Remote Indication Facility & Sensor Trip Indication
6. **Number of Sensors to be Connected**
Plug & Socket Connection written as 01, 02, 03 or 04
Terminal Block Connection written As T1 or T2
(Indicator Options 0, 1, 2 or 3 only)
7. **Supply Voltage**
1 24V dc / 18V ac
8. **Special Variants**
0 Standard Control

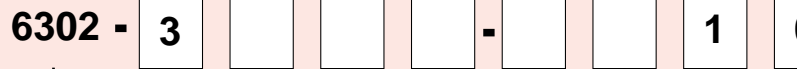


6302-31 ~ hergalite Controls



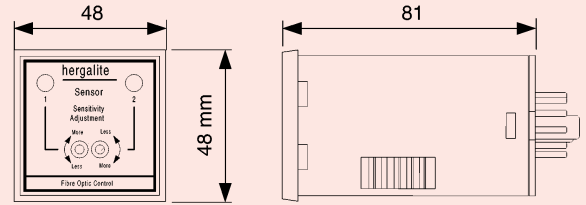
Benefits

- ❖ Robust - wall or machine mounted
- ❖ Protected to IP54
- ❖ Designed to meet requirements of EN 954-1 & EN 60204-1
- ❖ Third party tested to ensure compliance with EN 50081-1 & EN 50082-1

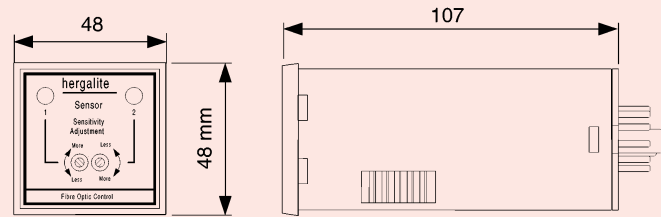


- 1. Model Number**
- 2. Enclosure**
3 Diecast Aluminium Enclosure
- 3. Safety Category**
1 Well Tried and Proven Design
- 4. Reset Facility**
1 Manual Reset
2 Self Reset
- 5. Indication Facility**
With Manual Reset
1 Power & Status LEDs with Local Reset
3 Power & Status LEDs with Local Reset & Remote Indication Facility
5 Power & Status LEDs with Local Reset & Sensor Trip Indication
7 Power & Status LEDs with Local Reset, Remote Indication Facility & Sensor Trip Indication
With Self Reset
0 Power & Status LEDs
2 Power & Status LEDs with Remote Indication Facility
4 Power & Status LEDs with Sensor Trip Indication
6 Power & Status LEDs with Remote Indication Facility & Sensor Trip Indication
- 6. Number of Sensors to be Connected**
Plug & Socket Connection written as 05, 06, 07 or 08
- 7. Supply Voltage**
1 24V dc / 18V ac
- 8. Special Variants**
0 Standard Control

6302-51 ~ hergalite Controls



6302-5124-TX10



6302-5124-TX20

Benefits

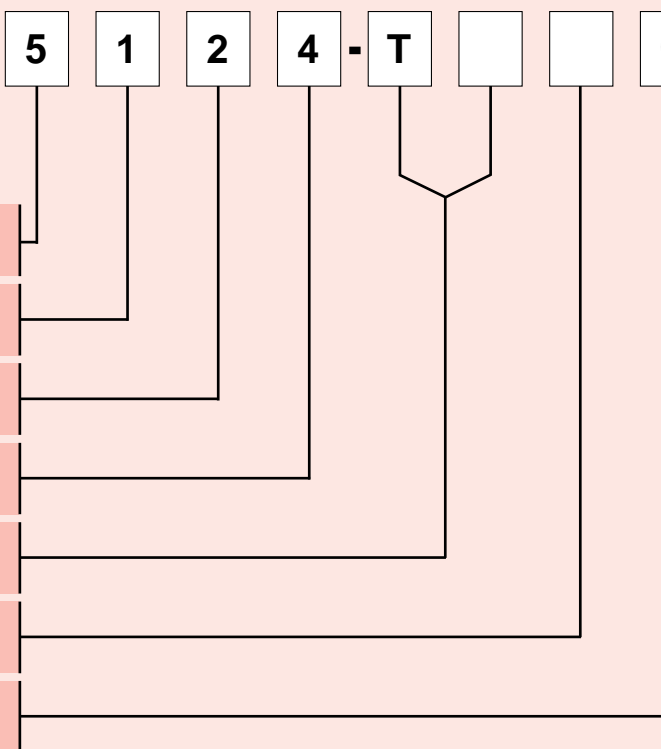
- ❖ Small size for mounting within control panels
- ❖ Protected to IP40

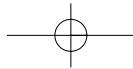
Benefits

- ❖ Designed to meet requirements of EN 954-1 & EN 60204-1
- ❖ Tested to ensure compliance with EN 50081-1 & EN 50082-1

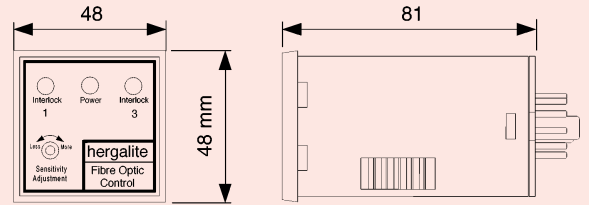
6302 - 5 1 2 4 - T

- 1. **Model Number**
- 2. **Enclosure**
5 Standard 48 x 48mm DIN Plug In Enclosure
- 3. **Safety Category**
1 Well Tried and Proven Design
- 4. **Reset Facility**
2 Self Reset
- 5. **Indication Facility**
4 Power & Status LEDs with Sensor Trip Indication
- 6. **Number of Sensors to be Connected**
Terminal Block Connection written as T1 or T2
- 7. **Supply Voltage**
1 24V dc / 18V ac
2 24V dc / 18V ac with Over Voltage Protection to 35V dc
- 8. **Special Variants**
0 Standard Control

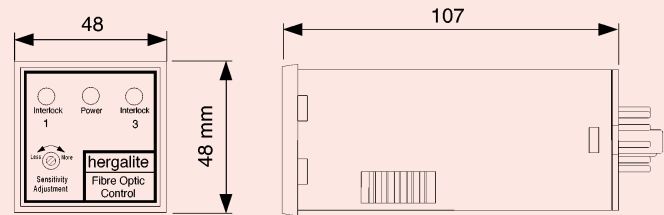




6302-52/53 ~ hergalite Controls



6302-5220-T110 / 6302-5320-T110



6302-5220-T120 / 6302-5320-T120

Benefits

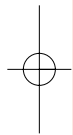
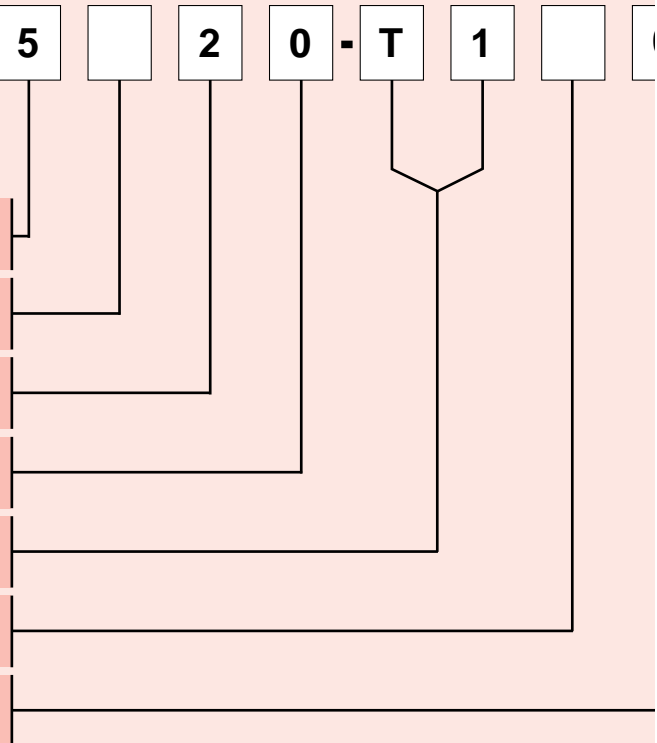
- ❖ Small size for mounting within control panels
- ❖ Protected to IP40

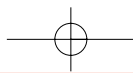
Benefits

- ❖ Designed to meet requirements of EN 954-1 & EN 60204-1
- ❖ Tested to ensure compliance with EN 50081-1 & EN 50082-1

6302 - 5 [] 2 0 - T 1 [] []

- 1. **Model Number**
- 2. **Enclosure**
5 Standard 48 x 48mm DIN Plug In Enclosure
- 3. **Safety Category**
2 Medium Level (Monitoring on Power Up)
3 High Level (Single Fault Detection)
- 4. **Reset Facility**
2 Self Reset
- 5. **Indication Facility**
0 Power & Status LEDs
- 6. **Number of Sensors to be Connected**
Terminal Block Connection written as T1
- 7. **Supply Voltage**
1 24V dc / 18V ac
2 24V dc / 18V ac with Over Voltage Protection to 35V dc
- 8. **Special Variants**
0 Standard Control





hergalite



hergalite in action

herga is happy to design and manufacture specialist sensors for you



hergalite Mats



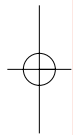
hergalite Bumpers

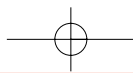


hergalite Mats



hergalite Bumpers





hergalite



hergalite in action

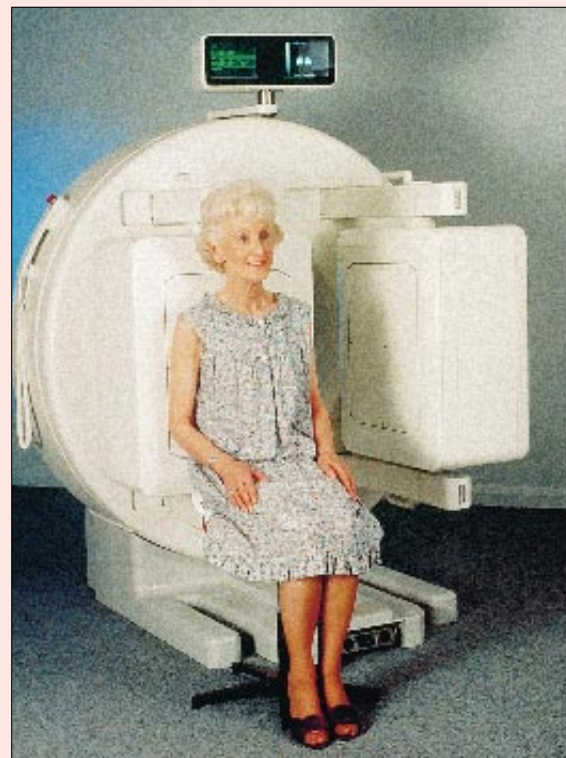
herga is happy to design and manufacture specialist sensors for you



hergalite Edge Sensor



hergalite Sensor



hergalite Contact Sensor

