

# Guardian Line Mini Duty Type: GLM

## FEATURES:

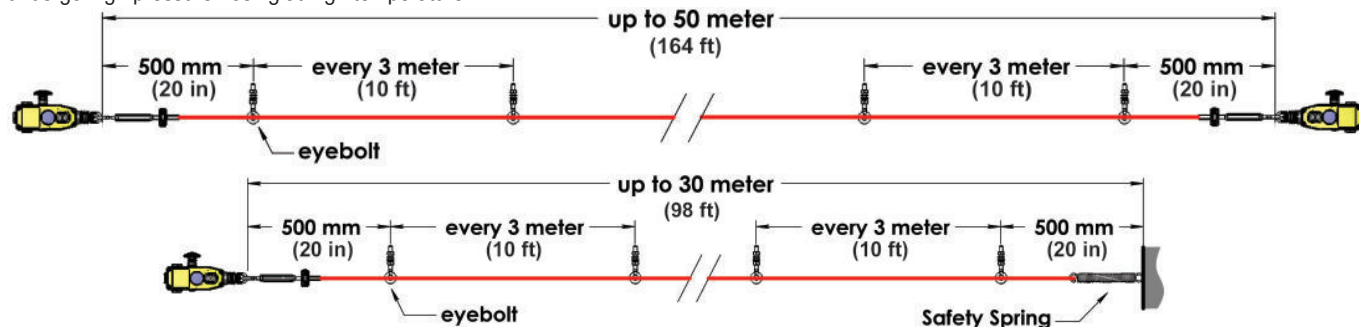
### PROTECTION UP TO 50 METRES (164 FEET)

The GLM is a compact yet robust die-cast Mini Duty Safety Rope Pull Switch which has been designed to protect short conveyor lengths where protection is required up to 50m using two switches or up to 30m using just a single switch.

The GLM provides a reliable, cost-effective safety solution for conveyor systems and can be enhanced by adding an external mushroom type emergency stop at the switch or a bi-colour LED is available to show switch status from a distance.

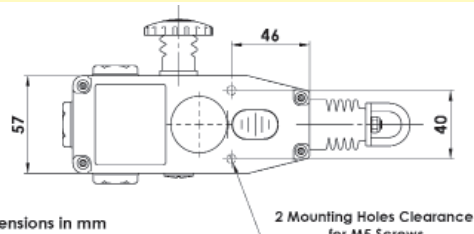
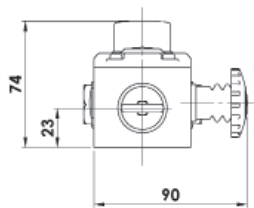
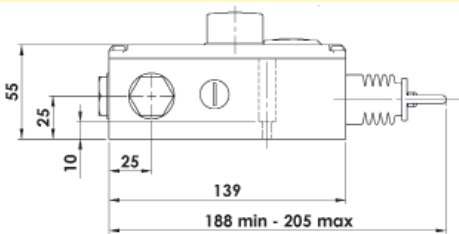
The GLM has a choice of 3 or 4 pole contacts to ensure flexibility with all modern control applications.

With the added benefit of rugged internal sealing bellows the GLM is able to undergo high pressure hosing at high temperature.



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

2 Mounting Holes Clearance for M5 Screws

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 50m (2 switches) 30m (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	640g approx.
Contact Type	EN60947-5-1 double break type Zb Snap Action up to 4NC (positive break) 2NO (Auxiliary)
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	CONDUIT	CONTACTS	FITTINGS
143001	M20	2NC 1NO	
143002	1/2" NPT	2NC 1NO	
143003	M20	3NC	
143004	1/2" NPT	3NC	
143005	M20	2NC 1NO	E- Stop
143006	1/2" NPT	2NC 1NO	E- Stop
143007	M20	3NC	E- Stop
143008	1/2" NPT	3NC	E- Stop
143050	M20	3NC 1NO	
143051	1/2" NPT	3NC 1NO	
143052	M20	2NC 2NO	
143053	1/2" NPT	2NC 2NO	
143054	M20	4NC	
143055	1/2" NPT	4NC	
143056	M20	3NC 1NO	E- Stop
143057	1/2" NPT	3NC 1NO	E- Stop
143058	M20	2NC 2NO	E- Stop
143059	1/2" NPT	2NC 2NO	E- Stop
143060	M20	4NC	E- Stop
143061	1/2" NPT	4NC	E- Stop
143062	M20	3NC 1NO	LED
143063	1/2" NPT	3NC 1NO	LED
143064	M20	2NC 2NO	LED
143065	1/2" NPT	2NC 2NO	LED
143066	M20	3NC 1NO	E-Stop & LED
143067	1/2" NPT	3NC 1NO	E-Stop & LED
143068	M20	2NC 2NO	E-Stop & LED
143069	1/2" NPT	2NC 2NO	E-Stop & LED
143009		Replacement Lid	
143010		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. 143001-GC

# Guardian Line Mini Duty Type: GLM-SS

## FEATURES:

### PROTECTION UP TO 50 METRES (164 FEET)

The GLM-SS is a Stainless Steel compact but extremely robust Mini Duty Safety Rope Pull Switch designed to protect short conveyor lengths where protection is required up to 50m using two switches or up to 30m using just a single switch.

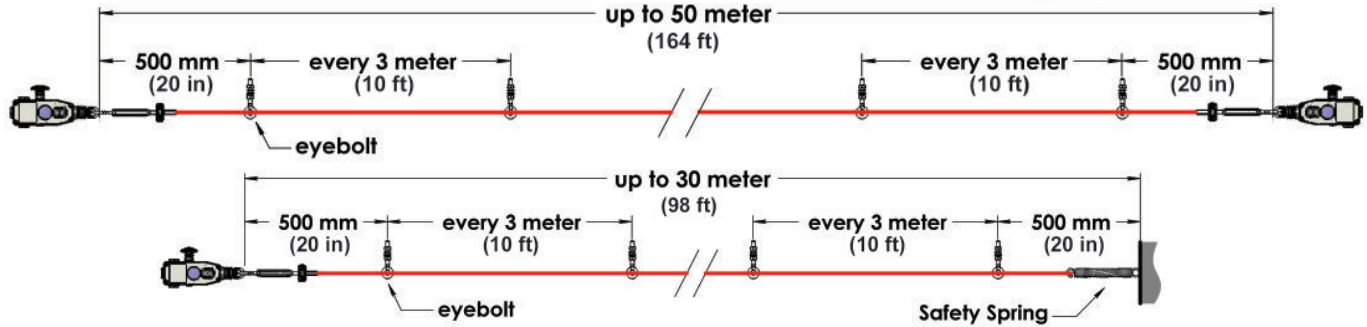
The GLM-SS provides a reliable, cost-effective safety solution for conveyor systems and can be enhanced by adding an external mushroom type emergency stop at the switch or a bi-colour LED to show switch status from a distance.

The GLM-SS comes with a choice of 3 or 4 pole contacts to ensure flexibility with all modern control applications.

With the added benefit of rugged internal sealing bellows the GLM-SS is able to undergo high pressure hosing at high temperature.

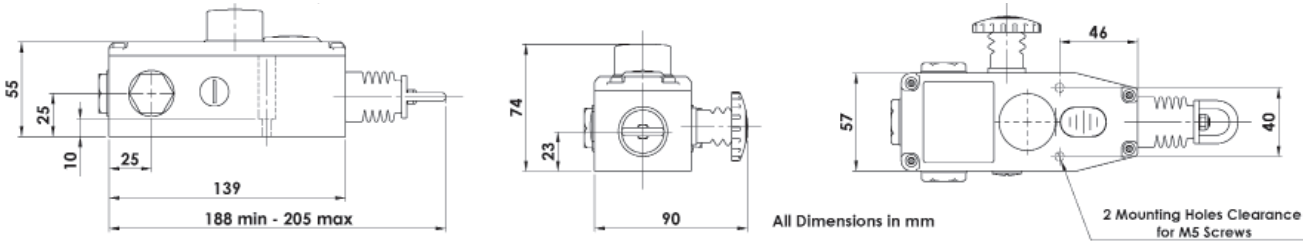


STAINLESS STEEL 316



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 Stainless Steel 316  
IP Rating IP69K  
Rope Span Up to 50m (2 switches) 30m (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 640g approx.

Contact Type EN60947-5-1 double break type Zb  
Snap Action up to 4NC (positive break)  
2NO (Auxiliary)

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	CONDUIT	CONTACTS	FITTINGS
148001	M20	2NC 1NO	
148002	1/2" NPT	2NC 1NO	
148003	M20	3NC	
148004	1/2" NPT	3NC	
148005	M20	2NC 1NO	E- Stop
148006	1/2" NPT	2NC 1NO	E- Stop
148007	M20	3NC	E- Stop
148009	1/2" NPT	3NC	E- Stop
148050	M20	3NC 1NO	
148051	1/2" NPT	3NC 1NO	
148052	M20	2NC 2NO	
148053	1/2" NPT	2NC 2NO	
148054	M20	4NC	
148055	1/2" NPT	4NC	
148056	M20	3NC 1NO	E- Stop
148057	1/2" NPT	3NC 1NO	E- Stop
148058	M20	2NC 2NO	E- Stop
148059	1/2" NPT	2NC 2NO	E- Stop
148060	M20	4NC	E- Stop
148061	1/2" NPT	4NC	E- Stop
148062	M20	3NC 1NO	LED
148063	1/2" NPT	3NC 1NO	LED
148064	M20	2NC 2NO	LED
148065	1/2" NPT	2NC 2NO	LED
148066	M20	3NC 1NO	E-Stop & LED
148067	1/2" NPT	3NC 1NO	E-Stop & LED
148068	M20	2NC 2NO	E-Stop & LED
148069	1/2" NPT	2NC 2NO	E-Stop & LED
148009	Replacement Lid		
148010	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

Gold Plated Contacts available for low power circuits (5V 5mA).  
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For all IDEM switches the normally closed (NC) circuits are closed when the system is tensioned correctly and the switch has been reset.