



Overview Free-standing

Permanent Beacons

<p>200/203 201/204 (LED)</p>  <p>Height: 65.5/91 mm Page 122 + 123</p>	<p>209 209 (LED)</p>  <p>Height: 87/103 mm Page 124 + 125</p>	<p>210/213 211/214 (LED)</p>  <p>Height: 81/107 mm Page 126 + 127</p>	<p>219 219 (LED)</p>  <p>Height: 103/119 mm Page 128 + 129</p>
<p>850/851/852</p>  <p>Height: 88/108/101 mm Page 130</p>	<p>220/223 221/224 (LED)</p>  <p>Height: 79/105 mm Page 132 + 133</p>	<p>806 Monitorable LED Permanent Beacon</p>  <p>Height: 97 mm Page 134</p>	<p>853 (LED)</p>  <p>Height: 85 mm Page 135</p>
<p>826</p>  <p>Height: 137 mm Page 136</p>	<p>826 Monitored Permanent Beacon</p>  <p>Height: 137 mm Page 137</p>	<p>829 LED Permanent/ Blinking Beacon</p>  <p>Height: 137 mm Page 138</p>	<p>829 LED Perma- nent/Blinking/ Rotating Beacon</p>  <p>Height: 137 mm Page 139</p>
<p>829 Monitored LED Permanent Beacon</p>  <p>Height: 137 mm Page 140</p>	<p>895</p>  <p>Height: 148 mm Page 141</p>	<p>839 (LED)</p>  <p>Height: 189 mm Page 142</p>	<p>280 (LED)</p>  <p>Height: 218 mm Page 143</p>
<p>NEW 280 LED Obstruction Light</p>  <p>Height: 218 mm Page 145</p>	<p>NEW 281 LED Obstruction Light</p>  <p>Height: 205 mm Page 146</p>		

Rotating Beacons

<p>885 Rotating Mirror Beacon</p>  <p>Height: 151 mm Page 165</p>	<p>839 Rotating Mirror 839 LED Rotating</p>  <p>Height: 189 mm Page 167 + 168</p>	<p>829 LED Rotating Beacon</p>  <p>Height: 137 mm Page 169</p>	<p>280 LED Rotating Beacon</p>  <p>Height: 218 mm Page 170</p>
<p>884 Rotating Beacon</p>  <p>Height: 218 mm Page 171</p>	<p>883 Rotating Mirror Beacon</p>  <p>Height: 218 mm Page 172</p>	<p>880 Rotating Mirror Beacon</p>  <p>Height: 215 mm Page 173</p>	<p>881 Rotating Mirror Beacon</p>  <p>Height: 204 mm Page 174</p>

Flashing Beacons

<p>202 Flashing 205 Flashing</p>  <p>Height: 81/107 mm Page 147</p>	<p>209 Flashing Beacon</p>  <p>Height: 103 mm Page 148</p>	<p>212 Flashing 215 Flashing</p>  <p>Height: 97/123 mm Page 149</p>	<p>219 Flashing Beacon</p>  <p>Height: 119 mm Page 150</p>
<p>222 Flashing 225 Flashing</p>  <p>Height: 79/105 mm Page 151</p>	<p>853 LED Double Flash</p>  <p>Height: 85 mm Page 152</p>	<p>853 LED EVS</p>  <p>Height: 85 mm Page 153</p>	<p>897 Double Flash</p>  <p>Height: 148 mm Page 154</p>
<p>830 Flashing 835 Flashing</p>  <p>Height: 133/172 mm Page 155</p>	<p>827 Blinking Beacon</p>  <p>Height: 137 mm Page 156</p>	<p>828 Flashing Beacon</p>  <p>Height: 137 mm Page 157</p>	<p>829 LED Double Flash</p>  <p>Height: 137 mm Page 159</p>
<p>829 LED EVS</p>  <p>Height: 137 mm Page 160</p>	<p>839 Double Flash Beacon</p>  <p>Height: 189 mm Page 161</p>	<p>838 Double Flash Beacon</p>  <p>Height: 218 mm Page 162</p>	<p>280 LED Double Flash</p>  <p>Height: 218 mm Page 163</p>
<p>280 LED EVS</p>  <p>Height: 218 mm Page 164</p>	<p>828 Flashing Beacon for road tunnels</p>  <p>Height: 137 mm Page 158</p>		

Traffic Lights

<p>853 LED Traffic Light</p>  <p>Height: 85 mm Page 179</p>	<p>890 (LED) Traffic Light</p>  <p>Height: 154 mm Page 175 + 176</p>	<p>894 LED Traffic Light</p>  <p>2 or 3 tier Page 180</p>	<p>894 LED Traffic Light</p>  <p>1, 2 or 3 tier Page 181</p>
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Bulbs and Further Information

LED Bulbs Page 182 + 183
 Bulbs Overview Page 184 + 185

Further information about "Optical Signal Devices" can be found in the chapter "General Information" beginning on page 356.



Optical Signal Devices

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.

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.

Please note the photosensitive epilepsy warning on page 352.



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.



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.

Advantages

- 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



Series	200	220	210	209	219	853
Ø	57 mm	75 mm	57 mm	57 mm	57 mm	85 mm
Height	65.5 mm	79 mm	81 mm	87 mm	103 mm	85 mm
Page	122	132	126	148	150	135

COMPARISON OF WERMA FREE-STANDING BEACONS



Series	826	885	839	280/883	884
Ø	98 mm	98 mm	153 mm	142 mm	142 mm
Height	137 mm	151 mm	189 mm	218 mm	218 mm
Page	136	165	142	143/172	171





Permanent Beacon 200
(base mounting)



Permanent Beacon 203 with
integrated mounting bracket

- Safe CAGE CLAMP® technology
- BA15d socket integrated in the base
- 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
Connection:	CAGE CLAMP® technology max. 2.5 mm ²
Cable entry:	Cable diameter max. 10 mm (200) Cable diameter 3-6 mm (203)

PERMANENT BEACON	200	203
Fixing:	Base mounting with flat seal	Bracket mounting incl. cable gland M 12 x 1.5 mm
Dimensions (Ø x Height):	57 mm x 65.5 mm	57 mm x 91 mm
Operating voltage:	Max. 250 V	Max. 250 V
Bulb socket:	BA15d, 7 Watt max.	BA15d, 7 Watt max.
Bulb change:	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 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 42 mm

Voltage	24 V AC/DC	115 V AC	230 V AC
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

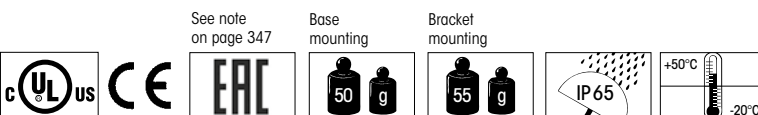


Accessories

Sizes of Permanent Beacons



TECHNICAL DIAGRAMS: see page 298





LED Permanent Beacon 201
(base mounting)



LED 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 ²
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 incl. 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 AC/DC	115 V AC	230 V AC
Voltage	24 V AC/DC	115 V AC	230 V AC
Current consumption	45 mA	25 mA	25 mA
red	201 100 75	201 100 67	201 100 68
green	201 200 75	201 200 67	201 200 68
yellow	201 300 75	201 300 67	201 300 68

Bracket mounting 204

	24 V AC/DC	115 V AC	230 V AC
Voltage	24 V AC/DC	115 V AC	230 V AC
Current consumption	45 mA	25 mA	25 mA
red	204 100 75	204 100 67	204 100 68
green	204 200 75	204 200 67	204 200 68
yellow	204 300 75	204 300 67	204 300 68

Further colours and voltages on request.

TECHNICAL DIAGRAMS:

see page 298 + 299

Sizes of Permanent Beacons



See note on page 347

Base mounting: 66 g, 72 g

Bracket mounting: 72 g, 72 g

24 V

UL US, CE, EAC, IP65, +50°C to -20°C, PLC





- Safe CAGE CLAMP® technology
- BA15d socket integrated in the base
- Optimum illumination
- Tube mounting
- Single hole mounting possible with cable gland

TECHNICAL SPECIFICATIONS:

Dimensions (Ø x Height):	57 mm x 87 mm
Housing:	PA-GF, high impact
Lens:	PC, transparent
	Ring: PC
Connection:	CAGE CLAMP® technology max. 2.5 mm ²
Cable entry:	Cable diameter max. 11 mm
Fixing:	Tube mounting M25 x 1.5 mm
Operating voltage:	Max. 250 V
Bulb socket:	BA15d, 7 Watt max.
Bulb change:	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:

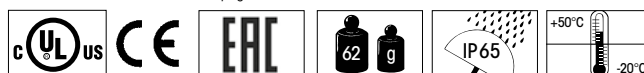
Base with integrated tube, M25 x 1.5 mm	975 209 01				
Cable gland M25 x 1.5 mm	975 209 02				
Bulb BA15d, 5 W total length 42 mm					
Voltage	12 V	24 V	30 V	115 V	230 V
	955 840 34	955 840 35	955 840 32	955 840 57	955 840 38

LED bulb BA15d total length 42 mm				
Voltage	24 V AC/DC	115 V AC	230 V AC	
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 299

See note on page 347



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

TECHNICAL SPECIFICATIONS:

Life duration up to 100,000 hrs

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 ²
Cable entry:	Cable diameter max. 11 mm
Fixing:	Tube mounting M25 x 1.5 mm

ORDER SPECIFICATIONS:

Voltage	24 V AC/DC	115 V AC	230 V AC
Current consumption	45 mA	25 mA	25 mA
red	209 110 75	209 110 67	209 110 68
green	209 210 75	209 210 67	209 210 68
yellow	209 310 75	209 310 67	209 310 68

ACCESSORIES:

Base with integrated tube, M25 x 1.5 mm	975 209 01
Cable gland M25 x 1.5 mm	975 209 02

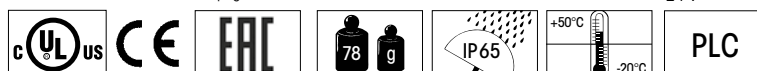
TECHNICAL DIAGRAMS:

see page 299

Sizes of Permanent Beacons



See note on page 347



24 V





Permanent Beacon 210
(base mounting)



Permanent Beacon 213 with
integrated mounting bracket



Accessories

Sizes of Permanent Beacons



- Safe CAGE CLAMP® technology
- BA15d socket integrated in the base
- 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
Connection:	CAGE CLAMP® technology max. 2.5 mm ²
Cable entry:	Cable diameter max. 10 mm (210) Cable diameter 3-6 mm (213)

PERMANENT BEACON	210	213
Fixing:	Base mounting with flat seal	Bracket mounting incl. cable gland M12 x 1.5 mm
Dimensions (Ø x Height):	57 mm x 81 mm	57 mm x 107 mm
Operating voltage:	Max. 250 V	Max. 250 V
Bulb socket:	BA15d, 10 Watt max.	BA15d, 10 Watt max.
Bulb change:	Via removal of lens	Via removal of lens
	Bulb not included in assembly.	

ORDER SPECIFICATIONS:

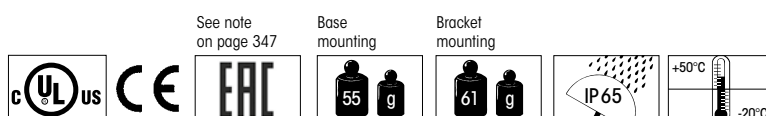
	Base mounting 210	Bracket mounting 213
Voltage	12-240 V	12-240 V
red	210 100 00	213 100 00
green	210 200 00	213 200 00
yellow	210 300 00	213 300 00
clear	210 400 00	213 400 00
blue	210 500 00	213 500 00

ACCESSORIES:

Bulb BA15d, 7 W total length 54 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 42 mm			
Voltage	24 V AC/DC	115 V AC	230 V AC
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 300





LED Permanent Beacon 211
(base mounting)



LED 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:

Housing:	PA-GF, high impact
Lens:	PC, transparent; Ring: PC
Connection:	CAGE CLAMP® technology max. 2,5 mm ²
Cable entry:	Cable diameter max. 10 mm (211) Cable diameter 3-6 mm (214)

Life duration
up to 100,000 hrs

LED PERMANENT BEACON	211	214
Fixing:	Base mounting with flat seal	Bracket mounting incl. cable gland M12 x 1.5 mm
Dimensions (Ø x Height):	58 mm x 97 mm	58 mm x 123 mm

ORDER SPECIFICATIONS:

Base mounting 211

	24 V AC/DC	115 V AC	230 V AC
Voltage	24 V AC/DC	115 V AC	230 V AC
Current consumption	45 mA	25 mA	25 mA
red	211 100 75	211 100 67	211 100 68
green	211 200 75	211 200 67	211 200 68
yellow	211 300 75	211 300 67	211 300 68

Bracket mounting 214

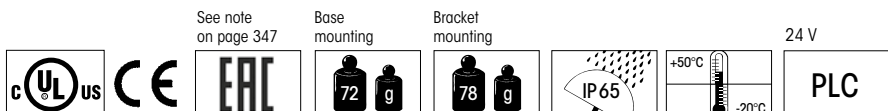
	24 V AC/DC	115 V AC	230 V AC
Voltage	24 V AC/DC	115 V AC	230 V AC
Current consumption	45 mA	25 mA	25 mA
red	214 100 75	214 100 67	214 100 68
green	214 200 75	214 200 67	214 200 68
yellow	214 300 75	214 300 67	214 300 68

Further colours and voltages on request.

TECHNICAL DIAGRAMS:

see page 300

Sizes of Permanent Beacons





- Safe CAGE CLAMP® technology
- BA15d socket integrated in the base

- Optimum illumination
- Tube mounting
- Single hole mounting possible with cable gland

**TECHNICAL SPECIFICATIONS:**

Dimensions (Ø x Height):	57 mm x 103 mm
Housing:	PA-GF, high impact
Lens:	PC, transparent
	Ring: PC
Connection:	CAGE CLAMP® technology max. 2.5 mm ²
Cable entry:	Cable diameter max. 11 mm
Fixing:	Tube mounting, M25 x 1.5 mm
Operating voltage:	Max. 250 V
Bulb socket:	BA15d, 10 Watt max.
Bulb change:	Via removal of lens
	Bulb not included in assembly.

**ORDER SPECIFICATIONS:**

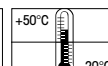
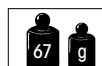
	12-240 V
red	219 100 00
green	219 200 00
yellow	219 300 00
clear	219 400 00
blue	219 500 00

**ACCESSORIES:**

Base with integrated tube, M25 x 1.5 mm	975 209 01				
Cable gland M25 x 1.5 mm	975 209 02				
Bulb BA15d, 7 W total length 54 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 42 mm					
Voltage	24 V AC/DC		115 V AC	230 V AC	
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	



Accessories

Sizes of Permanent Beacons**TECHNICAL DIAGRAMS:** see page 301See note
on page 347



Base with integrated tube (accessory)

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

i TECHNICAL SPECIFICATIONS:

Dimensions (Ø x Height):	58 mm x 119 mm
Housing:	PA-GF, high impact
Lens:	PC, transparent
	Ring: PC
Connection:	CAGE CLAMP® technology max. 2.5 mm ²
Cable entry:	Cable diameter max. 11 mm
Fixing:	Tube mounting, M25 x 1.5 mm

Life duration up to 100,000 hrs

🛒 ORDER SPECIFICATIONS:

Voltage	24 V AC/DC	115 V AC	230 V AC
Current consumption	45 mA	25 mA	25 mA
red	219 110 75	219 110 67	219 110 68
green	219 210 75	219 210 67	219 210 68
yellow	219 310 75	219 310 67	219 310 68

🏠 ACCESSORIES:

Base with integrated tube, M25 x 1.5 mm	975 209 01
Cable gland M25 x 1.5 mm	975 209 02

📐 TECHNICAL DIAGRAMS:

see page 301

Sizes of Permanent Beacons



See note on page 347





850



851



852

- Available with grey or black housing

TECHNICAL SPECIFICATIONS:

Dimensions (Ø x Height):	57 mm x 88 mm (850) 57 mm x 108 mm (851) 57 mm x 101 mm (852)
Housing:	ABS (85X XXX 38) PC/ABS-Blend (85X XXX 08)
Lens:	PC, transparent
Fixing:	850: Base mounting 851: Bracket mounting 852: Tube mounting M25 x 1.5 mm
Socket:	BA15d max. 7 Watt
Connection:	Screw terminal max. 1.5 mm ²
Cable entry:	Cable diameter max. 8.5 mm (850) Cable diameter max. 7 mm (851) Cable diameter max. 10 mm (852)

Bulb not included in assembly.

ORDER SPECIFICATIONS:

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

Further colours and voltages on request.

ADDITIONAL INFORMATION:

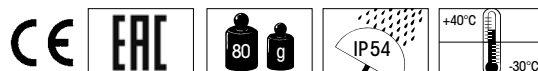
Please also see the beacon series 209, 210, 213, 219 with additional advantages (see page 148 onwards)

- High protection rating IP 65
- BA15d socket integrated in the base
- Safe CAGE CLAMP® connection
- Optimum illumination
- Connection without product disassembly



ACCESSORIES: see next page

See note on page 347





ACCESSORIES:

Base with integrated tube
with M25 x 1.5 mm
incl. rubber seal **960 693 03**

Adaptor M25 / M20
for fixing **960 693 04**

Cable gland
M25 x 1.5 mm **975 209 02**

Bulb BA15d, 7 W
Total length 54 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 42 mm

Voltage	24 V AC/DC	115 V AC	230 V AC
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

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



TECHNICAL DIAGRAMS:

see page 321





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
- BA15d socket integrated in the base
- 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/ABS-Blend
Connection:	CAGE CLAMP® technology max. 2.5 mm ²
Cable entry:	Cable diameter max. 10 mm (220) Cable diameter 3-6 mm (223)

PERMANENT BEACON	220	223
Fixing:	Base mounting with flat seal	Bracket mounting incl. cable gland M12 x 1.5 mm
Dimensions (Ø x Height):	75 mm x 79 mm	75 mm x 105 mm
Operating voltage:	Max. 250 V	Max. 250 V
Bulb socket:	BA15d, 10 Watt max.	BA15d, 10 Watt max.
Bulb change:	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:

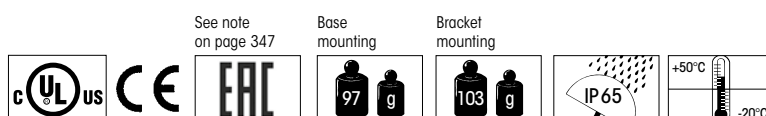
Bulb BA15d, 7 W
total length 54 mm

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 42 mm

Voltage	24 V AC/DC	115 V AC	230 V AC
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 301





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

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

LED PERMANENT BEACON	221	224
Fixing:	Base mounting with flat seal	Bracket mounting incl. cable gland M12 x 1.5 mm
Dimensions (Ø x Height):	75 mm x 79 mm	75 mm x 105 mm

ORDER SPECIFICATIONS:

Base mounting 221

Voltage	24 V AC/DC	115 V AC	230 V AC
Current consumption	45 mA	25 mA	25 mA
red	221 100 75	221 100 67	221 100 68
green	221 200 75	221 200 67	221 200 68
yellow	221 300 75	221 300 67	221 300 68

Bracket mounting 224

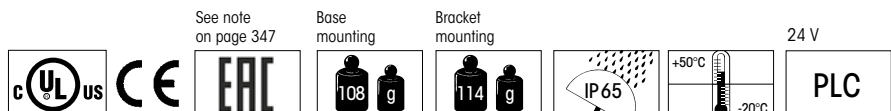
Voltage	24 V AC/DC	115 V AC	230 V AC
Current consumption	45 mA	25 mA	25 mA
red	224 100 75	224 100 67	224 100 68
green	224 200 75	224 200 67	224 200 68
yellow	224 300 75	224 300 67	224 300 68

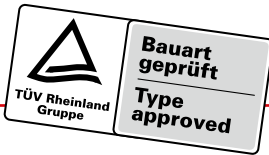
Further colours and voltages on request.

TECHNICAL DIAGRAMS:

see page 301 + 302

Sizes of Permanent Beacons





Monitorable LED Permanent Beacon



Bracket (accessory)



Accessories

- TÜV certified LED Muting Beacon
- Current monitoring possible
- 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

TECHNICAL SPECIFICATIONS:

Life duration up to 100,000 hrs

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 ²
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 DC
Current consumption	60 mA
yellow	806 350 55
clear	806 450 55

ACCESSORIES:

Bracket, including cable gland	960 000 02
Bracket for 1-sided mounting	975 840 85

see page 67.

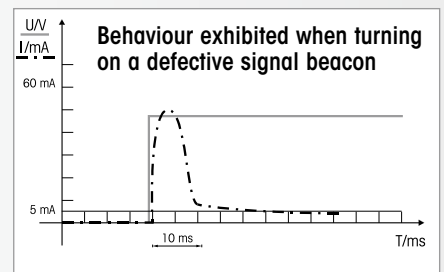
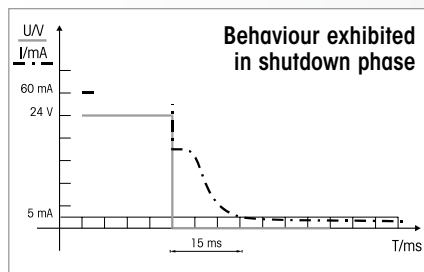
ADDITIONAL INFORMATION:

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.

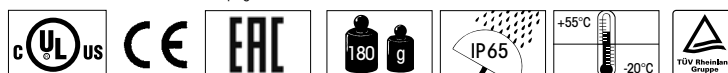
It is therefore necessary that the signal beacon in such applications can be triggered by failsafe technology and the bulb function can be monitored.

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



TECHNICAL DIAGRAMS: see page 315

See note on page 347





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
- Also available in 48 V

Life duration up to 50,000 hrs

TECHNICAL SPECIFICATIONS:

Dimensions (L x H x W):	85 mm x 85 mm x 72 mm
Housing:	PP-GF, black
Lens:	PC, transparent
Connection:	Screw terminal with wire protection, max. 1.5 mm ²
Fixing:	Wall, base and ceiling mounting
Current consumption:	Max. 80 mA at 24 V
Equipment:	Elastic self-sealing membranes for cable entry without tools Eight integrated M20 threads, no nuts required Optional use of a cable gland, thread length of cable gland ≤ 9 mm (accessory)
Assembly:	Incl. snap-on fixing bracket (optional use, see page 152)

ORDER SPECIFICATIONS:

Voltage	12 V DC	24 V DC	48 V AC	115-230 V AC
red	853 100 54	853 100 55	853 100 66	853 100 60
green	853 200 54	853 200 55	853 200 66	853 200 60
yellow	853 300 54	853 300 55	853 300 66	853 300 60
clear	853 400 54	853 400 55	853 400 66	853 400 60
blue	853 500 54	853 500 55	853 500 66	853 500 60

ACCESSORIES:

Connector for traffic light combinations	975 853 01
Cable gland M20 x 1.5 mm, 8mm thread length	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 M20 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.

Traffic light configurator at www.werma.com



TECHNICAL DIAGRAMS: see page 321

See note on page 347



Sizes of Permanent Beacons





Base/Bracket Mounting



Tube Mounting



Accessories

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

i TECHNICAL SPECIFICATIONS:

Dimensions (Ø x Height):	98 mm x 137 mm (Base/Bracket mounting) 98 mm x 200 mm (Tube mounting)
Cable entry:	Cable diameter 5-7 mm
Housing:	PC/ABS-Blend
Lens:	PC, transparent
Connection:	Screw free clamp mechanism max. 1.5 mm ²
Operating voltage:	Max. 250 V for BA15d
Bulb:	Max. 15 W
Duty cycle:	100 % max. 15 W, 50 % max. 25 W
Socket:	BA15d

Bulb not included in assembly.

🛒 ORDER SPECIFICATIONS:

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

🏠 ACCESSORIES:

Plastic bracket for wall mounting	975 826 05
Wire guard, galvanised, only for base mounting	975 826 03
Tube Ø 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

Bulb BA15d, 15 W, total length 48 mm	24 V 955 826 35	230 V 955 826 38
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📐 TECHNICAL DIAGRAMS:

see page 316

Sizes of Permanent Beacons



Base/Bracket mounting See note on page 347 Base/Bracket mounting Tube mounting





Monitored Permanent Beacon

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



Bracket (accessory)



Tube with base (accessory)

i 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 ²
Cable entry:	Cable diameter 5-7 mm
Rated voltage:	24 V DC ± 10 %
Input power 24 V AC/DC:	7 W
Bulb BA15d:	7 W/24 V
Output current capability:	30 V DC/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.

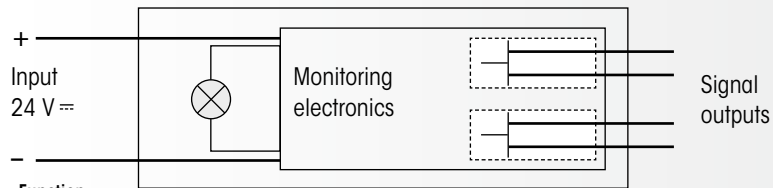
🛒 ORDER SPECIFICATIONS:

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

🏠 ACCESSORIES:

Bulb BA15d, 7 W	955 015 35
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⚠️ ADDITIONAL INFORMATION:

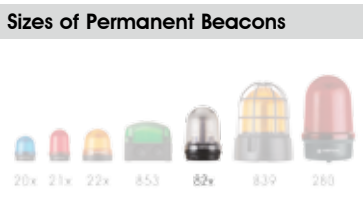


Function

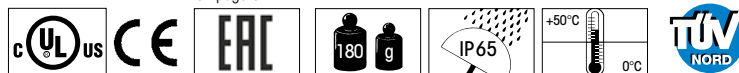
The device is equipped with a lamp monitor which signals the current flow of the incandescent lamp back to two electrically isolated, potential-free semiconductor outputs A and B (outputs closed). If the lamp has not been actuated, both outputs are open. In case of a fault and/or a lamp failure at least 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 316



See note on page 347





Base/Bracket mounting



Tube mounting



Accessories

- Multi-functional LED beacon
- Interchangeable light effects
- Shock-proof and vibration resistant
- 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)
	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 ² - 2.5 mm ²

Life duration up to 50,000 hrs

LED PERMANENT/BLINKING BEACON (INTERCHANGEABLE LIGHT EFFECT)

Blink frequency:	C. 1.5 Hz
Operating voltage:	24 V DC

LED PERMANENT BEACON

Operating voltage:	115 V AC	230 V AC
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ORDER SPECIFICATIONS:

	Base/Bracket mounting	Tube mounting
LED PERMANENT/BLINKING		
Voltage	24 V DC	24 V DC
Current consumption	≤ 150 mA	≤ 150 mA
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

	Base/Bracket mounting		Tube mounting	
LED PERMANENT				
Voltage	115 V AC	230 V AC	115 V AC	230 V AC
Current consumption	≤ 30 mA	≤ 30 mA	≤ 30 mA	≤ 30 mA
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 Ø 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 317

Sizes of Permanent Beacons



Base/Bracket mounting See note on page 347 Base/Bracket mounting Tube mounting



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 ² - 2.5 mm ²	
Blink frequency:	C. 1.5 Hz	
Rotation frequency:	C. 180 r.p.m.	

🛒 ORDER SPECIFICATIONS:

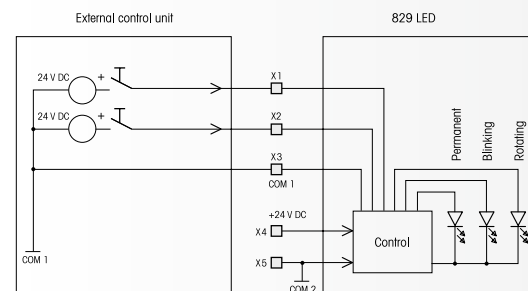
Fixing	Base/Bracket mounting	Tube mounting
Voltage	24 V DC	24 V DC
Current consumption	≤ 300 mA	≤ 300 mA
red	829 150 55	829 157 55
green	829 250 55	829 257 55
yellow	829 350 55	829 357 55
blue	829 550 55	829 557 55

🏠 ACCESSORIES:

Plastic bracket for wall mounting	975 826 05
Wire guard, galvanised, only for base mounting	975 826 03
Tube Ø 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

⚠️ 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 317

See note on page 347

Base/Bracket mounting Tube mounting

220 g 255 g

UL US CE EAC IP65 +50°C / -20°C





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



Bracket (accessory)

- Durable LED Permanent Beacon with built-in monitoring capability
- No additional external voltage required
- Two potential-free safety outputs for connection to control system

Life duration
up to 50,000 hrs

TECHNICAL SPECIFICATIONS:

Dimensions (Diameter 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 tube mounting - once as socket for beacon and once as base
Installation position:	Vertical
Cable outlet:	Downwards
Current consumption:	≤ 145 mA
Duty cycle:	100 %
Connection:	Screw terminal with wire protection max. 2.5 mm ²
Cable entry:	Cable diameter 5-7 mm
Rated voltage:	24 V DC
Input power 24 V DC:	c. 3.5 W
Output current capability:	30 V DC/100 mA
On state resistance of an output:	Max. 25 Ω
Atmospheric humidity:	≤ 95% without moisture condensation
Response time, normal operation and with LED failure:	1 ms to 5 ms
in fault cases with safety release:	< 1 s (with short-circuit current ≥ 1 A)
Certification:	EN ISO 13849-1:2008 category 4, Performance Level "e" EN ISO 13849-2:2008 validation

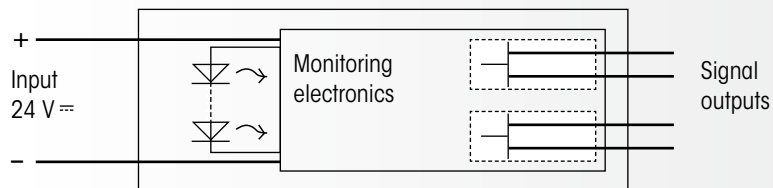
ORDER SPECIFICATIONS:

Voltage	24 V DC
red	829 170 55
yellow	829 370 55
clear	829 470 55

ACCESSORIES:

Bracket	975 826 05
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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).

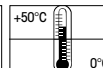
If the beacon has not been actuated, both outputs are open. In case of a fault at least one output is opened.

TECHNICAL DIAGRAMS:

see page 317

See note on page 347

Sizes of Permanent Beacons





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



TECHNICAL SPECIFICATIONS:

Dimensions (Ø x Height):	150 mm x 148 mm
Housing:	PC/ABS-Blend, grey
Lens:	PC, transparent
Socket:	E27 max. 25 W 2 sockets E14 each with max. 15 W with adhesive stickers E27 max. 15 W
Fixing:	Base mounting, tube mounting and fixing bracket (accessory)
Cable entry:	From top or bottom with cable gland M20 x 1.5 mm or from the back with rubber grommet Ø 6-12 mm
Connection:	Screw-free clamp mechanism max. 1.5 mm ²



ORDER SPECIFICATIONS:

Voltage	12-240 V AC/DC
red	895 100 00
green	895 200 00
yellow	895 300 00
clear	895 400 00
blue	895 500 00
Bulb not included in assembly.	

PERMANENT LIGHT WITH TWO SOCKETS (incl. reflector)

Voltage	12-240 V AC/DC
red	895 110 00



ACCESSORIES:

Fixing bracket, additional reflector, Bulbs and LED Bulbs, Adhesive Stickers see Permanent/Traffic Light Beacon (page 176).



TECHNICAL DIAGRAMS:

see page 326



Audible addition:
The Multi-Tone Sounder 190 with 110 dB (see page 253)

See note on page 347





- Robust aluminium housing including wire guard
- Salt water resistant
- DC multi-voltage version
- High Protection rating IP 67
- Robust bracket made of V2A stainless steel (accessory)

Life duration up to 50,000 hrs

i TECHNICAL SPECIFICATIONS:

Dimensions (Ø x Height):	153 mm x 198 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 ²	
Cable entry:	Cable gland M20 x 1.5 mm (included in assembly) Cable diameter 6-13 mm	
Installation position:	As required	

🛒 ORDER SPECIFICATIONS:

Voltage	12-50 V DC	230 V AC
Current consumption	500-100 mA	50 mA
red	839 100 55	839 100 68
yellow	839 300 55	839 300 68

🏠 ACCESSORIES:

Mounting bracket	975 839 02
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📏 TECHNICAL DIAGRAMS:

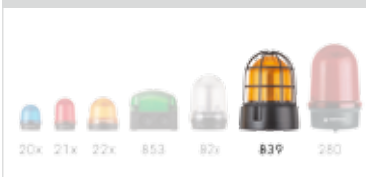
see page 317



Also suitable for use in rough conditions



Sizes of Permanent Beacons



See note on page 347





- High light intensity
- Adaptor for tube mounting (accessory)
- High impact resistance to 20 Joules
- DC multi-voltage version

i 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 ²	
Cable entry:	Cable diameter 5-7 mm	
Duty cycle:	100 %	

🛒 ORDER SPECIFICATIONS:

Voltage	12-50 V DC	230 V AC
Current consumption	12 V: 500 mA	50 mA
	50 V: 100 mA	
red	280 100 55	280 100 68
yellow	280 300 55	280 300 68

🏠 ACCESSORIES:

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

📏 TECHNICAL DIAGRAMS:

see page 303



Plastic bracket (accessory)



High light output using unique LED technology



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

Sizes of Permanent Beacons



See note on page 347



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.

- **"Low intensity obstacle beacon type A"**: a red permanent night-time warning beacon for fixed obstructions with a brightness of 10 cd.
- **"Low intensity obstacle beacon type B"**: a red permanent night-time warning beacon for fixed obstructions with a brightness of 32 cd.

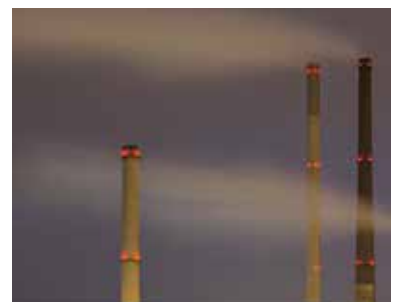
Where are obstacle lights deployed?



- **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").



Low-intensity LED Obstruction Light Type A and B

NEW



LED Obstruction Light Type B



LED Obstruction Light Type A - The adaptor (accessory) allows quick and simple mounting on a tube



Plastic bracket, adaptor for tube mounting (accessories)

Sizes of Permanent Beacons



- For use as "Low-intensity Obstruction Light, Type A or B" in accordance with ICAO Annex 14
- **NEW** 230 V version with or without monitoring function
- Very bright solution which far exceeds the required light output (32 cd)
- High impact resistance to 20 Joules

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, clear
Fixing:	Base mounting, bracket mounting (accessory), tube mounting (accessory)
Connection:	Screw terminal with wire protection max. 2.5 mm ²
Cable entry:	Cable diameter 5-7 mm
Duty cycle:	100 %
Current consumption at failure of 2 of the 12 LED strips: < 50mA	

🛒 ORDER SPECIFICATIONS:

Low-intensity LED Obstruction Light Type A

Voltage	12-50 V DC
Current consumption aviation red	500-100 mA
	280 410 55

NEW Low-intensity LED Obstruction Light Type B

Voltage	24 V DC	230 V AC	230 V AC with monitoring funct.
Current consumption aviation red	~ 400 mA	~ 200 mA	~ 200 mA / < 50 mA (Failure mode)
	280 470 55	280 470 68	280 480 68

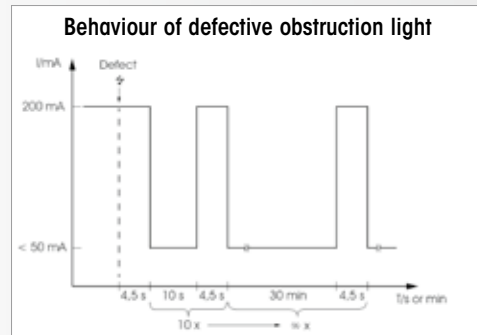
🏠 ACCESSORIES:

Plastic bracket for wall mounting	975 883 06
Adaptor for tube mounting	975 883 09

⚠️ ADDITIONAL INFORMATION:

Monitoring function:
To provide enhanced safety for obstruction light applications WERMA has developed a variant with an integrated monitoring function.

Should any two of the twelve LED strips fail, the light will switch to failure mode (see image). This can be detected for example by a current monitoring relay. After repeatedly checking the product status the unit will remain in failure mode for 30 minutes before again checking the status.



📐 TECHNICAL DIAGRAMS: see page 303

See note on page 347



Low-intensity LED Obstruction Light Type A and B

NEW

LED Obstruction Light Type B

- LED Obstruction Light with robust glass/metal housing
- For international use as „Low-intensity Obstacle Light, Type A or B“ in accordance with ICAO Annex 14
- NEW** • 230 V version with or without monitoring function (Type B)
- Suitable for use in tough operating conditions, salt water resistant

TECHNICAL SPECIFICATIONS:

Dimensions (Ø x Height):	185 mm x 205 mm
Housing:	Aluminium, coloured powder coating
Lens:	Reinforced borosilicate glass
Fixing:	Base mounting, tube mounting M25 (no accessory required)
Connection:	Screw terminal with wire protection max. 2.5 mm ²
Cable entry:	Cable gland M25 x 1.5 mm (included in assembly), Cable diameter 9-17 mm Reducer unit (included in assembly)

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

ORDER SPECIFICATIONS:

Low-intensity LED Obstruction Light Type A

Voltage	12-50 V DC
Current consumption aviation red	500-100 mA 281 410 55

NEW

Low-intensity LED Obstruction Light Type B

Voltage	24 V DC	230 V AC	230 V AC with monitoring funct.
Current consumption	~ 400 mA	~ 200 mA	~ 200 mA / < 50 mA (Failure mode)
aviation red	281 470 55	281 470 68	281 480 68



ADDITIONAL INFORMATION:

Salt water and fuel resistant

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.

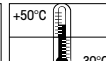
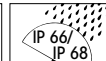
Further information on the monitoring function can be found on page 145.



TECHNICAL DIAGRAMS:

see page 303

See note
on page 347





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:

Housing:	PA-GF, high impact
Lens:	PC, transparent; Ring: PC
Connection:	CAGE CLAMP® technology max. 2.5 mm ²
Cable entry:	Cable diameter max. 10 mm (202) Cable diameter 3-6 mm (205)

FLASHING BEACON	202	205
Fixing:	Base mounting with flat seal	Bracket mounting incl. cable gland M12 x 1.5 mm
Dimensions (Ø x Height):	58 mm x 81 mm	58 mm x 107 mm
Flash frequency:	C. 0.75 Hz	C. 0.75 Hz
Flash energy:	1 Ws	1 Ws
Life duration:	4 x 10 ⁶ flashes	4 x 10 ⁶ flashes

🛒 ORDER SPECIFICATIONS:

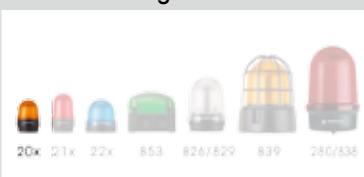
Base mounting 202			
Voltage	24 V DC	115 V AC	230 V AC
Current consumption	100 mA	20 mA	30 mA
red	202 100 55	202 100 67	202 100 68
yellow	202 300 55	202 300 67	202 300 68
Bracket mounting 205			
Voltage	24 V DC	115 V AC	230 V AC
Current consumption	100 mA	20 mA	30 mA
red	205 100 55	205 100 67	205 100 68
yellow	205 300 55	205 300 67	205 300 68

Further colours and voltages on request.

📐 TECHNICAL DIAGRAMS:

see page 298 + 299

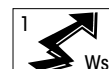
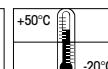
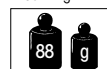
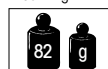
Sizes of Flashing Beacons



See note
on page 347

Base
mounting

Bracket
mounting





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 ²
Cable entry:	Cable diameter max. 11 mm
Fixing:	Tube mounting M25 x 1.5 mm
Flash frequency:	C. 0.75 Hz
Flash energy:	1 Ws
Life duration:	4 x 10 ⁶ flashes

ORDER SPECIFICATIONS:

Voltage	24 V DC	115 V AC	230 V AC
Current consumption	100 mA	20 mA	30 mA
red	209 120 55	209 120 67	209 120 68
yellow	209 320 55	209 320 67	209 320 68

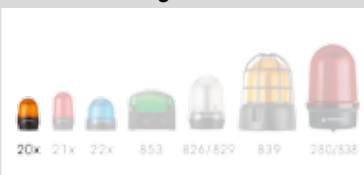
ACCESSORIES:

Base with integrated tube, M25 x 1.5 mm	975 209 01
Cable gland M25 x 1.5 mm	975 209 02

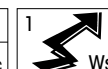
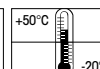
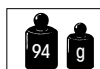
TECHNICAL DIAGRAMS:

see page 299

Sizes of Flashing Beacons



See note
on page 347





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:

Housing:	PA-GF, high impact
Lens:	PC, transparent; Ring: PC
Connection:	CAGE CLAMP® technology max. 2.5 mm ²
Cable entry:	Cable diameter max. 10 mm (212) Cable diameter 3-6 mm (215)

FLASHING BEACON	212	215
Fixing:	Base mounting with flat seal	Bracket mounting incl. cable gland M12 x 1.5 mm
Dimensions (Ø x Height):	58 mm x 97 mm	58 mm x 123 mm
Flash frequency:	C. 0.75 Hz	C. 0.75 Hz
Flash energy:	1 Ws	1 Ws
Life duration:	4 x 10 ⁶ flashes	4 x 10 ⁶ flashes

ORDER SPECIFICATIONS:

Base mounting 212			
Voltage	24 V DC	115 V AC	230 V AC
Current consumption	100 mA	20 mA	30 mA
red	212 100 55	212 100 67	212 100 68
yellow	212 300 55	212 300 67	212 300 68

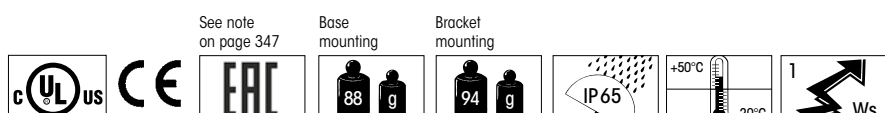
Bracket mounting 215			
Voltage	24 V DC	115 V AC	230 V AC
Current consumption	100 mA	20 mA	30 mA
red	215 100 55	215 100 67	215 100 68
yellow	215 300 55	215 300 67	215 300 68

Further colours and voltages on request.

TECHNICAL DIAGRAMS:

see page 300

Sizes of Flashing Beacons





Base with tube (accessory)



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

i TECHNICAL SPECIFICATIONS:

Dimensions (Ø x Height):	58 mm x 119 mm		
Housing:	PA-GF, high impact		
Lens:	PC, transparent		
	Ring: PC		
Connection:	CAGE CLAMP® technology max. 2.5 mm ²		
Cable entry:	Cable diameter max. 11 mm		
Fixing:	Tube mounting M25 x 1.5 mm		
Flash frequency:	C. 0.75 Hz		
Flash energy:	1 Ws		
Life duration:	4 x 10 ⁶ flashes		

🛒 ORDER SPECIFICATIONS:

Voltage	24 V DC	115 V AC	230 V AC
Current consumption	100 mA	20 mA	30 mA
red	219 120 55	219 120 67	219 120 68
yellow	219 320 55	219 320 67	219 320 68

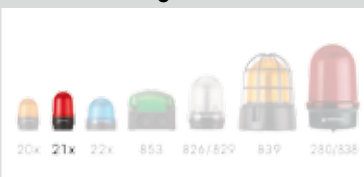
🏠 ACCESSORIES:

Base with integrated tube, M25 x 1.5 mm	975 209 01
Cable gland M25 x 1.5 mm	975 209 02

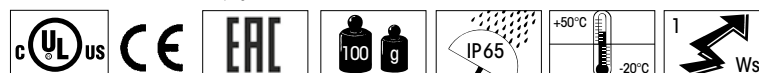
📐 TECHNICAL DIAGRAMS:

see page 301

Sizes of Flashing Beacons



See note on page 347





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

TECHNICAL SPECIFICATIONS:

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

FLASHING BEACON	222	225
Fixing:	Base mounting with flat seal	Bracket mounting incl. cable gland M12 x 1.5 mm
Dimensions (Ø x Height):	75 mm x 79 mm	75 mm x 105 mm
Flash frequency:	C. 0.75 Hz	C. 0.75 Hz
Flash energy:	1 Ws	1 Ws
Life duration:	4 x 10 ⁶ flashes	4 x 10 ⁶ flashes

ORDER SPECIFICATIONS:

Base mounting 222			
Voltage	24 V DC	115 V AC	230 V AC
Current consumption	100 mA	20 mA	30 mA
red	222 100 55	222 100 67	222 100 68
yellow	222 300 55	222 300 67	222 300 68

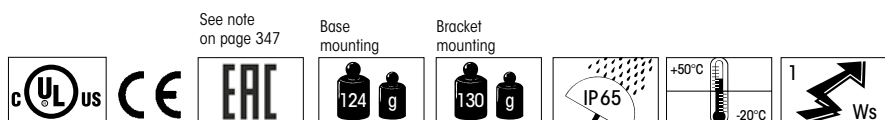
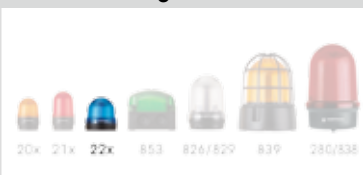
Bracket mounting 225			
Voltage	24 V DC	115 V AC	230 V AC
Current consumption	100 mA	20 mA	30 mA
red	225 100 55	225 100 67	225 100 68
yellow	225 300 55	225 300 67	225 300 68
blue	225 500 55	225 500 67	225 500 68

Further colours and voltages on request.

TECHNICAL DIAGRAMS:

see page 301 + 302

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
- Also available in 48 V

i TECHNICAL SPECIFICATIONS:

Life duration up to 50,000 hrs

Dimensions (L x H x W):	85 mm x 85 mm x 72 mm
Housing:	PP-GF, black
Lens:	PC, transparent
Connection:	Screw terminal with wire protection, max. 1.5 mm ²
Fixing:	Wall, base and ceiling mounting
Current consumption:	Max. 80 mA at 24 V
Equipment:	Eight self-sealing membranes for cable entry without tools Eight integrated M20 threads, no nuts required Optional use of a cable gland, thread length of cable gland ≤ 9 mm (accessory) Incl. snap-on fixing bracket (optional use)

Assembly:

ORDER SPECIFICATIONS:

Voltage	12 V DC	24 V DC	48 V AC	115-230 V AC
red	853 110 54	853 110 55	853 110 66	853 110 60
green	853 210 54	853 210 55	853 210 66	853 210 60
yellow	853 310 54	853 310 55	853 310 66	853 310 60
clear	853 410 54	853 410 55	853 410 66	853 410 60
blue	853 510 54	853 510 55	853 510 66	853 510 60

ACCESSORIES:

Connector for traffic light combinations (For further information see page 135)	975 853 01
Cable gland M20 x 1.5 mm 8 mm thread length	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 321

24 V

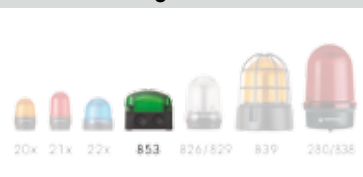
CE 160 g IP67 +50°C -25°C PLC

Intense double flash effect with low power consumption



Time-saving alternative: The snap-on fixing bracket (included in assembly)

Sizes of Flashing Beacons



Patent approved



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

- LED EVS Beacon in attractive quadratic form
- Attention-grabbing flickering light
- Innovative connector to create traffic light combinations
- Also available in 48 V
- 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:

Dimensions (L x H x W):	85 mm x 85 mm x 72 mm
Housing:	PP-GF, black
Lens:	PC, transparent
Connection:	Screw terminal with wire protection, max. 1.5 mm ²
Cable entry:	Cable diameter max. 8 mm, optional Cable gland M20 (accessory)
Fixing:	Wall, base and ceiling mounting
Current consumption:	Max. 200 mA at 24 V
Equipment:	Eight self-sealing membranes for cable entry without tools Eight integrated M20 threads, no nuts required Optional use of a cable gland, thread length of cable gland ≤ 9 mm (accessory)
Assembly:	Incl. snap-on fixing bracket (optional use, see page 152)

🛒 ORDER SPECIFICATIONS:

Voltage	12 V DC	24 V DC	48 V AC	115-230 V AC
red	853 120 54	853 120 55	853 120 66	853 120 60
green	853 220 54	853 220 55	853 220 66	853 220 60
yellow	853 320 54	853 320 55	853 320 66	853 320 60
clear	853 420 54	853 420 55	853 420 66	853 420 60
blue	853 520 54	853 520 55	853 520 66	853 520 60

🏠 ACCESSORIES:

Connector for traffic light combinations (For further information see page 119)	975 853 01
Cable gland M20 x 1.5 mm 8 mm thread length	975 853 02

⚠️ ADDITIONAL INFORMATION:

* EVS = Enhanced Visibility System.
Further Information can be found in the chapter "General Informations" beginning on page 352.
Please note the photosensitive epilepsy warning on page 352.

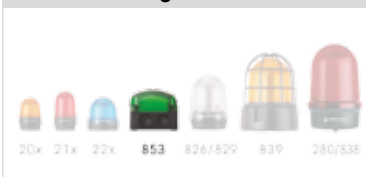
📏 TECHNICAL DIAGRAMS:

see page 321



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

Sizes of Flashing Beacons



24 V

CE 160 g IP67 +50°C -25°C PLC





- Large signal beacon for powerful signal effectiv

- High light intensity thanks to optimised lens

i TECHNICAL SPECIFICATIONS:

Dimensions (Ø x Height):	150 mm x 148 mm	
Housing:	PC/ABS-Blend, grey	
Lens:	PC, transparent	
Fixing:	Base mounting, tube mounting and fixing bracket (accessory)	
Cable entry:	From top or bottom with cable gland M20 x 1.5 mm or from the back with rubber grommet Ø 6-12 mm	
Connection:	Screw terminal, max. 2.5 mm ²	
Flash frequency:	1 Hz	
Flash energy:	15 Ws	
Life duration:	4 x 10 ⁶ flashes	

🛒 ORDER SPECIFICATIONS:

Voltage	24 V DC	230 V AC
Current consumption	800 mA	200 mA
red	897 100 55	897 100 68
yellow	897 300 55	897 300 68

Further colours and voltages on request.

🏠 ACCESSORIES:

Fixing bracket, adhesive stickers see Permanent/Traffic Light Beacon 890 (page 176).

📐 TECHNICAL DIAGRAMS:

see page 326



Audible addition:
The Multi-Tone Sounder 190 with 110 dB (see page 253)

See note on page 347





Base mounting 830



Wall mounting 835



Wire guard and bracket (accessories)

- High flash power



TECHNICAL SPECIFICATIONS:

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



ORDER SPECIFICATIONS:

Base mounting 830

Voltage	24 V DC	230 V AC
Current consumption	250 mA	140 mA
red	830 152 55	830 152 68
yellow	830 352 55	830 352 68

Bracket mounting 835

Voltage	24 V DC	230 V AC
Current consumption	250 mA	140 mA
red	835 152 55	835 152 68
yellow	835 352 55	835 352 68

Further colours and voltages on request.



ACCESSORIES:

Wire guard for base and bracket mounting	975 830 00
Bracket for wall mounting for 830	975 835 01



ADDITIONAL INFORMATION:

Please also see Flashing Beacon 828 and LED Flashing Beacon 829 with additional advantages (see page 157 and 159)

- 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 317





Base/Bracket Mounting



Tube mounting



Accessories

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

TECHNICAL SPECIFICATIONS:

Dimensions (Ø x Height):	98 mm x 137 mm (Base/Bracket mounting) 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 max. 2,5 mm ²		
Bulb:	Max. 25 W		
Blinking frequency:	1.5 Hz		
Starting current:	24 V AC/DC	115 V AC	230 V AC
	3 A	0,6 A	0,35 A
Socket:	BA15d		
Bulb included in assembly.			

ORDER SPECIFICATIONS:

Base/Bracket mounting			
Voltage	24 V AC/DC	115 V AC/DC	230 V AC/DC
red	827 100 75	827 100 77	827 100 78
yellow	827 300 75	827 300 77	827 300 78
Tube mounting			
Voltage	24 V AC/DC	115 V AC/DC	230 V AC/DC
red	827 110 75	827 110 77	827 110 78
yellow	827 310 75	827 310 77	827 310 78

ACCESSORIES:

Plastic bracket for wall mounting	975 826 05
Wire guard, galvanised, only for base mounting	975 826 03
Tube Ø 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
Bulb BA15d, 25 W, total length max. 55 mm	
Voltage	24 V AC/DC 115 V AC/DC 230 V AC/DC
	955 827 35 955 827 37 955 827 38

TECHNICAL DIAGRAMS:

see page 316

Sizes of Flashing Beacons



See note on page 347

Base/Bracket mounting Tube mounting





Base/Bracket Mounting



Tube mounting



Accessories

- Tube mounting solution suitable for Ø 25 mm and 1/2" NPT tubes
- Also available in 10-60 V AC/DC version
- Removal of the lens only possible with tools
- Also available with 2 frequencies

i TECHNICAL SPECIFICATIONS:

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

FLASHING BEACON 828

Connection:	Screw terminal with wire protection 0.5-2.5 mm ²
Flash frequency:	c. 1 Hz
Life duration:	4 x 10 ⁶ flashes
12 V: Safety contact is triggered by removal of lens.	

FLASHING BEACON 828 WITH 2 FREQUENCIES

Connection:	Screw terminal with wire protection max. 2.5 mm ²
Flash frequency:	0.5 Hz or 1.5 Hz can be set externally
Life duration:	4 x 10 ⁶ flashes

ORDER SPECIFICATIONS:

FLASHING BEACON 828

Base/Bracket mounting					
Voltage	12 V DC	24 V DC	10-60 V AC/DC	115 V AC	230 V AC
Current consumpt.	500 mA	300 mA	500-120 mA	65 mA	150 mA
red	828 100 54	828 100 55	828 180 70	828 100 67	828 100 68
yellow	828 300 54	828 300 55	828 380 70	828 300 67	828 300 68
clear	-	828 400 55	828 480 70	-	828 400 68

Tube mounting				
Voltage	24 V DC	115 V AC	230 V AC	
red	828 140 55	828 140 67	828 140 68	
yellow	828 340 55	828 340 67	828 340 68	
clear	828 440 55	-	-	

FLASHING BEACON 828 WITH 2 FREQUENCIES

	Boden-/Winkelmontage	Rohrmontage
Voltage	24 V DC	24 V DC
Current consumption	500 mA	500 mA
red	828 120 55	828 160 55
yellow	828 320 55	828 360 55

ACCESSORIES:

Accessories see page 156.

TECHNICAL DIAGRAMS:

see page 316

Sizes of Flashing Beacons

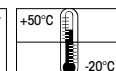


828 X00 XX
828 X40 XX
828 X20 XX
828 X60 XX

See note on page 347

Base/Bracket mounting

Tube mounting





Modified flashing beacon 828 specifically for use in road tunnels



Clear identification of escape routes can save lives



A special valve in the lens also prevents the build-up of condensation inside the beacon

- Xenon flashing beacon for use in road tunnels
- Developed specifically for installation underneath warning signs
- A special valve in the lens also prevents the build-up of condensation inside the beacon, ensuring optimum protection against even the most demanding tunnel cleaning operations

i TECHNICAL SPECIFICATIONS:

Dimensions (Ø x Height):	98 mm x 137 mm
Cable entry:	Cable diameter 5-7 mm
Housing:	PC/ABS-Blend
Lens:	PC, transparent
Fixing:	Base mounting, bracket mounting (accessory)
Connection:	Screw terminal with wire protection max. 2.5 mm ²
Flash frequency:	C. 1 Hz
Life duration:	4 x 10 ⁶ flashes

🛒 ORDER SPECIFICATIONS:

Voltage	230 V AC
Current consumption	140 mA
yellow	828 370 68
clear	828 470 68

🏠 ACCESSORIES:

Plastic bracket for wall mounting	975 826 05
Wire guard, galvanised, only for base mounting	975 826 03

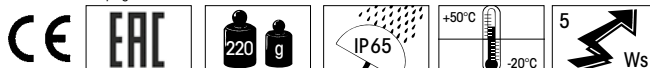
📐 TECHNICAL DIAGRAMS:

see page 316

Sizes of Flashing Beacons



See note on page 347





Base/Bracket Mounting

- Intense double flash with low power consumption

- High flash power from two consecutive flashes

Life duration up to 50,000 hrs

TECHNICAL SPECIFICATIONS:

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

ORDER SPECIFICATIONS:

Base/Bracket mounting		
Voltage	24 V DC	115-230 V AC
Current consumption	< 100 mA	< 100 mA
red	829 120 55	829 120 68
yellow	829 320 55	829 320 68
clear	829 420 55	829 420 68
Tube mounting		
Voltage	24 V DC	115-230 V AC
Current consumption	< 100 mA	< 100 mA
red	829 127 55	829 127 68
yellow	829 327 55	829 327 68
clear	829 427 55	829 427 68



Tube Mounting (tube and base for tube - accessory)

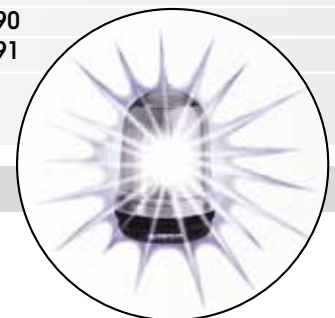
ACCESSORIES:

Plastic bracket for wall mounting	975 826 05
Wire guard, galvanised, only for base mounting	975 826 03
Tube Ø 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

(Accessories see page 156)

TECHNICAL DIAGRAMS:

see page 317



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

Sizes of Flashing Beacons



See note on page 347





Base/Bracket mounting

- 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

TECHNICAL SPECIFICATIONS:

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

ORDER SPECIFICATIONS:

Base/Bracket mounting	24 V DC	115-230 V AC
Voltage	< 300 mA	< 150 mA
Current consumption		
red	829 190 55	829 190 68
yellow	829 390 55	829 390 68
clear	829 490 55	829 490 68
Tube mounting		
Voltage	24 V DC	115-230 V AC
Current consumption	< 300 mA	< 150 mA
red	829 197 55	829 197 68
yellow	829 397 55	829 397 68
clear	829 497 55	829 497 68



Tube mounting

Patent approved

ACCESSORIES:

Plastic bracket for wall mounting	975 826 05
Wire guard, galvanised, only for base mounting	975 826 03
Tube Ø 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



Accessories

ADDITIONAL INFORMATION:

* EVS = Enhanced Visibility System.
Further information can be found in the chapter "General Information" beginning on page 352.
Please note the photosensitive epilepsy warning on page 352.



TECHNICAL DIAGRAMS:

see page 317

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

Sizes of Flashing Beacons



See note on page 347

Tube mounting





- Robust aluminium housing including wire guard
- High flash power from two consecutive flashes
- High Protection rating IP 67
- Salt water resistant
- Robust bracket made of V2A stainless steel (accessory)

i TECHNICAL SPECIFICATIONS:

Dimensions (Ø x Height):	153 mm x 198 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 ²	
Cable entry:	Cable gland M20 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 ⁶ flashes	

🛒 ORDER SPECIFICATIONS:

Voltage	24 V DC	230 V AC
Current consumption	800 mA	200 mA
red	839 152 55	839 152 68
yellow	839 352 55	839 352 68

🏠 ACCESSORIES:

Mounting bracket	975 839 02
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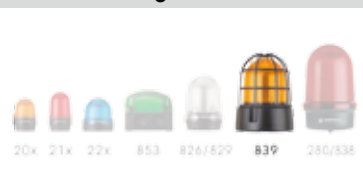
📐 TECHNICAL DIAGRAMS:

see page 317



Generates a high signal effect thanks to two consecutive flashes

Sizes of Flashing Beacons



See note on page 347





- High flash power from two consecutive flashes
- High light intensity
- 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 2.5 mm ²
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 ⁶ flashes

🛒 ORDER SPECIFICATIONS:

Voltage	24 V DC	115 V AC	230 V AC
Current consumption:	800 mA	400 mA	200 mA
red	838 100 55	838 100 67	838 100 68
yellow	838 300 55	838 300 67	838 300 68

🏠 ACCESSORIES:

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

📐 TECHNICAL DIAGRAMS:

see page 317

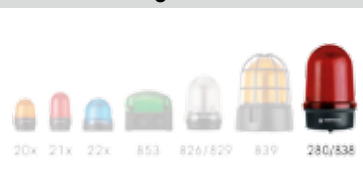


Wire guard (accessory)



Adaptor for tube mounting and plastic bracket (accessories)

Sizes of Flashing Beacons



See note on page 347





Base mounting



The 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
- Adaptor for tube mounting (accessory)
- High impact up to 20 Joules

i 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 ²
Cable entry:	Cable diameter 5-7 mm
Duty cycle:	100 %

🛒 ORDER SPECIFICATIONS:

Voltage	24 V DC	115-230 V AC
Current consumption	< 150 mA	< 350 mA
red	280 150 55	280 150 60
yellow	280 350 55	280 350 60
clear	280 450 55	280 450 60

🏠 ACCESSORIES:

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

⚠️ ADDITIONAL INFORMATION:

The LED Beacon 280 is also available as LED EVS Beacon (see page 164), LED Permanent Beacon (see page 143) or LED Rotating Beacon (see page 170).

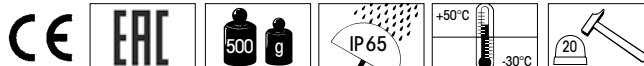
📏 TECHNICAL DIAGRAMS:

see page 303



Two consecutive flashes generate a brilliant signal

See note on page 347



Patent approved



Base mounting



Bracket mounting (accessory)

- 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 ²	
Cable entry:	Cable diameter 5-7 mm	
Duty cycle:	100 %	

ORDER SPECIFICATIONS:

Voltage	24 V DC	115-230 V AC
Current consumption	< 500 mA	< 350 mA
red	280 160 55	280 160 60
yellow	280 360 55	280 360 60
clear	280 460 55	280 460 60

ACCESSORIES:

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

(Accessories see page 163)

ADDITIONAL INFORMATION:

* EVS = Enhanced Visibility System

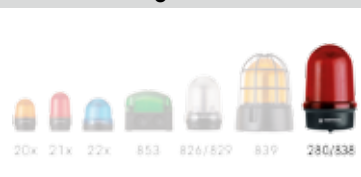
Further Information can be found in the chapter "General Information" beginning on page 352.

Please note the photosensitive epilepsy warning on page 352.

TECHNICAL DIAGRAMS:

see page 303

Sizes of Flashing Beacons



See note on page 347





Base mounting



Rotating Mirror Beacon 885 with tube and base (accessories)



Plastic bracket and wire guard (accessories)

Sizes of Rotating Beacons



- High light intensity in compact form
- Tube mounting solution suitable for Ø 25 mm and 1/2" NPT tubes
- Installation without the need to disassemble the mechanism
- Extremely quiet

i TECHNICAL SPECIFICATIONS:

Dimensions (Ø x Height):	98 mm x 151 mm (Base mounting) 98 mm x 200 mm (Tube mounting)
Housing:	PC/ABS-Blend
Lens:	PC, transparent
Fixing:	Base mounting, bracket/tube mounting (accessory)
Connection:	Screw terminal with wire protection max. 2.5 mm ²
Cable entry:	Cable diameter 5-7 mm
Installation position:	Standing
Halogen bulb:	G 6.35 20 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:

Base mounting				
	12 V DC	24 V AC/DC	115 V AC/ 115 V DC/ 230 V AC/ 230 V DC	
	1.9 A	1.0 A	0.4 A	/0.2 A /0.2 A /0.1 A
red	885 100 54	885 100 75	885 100 78	
green	885 200 54	885 200 75	885 200 78	
yellow	885 300 54	885 300 75	885 300 78	
blue	885 500 54	885 500 75	885 500 78	
Tube mounting				
	12 V DC	24 V AC/DC	115 V AC/ 115 V DC/ 230 V AC/ 230 V DC	
	1.9 A	1.0 A	0.4 A	/0.2 A /0.2 A /0.1 A
red	885 110 54	885 110 75	885 110 78	
green	885 210 54	885 210 75	885 210 78	
yellow	885 310 54	885 310 75	885 310 78	
blue	885 510 54	885 510 75	885 510 78	

🏠 ACCESSORIES:

Plastic bracket for wall mounting	975 826 05
Wire guard, galvanised, only for base mounting	975 826 03
Base for tube mounting Ø 25 mm, plastic, Incl. rubber seal	975 840 90
Base for tube mounting Ø 25 mm, metal, Incl. rubber seal	975 840 91
Tube Ø 25 mm, all anodized aluminium	
100 mm	975 845 10
250 mm	975 840 25
SPARE PARTS:	
Halogen bulb 20 W/12 V for 12 V DC	955 885 24
115 V AC/DC, 230 V AC	
Halogen bulb 20 W/24 V for 24 V AC/DC	955 885 25

📐 TECHNICAL DIAGRAMS: see page 325

See note on page 347





Flange with counter-plug for electrical connection (accessory)

- 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:

Voltage	12 V DC	24 V AC/DC
Current consumption	1.9 A	1.0 A
red	885 120 54	885 120 75
green	885 220 54	885 220 75
yellow	885 320 54	885 320 75
blue	885 520 54	885 520 75

SPARE PARTS:

Halogen bulb 20 W/12 V for 12 V DC **955 885 24**
 115 V AC/DC, 230 V AC

Halogen bulb 20 W/24 V for 24 V AC/DC **955 885 25**

ACCESSORIES:

Flange with counter-plug for electrical connection **975 826 20**

TECHNICAL DIAGRAMS:

see page 325

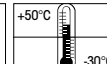


The flexible tube, made of an elastic material, is hard-wearing and prevents the beacon from breaking off

Sizes of Rotating Beacons



See note on page 347





Mounting bracket (accessory)

- 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
- Robust bracket made of V2A stainless steel (accessory)

i TECHNICAL SPECIFICATIONS:

Dimensions (Ø x Height):	153 mm x 198 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 ²
Cable entry:	Cable gland M20 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 AC/DC	115 V AC	/ 115 V DC	/ 230 V AC	/ 230 V DC
Current consumption	1.0 A	0.35 A	/ 0.5 A	/ 0.15 A	/ 0.1 A
red	839 160 75			839 160 78	
yellow	839 360 75			839 360 78	

🏠 ACCESSORIES:

Mounting bracket **975 839 02**

SPARE PARTS:

Halogen bulb 20 W/12 V for 115 V AC/DC, 230 V AC **955 885 24**

Halogen bulb 20 W/24 V for 24 V AC/DC **955 885 25**

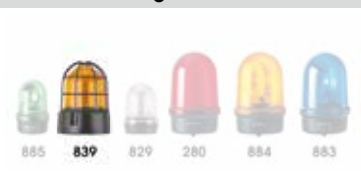
📐 TECHNICAL DIAGRAMS:

see page 317

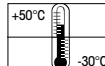
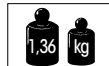


Also suitable for use in rough conditions

Sizes of Rotating Beacons



See note on page 347





Mounting bracket
(accessory)

- 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
- Robust bracket made of V2A stainless steel (accessory)

i TECHNICAL SPECIFICATIONS:

Life duration
up to 50,000 hrs

Dimensions (Ø x Height):	153 mm x 198 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 ²	
Cable entry:	Cable gland M20 x 1.5 mm (included in assembly) Cable diameter 6-13 mm	
Installation position:	As required	
Rotation rate:	C. 180 r.p.m.	

🛒 ORDER SPECIFICATIONS:

Voltage	24 V DC	115-230 V AC
Current consumption	150 mA	70-180 mA
red	839 120 55	839 120 68
yellow	839 320 55	839 320 68



Mounting bracket	975 839 02
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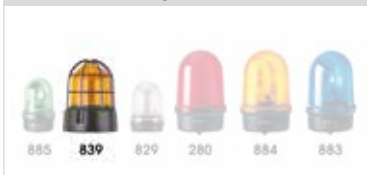
TECHNICAL DIAGRAMS:

see page 317

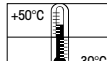
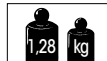


Generates a high signal effect thanks to the LEDs programmed to create a rotating light

Sizes of Rotating Beacons



See note on page 347





Tube mounting



Base/Bracket mounting



Accessories

- 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:

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

🛒 ORDER SPECIFICATIONS:

Base/Bracket mounting		
Voltage	24 V DC	115-230 V AC
Current consumption	< 170 mA	< 200 mA
red	829 110 55	829 110 68
green	829 210 55	829 210 68
yellow	829 310 55	829 310 68
clear	829 410 55	829 410 68
blue	829 510 55	829 510 68

Tube mounting		
Voltage	24 V DC	115-230 V AC
Current consumption	< 170 mA	< 200 mA
red	829 117 55	829 117 68
green	829 217 55	829 217 68
yellow	829 317 55	829 317 68
clear	829 417 55	829 417 68
blue	829 517 55	829 517 68

🏠 ACCESSORIES:

Plastic bracket for wall mounting	975 826 05
Wire guard, galvanised, only for base mounting	975 826 03
Tube Ø 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



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

📏 TECHNICAL DIAGRAMS:

see page 317

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 resistant against vibration
- High impact resistance to 20 Joules

Life duration up to 50,000 hrs

TECHNICAL SPECIFICATIONS:

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

ORDER SPECIFICATIONS:

Voltage	24 V DC	115-230 V AC
Current consumption	150 mA	< 200 mA
red	280 120 55	280 120 68
yellow	280 320 55	280 320 68

ACCESSORIES:

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

TECHNICAL DIAGRAMS:

see page 303



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



High impact resistance to 20 Joules

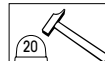
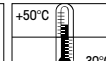


Plastic bracket, adaptor for tube mounting and wire guard (accessories)

Sizes of Rotating Beacons



See note on page 347



24 V

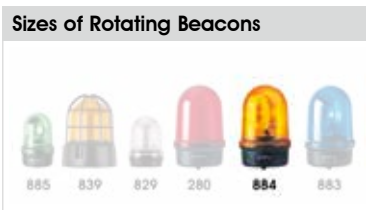




Bracket (accessory)



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

i 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 ²
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:	60 r.p.m.
Service life of drive:	> 5,000 hrs
Duty cycle:	100 %

Halogen bulb included in assembly.

🛒 ORDER SPECIFICATIONS:

Voltage	24 V AC/DC	230 V AC
Current consumption	1.6 A	0.17 A
red	884 100 75	884 100 68
green	884 200 75	884 200 68
yellow	884 300 75	884 300 68
blue	884 500 75	884 500 68

Further colours and voltages on request.

🏠 ACCESSORIES:

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

🔧 SPARE PARTS:

Halogen bulb 35 W/12 V for 230 V AC	955 883 34
Halogen bulb 35 W/24 V for 24 V AC/DC	955 883 35

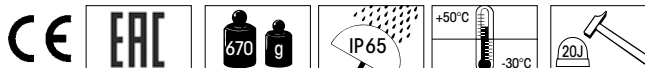


3 Fresnel lenses are set at a 120° angle

📐 TECHNICAL DIAGRAMS:

see page 325

See note on page 347





Bracket (accessory)



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

Sizes of Rotating Beacons



- Extreme durability thanks to lowwear wheel and disc drive
- Adaptor for tube mounting (accessory)
- Installation without the need to disassemble the mechanism
- 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, tube mounting (accessory)
Connection:	Screw terminal with wire protection max. 2.5 mm ²
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 DC	24 V AC/DC	115 V AC/DC	230 V AC
Voltage	12 V DC	24 V AC/DC	115 V AC/DC	230 V AC
Current consumpt.	3 A	1.6 A	0.35 A	0.17 A
red	883 100 54	883 100 75	883 100 77	883 100 68
green	883 200 54	883 200 75	883 200 77	883 200 68
yellow	883 300 54	883 300 75	883 300 77	883 300 68
blue	883 500 54	883 500 75	883 500 77	883 500 68

Further colours and voltages on request.

🏠 ACCESSORIES:

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

SPARE PARTS:

Halogen bulb 35 W/12 V for 12 V DC, 115 V AC/DC, 230 V AC	955 883 34
Halogen bulb 35 W/24 V for 24 V AC/DC	955 883 35

📐 TECHNICAL DIAGRAMS:

see page 325



Low wear wheel and disc drive

See note on page 347





- High intensity optical signal with halogen bulb
- "e" approval for automotive use (yellow, 24 V)

i 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 ²
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 DC	230 V AC
Current consumption	3.0 A	0.3 A
red	880 152 55	880 152 68
yellow	880 352 55	880 352 68

Further colours and voltages on request.

🏠 ACCESSORIES:

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

🔧 SPARE PARTS:

Bulb H 1 55 W for 230 V AC	955 880 34
Bulb H 1 70 W for 24 V AC/DC	955 880 35

⚠️ ADDITIONAL INFORMATION:

Please also see Rotating Mirror Beacon 883 with additional advantages (see page 172)

- 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 325

See note on page 347

CE	ERC	230 V	24 V	IP 54	+50°C -20°C	880 352 55	e2
		2,3 kg	1,4 kg				





- 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 ²
Cable entry:	Cable diameter 5-8 mm
Mirror rotating rate:	C. 170 r.p.m.

Bulb included in assembly.

ORDER SPECIFICATIONS:

Voltage	48 V AC/DC	230 V AC
Current consumption	1.0 A	0.3 A
red	881 152 56	881 152 98
yellow	881 352 56	881 352 98

ACCESSORIES:

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

SPARE PARTS:

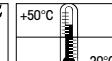
Bulb E14, 40 W		
Voltage	48 V AC/DC	230 V AC/DC
	955 880 66	955 880 68

TECHNICAL DIAGRAMS:

see page 325



See note
on page 347





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

Dimensions (Ø x Height):	150 mm x 154 mm
Housing:	PC/ABS-Blend, grey
Lens:	PC, transparent
Fixing:	Base mounting, bracket mounting (accessory), tube mounting (accessory)
Connection:	Screw terminal max. 1.5 mm ²
Installation position:	As required
Cable entry:	From top or bottom with cable gland M20 x 1.5 mm or from the back with rubber grommet Ø 6-12 mm, included in assembly.

🛒 ORDER SPECIFICATIONS:

Voltage	12-24 V DC	115 V AC	230 V AC
Current consumption	< 200 mA	< 35 mA	< 35 mA
red	890 120 55	890 120 67	890 120 68
green	890 220 55	890 220 67	890 220 68
yellow	890 320 55	890 320 67	890 320 68

🏠 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 178.

CONNECTING GROMMET

Connecting grommet for traffic light combinations	975 890 25
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TUBE ADAPTOR

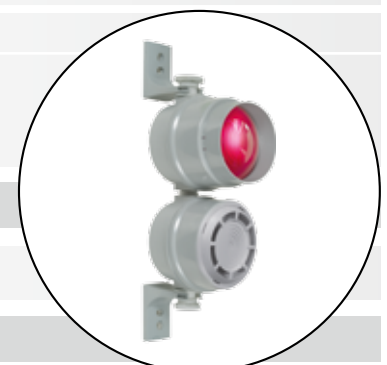
Adaptor for tube mounting (suitable for Ø 75 mm tubes, see page 195)	975 890 36
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⚠️ ADDITIONAL INFORMATION:

Traffic light configurator at www.werma.com

📐 TECHNICAL DIAGRAMS: see page 326

See note on page 347



The LED Beacon 890 in combination with Multi-Tone Sounder 190 (see page 216)





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:

Dimensions (Ø x Height):	150 mm x 154 mm
Housing:	PC/ABS-Blend, grey
Lens:	PC, transparent
Socket:	E27 max. 25 W at 890 X00 00 2 sockets each E14 with max. 15 W at 890 X10 00 with adhesive stickers E27 max. 15 W
Fixing:	Base mounting, fixing bracket (accessory), tube mounting (accessory)
Connection:	Screw-free clamp mechanism max. 1.5 mm ²
Cable entry:	From top or bottom with cable gland M20 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 AC/DC
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 AC/DC
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. 175)

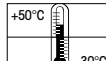
- Maintenance-free LED technology
- Life duration up to 50,000 hrs
- Clear signalling effect even in direct sunlight

Traffic light configurator at www.werma.com



ACCESSORIES: see next page

See note
on page 347





Beacon 890 in combination with Multi-Tone Sounder 190 (see page 216)



The 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 178.

CONNECTING GROMMET

Connecting grommet for traffic light combinations	975 890 25
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TUBE ADAPTOR

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

Additional reflector for 890 X00 00	975 890 02
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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
⚡	975 890 64
👤	975 890 65



TECHNICAL DIAGRAMS:

see page 326





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
- Also suitable for Multi-Tone Sounder 190
- High Protection rating IP 65

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 175) Permanent/Traffic Light Beacon 890 (see page 176) Multi-Tone Sounder 190 (see page 253)

ORDER SPECIFICATIONS:

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

NEW FIXING BRACKET FOR SIMPLE MOUNTING:

Method No. 1

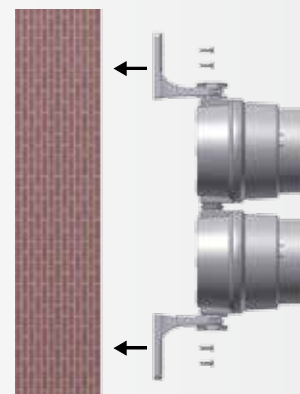
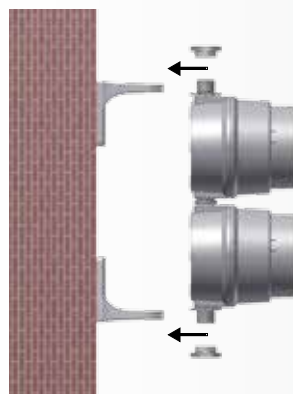
- Attach the bracket to the wall
- Connect the pre-assembled Traffic Light/Multi-Tone Sounder
- Tighten the nuts on both sides

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 326

1 tier  158 g	2 tier  175 g	3 tier  195 g	4 tier  215 g	 IP65	 +50°C -20°C
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The innovative connector (accessory) enables traffic light combinations to be created in a matter of seconds



Three highly visible light effects are available



The LED beacon can be used with the sounder

- 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

i TECHNICAL SPECIFICATIONS:

Life duration up to 50,000 hrs

Dimensions (L x H x W):	85 mm x 85 mm x 72 mm
Housing:	PP-GF, black
Lens:	PC, transparent
Connection:	Screw terminal with wire protection, max. 1.5 mm ²
Fixing:	Wall, base and ceiling mounting
Possible colours:	Red, green, yellow, clear, blue
Operating voltage:	12 V DC, 24 V DC, 115-230 V AC
Current consumption:	Max. 80 mA at 24 V (LED Permanent Beacon) Max. 80 mA at 24 V (LED Double Flash Beacon) Max. 200 mA at 24 V (LED EVS Beacon)
Equipment:	Eight self-sealing membranes for cable entry without tools Eight integrated M20 threads, no nuts required Optional use of a cable gland, thread length of cable gland ≤ 9 mm (accessory)
Assembly:	Incl. snap-on fixing bracket (optional use)

🛒 ORDER SPECIFICATIONS:

LED Permanent Beacon 853	see page 135
LED Double Flash Beacon 853	see page 152
LED EVS Beacon 853	see page 153
Sounder 153	see page 252

🏠 ACCESSORIES:

Connector for traffic light combinations	975 853 01
Cable gland M20 x 1.5 mm, 8 mm thread length	975 853 02

⚠️ ADDITIONAL INFORMATION:

Combinations made easy
The LED Beacon 853/Sounder 153 can be easily turned into a traffic light combination. Simply attach different coloured beacons or sounder together using the connector.

The eight cable entries with both self-sealing membranes and integrated M20 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.

Traffic light configurator at www.werma.com



Individual lighting designs thanks to eight possible cable entries

📏 TECHNICAL DIAGRAMS:

see page 321

See note on page 347

CE	ERC	853 X00 XX 135 g	853 X10 XX 130 g	853 X20 XX 130 g	IP67	+50°C -25°C	24 V PLC
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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
- Simple mounting due to integrated mounting bracket
- Very good sideward visibility
- Protection rating IP 65/IP 69k

Life duration up to 50,000 hrs

i TECHNICAL SPECIFICATIONS:

Dimensions (L x H x W):	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 ²	
Cable entry:	Cable diameter max. 13 mm	
Duty cycle:	100 %	

ORDER SPECIFICATIONS:

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

ACCESSORIES:

Fixing bracket underneath	975 894 01
Adaptor for tube mounting (suitable for Ø 75 mm tubes, see page 181)	975 894 02

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 214

TECHNICAL DIAGRAMS:

see page 326

See note on page 347

2 tier 3 tier

CE EAC 380 g 410 g IP 65/IP 69k +50°C / -30°C





LED Beacon (1 tier)



The direction of the optical signal can be individually adjusted



The 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
- 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 ²
Cable entry:	Cable diameter max. 13 mm
Duty cycle:	100 %

🛒 ORDER SPECIFICATIONS:

Voltage	24 V DC	115-230 V AC
Current consumption	60 mA (red/yellow)	30 mA per tier
	120 mA (green)	at 230 V/50 Hz
red	894 010 55	894 010 68
green	894 020 55	894 020 68
yellow	894 030 55	894 030 68
red / green	894 060 55	894 060 68
red / yellow / green	894 080 55	894 080 68

🏠 ACCESSORIES:

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

⚠️ 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.



📐 TECHNICAL DIAGRAMS:

see page 326

See note on page 347

CE EAC

1 tier 350 g 2 tier 380 g 3 tier 410 g

IP65/IP69k +50°C / -30°C





- Extremely long life duration
- To fit in WERMA Signal towers and signal devices with BA15d socket
- Resistant against shock and vibration
- Frontal beam direction

i TECHNICAL SPECIFICATIONS:

Life duration up to 50,000 hrs

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

Slight deviations in the form of the bulbs are possible.

🛒 ORDER SPECIFICATIONS:

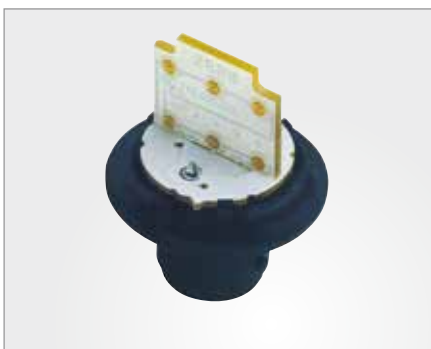
	24 V AC/DC	115 V AC	230 V AC
Current consumption	≤ 45 mA	≤ 15 mA	≤ 15 mA
red	956 100 75	956 100 67	956 100 68
green	956 200 75	956 200 67	956 200 68
yellow	956 300 75	956 300 67	956 300 68
white	956 400 75	956 400 67	956 400 68
blue	956 500 75	956 500 67	956 500 68

📏 TECHNICAL DIAGRAMS:

see page 326



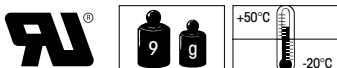
Suitable for use in KombiSIGN 71



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:

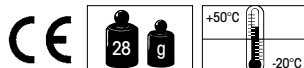
Socket:	E27
For use with:	890, 895
Slight deviations in the form of the bulbs are possible.	

🛒 ORDER SPECIFICATIONS:

Voltage	24 V AC/DC	115 V AC	230 V AC
Current consumption	≤ 30 mA	≤ 30 mA	≤ 30 mA
red	956 120 75	956 120 67	956 120 68
green	956 220 75	956 220 67	956 220 68
yellow	956 320 75	956 320 67	956 320 68



Suitable for use in Permanent/Traffic Light Beacons 890 (see page 176)



Bulb Overview

	PART NO.	DESCRIPTION	TOTAL LENGTH(mm)	VOLTAGE	FOR USE WITH:										
	955 840 34	Bulb BA15d 5 W	42	12 V	200	203	209	641	800	840	845				
	955 840 35	Bulb BA15d 5 W	42	24 V	200	203	209	641	800	840	845				
	955 840 32	Bulb BA15d 5 W	42	30 V	200	203	209	641	800	840	845				
	955 840 57	Bulb BA15d 5 W	42	115 V	200	203	209	641	800	840	845				
	955 840 38	Bulb BA15d 5 W	42	230 V	200	203	209	641	800	840	845				
	955 015 34	Bulb BA15d 7 W	52	12 V	210	213	219	220	480	580	815				850
	955 015 35	Bulb BA15d 7 W	52	24 V	210	213	219	220	480	580	815	826			850
	955 015 36	Bulb BA15d 7 W	52	48 V	210	213	219	220	480	580	815	monit.			850
	955 015 37	Bulb BA15d 7 W	52	115 V	210	213	219	220	480	580	815				850
	955 015 38	Bulb BA15d 7 W	52	230 V	210	213	219	220	480	580	815				850
	955 826 35	Bulb BA15d 15 W	45	24 V	826										
	955 826 38	Bulb BA15d 15 W	45	230 V	826										
	955 827 35	Bulb BA15d 25 W	55	24 V	827										
	955 827 37	Bulb BA15d 25 W	55	115 V	827										
	955 827 38	Bulb BA15d 25 W	55	230 V	827										
	955 890 38	Bulb E14 15 W	76	230 V	890	895									
	955 880 66	Bulb E14 40 W	76	48 V	881										
	955 880 67	Bulb E14 40 W	76	115 V	881										
	955 880 68	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:
	955 890 55	Bulb E27 25 W	100	24 V	890 895
	955 890 67	Bulb E27 25 W	100	115 V	890 895
	955 890 68	Bulb E27 25 W	100	230 V	890 895
	955 883 34	Halogen bulb G 6.35 35 W	40	12 V	783 784 883 884
	955 883 35	Halogen bulb G 6.35 35 W	40	24 V	783 784 883 884
	955 885 24	Halogen bulb G 6.35 20 W	40	12 V	783 885
	955 885 25	Halogen bulb G 6.35 20 W	40	24 V	783 885
	955 880 34	Halogen bulb H 1 55 W	57	12 V	880
	955 880 35	Halogen bulb H 1 70 W	57	24 V	880
	956 x00 75	LED bulb BA15d	42	24 V	200, 203, 206, 209, 210,
	956 x00 67	LED bulb BA15d	42	115 V	213, 216, 219, 220, 223,
	956 x00 68 x see page 182	LED bulb BA15d	42	230 V	641, 805, 840, 846, 850, 851, 852
	956 x20 75	LED bulb E27	65	24 V	890 895
	956 x20 67	LED bulb E27	65	115 V	890 895
	956 x20 68 x see page 183	LED bulb E27	65	230 V	890 895

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

