



TRAXON

TRAXON Pro*

Washer Pro*

INSTALLATION GUIDE



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For your own safety and that of the product, please read this installation guide carefully before beginning setup and installation.

1. Safety And Operation



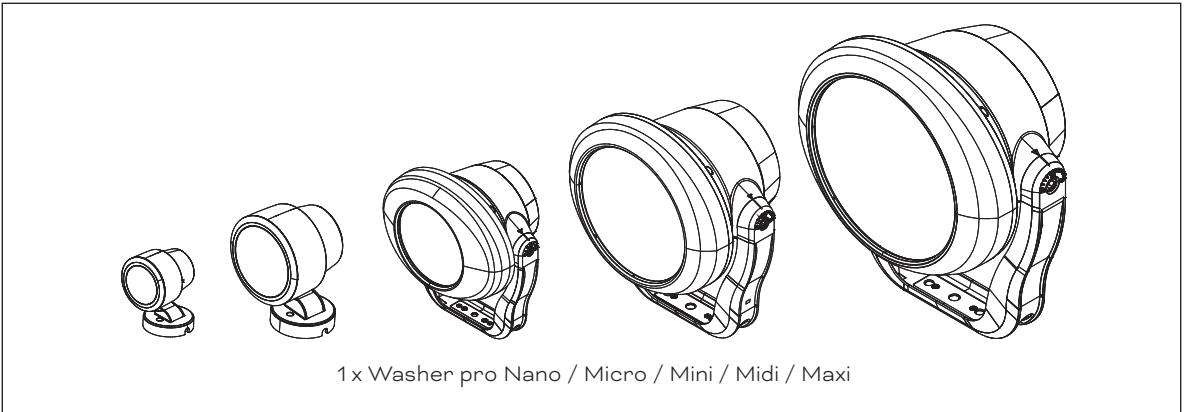
Please read through Safety and Operation before start of the installation.

1. CAUTION - Unplug the power supply from the mains power before connecting any cables as this can damage the products.
2. CAUTION - Avoid looking directly into the LED light source at close range for your own safety.
3. Persons installing this product should make sure:
 - a. The installation complies with all applicable codes, state and local laws, ordinances, standards and safety regulations.
 - b. The installation environment is carefully studied and suitable surge protection measure(s) is taken.
 - c. He or she is qualified for the handling of electrical equipment.
4. Do not attempt to install or use the product until installation instructions and safety labels are fully understood. This product is designed for indoor and outdoor use.
5. Ensure product operates within the specified temperature range.
6. Do not attempt to open the product. Not user serviceable.
7. Do not use the product if any part of it, or the power cables are damaged.
8. Only use product for specified voltage, do not exceed.
9. Always maintain connection to ensure waterproofing.
10. If the product has been subjected to drastic temperature variances, for example, following transportation, do not connect the fixture until it has reached room temperature, as moisture condensation may cause electric shock and product damages.
11. When installing the products and system power supplies, please ensure they will not be exposed to moisture and extreme heat (and direct sunlight for outdoor products). Besides, keep a clean operating environment for the fixtures and system power supplies.
12. Please study this Installation Guide thoroughly and check the latest Technical Specification Sheets available from the Traxon website www.traxon-ecue.com before setup.
13. Any non-compliance of the Installation Guide will void the Traxon warranty.

2. Introduction

2.1 Packing Contents

FIG.1: Washer Pro Packing Contents



2.2 Dimensions

2.2.1 Luminaire Dimensions

FIG.2: Washer Pro Nano

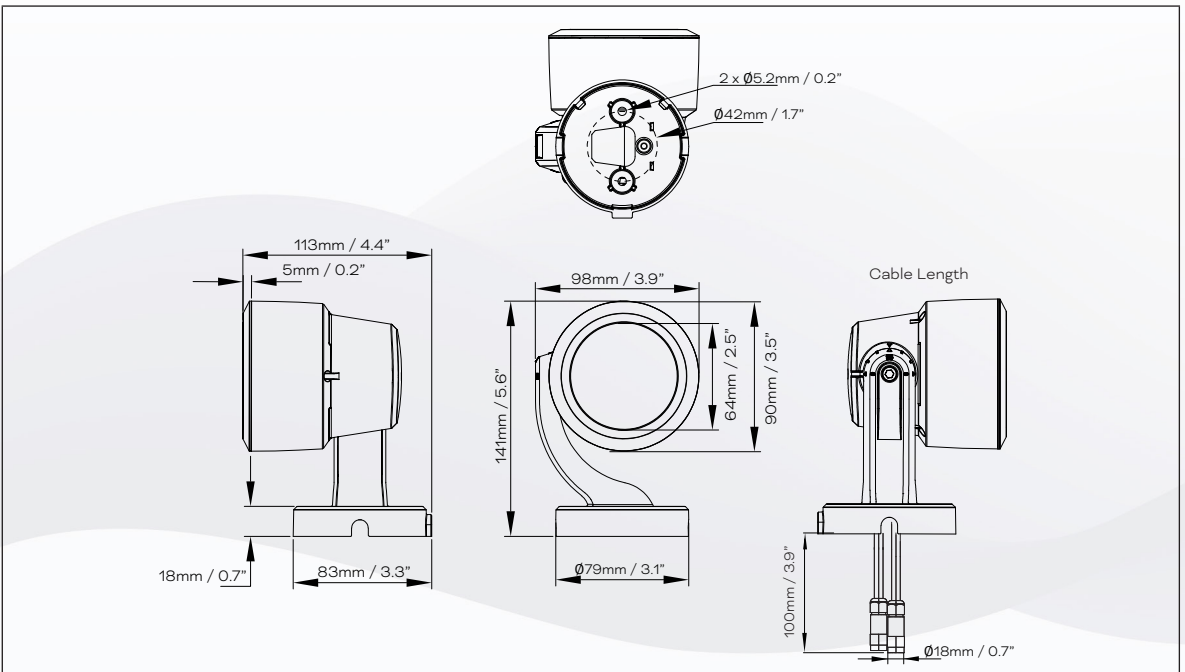


FIG.3: Washer Pro Micro

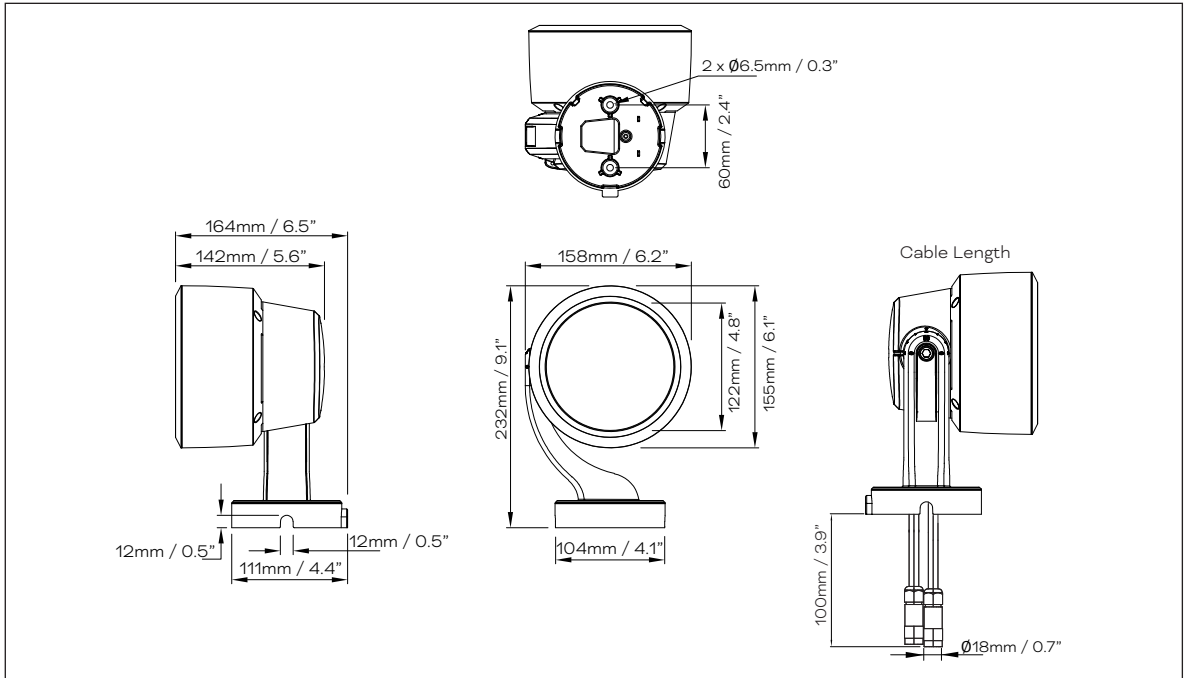


FIG.4: Washer Pro Mini

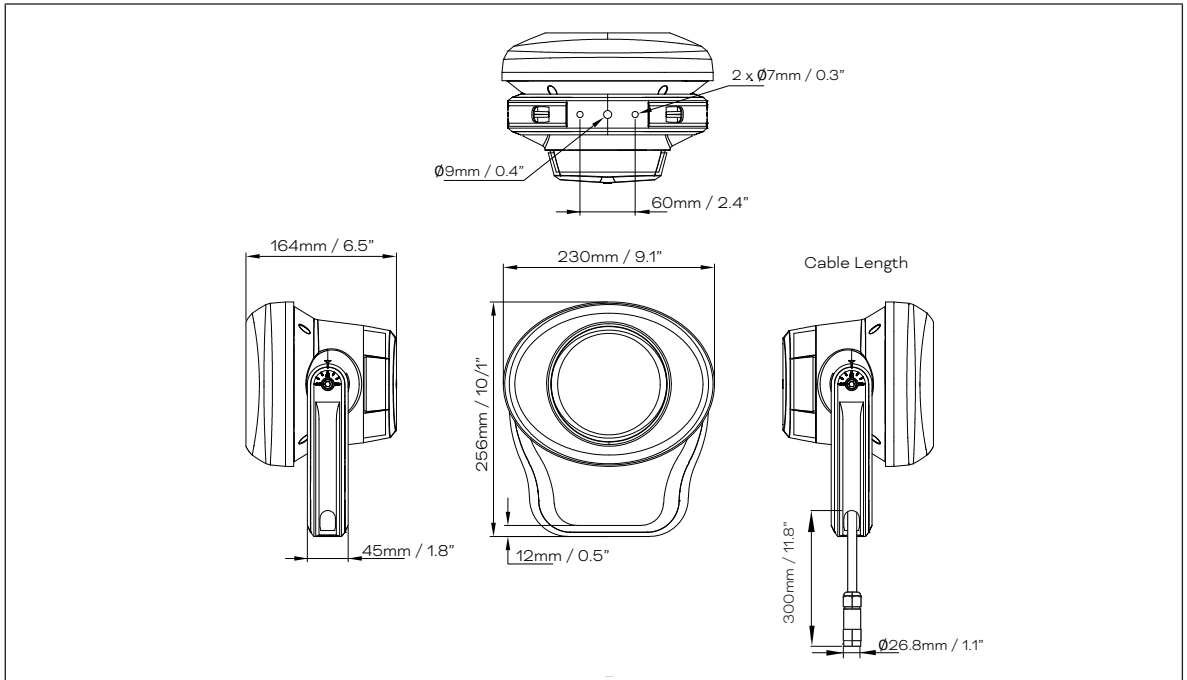


FIG.5: Washer Pro Midi

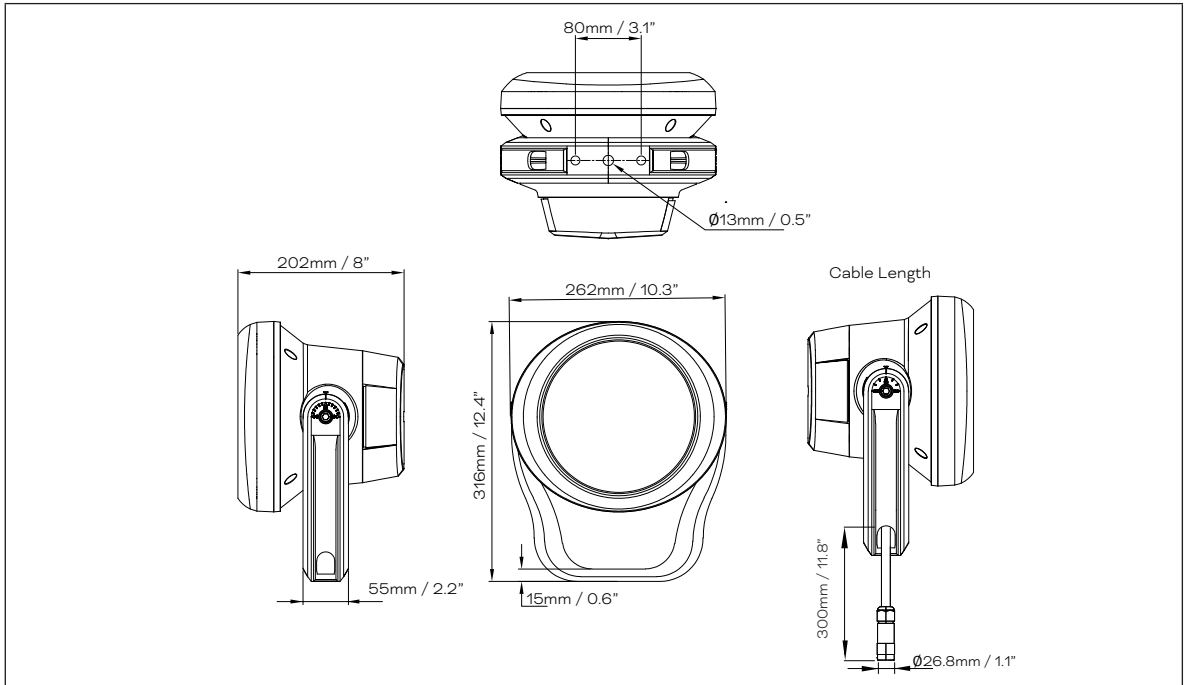
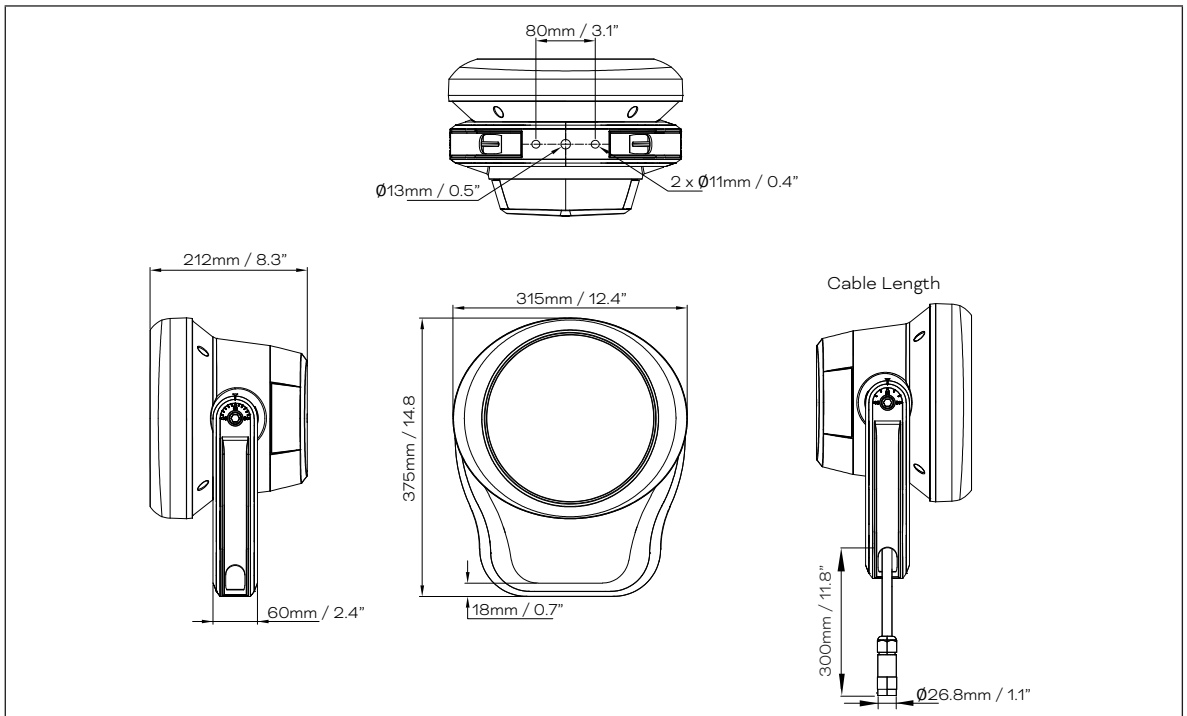


FIG.6: Washer Pro Maxi



2.2.2 Optical Accessories Dimensions

NOTE: All accessories can be stacked / used together.

FIG.7: Washer Pro Nano Optical Accessories

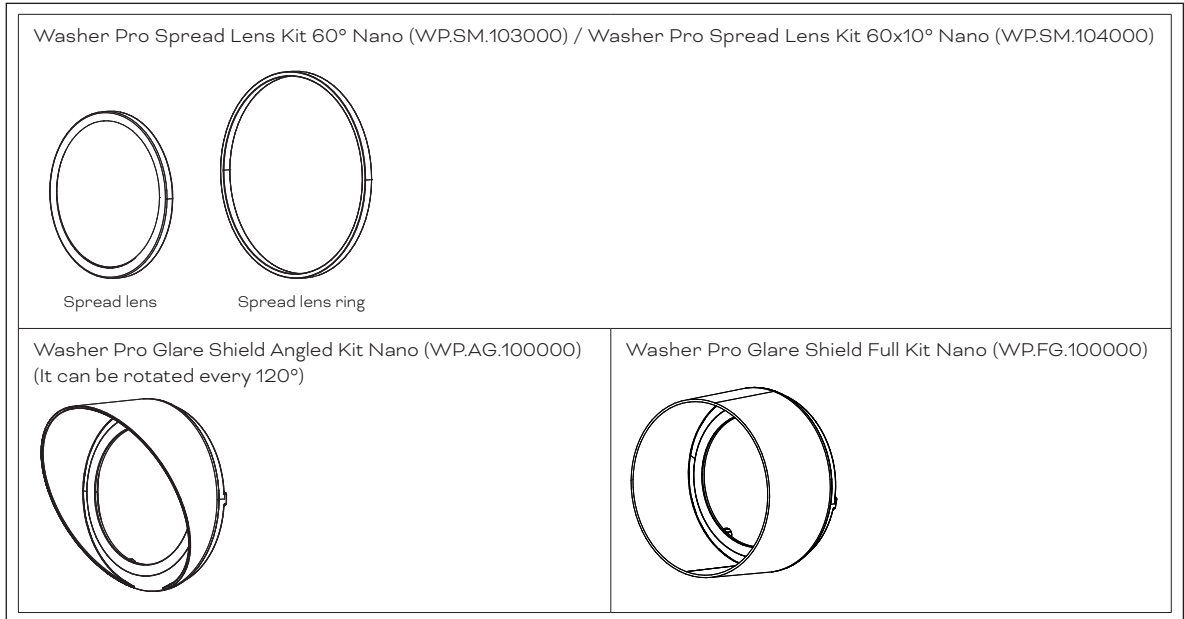


FIG.8: Washer Pro Micro Optical Accessories

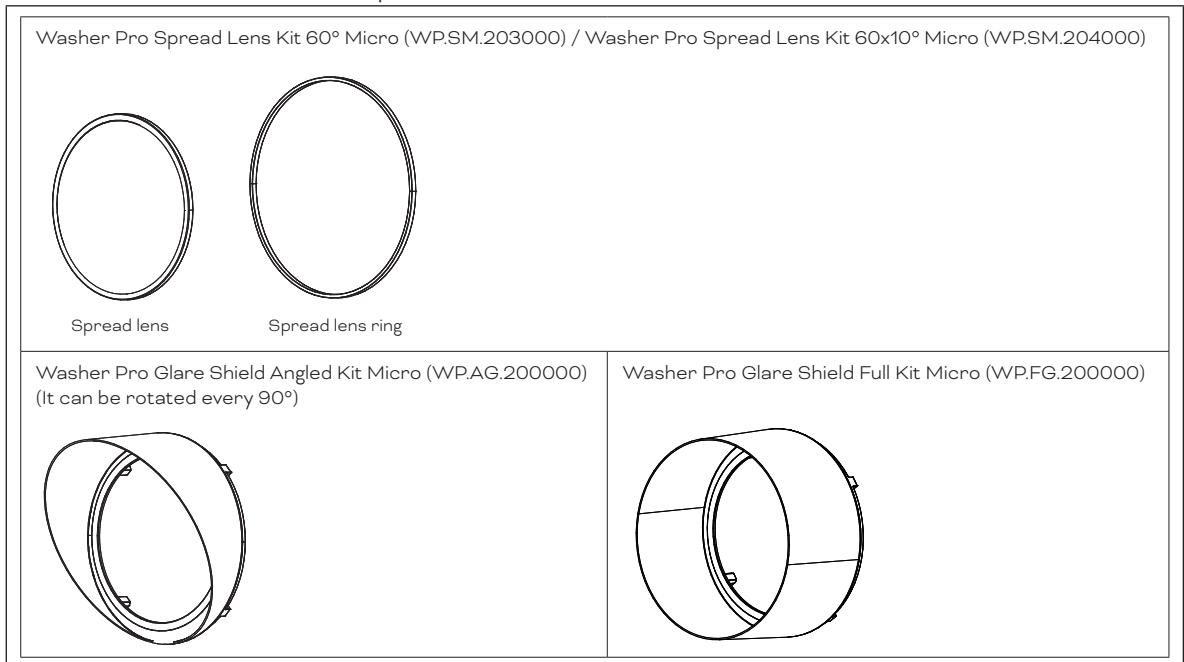
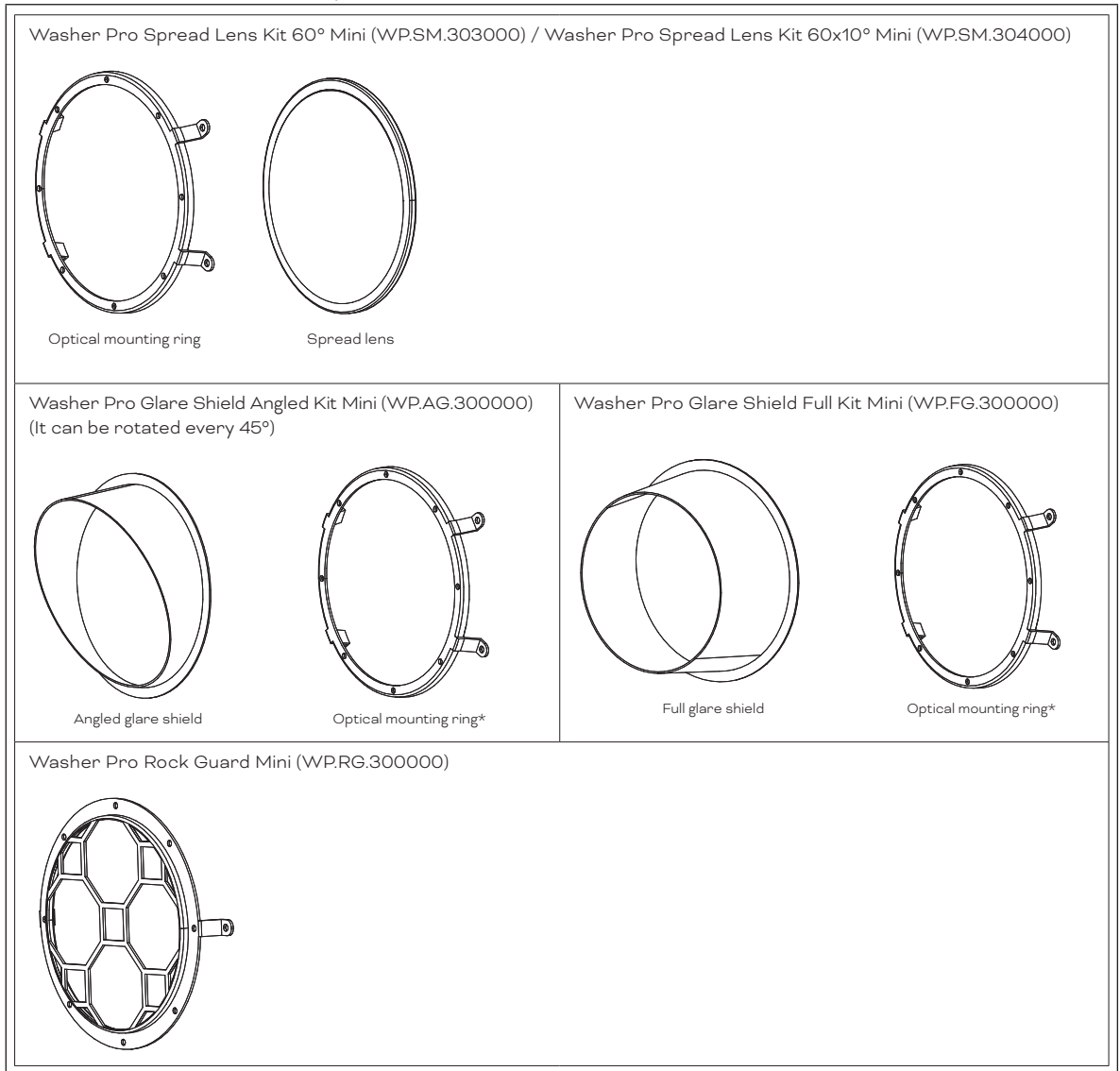
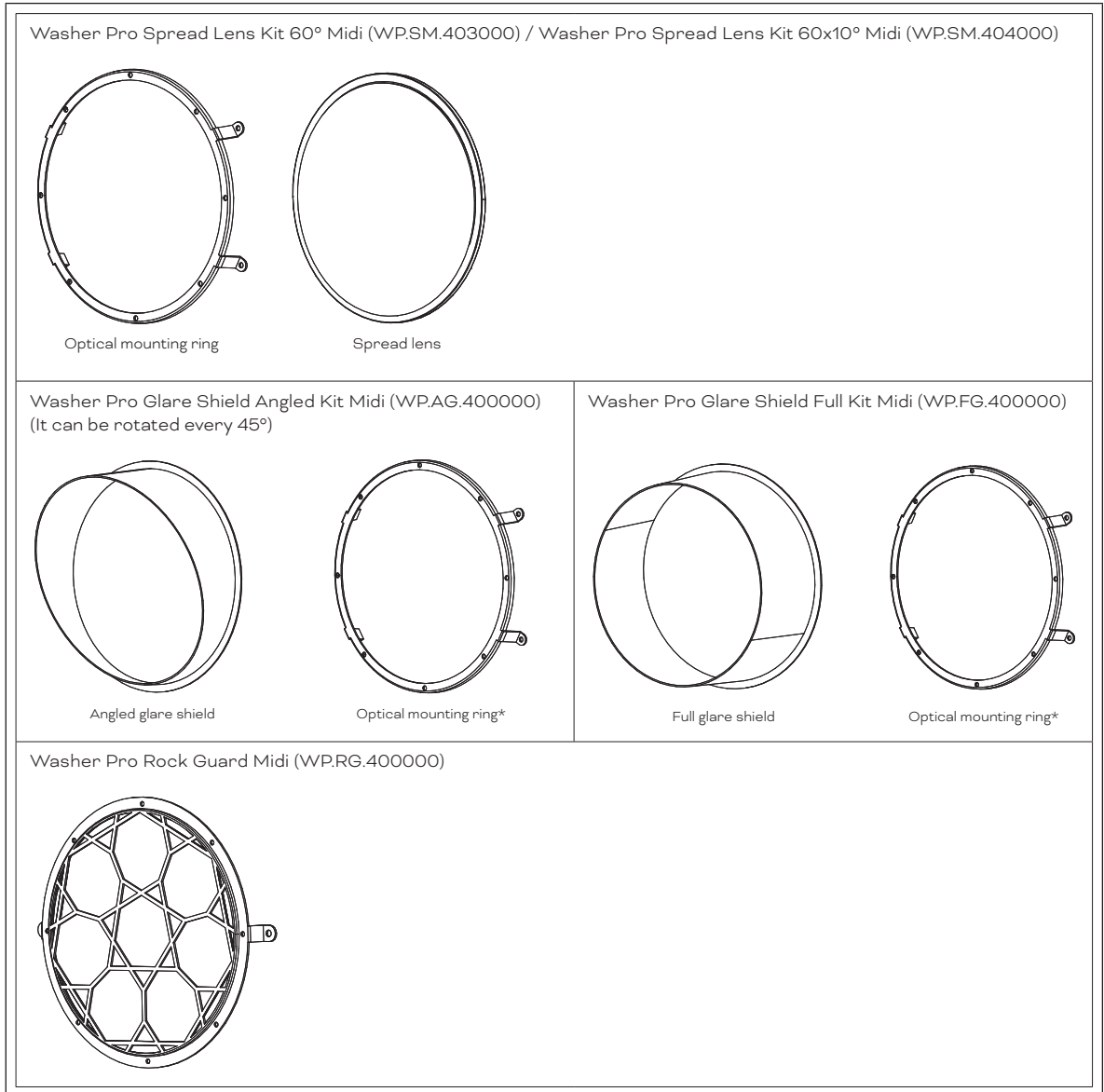


FIG.9: Washer Pro Mini Optical Accessories



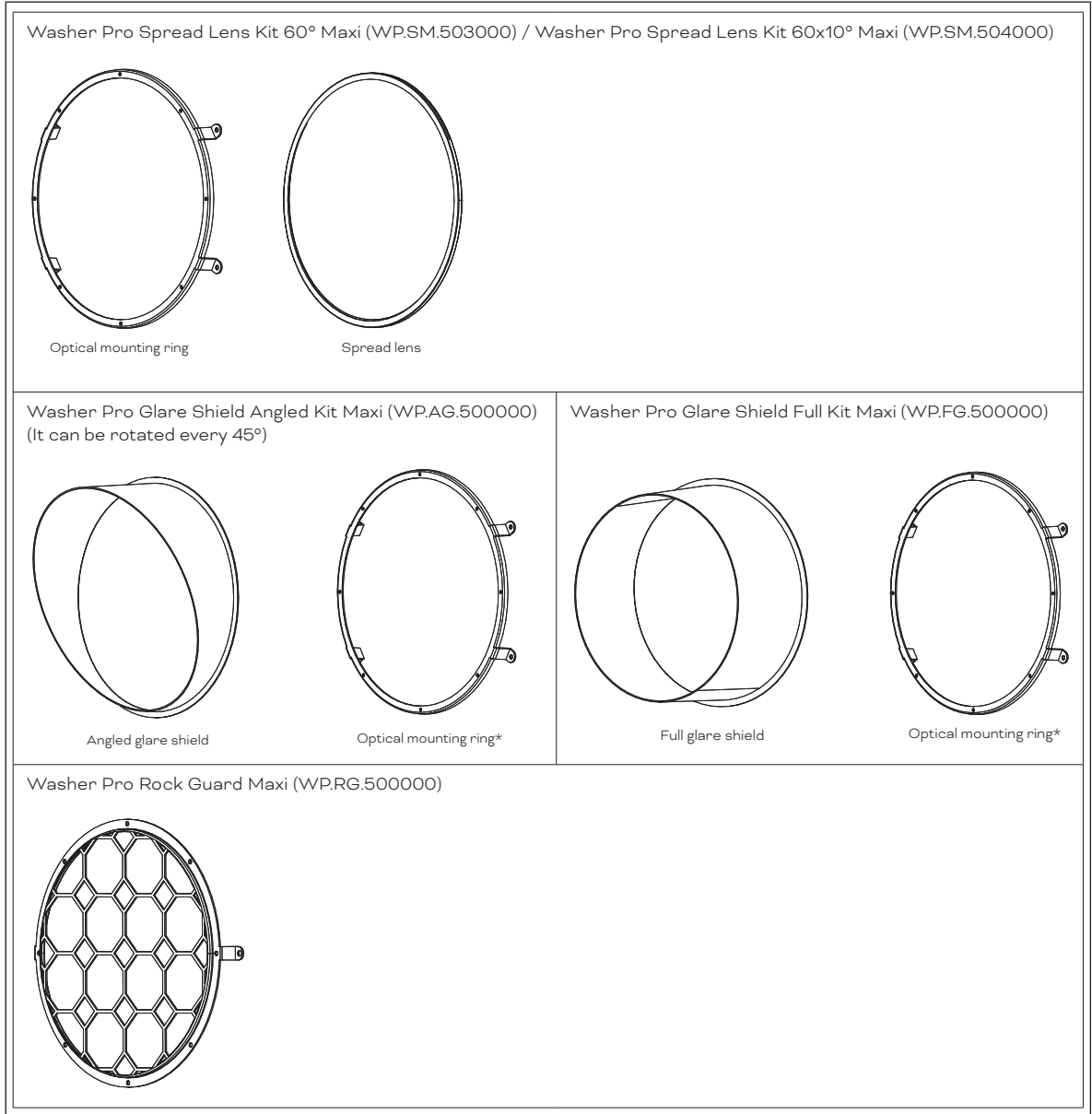
* Optical mounting ring included with glare shield's for spacing of the accessory.

FIG.10: Washer Pro Midi Optical Accessories



* Optical mounting ring included with glare shield's for spacing of the accessory.

FIG.11: Washer Pro Maxi Optical Accessories



* Optical mounting ring included with glare shield's for spacing of the accessory.

2.2.3 Mounting Accessories Dimensions

FIG.12: Washer Pro Nano Mounting Accessories

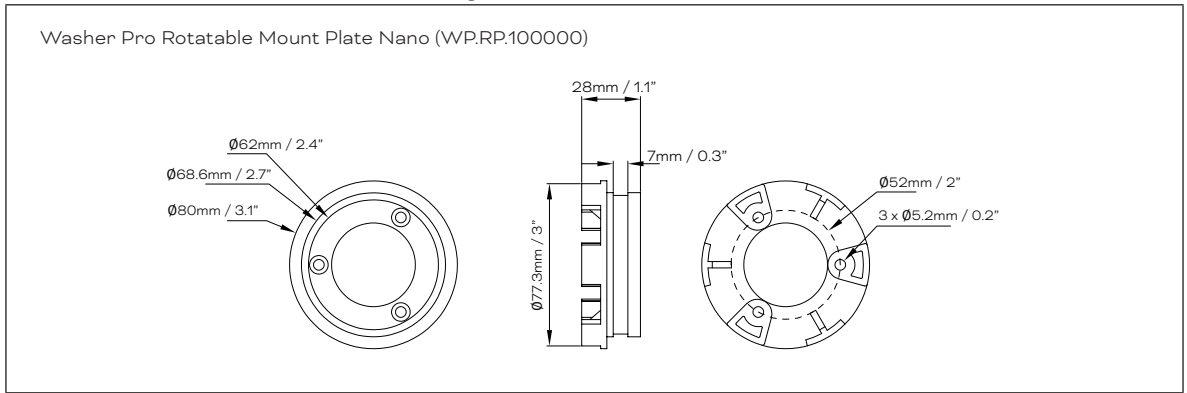


FIG.13: Washer Pro Micro Mounting Accessories

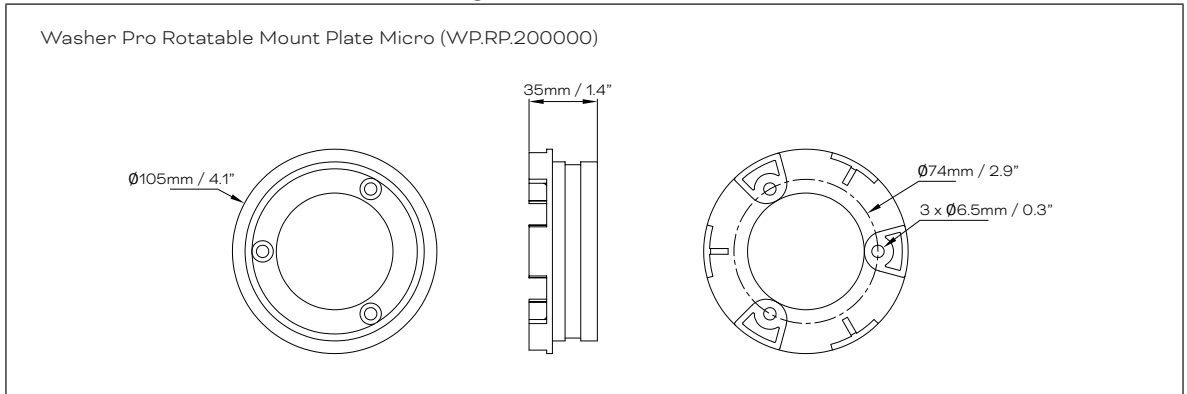


FIG.14: Washer Pro Mini Mounting Accessories

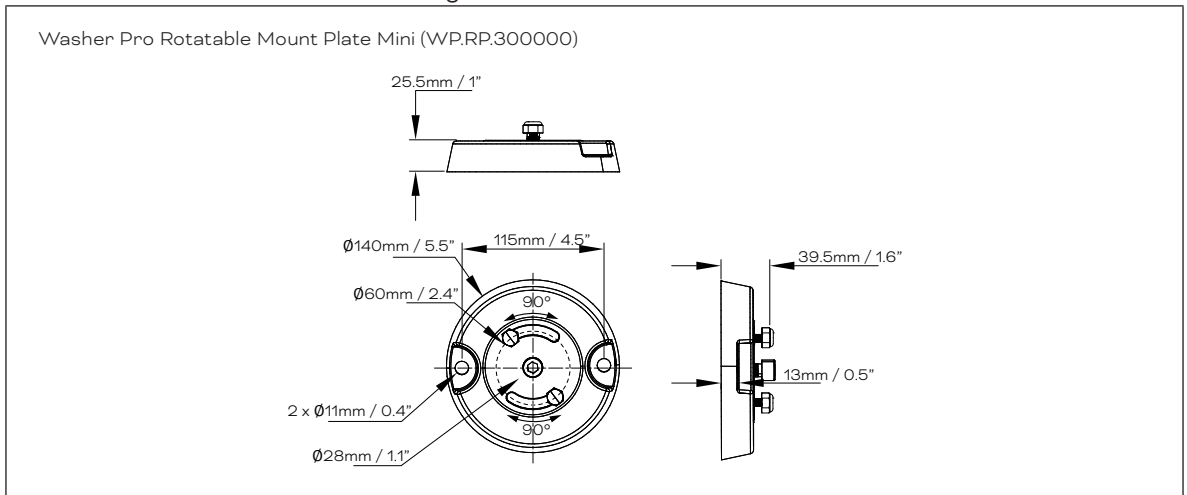
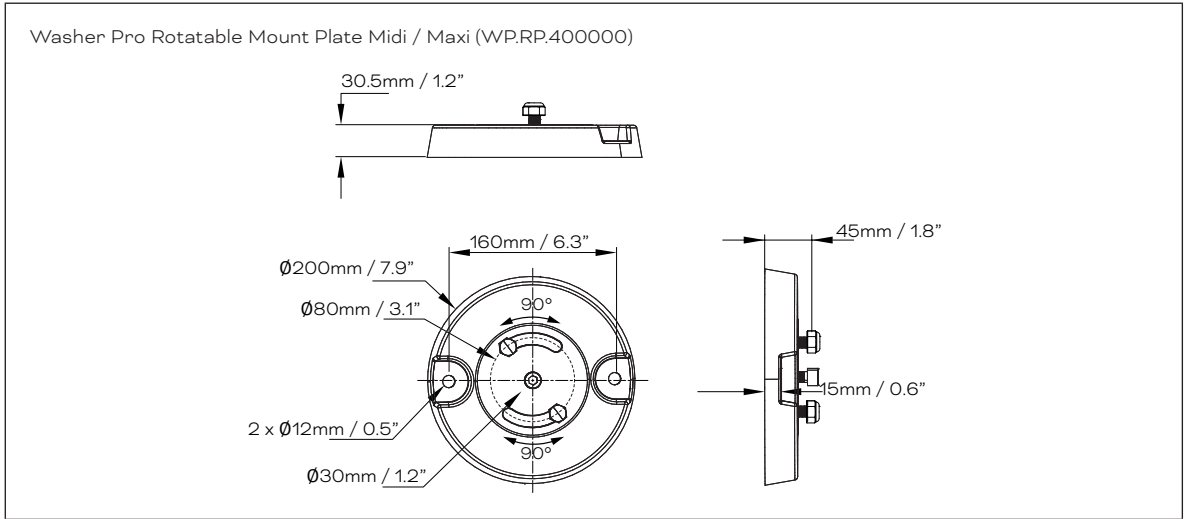


FIG.15: Washer Pro Midi / Maxi Mounting Accessories



2.2.4 Connection Accessories Dimensions

FIG.16: Washer Pro Nano / Micro Starter Cable (CE & ETL)
(CA.IC.CC101000 / CA.IC.CC103000 / CA.IC.CC105000 / CA.IC.CC110000)

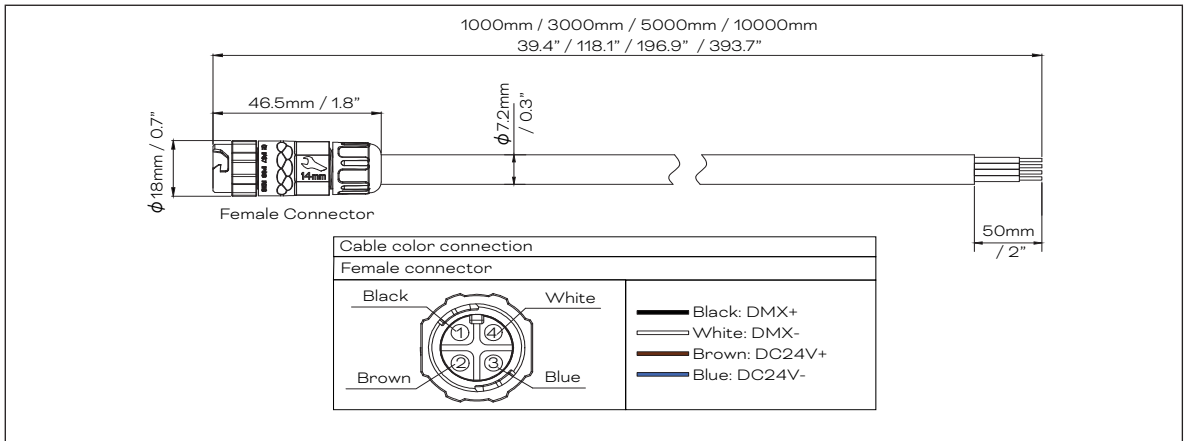


FIG.17: Washer Pro Nano / Micro Interconnection Cable (CE & ETL)
 (CA.IC.CC101000 / CA.IC.CC103000 / CA.IC.CC105000 / CA.IC.CC110000)

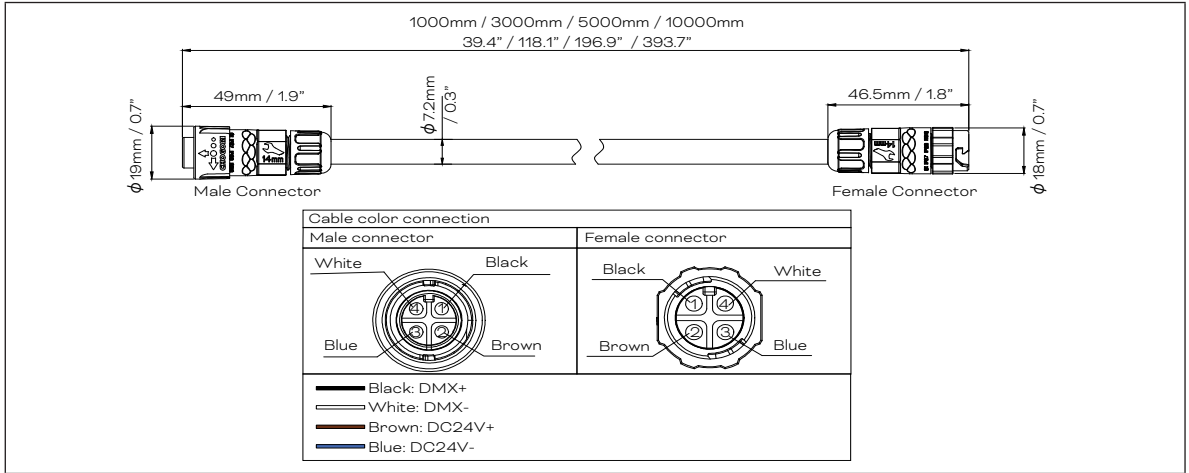


FIG.18: Washer Pro Nano / Micro Starter Cable-2 Pin (CE & ETL)
 (CA.SC.CC401000 / CA.SC.CC403000 / CA.SC.CC405000 / CA.SC.CC410000)

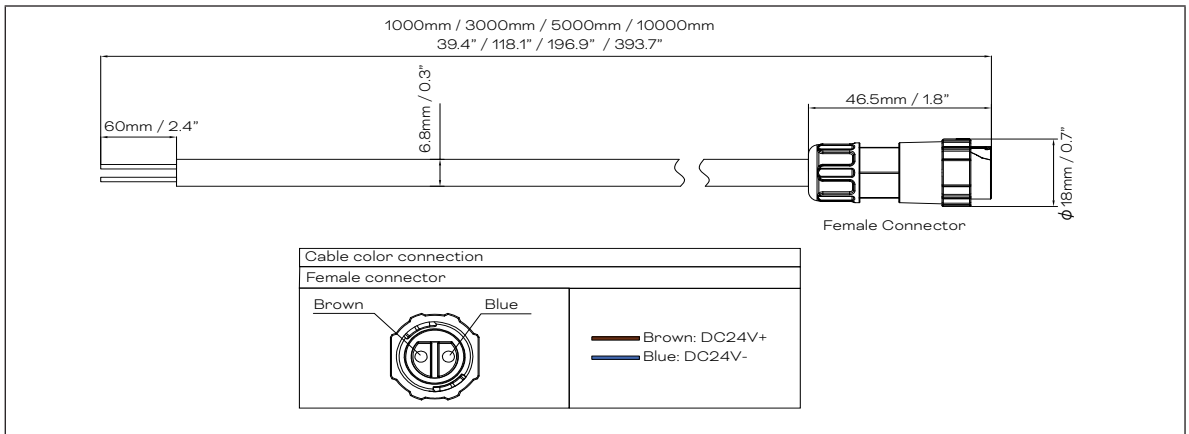


FIG.19: Washer Pro Nano / Micro Power Injector Cable (CE & ETL)
(CA.PI.CC100000)

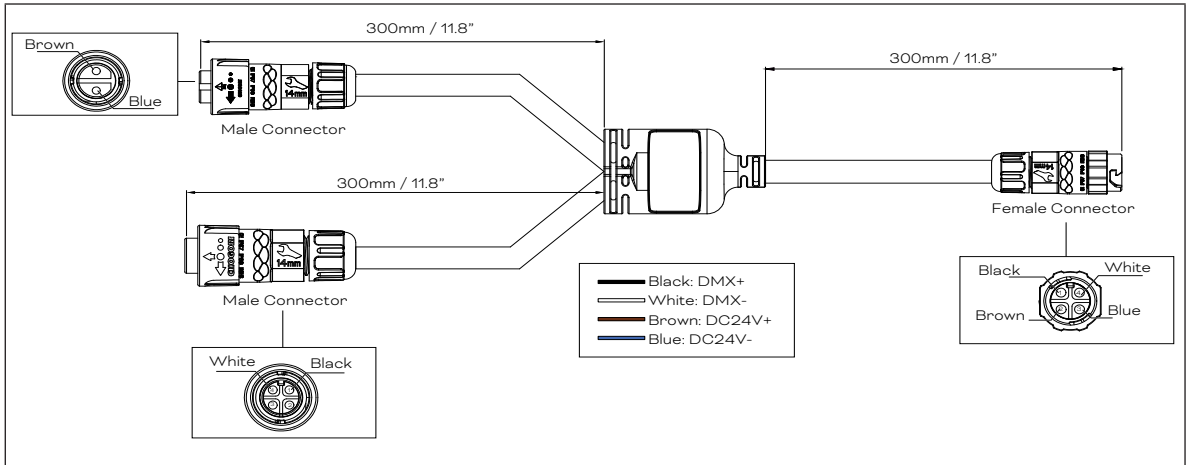


FIG.20: Washer Pro Mini / Midi / Maxi Starter Cable (CE)
(CA.SC.CC301000 / CA.SC.CC302000 / CA.SC.CC303000 / CA.SC.CC310000)

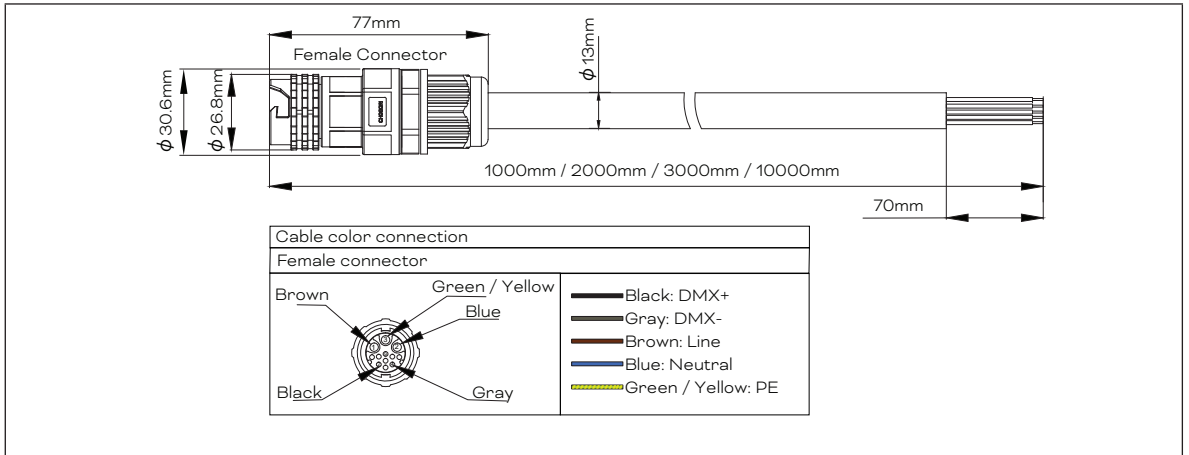


FIG.21: Washer Pro Mini / Midi / Maxi Starter Cable (ETL)
 (CA.SC.CC201000 / CA.SC.CC202000 / CA.SC.CC203000 / CA.SC.CC210000)

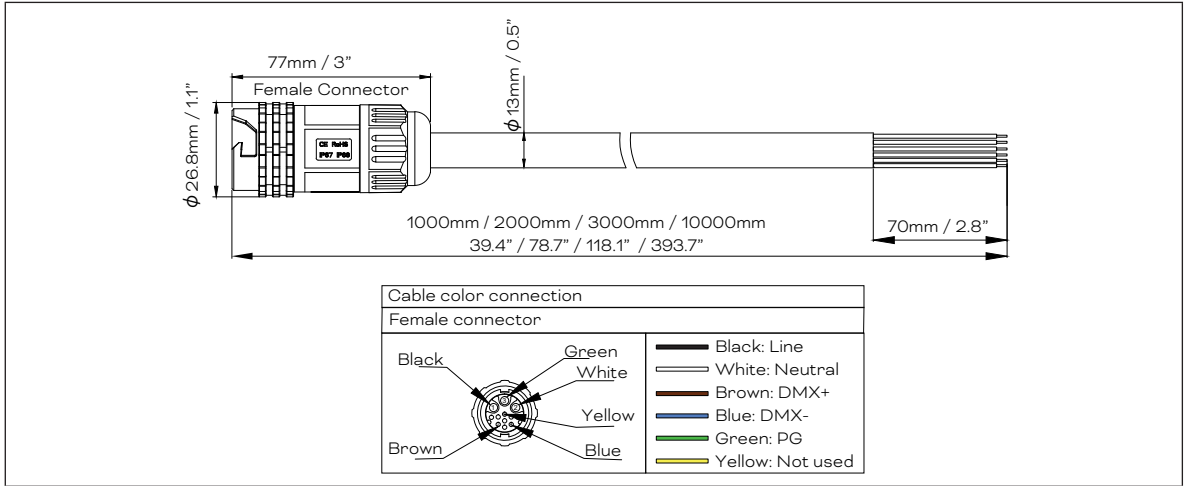


FIG.22: Washer Pro Mini / Midi / Maxi Interconnection Cable (CE)
 (XE.IG.0100000 / XE.IG.0200000 / XE.IG.0300000 / XE.IG.1000000)

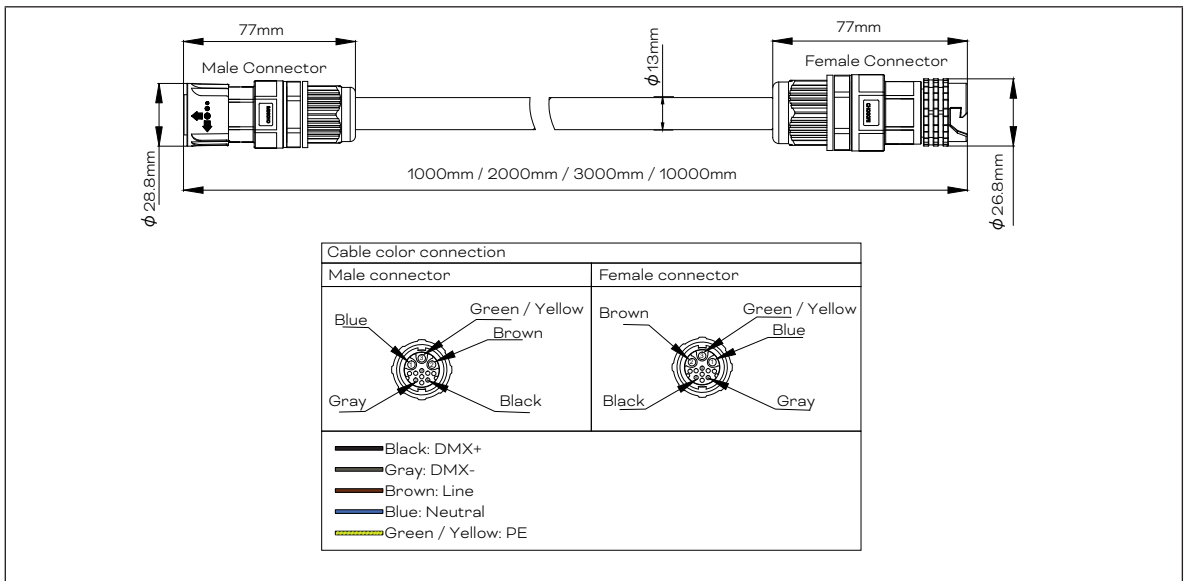
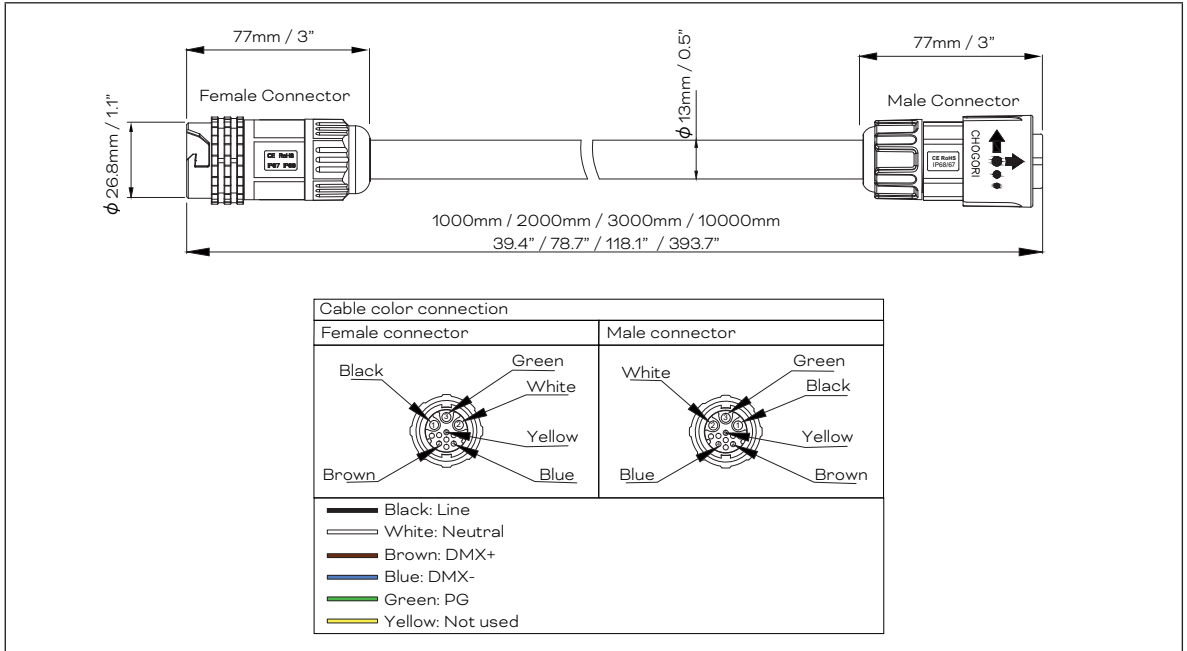


FIG.23: Washer Pro Mini / Midi / Maxi Interconnection Cable (ETL)
 (KO.KA.601000 / KO.KA.602000 / KO.KA.603000 / KO.KA.610000)



3. Installation

3.1 Points To Consider

Plan your installation before mounting the Washer Pro. The following should be considered for a successful installation.

- Weather conditions and ambient temperature of installation site.
- Appropriate cable lengths (cable gauges described in system diagram). Please consult your local Traxon office or authorized agent for necessary aid.
- The number of the Washer Pro and appropriate LED Engines.
- Proper control set up (e.g. DMX control) of the Washer Pro.
- Mounting distances should be considered.
- Proper surge protection.

3.2 Pre-Installation Checks

3.2.1 Installation Checklist

1. Prepare cables and all necessary accessories (Waterproof Quick Lock End Caps etc).
2. Perform functional check of the Washer Pro. Take care not to damage cables/connectors during pre-installation checks.
3. Ensure all pre-installation checks laid out below have been followed.
4. Mount the Washer Pro on-site. If the installation is to be left uncompleted overnight, place all non-connected LED Engines and the Washer Pro in an indoor environment.
5. All units must be connected or utilize end caps to protect from water ingress.

Ensure all the Interconnection Cables, Washer Pro and LED Engines are initially stored in a dry area to guarantee the complete sealing of the system from water before installation.

3.2.2 Installation Sequence


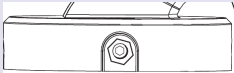
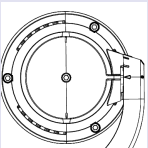
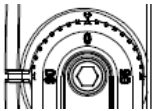
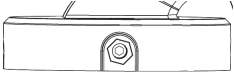
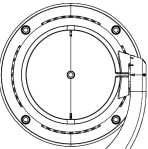
1. Measure the correct distances for brackets and install the Washer Pro fixtures.
2. Connect the Washer Pro in the daisy-chain manner outlined in the System Diagram.
3. Perform functional check on all the Washer Pro and inspect cables and brackets for any damage. Check for any abnormalities with the control signal.
4. Report any functional defect found to your nearest Traxon Technologies office. DO NOT attempt to install the Washer Pro with functional defects on-site.

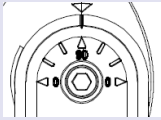
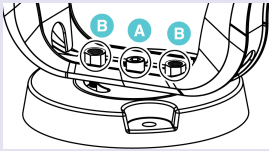
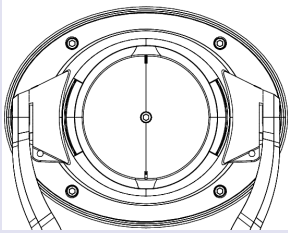

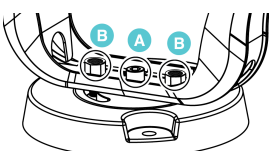
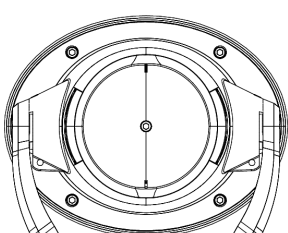
3.3 On-Site Installation



- DO NOT attempt installation in wet or severe weather conditions.
- DO NOT leave and expose any Washer Pro or LED Engines unconnected under wet/raining or snowing environment.
- IP failure induced by stressed/damaged cables during or after installation will not be under warranty.
- ALWAYS keep the cables protected from sharp objects and ensure no damage is generated to the cable.
- Failure to keep Washer Pro within the operating temperature range of -30°C to +55°C (-22°F to +131°F) and storage temperature range of -40°C to +80°C (-40°F to +176°F) will void the product's warranty.

3.3.1 Installation Tool Summary

Model	Allen Screw Position	Allen Screw Size	Hex Key Size
Washer Pro Nano		M5 (angle adjust)	4mm
		M6 (rotatable mount plate fixation)	5mm
		M3 x 3 (front cover removing)	2.5mm
Washer Pro Micro		M8 (angle adjust)	6mm
		M8 (rotatable mount plate fixation)	6mm
		M4 x 4 (front cover removing)	3mm

Model	Allen Screw Position	Allen Screw Size	Hex Key Size
Washer Pro Mini		M6 (angle adjust)	5mm
		A: M10 (rotatable mount plate fixation) B: M6 (rotatable mount plate fixation)	A: 8mm B: 5mm
		M5 x 4 (front cover removing)	4mm
Washer Pro Midi / Maxi		M8 (angle adjust)	6mm
		A: M12 (rotatable mount plate fixation) B: M6 (rotatable mount plate fixation)	A: 10mm B: 5mm
		M6 x 4 (front cover removing)	5mm

3.3.2 Washer Pro Surface Installation

1. Install expansion screws on the fixed surface.
2. Fix the bracket.
3. Adjust desired angles.
4. Tighten the bracket bolts to fix the luminaire to the desired angle.

FIG.24: Washer Pro Nano Surface Installation

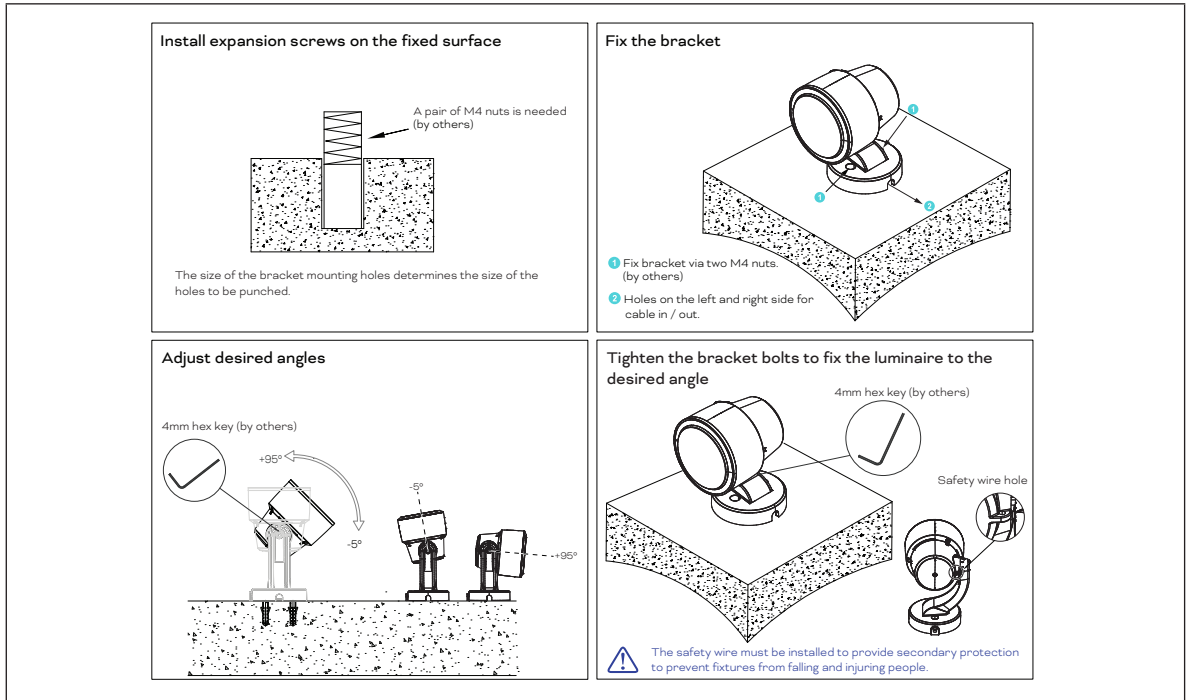


FIG.25: Washer Pro Micro Surface Installation

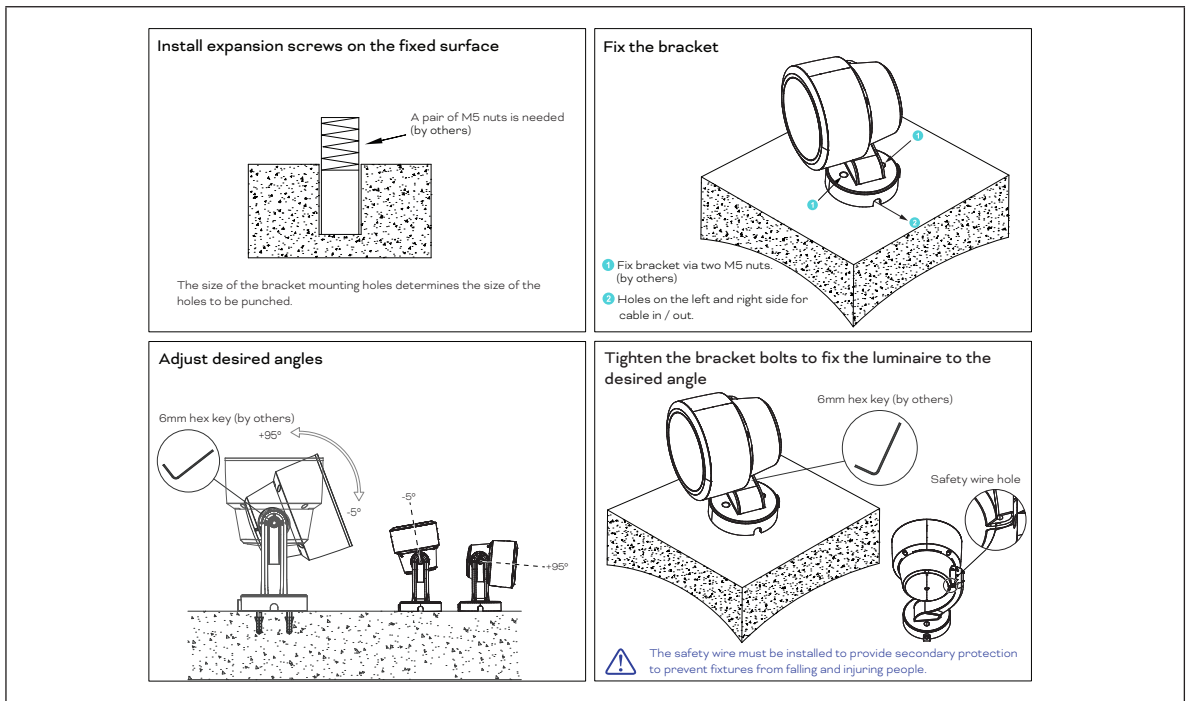


FIG.26: Washer Pro Mini Surface Installation

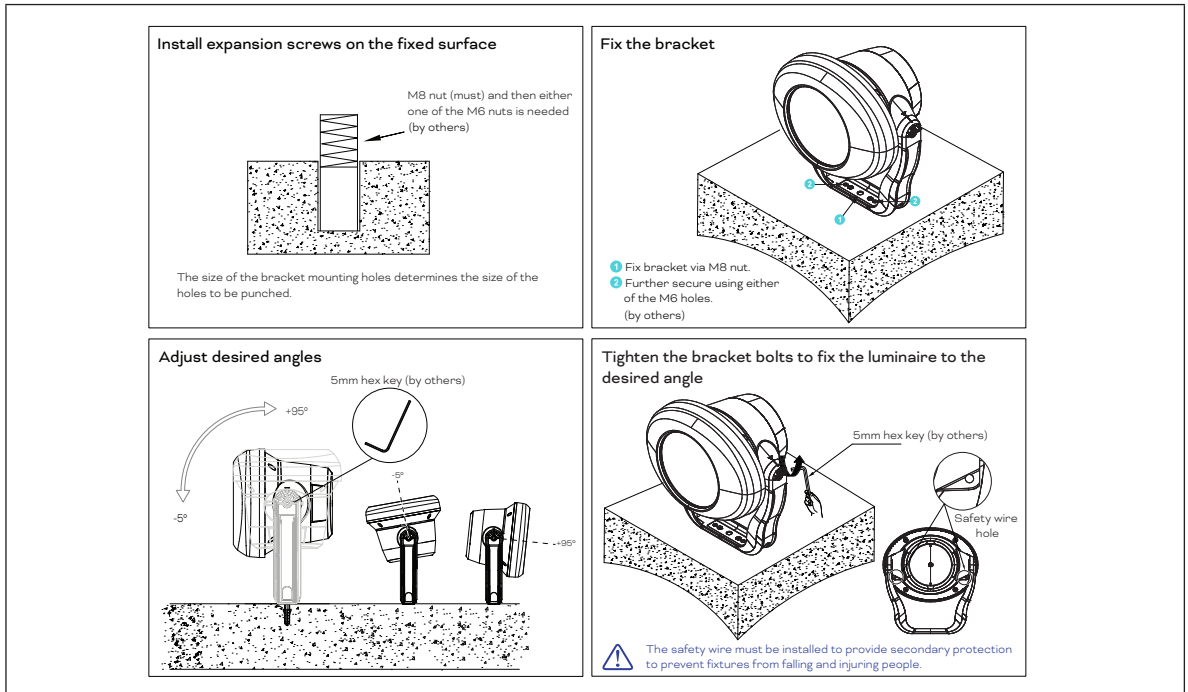
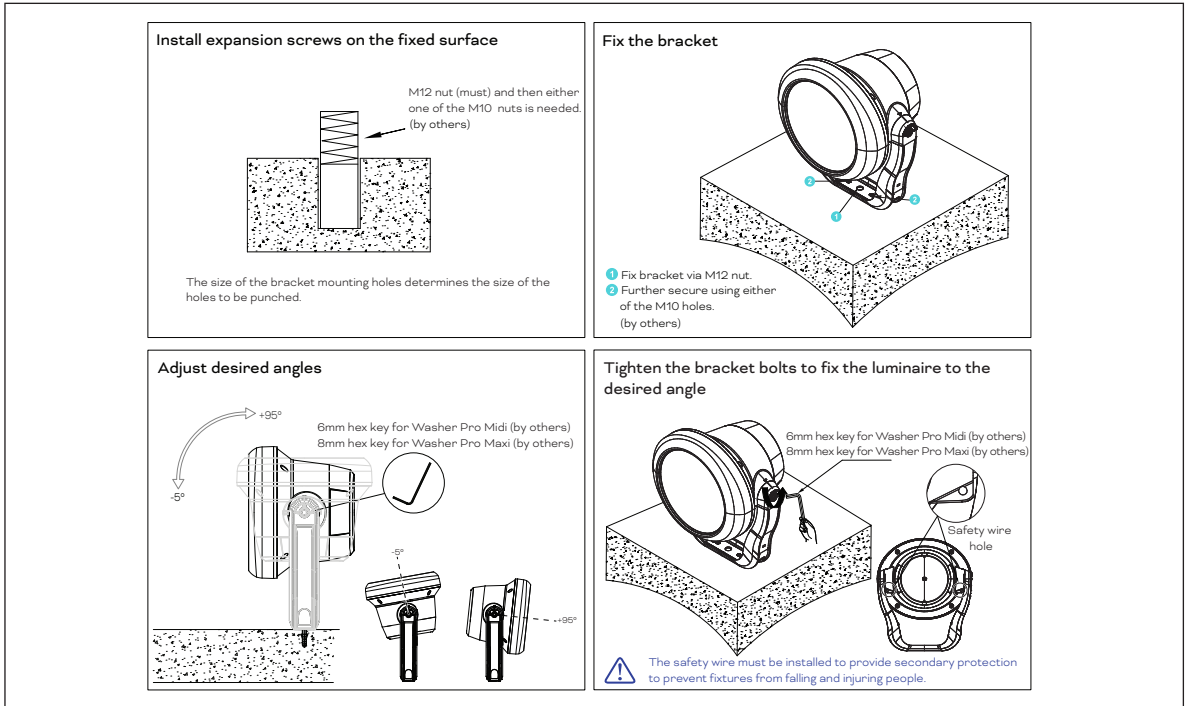


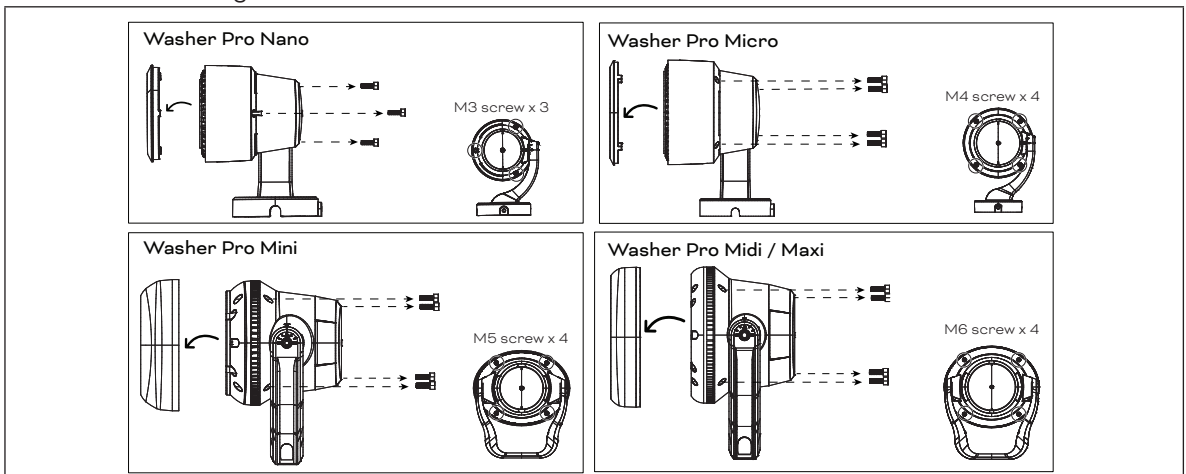
FIG.27: Washer Pro Midi / Maxi Surface Installation



3.3.3 Optical Accessories Installation

Washer Pro includes a range of optical accessories to meet different needs. The optical accessories for Washer Pro Nano / Micro are Spread Lens Kit, Glare Shield (Angled Kit/ Full Kit), the optical accessories for Washer Pro Mini / Midi / Maxi are Spread Lens Kit, Glare Shield (Angled Kit/ Full Kit) and Rock Guard.

FIG.28: Removing the Front Cover



NOTE: The removal of the front cover does not impact the IP rating of Washer Pro.

FIG.29: Spread Lens Kit Installation of Washer Pro Nano / Micro

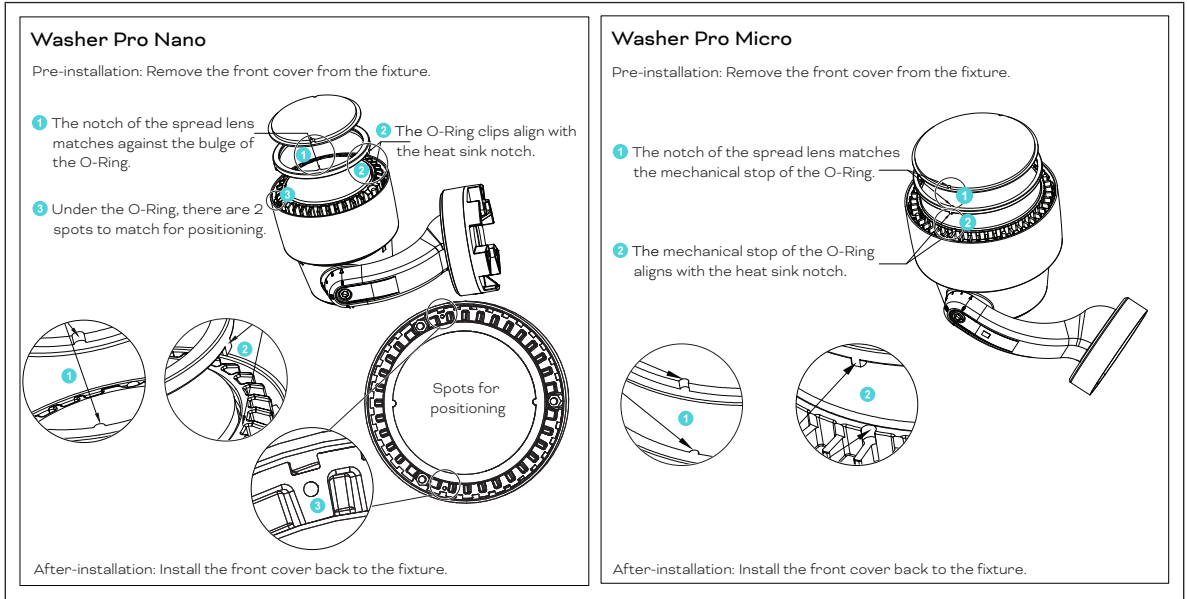
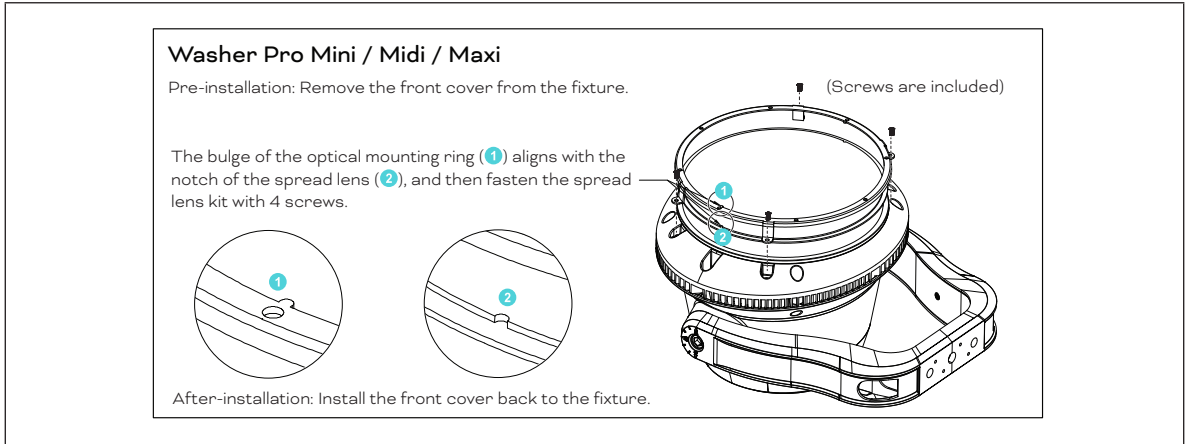


FIG.30: Spread Lens Kit Installation of Pro Mini / Midi / Maxi



The Rock Guard is designed to protect the lens and other important components from being damaged by external impacts.

NOTE: Rock Guard not available for Nano / Micro.

FIG.31: Rock Guard Installation of Pro Mini / Midi / Maxi

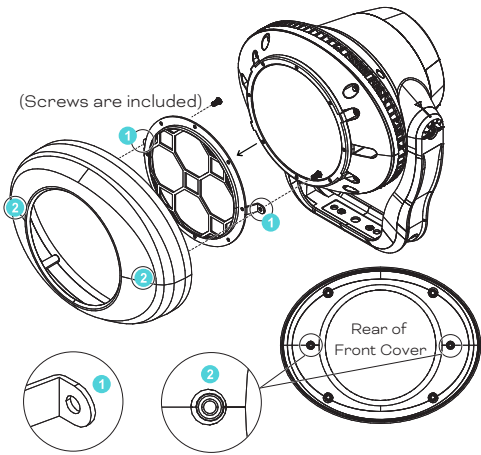
Pre-installation: Remove the front cover from the fixture.

From the rear of the Rock Guard, insert two screws (included) through the screw holes (1) on the left and right into the corresponding holes (2) in the front cover and lock them in place.

After-installation: Install the front cover back to the fixture.

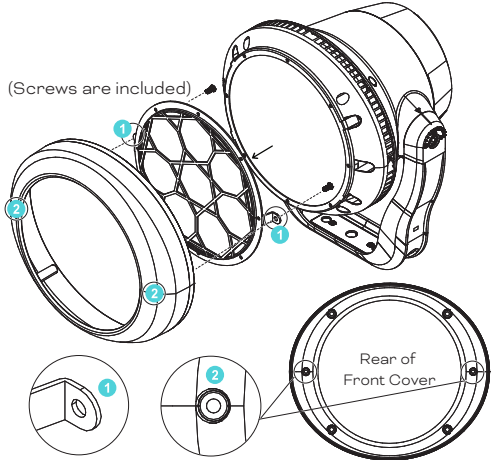
Washer Pro Mini

(Screws are included)



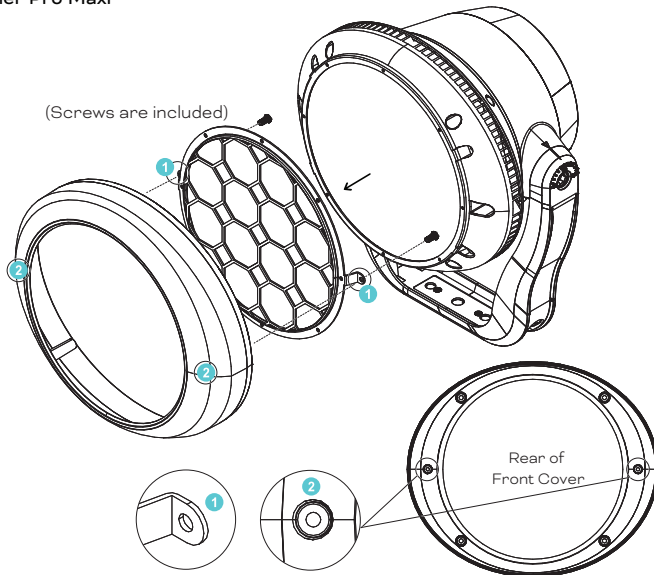
Washer Pro Midi

(Screws are included)



Washer Pro Maxi

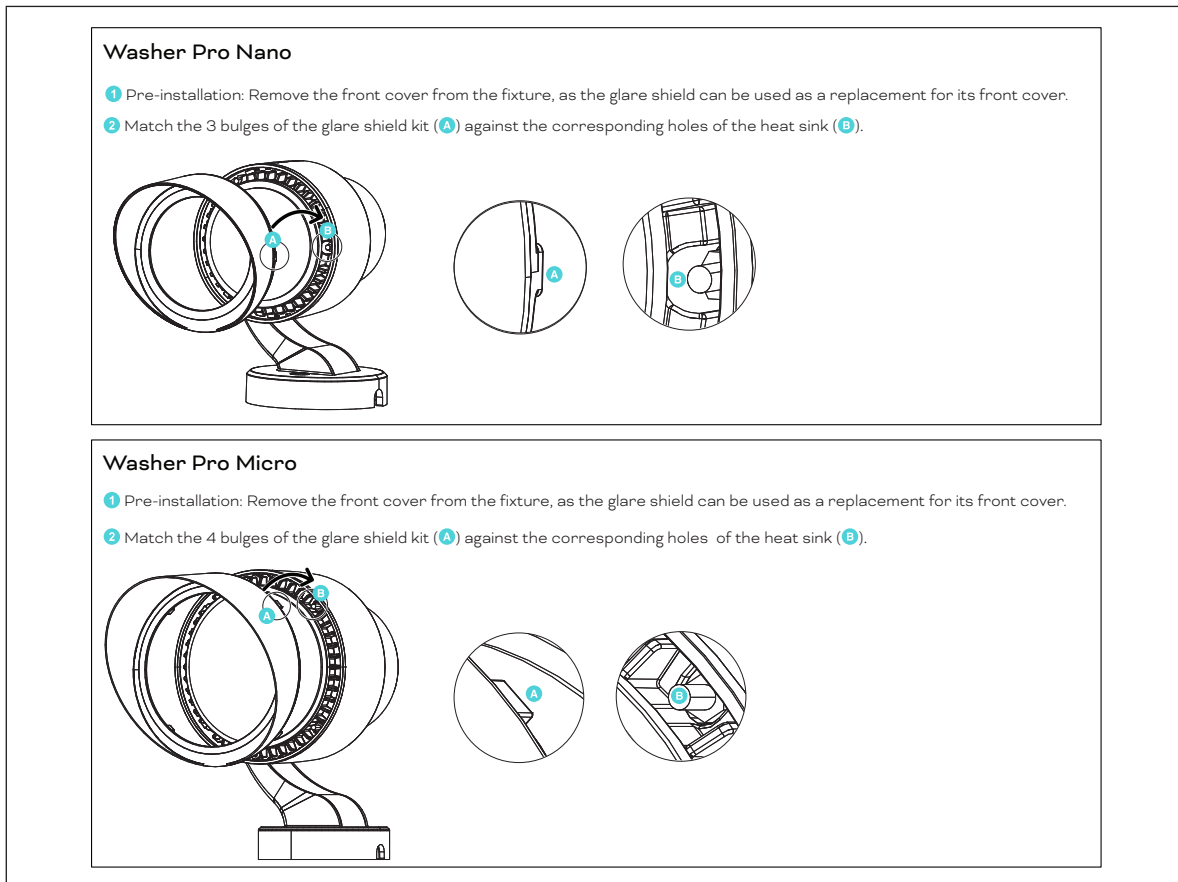
(Screws are included)



Due to the structural design of the Washer Pro, the installation of the Glare Shield is slightly different between the Washer Pro Nano / Micro and the Washer Pro Mini / Midi / Maxi.

The Glare Shield Angled Kit and Glare Shield Full Kit can share the same installation. Here the Glare Shield Angled Kit is used as a reference.

FIG.32: Glare Shield Installation of Washer Pro Nano / Micro



NOTE: The Glare Shield of the Washer Pro Mini / Midi / Maxi MUST be mounted on the Rock Guard, the Optical Mounting Ring, or both. The Optical Mounting Ring is included with each Glare Shield Kit, as well as with each Spread Lens kit.

FIG.33: Glare Shield Installation of Washer Pro Mini / Midi / Maxi

Install Glare Shield on Fixture
 Make the rear bulges of the glare shield (1) align with the holes of the optical mounting ring (2), and then fasten the glare shield with the front cover. The bulges allow rotation of the Angled Glare Shield in 45° increments.

Washer Pro Mini **Washer Pro Midi** **Washer Pro Maxi**

Install Glare Shield on Rock Guard OR Spread Lens Kit
 Make the rear bulges of the glare shield (1) align with the holes of the rock guard / optical mounting ring (2), and then fasten the glare shield with the front cover. The bulges allow rotation of the Angled Glare Shield in 45° increments.

Washer Pro Mini **Washer Pro Midi** **Washer Pro Maxi**

Install Glare Shield on Rock Guard AND Spread Lens Kit
 Make the bulges of the glare shield (1) align with the holes of the rock guard (2), and then fasten the glare shield with the front cover. The bulges allow rotation of the Angled Glare Shield in 45° increments.

Washer Pro Mini **Washer Pro Midi** **Washer Pro Maxi**

3.3.4 Rotatable Mount Plate Installation

Washer Pro Rotatable Mount Plate allows the luminaire to rotate to provide additional convenience for field applications.

FIG.34: Rotatable Mount Plate Installation of Washer Pro Nano / Micro

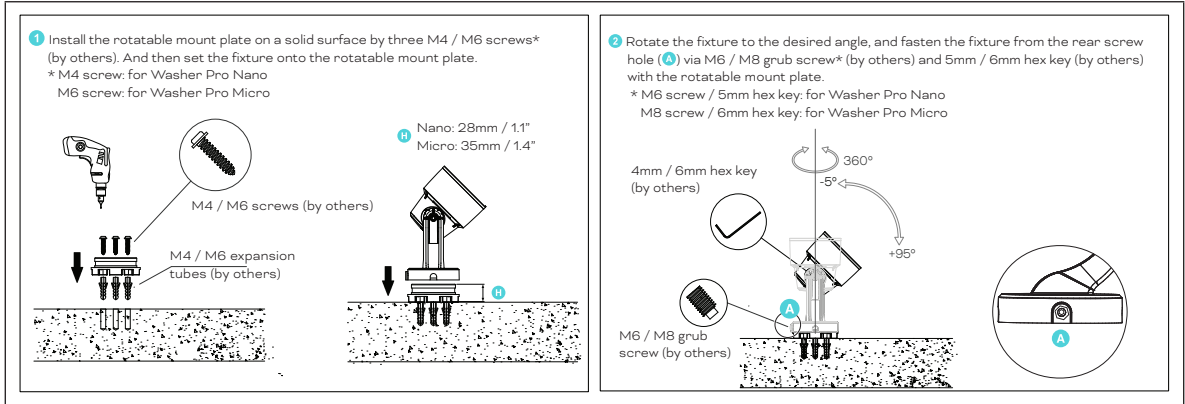
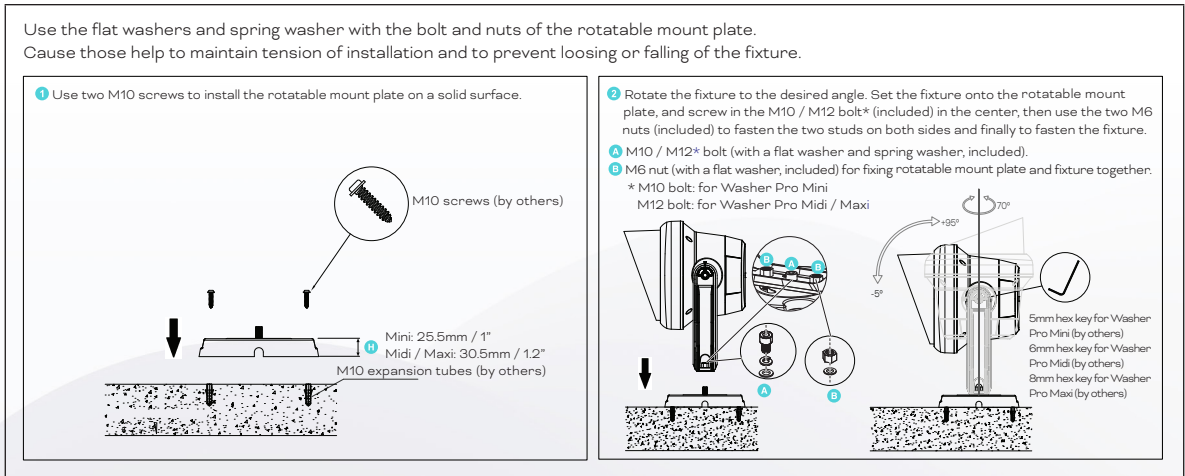


FIG.35: Rotatable Mount Plate Installation of Washer Pro Mini /Midi / Maxi

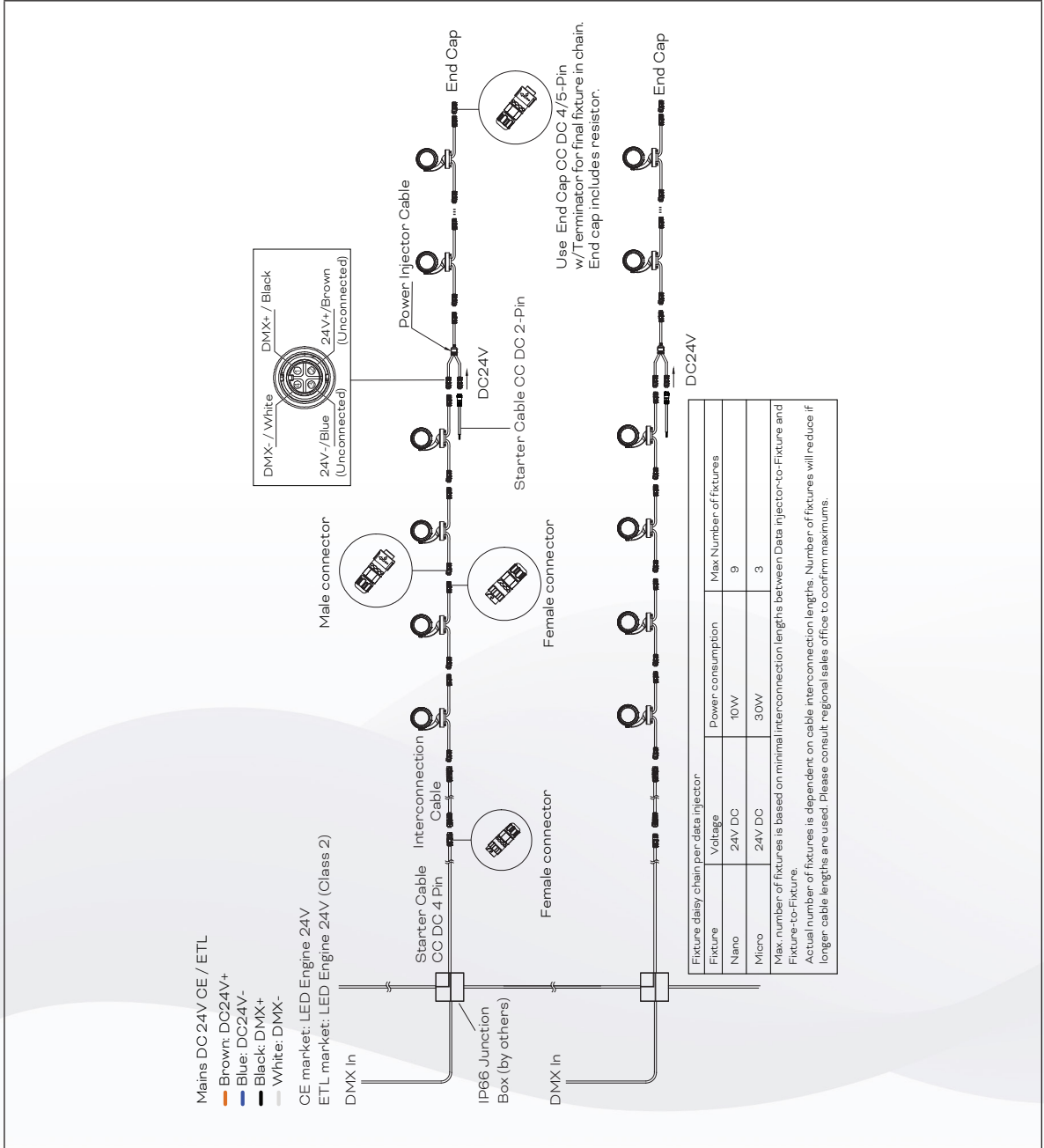


More mounting accessories (Post Mount, Compression Post Mount, Extendable Mounting Arm, Pendant Mount and Tree Mount) will be available soon. Please look out for more optional installation options coming soon.

4. System Config

4.1 Washer Pro Nano / Micro Wiring Diagram

FIG.36: Wiring Diagram of Washer Pro Nano / Micro



4.2 Washer Pro Mini / Midi / Maxi Wiring Diagram

FIG.37: Wiring Diagram of Washer Pro Mini / Midi / Maxi with Injector Box

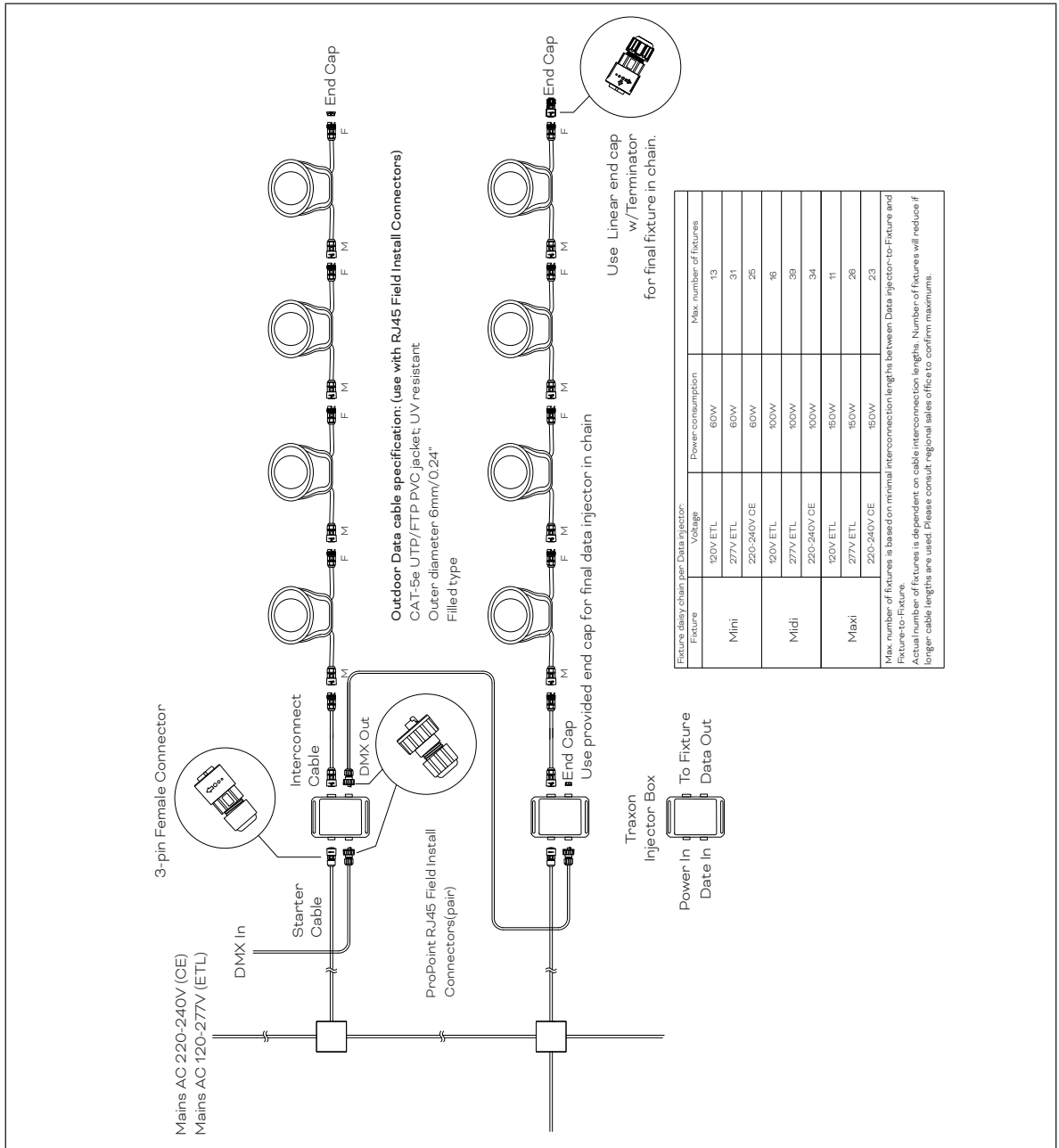
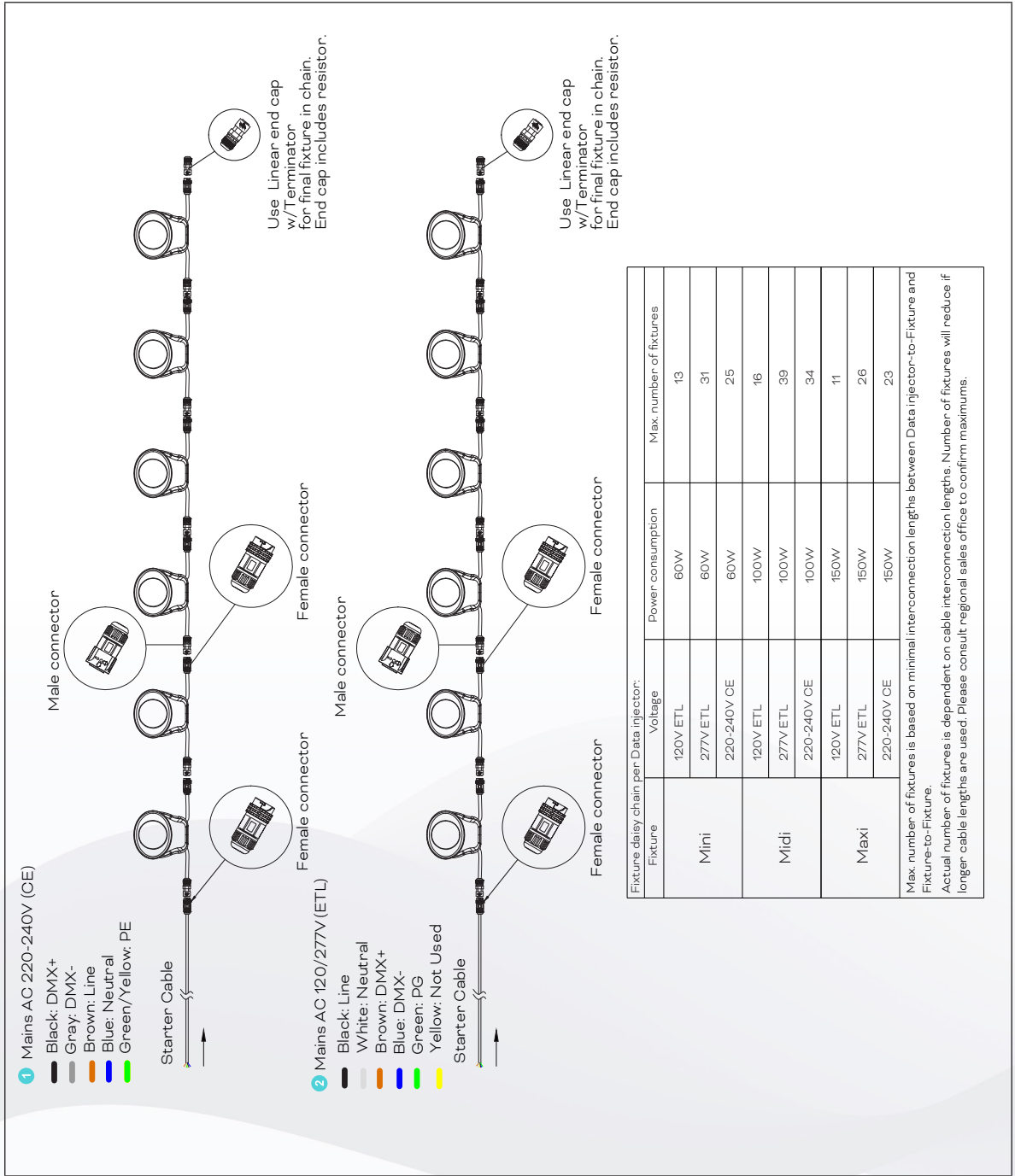


FIG.38: Wiring Diagram of Washer Pro Mini / Midi / Maxi without Injector Box



5. Care and Maintenance

Traxon products are of superior design and quality and should be treated with care. The recommendations below will help fulfill any warranty obligations and gain good use and longevity from the products.

- Do not attempt or use the product(s) until you read and understand the installation instructions. Failure to adhere to these instructions could result in serious injury or property damage.
- Do not use product(s) if cables are damaged.
- Do not connect cables and connectors when wet or in wet area. Moisture on bare connectors can cause electric shock and damage to product(s).
- Do not use product(s) in extreme heat environment. Ensure there is sufficient airflow and use cool air circulation if required.
- Do not drop, knock, or shake product(s). Rough handling can damage the electronics and void the warranty.
- Do not use harsh chemicals, cleaning solvents, or strong detergents to clean products. Wipe with a damp cloth on housings and a dry cloth on electronics to remove dirt or dust.
- Do not attempt to service or repair the product(s) unless done by an authorized service personnel. Contact your local Traxon office or distributor for details.
- If the product is not working as specified, please contact your nearest authorized service center or Traxon Technologies office for assistance.
- The light source of this luminaire is not replaceable; when the light source reaches its end of life the whole luminaire shall be replaced.

6. Technical Specification

For detailed product specifications, please refer to the product data sheet or www.traxon-ecue.com.

As with all electronic devices, LED output degrades over time - a term called lumen depreciation. This also explains why it is nearly impossible to expect photometric performances of two LED products with different service life spans to be the same. The rate of LED degradation is a complex function of many factors such as operating efficiency, duration of continuous operation, and operating conditions (e.g. ambient temperature).

Because LEDs are semiconductor devices, their performances are subject to inherent variability commonly found in semiconductor industry. To improve consistency in performance across the same product, LED manufacturers “sort” LEDs into bins according to different preset parameters, such as forward driving voltage, illumination, etc. Whereas binning is a sorting function, it is not a correction process. Inherent variability in the manufacturing process always results in different binning distributions according to different production lots. Traxon uses automatically binned LEDs on its products, thereby minimizing output variations within the model range.

7. Troubleshooting



CAUTION: Ensure power supply is OFF when disconnecting / connecting cables.

Problem	Cause	Possible Solutions
Product does NOT light up after installation	Incorrect power connection	<ul style="list-style-type: none">— Check Mains Power— Check power supply leads and wire connections— Ensure output wires are connected with proper polarity— Check if LED Engine's secondary output is working as specified.
Shadowing	Light source covered	<ul style="list-style-type: none">— Check for cables, wires or unwanted debris covering LED light source
Modules are dim	Excess products connected	<ul style="list-style-type: none">— Ensure the power supplies are not overloaded due to an excess of products connected
Flickering	Incorrect power input/Excess products connected	<ul style="list-style-type: none">— Ensure the input voltage is correct— Ensure the power supplies are not overloaded due to an excess of products connected

If problems persist or the product is not working as specified, please contact your Traxon Technologies office for assistance.

8. Warranty Statement

Traxon Technologies warrants its Products against material or workmanship defects for a period of five (5) years from date of invoicing, provided that the purchased items are used under the conditions stated in this user manual.

Please refer www.traxon-ecue.com for all warranty terms and conditions.



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