

# Guardian Line Heavy Duty Type: GLHD

## FEATURES:

### PROTECTION UP TO 250 METRES (820 FEET)

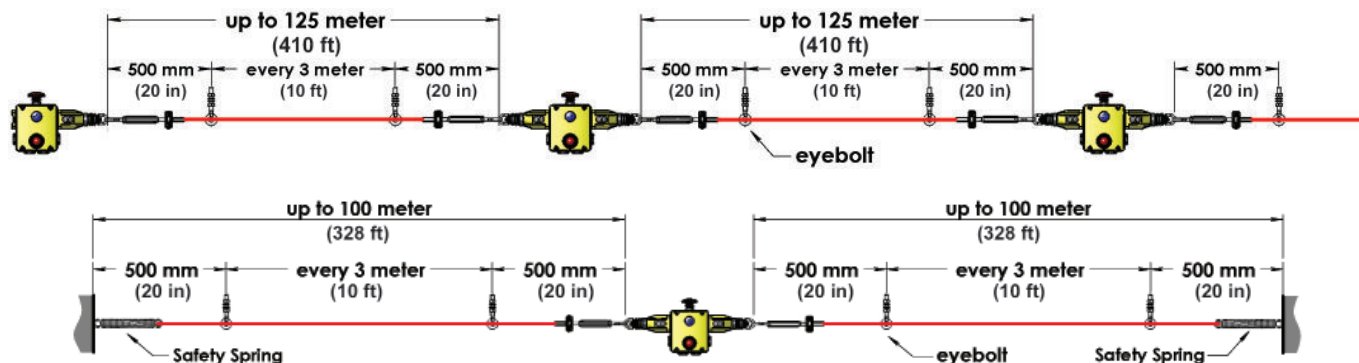
The GLHD is a Heavy Duty Safety Rope Pull Switch designed to protect long conveyor lengths. The die-cast housings are robust to survive indoor or outdoor use including washdown (IP67 rating). Lengths over 2 Km can be achieved with less than 20 switches.

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.

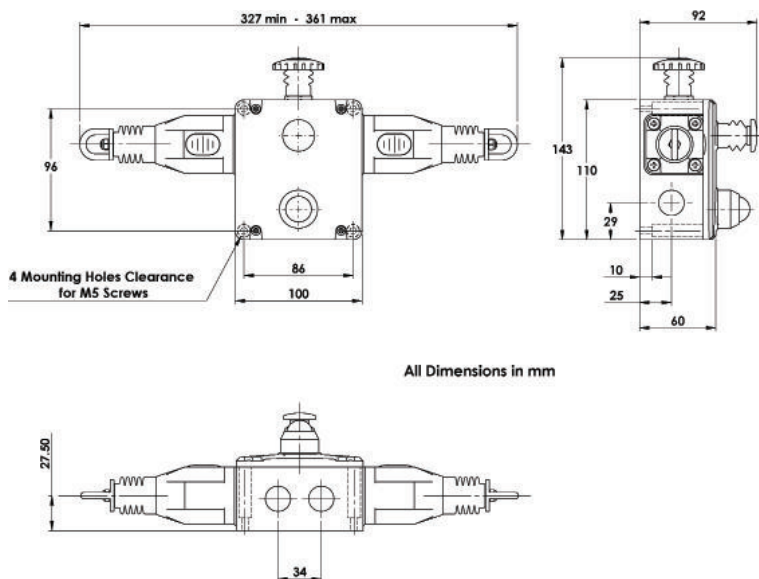


Low temperature version -40C available GLHD-FZ



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:



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 <sup>6</sup> 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 <sup>-7</sup>
Proof Test Interval (Life)	21 years
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 <sup>2</sup> 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.