

# Guardian Line Standard Duty Type: GLS

## FEATURES:

### PROTECTION UP TO 80 METRES (262 FEET)

The GLS is a General/Standard Duty robust die-cast Safety Rope Pull Switch designed to protect conveyor lengths where protection is required up to 80m using two switches or up to 60m using a single switch.

They provide a reliable general purpose safety solution for conveyors and offer a choice of fittings depending upon the application.

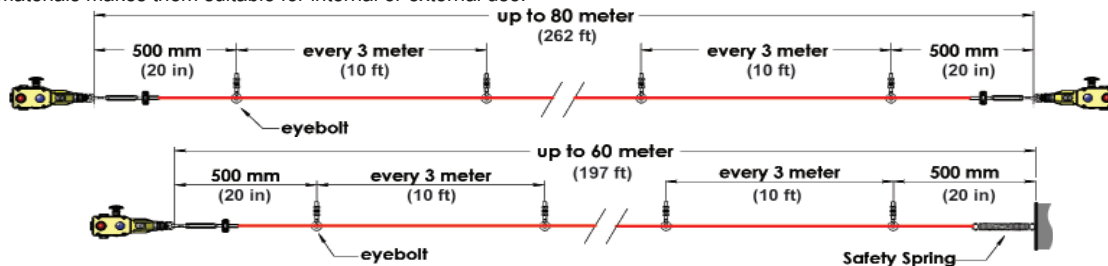
They can be supplied with a mushroom type Emergency Stop button which can be fitted to the side of the switch to offer an extra traditional Emergency Stop function close to the switch, or can be fitted later after installation without any extra wiring.

A bi-colour LED is also available to show switch status from a distance and they have a choice of 3 pole, 4 pole or Explosion Proof contact blocks to ensure flexibility with all modern control applications.

Rugged internal sealing bellows means the GLS can be high pressure hosed and choice of materials makes them suitable for internal or external use.

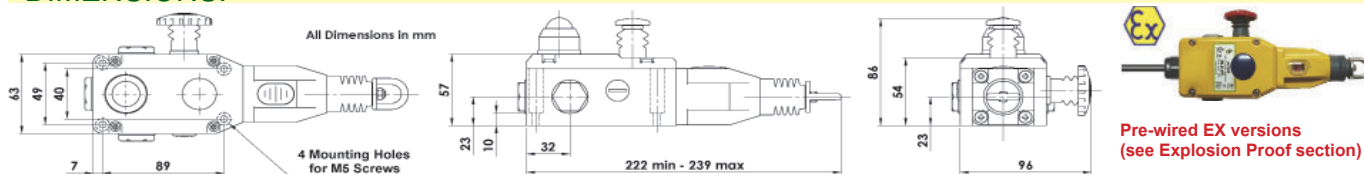


GLS-FZ: Special low temperature version -40C available.



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:



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
	MTTFd 214 years
Enclosure Material	Die Cast (painted yellow)
IP Rating	IP67 (NEMA 6)
Rope Span	Up to 80m (2 switches) 60m (1 switch)
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	3 x M20 or 3 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	735g 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
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)

Pre-wired EX versions  
(see Explosion Proof section)

SALES NUMBER	CONDUIT	CONTACTS	FITTINGS
142001	3 x M20	2NC 1NO	
142002	3 x 1/2" NPT	2NC 1NO	
142005	3 x M20	2NC 1NO	LED
142006	3 x 1/2" NPT	2NC 1NO	LED
142009	3 x M20	2NC 1NO	E-Stop
142010	3 x 1/2" NPT	2NC 1NO	E-Stop
142017	3 x M20	2NC 1NO	E-Stop & LED
142018	3 x 1/2" NPT	2NC 1NO	E-Stop & LED
142050	3 x M20	3NC 1NO	
142051	3 x 1/2" NPT	3NC 1NO	
142052	3 x M20	2NC 2NO	
142053	3 x 1/2" NPT	2NC 2NO	
142054	3 x M20	4NC	
142055	3 x 1/2" NPT	4NC	
142056	3 x M20	3NC 1NO	LED
142057	3 x 1/2" NPT	3NC 1NO	LED
142058	3 x M20	2NC 2NO	LED
142059	3 x 1/2" NPT	2NC 2NO	LED
142060	3 x M20	4NC	LED
142061	3 x 1/2" NPT	4NC	LED
142062	3 x M20	3NC 1NO	E-Stop
142063	3 x 1/2" NPT	3NC 1NO	E-Stop
142064	3 x M20	2NC 2NO	E-Stop
142065	3 x 1/2" NPT	2NC 2NO	E-Stop
142066	3 x M20	4NC	E-Stop
142067	3 x 1/2" NPT	4NC	E-Stop
142074	3 x M20	3NC 1NO	E-Stop & LED
142075	3 x 1/2" NPT	3NC 1NO	E-Stop & LED
142076	3 x M20	2NC 2NO	E-Stop & LED
142077	3 x 1/2" NPT	2NC 2NO	E-Stop & LED
142078	3 x M20	4NC	E-Stop & LED
142079	3 x 1/2" NPT	4NC	E-Stop & LED
142026		Replacement Lid	
142027		Replacement Lid/LED	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			

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

Gold Plated Contacts available for low power circuits (5V 5mA).  
Add GC to Sales Number e.g. 142001-GC