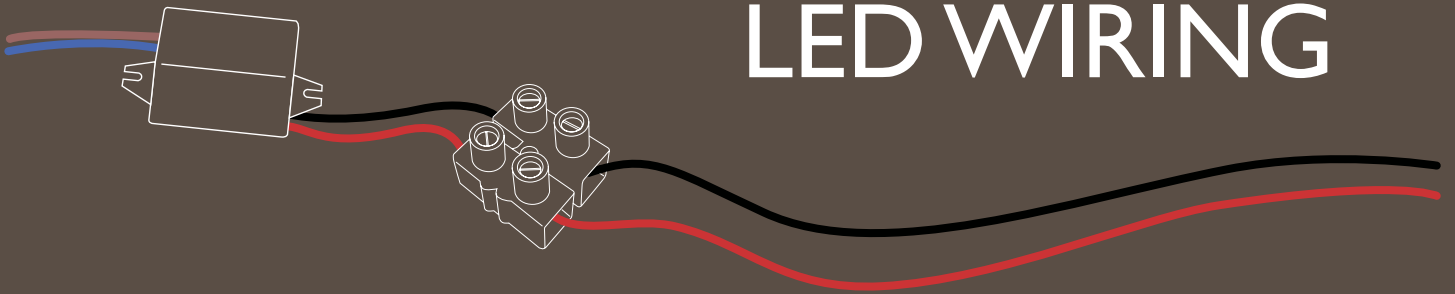


GUIDE TO LED WIRING



1w 350mA LED Products

3w 700mA LED Products

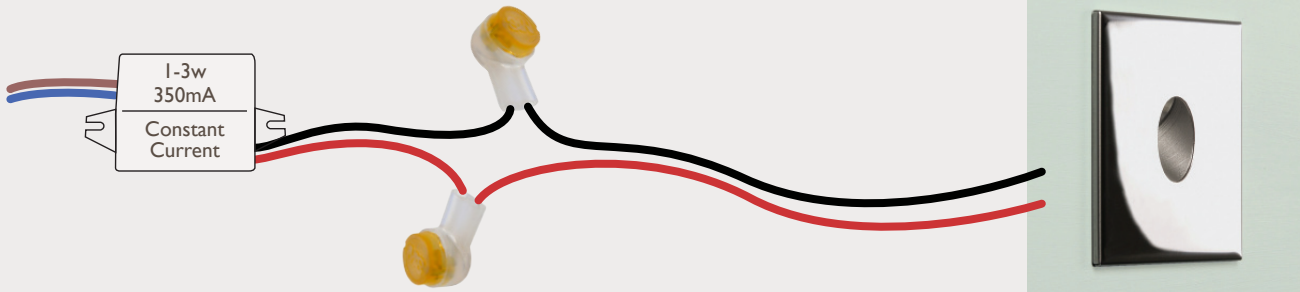
Drivers

Connectors

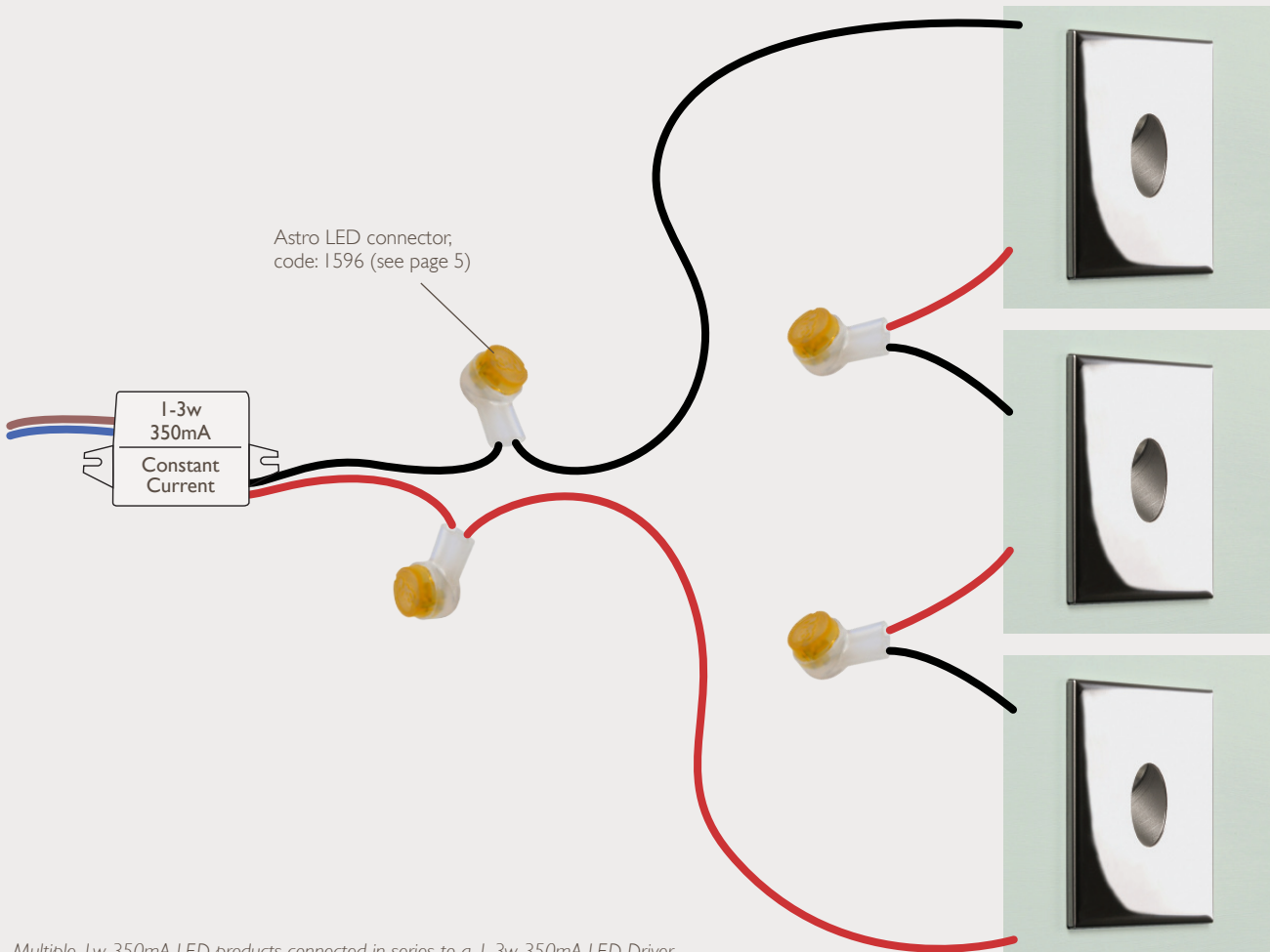
Transformers

1w LED PRODUCTS

You can connect one, two or three 1w 350mA LED products to our 1-3w 350mA Constant Current LED Driver, I275. If you are wiring more than one product, the products must be wired **in series, not parallel**.



Single 1w 350mA LED product connected to a 1-3w 350mA LED Driver

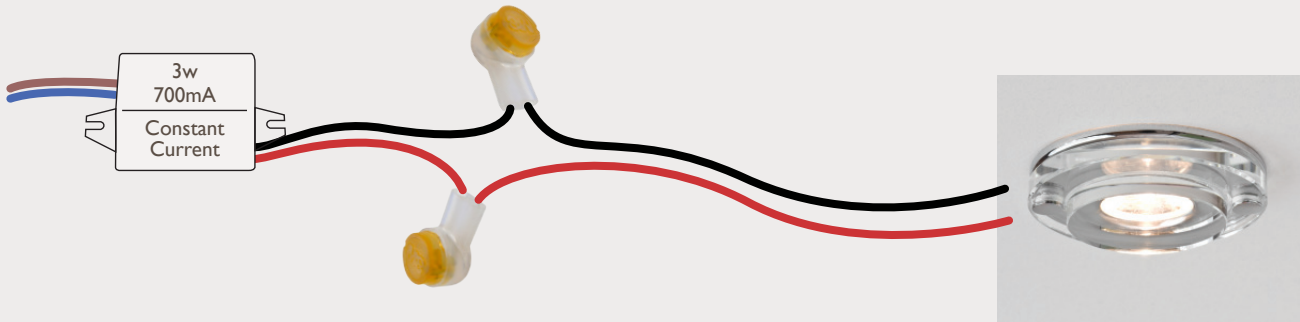


Multiple 1w 350mA LED products connected in series to a 1-3w 350mA LED Driver

1w 350mA products in the Astro range include: Fosso Recess 0629, 0631 and 0757
Tango 0825, 0826, 0831, 0832 and 0833

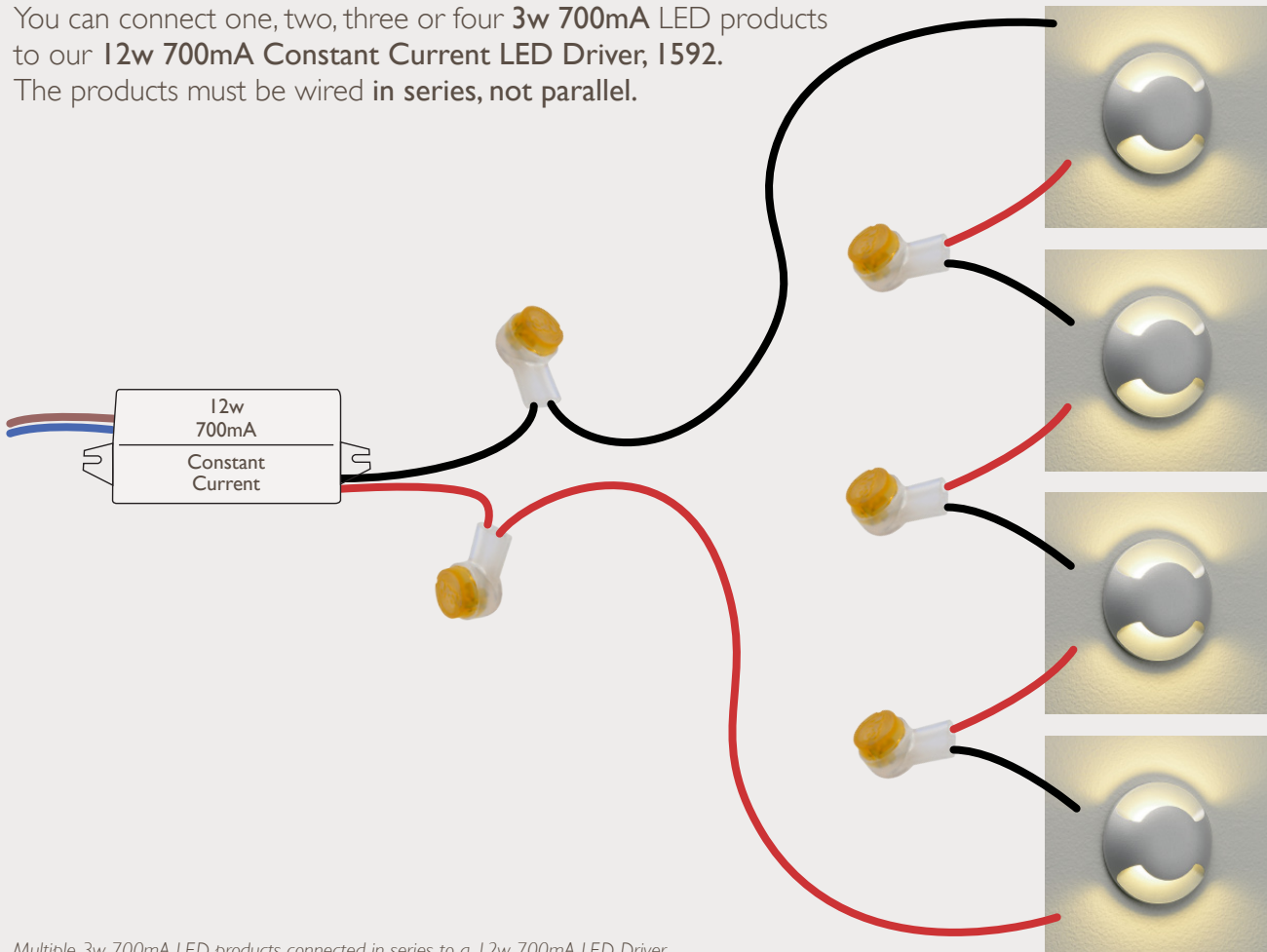
3w LED PRODUCTS

One **3w 700mA** LED product can be wired to our **3w 700mA Constant Current LED Driver, I271**.



Single 3w 700mA LED product connected to a 3w 700mA LED Driver

You can connect one, two, three or four **3w 700mA** LED products to our **12w 700mA Constant Current LED Driver, I592**. The products must be wired in **series, not parallel**.



Multiple 3w 700mA LED products connected in series to a 12w 700mA LED Driver

3w 700mA products in the Astro range include:

Ice LED 5579 and 5580
Mint LED 5581 and 5582
Beam 0937, 0938 and 0939
Terra 43 0936

DRIVERS

A driver reduces the voltage supplied to the LED and “drives” either a **constant voltage** or a **constant current** to the LED.

It is very important that LED products which do not have a built-in driver must be connected to an LED driver, not directly to the mains.

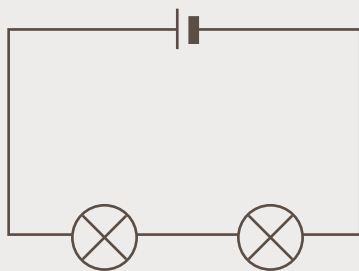
Connecting LEDs directly to mains will cause irreparable damage to the product.

All our LED products that need a separate driver must be wired in **SERIES** not parallel.

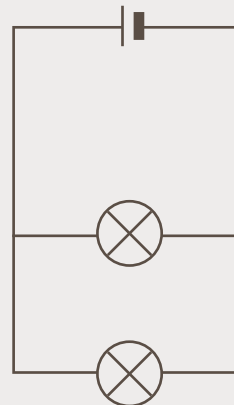
WARNING: It is very important that the power is disconnected until installation of the LED products is completely finished. Any connections made with the power on will cause irreparable damage to the product.

You can connect up to three 1w 350mA LED products to our 350mA Constant Current Driver, I275. The products must be wired in series.

SERIES WIRING DIAGRAM



PARALLEL WIRING DIAGRAM

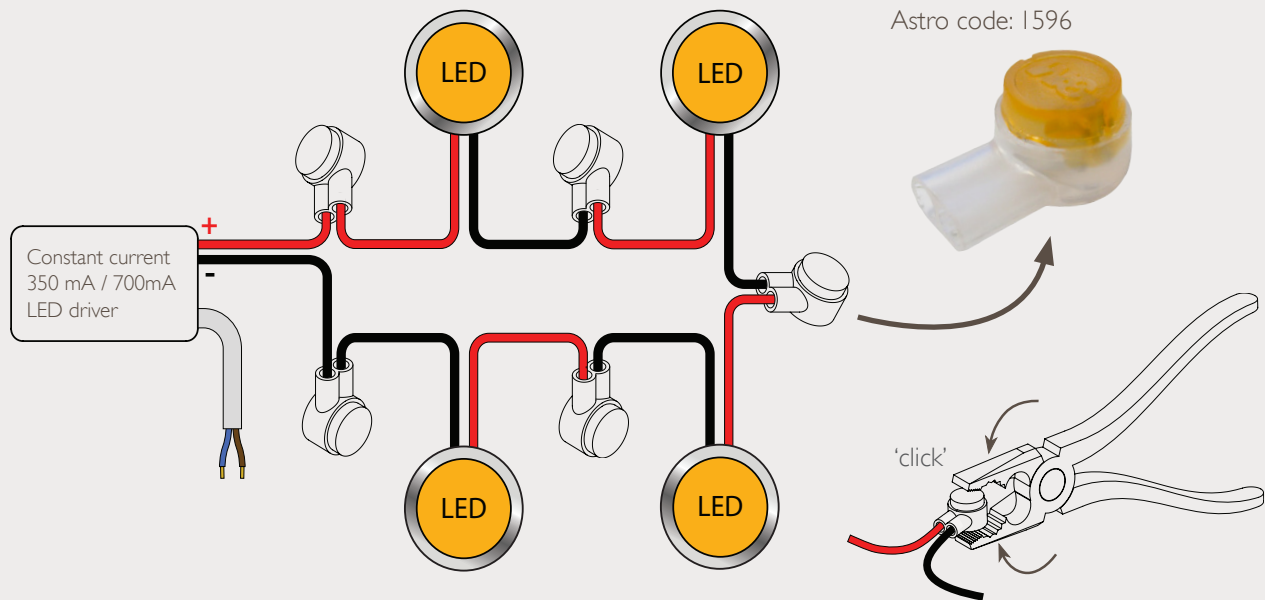


Some, but not all, of our drivers are IP65 rated. The installer must therefore ensure that IP integrity is maintained, either by positioning the driver indoors or using waterproof junction boxes.

CONNECTORS

Below is the diagram we use on our instructions showing a series circuit including the connectors that we sell.

These connectors are specifically for LED circuits and are gel filled to provide IP65 protection when used outside.



TRANSFORMERS

A transformer does what it says, it transforms mains voltage, 230 volts, down to 12 volts. We use these on low voltage halogen products, eg Ice downlights.

CABLE DISTANCES BETWEEN PRODUCTS AND TRANSFORMER OR DRIVER

Transformers

For installation using 12v transformers it is important to keep the distance between the product and the transformer to a minimum to reduce "voltage drop". This means over long distances maybe only 10v is getting to the product instead of 12v. This can be overcome by increasing the diameter of the conductor of the cable, this is the electrician responsibility to advise the customer.

Drivers

With constant current drivers there is much more flexibility since the driver will automatically supply more voltage in order to provide the necessary current. Up to 10metres between a driver and product would be acceptable on 0.75mm cable.