



Gimbal – Cardanically adjustable

Recessed spotlight with a compact high-precision swivel mechanism

Gimbal suspension is widely prevalent in technology and is a concept that is as old as Leonardo da Vinci, who suggested its use for nautical compasses. In lighting technology, gimbals are an elegant solution for pinpoint adjustment of the luminaires. Gimbal recessed spotlights transform this principle into the era of digital lighting – with a highly precise and convenient swivel mechanism in a compact design that stands apart from conventional approaches and enables

shallow recess depths. Different sizes and wattages for the full spectrum of light distributions make Gimbal ideal as a system for differentiated lighting design with focus on the high-contrast presentation of objects. With its unique technoid appearance in the ceiling, Gimbal lends itself perfectly to retail projects as well as to museums and other public buildings.



Structure and characteristics

The features described here are typical of products in this range. Special versions may offer additional or varying features. A comprehensive description of the features of individual products can be found on our website.

1 ERCO Spherolit lens

- Light distributions: narrow spot, spot, flood, wide flood, extra wide flood, oval flood or wallwash
- Oval flood 360° rotation

2 ERCO LED-module

- High-power LEDs: warm white (2700K or 3000K) or neutral white (3500K or 4000K)
- Collimating lens made of optical polymer

3 Mounting ring

- Covered mounting detail
- Fixing for ceiling thicknesses of 1-25mm (size 4) or 1-30mm (size 5-7)
- Polymer, white
- For flush mounting: mounting ring to be ordered separately, fixing for ceiling thicknesses of 12.5-25mm

4 Luminaire

- Black
- Cast aluminium, powder-coated
- Gimbal suspension: polymer
- 0°-40° tilt

5 Control gear

- Switchable, phase dimmable, DALI dimmable or Casambi Bluetooth
- Phase dimmable version: Dimming with external dimmers possible (trailing edge)

Variants on request

- Connection: 3- or 5-pole plug with connection cable (Wago or Wieland)
- Housing: 10,000 further colours

Please contact your ERCO consultant.



Design and application:
www.erco.com/gimbal-r

Gimbal Recessed spotlights



Oval flood freely rotatable

With luminaires with round light emission, the oval flood Spherolit lens can be freely rotated to align the light optimally to various objects.



Cardanic suspension

Especially with high ceilings, small swivel movements have a strong effect on the position of the light beam – cardanic suspension facilitates precise luminaire alignment in such cases.



Covered or flush mounting detail

As standard, all recessed luminaires have overlapping installation details. Flush mounting rings are available as accessories.



Shallow recess depth

In compact installation situations, every millimetre is decisive with the recess depth of a luminaire. ERCO has thus developed special luminaires for shallow recess depths that guarantee very good quality of light even in very tight installation conditions.

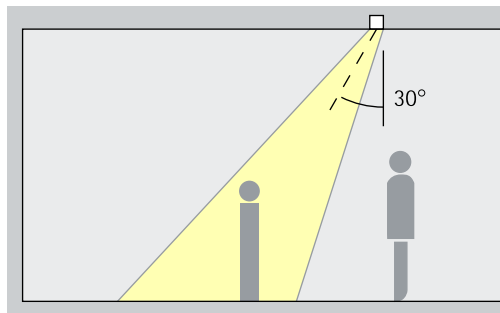
Special characteristics

	Oval flood, freely rotatable		ERCO high-power LEDs		Excellent thermal management		Switchable
	Gimbal suspension		Efficient Spherolit technology		EMC-optimised		Phase dimmable
	Flush or covered mounting detail		Different light distributions		Various construction sizes		DALI dimmable
	Shallow recess depth		Different light colours		Pivotable through 40°		Casambi Bluetooth
			Tool-free mounting		Accessory for maximum visual comfort		

Gimbal Recessed spotlights – Luminaire arrangement

Recessed spotlights

Narrow spot, Spot, Flood

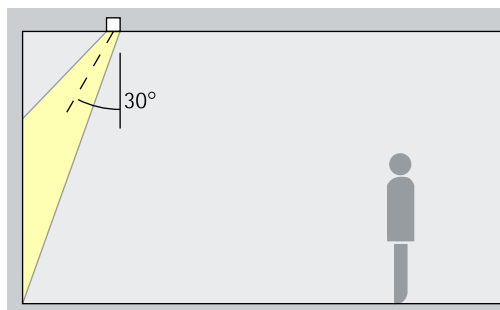


Gimbal recessed spotlights accentuate artwork, products and architectural details effectively. The ideal angle of tilt (α) for this is around 30°. The object is modelled without distorting the effect as a result of excessive shadowing. It also prevents shadows cast by the observer.

Arrangement: $\alpha = 30^\circ$

Recessed floodlights

Wide flood, Extra wide flood, Oval flood

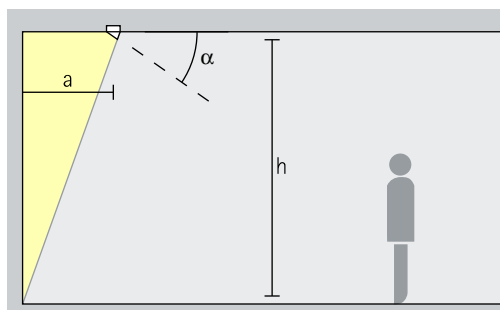


The ideal angle of tilt (α) for flood-lighting objects with a long, square shape, e.g. pictures, sculptures or merchandise displays, is around 30°.

Arrangement: $\alpha = 30^\circ$

Recessed lens wallwashers

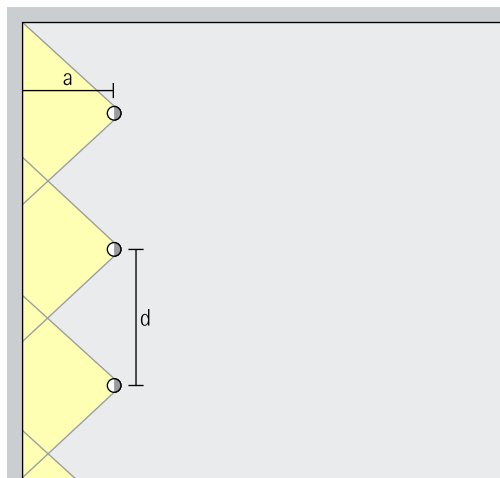
Wallwash



For good longitudinal uniformity, the spacing (d) of Gimbal lens wallwashers may be up to 1.2 times the offset from the wall (a).

Arrangement: $d \leq 1.2 \times a$

Optimal wall offset and luminaire spacing values are indicated in the wallwasher tables on the product data sheets.



For uniform vertical illuminance, the distance (a) of Gimbal lens wallwashers from the wall should be around one third of the wall height (h). This results in an angle of tilt (α) of approx. 35°.

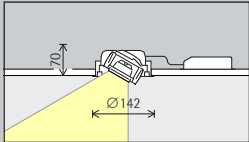
Arrangement: $a = 1/3 \times h$ bzw. $\alpha = 35^\circ$

Suncorp Discovery
Centre, Sydney.
Architecture:
Geyer, Sydney.
Lighting design:
Medland Engin-
eering, Sydney.
Photography:
Jackie Chan,
Sydney.

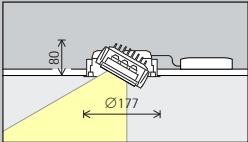


Gimbal Recessed spotlights

Construction size



Size 4



Size 5

LED module
Maximum value
at 4000K CRI 92

6.1W/862lm	2W/287lm (Narrow spot)
9.3W/1213lm	3.1W/404lm (Narrow spot)

12.1W/1723lm	4W/574lm (Narrow spot)
18.6W/2426lm	6.2W/809lm (Narrow spot)

Light colour

	2700K CRI 92		3500K CRI 92
	3000K CRI 92		4000K CRI 92
	3000K CRI 97		

	2700K CRI 92		3500K CRI 92
	3000K CRI 92		4000K CRI 92
	3000K CRI 97		

Light
distribution

Recessed spotlights	Recessed floodlights
Narrow spot	Wide flood
Spot	Extra wide flood
Flood	Oval flood
Recessed lens wallwashers	
Wallwash	

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Control

	Switchable		DALI
	Phase dimmable		Casambi Bluetooth

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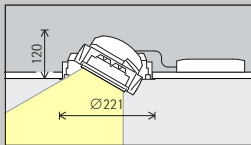
Colour (housing)

	Black
	10,000 colours *

	Black
	10,000 colours *

Accessories

	Lenses		Concrete mounting enclosure		Compensation set
	Snoot		Mounting ring		Cover ring
	Cross-baffle		Spacer plate		
	Honeycomb anti-glare screen		Mounting plate for panelled ceilings		



Size 7

2.3W/3446lm	8.1W/1149lm (Narrow spot)
37.3W/4853lm	12.4W/1618lm (Narrow spot)

	2700K CRI 92		3500K CRI 92
	3000K CRI 92		4000K CRI 92
	3000K CRI 97		

Recessed spotlights	Recessed floodlights
 Narrow spot	 Wide flood
 Spot	 Extra wide flood
 Flood	 Oval flood
Recessed lens wallwashers	
 Wallwash	

 Switchable	 DALI
 Phase dimmable	 Casambi Bluetooth

	Black
	10,000 colours *

* available on request

www.erco.com/gimbal-r





Melissa Flagship
Store, Singapore.
Architecture:
LAANK, Singapore.
Photography:
Jotham Koh Meng
Kwang.