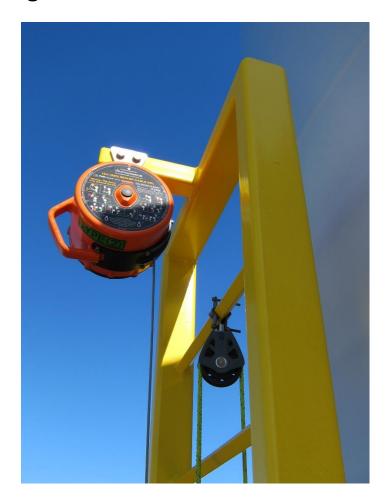
Latchways Loop Tether Line Tethering solution for ManSafe® Sealed SRL



Manufactured by

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<u>Please note that the Tether Line is an aid to retrieve the SRL's user attachment point and does not form part</u> of the fall arrest system – If in doubt, when installing or using the system, please contact Latchways plc.

- Ensure all tools are present before carrying out the installation
 - o 1 x 9 mm Spanner
 - o 1 x 10 mm Spanner/Wrench
 - o 2 x 17 mm Spanner/Wrench
 - o 1 x 3 mm Hex Allen key
 - o 1 x 5 mm Hex Allen key
 - o 1 x 6 mm Hex Allen key
 - 1 x Knife & Electrical tape
 - o 1 x Hot Knife
 - o 1 x Pliers
- Ensure all tether line components are present (as supplied by Latchways)
 - o 1 x Upper Pulley assembly, assembly shall include:
 - 1 x Tether line pulley
 - 2 x Tether line brackets w/ rubber pads (one bracket is threaded)
 - 2 x M6 bolts
 - 2 x M6 Nyloc nuts
 - 2 x Anti-loss washers
 - 1 x Lower Pulley assembly, assembly shall include:
 - 1 x Tether line pulley
 - 2 x Tether line brackets w/ rubber pads (one bracket supports the pulley)
 - 2 x M10 bolts
 - 2 x M10 nuts
 - 4 x M10 washers
 - 2 x M10 spring washers
 - 1 x M8 bolt
 - 1 x M8 nut
 - 2 x M8 washers
 - 1 x M8 spring washer
 - 1 x 15 m/25 m Polyester rope tether line, terminated at one end with an eyelet
 - 1 x Stainless Steel Swivel Shackle
 - o 2 x Cable ties
 - o 1 x Extension wire, which includes
 - Stainless steel wire weak link, with 2 x D-shackles
 - Stainless steel maillon rapide
 - o 1 x Tether line clamp w/ clamping bolt

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1. Attaching the pulley assemblies to the access ladder of the wind turbine

<u>Please note that there are 2 different pulley assembly brackets and they MUST be fitted in the</u> correct location on the ladder (see below for correct type)

- a. Attach the Upper pulley assembly to the centre of the uppermost rung, ensuring that the pulley is hanging below the highest rung.
- b. Using the 5mm Allen (hex) key ensure both M6 bolts are tightened up evenly, to give an even contact onto the rung. (Note one side of the pulley bracket is threaded, which shall be located at the back of the ladder).
- c. When firmly secured, fasten M6 Nyloc's to M6 bolt threads and using a 5mm Allen (hex) key and 10mm Spanner, fully tighten and lock sufficiently ensure assembly is rigidly fixed.
- d. Attach the Lower pulley assembly to the centre of the nearest rung that is 2 metres above Lowest Astronomical Tide (L.A.T.) for boat landing ladders and on the bottom rung for upper ladders. Using 2 x 17 mm spanners tighten fully and ensure that the assembly is rigidly fixed. The pulley must point upwards with the chosen rung below it.
- e. Make sure both blue pulley buttons are in the 'locked' position to ensure the pulleys do not rotate (as pictured below).



Upper pulley assembly



Lower pulley assembly

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2. Feeding the rope tether line onto the pulleys

- a. Ensure entire length of tether line supplied is free front knots and tangling before installing
- b. Feed the 'non-eyelet' end of the tether line through the top pulley from front to back
- c. Pull the tether line down and pass the 'non-eyelet' end through the bottom pulley from back to front.





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3. Connecting the stainless steel swivel shackle

- a. Attach the stainless steel swivel shackle into the eyelet terminated end of the rope tether line.
- b. Using a 3mm Allen (hex) key ensure that the bolt of the swivel shackle is fully tightened.
- c. Feed the 'non-eyelet' end of the tether line, through the tether line clamp and then through the other 'D' shape of the swivel shackle.
- d. Then pass it back through the tether line clamp and pull the slack through.
- e. Push the tether line clamp as close to the eyelet as possible.
- f. Pull the tether line hand tight, removing any slack from the system ensure that the tether line freely moves up and down.
- g. Tighten the tether line clamp bolt using a 6 mm Hex Allen key.









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4. Terminating the tether line

- a. Cut off the excess end of the tether line using a hot knife, or other suitable rope sealing device, leaving approximately 100mm.
 - i. Another method, is to tightly bind the rope tether line with electrical tape at the point of the cut. Cut the rope with a sharp knife through the tape. Heat seal ends and then remove the tape.
- b. Secure to the main tether line using 2 cable ties
- c. Cut off the excess cable tie using pliers, cutting cleanly to avoid any sharp edges.





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5. Connecting the extension line

- a. Attach one end of the extension line to the tether line using the maillon rapide
- b. Tighten the maillon rapide with the 9 mm spanner
- c. Connect the other end of the extension line to the SRL via the sacrificial (weak) wire link and D-shackle, into the rotating arm, located above the user attachment point.
- d. Tighten the D-shackle with a 3 mm Allen key.



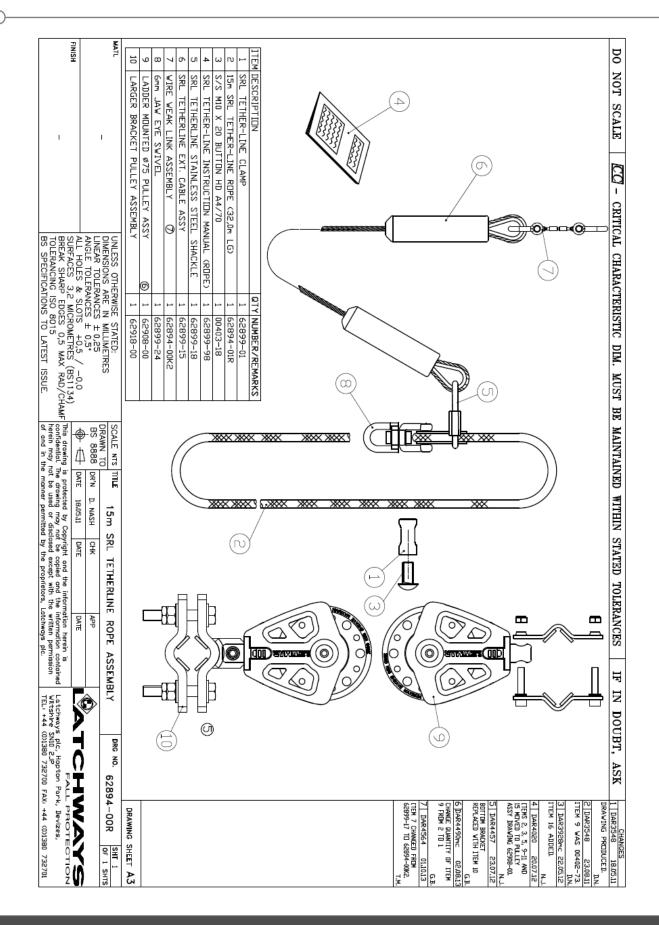


<u>Test full system, ensuring it freely runs up and down the full length of the ladder as required.</u>

The Tether Line system is not designed to retract back on its own and will require guidance when returning the cable back into the SRL housing after use.

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