Guardian Line Standard Duty: **GLS-SS**

FEATURES:

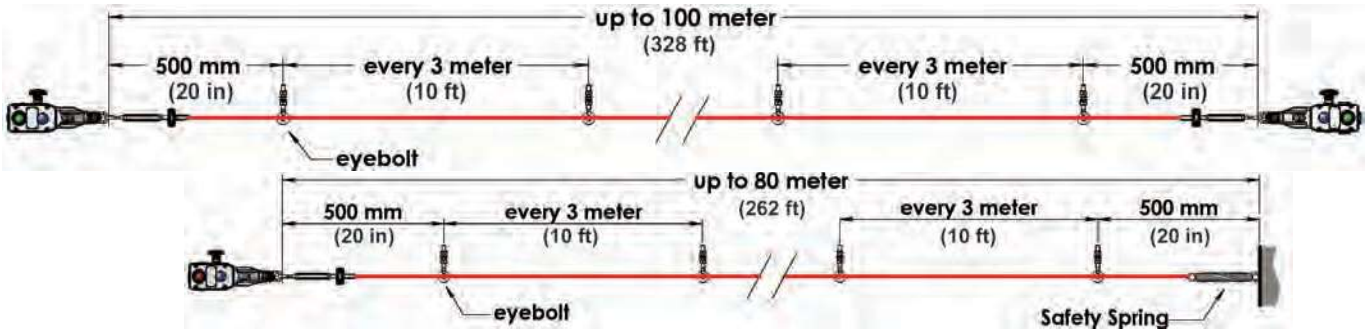
PROTECTION UP TO 100 METRES (328 FEET)

The GLS-SS is General Duty Safety Rope Pull Switch designed to protect long conveyor lengths up to 100m. The Stainless Steel 316 housings are designed specifically to withstand the harsh environments found in the Food and Pharmaceutical industries. The fixing holes are under the cover of the switch to prevent food trap areas and will survive chemical and detergent washdown by providing all stainless steel parts and robust IP67 and IP69K sealing by using integral bellows and gaskets.
An easily visible bi-colour LED is 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.
Shorter rope spans up to 80m can be achieved by using just one switch therefore making a cost-effective solution and also reducing electrical wiring runs.

IP69K

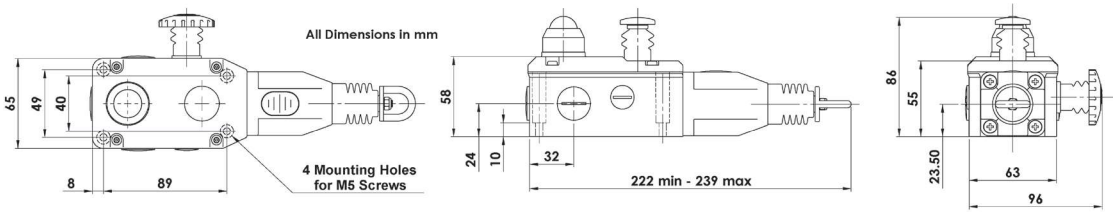
STAINLESS STEEL 316

Low temperature version -40C available GLS-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:



Pre-wired EX versions
(see Explosion Proof section)

Standards: EN60947-5-1 EN60947-5-5 EN62061
UL 60947-5-1 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	Stainless Steel 316
External Parts	Stainless Steel
IP Rating	IP69K (NEMA PW12) IP67 (NEMA 6)
Rope Span	Up to 100m (2 switches) 80m (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 (100C cleaning)
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	1810g 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)

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

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

SALES NUMBER	CONDUIT	CONTACTS	FITTINGS
144001	3 x M20	3NC 1NO	
144002	3 x 1/2" NPT	3NC 1NO	
144003	3 x M20	2NC 2NO	
144004	3 x 1/2" NPT	2NC 2NO	
144005	3 x M20	4NC	
144006	3 x 1/2" NPT	4NC	
144007	3 x M20	3NC 1NO	LED
144008	3 x 1/2" NPT	3NC 1NO	LED
144009	3 x M20	2NC 2NO	LED
144010	3 x 1/2" NPT	2NC 2NO	LED
144011	3 x M20	4NC	LED
144012	3 x 1/2" NPT	4NC	LED
144013	3 x M20	3NC 1NO	E-Stop
144014	3 x 1/2" NPT	3NC 1NO	E-Stop
144015	3 x M20	2NC 2NO	E-Stop
144016	3 x 1/2" NPT	2NC 2NO	E-Stop
144017	3 x M20	4NC	E-Stop
144018	3 x 1/2" NPT	4NC	E-Stop
144019	3 x M20	3NC 1NO	E-Stop & Led
144020	3 x 1/2" NPT	3NC 1NO	E-Stop & Led
144021	3 x M20	2NC 2NO	E-Stop & Led
144022	3 x 1/2" NPT	2NC 2NO	E-Stop & Led
144023	3 x M20	4NC	E-Stop & Led
144024	3 x 1/2" NPT	4NC	E-Stop & Led
144040	Replacement Lid		
144041	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). Add GC to Sales Number e.g. 144001-GC

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