IDEM ROPE PULL KITS - Installation Instructions

IMPORTANT NOTE:

Read and understand these instructions before installing, operating or maintaining this equipment.
The product is designed to be a component of a customised safety orientated control system. It is the responsibility of each manufacturer to ensure the correct overall functionality of its systems and machines. IDEM, its subsidiaries and affiliates, are not in a position to guarantee all of the characteristics of a given system or product not designed by IDEM.

General Installation Guide:

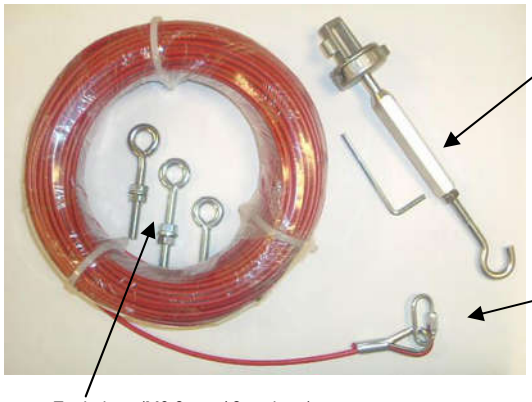
(Important - refer also to Rope Switch installation instructions).

1. Installation of all IDEM Safety Rope Switch systems must be in accordance with a risk assessment for the individual application.
Installation must only be carried out by competent personnel and in accordance with these instructions.

2. Rope support eyebolts must be fitted at 2.5m. min. to 3m. max. intervals along all rope lengths between switches. The rope must be supported no more than 500mm from the switch eyebolt or Safety Spring (if used). It is important that this first 500mm is not used as part of the active protection coverage.

Rope System Installation:

1. Check all parts:



Tensioner/Gripper
Allen Key 4mm
(Quantity as table).

Quick Link. (QL)
For up to 50m. spans, one end of the rope is terminated with a thimble and permanent clamp (Quick Link). For spans above 50m. two Tensioner/Gripper assemblies are used. There is no Quick Link the rope ends are free.

Eyebolts (M8 2nuts / 2washers)
(Quantity as per table)

Description	Rope	Eyebolts	Tensioner / Gripper	Allen Key
5M Kit	5M. QL	3	1	1
10M Kit	10M. QL	5	1	1
15M Kit	15M. QL	7	1	1
20M Kit	20M. QL	9	1	1
30M Kit	30M. QL	12	1	1
50MKit	50M. QL	20	1	1
80M Kit	80M.	30	2	2
100M Kit	100M.	37	2	2
126M Kit	126M.	45	2	2

2. Ensure switches, eyebolts and safety springs are correctly positioned and rigidly mounted in their final operating position before connecting the Rope system.
Ensure all Rope runs are clear, and that switch resetting function can be observed clearly.
If a Safety Spring is used the whole length of the rope must be observed to the resetting function (switch) and the spring (EN ISO 13850).

3. When using pulleys, ensure they are aligned correctly with the rope direction and the rope moves freely and is retained around the pulley wheel.
Pulleys can be used on inside corners, outside corners or for change in rope direction.

Universal Pulley:



Example: Inside corner fitting



Example: Outside corner fitting



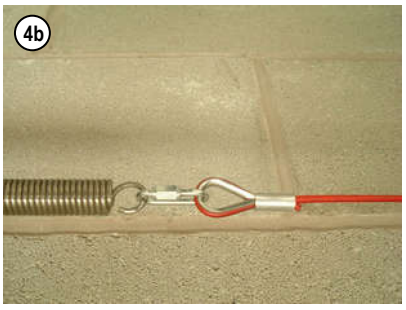
4. For systems up to 50m.

4a. For 2 switch systems, up to 50m., undo the locking clasp on the Quick Link (QL) locking and fit the clasp fully around one of the switch eyebolts.



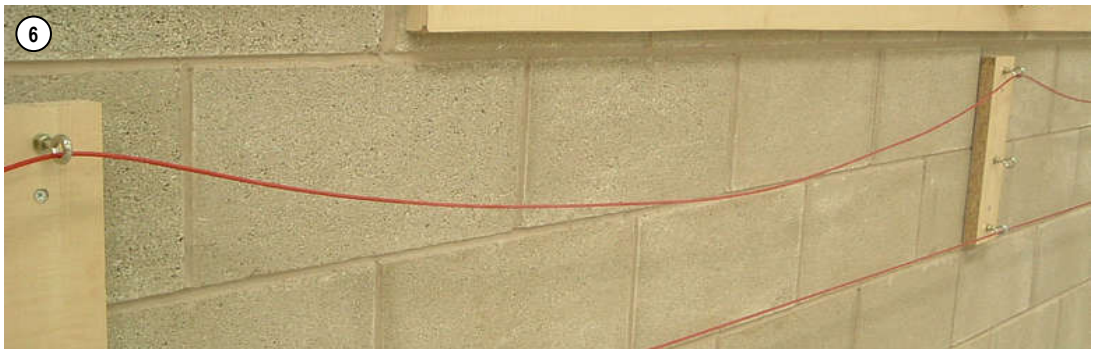


4b. For single switch systems, fit the QL to the Safety Spring.



5. For systems over 50m. two Tensioner/Gripper assemblies are provided to enable the maximum tension range to be achieved over longer lengths (there is no Quick Link provided). In this case instead of a QL, fit a Tensioner/Gripper to both ends of the system (See 7a and 7b).

6. After fitting the QL or Tensioner/Gripper to one end, feed the free end of the rope through each of the eyebolts and around pulleys ensuring that the rope is free to move.



7a. Unscrew the eyehook from the Hexagon shaped Thimble and re-fit the eyehook by 3 turns of the thimble to ensure that the eyehook is secure.
Leave the maximum thread possible for later adjustment of the rope tension.



7b. Fit the eyehook through the switch.



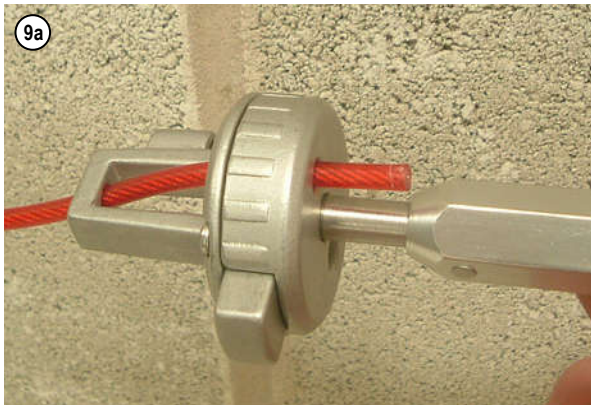
8a. Using the Allen Key (provided) open the locking bar in the main housing by turning the locking bolt.



8b. Ensure that the rope feed holes are open sufficiently to feed the rope through.



9a. Push the free end of rope through the central guide hole on the rear of the gripper housing and through either of the feed holes in the main housing.



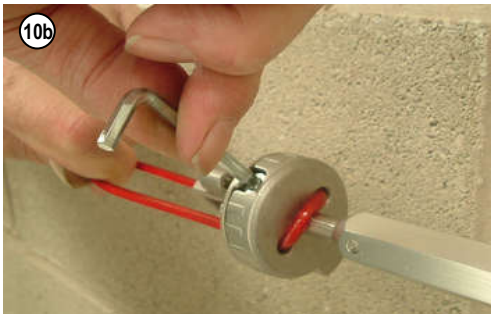
9b. Loop the rope over the thimble and back through 180 degrees and push through the other feed hole on the opposite side of the main housing.



10a. The rope is then pulled by hand through the Tensioner / Gripper to take up any slack rope before final locking.



10b. The rope is locked in position by the locking bar inside the main housing which is moved by using the allen key to turn the locking bolt.



11a. Tension the system by holding the hexagon thimble whilst turning the switch eyebolt



11b. For optimum performance the switch tension should be set at mid position (as indicated by the markers in the viewing window).



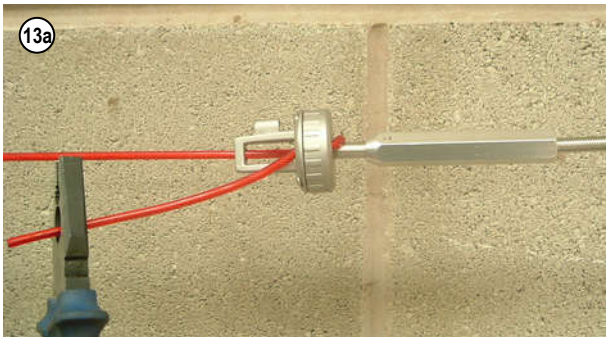
11c. For long rope spans >50m. it is advisable to balance the system by making turns to the Left and Right Tensioner/Grippers in turn whilst at the same time checking the rope tension setting in each of the switch viewing windows.



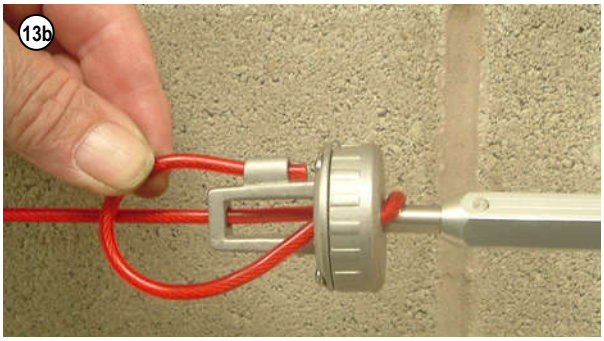
12. Tighten the lock nut tightly to the hexagon adjuster.



13a. Cut any excess rope but leave approximately 100mm free.



13b. Loop the remaining free end into the retaining clip.



Maintenance:

Every Month (or as directed by the risk assessment for the application):
Check correct operation of system at locations along all coverage length.
Check all Pulleys and Tensioner components for signs of damage to the rope sheath. Replace any damaged rope.
Check Rope Tensioner locking nut for tightness.
Check for nominal tension setting, re-tension rope if necessary.

Accessories

Sales Number Galvanised	Description	Rope	Eyebolts	Tensioner / Gripper	Allen Key
140001	5M Rope Kit	5M. QL	3	1	1
140002	10M Rope Kit	10M. QL	5	1	1
140003	15M Rope Kit	15M. QL	7	1	1
140004	20M Rope Kit	20M. QL	9	1	1
140005	30M Rope Kit	30M. QL	12	1	1
140006	50M Rope Kit	50M. QL	20	1	1
140007	80M Rope Kit	80M.	30	2	2
140008	100M Rope Kit	100M.	37	2	2
140009	126M Rope Kit	126M.	45	2	2
Sales Number **Stainless Steel**	**Description**	**Rope**	**Eyebolts**	**Tensioner / Gripper**	**Allen Key**
140010	5M Rope Kit	5M. QL	3	1	1
140011	10M Rope Kit	10M. QL	5	1	1
140012	15M Rope Kit	15M. QL	7	1	1
140013	20M Rope Kit	20M. QL	9	1	1
140014	30M Rope Kit	30M. QL	12	1	1
140015	50M Rope Kit	50M. QL	20	1	1
140016	80M Rope Kit	80M.	30	2	2
140017	100M Rope Kit	100M.	37	2	2
140018	126M Rope Kit	126M.	45	2	2

140019	Rope Tensioner / Gripper Stainless Steel
140020	Rope Tensioner / Gripper Galvanised Steel



	77mm Long 40mm High Fixing Hole centres 20mm
140021	Universal Pulley (Inside and Outside Corners) Stainless Steel
140064	Universal Pulley (Inside and Outside Corners) Galvanised



	84mm Long Thread length 51mm M8 x 1.25
140045	Eyebolt Stainless Steel
140046	Eyebolt Galvanised



Standard Bezel	S/Steel Bezel	
140042-A	140042-A-SS	LED Green / Flashing Red 24V.dc.
140042-B	140042-B-SS	LED Green / Flashing Red 110-120V.ac.
140042-C	140042-C-SS	LED Green / Flashing Red 230V.ac.
140132-AS	140132-AS-SS	LED Steady Green/Steady Red 24V.dc.
140132-BS	140132-BS-SS	LED Steady Green/Steady Red 110-120V.ac.
140132-CS	140132-CS-SS	LED Steady Green/Steady Red 230V.ac.



	220mm Long
140043	Safety Spring Standard



140044	E-Stop Mechanism Standard
140144	E-Stop Mechanism Stainless Steel



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