# Guidelines for better installation

**Specifications of Torque Forces** 



High-reliability electrical connections www.techno.it



#### A basic rule



The protection rating of the electrical connection <u>must be</u>
<u>equal or greater</u> than the IP rating of the luminaire



# $IP \ge LAMPS$

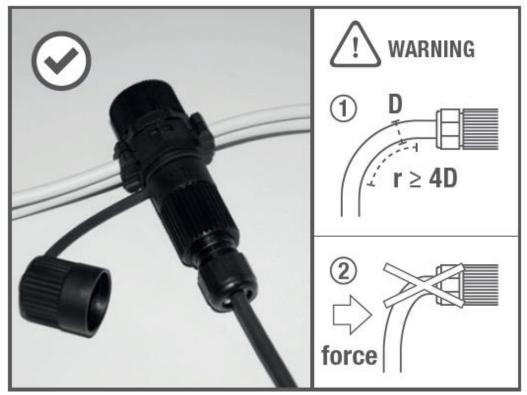




#### Avoid mechanical stresses

- The generally accepted guidelines for laying cables must be observed
- Mechanical bending in the area of the strain relief must be controlled using suitable measures (e.g.cable clamps)
- If abrasion might occur (construction site lighting systems, event equipment, or similar temporary applications), wear of the pre-assembled cable and plug connections must be taken into consideration and must be monitored

example





## Installation position and additional protections

- Choose a horizontal position to guarantee water drainage
- If this is not possible, an additional cover should be used for protection
- The cable arrangement is just as important. The cable must be laid in such a way that any draining water is not routed to the cable gland, but drops off beforehand





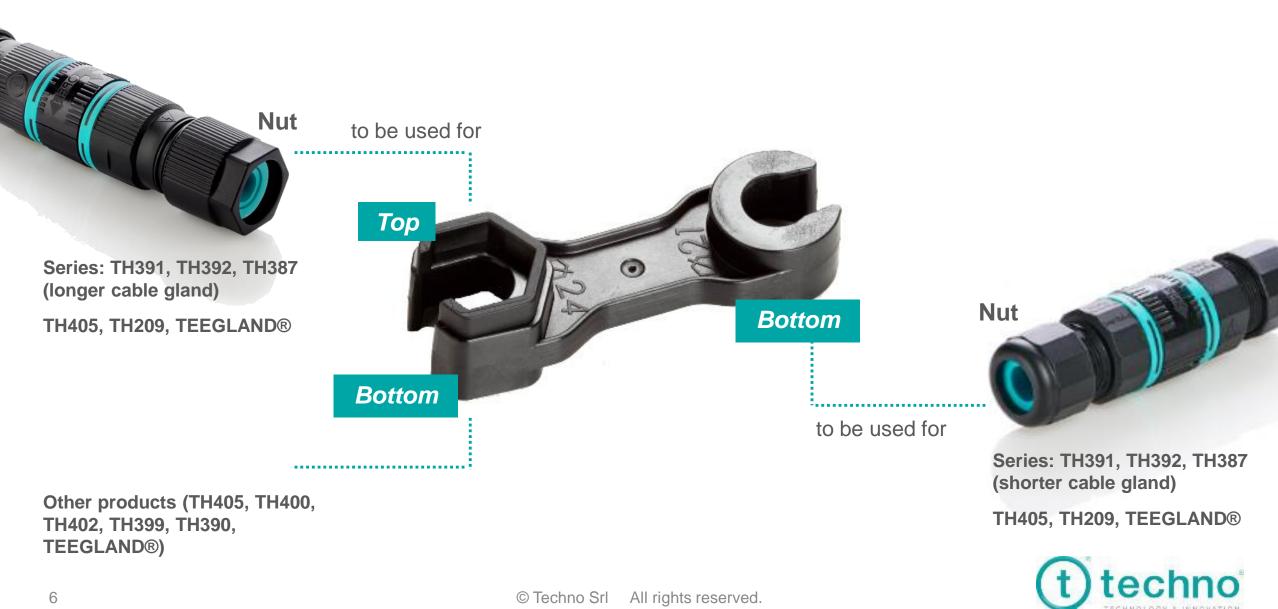
# Torque and locking according to specs.

- The cable glands must be tightened to the specified torque
- All connections must be locked
- Unlocking must be done manually or using a suitable screwdriver in accordance with the assembly instructions
- "Over-tightening" soon leads to wear and ineffective connections





#### How to use the quick-fix spanner



# How to use the quick-fix spanner (cont.)





- 1. Turn the nut (A) of the connector clockwise using the quick-fix spanner
- 2. Continue to turn it up to the nut will not turn more. You will hear a noise due to friction of the key on the nut
- 3. At this point you have the nut tighten with a torque force of 2.0 Nm ÷ 2.5 Nm
- Important: the cable gland (B) will be tightened automatically when turning the nut (A)
- 5. Cable retention and IP68 resistance are guaranteed (acc. to EN61984 and EN60998/EN60529)

