

## EVO90 R / EVO75 R

FOR DIRECT CONNECTION  
TO MAINS VOLTAGE



## CONVENIENT LED TECHNOLOGY

As a perfect replacement for halogen lamps, these light engines are ideal for integration in luminaires like spots or downlights. The direct connection to mains voltage (220–240 V) offers a cost effective solution. They are ideal for applications like retail, halls and public buildings.

The aluminium reflectors offer an homogeneous light distribution spot and it is possible to interchange the reflector easily.

### **EVO series**

- Replacement for halogen lamps up to 150 W
- Interchangeable aluminium reflector for homogeneous light distribution
- LES Protected by plastic cover

### **Typical applications for LEDSpots**

- Integration in luminaires
- Retail lighting
- Downlights
- Light advertising
- Entertainment



## EVO90 R / EVO75 R

**Built-in LEDSpot equipped with an interchangeable aluminium reflector, heat sink and leads**

### Technical notes

For direct connection to mains voltage

Mains voltage: 220–240 V, 50/60 Hz

Power factor: > 0.95

Reflector: Ø 90/75 mm (EVO90 R/EVO75 R)

aluminium, bayonet fixing

Holder: PC, inner ring: metallized

Heat sink material: aluminium

Max operating temperature at  $t_p$  point: 85 °C

Lumen maintenance:

L70/B50; 50,000 hrs. at 70 °C

Temperature depends on installation situation and

has to be checked by the luminaire manufacturer.

Colour accuracy initially: 3 SDCM

Fixation heat sink: lateral fixation with M5 screws and nuts

or rear side fixation with self-tapping screws ST2.9

Leads: Cu tinned, stranded conductors 0.5 mm<sup>2</sup>,

FEP/FEP-insulation and neoprene sleeve

length: 350 mm (EVO90 R)

length: 300 mm (EVO75 R)

With integrated cord grip

Weight: 360/280 g (EVO90 R/EVO75 R)

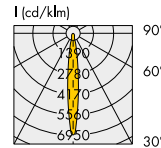
Packaging unit: 6 pcs.



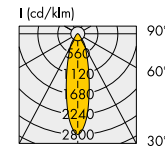
**EVO90 R**



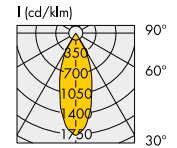
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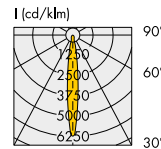
14° [EVO90 R]



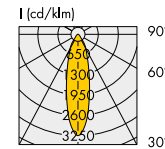
24° [EVO90 R]



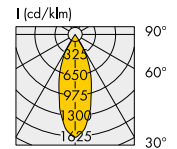
36° [EVO90 R]



14° [EVO75 R]

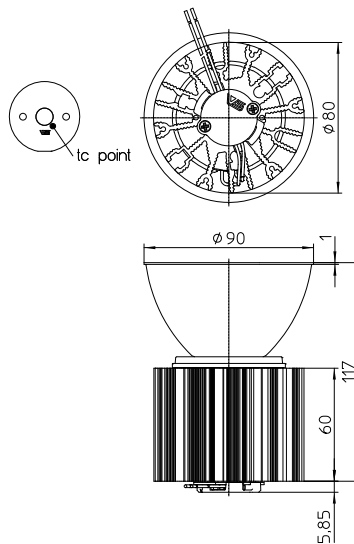


24° [EVO75 R]

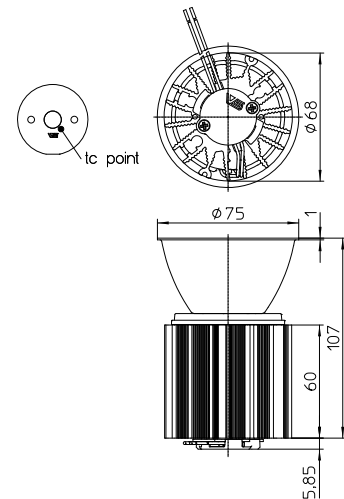


32° [EVO75 R]

### EVO90 R



### EVO75 R



The values contained in this data sheet can change due to technical innovations. Any such changes will be made without separate notification.

## EVO90 R / EVO75 R

Type	Ref. No.	Mains voltage AC 50/60 Hz V	Colour	Correlated colour temperature K	Typ. luminous flux* lm	Light intensity at 230 V Candela	Beam angle °	CRI R <sub>a</sub>	Power consumption at 230 V W	Energy efficiency at 230 V
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### EVO90 R

EVO90 R 20	<b>561757</b>	220–240	warm white	3000	1515	9200	14	80	20	A
EVO90 R 20	<b>561758</b>	220–240	neutral white	4000	1600	9900	14	80	20	A+
EVO90 R 20	<b>561759</b>	220–240	warm white	3000	1515	4400	24	80	20	A
EVO90 R 20	<b>561760</b>	220–240	neutral white	4000	1600	4580	24	80	20	A+
EVO90 R 20	<b>561761</b>	220–240	warm white	3000	1495	2450	36	80	20	A
EVO90 R 20	<b>561762</b>	220–240	neutral white	4000	1580	2690	36	80	20	A+

### EVO75 R

EVO75 R 10	<b>561751</b>	220–240	warm white	3000	760	5000	14	80	10	A+
EVO75 R 10	<b>561752</b>	220–240	neutral white	4000	780	5180	14	80	10	A+
EVO75 R 10	<b>561753</b>	220–240	warm white	3000	760	3600	24	80	10	A+
EVO75 R 10	<b>561754</b>	220–240	neutral white	4000	780	3700	24	80	10	A+
EVO75 R 10	<b>561755</b>	220–240	warm white	3000	760	1370	32	80	10	A+
EVO75 R 10	<b>561756</b>	220–240	neutral white	4000	780	1430	32	80	10	A+

\* Production tolerance of luminous flux: ±10%

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## EVO90 R / EVO75 R

### Accessories

#### Exchangeable aluminum reflectors

Technical notes

Reflectors made of aluminium with bayonet fixation

Surface: anodised

Weight: 27/17 g (D90/D75)

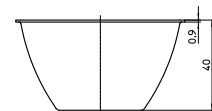
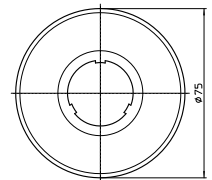
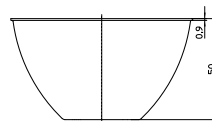
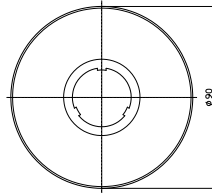
Packaging unit: 18 pcs.

#### Usage and maintenance

If necessary clean reflectors with mild soap, water and soft cloth.

Never use any commercial cleaning solvents on reflectors, like alcohol.

Please handle or install reflectors with wearing gloves, skin oils may damage reflector or its optical characteristic.



Ref. No.	Beam characteristic	Beam angle [°]	
		EVO 75 R 10	NEXT 111, EVO 90 R 20

#### Reflector D90 – H = 50

<b>557359</b>	narrow	14*	14
<b>557360</b>	medium	24*	24
<b>557361</b>	wide	36*	36
<b>563446</b>	extra wide	48*	48

#### Reflector D75 – H = 40

<b>557152</b>	narrow	14	14**
<b>557153</b>	medium	24	24**
<b>557154</b>	wide	32	32**
<b>562157</b>	extra wide	60	60**

It's possible to use all the reflectors on the same holder.

\* On request | \*\* Only for EVO 90 on request

#### Holder for EVO reflectors

For COB Type EDC57C

Cover for LES: PC, transparent

Dimensions (ØxH): 60 x14.65 mm

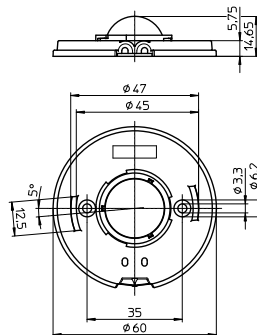
Packaging unit: 72 pcs

Material: PC, black, inner ring: metallized

**Ref. No.: 561847**

Material: PC, white

**Ref. No.: 563095**



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## EVO90 R / EVO75 R Installation Instruction

### General Safety Information

- Built-in LED Spot for direct connection to mains voltage
- VS product may only be installed and commissioned by authorised and fully qualified staff.
- These instructions must be carefully read before installing and commissioning the system, as this is the only way to ensure safe and correct handling.
- Before any work is carried out on the equipment, it must be disconnected from the mains.
- All valid safety and accident-prevention regulations must be observed.
- The products should never be inexpertly opened as this poses lethal danger due to electrical shock. Repairs may only be undertaken by the manufacturer.
- EVO90 R / EVO 75 R are dimmable with common phase-cut dimmers; minimum dimmer load has to be respected.
- The compatibility of the spots with the dimmer has to be confirmed prior to installation
- If module is used in rooms with fast moving parts as the light modulation might cause stroboscopic effects.
- This LED module might interfere with displays and cameras due to modulation.
- The photo biological safety of the LED modules is classified into risk groups in accordance with EN 62471: 2008 and IEC TR 62778: risk group 1.

## Tested Dimmers

EVO90 R / EVO75 R are dimmable with common phase-cut dimmers; minimum dimming load has to be respected. The compatibility of the spots with the dimmer has to be confirmed prior to installation.

- Vossloh-Schwabe DimONE 186607
- Vossloh-Schwabe DimONE Bluetooth® 186608
- Vossloh-Schwabe Dimmer 250 W 554591
- Vossloh-Schwabe Dimmer 500 W 554592
- Jung 225TDE Insta 51040
- Gira 030700 = Insta
- Berker 2874
- Berker 286710 Insta 5190
- Busch Jäger 6513 U-102
- Busch Jäger 6519U
- Sygonix 33595A
- Merten MEG5136-0000
- LeGrand ADW-ETL4-420VA
- Hager WUD82 + WYA920
- Merten 577899 + 570419
- Gira 2262 Ansch.
- Jung 225 NVDE Ansch.
- Berker 85421200 leading edge Anf. 2013 / equiv. Hager Anf. 2013 both Touch
- Sygonix 33596V leading edge
- Sygonix 33594C leading edge
- Sygonix 33594R leading edge
- Merten MEG5170-0300 + 343519
- Eltako EUD61NPN univ.
- Eltako EUD61M-UC univ.
- Eltako EUD61NP univ.
- Hager EVN002 univ.
- Hager EVN004 univ.
- Berker 16701 univ.
- Jung UD1255REG univ.
- Busch Jäger 6583 univ.
- Eltako EUD12D univ. / Eltako EUD12F univ. / Eltako EUD12Z univ.
- Eltako EUD12Z univ.

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