

Grab Wire Auto-Reset Trip Switch Type: GLS-AR

FEATURES:

Grab Wire Auto-Reset Rope Switches are mounted on machines and sections of plant conveyors to initiate a momentary control signal command from any point along the installed rope length.

Pulling the rope causes instant tripping of the control circuit contacts.

Ideal for normal stop circuits where manual resetting of the switch is not required. **This switch is not an emergency stop, it is a "trip" switch with automatic reset.**

Rope Pull operated Auto Reset- Stop Switch

GLS-AR



APPLICATION:

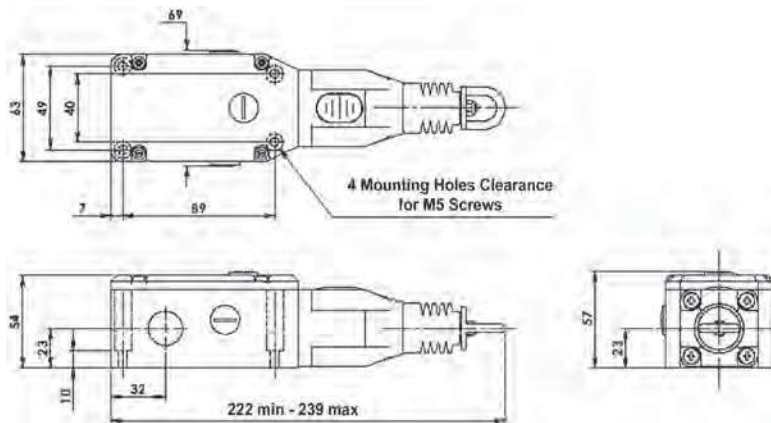
The switches have a positive mechanical linkage between the switch contacts and the wire rope as per EN60947-5-1. The switches are brought into the operational condition by pre-tensioning the rope by use of a tensioner device which clamps the rope and then hooks to the switch eyebolts. Correct tension can be observed by viewing the tension indicator on the switch housing. Once tensioned the switch contact blocks are set to the operational condition. i.e. Signal Contacts Closed - Auxiliary Contacts Open.

All of the switches have wire breakage monitoring. On pulling or breakage (loss of tension) of the rope, the normally closed Signal Contacts are opened and the Auxiliary Contacts are closed. The switches will be returned to the operational condition as soon as the rope returns to the set position.

**Explosion Proof version:
Zones 1,2,21,22**



DIMENSIONS:



Mechanical Features:

Enclosure/Cover Material	Die-Cast (painted yellow)
IP Rating	IP67
Rope Span	Up to 80m
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

Mechanical Life 1,000,000 operations

Approx.Weight 760g

Electrical Features:

Contact Type	EN60947-5-1 double break type Zb
Contact Material	Snap Action up to 2NC + 1NO (Auxiliary)
Termination	Silver
Rating	Clamp up to 2.5mm ² conductors
Operational Rating	Utilisation category AC15
Thermal Current (Ith)	240V 3A
Rated Insulation Voltage (U)	10A
Withstand Voltage (Uimp)	500V
Short Circuit Overload Protection	2500V
	Fuse externally 10A(FF)

Standards: EN60947-5-1 EN60947-5-5 EN62061
UL 60947-5-1 ISO13849-1

Safety Classification and Reliability Data:

Mechanical Reliability B10d 1.5 x 10⁶ operations at 100mA load

ATEX Classification (EX Versions)

Exd IIC T6 (-20 ≤ Ta ≤ +60C)	Gb
Ex tb IIIC T85C (-20 ≤ Ta ≤ +60C)	Db
Rated Voltage	250Vac
Rated Current	4Aac
Cable Length	3m pre-wired (EX versions)

SALES NUMBER	TYPE	CONDUIT	CONTACTS	FITTINGS
142498	GLS-AR	3 x M20	2NC 1NO	
142499	GLS-AR	3 x 1/2" NPT	2NC 1NO	
142496	GLS-AR	EX	1NC 1NO	Pre-Wired 3m
142497	GLS-AR	EX	2NC	Pre-Wired 3m

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. 142498-GC**