Examination lamps

OBSERVA

ALFALED

A06

L88

ALFA

RIMSA

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Light plays a major role in the medical field, being required to provide a faithful image of what the doctor sees during observation. Suitable lighting creates **comfortable conditions**, reduces stress and sense of tiredness and **increases productivity**. The quality of artificial lighting is of **primary importance** and is directly proportionate to the quality of the service to be provided. RIMSA has designed a broad range of observation lamps for surgery use, able to cater to various medical requirements. With its appealing design, the OBSERVA series is a concentrate of technology with unparalleled performance; the very best in terms of observation lamps. The articulated arm provides perfect lamp rotation and stability, while the flexible arm ensures easy light adjustment.

RIMSA offers a broad range of observation lamps for all fields of medicine.

ALFALED
(LED light)

A06
(halogen light)

L88
(fluorescent) with magnifying lens

ALFA
(halogen light)

These are examination lamps **in compliance with Directives 93/42 EEC** and **2007/47 EC** and bear the **CE mark** as **Class I medical devices**. They are in conformity with the general **IEC 60601-1** standard and with the specific **IEC 60601-2-41** standard and are therefore also usable in intensive-care wards, as well as in all medical surgeries.

This is an examination lamp in compliance with Directives **73/23 EEC** and **2006/95 EC**. It bears the **CE mark** as a lighting device and not as a medical device. It complies with the general **IEC 60598-1** standard and with the specific **IEC 60598-2-25** standard (“Luminaires for use in clinical areas of hospitals and health-care buildings”).

Design
each lamp has been shaped to make the product ergonomic, making it suitable for all types of application and easy to clean.

Ergo_Spring
the articulated movement of the vertical arm of the models A06 and L88 is servo-assisted by a torsion spring which conveys lightness of movement and positioning stability. These lamps combine an articulated structure with spring balancing, and the result is like moving a feather. Ergo_Spring is the upshot of RIMSA R&D.

Mechanical testing and safe use
The articulated arm underwent severe testing - 40,000 continuous movements - to provide the user with utmost safety during operation. The absence of holes makes the product safe, hygienic and easy to use. The exclusive RIMSA design comprises a die-cast aluminium base and flexible or articulated steel arm.

Components, assistance, Italian spares
the availability of spare parts is guaranteed over the years and technical assistance is provided by carefully-selected distributors. Professionalism and quality have distinguished RIMSA products for over seventy years.

RIMSA, quality in compliance with IEC 60601-1 medical electrical equipment

Compulsory requirements of general medical standard IEC 60601-1:

§ 15.4.4 luminous bipolar switch
§ 8.11.3.6 safety cord
§ 8.11.5 double fuse
§ 9.2 no mechanical hazards
§ 9.3 shaped edges
§ 8.11.3.3 cord section
§ 9.4.2.2 tilting test 10°

Compulsory requirement of luminaires standard IEC 60598-1:

§ safety lock 4.12.4

Luminous bipolar switch **15.4.4**

15.4.4 Indicators

Unless it is otherwise apparent to the OPERATOR from the normal operating position, indicator lights shall be provided to indicate that ME EQUIPMENT is ready for NORMAL USE. The marking of 7.4.1 is not sufficient for this purpose.

.....Compliance is checked by inspection of the presence and function of indicating means visible from the position of NORMAL USE.

Double fuse **8.11.5**

8.11.5 Mains fuses and over-current releases

A fuse or OVER-CURRENT RELEASE shall be provided in each supply lead for CLASS I ME EQUIPMENT and for CLASS II ME EQUIPMENT having a functional earth connection according to 8.6.9, and in at least one supply lead for other single-phase CLASS II ME EQUIPMENT.

Safety cord **8.11.3.6**

8.11.3.6 Cord guards

POWER SUPPLY CORDS of other than STATIONARY ME EQUIPMENT shall be protected against excessive bending at the inlet opening of the equipment or of the MAINS CONNECTOR by means of a cord guard of insulating material or by means of an appropriately shaped opening in the ME EQUIPMENT.

(If a power cord were not adequately protected against excessive bending, there would be a high probability of breakage of power-carrying conductors, giving a RISK of fire, and with CLASS I ME EQUIPMENT, a high probability of breakage of the PROTECTIVE EARTH CONDUCTOR.)

No mechanical hazards **9.2**

9 Protection against MECHANICAL HAZARDS of ME EQUIPMENT and ME SYSTEMS

9.2 HAZARDS associated with moving parts

9.2.1 General

ME EQUIPMENT with moving parts shall be designed, built and laid out so that, when PROPERLY INSTALLED and used as indicated in the ACCOMPANYING DOCUMENTS or under reasonably foreseeable misuse, the RISKS associated with those moving parts are reduced to an acceptable level.

The RISK from contact with the moving parts shall be reduced to an acceptable level by use of protective measures, bearing in mind the ease of access, the ME EQUIPMENT'S function, the shape of the parts, the energy and speed of the motion and the benefits to the PATIENT.

9.2.2.2 Gaps

A TRAPPING ZONE is considered not to present a MECHANICAL HAZARD if the gaps of the TRAPPING ZONE comply with the dimensions specified in Table 20.

Table 20 *– Acceptable gaps (a)*

Part of body	Adult gap (a) mm	Illustration
Finger	> 25 or < 8	

Shaped edges **9.3**

9.3 HAZARD associated with surfaces, corners and edges

Rough surfaces, sharp corners and edges of ME EQUIPMENT that could result in an unacceptable RISK shall be avoided or covered. In particular, attention shall be paid to flange or frame edges and the removal of burrs.

Cord section **8.11.3.3**

8.11.3.3 Cross-sectional area of POWER SUPPLY CORD conductors

The NOMINAL cross-sectional area of conductors of any POWER SUPPLY CORD of ME EQUIPMENT shall be not less than that shown in Table 17.

Compliance is checked by inspection.

Table 17 *– NOMINAL cross-sectional area of conductors of a POWER SUPPLY CORD*

RATED current (I) of ME EQUIPMENT A	NOMINAL cross-sectional area mm2 Cu
I ≤ 6	0,75
6 < I ≤ 10	1
10 < I ≤ 16	1,5
16 < I ≤ 25	2,5
25 < I ≤ 32	4
32 < I ≤ 40	6
40 < I ≤ 63	10

Tilting test 10° **9.4.2.2**

9.4.2.2 Instability – overbalance

ME EQUIPMENT or its parts shall not overbalance when placed in any transport position of NORMAL USE on a plane inclined at an angle of 10 ° from the horizontal plane. Compliance is checked by the following test: Prior to the test the ME EQUIPMENT is prepared as indicated in the ACCOMPANYING DOCUMENTS (or, if not specified, as in 9.4.2.2). The ME EQUIPMENT or its parts is placed on a plane inclined at an angle 10 ° from the horizontal plane. If the ME EQUIPMENT or its parts overbalances, it constitutes a failure.

IEC 60598-1

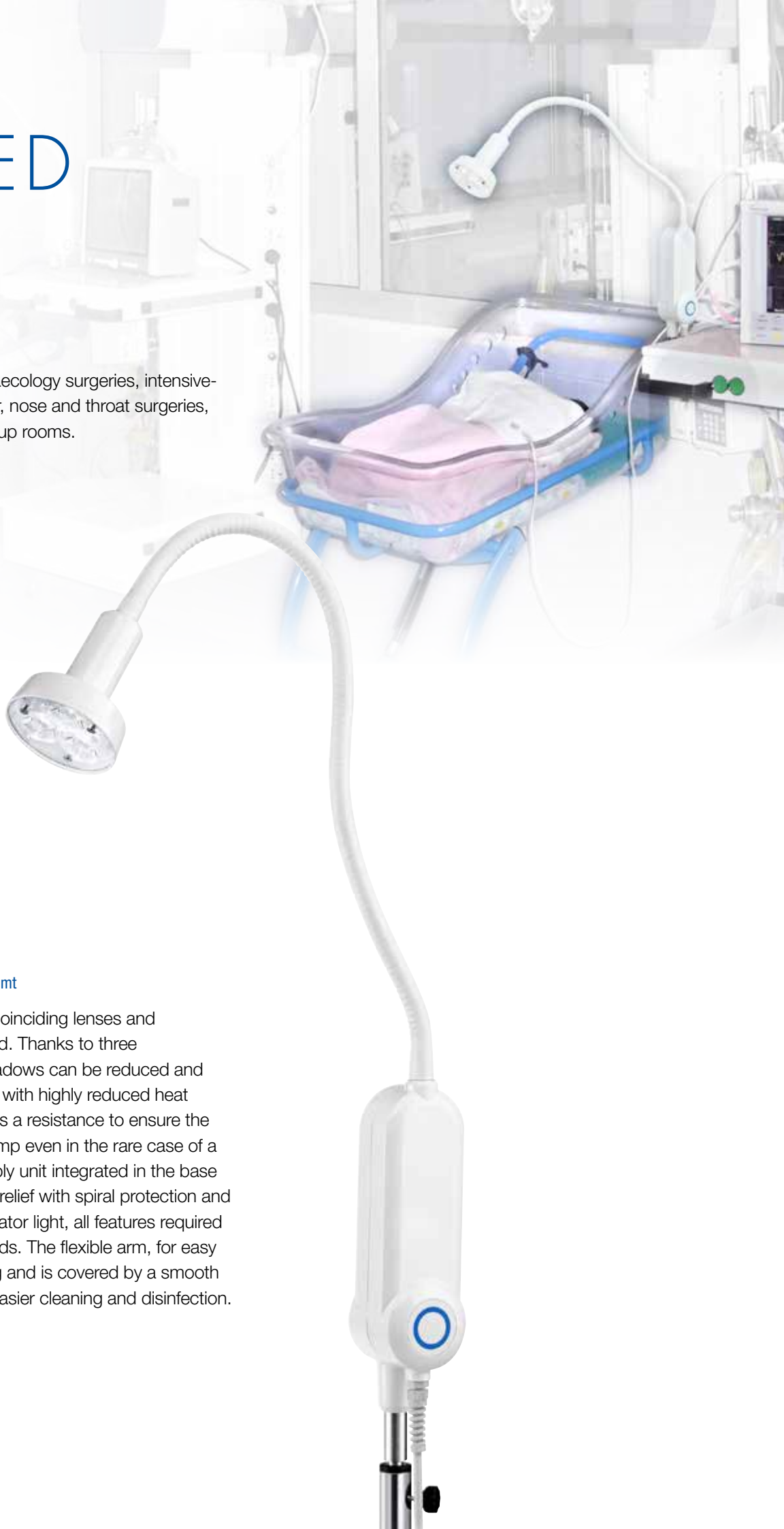
4.12.4 Safety lock

Screwed and other fixed connections between different parts of luminaires shall be made in such a way that they do not work loose through such torsion, bending stresses, vibration etc., as may occur in a normal use. Fixed arm and suspension tubes shall be securely attached.

ALFALED

Cold light led lamp with flexible arm

Especially suitable for: gynaecology surgeries, intensive-care units, bed-head units, ear, nose and throat surgeries, medication rooms and check-up rooms.



3 white LED lights – 1.4W each 12V
35,000 lux at 50cm - 13,000 lux at 1mt

Three LED light sources with coinciding lenses and polycarbonate protection shield. Thanks to three independent light sources, shadows can be reduced and provide a deep cylindrical light with highly reduced heat irradiation. Each LED integrates a resistance to ensure the continuous operation of the lamp even in the rare case of a LED fault. Medical power supply unit integrated in the base with double safety fuse, strain relief with spiral protection and bipolar switch with green indicator light, all features required to conform to medical standards. The flexible arm, for easy light adjustment, is 60 cm long and is covered by a smooth white shrink-wrap sheath for easier cleaning and disinfection. Voltage 100÷240V 50-60Hz.

A06

Halogen bulb lamp with double bulb and articulated arm

Especially suitable for: intensive-care units, bed-head units, ear, nose and throat surgeries, gynaecology, medication rooms, check-up rooms and plaster rooms.

2 dichroic 20W 12V IRC halogen bulbs
40,000 lux at 50 cm

Aluminium reflector compartment with 14 cm diameter featuring 2 dichroic 20W 12V 10° IRC halogen bulbs and protection glass. Ergonomic movement handle and articulated arm with mechanical frictions. Vertical Ergo_ spring movement servo-assisted by a torsion spring to provide lightweight movement and positioning stability. The light bulbs come on together and in case of a fault affecting a light source, you do not remain in the dark. Electronic transformer integrated in the base with double safety fuse, strain relief with spiral protection and bipolar switch with green indicator light, all features required to conform to medical standards.

L88

Self-lighting fluorescent cold light magnifying lens

Especially suitable for: observations in general, visual aid for extracting foreign bodies such as splinters, dermatology surgeries, medication rooms, clinical laboratories, ear, nose and throat surgeries, check-up rooms.

fluorescent 22W 230V
lens 3 dioptres Ø 120mm

Especially suitable for dermatological use and wherever magnifying in general is needed. This model features a biconvex magnifying lens in optical glass with Ø 120mm. It allows making observations without causing any eyesight problems. The “cold” fluorescent light is also ideal for prolonged use. It features a polycarbonate screen for protecting the light source. Power supply unit integrated in the base with double safety fuse, strain relief with spiral protection and bipolar switch with green indicator light, all features required to conform to medical standards.

ALFA

Halogen bulb lamp with flexible arm

Especially suitable for: medical examinations and check-up rooms.

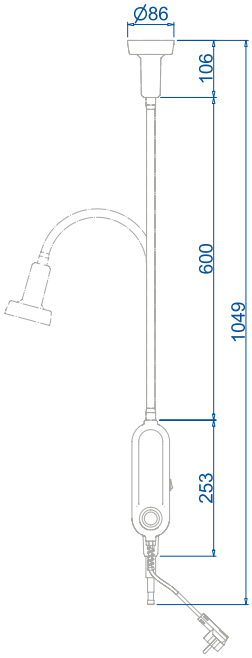
35W 12V IRC dichroic halogen bulb
30,000 lux at 50 cm

Lamp featuring 35W 12V 10° IRC dichroic halogen bulb housed inside the reflector and protected by a tempered glass shield. The reflector is of reduced size to allow greater freedom of movement.

Electronic transformer integrated in the base with strain relief with spiral protection and bipolar switch with green indicator light. The flexible arm ensures easier light positioning and is 60 cm long and covered with a white sheath easy to clean.

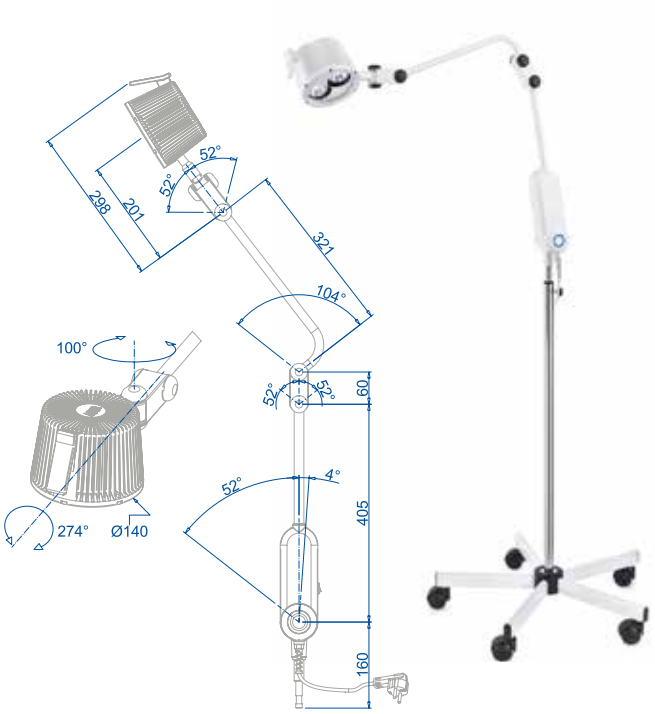
ALFALED

3 white LED lights – 1.4W each 12V
35,000 lux at 50cm - 13,000 lux at 1mt



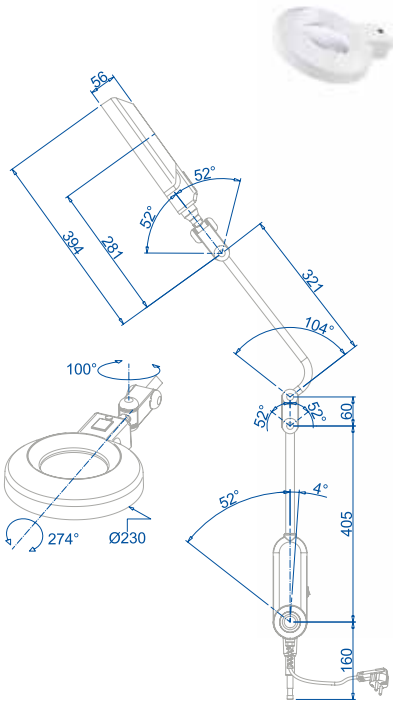
A06

2 dichroic 20W 12V IRC halogen bulbs
40,000 lux at 50 cm



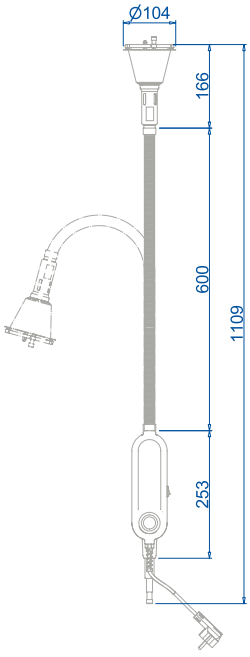
L88

fluorescent 22W 230V
lens 3 dioptres Ø 120mm



ALFA

35W 12V IRC dichroic halogen bulb
30,000 lux at 50 cm



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Performances

Type of lighting		LED	HALOGEN	FLUORESCENT	HALOGEN
Light intensity at 50 cm	Lux	35.000	40.000	550	30.000
Light intensity at 1 m	Lux	13.000	8.000	250	8.000
Color temperature	K	4.200	3.000	4.550	3.000
Color rendering Index (CRI)	Ra	95	93	90	93
Light field size at 50 cm	mm	140	180	-	100
Primary voltage	V	100÷240	230/240	220/240	230
Secondary voltage	V	12	12	-	12
Frequency	Hz	50/60	50/60	50	50/60
Average life	H	50.000	5.000	5.000	5.000
Light source	W	3x1,4	2x20	22	35
Absorbed power		35VA	40W	33VA	35W
Out reflector diameter	mm	86	140	230	104
Directive		2007/47/EC	2007/47/EC	2007/47/EC	2006/95/EC
Standards		IEC60601-1 IEC60601-2-41	IEC60601-1 IEC60601-2-41	IEC60601-1 IEC60601-2-41	IEC60598-2-25
Weight	Kg	2	3	3	2

Fixing systems:

Caster base
RL

Wall clamp
S12MED

Table clamp
S11

Rail clamp
100226

RIMSA

OBSERVA

Ref. June 2013

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