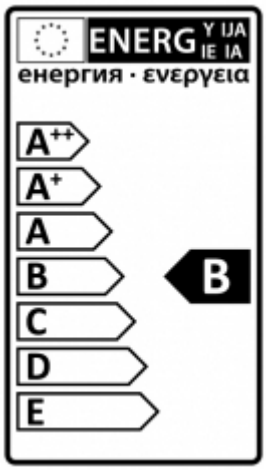
Product Datasheet Date: 12/02/2014

High pressure mercury lamp HRL 50W/230/E27

Logistic Data

Article No.	32210618
Code	HRL 50W/230/E27
Product EAN	4008597106187
Customs tariff no.	85393220
Box quantitiy (pcs.)	40
EAN Box	4008597401480
Gross weight of box in kg	3.0
Length of box in m	0.36
Width of box in m	0.3
Height of box in m	0.32
Pieces per palette	2000
EAN Palett	4008597601484
ETIM class	EC000056
ETIM class name	High pressure mercury lamp

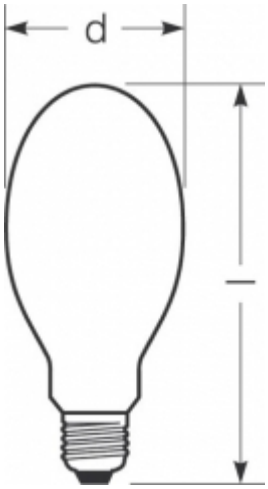


Electric Parameters

Lamp nominal wattage	50 W
Rated wattage	50.4 W
Mains voltage	230 V
Supply frequency	50
Lamp's nominal current	0.6
Nominal choke current	0.6 A
Running up current max.	140%
Compensation capacitor for 50Hz operation	7 µF
Energy Consumption kWh/1000h	55

Light Application Parameters

Luminous flux	1800 lm
Rated lamp luminous flux	1800 lm
Luminous efficiency of lamp	35.71 lm/W
Colour temperature	4200 K
Colour rendering index Ra	50
Colour rendering group	40-59 (Klasse 3)



Service Life

Mean service life	20000 h
Info about service life	12B50, 50Hz
Lamp survival factor at 2000h	0.99
Lamp survival factor at 4000h	0.99
Lamp survival factor at 6000h	0.98
Lamp survival factor at 8000h	0.98
Lamp survival factor at 12000h	0.89
Lamp survival factor at 16000h	0.79
Lamp survival factor at 20000h	0.67
Lumen maintenance at 2000h	0.95
Lumen maintenance at 4000h	0.90
Lumen maintenance at 6000h	0.88
Lumen maintenance at 8000h	0.86
Lumen maintenance at 12000h	0.83
Lumen maintenance at 16000h	0.83
Lumen maintenance at 20000h	0.83
Operation mode for LLMF/LSF	50 Hz

Specification

Diameter max.	56 mm
Length max.	130 mm
Controllable (in suitable circuit)	up to 50% (run-up at nominal power)
dimmable	nein
Energylabel from 2013	B
Mercury content	12.3 mg
Base	E27
Lamp shape	ellipsoidal

Notes on Operation

Starter / Ingnitor	not rquired
max. permissible base / pinch seal temperature	210
Ignition assured down to about (°C)	-20
Operation with CCG (choke coil)	+
Re-ignition behaviour	after 3-10min. Cooling normal ignition possible
Burning position	h180

Miscellaneous

EU Directive	TIM
EU-date of phase-out	13.04.2015
ILCOS name	QE-50-H-E27
LBS name	HME 50W E27

Notes:

High pressure mercury vapour lamp, no CE-marking for newly made product after Apr 13th 2015

Please, refer to www.radium.de/recycling for notes on disposal of burned-out lamps as well as lamp breakage.
The field 'info about service life' contains the frame conditions according to standards based on which the specific service life has been determined. So, for example, "12B50, 50Hz" means that the mean service life (B50) has been determined with a 12h switching cycle at mains (frequency 50Hz), "3B50, HF" is based on a 3h switching cycle at electronic control gear (high frequency).

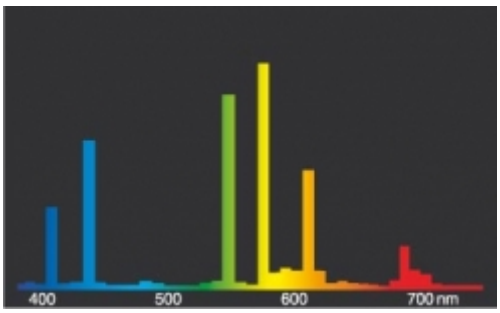
Notes

Base

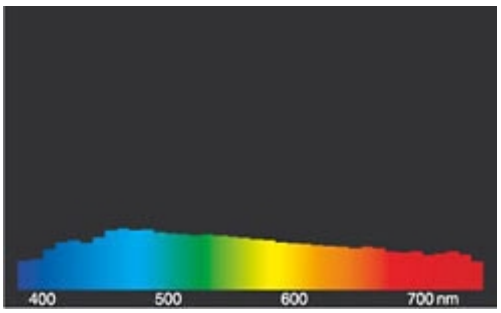
E27
IEC/EN 60061-1
sheet 7004-21-9

Spectrum

Natural daylight is a mixture of direct sunlight and the light of the sky. Therefore, its spectral composition changes permanently due to the changing time of day. The standardised light classification D65 corresponds to a daylight with a colour temperature of approximately 6500 K.
Every discharge lamp type has got an individual spectral power distribution according to its chemical filling. From this result important properties light colour or colour rendering.
Should the spectral lines be very close together the lamp presumably has got a very good colour rendering index, so, Ra might be near 100. Does the spectrum rather look like single lines or frayed out the colour rendering of the lamp will probably be not as good.
If number and height of the spectral lines within the blue range (around 400 nm) prevails it might be a lamp with a rather cold light colour like for example daylight. On the other hand, should the red (around 700 nm) or the red and yellow (around 600 nm) range be dominant one can assume that the lamp will be a rather warm light colour like WDL.
After the lamp start a mercury vapour lamp needs about 5 minutes time to reach its full luminous flux.
Visible region from 380 to 780 nm; height of graph corresponding with relative spectral emission (400mW/klm) per 10nm.

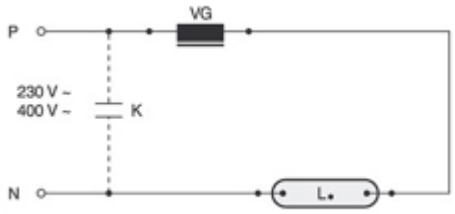


HRL (4200K)



daylight(D 65)

Circuit diagrams



Standard circuit HID with internal ignitor
Key:
L. = lamp
VG = ballast electromagnetic (KVG/VVG)
P = phase
N = zero potential
K = p. f. correction capacitor

The required control gear (here ballast only) for the lamp's operation is usually mounted in the suitable luminaire in an appropriate electric circuit. Changes of any kind are to be conducted by qualified and specialised staff, only. Thus, this circuit example is to be understood merely as a technical background information for interested users.

Special features

Please, dump as special waste, **no ordinary household waste!**

From last due date April 13th 2015, product does not comply with EU directives regarding energy efficiency any more.
Please, choose alternative product or look for remainders (sale of articles in stock is still allowed).

General notes

The technical design data in accordance with DIN and IEC. The producer does not take any responsibility for damage to persons or property in case of unsuitable operation or handling of the product. Operating data and dimensions are valid within the usual tolerances. Related lamp types (different bases, mains voltages) may be available on request. Sale and delivery are effected in accordance with the Radium Terms of Delivery and Payment valid on the day of conclusion of contract. Packing units offer economical advantages to the purchase and logistic department. Please match your quantity volume accordingly. For orders of a minimum quantity (clefts) with a lamp model the amount lower than the volume of each packaging unit, we will invoice 10 % additional charge per lamp type. Technical changes and terms of delivery are reserved. Manipulation of any kind to packaging or product is not permissible as this will violate Radium brand rights. Furthermore, technical properties of the product can change to its disadvantage or even destruction. Therefore, Radium cannot be responsible for consequential damages. Subject to change without notice. Errors and omissions excepted. ® = Registered trademark

All technical data without guarantee.