

MEDICAL LIGHTING

HUGO EXAMINATION LIGHT

HUTZ
MEDICAL


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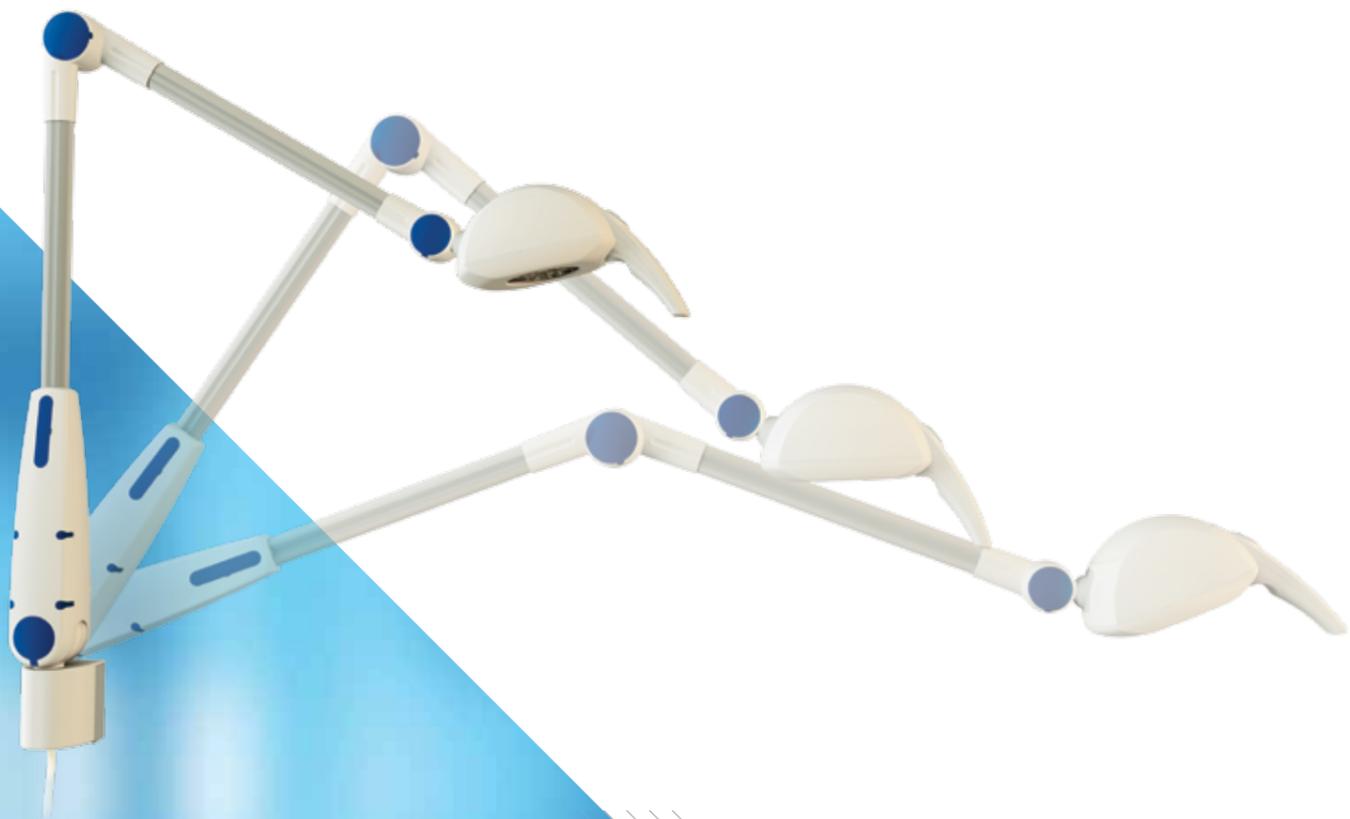
HUTZ
MEDICAL


ADVANCING HEALTHCARE
TECHNOLOGY

SA Patent Application No. 2014/01508

 Manufactured in South Africa

09/2014



Welcome to HUTZ Medical

For many years, the HUTZ name has been synonymous with high quality. Renowned for developing and manufacturing hospital service systems for over four decades, Hutz Medical also boasts an extensive Medical Lighting range that consists of Operating Theatre, Procedure and Examination Lights.

Our selection of highly specialised lights offer superior quality that enhances the hospital environment for efficient and effective healthcare. Our lights not only meet, but exceed required standards. As an established and reputable medical equipment supplier, Hutz Medical offers service, maintenance and spares on all of our lights. Our team of professionals can assist and advise customers as to the most efficient solution for their lighting requirements.

The HUTZ name therefore is more than just a well-recognised brand for medical equipment, it is also a concept. This concept embraces a range of hospital service systems and medical lighting that has been designed and manufactured in South Africa for a market that is both high-tech and demanding. Our products are known for their innovative, modern and aesthetic designs, which are underpinned by practical technology, resulting in dependability and durability.

With a focus on continuous improvement in every aspect of our business, Hutz Medical is proud to announce that we will be extending our range of Medical Lighting to include the brand new HUGO range of Examination lights.

At Hutz Medical, we constantly strive to make a difference where it really matters: with the patient.



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Healthcare professionals are assured of user-friendly, peer-endorsed, quality medical equipment.



Hospital developers have peace of mind, knowing that they are dealing with a market leader with numerous quality accreditations and accolades to its name. Furthermore, our products offer many years of hassle-free, low maintenance.



Architecturally, our qualified design team has extensive experience in hospital projects, ensuring appreciable aesthetics and intelligent solutions.



Electrically, international specifications and standards are applied. Contractors know us for our uncompromising quality, support and the ease of installation that our products offer.

HUGO Examination Light

The HUGO name means "Bright in Mind and Spirit", "Inspiration" or "Intelligence".

Hutz Medical has gained invaluable experience over the last 40 years in the field of lighting and medical equipment. Hutz Medical first manufactured a medical examination light in 1965; since then it has established a culture to improve and better their design offering.

The first light design was dictated by the technology of the time. The use of halogen dichroic bulbs had many restrictions including the heat generation and limited colour rendering. As developments occurred in the field of lighting components so too did the product development at HUTZ to meet the ever increasing demands of the medical professional. New manufacturing methods and capabilities led to the next generation of HUTZ examination lights.

Over the past few decades, the LED technology has grown exponentially whereby making it possible to integrate an LED light source into a cost effective medical lighting product.

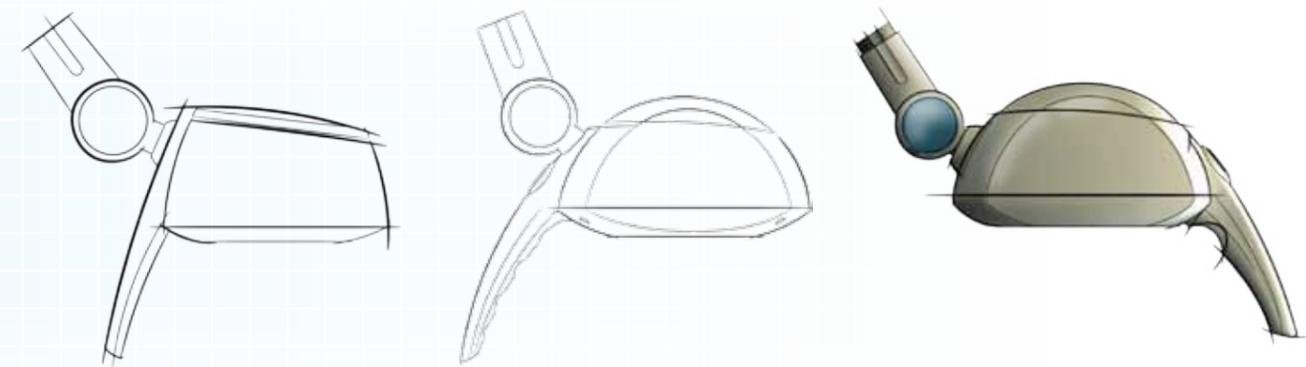
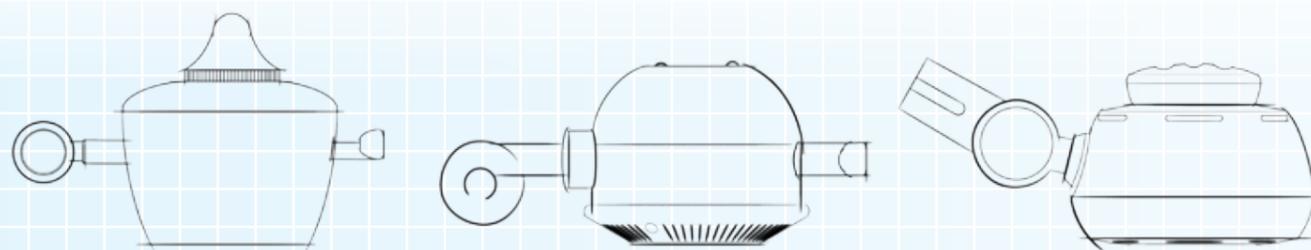
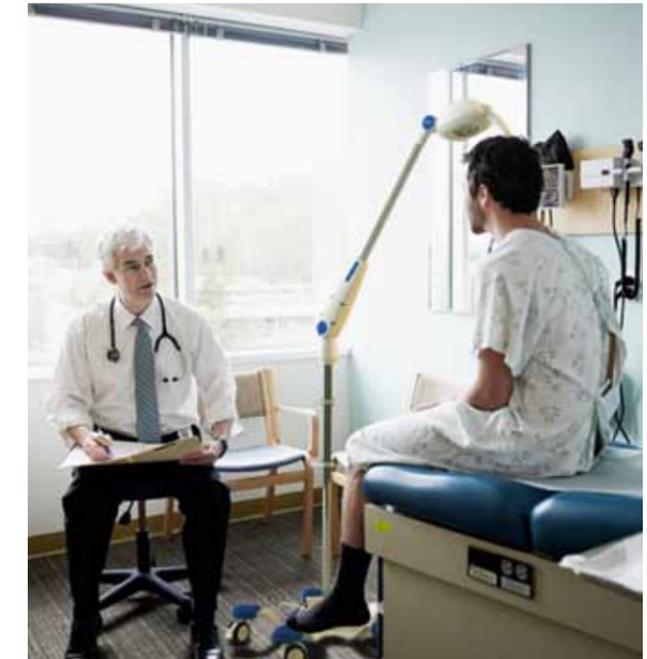
The luminance output can be customised together with the colour rendering index to meet the high specifications dictated by the IEC standards for medical lighting.

The use of LED technology in medical lighting is now becoming the norm due to its undisputed advantages such as long life, high performance with low energy consumption, minimal heat and excellent colour rendering index.

Extensive research and development has been invested in the HUGO to achieve an ergonomically superior product.

A true innovation in examination lights is achieved with the integral clutch system (**SA Patent Application No. 2014/01508**) that eliminates the need for manually adjusted friction brakes at each articulated joint.

Single-handed positioning of the light enables the medical practitioner to illuminate the target area with ease. This technology enhances the user experience and allows the operator to concentrate on their procedure with little effort to re-adjust the light.



1965

1990

Halogen Dichroic light source

LED concepts

2014

HUGO

HUGO Advantage

The HUGO is designed and manufactured for mass production. Plastic moulded components allow for a freedom in design and consistency in product quality.

All apertures required for assembly are capped to provide a seamless body surface for easy cleaning.

Designed to assist with infection control, an anti-microbial additive is integrated into the plastic parts during manufacturing to inhibit bacterial growth.

The use of Aluminium extrusion for the HUGO arms provide both functional and aesthetic advantages.

Arms can be cut to length to satisfy various applications while providing a hard wearing, easily cleaned surface suited to any medical environment.

The extrusion design mirrors the styling details on the plastic components to give a seamless aesthetic.

The lamphead has an Integrated Cool touch handle with an illuminated power switch for easy on-off operation and movement of the light beam.

The ergonomic handle with finger grip allows for smooth maneuverability of both the lamphead and articulated joints.

The selected colour rendering index of $R_a > 85$ (IEC 60601-2-41) provides the medical practitioner with accurate detail recognition of tissue colour in a natural and contrasted appearance.

A focused light beam with an even intensity across the target area allows for clearer viewing and reduced eye tension.

Thermally toughened, technically optimised high transparency glass provides a uniform output of light for the complete band of visible light.

High quality components and our clutch system (SA Patent Application No. 2014/01508) guarantees holding a firm set position.

The long LED life span and our unique knuckle system reduces maintenance and thus saves costs.

Efficient heat dissipation enables better comfort and safety for both medical staff and patient.



HUGO-C

CEILING PENDANT

With a focus on continuous improvement HUTZ has integrated a Slipring into the rotation joint where the light arm meets the extension arm. This small detail has far reaching advantages for both installation and daily use. Slipring technology is commonly used in theatre lights but HUGO-C is a first for application in the Examination light market. The Slipring allows for 360° rotation with full function. This provides a wider working radius and simplifies installation where mechanical stops have to be aligned to suit the working area.

360°
ROTATION
(SLIPRING)



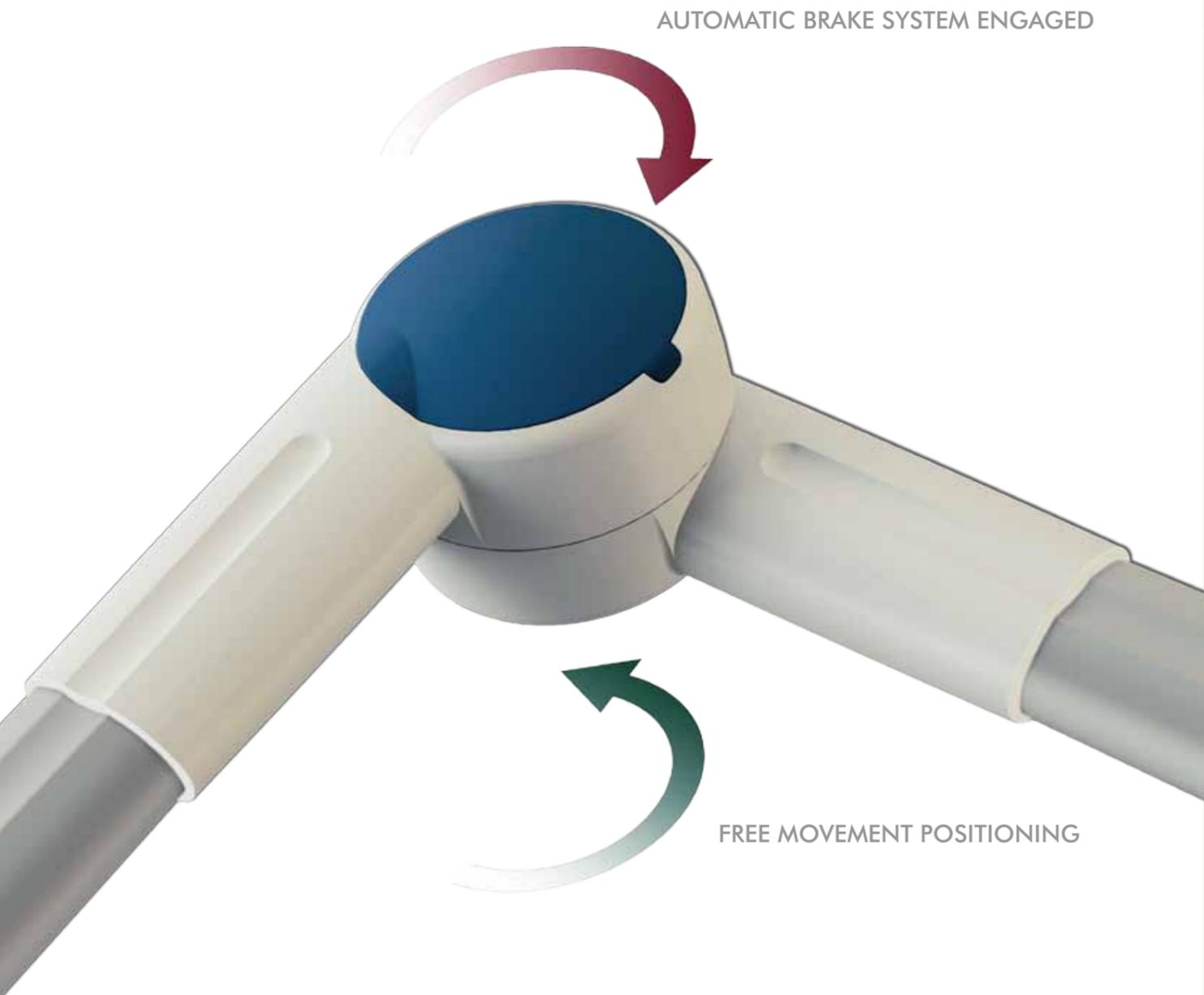
320°
ROTATION
(MECHANICAL STOP)



INSTALLATION

With installation in mind, time and simplicity is of great value to our clients. The method of installing the HUGO-C has been thoroughly examined to eliminate any potential issues and facilitate quick and efficient fitting of the unit. With suspended ceilings becoming more common in the medical environment, HUTZ has designed a standard mounting system to suit industry sizes. An additional benefit is that the HUGO-C can be repositioned with ease by simply taking the ceiling panel out and fitting it to the new area in the ward. This eliminates maintenance on additional mounting holes and renovations to previous installation points.

This together with the pre-wired mounting structure provides an efficient and fast installation that will benefit both the installer and client alike.



The HUTZ in-house Research & Development team conducted an extensive investigation into the shortfalls of current Examination Lights, on their design, function and use in the field. The HUGO has endeavoured to address these areas and find innovation in the end result.

Optimum Luminaire positioning is a fundamental requirement of a Medical Light. To achieve this, the HUGO makes use of factory pre-set friction joints (SA

Patent Application No. 2014/01508) which provide effortless movement and positioning of the luminaire; the head will always hold its position.

The user will never again need to adjust the arm manually through the readjustment of individual articulations. This improves the user experience by removing unnecessary actions that detract from the core function of targeting the light to the required area.



AESTHETICS

The ergonomic handle with finger grip allows for smooth maneuverability of both the lamphead and articulated joints. Positioned above the handle is the power switch, this is illuminated when the mains power is connected to indicate 'ready for use'.

The plastic moulded body is finished in a satin-matte surface suitable for easy cleaning.

CONSTRUCTION

The plastic moulding of the parts allows for both aesthetic freedom and seamless design for easy cleaning. Specific materials were selected to meet the HUGO's functional strength and environmental requirements.

By using low power, high intensity LEDs with an efficient heatsink, the product design can be sealed therefore eliminating the need for venting slots. The lamphead is sealed (IP 54) with minimal gaps to prevent foreign objects from damaging the electronic components or liquids accumulating. *(Ingress Protection)

HYGIENE & SAFETY

As an added benefit, anti-microbial additive is integrated into the plastic pellets prior to moulding. This results in the plastic manufactured parts having the inherent ability to inhibit bacterial growth on its surface enhancing the hygiene within the working environment.

LED TECHNOLOGY

The LED light beam produces negligible forward heat; the majority of the heat generated is drawn into the heatsink mounted within the lamphead where it dissipates.

The absence of heat normally associated with conventional light sources means that the light does not affect the target temperature, medical staff or the patient, providing a more comfortable working environment.

An inherent benefit of utilising LEDs as a light source is their long working life of >45 000 Hours. This is approximately 40 times that of incandescent sources and means that general maintenance can be minimised.

HUGO Range

HUGO-W

A Wall Mounted Bracket is provided which can be pre-installed on site ready for the HUGO installation. The bracket is manufactured with mounting holes which can be used as a template for positioning. Once the bracket is correctly fitted the HUGO is simply slotted into the bracket and clicks in place.



COMMON MOUNTING DETAIL

(HUGO-R/P/W/D)

HUTZ has designed a common assembly detail that accommodates the Rail, Pole, Wall and Desk clamp attachments. This simple click-in method provides a quick and efficient method of installation and repositioning of the HUGO.



HUGO-R

The Medical Rail Clamp is universal to both the Gabler shape and Euro shape medical rails. The Medical Rail Clamp can either be positioned on its own and then the HUGO fitted into the slot or pre-assembled onto the HUGO and then fitted to the medical rail. Simply loosen the clamp handle to slide along the rail when repositioning, then tighten the handle to secure in place.



HUGO-P

The Pole Clamp is designed for the 38mm diameter medical equipment pole (a reducer bush to suit a 25mm pole can be provided on request). The Pole Clamp should be positioned and secured in place by tightening the cross knobs and the HUGO can now be fitted.

To reposition, simply remove the HUGO (see installation manual) loosen the Pole Clamp, move to the desired position and tighten the cross knobs, then slide the HUGO back into its slot.

HUGO-D

The Desk Clamp is an addition to the range and can prove useful in a Doctor's office, Nurse's station or mobile clinic. As with the Wall, Medical Rail Clamp and Pole Clamp versions, the installation of the HUGO-D is common.



HUGO-M

The Mobile Examination Light has been designed for vertical stability, smooth maneuverability and extended reach. The mobile base has additional weight incorporated together with a low center of gravity to ensure perfect balance. Extra soft polyurethane edge protectors are provided on all five base points. In addition, smooth running 75mm diameter medical casters (x2 locking) have been used to facilitate effortless movement.

HUGO-C

The Ceiling pendant incorporates simple installation with a superior user function in the integrated Slipping to provide 360° movement at the rotation joint. The Extension arm is powder coated to ensure a hard wearing, easily cleaned surface.

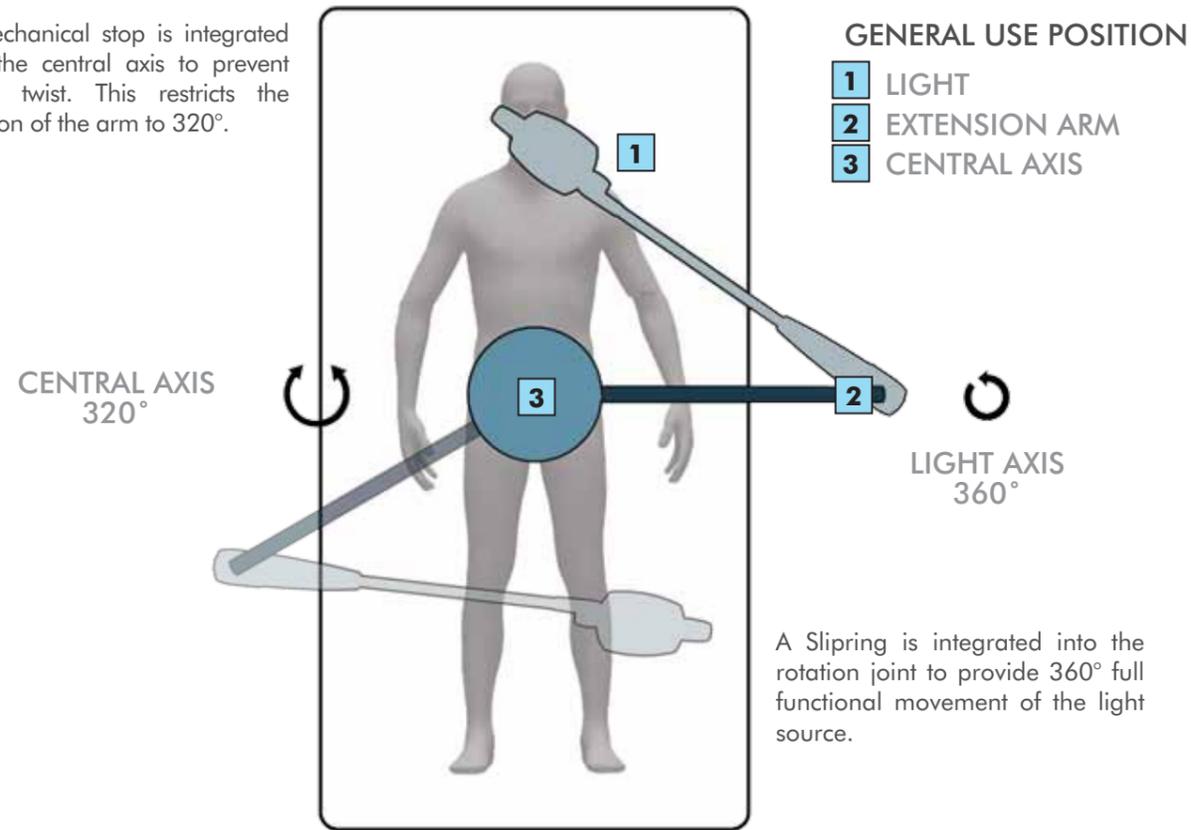


* Please refer to the HUGO Installation Manual for detailed instructions on all the versions of the light.

HUGO Technical data

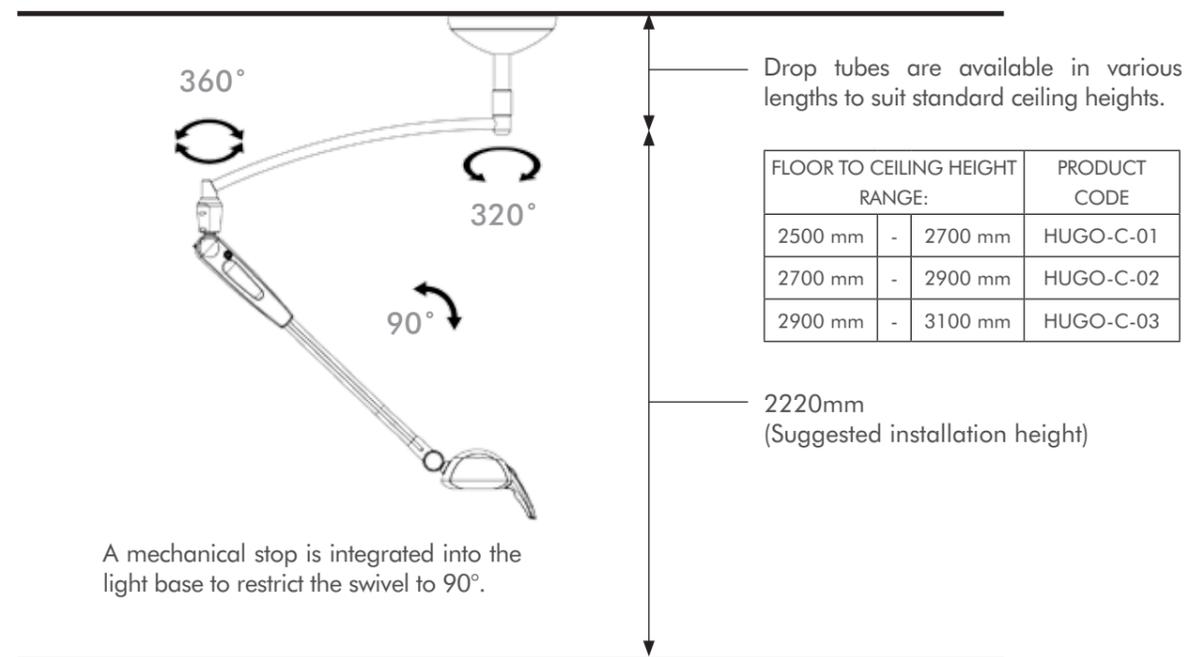
HUGO-C MOVEMENTS

A mechanical stop is integrated into the central axis to prevent cable twist. This restricts the rotation of the arm to 320°.

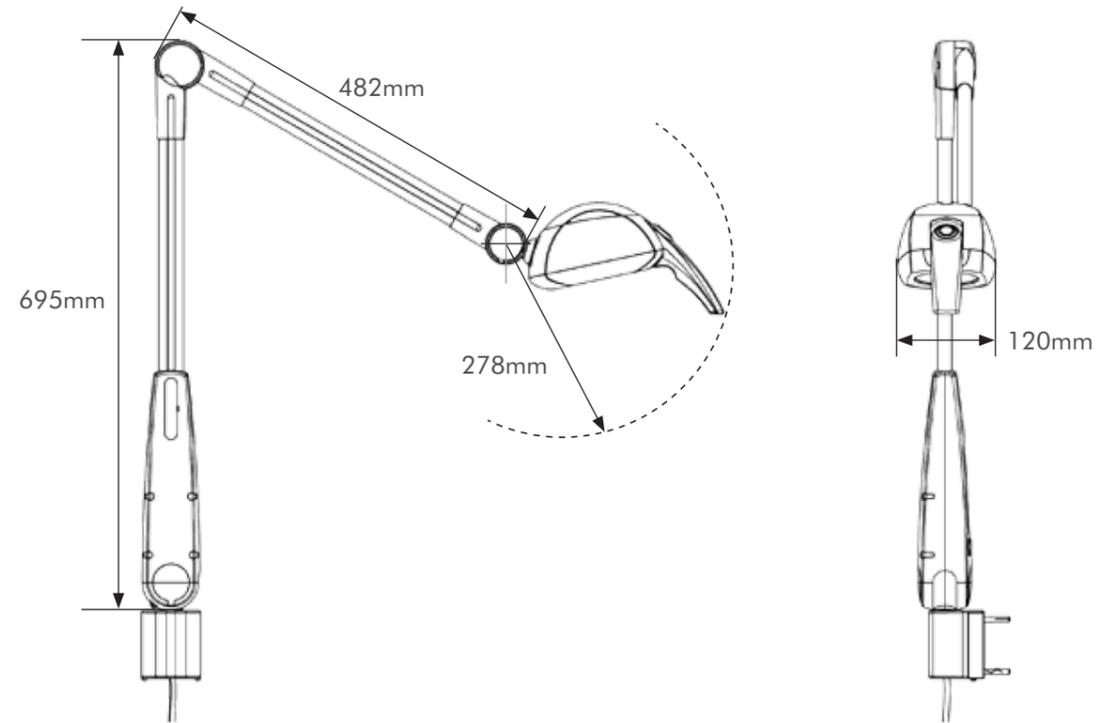


A Slipping is integrated into the rotation joint to provide 360° full functional movement of the light source.

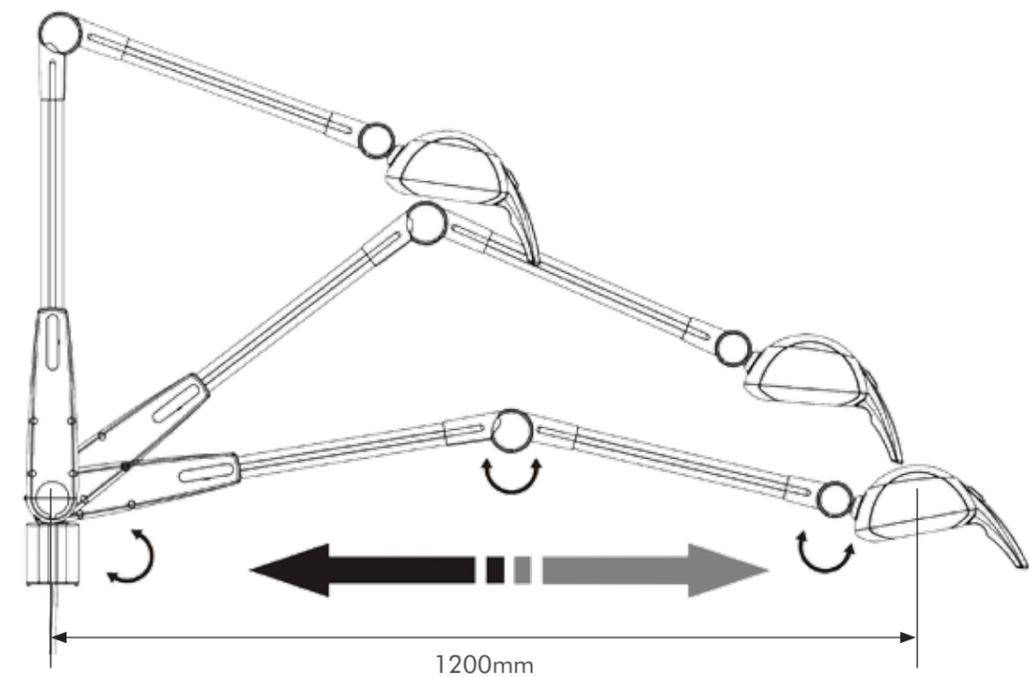
The working radius is 1447mm.



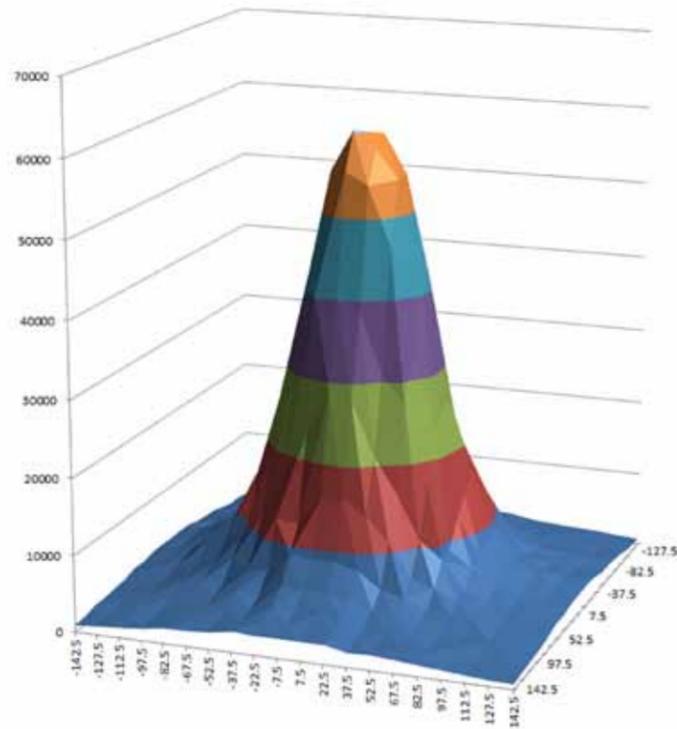
GENERAL DIMENSIONS



PRODUCT REACH



LIGHT DATA



LUX OUTPUT



LEDs

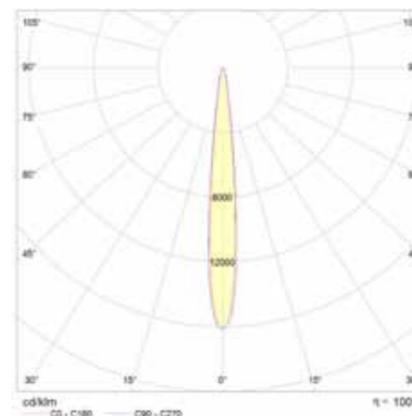
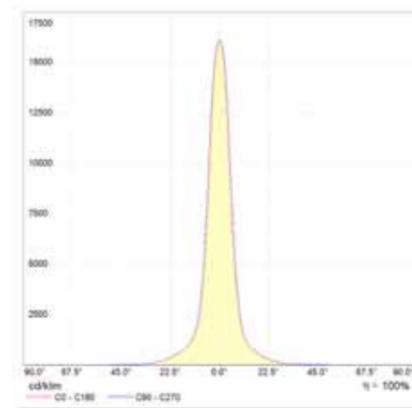
The high performance of the LEDs provides intrinsic features of long life, low power consumption, no infra-red waves, a cold light in the operating field and no replacement of the LED lamp required throughout the lifetime of the light.

A Medical Grade luminaire requires a specific colour spectrum and rendition to meet the IEC standards; the LED for the HUGO has been developed specifically for HUTZ by Vossloh-Schwabe (Germany) to meet these stringent criteria.

At a target distance of 500mm, a LUX output of greater than 50,000 is achieved.

The natural efficiency of the LEDs provide a maintenance free, reliable light source.

* Light data (Cone diagram, Cartesian diagram, Polar Curve) provided by: Vossloh-Schwabe Deutschland GmbH



PRODUCT DATA

SPECIFICATIONS:	HUGO-R	HUGO-W	HUGO-P	HUGO-D	HUGO-C	HUGO-M
Light source:	5x LEDs					
Luminance Output:	≥50 000 Lux @ 500mm					
Supply Voltage:	220-240V / 50-60Hz					
Output:	12V DC / 12 Watt					
Light field @ 500 mm:	Ø 150mm					
Colour Temperature:	4500 K					
LED Life-span:	>45 000 Hrs					
Colour Rendering Index: Ra	>85	>85	>85	>85	>85	>85
Switching:	Illuminated switch on lamphead					
Luminaire Body / All Plastic Parts:	Plastic moulded with Anti-Microbial Additive.					
Arm:	Aluminium: Natural Anodised					
Standards:	IEC 60601-1, 60601-2-41, 62031					
Colour:	Lamp body - White, Arms - Natural Anodised, Cover Caps offered in various colours on request, with the standard being blue.	Lamp body - White, Arms - Natural Anodised, Cover Caps offered in various colours on request, with the standard being blue.	Lamp body - White, Arms - Natural Anodised, Cover Caps offered in various colours on request, with the standard being blue.	Lamp body - White, Arms - Natural Anodised, Cover Caps offered in various colours on request, with the standard being blue.	Lamp body - White, Arms - Natural Anodised, Cover Caps offered in various colours on request, with the standard being blue.	Lamp body - White, Arms - Natural Anodised, Cover Caps offered in various colours on request, with the standard being blue.
Mains Lead:	Moulded plug top, 1.5 m cable	N/A	Moulded plug top, 3m cable			
Product Weight (net):	2.3Kg	2Kg	2.4Kg	2.4Kg	7.5Kg	10.7Kg *Excl. Battery Option
Dimensions: (Packaging)	820mm x 240mm x 170mm	Arm/Light: 1030mm x 530mm x 180mm Drop Tube: 310 - 810mm x 270mm x 270mm	Pole/Light: 1090mm x 240mm x 170mm Base: 570mm x 550mm x 140mm			
Reach:	1200mm	1200mm	1200mm	1200mm	1540mm	857mm
Mounting Options:	Rail	Wall	Pole	Desk Clamp	Ceiling	Mobile
Battery Back-Up Option Available:	N/A	N/A	N/A	N/A	Yes	Yes
Warranty:	2 years					
IP Rating:	54	54	54	54	54	54
Patent:	SA Patent Application No. 2014/01508					