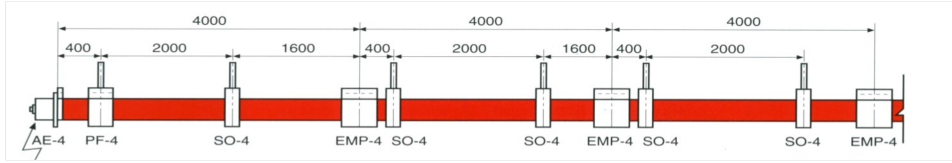




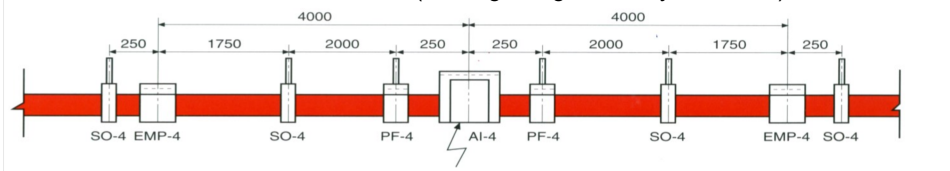
# MODULAR CONDUCTOR SYSTEM LM-60Q

## ASSEMBLY INSTRUCTIONS

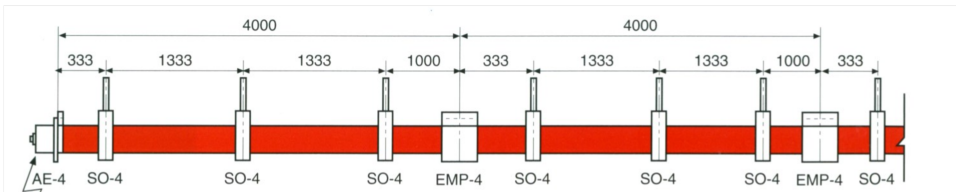
### INDOOR SYSTEM WITH END FEED (Sliding hangers every 2 metres)



### INDOOR SYSTEM WITH LINE FEED (Sliding hangers every 2 metres)



### OUTDOOR SYSTEM WITH END FEED (Sliding hangers every 1,33 metres)



The fixed point clamp, PF-4 can also be installed in the middle of the system to disperse

#### 1) SAFETY

Disconnect the electrical current from the system before beginning any assembly operation.  
Do not use the Modular Line LM-4 for higher loads than the specified voltage and current.

#### 2) INSTALLATION

The support structure for the power line must be capable of supporting the total weight of the system. Place the support points along the beam through which the hoist will move. These points should be located every 2m or every 1,333m depending on the type of line in question and according to previous sketch.



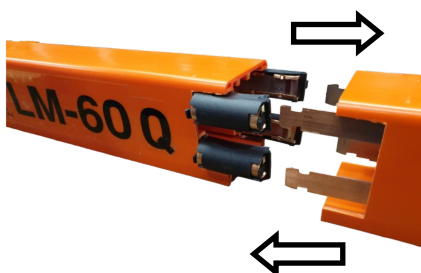
Install universal brackets every 2 or 1.33 meters, according to the assembly scheme



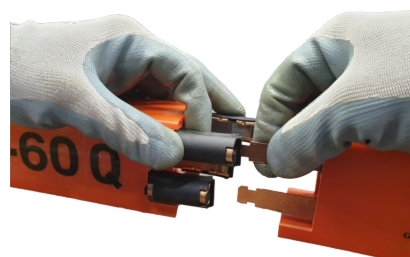
Assemble the sliding hangers SO-4 and the fixed points PF-4 on the support arms by tightening their corresponding screws.



Install the LM-4 line bars at the support points, respecting that the yellow "earth" signal line is always on the same side.



Inserted the 4 connectors on one of the lines, slide the second line over the first.



Insert the ends of the copper conductors into the spring connectors one by one approx. 5-10 mm.



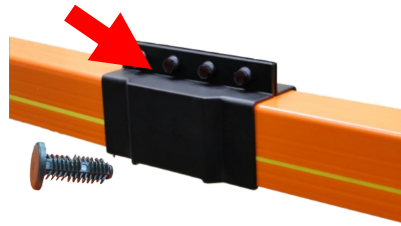
Push one line against the other until hearing "Click" and verify that it is properly held and close.



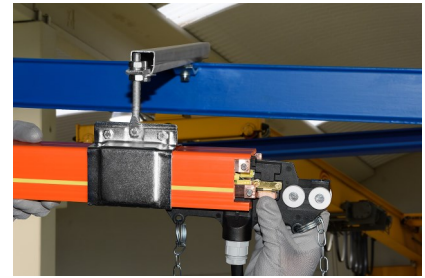
# ASSEMBLY INSTRUCTIONS



Cover the connections with the EMP-4Q joints, taking care to ensure that the sides are correctly fitted in the lower part of the PVC profile. The central joint must be assembled between both sides.



Tighten the screws on the joints EMP-4Q. Check correct alignment between beam and power line.



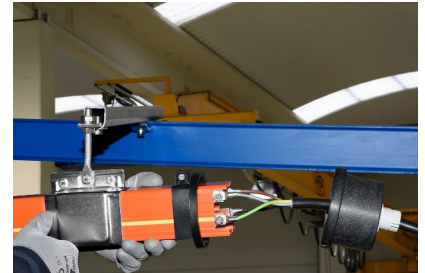
Insert the current collector, with manual pressure of brushes. Respect the unique position to avoid phase exchange.



Assemble the clips of the end feed AE-4Q and / or the end cap TE-4Q at both ends of the line.



Fix the cover of the end cap TE-4Q to avoid unwanted electrical contacts.



Perform the electrical connection to the line at the end. (If the connection is made in the central part of the line, a joint is replaced by a line feed AI-4Q making the electrical connection at that point.)



Fix the cover of the end line AE-4Q.



Tighten the electric cable thanks to the cable gland that this cover has. Verify that the cable is installed loosely, so that it can assume possible contractions and dilations of the line.



Assemble the towing arm BA-4 on the structure of the crane or hoist by aligning the pull of the chain with the central axis of the modular profile. The towing arm should be between 30mm and 50mm below the profile.

## 3 ) OPERATION

### 3.1 Previous tests

Carry out several travels by hand with the current collector to check that it moves throughout its length without problems. The extra-flexible cable of the current collector must be connected to the towing arm in a loop, without causing torsion of the trolley. Make the electrical connection to the line and test its insulation.

### 3.2 Final tests

Once the electric current is connected, check that the current collector moves forward and backward without problems. Check that the device that the LM-4 system is powered on works correctly.

### 3.3 Normal functioning

Do not exceed the maximum voltage and / or amperage specified for LM-4. Use the LM-4 line within its corresponding electrical and / or mechanical specifications.

## 4 ) MAINTENANCE

Perform periodic maintenance tasks to ensure the status of the LM-4 line. The maintenance operations will depend on the use given to the system.

During each inspection the following points should be checked:

- Wear of ball bearings.
- Ensure screws are correctly tightened.
- Separation or alignment in the joints.
- Electric cables: cuts, cracks, etc...
- The profile must be clean in the running edges.