

# **Focus series**

### Indoor Surface Mounted & Track Fixtures

The Art of Illumination



## Focus

#### **CLS Focus**

The CLS Focus series is the result of an intensive collaboration between a number of renowned lighting designers in the museum world and CLS as a manufacturer.

Therefore, both the aesthetic design and the photometric properties blend seamlessly with the needs of lighting designers. Over a short period of time after introduction, literally thousands of fixtures have already been installed in various museums and galleries. Originally developed as a fixture for showcase lighting in particular, it appears that the excellent light properties and beautiful design make the Focus also perfectly suitable for more general lighting purposes.

## What makes the Focus series so unique in terms of specifications and light perception?

With as much as 6 different versions the Focus series offers light designer & architects many possibilities for countless applications.

• Focus T 230V Magno

The Focus series consists of the following versions:

- Focus Compact GII & Focus surface
  Focus HP surface
- Focus Track HP DMX & Magno
- Focus Compact GII & Focus Track DMX & Magno



#### **CLS Performance Zoom System**

The CLS Performance Zoom system enables users to quickly and easily set the beam angle in a range between 13° and 65°. Therefore, designers no longer have to compromise when creating the perfect lighting scheme, as the ideal beam angle can be set for nearly every object.



The big advantage for museums is of course that with just one fixture model, changing exhibitions does not require new investments in lighting. It is obvious that there are many cost advantages to this lighting concept.

#### **High Light Efficiency**

Despite a power consumption of only 4 Watts, the Focus offers a high effective light output. This is the result of using the latest generation of LED chips combined with a high quality optical design. The Focus HP offers a light output that is 90% higher than the other versions, with a power consumption of only 6 Watts.

#### **Excellent Colour Rendition**

Lighting designers have a choice of multiple LED light sources in terms of colour temperature and colour rendition. Available in extra warm white (2700K), warm white (3000K) and neutral white (4000K).

Depending on the application, it is even possible to select a CRI value of 85 or 95 (typical). Other LED colour temperatures upon request and with reservation of minimum order quantities.





National Military Museum, The Netherlands



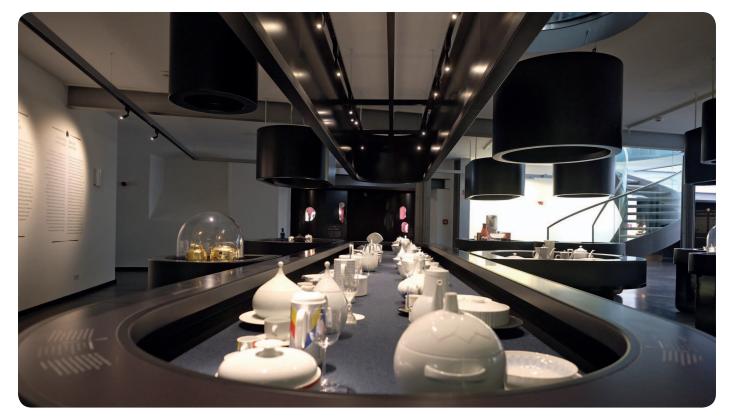
Exhibition 'Hier kom ik weg', The Netherlands



Catharijneconvent museum, The Netherlands



Exhibition Brug van Vroenhoven, Belgium



Porzellanikon, Germany

#### Various light correction possibilities

The Focus has an internal 'slot' which allows for colour- or correction filters, which can be replaced in an instant.

For a soft and homogeneous light beam the Focus is fitted with a soft diffusion filter as standard, which has a light transmission of as much as 94%.

The standard recessed optics already reduce glare to a minimum. To avoid glare at every angle, an optional snoot with bevelled edge is available, which can be mounted quickly and easily.

#### Accessories

The optional extension pipes are available in lengths of 10 cm and 30 cm. By combining them, various seamless extension pipes can be made, with lengths up to max. 120 cm.



This allows for the ideal lighting angle in every situation. For the Focus fixtures that are equipped with the Magno dimming system, sets of 10 magnets are available. Snoot with bevelled edge is available as optional accessory.

#### **Dimming Options**

The surface mounted versions of the Focus can be dimmed via various different methods. As standard, CLS offers dimming possibilities for phase cut (mains dimming), via 1-10V or via the industry standard DMX512 protocol.

Dimming via the DALI protocol is available on request.



#### Horizontal and vertical locking

The complete Focus series are equipped with a Mechanical locking system for optimum position fixation. This to prevent that the accurate alignment of the fixture can be disturbed by third parties and the light setting is no longer in line with the original light plan.

#### Focus T DMX Versions

In addition to the previously stated features, the Track versions of the Focus offer a number of additional functionalities.

#### DMX-control and 24V power supply via the same track

By means of an extremely compact 24V single-phase track, which is also fitted with data bus functionality, both power and data are distributed to the fixtures. DMX512 is used as control protocol. DMX512 is the industry standard for programming complete multimedia- shows and exhibitions.

DMX 512

#### Individual addressing and programming

Each fixture can be addressed individually in a quick and easy manner. Due to the individual address, it is possible to program a static or dynamic intensity level for each fixture.

#### Memory on Board function

Each track version of the Focus is equipped with a 'Memory on Board' function as standard. After programming an intensity level via the DMX-signal, this value can be stored in the fixture's memory. In the unlikely event of signal-loss, the fixture will still output the pre-programmed level.

The additional advantage of the 'Memory on Board' function, is the fact that museums or galleries are no longer necessarily required to invest in an own DMX-control system.

One can simply hire an experienced programmer who will program all fixtures, ensuring the perfect light levels for the term of an exhibition, without the need of an on-site control system.

#### **Magno Dimming**

For users who want individual dimming without the use of any external control equipment, CLS has developed the revolutionary Magno dimming system.

This inventive technology allows for storage of an intensity level in the Focus' memory, using just a small magnet. The system works extremely accurate and fast. An intensity level can be stored within a matter of seconds. Scanning the QR-code below with your smartphone, will lead you directly to a video explanation of the Magno dimming system. Of course this video can also be found at www.cls-led.com in the track fixtures section, Focus T DMX.



#### Focus Track 230V Magno

For the use in standard 3 phase track systems, the Focus Track 230V is available. The Focus Track 230V is equipped with an internal power supply and compatible with the majority of common track systems, therefore easily to incorporate into existing infrastructures. The light output is equivalent to traditional 35 Watt halogen fixtures.Next to the Internal slot for colour- and/ or correction filters, the Focus Track 230V is equipped with the acclaimed Magno dimming system.

The Focus Track 230V is the ideal solution for replacing traditional luminaries and provides not only a perfect dimming with unprecedented precision, but also adjustability of the beam angle.

Unique is the possibility to use optional extension rods of 10 and 30 cm height, allowing for the fixture to be mounted up to 120 cm below the track.









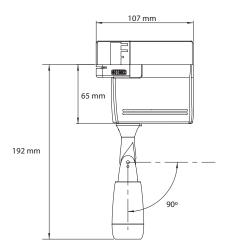
#### A Sound Investment

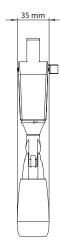
Components of the highest possible quality are used for the production of the Focus series, without compromise. The patented heat sink ensures optimum cooling of the light source, so that the potential 50,000-hour life length can actually be achieved.

Unlike many other suppliers on the market who only claim to do so, **CLS actually designs and produces its fixtures in The Netherlands.** CLS belongs to a group of companies with more than 25 years of expertise in the professional lighting business. This provides additional reassurance for years to come.

#### Measurements Focus T 230V series

Focus T 230V





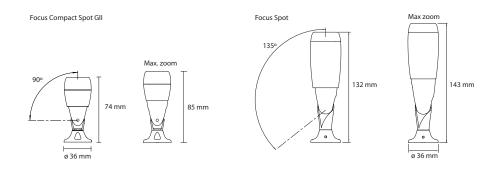
#### Technical specifications Focus T 230V series

| LED:                 | Luxeon / Cree                 |  |
|----------------------|-------------------------------|--|
| Available colours:   | CRI 85: 2700K, 3000K & 4000K  |  |
|                      | CRI 95: 2700K, 3000K & 4000K  |  |
| Beam angle:          | 13º - 65º                     |  |
| Power supply:        | 100-240 VAC                   |  |
| Power consumption:   | Max. 6 Watt                   |  |
| Housing:             | Anodised aluminium black,     |  |
|                      | White coated                  |  |
| Swivel:              | 360° horizontal, 90° vertical |  |
| IP value:            | IP20                          |  |
| Ambient temperature: | -10° till 40°                 |  |

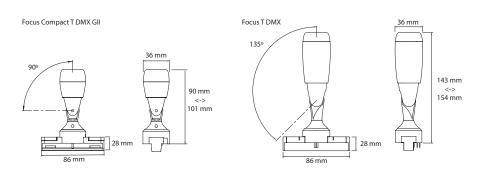
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#### **Measurements Focus Spot series**



#### Measurements Focus T DMX series



#### **Technical specifications Focus series**

| LED:                 | Luxeon / Cree                |                                  |
|----------------------|------------------------------|----------------------------------|
| Available colours:   | CRI 85: 2700K, 3000K & 4000K |                                  |
|                      | CRI 95: 2700K                | , 3000K & 4000K                  |
| Beam angle:          | 13º - 65º                    |                                  |
| Power supply:        | Focus Spot                   | : 700 mA                         |
|                      | Focus T DMX                  | : 24 VDC                         |
| Power consumption:   | Focus                        | : Max. 4 Watt                    |
|                      | Focus HP                     | : Max. 6 Watt                    |
| Housing:             | Anodised aluminium black,    |                                  |
|                      | white coated                 |                                  |
| Swivel:              | Compact GII                  | : 360º horizontal, 90º vertical  |
|                      | Focus                        | : 360º horizontal, 135º vertical |
| IP value:            | IP20                         |                                  |
| Cable length:        | Focus C Spot                 | : 150 cm                         |
|                      | Focus Spot                   | : 150 cm                         |
| Ambient temperature: | -10° till 40°                |                                  |

#### lcons

