

Guardian Line Heavy Duty Type: GLHD

FEATURES:

PROTECTION UP TO 250 METRES (820 FEET)

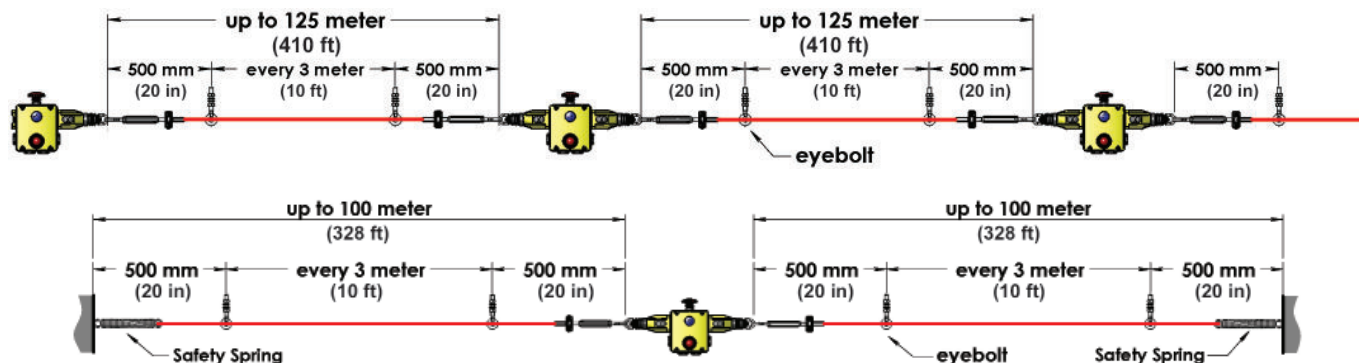
The GLHD is a Heavy Duty Safety Rope Pull Switch designed to protect long conveyor lengths. The die-cast housings are robust to survive indoor or outdoor use including washdown (IP67 rating). Lengths over 2 Km can be achieved with less than 20 switches.

A bi-colour LED ensures switch status can be seen easily from a distance. They have 4NC 2NO contacts to ensure flexibility with all modern control applications and optional Explosion Proof contact blocks are available.

Shorter rope spans up to 200m can be achieved by using just one switch therefore making a cost effective solution and also reducing electrical wiring runs.

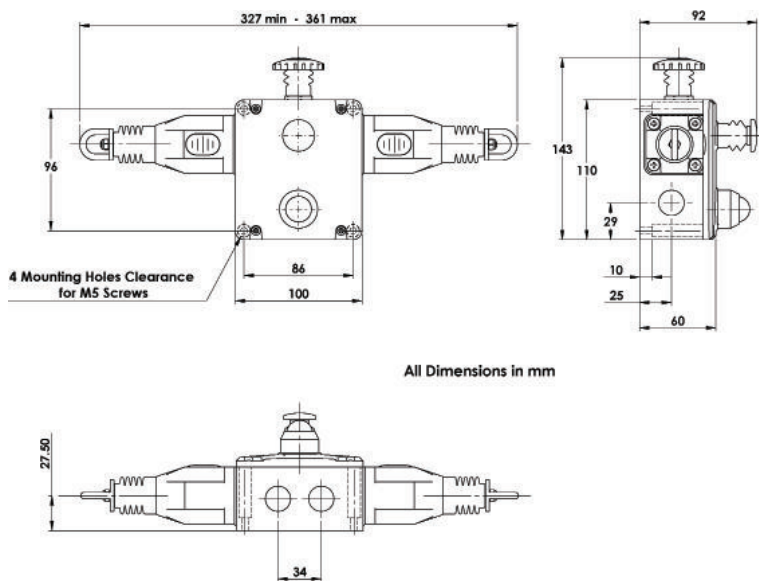


Low temperature version -40C available GLHD-FZ



It is important that the first 500mm is not used as part of the active protection coverage. If protection is required in this first 500mm then it is recommended to use switches fitted with a mushroom type E-Stop button. IDEM also recommend when using a Safety Spring that a maximum of one corner pulley is used.

DIMENSIONS:



All Dimensions in mm



Pre-wired EX versions
(see Explosion Proof section)

Standards: EN60947-5-1 EN60947-5-5 EN62061
UL508 ISO13850 ISO13849-1

Safety Classification and Reliability Data:

Mechanical Reliability B10d	1.5 x 10 ⁶ operations at 100mA load
ISO13849-1	Up to PLe depending upon system architecture
EN62061	Up to SIL3 depending upon system architecture
Safety Data – Annual Usage	8 cycles per hour/24 hours per day/365 days
	MTTFd 214 years
Enclosure/Cover Material	Die-Cast (painted yellow)
IP Rating	IP67 (NEMA 6)
Rope Span	250m Dual Head
Rope Tension Device	IDEM Tensioner/Gripper (quick fixing)
Rope Type	4.00mm outside dia. Steel inner - PVC sheath
Mounting	4 x M5
Mounting Position	Any
Conduit Entries	4 x M20 or 4 x 1/2" NPT (by Sales Number)
Tongue Settings	Mounting M5 4.0Nm Lid T20 Torx M4 1.5Nm
	Terminals 1.0Nm
Ambient Temperature	-25C +80C
Vibration Resistance	10-500Hz 0.35mm
Shock Resistance	11ms 15g
Tension Force (typical mid setting)	130N
Typical Operating Force (Rope pulled)	<125N <300mm deflection
Mechanical Life	1,000,000 operations
Weight	1350g approx.
Contact Type	EN60947-5-1 double break type Zb Snap Action up to 4NC (positive break) 2NO (Auxiliary)
Contact Material	Silver
Termination	Clamp up to 2.5mm ² conductors
Rating	Utilisation category AC15 A300
Operational Rating	240V 3A
Thermal Current (Ith)	10A
Rated Insulation Voltage (U)	500V
Withstand Voltage (Uimp)	2500V
Short Circuit Overload Protection	Fuse externally 10A(FF)

SALES NUMBER	TYPE	CONDUIT	CONTACTS	FITTINGS
141001	GLHD	4 x M20	4NC 2NO	LED & E-Stop
141002	GLHD	4 x 1/2" NPT	4NC 2NO	LED & E-Stop
141029	GLHD	4 x M20	4NC 2NO	LED
141030	GLHD	4 x 1/2" NPT	4NC 2NO	LED
141039	GLHD	4 x M20	4NC 2NO	E-Stop
141040	GLHD	4 x 1/2" NPT	4NC 2NO	E-Stop
141041	GLHD	4 x M20	4NC 2NO	
141042	GLHD	4 x 1/2" NPT	4NC 2NO	
141012	GLH			Replacement Lid
141013	GLH			Replacement Lid with LED
For LED Models add voltage code to Sales Number see below				
Steady Green/Flashing Red				
A - 24Vdc B - 110Vac C - 230Vac				
Steady Green/Steady Red				
AS - 24Vdc BS - 110Vac CS - 230Vac				

Gold Plated Contacts available for low power circuits (5V 5mA).
Add GC to Sales Number e.g. 141001-A-GC

For all IDEM switches the normally closed (NC) circuits are closed when the system is tensioned correctly and the switch has been reset.

Guardian Line Heavy Duty Type: GLHL & GLHR

FEATURES:

PROTECTION UP TO 125 METRES (410 FEET)

The GLHL/R is a robust die-cast Heavy Duty Safety Rope Pull Switch designed to protect long conveyor lengths where protection is required up to 125m using two switches or up to 100m using a single switch. The die-cast housings are robust to survive indoor or outdoor use.

A bi-colour LED ensures switch status can be seen easily from a distance. They have 4NC 2NO contacts to ensure flexibility with all modern control applications and optional Explosion Proof contact blocks are available.

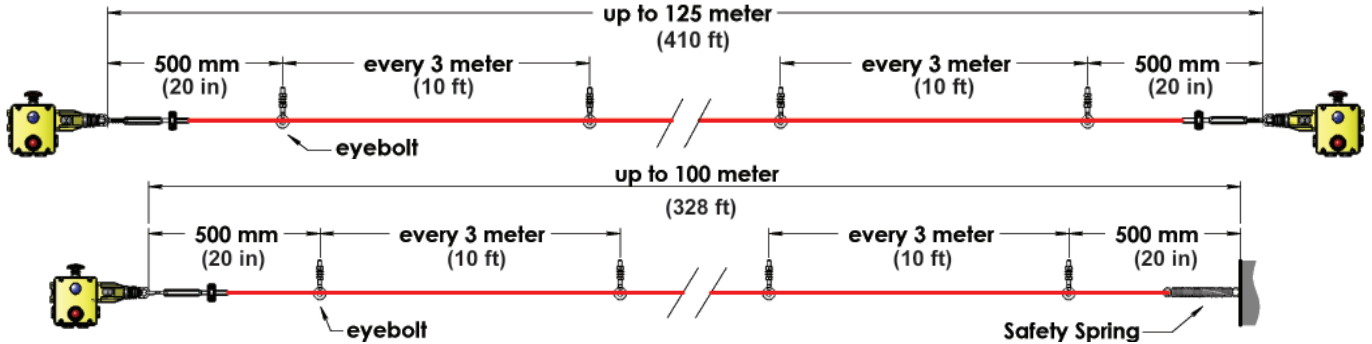
They can be used to complement the GLHD versions at each end of the rope span.



GLHL (Left Hand)

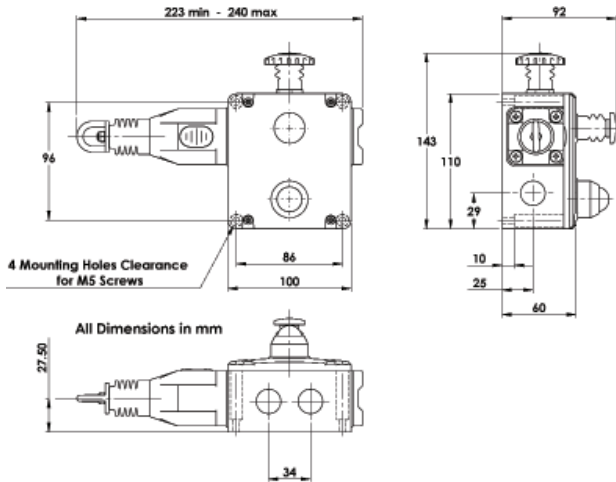
GLHR (Right Hand)

Low temperature versions -40C available GLHL-FZ and GLHR-FZ



It is important that the first 500mm is not used as part of the active protection coverage. If protection is required in this first 500mm then it is recommended to use switches fitted with a mushroom type E-Stop button. IDEM also recommend when using a Safety Spring that a maximum of one corner pulley is used.

DIMENSIONS:



Pre-wired EX versions (see Explosion Proof section)

Standards: EN60947-5-1 EN60947-5-5 EN62061 UL508 ISO13850 ISO13849-1

Safety Classification and Reliability Data:

Mechanical Reliability B10d	1.5 x 10 ⁶ operations at 100mA load
ISO13849-1	Up to PLe depending upon system architecture
EN62061	Up to SIL3 depending upon system architecture
Safety Data – Annual Usage	8 cycles per hour/24 hours per day/365 days
PFHd	<1.0 x 10 ⁻⁷
Proof Test Interval (Life)	21 years
MTTFd	214 years
Enclosure/Cover Material	Die-Cast (painted yellow)
IP Rating	IP67 (NEMA 6)
Rope Span	125m
Rope Tension Device	IDEM Tensioner/Gripper (quick fixing)
Rope Type	4.00mm outside dia. Steel inner - PVC sheath
Mounting	4 x M5
Mounting Position	Any
Conduit Entries	4 x M20 or 4 x 1/2" NPT (by Sales Number)
Tongue Settings	Mounting M5 4.0Nm Lid T20 Torx M4 1.5Nm Terminals 1.0Nm
Ambient Temperature	-25C +80C
Vibration Resistance	10-500Hz 0.35mm
Shock Resistance	11ms 15g
Tension Force (typical mid setting)	130N
Typical Operating Force (Rope pulled)	<125N <300mm deflection
Weight	1030g approx.
Contact Type	EN60947-5-1 double break type Zb Snap Action up to 4NC (positive break) 2NO (Auxiliary)
Contact Material	Silver
Termination	Clamp up to 2.5mm ² conductors
Rating	Utilisation category AC15 A300
Operational Rating	240V 3A
Thermal Current (Ith)	10A
Rated Insulation Voltage (U)	500V
Withstand Voltage (Uimp)	2500V
Short Circuit Overload Protection	Fuse externally 10A(FF)

SALES NUMBER	TYPE	CONDUIT	CONTACTS	FITTINGS
141005	GLHL	4 x M20	4NC 2NO	LED & E-Stop
141006	GLHL	4 x 1/2" NPT	4NC 2NO	LED & E-Stop
141053	GLHL	4 x M20	4NC 2NO	LED
141055	GLHL	4 x 1/2" NPT	4NC 2NO	LED
141051	GLHL	4 x M20	4NC 2NO	E-Stop
141035	GLHL	4 x 1/2" NPT	4NC 2NO	E-Stop
141037	GLHL	4 x M20	4NC 2NO	
141057	GLHL	4 x 1/2" NPT	4NC 2NO	
141009	GLHR	4 x M20	4NC 2NO	LED & E-Stop
141010	GLHR	4 x 1/2" NPT	4NC 2NO	LED & E-Stop
141054	GLHR	4 x M20	4NC 2NO	LED
141056	GLHR	4 x 1/2" NPT	4NC 2NO	LED
141052	GLHR	4 x M20	4NC 2NO	E-Stop
141036	GLHR	4 x 1/2" NPT	4NC 2NO	E-Stop
141038	GLHR	4 x M20	4NC 2NO	
141058	GLHR	4 x 1/2" NPT	4NC 2NO	
141012	GLH			Replacement Lid
141013	GLH			Replacement Lid with LED

For LED Models add voltage code to Sales Number see below

Steady Green/Flashing Red
A - 24Vdc B - 110Vac C - 230Vac
Steady Green/Steady Red
AS - 24Vdc BS - 110Vac CS - 230Vac

Gold Plated Contacts available for low power circuits (5V 5mA).
Add GC to Sales Number e.g. 141005-A-GC

For all IDEM switches the normally closed (NC) circuits are closed when the system is tensioned correctly and the switch has been reset.

Guardian Line Heavy Duty Type: GLHD-SS (Stainless Steel)

FEATURES:

PROTECTION UP TO 250 METRES (820 FEET)

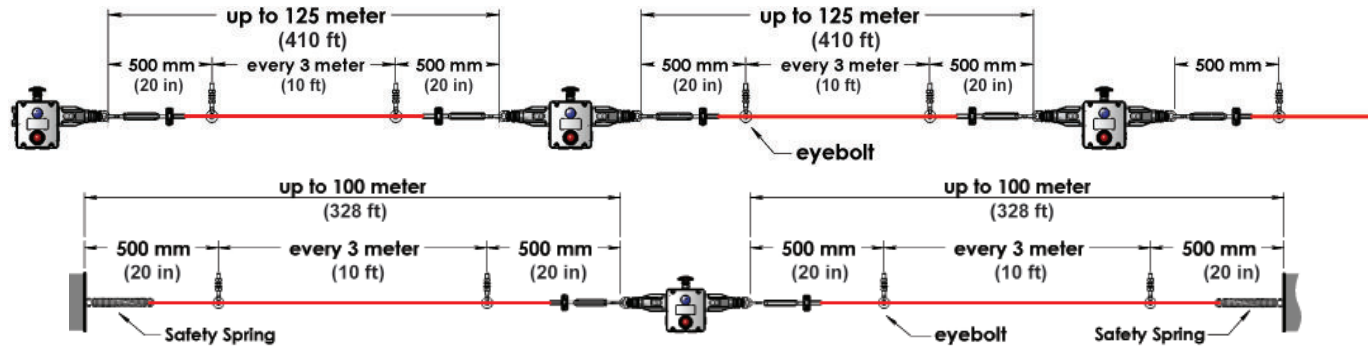
The GLHD-SS is a Heavy Duty Safety Rope Pull Switch designed to protect long conveyor lengths. The Stainless Steel 316 housings are designed specifically to withstand the tough environments found in the Food and Pharmaceutical industries. They will survive chemical and detergent washdown by providing all stainless steel parts and robust IP67 and IP69K sealing by using integral bellows and gaskets.

A bi-colour LED ensures switch status can be seen easily from a distance. They have 4NC 2NO contacts to ensure flexibility with all modern control applications and optional Explosion Proof contact blocks are available.

Shorter rope spans up to 200m can be achieved by using just one switch which makes a cost effective solution and also reducing electrical wiring runs.

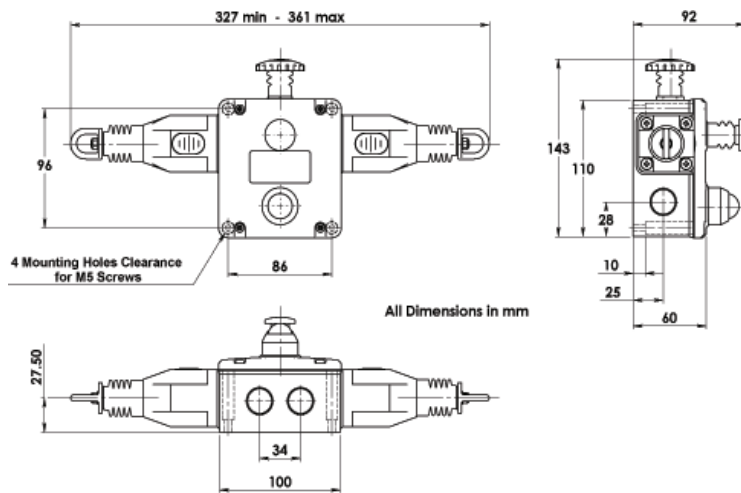


Low temperature version -40C available GLHD-SS-FZ



It is important that the first 500mm is not used as part of the active protection coverage. If protection is required in this first 500mm then it is recommended to use switches fitted with a mushroom type E-Stop button. IDEM also recommend when using a Safety Spring that a maximum of one corner pulley is used.

DIMENSIONS:



IDEM recommend using our Stainless Steel 316 Gland with this switch.

S/STEEL 316 GLAND	SALES NUMBER
M20	140120
1/2" NPT	140121



SALES NUMBER	TYPE	CONDUIT	CONTACTS	FITTINGS
145001	GLHD-SS	4 x M20	4NC 2NO	LED & E-Stop
145002	GLHD-SS	4 x 1/2" NPT	4NC 2NO	LED & E-Stop
145029	GLHD-SS	4 x M20	4NC 2NO	LED
145030	GLHD-SS	4 x 1/2" NPT	4NC 2NO	LED
145023	GLHD-SS	4 x M20	4NC 2NO	E-Stop
145024	GLHD-SS	4 x 1/2" NPT	4NC 2NO	E-Stop
145025	GLHD-SS	4 x M20	4NC 2NO	
145026	GLHD-SS	4 x 1/2" NPT	4NC 2NO	
145012	GLH-SS			Replacement Lid
145013	GLH-SS			Replacement Lid with LED

For LED Models add voltage code to Sales Number see below

Steady Green/Flashing Red
A - 24Vdc B - 110Vac C - 230Vac

Steady Green/Steady Red
AS - 24Vdc BS - 110Vac CS - 230Vac



Pre-wired EX versions (see Explosion Proof section)

Standards: EN60947-5-1 EN60947-5-5 EN62061
UL508 ISO13850 ISO13849-1

Safety Classification and Reliability Data:

Mechanical Reliability B10d	1.5 x 10 ⁸ operations at 100mA load
ISO13849-1	Up to PLe depending upon system architecture
EN62061	Up to SIL3 depending upon system architecture
Safety Data – Annual Usage	8 cycles per hour/24 hours per day/365 days
	MTTFd 214 years
Enclosure/Cover Material	Stainless Steel 316
External Parts	Stainless Steel
IP Rating	IP69K (NEMA PW12) IP67 (NEMA 6)
Rope Span	250m Dual Head
Rope Tension Device	IDEM Tensioner/Gripper (quick fixing)
Rope Type	4.00mm outside dia. Steel inner - PVC sheath
Mounting	4 x M5
Mounting Position	Any
Conduit Entries	4 x M20 or 4 x 1/2" NPT (by Sales Number)
Tongue Settings	Mounting M5 4.0Nm Lid T20 Torx M4 1.5Nm Terminals 1.0Nm
Ambient Temperature	-25C +80C (Cleaning 100C)
Vibration Resistance	10-500Hz 0.35mm
Shock Resistance	11ms 15g
Tension Force (typical mid setting)	130N
Typical Operating Force (Rope pulled)	<125N <300mm deflection
Weight	2850g approx.
Contact Type	EN60947-5-1 double break type Zb Snap Action up to 4NC (positive break) 2NO (Auxiliary)
Contact Material	Silver
Termination	Clamp up to 2.5mm ² conductors
Rating	Utilisation category AC15 A300
Operational Rating	240V 3A
Thermal Current (Ith)	10A
Rated Insulation Voltage (U)	500V
Withstand Voltage (Uimp)	2500V
Short Circuit Overload Protection	Fuse externally 10A(FF)

Gold Plated Contacts available for low power circuits (5V 5mA).
Add GC to Sales Number e.g. 145001-A-GC

For all IDEM switches the normally closed (NC) circuits are closed when the system is tensioned correctly and the switch has been reset.

Guardian Line Heavy Duty Type: GLHL-SS & GLHR-SS

FEATURES:

PROTECTION UP TO 125 METRES (410 FEET)

The GLHL/R-SS a robust Heavy Duty Safety Rope Pull Switch is designed to protect long conveyor lengths up to 125m (2 switches) or up to 100m using a single switch. The Stainless Steel 316 housings are designed specifically to withstand the tough environments found in the Food and Pharmaceutical industries. They will survive chemical and detergent washdown by providing all stainless steel parts and robust IP67 and IP69K sealing by using integral bellows and gaskets.

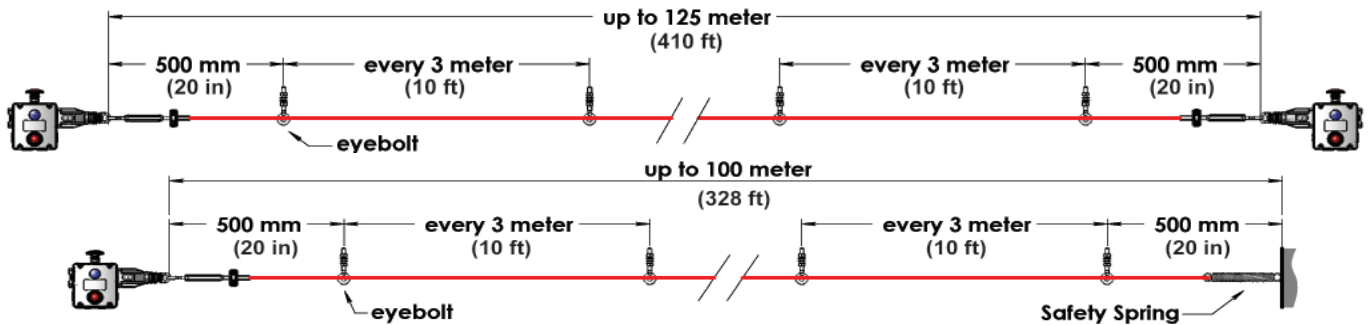
They can be used to complement the GLHD-SS (dual head) versions at each end of the rope span.



GLHL-SS (Left Hand)

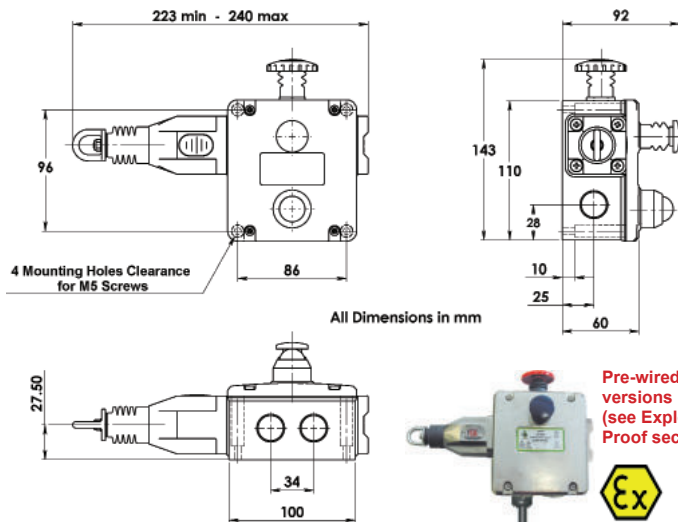
GLHR-SS (Right Hand)

Low temperature version -40C available GLHL-SS-FZ & GLHR-SS-FZ



It is important that the first 500mm is not used as part of the active protection coverage. If protection is required in this first 500mm then it is recommended to use switches fitted with a mushroom type E-Stop button. IDEM also recommend when using a Safety Spring that a maximum of one corner pulley is used.

DIMENSIONS:



All Dimensions in mm

Pre-wired EX versions (see Explosion Proof section)



SALES NUMBER	TYPE	CONDUIT	CONTACTS	FITTINGS
145005	GLHL-SS	4 x M20	4NC 2NO	LED & E-Stop
145006	GLHL-SS	4 x 1/2" NPT	4NC 2NO	LED & E-Stop
145053	GLHL-SS	4 x M20	4NC 2NO	LED
145055	GLHL-SS	4 x 1/2" NPT	4NC 2NO	LED
145051	GLHL-SS	4 x M20	4NC 2NO	E-Stop
145035	GLHL-SS	4 x 1/2" NPT	4NC 2NO	E-Stop
145037	GLHL-SS	4 x M20	4NC 2NO	
145057	GLHL-SS	4 x 1/2" NPT	4NC 2NO	
145009	GLHR-SS	4 x M20	4NC 2NO	LED & E-Stop
145010	GLHR-SS	4 x 1/2" NPT	4NC 2NO	LED & E-Stop
145054	GLHR-SS	4 x M20	4NC 2NO	LED
145056	GLHR-SS	4 x 1/2" NPT	4NC 2NO	LED
145052	GLHR-SS	4 x M20	4NC 2NO	E-Stop
145036	GLHR-SS	4 x 1/2" NPT	4NC 2NO	E-Stop
145038	GLHR-SS	4 x M20	4NC 2NO	
145058	GLHR-SS	4 x 1/2" NPT	4NC 2NO	
145012	GLH-SS			Replacement Lid
145013	GLH-SS			Replacement Lid with LED

For LED Models add voltage code to Sales Number see below

Steady Green/Flashing Red
A - 24Vdc B - 110Vac C - 230Vac
Steady Green/Steady Red
AS - 24Vdc BS - 110Vac CS - 230Vac

Gold Plated Contacts available for low power circuits (5V 5mA).
Add GC to Sales Number e.g. 145005-A-GC

Standards: EN60947-5-1 EN60947-5-5 EN62061
UL508 ISO13850 ISO13849-1

Safety Classification and Reliability Data:

Mechanical Reliability B10d	1.5 x 10 ⁶ operations at 100mA load
ISO13849-1	Up to PLE depending upon system architecture
EN62061	Up to SIL3 depending upon system architecture
Safety Data – Annual Usage	8 cycles per hour/24 hours per day/365 days
PFHd	<1.0 x 10 ⁻⁷
Proof Test Interval (Life)	21 years
MTTFd	214 years
Enclosure/Cover Material	Stainless Steel 316
External Parts	Stainless Steel
IP Rating	IP69K (NEMA PW12) IP67 (NEMA 6)
Rope Span	125m
Rope Tensioner/Gripper (quick fixing)	IDEM Tensioner/Gripper (quick fixing)
Rope Type	4.00mm outside dia. Steel inner - PVC sheath
Mounting	4 x M5
Mounting Position	Any
Conduit Entries	4 x M20 or 4 x 1/2" NPT (by Sales Number)
Tongue Settings	Mounting M5 4.0Nm Lid T20 Torx M4 1.5Nm Terminals 1.0Nm

Ambient Temperature	-25C +80C (Cleaning 100C)
Vibration Resistance	10-500Hz 0.35mm
Shock Resistance	11ms 15g
Tension Force (typical mid setting)	130N
Typical Operating Force (Rope pulled)	<125N <300mm deflection
Weight	2475g approx.
Contact Type	EN60947-5-1 double break type Zb Snap Action up to 4NC (positive break) 2NO (Auxiliary)
Contact Material	Silver
Termination	Clamp up to 2.5mm ² conductors
Rating	Utilisation category AC15 A300
Operational Rating	240V 3A
Thermal Current (Ith)	10A
Rated Insulation Voltage (U)	500V
Withstand Voltage (Uimp)	2500V
Short Circuit Overload Protection	Fuse externally 10A(FF)

S/STEEL 316 GLAND	SALES NUMBER
M20	140120
1/2" NPT	140121



IDEM recommend using our Stainless Steel 316 Gland with this switch.

For all IDEM switches the normally closed (NC) circuits are closed when the system is tensioned correctly and the switch has been reset.