

# pressinformation

No. 3-2013/10 – dr

June 2010

## Safety of kobold Products - Be sure to make it known

Aiming to offer technical, high quality products, kobold has focused on the safety aspect. To this purpose, the latest technical possibilities are being applied to increase safety. The efforts, taking the HMI/MSR lamps as an example (apart from the mechanical safety), cover the following key points:



### Weatherproof

kobold now offers weatherproof HMI lighting systems and ballast units. The additional technical effort to achieve a good weatherproof result is not insignificant. It comprises, in addition to drains for the ventilation slots, also waterproof sealing of electrical connection points in the unit's inner. Thus, one receives not only improved user safety but also an additional benefit in the form of trouble-free starting either in a downpour or drizzle etc. The respective articles have the letter "W" in their product designation indicating that they are weatherproof (e.g. EWB 200, DW 400 etc.), and conform to standard IP43 (ballast units) respectively IP54 (lamps).

## Electrical safety

As known, the international safety regulations for mains (line) operated units require, in addition to the so-called base insulation of the voltage-carrying parts, a further safety measure, in case the base insulation should become damaged or short-circuited. The measure can be in the form of an additional or reinforced insulation (e.g. units with plastic casing) or the earthing of exposed metal parts (in order to drain potential leakage currents into earth, e.g. an iron). With the new units EWB / DW 200, 400, 575 und 800 kobold has gone a step further: in addition to the conventional protective earth, all insulation has been reinforced to such an extent as if no earth connection would exist. This double protection also guarantees complete safety in situations where the effects of water are well above the IP standard. Storms do not follow rules!



## Protection from UV-radiation

According to common knowledge HMI/MSR lamps release UV-radiation and thus require the use of a safety glass that reduces the radiation to a harmless level. Operation without this safety glass is not permitted, and a corresponding warning can be found on each lamp. If the safety glass can be removed manually, correct mounting is monitored by a circuit breaker. The safety glass of other lamp types can only be removed by means of a tool. kobold uses an extremely efficient filter safety glass which completely eliminates the dangerous UVA rays to approx. 10% of sunlight (1). Therefore, safe shooting is ensured even with maximum brightness.

- (1) This information is based on a shooting situation with blazing sunshine as main light corresponding to an intensity of illumination of 100'000 lx and a fill-in of the shadow sides with 50'000 lx with kobold lights. These comparative figures are for your further information:

	Intensity of illumination	UVA radiation	UVB radiation
Sunlight with clear skyl	100'000 lx	56.0 W/m <sup>2</sup>	3.1 W/m <sup>2</sup>
kobold DW 200 *	8'100 lx	4.62 W/m <sup>2</sup>	<b>0.0 W/m<sup>2</sup></b>
kobold DW 400 *	20'000 lx	5 W/m <sup>2</sup>	<b>0.0 W/m<sup>2</sup></b>
kobold DW 575 *	36'000 lx	2 W/m <sup>2</sup>	<b>0.0 W/m<sup>2</sup></b>
kobold DW 800 *	56'000 lx	2.89 W/m <sup>2</sup>	<b>0.0 W/m<sup>2</sup></b>
Harmless level		10.0 W/m <sup>2</sup> no time limit	Only limited time
Solarium with fluorescent tubes		200 – 350W/m <sup>2</sup>	1.5 – 3.5 W/m <sup>2</sup>

\* in 3m., max focus

Sources: Federal Agency of Health, 3003 Bern: solarium, radiation and health, Opto.cal (Calibration Labor Switzerland), WHO, Environmental Health Criteria 14

You will find more information on [www.bron-kobold.com](http://www.bron-kobold.com).