



# Overview Installation Beacons

## LED Permanent Beacons



## LED Permanent Beacons (Multicolour)



## Permanent Beacons



## Flashing Beacons



## LED Blinking Light

## Bulbs

LED Bulbs  
Bulb Overview

Page 166 + 167  
Page 168 + 169

## Further information

Further information about "Optical Signal Devices" can be found in the chapter "Tech-Talk" beginning on page 328.



# Optical Signal Devices



## WERMA Installation Beacons

Installation beacons are designed for mounting in drill holes. A characteristic of this type of beacon is the rear fixture using a central nut

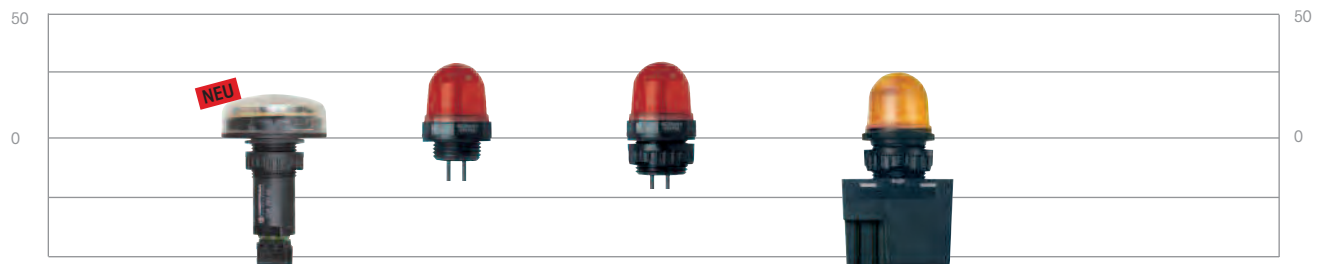
### Features

- Large variety of versions: Available as permanent, blinking, flashing or LED beacons
- IP 65 for indoor and outdoor applications
- Modern design
- Beacons available in five colours
- LED Multicolour Beacons with 5 or up to 200,000 colours in one beacon
- Beacon diameter between 25 and 75 mm
- Available in three thread diameters



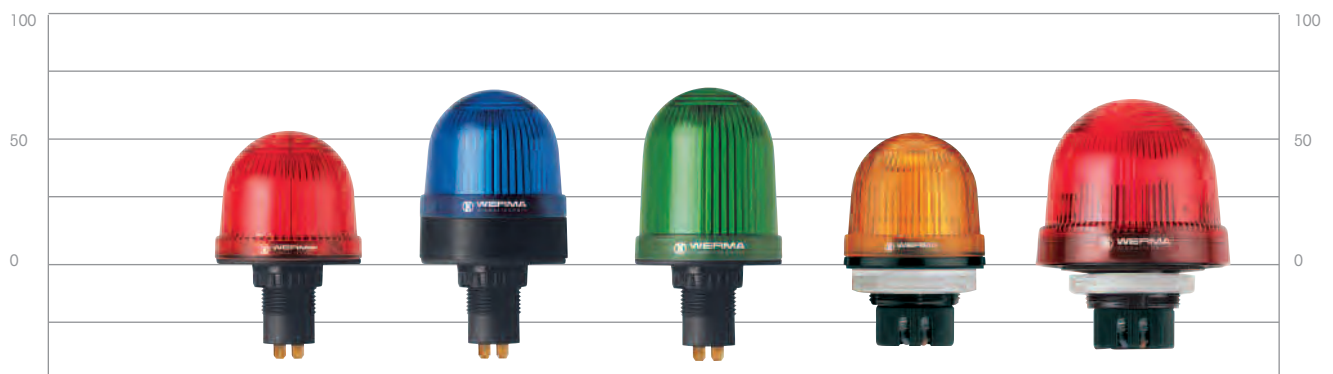
### Sizes

#### COMPARISON OF WERMA INSTALLATION BEACONS



Series	239	230	231	232
Thread	M 22	M 20	M 22	M 22
Ø	50 mm	29 mm	29 mm	29 mm
Height (Protrusion from panel)	22 mm	32 mm	32 mm	32 mm
Page	88	84	86	97

#### COMPARISON OF WERMA INSTALLATION BEACONS



Series	206	207/208	216	800/801/802	815/816/817
Thread	M 22	M 22	M 22	PG 29	PG 29
Ø	57 mm	58 mm	57 mm	57 mm	75 mm
Height (Protrusion from panel)	53 mm	69 mm	69 mm	54 mm	66 mm
Page	89	90/98	91	92/93/99	94/95/100



## Variety of light signals

Installation beacons from WERMA assist in indicating process conditions, risks and imminent dangers in modern production areas clearly and in good time.

The urgency of the required course of action can be indicated by the colour as well as the type and duration of the signal. As a basic principle, the colours red, yellow, green, blue and clear are employed. The available light effects in WERMA installation beacons range from a permanent light and a long life LED permanent light to an attention-grabbing flashing light.



## Permanent light and LED Permanent light

With the assistance of a permanent light or an LED permanent light the operator is made aware of a specific condition or is instructed to carry out a certain course of action.

For safety reasons signal beacons are increasingly equipped with light emitting diodes. The failure of optical signal devices is significantly reduced as a result of the longer life duration of LEDs. Furthermore, LEDs offer a range of advantages compared to conventional light bulbs for example lower current consumption, greater resistance to shocks, vibrations and other mechanical stress.



## **NEW** LED Beacons (Multicolour)

WERMA now offers two new LED multicolour beacons. These provide the user with several colours in just one beacon. The RGB LEDs employed in the new 816 LED Beacon (Multicolour) enable the user to choose from a broad range of more than 200,000 colours. In addition various light effects can also be set via USB: whether a permanent or a blinking light, or colour sequencing of all colours.

The new 239 LED Installation Beacon (Multicolour) for AS-Interface offers the five standard colours red, yellow, green, clear and blue. The user can signal several conditions with only one device.



## Flashing Light

The deployment of a flashing signal can generate even more attention than a permanent light. The reason for this is to be found in the very short flash duration.

Inside each Xenon flashing beacon there is a capacitor which stores electrical energy. Within the space of a few milliseconds this energy is discharged within the flash tube, generating a very intense light impulse.

The life duration of a flash tube is heavily dependent on the respective load. The average life duration in permanent operation is  $4 \times 10^6$  flashes.





Mainly sideways illumination

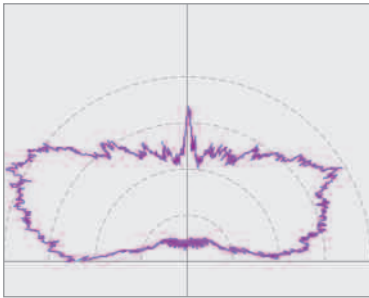


Illustration of the light distribution for the LED Installation Beacon 230



The LED Installation Beacon 230 can for example be used in applications with cable-operated switches or limit switch devices

### Sizes of Permanent Beacons



- LED Permanent beacon with M 20 thread for applications such as limit and cable-operated switches
- Extremely high light intensity
- Ideal for installation in limited space due to short thread

Life duration up to 100,000 hrs

### TECHNICAL SPECIFICATIONS:

<b>Dimensions</b> (Ø x Height):	29 mm x 32 mm (Protrusion from panel)
<b>Housing:</b>	PC/ABS-Blend
<b>Lens:</b>	PC, transparent
<b>Connection:</b>	2 wires, c. 115 mm long
<b>Fixing:</b>	Installation mounting for Ø 20,5 mm (M 20 x 1.5 mm)

Seal included in assembly.

### ORDER SPECIFICATIONS:

Voltage	12 V=	24 V=	115 V~	230 V~
Current consumption	80 mA	45 mA	15 mA	20 mA
red	<b>230 100 54</b>	<b>230 100 55</b>	<b>230 100 67</b>	<b>230 100 68</b>
yellow	<b>230 300 54</b>	<b>230 300 55</b>	<b>230 300 67</b>	<b>230 300 68</b>
clear		<b>230 400 55</b>		

Further colours on request.

### TECHNICAL DIAGRAMS:

see page 270



The LED Installation Beacon 230 is also available in an Ex version (see page 252)





Upward illumination

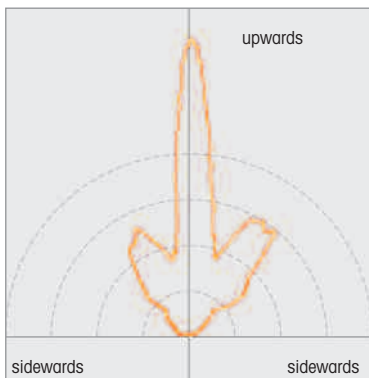


Illustration of the light distribution for the Economy LED Installation Beacon 230

- Competitively priced LED beacon
- New LED technology with upward illumination
- Ideal for installation in limited space due to short thread
- LED Permanent Beacon with M 20 thread for the limit and cable-operated switches

### **i** TECHNICAL SPECIFICATIONS:

Life duration up to 100,000 hrs

<b>Dimensions</b> (Ø x Height):	29 mm x 32 mm (Protrusion from panel)
<b>Housing:</b>	PC/ABS-Blend
<b>Lens:</b>	PC, transparent
<b>Connection:</b>	2 wires, c. 115 mm long
<b>Fixing:</b>	Installation mounting for Ø 20.5 mm (M 20 x 1.5 mm)

Seal included in assembly.

### **🛒** ORDER SPECIFICATIONS:

Voltage	24 V =
Current consumption	30 mA
red	<b>230 104 55</b>
yellow	<b>230 304 55</b>
clear	<b>230 404 55</b>

### **⚠** ADDITIONAL INFORMATION:

LED Installation Beacon 230 Economy attains an extremely high level of visibility thanks to completely new LED technology with upward illumination.

This cost-effective and innovative solution draws upon the most advanced technology and is furthermore resistant to vibration and other mechanical stress.

The LED Beacon 230 has a short M 20 thread and is especially suitable for installation in small spaces such as cable-operated switches or limit switches.



### **📏** TECHNICAL DIAGRAMS:

see page 270

#### Sizes of Permanent Beacons





# 231

# LED Installation Beacon



- LED Permanent Beacon with M 22 thread for the control panel/switchgear programme
- Extremely high light intensity

Life duration up to 100,000 hrs

### TECHNICAL SPECIFICATIONS:

<b>Dimensions</b> (Ø x Height):	29 mm x 32 mm (Protrusion from panel)
<b>Housing:</b>	PC/ABS-Blend
<b>Lens:</b>	PC, transparent
<b>Connection:</b>	2 wires, c. 105 mm long
<b>Fixing:</b>	Installation mounting for Ø 22.5 mm (M 22 x 1.5 mm)
Nut and seal included in assembly.	

### ORDER SPECIFICATIONS:

Voltage	12 V=	24 V=	115 V~	230 V~
Current consumption	80 mA	45 mA	15 mA	20 mA
red	231 100 54	231 100 55	231 100 67	231 100 68
green	231 200 54	231 200 55	231 200 67	231 200 68
yellow	231 300 54	231 300 55	231 300 67	231 300 68
clear	231 400 54	231 400 55	231 400 67	231 400 68
blue	231 500 54	231 500 55	231 500 67	231 500 68



Mainly sideways illumination

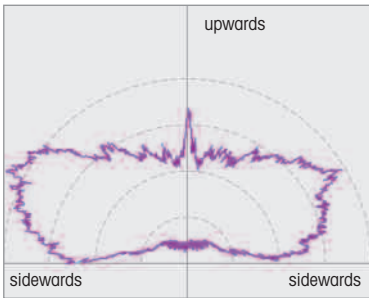


Illustration of the light distribution for the LED Installation Beacon 231

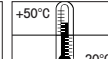
### TECHNICAL DIAGRAMS:

see page 270



The LED Installation Beacon 231 is also available in Ex version (see page 253)

### Sizes of Permanent Beacons



24 V





- Competitively priced LED beacon
- New LED technology with upward illumination
- LED Permanent Beacon with M 22 thread for the control panel/switch-gear programme

Life duration up to 100,000 hrs

### TECHNICAL SPECIFICATIONS:

<b>Dimensions</b> (Ø x Height):	29 mm x 32 mm (Protrusion from panel)
<b>Housing:</b>	PC/ABS-Blend
<b>Lens:</b>	PC, transparent
<b>Connection:</b>	2 wires, c. 105 mm long
<b>Fixing:</b>	Installation mounting for Ø 2.5 mm (M 22 x 1.5 mm)

Nut and seal included in assembly.

### ORDER SPECIFICATIONS:

Voltage	24 V $\overline{=}$
Current consumption	30 mA
red	<b>231 104 55</b>
green	<b>231 204 55</b>
yellow	<b>231 304 55</b>
clear	<b>231 404 55</b>
blue	<b>231 504 55</b>

### ADDITIONAL INFORMATION:

LED Installation Beacon 231 Economy attains an extremely high level of visibility thanks to completely new LED technology with upward illumination.

This cost-effective and innovative solution draws upon the most advanced technology and is furthermore resistant to vibration and other mechanical stress.

The LED Beacon 231 has an M 22 thread and is especially suitable for use in control panel/switch gear applications.



Upward illumination

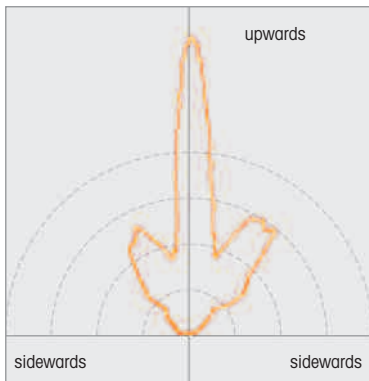
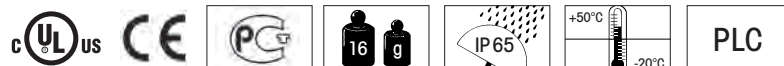


Illustration of the light distribution for the Economy LED Installation Beacon 231

### TECHNICAL DIAGRAMS:

see page 270

#### Sizes of Permanent Beacons





## LED Installation Beacon (Multicolour) for AS-Interface



- 5 colours possible in one beacon
- Colours can be triggered and changed via AS-Interface
- 2 pin terminal for easy AS-Interface connection

Life duration  
up to 50,000 hrs

### **i** TECHNICAL SPECIFICATIONS:

<b>Dimensions</b> (Ø x Height):	50 mm x 22 mm (Protrusion from panel)
<b>Housing:</b>	PC, black
<b>Lens:</b>	PC, transparent
<b>Fixing:</b>	Installation mounting for Ø 22.5 mm (M 22 x 1.5 mm) with anti-twist device
<b>Connection:</b>	Screw terminal with wire protection max. 1.5 mm <sup>2</sup>
<b>Power supply AS-Interface:</b>	Via bus conduction
<b>Operating voltage:</b>	25 V ... 31.6 V according to the AS-Interface specification
<b>Current consumption:</b>	≤ 100 mA
<b>Specification:</b>	V3.0
<b>IO-Code:</b>	8 <sub>HEX</sub>
<b>ID-Code:</b>	A <sub>HEX</sub>
<b>ID2-Code:</b>	E <sub>HEX</sub>
<b>Colour options:</b>	Red, yellow, green, clear, blue

Nut and seal included in assembly.



Five colours in one beacon:  
Red, yellow, green, clear and blue

### **🛒** ORDER SPECIFICATIONS:

Red/yellow/green/clear/blue (Multicolour)

239 780 55

### **⚠️** ADDITIONAL INFORMATION:

#### Extended addressing in accordance with V3.0

The LED Installation Beacon (Multicolour) for AS-Interface is suitable for the extended addressing (A/B technology) of up to 62 modules. The beacon is supplied with power via the bus.

Thanks to its M 22 installation dimension, the signal device can easily be installed via single-hole mounting, and is simply connected to the bus cable using a two-pole screw connector.



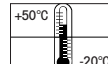
### **📐** TECHNICAL DIAGRAMS:

see page 270



Thanks to its compact dimensions and the AS-Interface technology, the LED beacon 239 is especially suited to automation applications

#### Sizes of Permanent Beacons





Bulb change via removal of lens  
(LED bulb as accessory)



Accessories

#### Sizes of Permanent Beacons



- Optimised illumination
- 360° visibility
- Suitable for use in the 22 mm standard control panel/switchgear programme
- Simple connection by means of 6.3 mm spades
- Bulb change via removal of lens

#### TECHNICAL SPECIFICATIONS:

<b>Dimensions</b> (Ø x Height):	57 mm x 53 mm (Protrusion from panel)
<b>Housing:</b>	PA-GF, high impact
<b>Lens:</b>	PC, transparent
<b>Connection:</b>	Spades 6.3 x 0.8 mm Finger-proof model according to BGV A2, when used with insulated spades
<b>Fixing:</b>	Installation mounting for Ø 22.5 mm (M 22 x 1.5 mm) with anti-twist device
<b>Operating voltage:</b>	Max. 48 V
<b>Bulb socket:</b>	B15d Watt max.
<b>Bulb change:</b>	Via removal of lens
Nut and seal included in assembly. Bulb not included in assembly.	

#### ORDER SPECIFICATIONS:

Voltage	12-48 V
red	206 100 00
green	206 200 00
yellow	206 300 00
clear	206 400 00
blue	206 500 00

Further colours and voltages on request.

#### ACCESSORIES:

Bulb BA15d  
total length max. 42 mm

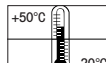
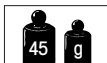
Voltage	12 V	24 V	30 V
	955 840 34	955 840 35	955 840 32

LED bulb BA15d  
total length max. 42 mm

Voltage	24 V ≈
Current consumption	< 45 mA
red	956 100 75
green	956 200 75
yellow	956 300 75
white	956 400 75
blue	956 500 75

#### TECHNICAL DIAGRAMS:

see page 269





- Optimised illumination
- 360° visibility
- Suitable for use in the 22 mm standard control panel/switchgear programme
- Simple connection by means of 6.3 mm spades

Life duration up to 100,000 hrs

**TECHNICAL SPECIFICATIONS:**

<b>Dimensions (Ø x Height):</b>	58 mm x 69 mm (Protrusion from panel)		
<b>Housing:</b>	PA-GF, high impact		
<b>Lens:</b>	PC, transparent, Ring: PC		
<b>Connection:</b>	Spades 6.3 x 0.8 mm Finger-proof model according to BGV A2, when used with insulated spades		
<b>Fixing:</b>	Installation mounting for Ø 22.5 mm (M 22 x 1.5 mm) with anti-twist device		

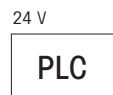
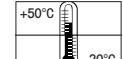
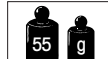
**ORDER SPECIFICATIONS:**

Voltage	24 V ≈	115 V ~	230 V ~
Current consumption	45 mA	25 mA	25 mA
red	<b>207 100 75</b>	<b>207 100 67</b>	<b>207 100 68</b>
green	<b>207 200 75</b>	<b>207 200 67</b>	<b>207 200 68</b>
yellow	<b>207 300 75</b>	<b>207 300 67</b>	<b>207 300 68</b>
Further colours and voltages on request.			

**TECHNICAL DIAGRAMS:**

see page 269

**Sizes of Permanent Beacons**





- Optimised illumination
- 360° visibility
- Suitable for use in the 22 mm standard control panel/switchgear programme
- Simple connection by means of 6.3 mm spades
- Bulb change via removal of lens



Bulb change via removal of lens (LED bulb as accessory)



Accessories

### **i** TECHNICAL SPECIFICATIONS:

<b>Dimensions</b> (Ø x Height):	57 mm x 69 mm (Protrusion from panel)
<b>Housing:</b>	PA-GF, high impact
<b>Lens:</b>	PC, transparent
<b>Connection:</b>	Spades 6.3 mm x 0.8 mm Finger-proof model according to BGV A2, when used with insulated spades
<b>Fixing:</b>	Installation mounting for Ø22.5 mm (M 22 x 1.5 mm) with anti-twist device
<b>Operating voltage:</b>	Max. 48 V
<b>Bulb socket:</b>	B15d, 7 Watt max.
<b>Bulb change:</b>	Via removal of lens
Nut and seal included in assembly. Bulb not included in assembly.	

### **🛒** ORDER SPECIFICATIONS:

Voltage	12 - 48 V		
red	216 100 00		
green	216 200 00		
yellow	216 300 00		
clear	216 400 00		
blue	216 500 00		

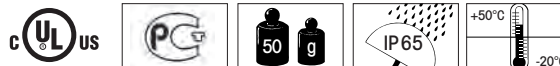
### **🏠** ACCESSORIES:

Bulb BA15d, total length max. 52 mm			
Voltage	12 V (7 W)	24 V (7 W)	30 V (5 W)
	955 015 34	955 015 35	955 840 32
LED bulb BA15d, total length max. 42 mm			
Voltage	24 V ≈		
Current consumption	< 45 mA		
red	956 100 75		
green	956 200 75		
yellow	956 300 75		
white	956 400 75		
blue	956 500 75		

### **📐** TECHNICAL DIAGRAMS:

see page 270

#### Sizes of Permanent Beacons





# 800

# Installation Permanent Beacon



- Tamper-proof – bulb change via rear access with bayonet mechanism
- With anti-twist device (as accessory)
- Available with tube adaptor as free-standing beacon

### **i** TECHNICAL SPECIFICATIONS:

<b>Dimensions</b> (Ø x Height):	57 mm x 54 mm (Protrusion from panel)
<b>Housing:</b>	PC/ABS-Blend Socket: PA-GF, high impact
<b>Lens:</b>	PC, transparent
<b>Fixing:</b>	Installation mounting for Ø 37 mm (PG 29)
<b>Connection:</b>	Screw terminal max. 2.5 mm <sup>2</sup> Strain relief, Contact protection according to VDE, flex radial or axial laid
<b>Operating voltage:</b>	Max. 250 V
<b>Bulb socket:</b>	B15d, 7 Watt max.
<b>Bulb change:</b>	Via rear access with bayonet mechanism Bulb not included in assembly.



Bulb change via rear access with bayonet mechanism

### **🛒** ORDER SPECIFICATIONS:

Voltage	12 - 240 V
red	<b>800 100 00</b>
green	<b>800 200 00</b>
yellow	<b>800 300 00</b>
clear	<b>800 400 00</b>
blue	<b>800 500 00</b>

Further colours and voltages on request.

### **🏠** ACCESSORIES:

Bulb BA15d, 5 W, total length max. 42 mm					
Voltage	12 V	24 V	30 V	115 V	230 V
	<b>955 840 34</b>	<b>955 840 35</b>	<b>955 840 32</b>	<b>955 840 57</b>	<b>955 840 38</b>
Tube adaptor	<b>975 812 01</b>				
Base with integrated tube, Ø 25 mm, 110 mm long, plastic	<b>975 840 10</b>				
Base for tube mounting	<b>975 840 90</b>				
Base for base mounting	<b>975 812 02</b>				
Tube Ø 25 mm, all anodized aluminium					
100 mm long	<b>975 845 10</b>				
250 mm long	<b>975 840 25</b>				
400 mm long	<b>975 840 40</b>				
Anti-twist device	<b>975 815 22</b>				
Surface housing IP 65					
for 1 Installation Beacon	<b>975 815 03</b>				
for 2 Installation Beacons	<b>975 815 07</b>				
for 3 Installation Beacons	<b>975 815 08</b>				
for 4 Installation Beacons	<b>975 109 05</b>				



Accessories

### Sizes of Permanent Beacons



### **📐** TECHNICAL DIAGRAMS:

see page 282





Tube adaptor as accessory



Accessories

- Long-life LED Permanent Beacon
- With anti-twist device (as accessory)
- Available with tube adaptor as free-standing beacon

Life duration up to 100,000 hrs

**i TECHNICAL SPECIFICATIONS:**

<b>Dimensions</b> (Ø x Height):	57 mm x 54 mm (Protrusion from panel)
<b>Housing:</b>	PC/ABS-Blend Socket: PA-GF, high impact
<b>Lens:</b>	PC, transparent
<b>Fixing:</b>	Installation mounting for Ø 37 mm (PG 29)
<b>Connection:</b>	Screw terminal max. 2.5 mm <sup>2</sup> Strain relief, Contact protection according to VDE, flex radial or axial laid

**ORDER SPECIFICATIONS:**

Voltage	24 V <sub>≈</sub>	115 V <sub>~</sub>	230 V <sub>~</sub>
Current consumption	45 mA	25 mA	25 mA
red	<b>801 100 75</b>	<b>801 100 67</b>	<b>801 100 68</b>
green	<b>801 200 75</b>	<b>801 200 67</b>	<b>801 200 68</b>
yellow	<b>801 300 75</b>	<b>801 300 67</b>	<b>801 300 68</b>

Further colours and voltages on request.

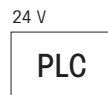
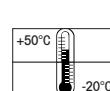
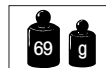
**ACCESSORIES:**

Tube adaptor	<b>975 812 01</b>
Base with integrated tube, Ø 25 mm, 110 mm long, plastic	<b>975 840 10</b>
Base for tube mounting	<b>975 840 90</b>
Base for base mounting	<b>975 812 02</b>
Tube Ø 25 mm, all anodized aluminium	
100 mm long	<b>975 845 10</b>
250 mm long	<b>975 840 25</b>
400 mm long	<b>975 840 40</b>
Anti-twist device	<b>975 815 22</b>
Surface housing IP 65	
for 1 Installation Beacon	<b>975 815 03</b>
for 2 Installation Beacons	<b>975 815 07</b>
for 3 Installation Beacons	<b>975 815 08</b>
for 4 Installation Beacons	<b>975 109 05</b>

**TECHNICAL DIAGRAMS:**

see page 282

Sizes of Permanent Beacons





# 815

# Installation Permanent Beacon



- Vandal-proof construction withstands every mechanical and natural challenge
- High impact polycarbonate lens (up to 20 Joules)
- Tamper-proof – bulb change via rear access with bayonet mechanism



Vandal-proof construction

### TECHNICAL SPECIFICATIONS:

<b>Dimensions</b> (Ø x Height):	75 mm x 66 mm (Protrusion from panel)
<b>Housing:</b>	PC/ABS-Blend, Socket: PA-GF, high impact
<b>Lens:</b>	PC transparent
	Shock resistance 20 Joules according to EN 50014
<b>Fixing:</b>	Installation mounting for Ø 37 mm (PG 29)
<b>Connection:</b>	Screw terminal max. 2.5 mm <sup>2</sup> Strain relief, Contact protection according to VDE, flex radial or axial laid
<b>Operating voltage:</b>	Max. 250 V
<b>Bulb socket:</b>	B15d, 10 Watt max.
<b>Bulb change:</b>	Via rear access with bayonet mechanism
	Bulb not included in assembly.

### ORDER SPECIFICATIONS:

Voltage	12 - 240 V
red	815 100 00
green	815 200 00
yellow	815 300 00
clear	815 400 00
blue	815 500 00

Further colours and voltages on request.

### ACCESSORIES:

Bulb BA15d, 5 W, total length max. 42 mm					
Voltage	12 V	24 V	30 V	115 V	230 V
	955 840 34	955 840 35	955 840 32	955 840 57	955 840 38
Tube adaptor	975 812 01				
Base with integrated tube, Ø 25 mm, 110 mm long, plastic	975 840 10				
Base for tube mounting	975 840 90				
Base for base mounting	975 812 02				
Tube Ø 25 mm, all anodized aluminium					
100 mm long	975 845 10				
250 mm long	975 840 25				
400 mm long	975 840 40				
Anti-twist device	975 815 22				
Surface housing IP 65					
for 1 Installation Beacon	975 815 03				
for 2 Installation Beacons	975 815 07				
for 3 Installation Beacons	975 815 08				
for 4 Installation Beacons	975 109 05				



Accessories

### Sizes of Permanent Beacons



### TECHNICAL DIAGRAMS:

see page 282





Tube adaptor as accessory



Surface housing as accessory

- Long-life LED Permanent Beacon
- Vandal-proof construction withstands every mechanical and natural challenge
- High impact polycarbonate lens (up to 20 Joules)

Life duration  
up to 100,000 hrs

### TECHNICAL SPECIFICATIONS:

<b>Dimensions</b> (Ø x Height):	75 mm x 66 mm (Protrusion from panel)
<b>Housing:</b>	PC/ABS-Blend Socket: PA-GF, high impact
<b>Lens:</b>	PC transparent Shock resistance 20 Joules according to EN 50014
<b>Fixing:</b>	Installation mounting for Ø 37 mm (PG 29)
<b>Connection:</b>	Screw terminal max. 2.5 mm <sup>2</sup> Strain relief, Contact protection according to VDE, flex radial or axial laid

### ORDER SPECIFICATIONS:

Voltage	24 V ≈	115 V ~	230 V ~
Current consumption	45 mA	25 mA	25 mA
red	<b>816 100 55</b>	<b>816 100 67</b>	<b>816 100 68</b>
green	<b>816 200 55</b>	<b>816 200 67</b>	<b>816 200 68</b>
yellow	<b>816 300 55</b>	<b>816 300 67</b>	<b>816 300 68</b>
clear	<b>816 400 55</b>	<b>816 400 67</b>	<b>816 400 68</b>

Further colours and voltages on request.

### ACCESSORIES:

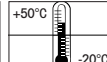
Tube adaptor	<b>975 812 01</b>
Base with integrated tube, Ø 25 mm, 110 mm long, plastic	<b>975 840 10</b>
Base for tube mounting	<b>975 840 90</b>
Base for base mounting	<b>975 812 02</b>
Tube Ø 25 mm, all anodized aluminium	
100 mm long	<b>975 845 10</b>
250 mm long	<b>975 840 25</b>
400 mm long	<b>975 840 40</b>
Anti-twist device	<b>975 815 22</b>
Surface housing IP 65	
for 1 Installation Beacon	<b>975 815 03</b>
for 2 Installation Beacons	<b>975 815 07</b>
for 3 Installation Beacons	<b>975 815 08</b>
for 4 Installation Beacons	<b>975 109 05</b>

Accessories see page 94

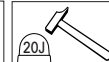
### TECHNICAL DIAGRAMS:

see page 282

#### Sizes of Permanent Beacons



24 V







# 816 LED Beacon (Multicolour) with USB Interface

**NEW**



- More than 200,000 colours possible in one beacon
- Direct triggering of the beacon via USB Interface
- No additional power supply or hardware necessary
- Compatible with USB 2.0 and 1.1

**Life duration up to 50,000 hrs**

## TECHNICAL SPECIFICATIONS:

<b>Dimensions</b> (Ø x Height):	75 mm x 66 mm (Protrusion from panel)
<b>Housing:</b>	ABS/PC-Blend, black
<b>Lens:</b>	PC, transparent
	Shock resistance 20 J according to EN 50014
<b>Fixing:</b>	Installation mounting for Ø 37 mm (PG 29)
	Base and wall mounting possible (accessories)
<b>Connection:</b>	Mini USB 2.0 downward cable outlet
<b>Power supply:</b>	Via USB
<b>Colour options:</b>	More than 200,000 colours (RGB LED)
<b>Suitable for:</b>	Windows 2000, Windows XP, Windows Vista, Windows 7
<b>Assembly:</b>	LED beacon, demo software, driver and USB connection cable included, 5 m long



Simple triggering as no special software is required

## ORDER SPECIFICATIONS:

Voltage	5 V (USB-Connection)
Current consumption	≤ 500 mA
Clear lens	<b>816 480 53</b>

## ACCESSORIES:

You will find the appropriate accessories for base or tube mounting on page 94 or under [www.werma.com](http://www.werma.com)

## ADDITIONAL INFORMATION:

The new installation LED Beacon with USB interface is compatible with USB 2.0 and 1.1.

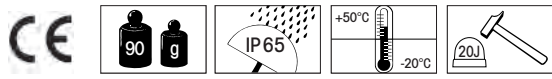
A wide range of colours and light effects can be quickly and simply programmed by the customer and altered at any time.



With RGB LEDs more than 200.000 colours can be selected

## TECHNICAL DIAGRAMS:

see page 282





- Extremely bright Xenon Flash
- Multivoltage Flashing Beacon
- Simple installation by clicking the beacon onto the housing
- 22 mm installation diameter for the control panel/switchgear programme

**i TECHNICAL SPECIFICATIONS:**

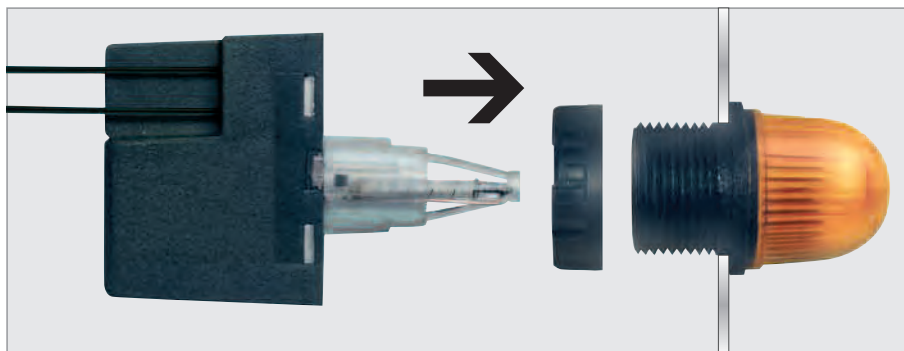
<b>Dimensions (Ø x Height):</b>	29 mm x 32 mm (Protrusion from panel)
<b>Housing:</b>	PC/ABS-Blend
<b>Lens:</b>	PC, transparent
<b>Connection:</b>	2 wires, c. 600 mm long
<b>Fixing:</b>	Installation mounting for Ø 22.5 mm (M 22 x 1.5 mm) with anti-twist device
<b>Flash frequency:</b>	1.5 Hz
<b>Flash energy:</b>	1 Ws
<b>Life duration:</b>	4 x 10 <sup>6</sup> flashes
Nut and seal included in assembly.	

**🛒 ORDER SPECIFICATIONS:**

Voltage	24 V ≈ (10 - 100 V ≈)	115 V ~	230 V ~
	(20 - 72 V ~)		
Current consumption	140 mA	30 mA	20 mA
red	<b>232 100 55</b>	<b>232 100 67</b>	<b>232 100 68</b>
yellow	<b>232 300 55</b>	<b>232 300 67</b>	<b>232 300 68</b>

**📐 TECHNICAL DIAGRAMS:**

see page 270



Simple mounting thanks to click-on electronics module

**Sizes of Flashing Beacons**



24 V

CE    PC    54 g    IP 65    +50°C / -20°C    1    Ws    PLC



# 208

# Installation Flashing Beacon



- Optimised illumination
- 360° visibility
- Suitable for use in the 22 mm standard control panel/switchgear programme
- Simple connection by means of 6.3 mm spades

### TECHNICAL SPECIFICATIONS:

<b>Dimensions (Ø x Height):</b>	58 mm x 69 mm (Protrusion from panel)		
<b>Housing:</b>	PA-GF, high impact		
<b>Lens:</b>	PC, transparent; Ring: PC		
<b>Connection:</b>	Spades 6.3 x 0.8 mm Finger-proof model according to BGV A2, when used with insulated spades		
<b>Fixing:</b>	Installation mounting for Ø 22.5 mm (M 22 x 1.5 mm) with anti-twist device		
<b>Flash frequency:</b>	c. 0.75 Hz		
<b>Flash energy:</b>	1 Ws		
<b>Life duration:</b>	4 x 10 <sup>6</sup> flashes		
Nut and seal included in assembly.			

### ORDER SPECIFICATIONS:

Voltage	24 V =	115 V ~	230 V ~
Current consumption	100 mA	25 mA	30 mA
red	<b>208 100 55</b>	<b>208 100 67</b>	<b>208 100 68</b>
yellow	<b>208 300 55</b>	<b>208 300 67</b>	<b>208 300 68</b>
Further colours and voltages on request.			

### TECHNICAL DIAGRAMS:

see page 269

#### Sizes of Flashing Beacons





Tube adaptor as accessory

- Light intensive Xenon flash
- With anti-twist device (as accessory)
- Available with tube adaptor as free-standing beacon

**i TECHNICAL SPECIFICATIONS:**

<b>Dimensions (Ø x Height):</b>	57 mm x 54 mm (Protrusion from panel)		
<b>Housing:</b>	PC/ABS-Blend		
	Socket: PA-GF, high impact		
<b>Lens:</b>	PC, transparent		
<b>Fixing:</b>	Installation mounting for Ø 37 mm (PG 29)		
<b>Connection:</b>	Screw terminal max. 2.5 mm <sup>2</sup>		
	Strain relief, Contact protection according to VDE, flex radial or axial laid		
<b>Flash frequency:</b>	0.75 Hz		
<b>Flash energy:</b>	1 Ws		
<b>Life duration:</b>	4 x 10 <sup>6</sup> flashes		

**🛒 ORDER SPECIFICATIONS:**

Voltage	24 V ≈	115 V ~	230 V ~
Current consumption	100 mA	20 mA	30 mA
red	<b>802 100 55</b>	<b>802 100 67</b>	<b>802 100 68</b>
yellow	<b>802 300 55</b>	<b>802 300 67</b>	<b>802 300 68</b>

Further colours and voltages on request.

**🏠 ACCESSORIES:**

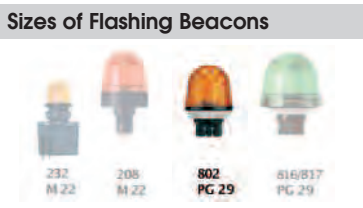
Tube adaptor	<b>975 812 01</b>
Base with integrated tube, Ø 25 mm, 110 mm long, plastic	<b>975 840 10</b>
Base for tube mounting	<b>975 840 90</b>
Base for base mounting	<b>975 812 02</b>
Tube Ø 25 mm, all anodized aluminium	
100 mm long	<b>975 845 10</b>
250 mm long	<b>975 840 25</b>
400 mm long	<b>975 840 40</b>
Anti-twist device	<b>975 815 22</b>
Surface housing IP 65	
for 1 Installation Beacon	<b>975 815 03</b>
for 2 Installation Beacons	<b>975 815 07</b>
for 3 Installation Beacons	<b>975 815 08</b>
for 4 Installation Beacons	<b>975 109 05</b>



Accessories

**📐 TECHNICAL DIAGRAMS:**

see page 282





# 817

# Installation Flashing Beacon



Tube adaptor as accessory



Accessories

### Sizes of Flashing Beacons



- Light intensive Xenon flash
- Vandal-proof construction withstands every mechanical and natural challenge
- High impact polycarbonate lens (up to 20 Joules)

### TECHNICAL SPECIFICATIONS:

<b>Dimensions</b> (Ø x Height):	75 mm x 66 mm (Protrusion from panel)
<b>Housing:</b>	PC/ABS-Blend Socket: PA fibreglass, high-impact
<b>Lens:</b>	PC transparent Shock resistance 20 Joules according to EN 50014
<b>Fixing:</b>	Installation mounting for Ø 37 mm (PG 29)
<b>Connection:</b>	Screw terminal max. 2.5 mm <sup>2</sup> Strain relief, Contact protection according to VDE, flex radial or axial laid
<b>Flash frequency:</b>	c. 1 Hz
<b>Flash energy:</b>	2 Ws
<b>Life duration:</b>	4 x 10 <sup>6</sup> flashes

### ORDER SPECIFICATIONS:

Voltage	12 V <sup>==</sup>	24 V <sup>==</sup>	115 V <sup>~</sup>	230 V <sup>~</sup>
Current consumpt.	<195 mA	125 mA	20 mA	35 mA
red	<b>817 100 54</b>	<b>817 100 55</b>	<b>817 100 67</b>	<b>817 100 68</b>
yellow	<b>817 300 54</b>	<b>817 300 55</b>	<b>817 300 67</b>	<b>817 300 68</b>

Further colours and voltages on request.

### ACCESSORIES:

Tube adaptor	<b>975 812 01</b>
Base with integrated tube, Ø 25 mm, 110 mm long, plastic	<b>975 840 10</b>
Base for tube mounting	<b>975 840 90</b>
Base for base mounting	<b>975 812 02</b>
Tube Ø 25 mm, all anodized aluminium	
100 mm long	<b>975 845 10</b>
250 mm long	<b>975 840 25</b>
400 mm long	<b>975 840 40</b>
Anti-twist device	<b>975 815 22</b>
Surface housing IP 65	
for 1 Installation Beacon	<b>975 815 03</b>
for 2 Installation Beacons	<b>975 815 07</b>
for 3 Installation Beacons	<b>975 815 08</b>
for 4 Installation Beacons	<b>975 109 05</b>

### TECHNICAL DIAGRAMS:

see page 282





Tube adaptor as accessory



Surface housing (accessory)

- Vandal-proof construction withstands every mechanical and natural challenge
- High impact polycarbonate lens (up to 20 Joules)

Life duration  
up to 50,000 hrs

### **i** TECHNICAL SPECIFICATIONS:

<b>Dimensions</b> (Ø x Height):	75 mm x 66 mm (Protrusion from panel)
<b>Housing:</b>	PC/ABS-Blend Socket: PA-GF, high impact
<b>Lens:</b>	PC transparent Shock resistance 20 Joules according to EN 50014
<b>Fixing:</b>	Installation mounting for Ø 37 mm (PG 29)
<b>Connection:</b>	Screw terminal max. 2.5 mm <sup>2</sup> Strain relief, Contact protection according to VDE, flex radial or axial laid
<b>Blink frequency:</b>	c. 1 Hz

### **🛒** ORDER SPECIFICATIONS:

Voltage	24 V $\approx$
Current consumption	25 mA
red	<b>816 110 55</b>
yellow	<b>816 310 55</b>
Further colours and voltages on request.	

### **🏠** ACCESSORIES:

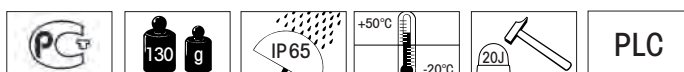
Tube adaptor	<b>975 812 01</b>
Base with integrated tube, Ø 25 mm, 110 mm long, plastic	<b>975 840 10</b>
Base for tube mounting	<b>975 840 90</b>
Base for base mounting	<b>975 812 02</b>
Tube Ø 25 mm, all anodized aluminium	
100 mm long	<b>975 845 10</b>
250 mm long	<b>975 840 25</b>
400 mm long	<b>975 840 40</b>
Anti-twist device	<b>975 815 22</b>
Surface housing IP 65	
for 1 Installation Beacon	<b>975 815 03</b>
for 2 Installation Beacons	<b>975 815 07</b>
for 3 Installation Beacons	<b>975 815 08</b>
for 4 Installation Beacons	<b>975 109 05</b>

Accessories see page 100.

### **📏** TECHNICAL DIAGRAMS:

see page 282

#### Sizes of Flashing Beacons





# Overview Free-standing

## Permanent Beacons

<p>200/203 201/204 (LED)</p>  <p>Height: 65.5/101 mm Page 106 + 107</p>	<p>209 209 (LED)</p>  <p>Height: 87/103 mm Page 108 + 109</p>	<p>210/213 211/214 (LED)</p>  <p>Height: 81/107 mm Page 110 + 111</p>	<p>219 219 (LED)</p>  <p>Height: 103/119 mm Page 112 + 113</p>
<p>850/851/852</p>  <p>Height: 88/108/101 mm Page 114</p>	<p>220/223 221/224 (LED)</p>  <p>Height: 79/105 mm Page 116 + 117</p>	<p>806 Monitorable LED Permanent Beacon</p>  <p>Height: 97 mm Page 118</p>	<p><b>NEW</b> 853 (LED)</p>  <p>Height: 85 mm Page 119</p>
<p>826</p>  <p>Height: 137 mm Page 120</p>	<p>826 Monitored Permanent Beacon</p>  <p>Height: 137 mm Page 121</p>	<p>829 LED Permanent/ Blinking Beacon</p>  <p>Height: 137 mm Page 122</p>	<p>829 LED Perma- nent/Blinking/ Rotating Beacon</p>  <p>Height: 137 mm Page 123</p>
<p>829 Monitored LED Permanent Beacon</p>  <p>Height: 137 mm Page 124</p>	<p>895</p>  <p>Height: 148 mm Page 125</p>	<p>839 (LED)</p>  <p>Height: 189 mm Page 126</p>	<p>280 (LED)</p>  <p>Height: 218 mm Page 127</p>
<p>280 LED Obstruction Light</p>  <p>Height: 218 mm Page 129</p>	<p><b>NEW</b> 281 LED Obstruction Light</p>  <p>Height: 205 mm Page 130</p>		

## Rotating Beacons

<p>885 Rotating Mirror Beacon</p>  <p>Height: 151 mm Page 148</p>	<p>839 Rotating Mirror 839 LED Rotating</p>  <p>Height: 189 mm Page 151 + 152</p>	<p><b>NEW</b> 829 LED Rotating Beacon</p>  <p>Height: 137 mm Page 153</p>	<p><b>NEW</b> 280 LED Rotating Beacon</p>  <p>Height: 218 mm Page 154</p>
<p>884 Rotating Beacon</p>  <p>Height: 218 mm Page 155</p>	<p>883 Rotating Mirror Beacon</p>  <p>Height: 218 mm Page 156</p>	<p>880 Rotating Mirror Beacon</p>  <p>Height: 215 mm Page 157</p>	<p>881 Rotating Mirror Beacon</p>  <p>Height: 204 mm Page 158</p>

## Flashing Beacons

<p>202 Flashing 205 Flashing</p>  <p>Height: 81/107 mm Page 131</p>	<p>209 Flashing Beacon</p>  <p>Height: 103 mm Page 132</p>	<p>212 Flashing 215 Flashing</p>  <p>Height: 97/123 mm Page 133</p>	<p>219 Flashing Beacon</p>  <p>Height: 119 mm Page 134</p>
<p>222 Flashing 225 Flashing</p>  <p>Height: 79/105 mm Page 135</p>	<p><b>NEW</b> 853 LED Double Flash</p>  <p>Height: 85 mm Page 136</p>	<p><b>NEW</b> 853 LED EVS</p>  <p>Height: 85 mm Page 137</p>	<p>897 Double Flash</p>  <p>Height: 148 mm Page 138</p>
<p>830 Flashing 835 Flashing</p>  <p>Height: 133/172 mm Page 139</p>	<p>827 Blinking Beacon</p>  <p>Height: 137 mm Page 140</p>	<p>828 Flashing Beacon</p>  <p>Height: 137 mm Page 141</p>	<p><b>NEW</b> 829 LED Double Flash</p>  <p>Height: 137 mm Page 142</p>
<p><b>NEW</b> 829 LED EVS</p>  <p>Height: 137 mm Page 143</p>	<p>839 Double Flash Beacon</p>  <p>Height: 189 mm Page 144</p>	<p>838 Double Flash Beacon</p>  <p>Height: 218 mm Page 145</p>	<p><b>NEW</b> 280 LED Double Flash</p>  <p>Height: 218 mm Page 146</p>
<p><b>NEW</b> 280 LED EVS</p>  <p>Height: 218 mm Page 147</p>			

## Traffic Lights

<p>894 LED Traffic Light</p>  <p>2 or 3 tier Page 164</p>	<p>894 LED Traffic Light</p>  <p>1, 2 or 3 tier Page 165</p>	<p>890 (LED) Traffic Light</p>  <p>Height: 154 mm Page 159 + 160</p>	<p><b>NEW</b> 853 LED Traffic Light</p>  <p>Height: 85 mm Page 163</p>
------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------

## Bulbs and Further Information

LED Bulbs Page 166 + 167  
 Bulbs Overview Page 168 + 169

Further information about "Optical Signal Devices" can be found in the chapter "Tech-Talk" beginning on page 328.





# Optical Signal Devices

## WERMA Free-standing Beacons

Free-standing beacons are designed for direct fixing to the respective object. The basic types of available fixings are base, bracket and tube mounting.

### Features

- Base, bracket or tube mounting
- Increasing use of LEDs as light source
- High protection rating IP 65
- Beacons with the exceptional protection ratings IP 66 and IP 69k
- Large variety of versions: Available as permanent, blinking, flashing, LED EVS or LED light beacons
- Beacon diameter between 57 and 153 mm
- Modern design



### Sizes

#### COMPARISON OF WERMA FREE-STANDING BEACONS



#### COMPARISON OF WERMA FREE-STANDING BEACONS



## Variety of light effects

Free-standing beacons from WERMA assist in indicating process conditions, risks and imminent dangers in modern production areas clearly and in good time. The urgency of the required course of action can be indicated by the colour as well as the type and duration of the signal. As a basic principle, the colours red, yellow, green, blue and clear are employed in the following variety of signals.



### Permanent Light and LED Permanent Light

With the assistance of a permanent light or an LED permanent light the operator is made aware of a specific condition or is instructed to carry out a certain course of action.

WERMA provides free standing beacons with conventional bulbs as well as with long-life LED technology.



### (LED) Flashing or Blinking Light and LED EVS Signal Beacon

The deployment of a flashing or blinking signal can generate even more attention than a permanent light. WERMA also provides an alternative long life LED Flash which has a significantly longer life duration of up to 50,000 hours with a considerably reduced power consumption.

**NEW** The stochastic, random flickering light EVS (Enhanced Visibility System) has been developed by WERMA on a neurobiological basis. As deployed in LED Beacons, this technology succeeds in generating an optimal attention level never previously reached by existing signal devices.

WERMA employs LEDs for its EVS system. A microprocessor triggers random light signals, which make the light appear extremely "agitated", thus generating a continuously high attention level amongst those in the vicinity – even when viewed out the corner of the eye.



### Rotating Mirror Beacon and LED Rotating Signal Beacon

Inside each rotating mirror beacon is a halogen bulb, and a mirror to deflect the light in one direction. This generates a rotating light beam.

In contrast to conventional Rotating Mirror Beacons, the LED version generates the rotating signal by means of a set of LEDs which are triggered in sequence. As no mechanical components have been used at all, the beacon is completely maintenance-free.



# 200/203

# Permanent Beacon



Permanent Beacon 200  
(Base mounting)



Permanent Beacon 203 with  
integrated mounting bracket

- Safe CAGE CLAMP® technology
- B15d socket integrated in the base
- Optimum illumination
- Available for base or bracket mounting
- Connection without the need to disassemble the product

### **i** TECHNICAL SPECIFICATIONS:

<b>Housing:</b>	PA-GF, high impact
<b>Lens:</b>	PC, transparent
<b>Connection:</b>	CAGE CLAMP® technology max. 2.5 mm <sup>2</sup> Contact protection according to VDE
<b>Cable entry:</b>	Cable diameter max. 10 mm (200) Cable diameter 3-6 mm (203)

PERMANENT BEACON	200	203
<b>Fixing:</b>	Base mounting with flat seal	Bracket mounting cable gland M 12 x 1.5 mm
<b>Dimensions (Ø x Height):</b>	57 mm x 65.5 mm	57 mm x 91 mm
<b>Operating voltage:</b>	Max. 250 V	Max. 250 V
<b>Bulb socket:</b>	B15d, 7 Watt max.	B15d, 7 Watt max.
<b>Bulb change:</b>	Via removal of lens	Via removal of lens
	Bulb not included in assembly.	

### **🛒** ORDER SPECIFICATIONS:

	Base mounting 200	Bracket mounting 203
Voltage	12-240 V	12-240 V
red	200 100 00	203 100 00
green	200 200 00	203 200 00
yellow	200 300 00	203 300 00
clear	200 400 00	203 400 00
blue	200 500 00	203 500 00

### **🏠** ACCESSORIES:

Bulb BA15d, 5 W  
total length max. 42 mm

Voltage	12 V	24 V	30 V	115 V	230 V
	955 840 34	955 840 35	955 840 32	955 840 57	955 840 38



Accessories

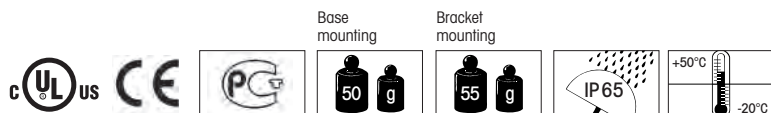
LED bulb BA15d  
total length max. 42 mm

Voltage	24 V ≈	115 V ~	230 V ~
Current consumption	< 45 mA	< 15 mA	< 15 mA
red	956 100 75	956 100 67	956 100 68
green	956 200 75	956 200 67	956 200 68
yellow	956 300 75	956 300 67	956 300 68
white	956 400 75	956 400 67	956 400 68
blue	956 500 75	956 500 67	956 500 68

### Sizes of Permanent Beacons



### **📐** TECHNICAL DIAGRAMS: see page 269





LED Permanent Beacon 201  
(Base mounting)



Permanent Beacon 204 with  
integrated mounting bracket

- Safe CAGE CLAMP® technology
- Optimum illumination
- Available for base or bracket mounting
- Connection without the need to disassemble the product

### TECHNICAL SPECIFICATIONS:

Housing:	PA-GF, high impact
Lens:	PC, transparent; Ring: PC
Connection:	CAGE CLAMP® technology max. 2.5 mm <sup>2</sup> Contact protection according to VDE
Cable entry:	Cable diameter max. 10 mm (201) Cable diameter 3-6 mm (204)

Life duration  
up to 100,000 hrs

LED-PERMANENT BEACON	201	204
Fixing:	Base mounting with flat seal	Bracket mounting cable gland M 12 x 1.5 mm
Dimensions (Ø x Height):	58 mm x 81 mm	58 mm x 107 mm

### ORDER SPECIFICATIONS:

#### Base mounting 201

	24 V ≈	115 V ~	230 V ~
Voltage	24 V ≈	115 V ~	230 V ~
Current consumption	45 mA	25 mA	25 mA
red	<b>201 100 75</b>	<b>201 100 67</b>	<b>201 100 68</b>
green	<b>201 200 75</b>	<b>201 200 67</b>	<b>201 200 68</b>
yellow	<b>201 300 75</b>	<b>201 300 67</b>	<b>201 300 68</b>

#### Bracket mounting 204

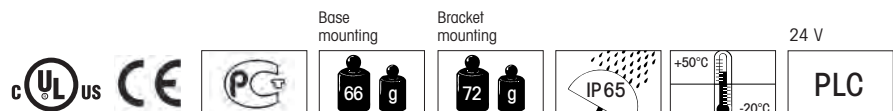
	24 V ≈	115 V ~	230 V ~
Voltage	24 V ≈	115 V ~	230 V ~
Current consumption	45 mA	25 mA	25 mA
red	<b>204 100 75</b>	<b>204 100 67</b>	<b>204 100 68</b>
green	<b>204 200 75</b>	<b>204 200 67</b>	<b>204 200 68</b>
yellow	<b>204 300 75</b>	<b>204 300 67</b>	<b>204 300 68</b>

Further colours and voltages on request.

### TECHNICAL DIAGRAMS:

see page 269

#### Sizes of Permanent Beacons





Accessories

#### Sizes of Permanent Beacons



- Safe CAGE CLAMP® technology
- B15d socket integrated in the base
- Optimum illumination
- Tube mounting
- Single hole mounting possible with cable gland

#### TECHNICAL SPECIFICATIONS:

<b>Dimensions</b> (Ø x Height):	57 mm x 87 mm
<b>Housing:</b>	PA-GF, high impact
<b>Lens:</b>	PC, transparent
	Ring: PC
<b>Connection:</b>	CAGE CLAMP® technology max. 2.5 mm <sup>2</sup> Contact protection according to VDE
<b>Cable entry:</b>	Cable diameter max. 11 mm
<b>Fixing:</b>	Tube mounting M 25 x 1.5 mm
<b>Operating voltage:</b>	Max. 250 V
<b>Bulb socket:</b>	B15d, 7 Watt max.
<b>Bulb change:</b>	Via removal of lens
	Bulb not included in assembly.

#### ORDER SPECIFICATIONS:

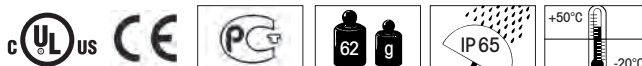
Voltage	12-240 V
red	209 100 00
green	209 200 00
yellow	209 300 00
clear	209 400 00
blue	209 500 00

#### ACCESSORIES:

Base with integrated tube, M 25 x 1.5 mm	975 209 01				
Cable gland M 25 x 1.5 mm	975 209 02				
Bulb BA15d, 5 W total length max. 42 mm					
Voltage	12 V	24 V	30 V	115 V	230 V
	955 840 34	955 840 35	955 840 32	955 840 57	955 840 38
LED bulb BA15d total length max. 42 mm					
Voltage	24 V ≈	115 V ~	230 V ~		
Current consumption	< 45 mA	< 15 mA	< 15 mA		
red	956 100 75	956 100 67	956 100 68		
green	956 200 75	956 200 67	956 200 68		
yellow	956 300 75	956 300 67	956 300 68		
white	956 400 75	956 400 67	956 400 68		
blue	956 500 75	956 500 67	956 500 68		

#### TECHNICAL DIAGRAMS:

see page 269





Base with integrated tube (accessory)

- Safe CAGE CLAMP® technology
- Optimum illumination
- Tube mounting
- Single hole mounting possible with cable gland

**i TECHNICAL SPECIFICATIONS:**

Life duration up to 100,000 hrs

<b>Dimensions (Ø x Height):</b>	58 mm x 103 mm
<b>Housing:</b>	PA-GF, high impact
<b>Lens:</b>	PC, transparent
	Ring: PC
<b>Connection:</b>	CAGE CLAMP® technology max. 2.5 mm <sup>2</sup>
	Contact protection according to VDE
<b>Cable entry:</b>	Cable diameter max. 11 mm
<b>Fixing:</b>	Tube mounting M 25 x 1.5 mm

**🛒 ORDER SPECIFICATIONS:**

Voltage	24 V <sub>≈</sub>	115 V <sub>~</sub>	230 V <sub>~</sub>
Current consumption	45 mA	25 mA	25 mA
red	<b>209 110 75</b>	<b>209 110 67</b>	<b>209 110 68</b>
green	<b>209 210 75</b>	<b>209 210 67</b>	<b>209 210 68</b>
yellow	<b>209 310 75</b>	<b>209 310 67</b>	<b>209 310 68</b>

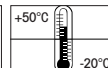
**🏠 ACCESSORIES:**

Base with integrated tube, M 25 x 1.5 mm	<b>975 209 01</b>
Cable gland M 25 x 1.5 mm	<b>975 209 02</b>

**📐 TECHNICAL DIAGRAMS:**

see page 269

**Sizes of Permanent Beacons**



24 V



# 210/213

# Permanent Beacon



Permanent Beacon 210  
(Base mounting)



Permanent Beacon 213 with  
integrated mounting bracket

- Safe CAGE CLAMP® technology
- B15d socket integrated in the base
- Optimum illumination
- Available for base or bracket mounting
- Connection without the need to disassemble the product

### TECHNICAL SPECIFICATIONS:

<b>Housing:</b>	PA-GF, high impact
<b>Lens:</b>	PC, transparent
<b>Connection:</b>	CAGE CLAMP® technology max. 2.5 mm <sup>2</sup> Contact protection according to VDE
<b>Cable entry:</b>	Cable diameter max. 10 mm (210) Cable diameter 3-6 mm (213)

PERMANENT BEACON	210	213
<b>Fixing:</b>	Base mounting with flat seal	Bracket mounting cable gland M 12 x 1.5 mm
<b>Dimensions (Ø x Height):</b>	57 mm x 81 mm	57 mm x 107 mm
<b>Operating voltage:</b>	Max. 250 V	Max. 250 V
<b>Bulb socket:</b>	B15d, 10 Watt max.	B15d, 10 Watt max.
<b>Bulb change:</b>	Via removal of lens	Via removal of lens
	Bulb not included in assembly.	

### ORDER SPECIFICATIONS:

	Base mounting 210	Bracket mounting 213
Voltage	12-240 V	12-240 V
red	210 100 00	213 100 00
green	210 200 00	213 200 00
yellow	210 300 00	213 300 00
clear	210 400 00	213 400 00
blue	210 500 00	213 500 00

### ACCESSORIES:

Bulb BA15d, 7 W total length max. 52 mm					
Voltage	12 V	24 V	48 V	115 V	230 V
	955 015 34	955 015 35	955 015 36	955 015 37	955 015 38

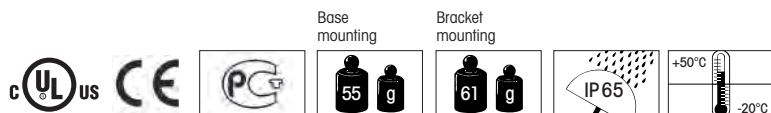
LED bulb BA15d total length max. 42 mm			
Voltage	24 V ≈	115 V ~	230 V ~
Current consumption	< 45 mA	< 15 mA	< 15 mA
red	956 100 75	956 100 67	956 100 68
green	956 200 75	956 200 67	956 200 68
yellow	956 300 75	956 300 67	956 300 68
white	956 400 75	956 400 67	956 400 68
blue	956 500 75	956 500 67	956 500 68

### TECHNICAL DIAGRAMS: see page 269 + 270



Accessories

### Sizes of Permanent Beacons





LED Permanent Beacon 211  
(base mounting)



Permanent Beacon 214 with  
integrated mounting bracket



Housing with  
CAGE CLAMP® Connection

- Safe CAGE CLAMP® technology
- Optimum illumination
- Available for base or bracket mounting
- Connection without the need to disassemble the product

### TECHNICAL SPECIFICATIONS:

Life duration  
up to 100,000 hrs

<b>Housing:</b>	PA-GF, high impact
<b>Lens:</b>	PC, transparent; Ring: PC
<b>Connection:</b>	CAGE CLAMP® technology max. 2,5 mm <sup>2</sup> Contact protection according to VDE
<b>Cable entry:</b>	Cable diameter max. 10 mm (211) Cable diameter 3-6 mm (214)

LED PERMANENT BEACON	211	214
<b>Fixing:</b>	Base mounting with flat seal	Bracket mounting cable gland M 12 x 1.5 mm
<b>Dimensions (Ø x Height):</b>	58 mm x 97 mm	58 mm x 123 mm

### ORDER SPECIFICATIONS:

#### Base mounting 211

	24 V≈	115 V~	230 V~
Current consumption	45 mA	25 mA	25 mA
red	<b>211 100 75</b>	<b>211 100 67</b>	<b>211 100 68</b>
green	<b>211 200 75</b>	<b>211 200 67</b>	<b>211 200 68</b>
yellow	<b>211 300 75</b>	<b>211 300 67</b>	<b>211 300 68</b>

#### Bracket mounting 214

	24 V≈	115 V~	230 V~
Current consumption	45 mA	25 mA	25 mA
red	<b>214 100 75</b>	<b>214 100 67</b>	<b>214 100 68</b>
green	<b>214 200 75</b>	<b>214 200 67</b>	<b>214 200 68</b>
yellow	<b>214 300 75</b>	<b>214 300 67</b>	<b>214 300 68</b>

Further colours and voltages on request.

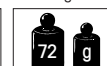
### TECHNICAL DIAGRAMS:

see page 269 + 270

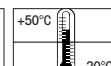
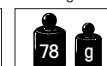
#### Sizes of Permanent Beacons



Base  
mounting



Bracket  
mounting



24 V







- Safe CAGE CLAMP® technology
- B15d socket integrated in the base
- Optimum illumination
- Tube mounting
- Single hole mounting possible with cable gland

### TECHNICAL SPECIFICATIONS:

<b>Dimensions</b> (Ø x Height):	57 mm x 103 mm
<b>Housing:</b>	PA-GF, high impact
<b>Lens:</b>	PC, transparent
	Ring: PC
<b>Connection:</b>	CAGE CLAMP® technology max. 2.5 mm <sup>2</sup>
	Contact protection according to VDE
<b>Cable entry:</b>	Cable diameter max. 11 mm
<b>Fixing:</b>	Tube mounting, M 25 x 1.5 mm
<b>Operating voltage:</b>	Max. 250 V
<b>Bulb socket:</b>	B15d, 10 Watt max.
<b>Bulb change:</b>	Via removal of lens
	Bulb not included in assembly.

### ORDER SPECIFICATIONS:

	12-240 V
red	219 100 00
green	219 200 00
yellow	219 300 00
clear	219 400 00
blue	219 500 00

### ACCESSORIES:

Base with integrated tube, M 25 x 1.5 mm	975 209 01				
Cable gland M 25 x 1.5 mm	975 209 02				
Bulb BA15d, 7 W total length max. 52 mm					
Voltage	12 V	24 V	48 V	115 V	230 V
	955 015 34	955 015 35	955 015 36	955 015 37	955 015 38

LED bulb BA15d  
total length max. 42 mm

Voltage	24 V≈	115 V~	230 V~
Current consumption	< 45 mA	< 15 mA	< 15 mA
red	956 100 75	956 100 67	956 100 68
green	956 200 75	956 200 67	956 200 68
yellow	956 300 75	956 300 67	956 300 68
white	956 400 75	956 400 67	956 400 68
blue	956 500 75	956 500 67	956 500 68

### TECHNICAL DIAGRAMS:

see page 270



Accessories

### Sizes of Permanent Beacons





Base with integrated tube (accessory)

- Safe CAGE CLAMP® technology
- Optimum illumination
- Tube mounting
- Single hole mounting possible with cable gland

**i TECHNICAL SPECIFICATIONS:**

Life duration up to 100,000 hrs

<b>Dimensions (Ø x Height):</b>	58 mm x 119 mm
<b>Housing:</b>	PA-GF, high impact
<b>Lens:</b>	PC, transparent
	Ring: PC
<b>Connection:</b>	CAGE CLAMP® technology max. 2.5 mm <sup>2</sup>
	Contact protection according to VDE
<b>Cable entry:</b>	Cable diameter max. 11 mm
<b>Fixing:</b>	Tube mounting, M 25 x 1.5 mm

**🛒 ORDER SPECIFICATIONS:**

Voltage	24 V≈	115 V~	230 V~
Current consumption	45 mA	25 mA	25 mA
red	<b>219 110 75</b>	<b>219 110 67</b>	<b>219 110 68</b>
green	<b>219 210 75</b>	<b>219 210 67</b>	<b>219 210 68</b>
yellow	<b>219 310 75</b>	<b>219 310 67</b>	<b>219 310 68</b>

**🏠 ACCESSORIES:**

Base with integrated tube, M 25 x 1.5 mm	<b>975 209 01</b>
Cable gland M 25 x 1.5 mm	<b>975 209 02</b>

**📏 TECHNICAL DIAGRAMS:**

see page 270

Sizes of Permanent Beacons



# 850/851/852 Permanent Beacon



850



851



852

- Available with grey or black housing

## **i** TECHNICAL SPECIFICATIONS:

<b>Dimensions</b> (Ø x Height):	57 mm x 88 mm (850) 57 mm x 108 mm (851) 57 mm x 101 mm (852)
<b>Housing:</b>	ABS (85X XXX 38) PC/ABS-Blend (85X XXX 08)
<b>Lens:</b>	PC, transparent
<b>Fixing:</b>	850: Base mounting 851: Bracket mounting 852: Tube mounting M 25 x 1.5 mm
<b>Socket:</b>	B15d max. 7 Watt
<b>Connection:</b>	Screw terminal max. 1.5 mm <sup>2</sup> Contact protection according to VDE
<b>Cable entry:</b>	Cable diameter max. 8.5 mm (850) Cable diameter max. 7-10 mm (851) Cable diameter max. 10 mm (852)

Bulb not included in assembly.

## **🛒** ORDER SPECIFICATIONS:

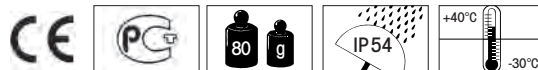
<b>Base mounting 850</b>		12 - 250 V		12 - 250 V	
Black housing	red	<b>850 100 08</b>	Grey housing	red	<b>850 100 38</b>
	green	<b>850 200 08</b>		green	<b>850 200 38</b>
	yellow	<b>850 300 08</b>		yellow	<b>850 300 38</b>
	clear	<b>850 400 08</b>		clear	<b>850 400 38</b>
<b>Bracket mounting 851</b>		12 - 250 V		12 - 250 V	
Black housing	red	<b>851 100 08</b>	Grey housing	red	<b>851 100 38</b>
	green	<b>851 200 08</b>		green	<b>851 200 38</b>
	yellow	<b>851 300 08</b>		yellow	<b>851 300 38</b>
	clear	<b>851 400 08</b>		clear	<b>851 400 38</b>
<b>Tube mounting 852</b>		12 - 250 V		12 - 250 V	
Black housing	red	<b>852 100 08</b>	Grey housing	red	<b>852 100 38</b>
	yellow	<b>852 300 08</b>		yellow	<b>852 300 38</b>

Further colours and voltages on request.

## **⚠** ADDITIONAL INFORMATION:

Please also see the beacon series 209, 210, 213, 219 with additional advantages (see page 108 onwards)

- High protection rating IP 65
- B15d socket integrated in the base
- Safe CAGE CLAMP® connection
- Optimum illumination
- Connection without product disassembly





## ACCESSORIES:

Base with integrated tube  
with M 25 x 1.5 mm  
incl. rubber seal **960 693 03**

Adaptor M 25 / M 20  
for fixing **960 693 04**

Cable gland  
M 25 x 1.5 mm **975 209 02**

Bulb BA15d, 7 W  
Total length max. 52 mm

Voltage	12 V	24 V	48 V	115 V	230 V
	<b>955 015 34</b>	<b>955 015 35</b>	<b>955 015 36</b>	<b>955 015 37</b>	<b>955 015 38</b>

LED bulb BA15d  
Total length max. 42 mm

Voltage	24 V ≈	115 V ~	230 V ~
Current consumption	< 45 mA	< 15 mA	< 15 mA
red	<b>956 100 75</b>	<b>956 100 67</b>	<b>956 100 68</b>
green	<b>956 200 75</b>	<b>956 200 67</b>	<b>956 200 68</b>
yellow	<b>956 300 75</b>	<b>956 300 67</b>	<b>956 300 68</b>
white	<b>956 400 75</b>	<b>956 400 67</b>	<b>956 400 68</b>
blue	<b>956 500 75</b>	<b>956 500 67</b>	<b>956 500 68</b>

Seal for 850  
(required for IP 54) **975 850 01**



## TECHNICAL DIAGRAMS:

see page 287





Permanent Beacon 220  
(Base mounting)



Permanent Beacon 223 with  
integrated mounting bracket



Housing with  
CAGE CLAMP®-Connection

### Sizes of Permanent Beacons



- Safe CAGE CLAMP® technology
- B15d socket integrated in the base
- Optimum illumination
- Available for base or bracket mounting
- Connection without the need to disassemble the product

### TECHNICAL SPECIFICATIONS:

<b>Housing:</b>	PA-GF, high impact
<b>Lens:</b>	PC, transparent; Ring: PC/ABS-Blend
<b>Connection:</b>	CAGE CLAMP® technology max. 2.5 mm <sup>2</sup> Contact protection according to VDE
<b>Cable entry:</b>	Cable diameter max. 10 mm (220) Cable diameter 3-6 mm (223)

PERMANENT BEACON	220	223
<b>Fixing:</b>	Base mounting with flat seal	Bracket mounting cable gland M 12 x 1.5 mm
<b>Dimensions (Ø x Height):</b>	75 mm x 79 mm	75 mm x 105 mm
<b>Operating voltage:</b>	Max. 250 V	Max. 250 V
<b>Bulb socket:</b>	B15d, 10 Watt max.	B15d, 10 Watt max.
<b>Bulb change:</b>	Via removal of lens	Via removal of lens
	Bulb not included in assembly.	

### ORDER SPECIFICATIONS:

	Base mounting 220	Bracket mounting 223
Voltage	12-240 V	12-240 V
red	220 100 00	223 100 00
green	220 200 00	223 200 00
yellow	220 300 00	223 300 00
clear	220 400 00	223 400 00
blue	220 500 00	223 500 00

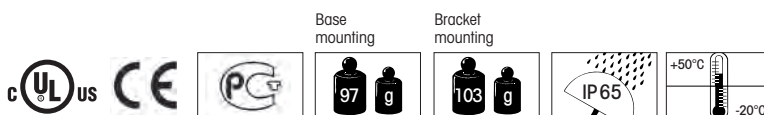
Further colours and voltages on request.

### ACCESSORIES:

Bulb BA15d, 7 W total length max. 52 mm					
Voltage	12 V	24 V	48 V	115 V	230 V
	955 015 34	955 015 35	955 015 36	955 015 37	955 015 38

LED bulb BA15d total length max. 42 mm			
Voltage	24 V≈	115 V~	230 V~
Current consumption	< 45 mA	< 15 mA	< 15 mA
red	956 100 75	956 100 67	956 100 68
green	956 200 75	956 200 67	956 200 68
yellow	956 300 75	956 300 67	956 300 68
white	956 400 75	956 400 67	956 400 68
blue	956 500 75	956 500 67	956 500 68

### TECHNICAL DIAGRAMS: see page 270





LED Permanent Beacon 221  
(Base mounting)



LED Permanent Beacon 224 with  
integrated mounting bracket

- Safe CAGE CLAMP® technology
- Optimum illumination
- Available for base or bracket mounting
- Connection without the need to disassemble the product

### TECHNICAL SPECIFICATIONS:

Life duration  
up to 100,000 hrs

<b>Housing:</b>	PA-GF, high impact
<b>Lens:</b>	PC, transparent; Ring: PC/ABS-Blend
<b>Connection:</b>	CAGE CLAMP® technology max. 2.5 mm <sup>2</sup> Contact protection according to VDE
<b>Cable entry:</b>	Cable diameter max. 10 mm (221) Cable diameter 3-6 mm (224)

LED PERMANENT BEACON	221	224
<b>Fixing:</b>	Base mounting with flat seal	Bracket mounting cable gland M 12 x 1.5 mm
<b>Dimensions (Ø x Height):</b>	75 mm x 79 mm	75 mm x 105 mm

### ORDER SPECIFICATIONS:

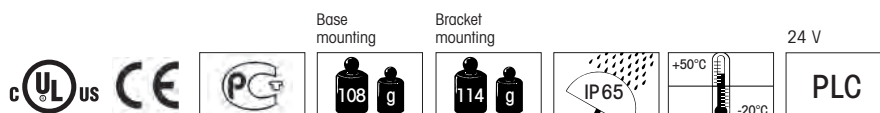
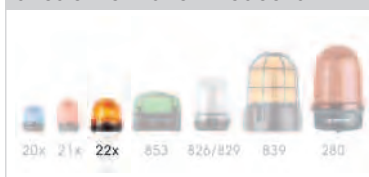
Base mounting 221			
Voltage	24 V ≈	115 V ~	230 V ~
Current consumption	45 mA	25 mA	25 mA
red	<b>221 100 75</b>	<b>221 100 67</b>	<b>221 100 68</b>
green	<b>221 200 75</b>	<b>221 200 67</b>	<b>221 200 68</b>
yellow	<b>221 300 75</b>	<b>221 300 67</b>	<b>221 300 68</b>
Bracket mounting 224			
Voltage	24 V ≈	115 V ~	230 V ~
Current consumption	45 mA	25 mA	25 mA
red	<b>224 100 75</b>	<b>224 100 67</b>	<b>224 100 68</b>
green	<b>224 200 75</b>	<b>224 200 67</b>	<b>224 200 68</b>
yellow	<b>224 300 75</b>	<b>224 300 67</b>	<b>224 300 68</b>

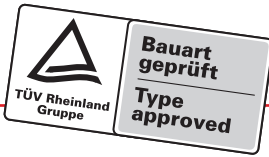
Further colours and voltages on request.

### TECHNICAL DIAGRAMS:

see page 270

#### Sizes of Permanent Beacons





# Monitorable LED Permanent Beacon



Bracket (accessory)



Accessories

- TÜV certified LED Muting Beacon
- Current monitoring possible
- Life duration up to 100,000 hrs
- Approved for muting use according to IEC 61496-1
- For use in laser technology according to EN 60825-1, restart warning, timed triggering, change of operating mode

Life duration up to 100,000 hrs

## TECHNICAL SPECIFICATIONS:

Dimensions (Ø x Height):	70 mm x 97 mm
Housing:	Terminal element: PA-GF, high impact Cap: PC
Lens:	PC, transparent
Fixing:	Base mounting, Bracket mounting
Connection:	CAGE CLAMP® technology max. 2.5 mm <sup>2</sup> Contact protection according to VDE
Cable entry:	Cable diameter max. 14 mm
Duty cycle:	100 %
Current consumption following failure of 3 of the 6 strips:	< 5 mA

## ORDER SPECIFICATIONS:

Voltage	24 V <sup>==</sup>
Current consumption	60 mA
yellow	<b>806 350 55</b>
clear	<b>806 450 55</b>

## ACCESSORIES:

Bracket, including cable gland	<b>960 000 02</b>
Bracket for 1-sided mounting	<b>975 840 85</b>
see page 41.	

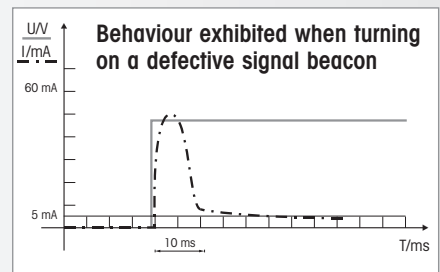
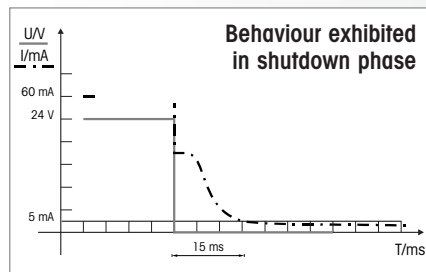
## ADDITIONAL INFORMATION:

### What does Muting mean?

Muting is the temporary automatic overriding of a safety protection device by means of a control system within the normal operating cycle of a machine. This bridging of the safety protection must be visually displayed in order to prevent workers mistakenly entering a dangerous area.

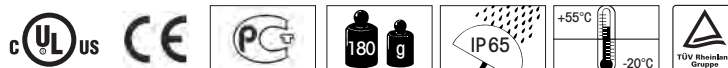
It is therefore necessary that the signal beacon in such applications can be triggered by failsafe technology and the bulb function can be monitored.

The standard colour for muting signalisation is clear; yellow is however also permitted.



## TECHNICAL DIAGRAMS:

see page 282



**NEW**



The innovative connector (accessory) enables traffic light combinations to be created in a matter of seconds

- LED Permanent Beacon in attractive quadratic form
- Innovative connector to create traffic light combinations
- Easy assembly due to quick-release screws
- Thread/membrane combination keeps cabling requirements to a minimum

Life duration up to 50,000 hrs

### TECHNICAL SPECIFICATIONS:

<b>Dimensions (L x H x W):</b>	85 mm x 85 mm x 72 mm
<b>Housing:</b>	PP-GF, black
<b>Lens:</b>	PC, transparent
<b>Connection:</b>	Screw terminal with wire protection, max. 1.5 mm <sup>2</sup>
<b>Fixing:</b>	Wall, base and ceiling mounting
<b>Current consumption:</b>	Max. 80 mA at 24 V
<b>Equipment:</b>	Eight self-sealing membranes for cable entry without tools Eight integrated M 20 threads, no nuts required Optional use of a cable gland, thread length of cable gland ≤ 9 mm (accessory)
<b>Assembly:</b>	Incl. snap-on fixing bracket (optional use, see page 136)

### ORDER SPECIFICATIONS:

Voltage	12 V <sup>==</sup>	24 V <sup>==</sup>	115-230 V <sup>~</sup>
red	<b>853 100 54</b>	<b>853 100 55</b>	<b>853 100 60</b>
green	<b>853 200 54</b>	<b>853 200 55</b>	<b>853 200 60</b>
yellow	<b>853 300 54</b>	<b>853 300 55</b>	<b>853 300 60</b>
clear	<b>853 400 54</b>	<b>853 400 55</b>	<b>853 400 60</b>
blue	<b>853 500 54</b>	<b>853 500 55</b>	<b>853 500 60</b>

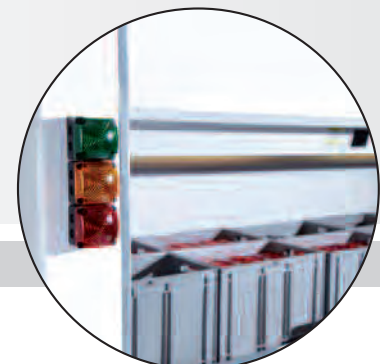
### ACCESSORIES:

Connector for traffic light combinations	<b>975 853 01</b>
Cable gland M 20 x 1.5 mm 8 mm thread length, required for protection rating IP 67.	<b>975 853 02</b>

### ADDITIONAL INFORMATION:

**Combinations made easy**  
The LED Beacon 853 can be easily turned into a traffic light combination. Simply attach different coloured beacons together using the connector.

The eight cable entries with both self-sealing membranes and integrated M 20 threads enable additional beacons to be attached to every side. There is no limit to the range of possible lighting designs that can be created.



### TECHNICAL DIAGRAMS:

see page 287

#### Sizes of Permanent Beacons



With cable gland

24 V







Base/Bracket Mounting



Tube Mounting



Accessories

- Tube mounting solution suitable for  $\varnothing$  25 mm and 1/2" NPT tubes
- Removal of the lens only possible with tools
- Simple mounting

### TECHNICAL SPECIFICATIONS:

<b>Dimensions</b> ( $\varnothing$ x Height):	98 mm x 137 mm (Base/Bracket mounting) 98 mm x 200 mm (Tube mounting)
<b>Cable entry:</b>	Cable diameter 5-7 mm
<b>Housing:</b>	PC/ABS-Blend
<b>Lens:</b>	PC, transparent
<b>Connection:</b>	Screw free clamp mechanism max. 1.5 mm <sup>2</sup> Contact protection according to VDE
<b>Operating voltage:</b>	Max. 250 V for B15d
<b>Bulb:</b>	Max. 15 W
<b>Duty cycle:</b>	100 % max. 15 W, 50 % max. 25 W
<b>Socket:</b>	B15d
Bulb not included in assembly.	

### ORDER SPECIFICATIONS:

Fixing	Base/Bracket mounting	Tube mounting
Voltage	12 – 240 V	12 – 240 V
red	<b>826 100 00</b>	<b>826 110 00</b>
green	<b>826 200 00</b>	<b>826 210 00</b>
yellow	<b>826 300 00</b>	<b>826 310 00</b>
clear	<b>826 400 00</b>	<b>826 410 00</b>
blue	<b>826 500 00</b>	<b>826 510 00</b>

### ACCESSORIES:

Plastic bracket for wall mounting	<b>975 826 05</b>	
Wire guard, galvanised, only for base mounting	<b>975 826 03</b>	
Tube $\varnothing$ 25 mm, all anodized aluminium, 100 mm long	<b>975 845 10</b>	
Base for tube, plastic	<b>975 840 90</b>	
Base for tube, metal	<b>975 840 91</b>	
Bulb BA15d, 15 W,	24 V	230 V
total length max. 45 mm	<b>955 826 35</b>	<b>955 826 38</b>

### TECHNICAL DIAGRAMS:

see page 283

#### Sizes of Permanent Beacons



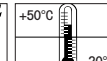
Base/Bracket  
mounting



Base/Bracket  
mounting



Tube  
mounting





# Monitored Permanent Beacon



Bracket (accessory)



Tube with base (accessory)

- Built-in monitoring capability
- TÜV approval
- No additional external voltage required
- Two potential-free safety outputs for connection to control system

### TECHNICAL SPECIFICATIONS:

Dimensions (Ø x Height):	98 mm x 137 mm
Housing:	PC/ABS-Blend
Lens:	PC, transparent
Fixing:	Base, bracket and tube mounting Base 975 840 90 must be ordered twice for base mounting – once as socket for beacon and once as base
Connection:	Screw terminal with wire protection max. 2.5 mm <sup>2</sup>
Cable entry:	Cable diameter 5-7 mm
Rated voltage:	24 V = ± 10 %
Input power 24 V = :	7 W
Bulb BA15d:	7 W/24 V
Output current capability:	30 V = / 100 mA
On state resistance of an output:	Max. 25 Ω
Fuse for 7 W bulb:	500 mA quick action (IEC 60127-3/3)
Atmospheric humidity:	≤ 95 % without moisture condensation
Response time, normal operation and with filament break:	1 ms to 5 ms
in fault cases with safety release:	< 300 ms (with short-circuit current ≥ 4 A)
Certification:	EN ISO 13849-1:2008 category 4 , Performance Level „e“ EN ISO 13849-2:2008 validation

Bulb included in assembly.

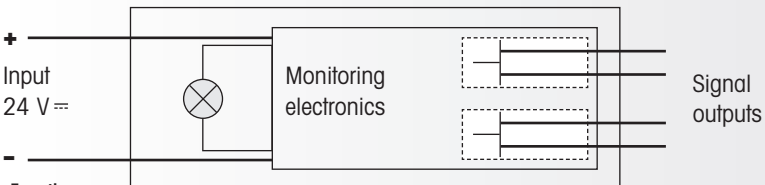
### ORDER SPECIFICATIONS:

Voltage	24 V =
red	826 110 55
yellow	826 310 55
clear	826 410 55

### ACCESSORIES:

Bulb BA15d, 7 W	955 015 35
-----------------	------------

### ADDITIONAL INFORMATION:



#### Function

The device is equipped with a lamp monitor which signals the current flow of the incandescent lamp back to two electrically isolated, potential-free semiconductor outputs A and B (outputs closed). If the lamp has not been actuated, both outputs are open. In case of a fault and/or a lamp failure at least one output is opened.

Depending on the safety category, one or two outputs are to be used for a reliable lamp evaluation. In case of an incandescent filament short-circuit in the lamp, the integrated fuse is tripped. It must be replaced by a new fuse in accordance with the specifications after the lamp has been replaced by a lamp of equal wattage.

### TECHNICAL DIAGRAMS:

see page 283

#### Sizes of Permanent Beacons





Base/Bracket mounting



Tube mounting



Accessories

#### Sizes of Permanent Beacons



- Multi-functional LED beacon
- Interchangeable light effects
- Shock-proof and vibration resistant
- Tube mounting solution suitable for  $\varnothing$  25 mm and 1/2" NPT tubes
- Life duration up to 50,000 hrs

#### TECHNICAL SPECIFICATIONS:

<b>Dimensions</b> ( $\varnothing$ x Height):	98 mm x 137 mm (Base/Bracket mounting) 98 mm x 200 mm (Tube mounting)
<b>Cable entry:</b>	Cable diameter 5-7 mm
<b>Housing:</b>	PC/ABS-Blend
<b>Lens:</b>	PC, transparent
<b>Connection:</b>	Screw terminal with wire protection 0.5 mm <sup>2</sup> - 2.5 mm <sup>2</sup>

Life duration  
up to 50,000 hrs

#### LED PERMANENT/BLINKING BEACON (INTERCHANGEABLE LIGHT EFFECT)

<b>Blink frequency:</b>	c. 1.5 Hz
<b>Operating voltage:</b>	24 V $\equiv$
<b>Current consumption:</b>	$\leq$ 150 mA

#### LED PERMANENT BEACON

<b>Operating voltage:</b>	115 V $\sim$	230 V $\sim$
<b>Current consumption:</b>	$\leq$ 30 mA	$\leq$ 30 mA

#### ORDER SPECIFICATIONS:

LED PERMANENT/BLINKING	Base/Bracket mounting	Tube mounting
Voltage	24 V $\equiv$	24 V $\equiv$
red	829 100 55	829 107 55
green	829 200 55	829 207 55
yellow	829 300 55	829 307 55
blue	829 500 55	829 507 55

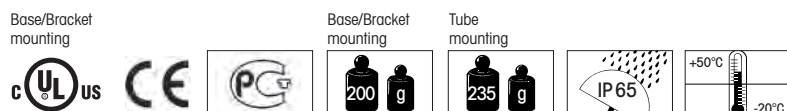
LED PERMANENT	Base/Bracket mounting		Tube mounting	
Voltage	115 V $\sim$	230 V $\sim$	115 V $\sim$	230 V $\sim$
red	829 130 67	829 130 68	829 137 67	829 137 68
green	829 230 67	829 230 68	829 237 67	829 237 68
yellow	829 330 67	829 330 68	829 337 67	829 337 68
blue	829 530 67	829 530 68	829 537 67	829 537 68

#### ACCESSORIES:

Plastic bracket for wall mounting	975 826 05
Wire guard, galvanised, only for base mounting	975 826 03
Tube $\varnothing$ 25 mm, all anodized aluminium, 100 mm long	975 845 10
Base for tube, plastic	975 840 90
Base for tube, metal	975 840 91

#### TECHNICAL DIAGRAMS:

see page 283



# LED Permanent/Blinking/Rotating Beacon with external triggering



Base/Bracket mounting



Bracket (accessories)



Three different light effects with one device

Sizes of Permanent Beacons



- Multi-functional LED beacon
- 3 light effects can be remotely selected
- Electrically isolated signal inputs
- Positive and negative logic possible
- Tube mounting solution suitable for Ø 25 mm and 1/2" NPT tubes

**i** TECHNICAL SPECIFICATIONS:

Dimensions (Ø x Height):	98 mm x 137 mm (Base/Bracket mounting)	Life duration up to 50,000 hrs
	98 mm x 200 mm (Tube mounting)	
Cable entry:	Cable diameter 5-7 mm	
Housing:	PC/ABS-Blend	
Lens:	PC, transparent	
Connection:	Screw terminal with wire protection 0.5 mm <sup>2</sup> - 2.5 mm <sup>2</sup>	
Blink frequency:	c. 1.5 Hz	
Rotation frequency:	c. 180 r.p.m.	

**🛒** ORDER SPECIFICATIONS:

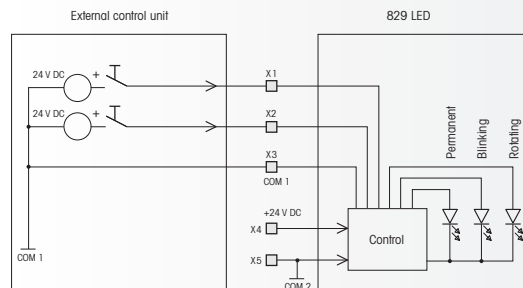
	Base/Bracket mounting	Tube mounting
Fixing		
Voltage	24 V =	24 V =
Current consumption	≤ 300 mA	≤ 300 mA
red	<b>829 150 55</b>	<b>829 157 55</b>
green	<b>829 250 55</b>	<b>829 257 55</b>
yellow	<b>829 350 55</b>	<b>829 357 55</b>
blue	<b>829 550 55</b>	<b>829 557 55</b>

**🏠** ACCESSORIES:

Plastic bracket for wall mounting	<b>975 826 05</b>
Wire guard, galvanised, only for base mounting	<b>975 826 03</b>
Tube Ø 25 mm, all anodized aluminium, 100 mm long	<b>975 845 10</b>
Base for tube, plastic	<b>975 840 90</b>
Base for tube, metal	<b>975 840 91</b>

**⚠️** ADDITIONAL INFORMATION:

829 with external triggering – Light effects set via control cables



Thanks to the external trigger function, the range of light effects offered by the LED Beacon 829 can be set by means of electrically isolated, binary coded 24 V control cables. This guarantees a much greater level of resistance to electrical interference. The machine operator can use the different signals to indicate various machine conditions – without having to make adjustments to the beacon itself. In addition the LED beacon 829 can be used in conjunction with both positive and negative trigger logic.

**📏** TECHNICAL DIAGRAMS:

see page 283

Base/Bracket mounting      Base/Bracket mounting      Tube mounting





Monitored Permanent Beacon with long life, maintenance-free LED technology



Bracket (accessory)

- Durable LED Permanent Beacon with built-in monitoring capability
- Life duration up to 50,000 hrs
- No additional external voltage required
- Two potential-free safety outputs for connection to control system

Life duration up to 50,000 hrs

**i TECHNICAL SPECIFICATIONS:**

<b>Dimensions (Diameter x Height):</b>	98 mm x 137 mm
<b>Housing:</b>	PC/ABS-Blend
<b>Lens:</b>	PC, transparent
<b>Fixing:</b>	Base, bracket and tube mounting Base 975 840 90 must be ordered twice for base mounting – once as socket for beacon and once as base
<b>Installation position:</b>	Vertical
<b>Cable outlet:</b>	Downward
<b>Current consumption:</b>	≤ 145 mA
<b>Duty cycle:</b>	100 %
<b>Connection:</b>	Screw terminal with wire protection max. 2.5 mm <sup>2</sup>
<b>Cable entry:</b>	Cable diameter 5-7 mm
<b>Rated voltage:</b>	24 V <sub>DC</sub>
<b>Input power 24 V<sub>DC</sub> :</b>	c. 3.5 W
<b>Output current capability:</b>	30 V <sub>DC</sub> / 100 mA
<b>On state resistance of an output:</b>	Max. 25 Ω
<b>Atmospheric humidity:</b>	≤ 95 % without moisture condensation
<b>Response time, normal operation and with LED failure:</b>	1 ms to 5 ms
<b>in fault cases with safety release:</b>	< 1 s (with short-circuit current ≥ 1 A)
<b>Certification:</b>	EN ISO 13849-1:2008 category 4 , Performance Level "e" EN ISO 13849-2:2008 validation

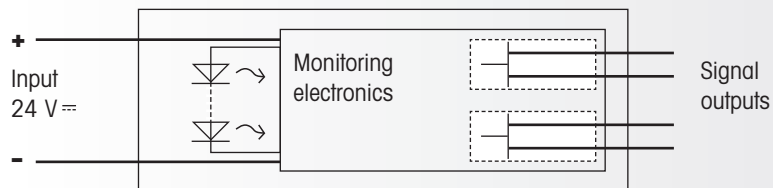
**ORDER SPECIFICATIONS:**

Voltage	24 V <sub>DC</sub>
red	<b>829 170 55</b>
yellow	<b>829 370 55</b>
clear	<b>829 470 55</b>

**ACCESSORIES:**

Bracket	<b>975 826 05</b>
---------	-------------------

**ADDITIONAL INFORMATION:**



**Function**

The device is equipped with monitoring electronics which signal the current flow of the beacon back to two electrically isolated, potential-free semiconductor outputs A and B (outputs closed).

If the beacon has not been actuated, both outputs are open. In case of a fault at least one output is opened.

**Sizes of Permanent Beacons**



**TECHNICAL DIAGRAMS:**

see page 283





- Large signal beacons for powerful signal effectiveness
- With a multitude of symbols
- High light intensity thanks to optimised lens

#### **i** TECHNICAL SPECIFICATIONS:

<b>Dimensions</b> (Ø x Height):	150 mm x 148 mm
<b>Housing:</b>	PC/ABS-Blend, grey
<b>Lens:</b>	PC, transparent
<b>Socket:</b>	E27 max. 25 W 2 sockets E14 each with max. 15 W with adhesive stickers E27 max. 15 W
<b>Fixing:</b>	Base mounting
<b>Cable entry:</b>	From top or bottom with cable gland M 20 x 1.5 mm or from the back with rubber grommet Ø 6-12 mm
<b>Connection:</b>	Screw-free clamp mechanism max. 1.5 mm <sup>2</sup>

#### **🛒** ORDER SPECIFICATIONS:

Voltage	12 – 240 V ≈
red	<b>895 100 00</b>
green	<b>895 200 00</b>
yellow	<b>895 300 00</b>
clear	<b>895 400 00</b>
blue	<b>895 500 00</b>

Bulb not included in assembly.

#### **PERMANENT LIGHT WITH TWO SOCKETS (incl. reflector)**

Voltage	12 – 240 V ≈
red	<b>895 110 00</b>

#### **🏠** ACCESSORIES:

Fixing bracket, additional reflector, Bulbs and LED Bulbs, Adhesive Stickers see Permanent/Traffic Light Beacon (page 161).

#### **📐** TECHNICAL DIAGRAMS:

see page 291



**NEW**

**Audible addition:**  
The Multi-Tone Sounder 190  
with 110 dB (see page 228)





839

# LED Permanent Beacon



- Robust aluminium housing including wire guard
- Salt water resistant
- DC multi-voltage version
- Life duration up to 50,000 hrs
- NEW** • High Protection rating IP 67

**Life duration up to 50,000 hrs**

## TECHNICAL SPECIFICATIONS:

Dimensions (Ø x Height):	153 mm x 189 mm
Housing:	Black laquered aluminium with integral wire guard
Lens:	PC, transparent
Fixing:	Base mounting
Connection:	Screw terminal with wire protection max. 2.5 mm <sup>2</sup>
Cable entry:	Cable gland M 20 x 1.5 mm (included in assembly) Cable diameter 6-13 mm
Installation position:	As required

## ORDER SPECIFICATIONS:

Voltage	12-50 V =	230 V ~
Current consumption	500 - 100 mA	50 mA
red	<b>839 100 55</b>	<b>839 100 68</b>
yellow	<b>839 300 55</b>	<b>839 300 68</b>

## TECHNICAL DIAGRAMS:

see page 284



**NEW**

Also suitable for use in rough conditions

### Sizes of Permanent Beacons





- Extremely high light intensity
- Life duration up to 50,000 hrs
- High impact resistance to 20 Joules
- DC multi-voltage version

**NEW**

Life duration up to 50,000 hrs

### TECHNICAL SPECIFICATIONS:

Dimensions (Ø x Height):	142 mm x 218 mm
Housing:	PC/ABS-Blend
Lens:	PC, transparent
Fixing:	Base mounting, bracket mounting (accessory), tube mounting (accessory)
Connection:	Screw terminal with wire protection max. 2.5 mm <sup>2</sup> Contact protection according to VDE
Cable entry:	Cable diameter 5-7 mm
Duty cycle:	100 %

### ORDER SPECIFICATIONS:

Voltage	12-50 V==	230 V~
Current consumption	12 V: 500 mA	50 mA
	50 V: 100 mA	
red	<b>280 100 55</b>	<b>280 100 68</b>
yellow	<b>280 300 55</b>	<b>280 300 68</b>

### ACCESSORIES:

Plastic bracket for wall mounting	<b>975 883 06</b>
Adaptor for tube mounting	<b>975 883 09</b>
Wire guard, only for base mounting	<b>975 883 08</b>

### TECHNICAL DIAGRAMS:

see page 271



Plastic bracket (accessory)



Plastic bracket, adaptor for tube mounting and wire guard (accessories)



Extremely high light output using unique LED technology

### Sizes of Permanent Beacons





# Obstruction Light



## Why do obstacles need to be illuminated?

The law stipulates that buildings of a specific height and in the vicinity of airports as well as factory chimneys, towers, masts etc. must be equipped with obstruction lights.

This special lighting makes obstacles visible for pilots in the dark or when visibility is poor. Obstruction lighting is one of the most important aspects of flight safety.



## What directives and regulations are there?

The method of marking obstacles to air traffic is laid down by diverse laws, regulations and recommendations. These regulations have a clearly defined sphere of influence and are **internationally interlinked**.

The International Civil Aviation Organisation (**ICAO**) is a special organisation within the United Nations created to establish and develop universal regulations for safety, continuity and economic efficiency in international air traffic. The recommendations of the ICAO are not directly binding in the member states, but must be transformed by them into the appropriate **national legal regulations**.

In **Germany** the Ministry for Transport and Construction Development (**BMVBS**) issues the regulations covering obstruction lighting on buildings. The **ICAO** regulations regarding the methods of marking and lighting aviation obstacles can be found in ICAO Annex 14.



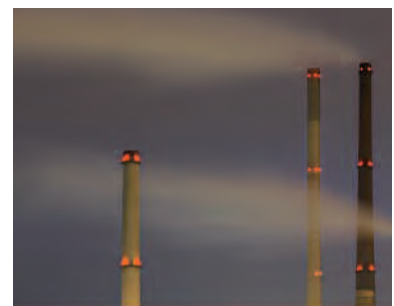
## Where are obstacle lights deployed?



- **Germany:** Marking of aviation obstacles by night at any height providing the highest point of the obstacle can be marked.



- **According to ICAO:** Marking of aviation obstacles by night up to 45 m ("Low-intensity Obstacle Light, Type A").





**NEW** The new adaptor (accessory) allows quick and simple mounting on a tube



**NEW** Plastic bracket, adaptor for tube mounting and wire guard (accessories)

#### Sizes of Permanent Beacons



- LED obstruction light certified in accordance with German BMVBS regulations
- For use as "Low-intensity Obstruction Light, Type A" in accordance with ICAO Annex 14
- Lightweight solution ensures easy installation
- High impact resistance to 20 Joules
- DC multi-voltage version

#### TECHNICAL SPECIFICATIONS:

Dimensions (Ø x Height):	142 mm x 218 mm	
Housing:	PC/ABS-Blend	
Lens:	PC, transparent, clear	
Fixing:	Base mounting, bracket mounting (accessory), tube mounting (accessory)	
Connection:	Screw terminal with wire protection max. 2.5 mm <sup>2</sup> Contact protection according to VDE	
Cable entry:	Cable diameter 5-7 mm	
Duty cycle:	100 %	

**Life duration up to 50,000 hrs**

#### ORDER SPECIFICATIONS:

Voltage	12-50 V =	230 V ~
Current consumption	500-100 mA	50 mA
aviation red	<b>280 410 55</b>	<b>280 410 68</b>

#### ACCESSORIES:

Plastic bracket for wall mounting	<b>975 883 06</b>
<b>NEW</b> Adaptor for tube mounting	<b>975 883 09</b>
Wire guard, only for base mounting	<b>975 883 08</b>

#### ADDITIONAL INFORMATION:

##### What benefits do you have?

- 1. Greater safety**
  - The high light intensity ensures obstacles are clearly marked.
  - Thanks to a life duration of up to 50,000 hours, the risk of a beacon failure is minimal.
- 2. Reduction in maintenance costs**
  - The LED technology guarantees a life duration of up to 50,000 hours. As a result, the LED Obstruction Light from WERMA is maintenance-free – and will require no attention for almost 6 years.
  - No need to change light bulbs.
  - Thanks to the LED technology, a reserve beacon and monitoring of the light is, as a rule, no longer necessary.



Extremely high light output using unique LED technology

#### TECHNICAL DIAGRAMS:

see page 259





Long-life and maintenance-free  
LED technology

- LED Obstruction Light with robust glass/metal housing
- Suitable for use in rough conditions, salt water resistant
- DC multi-voltage version (12-50 V)
- LED Obstruction Light certified in accordance with German BMVBS regulations
- For international use as „Low-intensity Obstacle Light, Type A“ in accordance with ICAO Annex 14

#### TECHNICAL SPECIFICATIONS:

<b>Dimensions</b> (Ø x Height):	185 mm x 205 mm	
<b>Housing:</b>	Aluminium, coloured powder coating	
<b>Lens:</b>	Reinforced borosilicate glass	
<b>Fixing:</b>	Base mounting, tube mounting M 25 (no accessory required)	
<b>Connection:</b>	Screw terminal with wire protection max. 2.5 mm <sup>2</sup> Contact protection according to VDE	
<b>Cable entry:</b>	Cable gland M 25 x 1.5 mm (included in assembly), Cable diameter 9-17 mm	

Life duration  
up to 50,000 hrs

Available: 1st quarter 2011



#### ORDER SPECIFICATIONS:

Voltage	12-50 V =	230 V ~
Current consumption	500-100 mA	50 mA
Aviation red	<b>281 410 55</b>	<b>281 410 68</b>



#### ADDITIONAL INFORMATION:

##### Salt water and fuel resistant

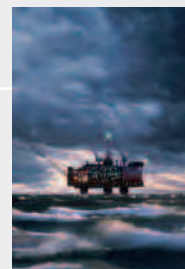
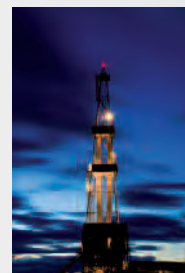
The new WERMA obstruction light is especially robust. It provides reliable signalling for all air traffic hazards – even in extreme conditions.

To protect the obstruction light against sea salt, UV radiation or aviation fuel, WERMA has selected a particularly robust material – the aluminium die-cast housing is made of a high-quality salt water resistant alloy which is covered with a powder coating.

The glass lens is made of hardened borosilicate glass. This ensures that the signalling device does not weather even in the toughest conditions.

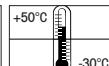
##### Once installed, the signalling device lasts many years

Thanks to the LED technology, WERMA's obstruction light is maintenance-free. With a life duration of up to 50,000 hours the LEDs last up to 50 times longer than conventional light bulbs. This fact embodies one of the biggest advantages of LED obstruction lights, as it does away with the cumbersome job of replacing light bulbs at great heights.



#### TECHNICAL DIAGRAMS:

see page 271





Flashing Beacon 202  
(Base mounting)



Flashing Beacon 205 with  
integrated mounting bracket



Housing with  
CAGE CLAMP®-Connection

- Safe CAGE CLAMP® technology
- Optimum illumination
- Available for base or bracket mounting
- Connection without the need to disassemble the product

### **i** TECHNICAL SPECIFICATIONS:

<b>Housing:</b>	PA-GF, high impact
<b>Lens:</b>	PC, transparent; Ring: PC
<b>Connection:</b>	CAGE CLAMP® technology max. 2.5 mm <sup>2</sup> Contact protection according to VDE
<b>Cable entry:</b>	Cable diameter max. 10 mm (202) Cable diameter 3-6 mm (205)

FLASHING BEACON	202	205
<b>Fixing:</b>	Base mounting with flat seal	Bracket mounting cable gland M 12 x 1.5 mm
<b>Dimensions (Ø x Height):</b>	58 mm x 81 mm	58 mm x 107 mm
<b>Flash frequency:</b>	c. 0.75 Hz	c. 0.75 Hz
<b>Flash energy:</b>	1 Ws	1 Ws
<b>Life duration:</b>	4 x 10 <sup>6</sup> flashes	4 x 10 <sup>6</sup> flashes

### **🛒** ORDER SPECIFICATIONS:

Base mounting 202			
Voltage	24 V <sup>==</sup>	115 V <sup>~</sup>	230 V <sup>~</sup>
Current consumption	100 mA	20 mA	30 mA
red	<b>202 100 55</b>	<b>202 100 67</b>	<b>202 100 68</b>
yellow	<b>202 300 55</b>	<b>202 300 67</b>	<b>202 300 68</b>

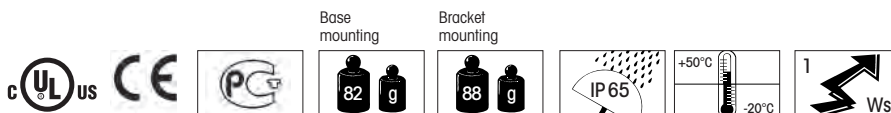
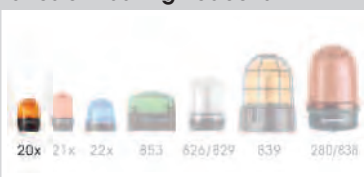
Bracket mounting 205			
Voltage	24 V <sup>==</sup>	115 V <sup>~</sup>	230 V <sup>~</sup>
Current consumption	100 mA	20 mA	30 mA
red	<b>205 100 55</b>	<b>205 100 67</b>	<b>205 100 68</b>
yellow	<b>205 300 55</b>	<b>205 300 67</b>	<b>205 300 68</b>

Further colours and voltages on request.

### **📐** TECHNICAL DIAGRAMS:

see page 269

#### Sizes of Flashing Beacons





Base with integrated tube  
(accessory)

- Safe CAGE CLAMP® technology
- Optimum illumination
- Tube mounting
- Single hole mounting possible with cable gland

#### TECHNICAL SPECIFICATIONS:

Dimensions (Ø x Height):	58 mm x 103 mm
Housing:	PA-GF, high impact
Lens:	PC, transparent
	Ring: PC
Connection:	CAGE CLAMP® technology max. 2.5 mm <sup>2</sup> Contact protection according to VDE
Cable entry:	Cable diameter max. 11 mm
Fixing:	Tube mounting M 25 x 1.5 mm
Flash frequency:	c. 0.75 Hz
Flash energy:	1 Ws
Life duration:	4 x 10 <sup>6</sup> flashes

#### ORDER SPECIFICATIONS:

Voltage	24 V=	115 V~	230 V~
Current consumption	100 mA	20 mA	30 mA
red	<b>209 120 55</b>	<b>209 120 67</b>	<b>209 120 68</b>
yellow	<b>209 320 55</b>	<b>209 320 67</b>	<b>209 320 68</b>

#### ACCESSORIES:

Base with integrated tube, M 25 x 1.5 mm	<b>975 209 01</b>
Cable gland M 25 x 1.5 mm	<b>975 209 02</b>

#### TECHNICAL DIAGRAMS:

see page 269

#### Sizes of Flashing Beacons





Flashing Beacon 212  
(Base mounting)



Flashing Beacon 215 with  
integrated mounting bracket

- Safe CAGE CLAMP® technology
- Optimum illumination
- Available for base or bracket mounting
- Connection without the need to disassemble the product

### TECHNICAL SPECIFICATIONS:

<b>Housing:</b>	PA-GF, high impact
<b>Lens:</b>	PC, transparent; Ring: PC
<b>Connection:</b>	CAGE CLAMP® technology max. 2.5 mm <sup>2</sup> Contact protection according to VDE
<b>Cable entry:</b>	Cable diameter max. 10 mm (212) Cable diameter 3-6 mm (215)

FLASHING BEACON	212	215
<b>Fixing:</b>	Base mounting with flat seal	Bracket mounting cable gland M 12 x 1.5 mm
<b>Dimensions (Ø x Height):</b>	58 mm x 97 mm	58 mm x 123 mm
<b>Flash frequency:</b>	c. 0.75 Hz	c. 0.75 Hz
<b>Flash energy:</b>	1 Ws	1 Ws
<b>Life duration:</b>	4 x 10 <sup>6</sup> flashes	4 x 10 <sup>6</sup> flashes

### ORDER SPECIFICATIONS:

Base mounting 212			
Voltage	24 V =	115 V ~	230 V ~
Current consumption	100 mA	20 mA	30 mA
red	<b>212 100 55</b>	<b>212 100 67</b>	<b>212 100 68</b>
yellow	<b>212 300 55</b>	<b>212 300 67</b>	<b>212 300 68</b>

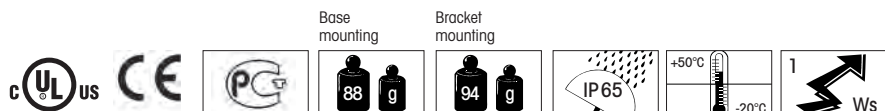
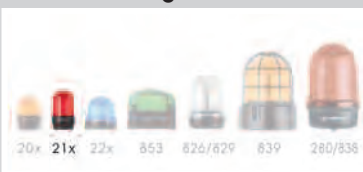
Bracket mounting 215			
Voltage	24 V =	115 V ~	230 V ~
Current consumption	100 mA	20 mA	30 mA
red	<b>215 100 55</b>	<b>215 100 67</b>	<b>215 100 68</b>
yellow	<b>215 300 55</b>	<b>215 300 67</b>	<b>215 300 68</b>

Further colours and voltages on request.

### TECHNICAL DIAGRAMS:

see page 270

#### Sizes of Flashing Beacons





Base with tube (accessory)



- Safe CAGE CLAMP® technology
- Optimum illumination
- Tube mounting
- Single hole mounting possible with cable gland

### TECHNICAL SPECIFICATIONS:

<b>Dimensions</b> (Ø x Height):	58 mm x 119 mm
<b>Housing:</b>	PA-GF, high impact
<b>Lens:</b>	PC, transparent
	Ring: PC
<b>Connection:</b>	CAGE CLAMP® technology max. 2.5 mm <sup>2</sup> Contact protection according to VDE
<b>Cable entry:</b>	Cable diameter max. 11 mm
<b>Fixing:</b>	Tube mounting M 25 x 1.5 mm
<b>Flash frequency:</b>	c. 0.75 Hz
<b>Flash energy:</b>	1 Ws
<b>Life duration:</b>	4 x 10 <sup>6</sup> flashes

### ORDER SPECIFICATIONS:

Voltage	24 V =	115 V ~	230 V ~
Current consumption	100 mA	20 mA	30 mA
red	<b>219 120 55</b>	<b>219 120 67</b>	<b>219 120 68</b>
yellow	<b>219 320 55</b>	<b>219 320 67</b>	<b>219 320 68</b>

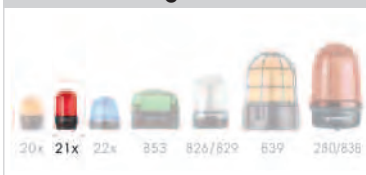
### ACCESSORIES:

Base with integrated tube, M 25 x 1.5 mm	<b>975 209 01</b>
Cable gland M 25 x 1.5 mm	<b>975 209 02</b>

### TECHNICAL DIAGRAMS:

see page 270

#### Sizes of Flashing Beacons





Flashing Beacon 222  
(base mounting)



Flashing Beacon 225 with  
integrated mounting bracket

- Safe CAGE CLAMP® technology
- Optimum illumination
- Available for base or bracket mounting
- Connection without the need to disassemble the product

### **i** TECHNICAL SPECIFICATIONS:

<b>Housing:</b>	PA-GF, high impact
<b>Lens:</b>	PC, transparent; Ring: PC/ABS-Blend
<b>Connection:</b>	CAGE CLAMP® technology max. 2.5 mm <sup>2</sup> Contact protection according to VDE
<b>Cable entry:</b>	Cable diameter max. 10 mm (222) Cable diameter 3-6 mm (225)

FLASHING BEACON	222	225
<b>Fixing:</b>	Base mounting with flat seal	Bracket mounting cable gland M 12 x 1.5 mm
<b>Dimensions (Ø x Height):</b>	75 mm x 79 mm	75 mm x 105 mm
<b>Flash frequency:</b>	c. 0.75 Hz	c. 0.75 Hz
<b>Flash energy:</b>	1 Ws	1 Ws
<b>Life duration:</b>	4 x 10 <sup>6</sup> flashes	4 x 10 <sup>6</sup> flashes

### **🛒** ORDER SPECIFICATIONS:

Base mounting 222			
Voltage	24 V <sup>==</sup>	115 V <sup>~</sup>	230 V <sup>~</sup>
Current consumption	100 mA	20 mA	30 mA
red	<b>222 100 55</b>	<b>222 100 67</b>	<b>222 100 68</b>
yellow	<b>222 300 55</b>	<b>222 300 67</b>	<b>222 300 68</b>

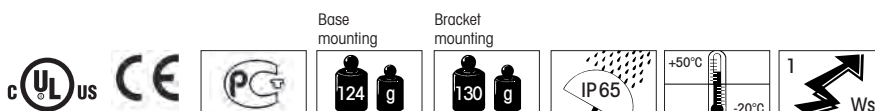
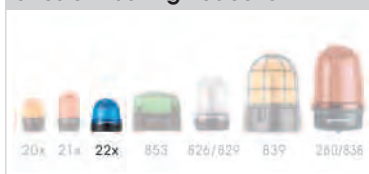
Bracket mounting 225			
Voltage	24 V <sup>==</sup>	115 V <sup>~</sup>	230 V <sup>~</sup>
Current consumption	100 mA	20 mA	30 mA
red	<b>225 100 55</b>	<b>225 100 67</b>	<b>225 100 68</b>
yellow	<b>225 300 55</b>	<b>225 300 67</b>	<b>225 300 68</b>
blue	<b>225 500 55</b>	<b>225 500 67</b>	<b>225 500 68</b>

Further colours and voltages on request.

### **📏** TECHNICAL DIAGRAMS:

see page 270

#### Sizes of Flashing Beacons





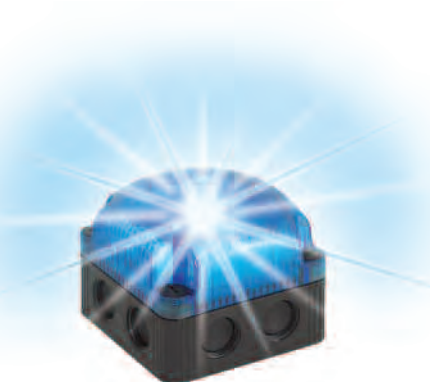


- LED Double Flash Beacon in attractive quadratic form
- Intense double flash with low power consumption
- Innovative connector to create traffic light combinations
- Easy assembly due to quick-release screws
- Thread/membrane combination keeps cabling requirements to a minimum

Life duration up to 50,000 hrs

**i TECHNICAL SPECIFICATIONS:**

<b>Dimensions (L x H x W):</b>	85 mm x 85 mm x 72 mm
<b>Housing:</b>	PP-GF, black
<b>Lens:</b>	PC, transparent
<b>Connection:</b>	Screw terminal with wire protection, max. 1.5 mm <sup>2</sup>
<b>Fixing:</b>	Wall, base and ceiling mounting
<b>Current consumption:</b>	Max. 80 mA at 24 V
<b>Equipment:</b>	Eight self-sealing membranes for cable entry without tools Eight integrated M 20 threads, no nuts required Optional use of a cable gland, thread length of cable gland ≤ 9 mm (accessory)
<b>Assembly:</b>	Incl. snap-on fixing bracket (optional use)



Intense double flash effect with low power consumption

**ORDER SPECIFICATIONS:**

Voltage	12 V <sup>DC</sup>	24 V <sup>DC</sup>	115-230 V <sup>AC</sup>
red	853 110 54	853 110 55	853 110 60
green	853 210 54	853 210 55	853 210 60
yellow	853 310 54	853 310 55	853 310 60
clear	853 410 54	853 410 55	853 410 60
blue	853 510 54	853 510 55	853 510 60

**ACCESSORIES:**

Connector for traffic light combinations (For further information see page 119)	975 853 01
Cable gland M 20 x 1.5 mm 8 mm thread length, required for protection rating IP 67	975 853 02

**ADDITIONAL INFORMATION:**

**Save time installing the product**  
To fix the 853 beacon to the wall four holes have to be drilled. To speed things up the snap-on fixing bracket delivered with the beacon offers a time-saving alternative: simply drill two holes to attach the fixing bracket to the wall and snap the beacon onto it.

The cable can be fed through one of the eight self-sealing membranes without any tools saving 30% of the usual installation time. Once the cable has been connected to the terminals, the lens can be clipped onto the base and secured using the four captive quick-release screws.

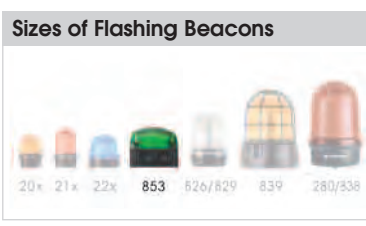


Easy assembly due to quick-release screws

**TECHNICAL DIAGRAMS:**

see page 287

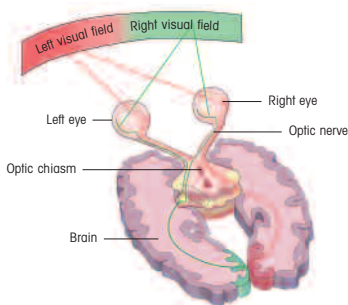
CE    130 g    IP66    IP67    +50°C / -25°C    PLC



**NEW**



The innovative connector (accessory) enables traffic light combinations to be created in a matter of seconds



The way in which the brain processes visual stimuli formed the basis for the development of the EVS technology

**Sizes of Flashing Beacons**



- LED EVS Beacon in attractive quadratic form
- Attention-grabbing flickering light
- Extremely powerful signal effect
- Innovative connector to create traffic light combinations
- Easy assembly due to quick-release screws
- Thread/membrane combination keeps cabling requirements to a minimum

Life duration up to 50,000 hrs

**i TECHNICAL SPECIFICATIONS:**

<b>Dimensions (L x H x W):</b>	85 mm x 85 mm x 72 mm
<b>Housing:</b>	PP-GF, black
<b>Lens:</b>	PC, transparent
<b>Connection:</b>	Screw terminal with wire protection, max. 1.5 mm <sup>2</sup>
<b>Cable entry:</b>	Cable diameter max. 8 mm, optional Cable gland M 20 (accessory)
<b>Fixing:</b>	Wall, base and ceiling mounting
<b>Current consumption:</b>	Max. 200 mA at 24 V
<b>Equipment:</b>	Eight self-sealing membranes for cable entry without tools Eight integrated M 20 threads, no nuts required Optional use of a cable gland, thread length of cable gland ≤ 9 mm (accessory)
<b>Assembly:</b>	Incl. snap-on fixing bracket (optional use, see page 136)

**🛒 ORDER SPECIFICATIONS:**

Voltage	12 V=	24 V=	115-230 V~
red	853 120 54	853 120 55	853 120 60
green	853 220 54	853 220 55	853 220 60
yellow	853 320 54	853 320 55	853 320 60
clear	853 420 54	853 420 55	853 420 60
blue	853 520 54	853 520 55	853 520 60

Available: 1st Quarter 2011.

**🏠 ACCESSORIES:**

Connector for traffic light combinations (For further information see page 119)	975 853 01
Cable gland M 20 x 1.5 mm 8 mm thread length, required for protection rating IP 67	975 853 02

**⚠️ ADDITIONAL INFORMATION:**

\* EVS = Enhanced Visibility System or Enhanced Visibility System. Further information can be found in the chapter "Tech-Talk" beginning on page 326.

**📏 TECHNICAL DIAGRAMS:**

see page 287



The "EVS" light signal ensures a maximum attention-grabbing effect

With cable gland 24 V





- Large signal beacons for powerful signal effectiveness
- High light intensity thanks to optimised lens
- With a multitude of symbols

#### TECHNICAL SPECIFICATIONS:

<b>Dimensions</b> (Ø x Height):	150 mm x 148 mm	
<b>Housing:</b>	PC/ABS-Blend, grey	
<b>Lens:</b>	PC, transparent	
<b>Socket:</b>	E27 max. 25 W 2 sockets E14 each with max. 15 W with adhesive stickers E27 max. 15 W	
<b>Fixing:</b>	Base mounting	
<b>Cable entry:</b>	From top or bottom with cable gland M 20 x 1.5 mm or from the back with rubber grommet Ø 6-12 mm	
<b>Connection:</b>	Screw terminal, max. 2.5 mm <sup>2</sup>	
<b>Flash frequency:</b>	1 Hz	
<b>Flash energy:</b>	15 Ws	
<b>Life duration:</b>	4 x 10 <sup>8</sup> flashes	

#### ORDER SPECIFICATIONS:

Voltage	24 V <sup>—</sup>	230 V <sup>~</sup>
Current consumption	800 mA	200 mA
red	<b>897 100 55</b>	<b>897 100 68</b>
yellow	<b>897 300 55</b>	<b>897 300 68</b>

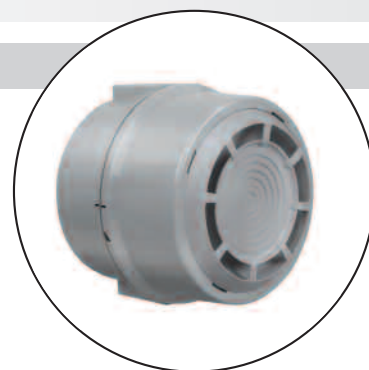
Further colours and voltages on request.

#### ACCESSORIES:

Fixing bracket, additional reflector, bulbs and LED bulbs, adhesive stickers see Permanent/Traffic Light Beacon 890 (page 161).

#### TECHNICAL DIAGRAMS:

see page 291



**NEW** Audible addition:  
The Multi-Tone Sounder 190  
with 110 dB (see page 228)

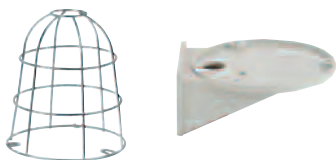




Base mounting 830



Wall mounting 835



Wire guard and Bracket (accessories)

- High flash power

### **i** TECHNICAL SPECIFICATIONS:

<b>Dimensions</b> (Ø x Height):	108 mm x 133 mm (830) 108 mm x 172 mm (835)
<b>Housing:</b>	ABS
<b>Lens:</b>	PC, transparent
<b>Fixing:</b>	830: Base mounting 835: Bracket mounting (included in assembly)
<b>Connection:</b>	Screw terminal with wire protection max. 2.5 mm <sup>2</sup>
<b>Cable entry:</b>	Rubber squeeze grommet Ø 5-7 mm
<b>Flash frequency:</b>	c. 1 Hz
<b>Life duration:</b>	4 x 10 <sup>6</sup> flashes

### **🛒** ORDER SPECIFICATIONS:

#### Base mounting 830

Voltage	24 V =	230 V ~
Current consumption	250 mA	140 mA
red	<b>830 152 55</b>	<b>830 152 68</b>
yellow	<b>830 352 55</b>	<b>830 352 68</b>

#### Bracket mounting 835

Voltage	24 V =	230 V ~
Current consumption	250 mA	140 mA
red	<b>835 152 55</b>	<b>835 152 68</b>
yellow	<b>835 352 55</b>	<b>835 352 68</b>

Further colours and voltages on request.

### SPECIAL VERSIONS:

- For PLC control systems with reduced starting current
- Green/clear lens for maritime use as specified by the Marine Liability Insurance Association

### **🏠** ACCESSORIES:

Wire guard for base and bracket mounting	<b>975 830 00</b>
Bracket for wall mounting for 830	<b>975 835 01</b>

### **⚠️** ADDITIONAL INFORMATION:

Please also see Flashing Beacon 828 and LED Flashing Beacon 829 with additional advantages (see page 141 and 142)

- High protection rating IP 65
- Simple mounting
- Shock-proof and vibration resistant (LED Flashing Beacon)
- Life duration up to 50,000 hrs (LED Flashing Beacon)



### **📏** TECHNICAL DIAGRAMS:

see page 284





Base/Bracket Mounting



Bracket (accessory)



Accessories

- Tube mounting solution suitable for  $\varnothing$  25 mm and 1/2" NPT tubes
- Simple mounting
- Removal of the lens only possible with tools

### TECHNICAL SPECIFICATIONS:

<b>Dimensions</b> ( $\varnothing$ x Height):	98 mm x 137 mm (Base/Bracket mounting) 98 mm x 200 mm (Tube mounting)		
<b>Cable entry:</b>	Cable diameter 5-7 mm		
<b>Housing:</b>	PC/ABS-Blend		
<b>Lens:</b>	PC, transparent		
<b>Connection:</b>	Screw terminal with wire protection 0.5-2.5 mm <sup>2</sup> Contact protection according to VDE		
<b>Bulb:</b>	Max. 25 W		
<b>Blinking frequency:</b>	1.5 Hz		
<b>Starting current:</b>	24 V $\approx$	115 V $\approx$	230 V $\approx$
	3 A	0,6 A	0,35 A
<b>Socket:</b>	B15d		
Bulb included in assembly.			

### ORDER SPECIFICATIONS:

<b>Base/Bracket mounting</b>			
Voltage	24 V $\approx$	115 V $\approx$	230 V $\approx$
red	<b>827 100 75</b>	<b>827 100 77</b>	<b>827 100 78</b>
yellow	<b>827 300 75</b>	<b>827 300 77</b>	<b>827 300 78</b>
<b>Tube mounting</b>			
Voltage	24 V $\approx$	115 V $\approx$	230 V $\approx$
red	<b>827 110 75</b>	<b>827 110 77</b>	<b>827 110 78</b>
yellow	<b>827 310 75</b>	<b>827 310 77</b>	<b>827 310 78</b>

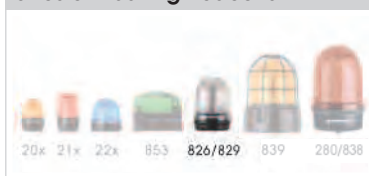
### ACCESSORIES:

Plastic bracket for wall mounting	<b>975 826 05</b>
Wire guard, galvanised, only for base mounting	<b>975 826 03</b>
Tube $\varnothing$ 25 mm, all anodized aluminium, 100 mm long	<b>975 845 10</b>
Base for tube, plastic	<b>975 840 90</b>
Base for tube, metal	<b>975 840 91</b>
Bulb BA15d, 25 W, total length max. 55 mm	
Voltage	24 V $\approx$ 115 V $\approx$ 230 V $\approx$
	<b>955 827 35</b> <b>955 827 37</b> <b>955 827 38</b>

### TECHNICAL DIAGRAMS:

see page 283

#### Sizes of Flashing Beacons



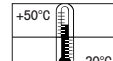
Base/Bracket mounting



Base/Bracket mounting



Tube mounting





- Tube mounting solution suitable for Ø 25 mm and 1/2" NPT tubes
- Simple mounting
- Removal of the lens only possible with tools
- Also available with 2 frequencies

**i TECHNICAL SPECIFICATIONS:**

<b>Dimensions (Ø x Height):</b>	98 mm x 137 mm (Base/Bracket mounting) 98 mm x 200 mm (Tube mounting)
<b>Cable entry:</b>	Cable diameter 5-7 mm
<b>Housing:</b>	PC/ABS-Blend
<b>Lens:</b>	PC, transparent

**FLASHING BEACON 828**

<b>Connection:</b>	Screw terminal with wire protection 0.5-2.5 mm <sup>2</sup> Contact protection according to VDE
<b>Flash frequency:</b>	c. 1 Hz
<b>Life duration:</b>	4 x 10 <sup>6</sup> flashes
12 V: Safety contact is triggered by removal of lens.	

**FLASHING BEACON 828 WITH 2 FREQUENCIES**

<b>Connection:</b>	Screw terminal with wire protection 0.5-2.5 mm <sup>2</sup> Contact protection according to VDE
<b>Flash frequency:</b>	0.5 Hz or 1.5 Hz can be set externally
<b>Life duration:</b>	4 x 10 <sup>6</sup> flashes



Bracket (accessory)

**ORDER SPECIFICATIONS:**

**FLASHING BEACON 828**

Base/Bracket mounting				
Voltage	12 V <sup>==</sup>	24 V <sup>==</sup>	115 V <sup>~</sup>	230 V <sup>~</sup>
Current consumption	500 mA	300 mA	65 mA	150 mA
red	<b>828 100 54</b>	<b>828 100 55</b>	<b>828 100 67</b>	<b>828 100 68</b>
yellow	<b>828 300 54</b>	<b>828 300 55</b>	<b>828 300 67</b>	<b>828 300 68</b>
clear		<b>828 400 55</b>		<b>828 400 68</b>

**Tube mounting**

Voltage	24 V <sup>==</sup>	115 V <sup>~</sup>	230 V <sup>~</sup>
red	<b>828 140 55</b>	<b>828 140 67</b>	<b>828 140 68</b>
yellow	<b>828 340 55</b>	<b>828 340 67</b>	<b>828 340 68</b>
clear	<b>828 440 55</b>		

**FLASHING BEACON 828 WITH 2 FREQUENCIES**

	Base/Bracket mounting	Tube mounting
Voltage	24 V <sup>==</sup>	24 V <sup>==</sup>
Current consumption	500 mA	500 mA
red	<b>828 120 55</b>	<b>828 160 55</b>
yellow	<b>828 320 55</b>	<b>828 360 55</b>

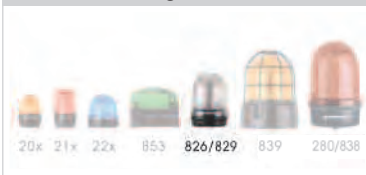


Accessories

**ACCESSORIES:**

Accessories see page 140.

**Sizes of Flashing Beacons**



**TECHNICAL DIAGRAMS:**

see page 283

Base/Bracket mounting      Base/Bracket mounting      Tube mounting      828 X00 55



**NEW**



Base/Bracket Mounting



Tube Mounting (tube and base for tube - accessory)

- Intense double flash with low power consumption
- High flash power from two consecutive flashes

Life duration up to 50,000 hrs

**TECHNICAL SPECIFICATIONS:**

<b>Dimensions</b> (Ø x Height):	98 mm x 137 mm (Base/Bracket mounting) 98 mm x 200 mm (Tube mounting)
<b>Housing:</b>	PC/ABS-Blend
<b>Lens:</b>	PC, transparent
<b>Fixing:</b>	Base mounting, bracket mounting (accessory), tube mounting (accessory)
<b>Cable entry:</b>	Cable diameter 5-7 mm
<b>Connection:</b>	Screw terminal with wire protection max. 2.5 mm <sup>2</sup> Contact protection according to VDE

**ORDER SPECIFICATIONS:**

**Base/Bracket mounting**

Voltage	24 V =	115-230 V ~
Current consumption	< 100 mA	< 100 mA
red	<b>829 120 55</b>	<b>829 120 68</b>
yellow	<b>829 320 55</b>	<b>829 320 68</b>
clear	<b>829 420 55</b>	<b>829 420 68</b>

**Tube mounting**

Voltage	24 V =	115-230 V ~
Current consumption	< 100 mA	< 100 mA
red	<b>829 127 55</b>	<b>829 127 68</b>
yellow	<b>829 327 55</b>	<b>829 327 68</b>
clear	<b>829 427 55</b>	<b>829 427 68</b>

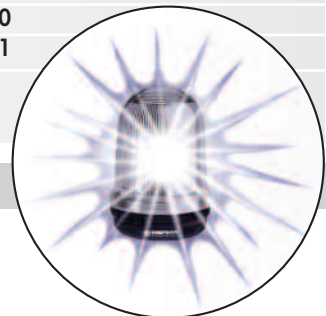
**ACCESSORIES:**

Plastic bracket for wall mounting	<b>975 826 05</b>
Wire guard, galvanised, only for base mounting	<b>975 826 03</b>
Tube Ø 25 mm, all anodized aluminium, 100 mm long	<b>975 845 10</b>
Base for tube, plastic	<b>975 840 90</b>
Base for tube, metal	<b>975 840 91</b>

(Accessories see page 140)

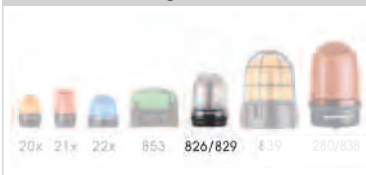
**TECHNICAL DIAGRAMS:**

see page 283



LED flash enables use in safety relevant applications or with batteries/power packs

Sizes of Flashing Beacons



CE

Base/Bracket mounting	Tube-mounting	IP 65	+50°C -20°C



Base/Bracket mounting



Tube mounting



Accessories

Sizes of Flashing Beacons



- Attention-grabbing flickering light
- Developed on a neurobiological basis
- Extremely powerful signal effect
- Random sequence of light signals prevents acclimatisation effect

Life duration up to 50,000 hrs

**i** TECHNICAL SPECIFICATIONS:

<b>Dimensions</b> (Ø x Height):	98 mm x 137 mm (Base/Bracket mounting)
	98 mm x 200 mm (Tube mounting)
<b>Housing:</b>	PC/ABS-Blend
<b>Lens:</b>	PC, transparent
<b>Fixing:</b>	Base mounting, bracket mounting (accessory), tube mounting (accessory)
<b>Cable entry:</b>	Cable diameter 5-7 mm
<b>Connection:</b>	Screw terminal with wire protection max. 2.5 mm <sup>2</sup> Contact protection according to VDE

**🛒** ORDER SPECIFICATIONS:

**Base/Bracket mounting**

Voltage	24 V=	115-230 V~
Current consumption	< 300 mA	< 150 mA
red	<b>829 190 55</b>	<b>829 190 68</b>
yellow	<b>829 390 55</b>	<b>829 390 68</b>
clear	<b>829 490 55</b>	<b>829 490 68</b>

**Tube mounting**

Voltage	24 V=	115-230 V~
Current consumption	< 300 mA	< 150 mA
red	<b>829 197 55</b>	<b>829 197 68</b>
yellow	<b>829 397 55</b>	<b>829 397 68</b>
clear	<b>829 497 55</b>	<b>829 497 68</b>

**🏠** ACCESSORIES:

Plastic bracket for wall mounting	<b>975 826 05</b>
Wire guard, galvanised, only for base mounting	<b>975 826 03</b>
Tube Ø 25 mm, all anodized aluminium, 100 mm long	<b>975 845 10</b>
Base for tube, plastic	<b>975 840 90</b>
Base for tube, metal	<b>975 840 91</b>

**⚠️** ADDITIONAL INFORMATION:

\* EVS = Enhanced Visibility System or Enhanced Visibility System.  
Further information can be found in the chapter "Tech-Talk" beginning on page 326.

**📐** TECHNICAL DIAGRAMS:

see page 283



The "EVS" light effect ensures a maximum attention-grabbing effect

Base/Bracket mounting      Tube mounting

CE      200 g      235 g      IP65      +50°C / -20°C







- Robust aluminium housing including wire guard
- High Protection rating IP 67
- High flash power from two consecutive flashes
- Salt water resistant

### **i** TECHNICAL SPECIFICATIONS:

Dimensions (Ø x Height):	153 mm x 189 mm	
Housing:	Black laquered aluminium with integral wire guard	
Lens:	PC, transparent	
Fixing:	Base mounting	
Connection:	Screw terminal with wire protection max. 2.5 mm <sup>2</sup>	
Cable entry:	Cable gland M 20 x 1.5 mm (included in assembly) Cable diameter 6-13 mm	
Installation position:	As required	
Flash energy:	15 Ws	
Flash frequency:	c. 1 Hz	
Life duration:	4 x 10 <sup>6</sup> flashes	

### **🛒** ORDER SPECIFICATIONS:

Voltage	24 V =	230 V ~
Current consumption	800 mA	200 mA
red	<b>839 152 55</b>	<b>839 152 68</b>
yellow	<b>839 352 55</b>	<b>839 352 68</b>

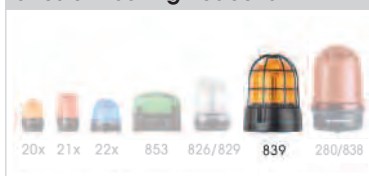
### **📐** TECHNICAL DIAGRAMS:

see page 284



Generates a high signal effect thanks to two consecutive flashes

#### Sizes of Flashing Beacons





- High flash power from two consecutive flashes
- High light intensity
- NEW** • Adaptor for tube mounting (accessory)
- High impact resistance to 20 Joules

### **i** TECHNICAL SPECIFICATIONS:

Dimensions (Ø x Height):	142 mm x 218 mm
Housing:	PC/ABS-Blend
Lens:	PC, transparent
Fixing:	Base mounting, Bracket mounting (accessory), Tube mounting (accessory)
Connection:	Screw terminal with wire protection 0.5-2.5 mm <sup>2</sup>
Cable entry:	Cable diameter 5-7 mm
Flash energy:	15 Ws
Flash frequency:	c. 1 Hz
Power supply frequency:	50/60 Hz
Life duration:	4 x 10 <sup>6</sup> flashes

### **🛒** ORDER SPECIFICATIONS:

Voltage	24 V=	115 V~	230 V~
Current consumption:	800 mA	300 mA	200 mA
red	<b>838 100 55</b>	<b>838 100 67</b>	<b>838 100 68</b>
yellow	<b>838 300 55</b>	<b>838 300 67</b>	<b>838 300 68</b>

### **🏠** ACCESSORIES:

Plastic bracket for wall mounting	<b>975 883 06</b>
<b>NEW</b> Adaptor for tube mounting	<b>975 883 09</b>
Wire guard, only for base mounting	<b>975 883 08</b>

### **📐** TECHNICAL DIAGRAMS:

see page 284

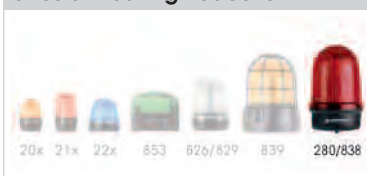


Wire guard (accessory)



Adaptor for tube mounting and plastic bracket (accessories)

### Sizes of Flashing Beacons





Base mounting



**NEW** The new adaptor (accessory) allows quick and simple mounting on a tube



Plastic bracket, Adaptor for tube mounting and wire guard (accessories)

Sizes of Flashing Beacons



- Intense double flash with low power consumption
- High flash power from two consecutive flashes
- NEW** • Adaptor for tube mounting (accessory)
- High impact up to 20 Joule

Life duration up to 50,000 hrs

**i TECHNICAL SPECIFICATIONS:**

Dimensions (Ø x Height):	142 mm x 218 mm
Housing:	PC/ABS-Blend
Lens:	PC, transparent
Fixing:	Base mounting, bracket mounting (accessory), tube mounting (accessory)
Connection:	Screw terminal with wire protection max. 2.5 mm <sup>2</sup> Contact protection according to VDE
Cable entry:	Cable diameter 5-7 mm
Duty cycle:	100 %

**🛒 ORDER SPECIFICATIONS:**

Voltage	24 V =	115-230 V ~
Current consumption	< 150 mA	< 100 mA
red	<b>280 150 55</b>	<b>280 150 60</b>
yellow	<b>280 350 55</b>	<b>280 350 60</b>
clear	<b>280 450 55</b>	<b>280 450 60</b>

**🏠 ACCESSORIES:**

Plastic bracket for wall mounting	<b>975 883 06</b>
<b>NEW</b> Adaptor for tube mounting	<b>975 883 09</b>
Wire guard, only for base mounting	<b>975 883 08</b>

**⚠️ ADDITIONAL INFORMATION:**

The LED Beacon 280 is also available as LED EVS Beacon (see page 147), LED Permanent Beacon (see page 127) or LED Rotating Beacon (see page 154).

**📐 TECHNICAL DIAGRAMS:**

see page 271



Two consecutive flashes generate a brilliant signal



**NEW**



Base mounting

- Attention-grabbing flickering light
- Developed on a neurobiological basis
- Extremely powerful signal effect
- Random sequence of light signals prevents acclimatisation effect

**TECHNICAL SPECIFICATIONS:**

Life duration up to 50,000 hrs

Dimensions (Ø x Height):	142 mm x 218 mm
Housing:	PC/ABS-Blend
Lens:	PC, transparent
Fixing:	Base mounting, bracket mounting (accessory), tube mounting (accessory)
Connection:	Screw terminal with wire protection max. 2.5 mm <sup>2</sup> Contact protection according to VDE
Cable entry:	Cable diameter 5-7 mm
Duty cycle:	100 %

**ORDER SPECIFICATIONS:**

Voltage	24 V =	115-230 V ~
Current consumption	< 500 mA	< 150 mA
red	<b>280 160 55</b>	<b>280 160 60</b>
yellow	<b>280 360 55</b>	<b>280 360 60</b>
clear	<b>280 460 55</b>	<b>280 460 60</b>

**ACCESSORIES:**

Plastic bracket for wall mounting	<b>975 883 06</b>
<b>NEU</b> Adaptor for tube mounting	<b>975 883 09</b>
Wire guard, only for base mounting	<b>975 883 08</b>

(Accessories see page 146)

**ADDITIONAL INFORMATION:**

\* EVS = Enhanced Visibility System or Enhanced Visibility System  
Further information can be found in the chapter "Tech-Talk" beginning on page 326.

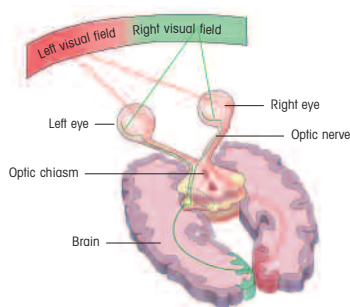
**EVS – Attention-grabbing light effect on neurobiological basis**

WERMA has developed a stochastic, random flickering light on a neurobiological basis: EVS, Enhanced Visibility System. This generates an optimal attention level never reached by previous signal devices.

For the EVS system WERMA employs light emitting diodes. A microprocessor generates random light signals. This gives the light a very "agitated" character which proves highly effective in drawing the attention of those in its vicinity – even when seen out of the corner of the eye. LEDs are capable of generating the required high flickering frequency with ease, frequencies which Xenon flashes for example are incapable of generating.

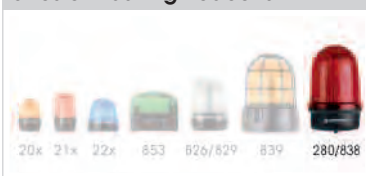


Bracket mounting (accessory)



The way in which the brain processes visual stimuli formed the basis for the development of the EVS technology

**Sizes of Flashing Beacons**



**TECHNICAL DIAGRAMS:**

see page 271





Base mounting



- High light intensity in compact form
- Award-winning design – winner of the "iF product design award 2006"
- Extremely quiet
- Can be mounted as required
- Installation without the need to disassemble the mechanism

### TECHNICAL SPECIFICATIONS:

<b>Dimensions (Ø x Height):</b>	98 mm x 151 mm
<b>Housing:</b>	PC/ABS-Blend
<b>Lens:</b>	PC, transparent
<b>Fixing:</b>	Base mounting, bracket mounting (accessory)
<b>Connection:</b>	Screw terminal with wire protection max. 2.5 mm <sup>2</sup> Contact protection according to VDE
<b>Cable entry:</b>	Cable diameter 5-7 mm
<b>Installation position:</b>	As required
<b>Halogen bulb:</b>	G 6.35 20 W 12 V / 24 V
<b>Mirror rotation rate:</b>	c. 180 r.p.m.
<b>Service life of drive:</b>	> 5,000 hrs
<b>Duty cycle:</b>	100 %

Halogen bulb included in assembly.

### ORDER SPECIFICATIONS:

Voltage	12 V =	24 V ≈	115 V ~ / 115 V =	/ 230 V ~ / 230 V =
Current consumpt.	1.7 A	1.0 A	0.35 A / 0.2 A	/ 0.15 A / 0.1 A
red	<b>885 100 54</b>	<b>885 100 75</b>	<b>885 100 78</b>	
green	<b>885 200 54</b>	<b>885 200 75</b>	<b>885 200 78</b>	
yellow	<b>885 300 54</b>	<b>885 300 75</b>	<b>885 300 78</b>	
blue	<b>885 500 54</b>	<b>885 500 75</b>	<b>885 500 78</b>	

### ACCESSORIES:

Halogen bulb for wall mounting	<b>975 826 05</b>
Wire guard, galvanised, only for base mounting	<b>975 826 03</b>

### SPARE PARTS:

Halogen bulb 20 W/12 V for 12 V = 115 V ≈, 230 V ~	<b>955 885 24</b>
Halogen bulb 20 W/24 V for 24 V ≈	<b>955 885 25</b>

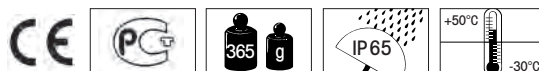
### TECHNICAL DIAGRAMS:

see page 290



Plastic bracket und wire guard (accessories)

### Sizes of Rotating Beacons





Tube mounting



Rotating Mirror Beacon 885 with tube and base (accessories)

- Tube mounting solution suitable for  $\varnothing$  25 mm and 1/2" NPT tubes
- Full rotating mirror functionality in compact form
- Can be mounted as required

### TECHNICAL SPECIFICATIONS:

<b>Dimensions</b> ( $\varnothing$ x Height):	98 mm x 200 mm
<b>Housing:</b>	PC/ABS-Blend
<b>Lens:</b>	PC, transparent
<b>Fixing:</b>	Tube mounting
<b>Connection:</b>	Screw terminal with wire protection max. 2.5 mm <sup>2</sup> . Contact protection according to VDE
<b>Cable entry:</b>	Cable diameter 5-7 mm
<b>Installation position:</b>	As required
<b>Halogen bulb:</b>	G 6.35 20 W 12 V/24 V
<b>Mirror rotating rate:</b>	c. 180 r.p.m.
<b>Service life of drive:</b>	> 5,000 hrs
<b>Duty cycle:</b>	100 %

Halogen bulb included in assembly.

### ORDER SPECIFICATIONS:

Voltage	12 V =	24 V =	115 V ~ / 115 V = / 230 V ~ / 230 V =
Current consumpt.	1.7 A	1.0 A	0.35 A / 0.2 A / 0.15 A / 0.1 A
red	<b>885 110 54</b>	<b>885 110 75</b>	<b>885 110 78</b>
green	<b>885 210 54</b>	<b>885 210 75</b>	<b>885 210 78</b>
yellow	<b>885 310 54</b>	<b>885 310 75</b>	<b>885 310 78</b>
blue	<b>885 510 54</b>	<b>885 510 75</b>	<b>885 510 78</b>

### ACCESSORIES:

Base for tube mounting $\varnothing$ 25 mm, plastic, Incl. rubber seal	<b>975 840 90</b>
Base for tube mounting $\varnothing$ 25 mm, metal, Incl. rubber seal	<b>975 840 91</b>
Tube $\varnothing$ 25 mm, all anodized aluminium 100 mm	<b>975 845 10</b>
250 mm	<b>975 840 25</b>

### TECHNICAL DIAGRAMS:

see page 290

#### Sizes of Rotating Beacons



# 885

# Rotating Mirror Beacon



- Integrated flexible tube
- With 2 pole plug connection according to ISO 4165
- Elastic material prevents the beacon from breaking off
- Full rotating mirror functionality in compact form

### TECHNICAL SPECIFICATIONS:

Dimensions (Ø x Height):	98 mm x 255 mm
Housing:	PC/ABS-Blend
Lens:	PC, transparent
Fixing:	Tube mounting
Connection:	2 pole plug connection (according to ISO 4165)
Cable entry:	Cable diameter 5-7 mm
Installation position:	As required
Halogen bulb:	G 6.35 20 W 12 V/24 V
Mirror rotating rate:	c. 180 r.p.m.
Service life of drive:	> 5,000 hrs
Duty cycle:	100 %

Halogen bulb included in assembly.

### ORDER SPECIFICATIONS:

	12 V ≈	24 V ≈
Voltage	12 V ≈	24 V ≈
Current consumption	1.7 A	1.0 A
red	<b>885 120 54</b>	<b>885 120 75</b>
green	<b>885 220 54</b>	<b>885 220 75</b>
yellow	<b>885 320 54</b>	<b>885 320 75</b>
blue	<b>885 520 54</b>	<b>885 520 75</b>



Flange with counter-plug for electrical connection (accessory)

### ACCESSORIES:

Flange with counter-plug for electrical connection	<b>975 826 20</b>
----------------------------------------------------	-------------------

### TECHNICAL DIAGRAMS:

see page 290



The flexible tube, made of an elastic material, is hard-wearing and prevents the beacon from breaking off

### Sizes of Rotating Beacons





- Robust aluminium housing including wire guard
- Extreme durability thanks to low wear belt drive
- Salt water resistant
- Extremely quiet
- Installation without the need to disassemble the mechanism

**i TECHNICAL SPECIFICATIONS:**

Dimensions (Ø x Height):	153 mm x 189 mm
Housing:	Black laquered aluminium with integral wire guard
Lens:	PC, transparent
Fixing:	Base mounting
Connection:	Screw terminal with wire protection max. 2.5 mm <sup>2</sup>
Cable entry:	Cable gland M 20 x 1.5 mm (included in assembly) Cable diameter 6-13 mm
Installation position:	As required
Halogen bulb:	G 6.35 20 W 12/24 V
Mirror rotating rate:	c. 180 r.p.m.
Service life of drive:	> 5.000 hrs



**🛒 ORDER SPECIFICATIONS:**

Voltage	24 V $\approx$	115 V $\sim$	/ 115 V $\approx$	/ 230 V $\sim$	/ 230 V $\approx$
Current consumption	1.0 A	0.35 A	/ 0.5 A	/ 0.15 A	/ 0.1 A
red	<b>839 160 75</b>			<b>839 160 78</b>	
yellow	<b>839 360 75</b>			<b>839 360 78</b>	

**🏠 ACCESSORIES:**

**SPARE PARTS:**

Halogen bulb 20 W/12 V for 115 V $\approx$ , 230 V $\sim$	<b>955 885 24</b>
Halogen bulb 20 W/24 V for 24 V $\approx$	<b>955 885 25</b>

**📏 TECHNICAL DIAGRAMS:**

see page 284



**NEW**

Also suitable for use in rough conditions

**Sizes of Rotating Beacons**







- Robust aluminium housing including wire guard
- Wear-free due to the absence of any moving mechanical components
- Salt water resistant
- Intense rotating signal effect with low power consumption
- AC multi-voltage version

#### TECHNICAL SPECIFICATIONS:

Dimensions (Ø x Height):	153 mm x 189 mm
Housing:	Black laquered aluminium with integral wire guard
Lens:	PC, transparent
Fixing:	Base mounting
Connection:	Screw terminal with wire protection max. 2.5 mm <sup>2</sup>
Cable entry:	Cable gland M 20 x 1.5 mm (included in assembly) Cable diameter 6-13 mm
Installation position:	As required
Rotation rate:	c. 180 r.p.m.

Life duration  
up to 50,000 hrs

#### ORDER SPECIFICATIONS:

Voltage	24 V <sup>≡</sup>	115-230 V <sup>~</sup>
Current consumption	150 mA	70-180 mA
red	<b>839 120 55</b>	<b>839 120 68</b>
yellow	<b>839 320 55</b>	<b>839 320 68</b>

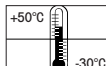
#### TECHNICAL DIAGRAMS:

see page 284



Generates a high signal effect thanks to the LEDs programmed to create a rotating light

#### Sizes of Rotating Beacons





Tube mounting



Base/Bracket mounting



Accessories

Sizes of Rotating Beacons



- Extremely high light intensity
- Wear-free due to the absence of any moving mechanical components
- Intense rotating signal effect with low power consumption
- Shock-proof and vibration-resistant

Life duration up to 50,000 hrs

**i** TECHNICAL SPECIFICATIONS:

<b>Dimensions</b> (Ø x Height):	98 mm x 137 mm (Base/Bracket mounting) 98 mm x 200 mm (Tube mounting)
<b>Housing:</b>	PC/ABS-Blend
<b>Lens:</b>	PC, transparent
<b>Fixing:</b>	Base mounting, bracket mounting (accessory), tube mounting (accessory)
<b>Cable entry:</b>	Cable diameter 5-7 mm
<b>Connection:</b>	Screw terminal with wire protection max. 2.5 mm <sup>2</sup> Contact protection according to VDE
<b>Rotation rate:</b>	c. 180 r.p.m.

**🛒** ORDER SPECIFICATIONS:

Base/Bracket mounting		
Voltage	24 V =	115-230 V ~
Current consumption	< 170 mA	< 200 mA
red	<b>829 110 55</b>	<b>829 110 68</b>
green	<b>829 210 55</b>	<b>829 210 68</b>
yellow	<b>829 310 55</b>	<b>829 310 68</b>
clear	<b>829 410 55</b>	<b>829 410 68</b>
blue	<b>829 510 55</b>	<b>829 510 68</b>
Tube mounting		
Voltage	24 V =	115-230 V ~
Current consumption	< 170 mA	< 200 mA
red	<b>829 117 55</b>	<b>829 117 68</b>
green	<b>829 217 55</b>	<b>829 217 68</b>
yellow	<b>829 317 55</b>	<b>829 317 68</b>
clear	<b>829 417 55</b>	<b>829 417 68</b>
blue	<b>829 517 55</b>	<b>829 517 68</b>

**🏠** ACCESSORIES:

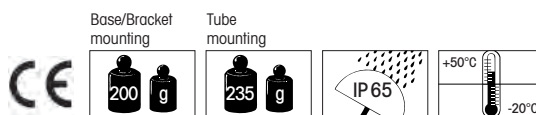
Plastic bracket for wall mounting	<b>975 826 05</b>
Wire guard, galvanised, only for base mounting	<b>975 826 03</b>
Tube Ø 25 mm, all anodized aluminium, 100 mm long	<b>975 845 10</b>
Base for tube, plastic	<b>975 840 90</b>
Base for tube, metal	<b>975 840 91</b>



Generates a distinctive rotating signal by triggering high output LEDs in sequence

**📏** TECHNICAL DIAGRAMS:

see page 283





- Extremely high light intensity
- Wear-free due to the absence of any moving mechanical components
- Intense rotating signal effect with low power consumption
- Life duration up to 50,000 hrs
- Shock proof and resistant against vibration
- High impact resistance to 20 Joules

**Life duration up to 50,000 hrs**

**i TECHNICAL SPECIFICATIONS:**

<b>Dimensions (Ø x Height):</b>	142 mm x 218 mm	
<b>Housing:</b>	PC/ABS-Blend, black	
<b>Lens:</b>	PC, transparent	
<b>Fixing:</b>	Base mounting, bracket mounting (accessory), tube mounting (accessory)	
<b>Connection:</b>	Screw terminal with wire protection max. 0.5-2.5 mm <sup>2</sup> Contact protection according to VDE	
<b>Cable entry:</b>	Cable diameter 5-7 mm	
<b>Rotation rate:</b>	c. 180 r.p.m.	
<b>Duty cycle:</b>	100 %	



High impact resistance to 20 Joules

**🛒 ORDER SPECIFICATIONS:**

Voltage	24 V <sup>==</sup>	115 - 230 V <sup>~</sup>
Current consumption	150 mA	70-180 mA
red	<b>280 120 55</b>	<b>280 120 68</b>
yellow	<b>280 320 55</b>	<b>280 320 68</b>

**🏠 ACCESSORIES:**

Plastic bracket for wall mounting	<b>975 883 06</b>
<b>NEW</b> Adaptor for tube mounting	<b>975 883 09</b>
Wire guard, only for base mounting	<b>975 883 08</b>

**📐 TECHNICAL DIAGRAMS:**

see page 271



Generates a high signal effect thanks to the LEDs programmed to create a rotating light



Plastic bracket, adaptor for tube mounting and wire guard (accessories)

**Sizes of Rotating Beacons**

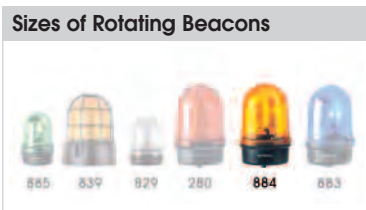




Bracket (accessory)



Plastic bracket, adaptor for tube mounting and wire guard (accessories)



- Greater signal effect particularly in poor conditions thanks to three light beams
- Low rotation rate
- Three Fresnel lenses effect light convergence and optimise visibility
- High impact resistance to 20 Joules

### TECHNICAL SPECIFICATIONS:

<b>Dimensions</b> (Ø x Height):	142 mm x 218 mm
<b>Housing:</b>	PC/ABS-Blend
<b>Lens:</b>	PC, transparent
<b>Fixing:</b>	Base mounting, bracket mounting, tube mounting (accessory)
<b>Connection:</b>	Screw terminal with wire protection max. 2.5 mm <sup>2</sup> Contact protection according to VDE
<b>Cable entry:</b>	Cable diameter 5-7 mm
<b>Drive:</b>	Wheel and disc drive, motor in centre of gravity
<b>Halogen bulb:</b>	G 6.35 35 W 12 V / 24 V
<b>Mirror rotation rate:</b>	60 r.p.m.
<b>Service life of drive:</b>	> 5,000 hrs
<b>Duty cycle:</b>	100 %

Halogen bulb included in assembly.

### ORDER SPECIFICATIONS:

Voltage	24 V~	230 V~
Current consumption	1.6 A	0.17 A
red	<b>884 100 75</b>	<b>884 100 68</b>
green	<b>884 200 75</b>	<b>884 200 68</b>
yellow	<b>884 300 75</b>	<b>884 300 68</b>
blue	<b>884 500 75</b>	<b>884 500 68</b>

Further colours and voltages on request.

### ACCESSORIES:

Plastic bracket for wall mounting	<b>975 883 06</b>
<b>NEW</b> Adaptor for tube mounting	<b>975 883 09</b>
Base for tube mounting	<b>975 840 91</b>
Tube, Ø 25 mm, 100 mm long	<b>975 845 10</b>
Tube, Ø 25 mm, 250 mm long	<b>975 840 25</b>
Wire guard, only for base mounting	<b>975 883 08</b>

### SPARE PARTS:

Halogen bulb 35 W/12 V for 230 V~	<b>955 883 34</b>
Halogen bulb 35 W/24 V for 24 V~	<b>955 883 35</b>



3 Fresnel lenses are set at a 120° angle

### TECHNICAL DIAGRAMS:

see page 290





Bracket (accessory)



Plastic bracket, adaptor for tube mounting and wire guard (accessories)

Sizes of Rotating Beacons



- Extreme durability thanks to low wear wheel and disc drive
- Installation without the need to disassemble the mechanism
- High impact resistance to 20 Joules

NEW

- Adaptor for tube mounting (accessory)

### TECHNICAL SPECIFICATIONS:

Dimensions (Ø x Height):	142 mm x 218 mm
Housing:	PC/ABS-Blend
Lens:	PC, transparent
Fixing:	Base mounting, bracket mounting, tube mounting (accessory)
Connection:	Screw terminal with wire protection max. 2.5 mm <sup>2</sup> Contact protection according to VDE
Cable entry:	Cable diameter 5-7 mm
Drive:	Wheel and disc drive, motor in centre of gravity
Halogen bulb:	G 6.35 35 W 12 V / 24 V
Mirror rotation rate:	c. 180 r.p.m.
Service life of drive:	> 5,000 hrs
Duty cycle:	100 %

Halogen bulb included in assembly.

### ORDER SPECIFICATIONS:

	12 V <sup>==</sup>	24 V <sup>≈</sup>	115 V <sup>≈</sup>	230 V <sup>~</sup>
Voltage	12 V <sup>==</sup>	24 V <sup>≈</sup>	115 V <sup>≈</sup>	230 V <sup>~</sup>
Current consumpt.	3 A	1.6 A	0.35 A	0.17 A
red	<b>883 100 54</b>	<b>883 100 75</b>	<b>883 100 77</b>	<b>883 100 68</b>
green	<b>883 200 54</b>	<b>883 200 75</b>	<b>883 200 77</b>	<b>883 200 68</b>
yellow	<b>883 300 54</b>	<b>883 300 75</b>	<b>883 300 77</b>	<b>883 300 68</b>
blue	<b>883 500 54</b>	<b>883 500 75</b>	<b>883 500 77</b>	<b>883 500 68</b>

Further colours and voltages on request.

### ACCESSORIES:

Plastic bracket for wall mounting	<b>975 883 06</b>
NEW Adaptor for tube mounting	<b>975 883 09</b>
Base for tube mounting	<b>975 840 91</b>
Tube, Ø 25 mm, 100 mm long	<b>975 845 10</b>
Tube, Ø 25 mm, 250 mm long	<b>975 840 25</b>
Wire guard, only for base mounting	<b>975 883 08</b>

### SPARE PARTS:

Halogen bulb 35 W/12 V for 12 V <sup>==</sup> , 115 V <sup>≈</sup> , 230 V <sup>~</sup>	<b>955 883 34</b>
Halogen bulb 35 W/24 V for 24 V <sup>≈</sup>	<b>955 883 35</b>

### TECHNICAL DIAGRAMS:

see page 290



Low wear wheel and disc drive





- High intensity optical signal with halogen bulb

- "e" approval for automotive use (yellow, 24 V)

### TECHNICAL SPECIFICATIONS:

Dimensions (Ø x Height):	152 mm x 215 mm	
Housing:	Thermoplastic with injected metal base	
Lens:	Plexiglass (PMMA)	
Fixing:	Base, bracket (accessory), tube mounting (accessory)	
Connection:	Screw terminal 0.5-1.5 mm <sup>2</sup>	
Cable entry:	Cable diameter 5-8 mm	
Mirror rotation rate:	c. 170 r.p.m.	

Assembly incl. halogen bulb H1.

### ORDER SPECIFICATIONS:

Voltage	24 V=	230 V~
Current consumption	3.0 A	0.3 A
red	<b>880 152 55</b>	<b>880 152 68</b>
yellow	<b>880 352 55</b>	<b>880 352 68</b>

Further colours and voltages on request.



### ACCESSORIES:

Flange for tube, max. 29.8 mm	<b>880 000 00</b>
Bracket for wall mounting	<b>975 881 01</b>

### SPARE PARTS:

Bulb H 1 55 W for 230 V~	<b>955 880 34</b>
Bulb H 1 70 W for 24 V=	<b>955 880 35</b>

### ADDITIONAL INFORMATION:

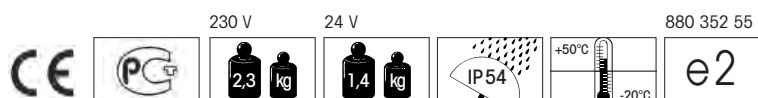
Please also see Rotating Mirror Beacon 883 with additional advantages (see page 156)

- High protection rating IP 65
- Modern design
- High impact to 20 Joules
- Long life duration thanks to low wear wheel and disc drive
- Installation without the need to disassemble the mechanism



### TECHNICAL DIAGRAMS:

see page 289





- Competitively priced rotating mirror beacon with bulb included

#### TECHNICAL SPECIFICATIONS:

Dimensions (Ø x Height):	150 mm x 204 mm
Housing:	ABS
Lens:	PC, transparent
Fixing:	Base, bracket (accessory), tube mounting (accessory)
Connection:	Screw terminal 0.5-1.5 mm <sup>2</sup>
Cable entry:	Cable diameter 5-8 mm
Mirror rotating rate:	c. 170 r.p.m.

Bulb included in assembly.

#### ORDER SPECIFICATIONS:

Voltage	48 V $\approx$	230 V $\sim$
Current consumption	1.0 A	0.3 A
red	<b>881 152 56</b>	<b>881 152 98</b>
yellow	<b>881 352 56</b>	<b>881 352 98</b>

#### ACCESSORIES:

Flange for tube, max. 29.8 mm	<b>880 000 00</b>
Bracket for wall mounting	<b>975 881 01</b>

#### SPARE PARTS:

Bulb E14, 40 W		
Voltage	48 V $\approx$	230 V $\sim$
	<b>955 880 66</b>	<b>955 880 68</b>

#### TECHNICAL DIAGRAMS:

see page 290





LED Permanent Beacon



LED Traffic Light Combination with mounting bracket (accessory)



Clear lenses ensure signalling effect even in direct sunlight

- LED Beacon for traffic light combinations
- Clear signalling effect even in direct sunlight
- Maintenance-free LED technology
- Innovative fixing bracket for simple mounting

**i TECHNICAL SPECIFICATIONS:**

Life duration up to 50,000 hrs

<b>Dimensions</b> (Ø x Height):	150 mm x 154 mm
<b>Housing:</b>	PC/ABS-Blend, grey
<b>Lens:</b>	PC, transparent
<b>Fixing:</b>	Base mounting, fixing bracket (accessory), tube mounting (accessory)
<b>Connection:</b>	Screw terminal max. 1.5 mm <sup>2</sup>
<b>Installation position:</b>	As required
<b>Cable entry:</b>	From top or bottom with cable gland M 20 x 1.5 mm or from the back with rubber grommet Ø 6-12 mm, included in assembly.

**ORDER SPECIFICATIONS:**

Voltage	12-24 V <sup>==</sup>	115 V <sup>~</sup>	230 V <sup>~</sup>
Current consumption	< 200 mA	< 35 mA	< 35 mA
red	<b>890 120 55</b>	<b>890 120 67</b>	<b>890 120 68</b>
green	<b>890 220 55</b>	<b>890 220 67</b>	<b>890 220 68</b>
yellow	<b>890 320 55</b>	<b>890 320 67</b>	<b>890 320 68</b>

**ACCESSORIES:**

**FIXING BRACKET**

Fixing bracket for one beacon	<b>975 890 33</b>
Fixing bracket for two beacons	<b>975 890 34</b>
Fixing bracket for three beacons	<b>975 890 35</b>
Fixing bracket for four beacons	<b>975 890 37</b>

Mounting material and connecting grommet included in assembly. Further information can be found on page 162.

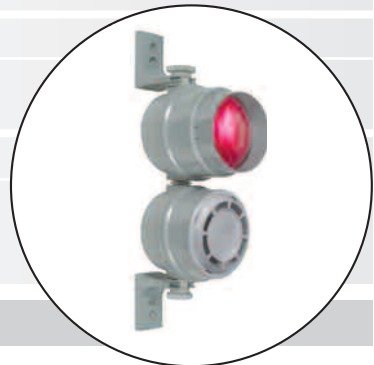
**CONNECTING GROMMET**

Connecting grommet for traffic light combinations	<b>975 890 25</b>
---------------------------------------------------	-------------------

**NEW**

**TUBE ADAPTOR**

Adaptor for tube mounting (suitable for Ø 75 mm tubes, see page 161)	<b>975 890 36</b>
----------------------------------------------------------------------	-------------------



**NEW** The LED Beacon 890 in combination with Multi-Tone Sounder 190 (see page 228)

**TECHNICAL DIAGRAMS:**

see page 291







Permanent Beacon

Traffic Light Combination  
with mounting bracket  
(accessory)Permanent beacon  
with two sockets

- Permanent Beacon for traffic light combinations
- Innovative fixing bracket for simple mounting
- Also with two bulb sockets for uniform safety, even in the case of bulb failure

### TECHNICAL SPECIFICATIONS:

<b>Dimensions</b> (Ø x Height):	150 mm x 154 mm
<b>Housing:</b>	PC/ABS-Blend, grey
<b>Lens:</b>	PC, transparent
<b>Socket:</b>	E27 max. 25 W at 890 X00 00 2 sockets each with max. 15 W at 890 X10 00 with adhesive stickers E27 max. 15 W
<b>Fixing:</b>	Base mounting, fixing bracket (accessory), tube mounting (accessory)
<b>Connection:</b>	Screw-free clamp mechanism max. 1.5 mm <sup>2</sup>
<b>Cable entry:</b>	From top or bottom with cable gland M 20 x 1.5 mm or from the back with rubber grommet Ø 6-12 mm, included in assembly

### ORDER SPECIFICATIONS:

#### PERMANENT BEACON

Voltage	12 – 240 V≈
red	890 100 00
green	890 200 00
yellow	890 300 00
clear	890 400 00
blue	890 500 00

#### PERMANENT BEACON WITH 2 SOCKETS (INCL. REFLECTOR)

Voltage	12 – 240 V≈
red	890 110 00
green	890 210 00
yellow	890 310 00

Further colours and voltages on request.

### ADDITIONAL INFORMATION:

Please also see LED Beacon/LED Traffic Light 890 with additional advantages (see p. 159)

- Maintenance-free LED technology
- Life duration up to 50,000 hrs
- Clear signalling effect even in direct sunlight





**NEW** Beacon 890 in combination with Multi-Tone Sounder 190 (see page 228)



**NEW** The new adaptor (accessory) allows quick and simple mounting on a tube (Ø 75 mm)



890 with adhesive sticker (accessory)



## ACCESSORIES:

### FIXING BRACKET

Fixing bracket for one beacon	975 890 33
Fixing bracket for two beacons	975 890 34
Fixing bracket for three beacons	975 890 35
Fixing bracket for four beacons	975 890 37

Mounting material and connecting grommet included in assembly. Further information can be found on page 162.

### CONNECTING GROMMET

Connecting grommet for traffic light combinations	975 890 25
---------------------------------------------------	------------

### **NEW** TUBE ADAPTOR

Adaptor for tube mounting (suitable for Ø 75 mm tubes)	975 890 36
--------------------------------------------------------	------------

### REFLECTOR

Additional reflector for 890 X00 00	975 890 02
-------------------------------------	------------

### BULBS

LED bulb E27, 24 V	956 X20 75
LED bulb E27, 115 V	956 X20 67
LED bulb E27, 230 V	956 X20 68

X see page 167.

Bulb E27, 24 V / 25 W	955 890 55
Bulb E27, 115 V / 25 W	955 890 67
Bulb E27, 230 V / 25 W	955 890 68
Bulb E14, 230 V / 15 W	955 890 38

### ADHESIVE STICKERS:

→	975 890 52
STOP	975 890 53
START	975 890 54
KEIN ZUTRITT	975 890 56
ZUTRITT	975 890 55
BETRIEB	975 890 57
STÖRUNG	975 890 58
⚡	975 890 64
👤	975 890 65



### TECHNICAL DIAGRAMS:

see page 291





Fixing bracket for (LED) Beacons 890 and Multi-Tone Sounder 190

- Beacon/Traffic Light can be completely pre-assembled on the fixing bracket and connected before attachment
- Easy mounting in just a few steps
- NEW** • Also suitable for Multi-Tone Sounder 190
- High Protection rating IP 65

### **i** TECHNICAL SPECIFICATIONS:

Material Fixing bracket:	PC/ABS-Blend
Material Connecting Grommet:	PA 6.6
Assembly:	Fixing bracket with mounting material and connecting grommet Beacon not included in assembly.
Suitable for:	LED Beacon/LED Traffic Light 890 (see page 159) Permanent/Traffic Light Beacon 890 (see page 160) Multi-Tone Sounder 190 (see page 228)

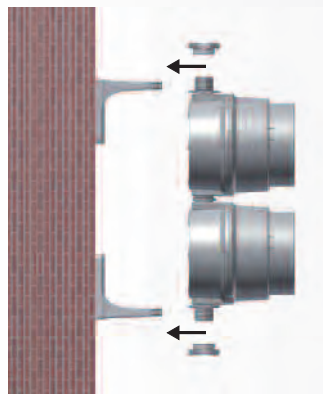
### **🛒** ORDER SPECIFICATIONS:

Fixing bracket for one beacon	<b>975 890 33</b>
Fixing bracket for two beacons	<b>975 890 34</b>
Fixing bracket for three beacons	<b>975 890 35</b>
Fixing bracket for four beacons	<b>975 890 37</b>

### **✓** NEW FIXING BRACKET FOR SIMPLE MOUNTING:

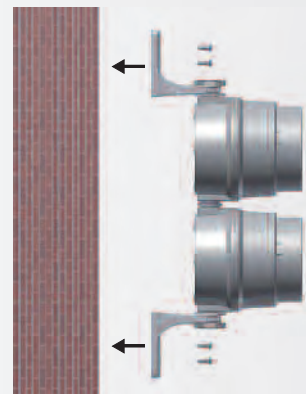
#### Method No. 1

- Attach the bracket to the wall
- Connect the pre-assembled Traffic Light/Multi-Tone Sounder
- Tighten the nuts on both sides



#### Method No. 2

- Connect and assemble the Traffic Light
- Attach the Traffic Light/Multi-Tone Sounder to the bracket and tighten the nuts on both sides
- Attach the complete bracket and Traffic Light/Multi-Tone Sounder to the wall



The fixing bracket can be mounted pointing inwards or outwards

### **📏** TECHNICAL DIAGRAMS:

see page 304

1 tier 	2 tier 	3 tier 	4 tier 		
------------	------------	------------	------------	--	--



**NEW**



The innovative connector (accessory) enables traffic light combinations to be created in a matter of seconds



Three highly visible light effects are available

- LED Permanent, LED Double Flash or LED EVS Beacon in attractive quadratic form
- Innovative connector to create traffic light combinations
- Easy assembly due to quick-release screws
- Thread/membrane combination keeps cabling requirements to a minimum

Life duration up to 50,000 hrs



**TECHNICAL SPECIFICATIONS:**

<b>Dimensions (L x H x W):</b>	85 mm x 85 mm x 72 mm
<b>Housing:</b>	PP-GF, black
<b>Lens:</b>	PC, transparent
<b>Connection:</b>	Screw terminal with wire protection, max. 1.5 mm <sup>2</sup>
<b>Fixing:</b>	Wall, base and ceiling mounting
<b>Possible colours:</b>	Red, green, yellow, clear, blue
<b>Operating voltage:</b>	12 V <sub>=</sub> , 24 V <sub>=</sub> , 115-230 V <sub>~</sub>
<b>Current consumption:</b>	Max. 80 mA at 24 V (LED Permanent Beacon) Max. 50 mA at 24 V (LED Double Flash Beacon) Max. 50 mA at 24 V (LED EVS Beacon)
<b>Equipment:</b>	Eight self-sealing membranes for cable entry without tools Eight integrated M 20 threads, no nuts required Optional use of a cable gland, thread length of cable gland ≤ 9 mm (accessory)
<b>Assembly:</b>	Incl. snap-on fixing bracket (optional use)



**ORDER SPECIFICATIONS:**

LED Permanent Beacon 853	see page 119
LED Double Flash Beacon 853	see page 136
LED EVS Beacon 853	see page 137
Available: 1st Quarter 2011.	



**ACCESSORIES:**

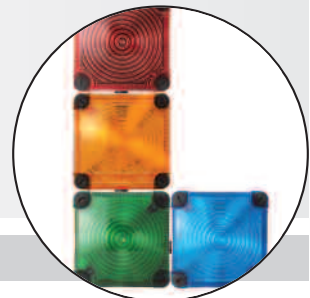
Connector for traffic light combinations	975 853 01
Cable gland M 20 x 1.5 mm 8 mm thread length, required for protection rating IP 67	975 853 02



**ADDITIONAL INFORMATION:**

**Combinations made easy**  
The LED Beacon 853 can be easily turned into a traffic light combination. Simply attach different coloured beacons together using the connector.

The eight cable entries with both self-sealing membranes and integrated M 20 threads enable additional beacons to be attached to every side. There is no limit to the range of possible lighting designs that can be created.



**TECHNICAL DIAGRAMS:**

see page 287

Individual lighting designs thanks to eight possible cable entries

CE      853 X00 XX      853 X10 XX      853 X20 XX      With cable gland      24 V

135 g      130 g      130 g      IP 66      IP 67      +50°C      -25°C      PLC





LED Traffic Light (3 tier)



The direction of the optical signal can be individually adjusted



Clear lenses ensure signalling effect even in direct sunlight

- High visibility LED Traffic Light in an innovative, award-winning design
- Clear signalling even in direct sunlight thanks to clear lenses **NEW**
- Simple mounting due to integrated mounting bracket
- Very good sideward visibility
- Protection rating IP 65/IP 69k

Life duration up to 50,000 hrs

### TECHNICAL SPECIFICATIONS:

<b>Dimensions (L x H x W):</b>	2 tier: 85 mm x 309 mm x 136 mm	3 tier: 85 mm x 394 mm x 136 mm
<b>Housing:</b>	PC/ABS, grey	
<b>Lens:</b>	PC, transparent	
<b>Fixing:</b>	Wall mounting, tube mounting (accessory)	
<b>Installation position:</b>	Vertical/hanging	
<b>Connection:</b>	Screw terminal with wire protection max. 1.5 mm <sup>2</sup>	
<b>Cable entry:</b>	Cable diameter max. 13 mm	
<b>Duty cycle:</b>	100 %	

### ORDER SPECIFICATIONS:

<b>Voltage</b>	24 V =	115-230 V ~
<b>Current consumption</b>	60 mA (red/yellow)	30 mA per tier
	120 mA (green)	at 230 V/50 Hz
<b>red / green</b>	<b>894 160 55</b>	<b>894 160 68</b>
<b>red / yellow / green</b>	<b>894 180 55</b>	<b>894 180 68</b>

### ACCESSORIES:

Fixing bracket underneath	<b>975 894 01</b>
Adaptor for tube mounting (suitable for Ø 75 mm tubes, see page 165)	<b>975 894 02</b>

### ADDITIONAL INFORMATION:

"Small traffic light series" wins "iF product design award 2009"  
 WERMA has won the prestigious "iF product design award" for the design and production of its "small traffic light series". Since its introduction in 1953, this design prize has been an enduring, renowned hallmark for "excellent" design.



High visibility LED Traffic Light with integrated siren see page 193

### TECHNICAL DIAGRAMS:

see page 291





LED Beacon (1 tier)



The direction of the optical signal can be individually adjusted



**NEW** The new adaptor (accessory) allows quick and simple mounting on a tube

- High visibility LED Beacon / Traffic Light in an innovative, award-winning design
- Colour intensive light effect thanks to LEDs in the same colour as the lenses
- Simple mounting due to integrated mounting bracket
- Very good sideward visibility
- NEW** • Protection rating IP 65/IP 69k

Life duration up to 50,000 hrs

**i TECHNICAL SPECIFICATIONS:**

Dimensions (L x H x W):	1 tier: 85 mm x 224 mm x 136 mm
	2 tier: 85 mm x 309 mm x 136 mm
	3 tier: 85 mm x 394 mm x 136 mm
Housing:	PC/ABS, grey
Lens:	PC, transparent
Fixing:	Wall mounting, tube mounting (accessory)
Installation position:	Vertical/hanging
Connection:	Screw terminal with wire protection max. 1.5 mm <sup>2</sup>
Cable entry:	Cable diameter max. 13 mm
Duty cycle:	100 %

**ORDER SPECIFICATIONS:**

Voltage	24 V <sup>==</sup>	115-230 V <sup>~</sup>
Current consumption	60 mA (red/yellow) 120 mA (green)	30 mA per tier at 230 V/50 Hz
red	<b>894 010 55</b>	<b>894 010 68</b>
green	<b>894 020 55</b>	<b>894 020 68</b>
yellow	<b>894 030 55</b>	<b>894 030 68</b>
red / green	<b>894 060 55</b>	<b>894 060 68</b>
red / yellow / green	<b>894 080 55</b>	<b>894 080 68</b>

**ACCESSORIES:**

Fixing bracket underneath	<b>975 894 01</b>
Adaptor for tube mounting (suitable for Ø 75 mm tubes)	<b>975 894 02</b>

**ADDITIONAL INFORMATION:**

**Maximum flexibility**

Thanks to the innovative bracket, the direction of the signal can be individually adjusted. After the bracket has been mounted, the customer can adjust the light direction to suit his requirements.

The LED traffic light can be turned through 360 degrees guaranteeing optimum visibility from all angles.



High visibility LED Traffic Light with integrated siren see page 194

**TECHNICAL DIAGRAMS:**

see page 291





- Extremely long life duration
- To fit in WERMA Signal towers and signal devices with B15d socket
- Resistant against shock and vibration
- Frontal beam direction
- Optimised lens structure ensures ideal illumination

**i TECHNICAL SPECIFICATIONS:**

Housing:	PA fibreglass, high-impact
Lens:	PC, transparent
Socket:	BA15d
For use with:	200, 203, 206, 209, 210, 213, 216, 219, 220, 223, 641, 805, 840, 846, 850, 851, 852

**Life duration up to 50,000 hrs**

Slight deviations in the form of the bulbs are possible.

**🛒 ORDER SPECIFICATIONS:**

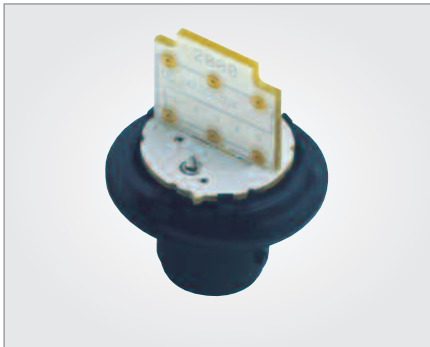
	24 V≈	115 V~	230 V~
Current consumption	≤ 45 mA	≤ 15 mA	≤ 15 mA
red	<b>956 100 75</b>	<b>956 100 67</b>	<b>956 100 68</b>
green	<b>956 200 75</b>	<b>956 200 67</b>	<b>956 200 68</b>
yellow	<b>956 300 75</b>	<b>956 300 67</b>	<b>956 300 68</b>
white	<b>956 400 75</b>	<b>956 400 67</b>	<b>956 400 68</b>
blue	<b>956 500 75</b>	<b>956 500 67</b>	<b>956 500 68</b>

**📐 TECHNICAL DIAGRAMS:**

see page 292



Suitable for use in KombiSIGN 71



Chip-On-Board technology



Manual grip facility





- Extremely long life duration
- To fit in WERMA Permanent/Traffic Light Beacon 890
- Resistant against shock and vibration

**i TECHNICAL SPECIFICATIONS:**

Socket:	E27
For use with:	890, 895
Slight deviations in the form of the bulbs are possible.	

**🛒 ORDER SPECIFICATIONS:**

Voltage	24 V ≈	115 V ~	230 V ~
Current consumption	≤ 30 mA	≤ 30 mA	≤ 30 mA
red	<b>956 120 75</b>	<b>956 120 67</b>	<b>956 120 68</b>
green	<b>956 220 75</b>	<b>956 220 67</b>	<b>956 220 68</b>
yellow	<b>956 320 75</b>	<b>956 320 67</b>	<b>956 320 68</b>



Suitable for use in Permanent/Traffic Light Beacons 890 (see page 160)





# Bulb Overview



	PART NO.	DESCRIPTION	TOTAL LENGTH(mm)	VOLTAGE	FOR USE WITH:									
	<b>955 840 34</b>	Bulb BA15d 5 W	max. 42	12 V	200	203	209	641	800	840	845			
	<b>955 840 35</b>	Bulb BA15d 5 W	max. 42	24 V	200	203	209	641	800	840	845			
	<b>955 840 32</b>	Bulb BA15d 5 W	max. 42	30 V	200	203	209	641	800	840	845			
	<b>955 840 57</b>	Bulb BA15d 5 W	max. 42	115 V	200	203	209	641	800	840	845			
	<b>955 840 38</b>	Bulb BA15d 5 W	max. 42	230 V	200	203	209	641	800	840	845			
	<b>955 015 34</b>	Bulb BA15d 7 W	52	12 V	210	213	219	220	480	580	815		850	
	<b>955 015 35</b>	Bulb BA15d 7 W	52	24 V	210	213	219	220	480	580	815	826	850	
	<b>955 015 36</b>	Bulb BA15d 7 W	52	48 V	210	213	219	220	480	580	815	monit.	850	
	<b>955 015 37</b>	Bulb BA15d 7 W	52	115 V	210	213	219	220	480	580	815		850	
	<b>955 015 38</b>	Bulb BA15d 7 W	52	230 V	210	213	219	220	480	580	815		850	
	<b>955 826 35</b>	Bulb BA15d 15 W	45	24 V	826									
	<b>955 826 38</b>	Bulb BA15d 15 W	45	230 V	826									
	<b>955 827 35</b>	Bulb BA15d 25 W	55	24 V	827									
	<b>955 827 37</b>	Bulb BA15d 25 W	55	115 V	827									
	<b>955 827 38</b>	Bulb BA15d 25 W	55	230 V	827									
	<b>955 890 38</b>	Bulb E14 15 W	76	230 V	890	895								
	<b>955 880 66</b>	Bulb E14 40 W	76	48 V	881									
	<b>955 880 67</b>	Bulb E14 40 W	76	115 V	881									
	<b>955 880 68</b>	Bulb E14 40 W	76	230 V	881									

Minimal differences in form are possible within the different bulb models.

	PART NO.	DESCRIPTION	TOTAL LENGTH (mm)	VOLTAGE	FOR USE WITH:					
	<b>955 890 67</b>	Bulb E27 25 W	100	115 V	890	895				
	<b>955 890 68</b>	Bulb E27 25 W	100	230 V	890	895				
	<b>955 883 34</b>	Halogen bulb G 6.35 35 W	40	12 V	783	784	883	884		
	<b>955 883 35</b>	Halogen bulb G 6.35 35 W	40	24 V	783	784	883	884		
	<b>955 885 24</b>	Halogen bulb G 6.35 20 W	40	12 V	783	885				
	<b>955 885 25</b>	Halogen bulb G 6.35 20 W	40	24 V	783	885				
	<b>955 880 34</b>	Halogen bulb H 1 55 W	57	12 V	880					
	<b>955 880 35</b>	Halogen bulb H 1 70 W	57	24 V	880					
	<b>956 x00 75</b>	LED bulb BA15d	42	24 V						
	<b>956 x00 67</b>	LED bulb BA15d	42	115 V						
	<b>956 x00 68</b>	LED bulb BA15d	42	230 V						
		x see page 166								
	<b>956 x20 75</b>	LED bulb E27	65	24 V	890	895				
	<b>956 x20 67</b>	LED bulb E27	65	115 V	890	895				
	<b>956 x20 68</b>	LED bulb E27	65	230 V	890	895				
		x see page 167								

Minimal differences in form are possible within the different bulb models.



## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Audio Indicators & Alerts](#) category:*

*Click to view products by [Werma](#) manufacturer:*

Other Similar products are found below :

[M2BJ-BH24E](#) [6-4](#) [68S1240-PA](#) [MBA-624](#) [F/BC 40P-DR LF](#) [FDG111PLF](#) [F/NRMB 24 BLACK LF](#) [PF-35N29WQ](#) [PFD-27A35PQ](#) [PL-27A35PSQ](#) [PS-531Q](#) [AB2020B-2-LW1](#) [EBPT-401](#) [PB06SD12AP](#) [PB-1220PEQ](#) [S6109](#) [SC2036ACP](#) [SC616N-2](#) [SC628FW](#) [SC628MPG](#) [SC648D](#) [SCS045MD9DT3S](#) [AB2025B-LW50-R](#) [ESZ-25B-5-250B](#) [F/BC 35-DR LF](#) [FCM12PLF](#) [F/EB20P-DR LF](#) [F/HU110MP24V-IP67B LF](#) [AI-2835-TF-LW150-2-R](#) [AI-4228-TF-LW305-R](#) [FSMD8585JSLF](#) [FSS-26T](#) [F/SU 21-02 LF](#) [F/TCW 05 WITH LABEL LF](#) [F/UCW 03 WITH LABEL LF](#) [F/UCW 06 WITH LABEL LF](#) [PKM22EPPH40S1-B0](#) [PKM35-4A0](#) [PL-35N29WQ](#) [PLD-27A35PQ](#) [PS-552Q](#) [CM-5](#) [M2BJ-BH24E-D](#) [REF-202](#) [LSC628ANR](#) [5-100 PAL-328](#) [03-810.001](#) [RTO-1R07-001](#) [PL-21N31PQ](#) [PF-27A25PSQ](#)