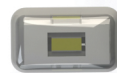


Nash LED Lamp G4 Replacement Bulb



Features

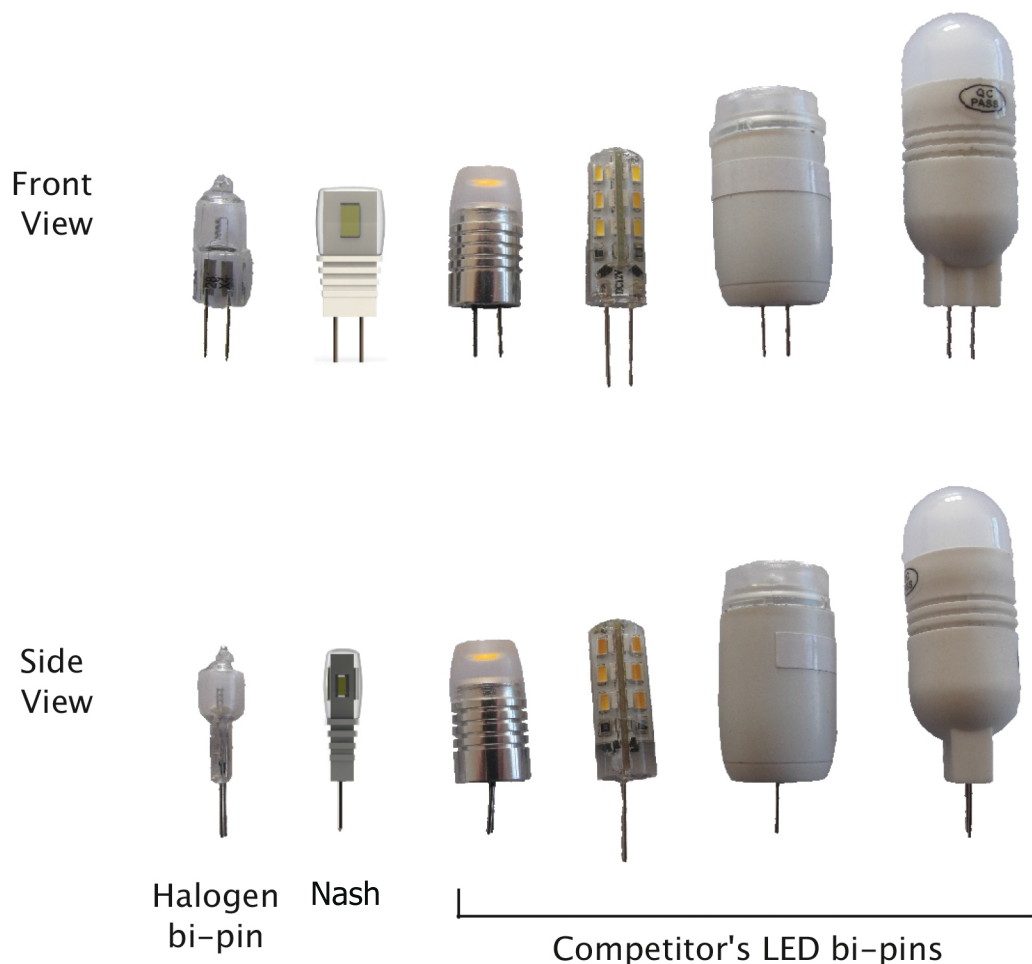
- Low energy consumption (1 W)
- High light output (50 lumens in warm white)
- Available in various colours (warm, natural, cool)
- Similar "sparkle" effect to halogen bi-pin
- Similar size and form factor to halogen bi-pin
- Compatible with halogen bi-pin lamp holders
- Optical centre aligns with halogen bi-pin
- Long life time > 15x halogen bi-pin lifespan
- Broad compatibility with transformers
- True retrofit LED bi-pin

Applications

- 10W halogen bi-pin replacement (12V, G4)
- Hospitality, Residential, Commercial
- Small aperture downlighting
- Accent lighting
- Decorative lighting, e.g. chandeliers
- Task lighting

Similar in size and form to halogen bi-pin

The Nash bi-pin capsule is unique in that it is of similar size and form factor to the halogen bi-pin capsule that it replaces. This is in contrast to most competitor's LED bi-pins that are significantly larger than the halogen bi-pin and/or have significant deviations from the halogen bi-pin's form factor. The shape of most LED bi-pin's is cylindrical, whereas the halogen bi-pin has a flattened shape.



Deviations in size and form factor of competitor's LED bi-pins result in a number of disadvantages of these LED lamps, including the inability to fit into existing lamp holders and displacement of the LED bi-pin's optical centre from that of the halogen bi-pin's position.

Compatibility with bi-pin lamp holders

Halogen bi-pin lamp holders have been designed for the size and shape of these bi-pins. LED bi-pins that deviate significantly from the size and shape of the halogen bi-pin are often not able to fit into the existing lamp holders in retrofit applications. When size is comparable, the cylindrical shape of the LED bi-pins is often the barrier to these lamps being used in the existing holders. As the Nash is of similar size and form to the halogen bi-pin, it is compatible with all halogen bi-pin holders.

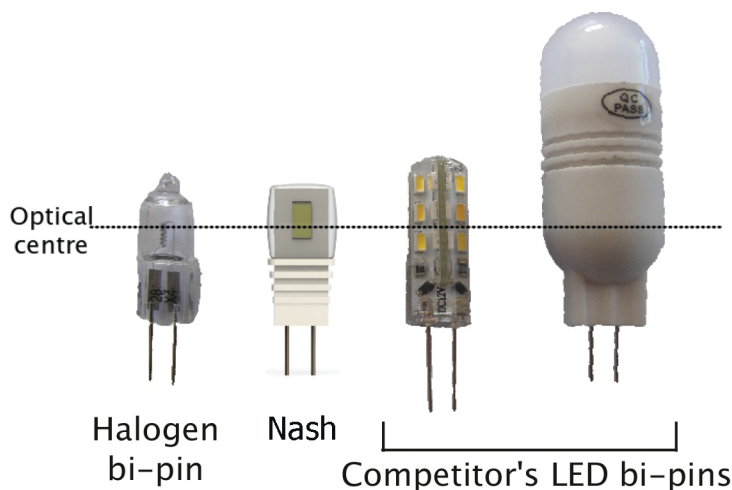


Nash Competitor's
LED bi-pin

Compatibility of bi-pins in lamp holder
used for small aperture downlighting

Optical centre aligned with halogen bi-pin

In addition to the size and form factor being similar to the halogen bi-pin, the Nash is also designed so that the light source is as close as possible to a point source, with its optical centre in a similar position to that of the halogen bi-pin. This is in contrast to most competitor's LED bi-pins, whose optical centre is displaced away from the optical centre of the halogen bi-pin, and/or whose light source is more distributed than that of the halogen's single-point source.



A LED bi-pin with a point-like source of similar position to the halogen bi-pin is advantageous for use in lamp reflectors designed for halogen bi-pins. In this case, the LED bi-pin functions effectively in the reflector. This is not the case for a LED bi-pin whose optical centre is displaced or whose source is distributed, as the reflector no longer creates the intended light beam when used with such a lamp.



Nash Reflector with halogen
bi-pin acting as point source



bi-pin is effective in reflector
due to optical centre position



Competitor's LED bi-pin is ineffective in
reflector as optical centre is significantly
displaced from optimal position



Decorative task lighting application with
bi-pin capsules fitted into reflectors

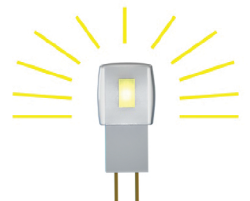
Halogen bi-pin "sparkle" effect maintained

The Nash provides a multi-directional light source that creates the same "sparkle" light effect as that of a halogen bi-pin. Many LED bi-pins lose this lighting effect as the light source is made more directional.

While this directionality can meet the specific requirements of small aperture downlighting, the loss of the "sparkle" effect is detrimental to other applications such as decorative lighting (for example in chandeliers), where the "sparkle" effect is a



Decorative chandelier lighting
using bi-pin capsules



Broad transformer compatibility

The Nash has patent-pending SlimDrive™ circuitry built into the lamp that allows it to operate on a wide range of electronic and magnetic transformers. This allows one to use the Nash to replace a halogen bi-pin without the need to exchange the existing transformer. The Nash will always operate on whatever transformer it is installed.

The compactness and low-component-count of the SlimDrive™ intelligent driver circuitry enables the Nash to be packaged in a size and form factor that is comparable with the halogen bi-pin, a feature that differentiates SlimDrive™ from other intelligent driver solutions that provide broad transformer compatibility.



The Nash operates with a wide range of electronic and magnetic transformers

True retrofit LED lamp

Broad transformer compatibility together with bi-pin holder / reflector compatibility, makes the Nash a true retrofit LED lamp, distinguishing it from most of the LED bi-pins currently on the market that are either too bulky to be used in existing lamp holders and/or do not work reliably on existing transformers.

