# Overview Beacons & Traffic Lights

WERMA's beacons and traffic lights help you indicate risks and imminent danger promptly and clearly. The urgency of the required action can be indicated by the colour of the light and by the type and duration of the signal.

This allows you to make your processes safe and efficient. Simply safe. Simply better. This is what we call intelligent signal technology.

Overview Signal Beacons & Traffic Lights			Installation	Installation	Installation/ Surface mounting	Surface mounting	Surface mounting
Product range			**Micro Installation Beacons**	**Mini Installation Beacons**	**Evo*SIGNAL* Mini**	**Evo*SIGNAL* Midi**	**Evo*SIGNAL* Maxi**
Dimensions (Ø x Height)*			See comparison of sizes table on page 82				
Voltage		12 V	●		●	●	●
		24 V	●	●	●	●	●
		48 V					
		115 V	●		●	●	●
		230 V	●		●	●	●
Optical	LED Permanent Light		●				
	LED Permanent Light (multicolour)			●	TriCOLOUR	TriCOLOUR	
	Twin*LIGHT* (Permanent/Blinking)				●	●	●
	Twin*FLASH* (Flash/EVS)				●	●	●
	LED Flashing Light						
	LED EVS Light						
	Permanent Light						
	Xenon Flashing Light		●				
	LED Rotating					●	●
	Rotating Mirror/Rotating Light					●	●
Protection			IP65	IP65	IP66	IP66	IP66
Signalisation index**			2-4	3	4-5	6-8	8-10
Page			Page 84	Page 88	Page 93	Page 107	Page 113

* Technical diagrams can be found on the product page

** Signalisation index – see page 13 + 21

Installation beacons

Installation beacons are used for installing in M20/M22 drilled holes. The beacon is fixed from the back, in controll panels for example, using a locking nut. This prevents subsequent tampering.

Surface mounted beacons

Surface mounted beacons are fixed directly onto the surface of the relevant object (machines). The basic mounting options are base, bracket or tube installation.

Surface mounting	Surface mounting	Surface mounting	Surface mounting	Surface mounting	Surface mounting
FlexSQUARE	Heavy Duty Beacons	Obstruction Light	Traffic Lights	Monitorable Beacon	Ex Signal Beacons
See comparison of sizes table on page 82					
●	●	●	●		
●	●	●	●	●	●
●		●			
●	●		●		●
●	●	●	●		●
●	●	●	●	●	●
●			●		
●					●
●					●
			●	●	
	●		●		●
	●				●
	●				●
IP67	IP67	IP65 / IP66/68	IP65/IP69k	IP65	IP66
5-8	6-9	Legal requirement	4-9	4-5	4-9
Page 121	Page 127	Page 132	Page 135	Page 146	Page 150

Sizes

COMPARISON OF WERMA BEACONS AND TRAFFIC LIGHTS
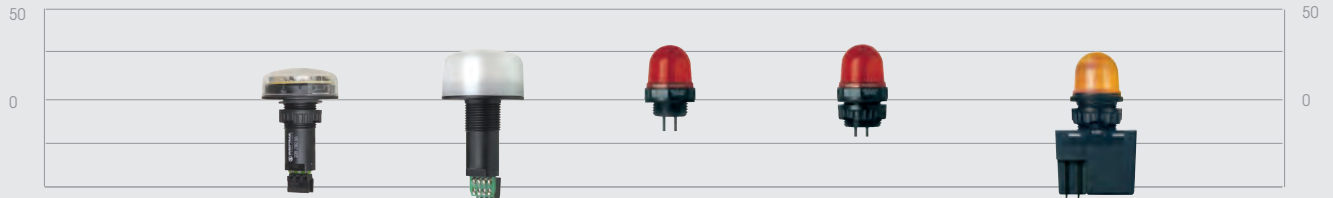
Series	239	239	230	231	232
Thread	M22	M22	M20	M22	M22
Ø	50 mm	50 mm	29 mm	29 mm	29 mm
Height (Protrusion from panel)	22 mm	31 mm	32 mm	32 mm	32 mm

Series	Evo*SIGNAL* Mini	Evo*SIGNAL* Midi	Evo*SIGNAL* Maxi
Ø	62 mm	85 mm	120 mm
Height	85 mm	130 mm	173 mm

Series	853
Ø	85 mm
Height	85 mm

Series	839	883	884
Ø	153 mm	142 mm	142 mm
Height	189 mm	218 mm	218 mm
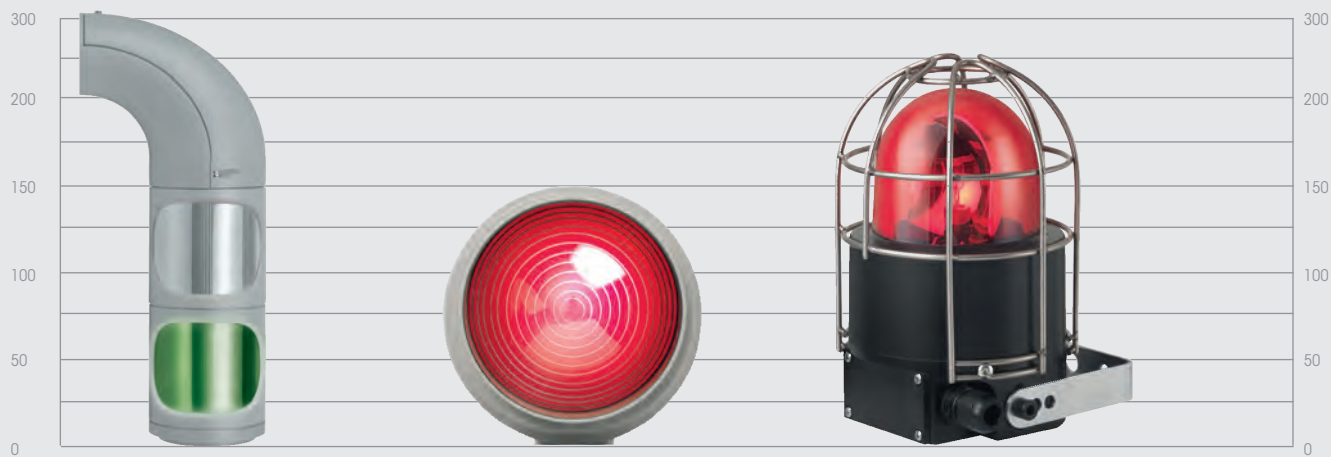
Series	894	890	728/729
Ø	98 mm	98 mm	139 mm
Height	137 mm	151 mm	214 mm

Micro Installation Beacons - 230/231/232

Your benefits

Despite their size, micro installation beacons from the 230 / 231 / 232 range will provide good all-round visibility. The range includes control panel indicator lights.

- The industry standard for control panels
- Easy to install, even where space is restricted

Typical applications

Signalling faults and statuses

- On small machines and equipment
- In building technology

Installation options

- M22 single-hole mounting including nut
- M20 for direct installation, in safety switches, for example

Features

- Available with a permanent light
- Powerful xenon flash light for increased visibility

Size comparison
Micro/Mini/EvoSIGNAL Mini

Signalisation index		
Optical		
LED Permanent Light		2
Xenon Flashing Light		4

230 LED Installation Beacon

ⓘ TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:

Dimensions (Ø x Height):	29 mm x 32 mm (Protrusion from panel)			
Housing:	PC/ABS-Blend			
Lens:	PC, transparent			
Connection:	2 wires, c. 115 mm long			
Fixing:	Installation mounting for Ø 20.5 mm (M20 x 1.5 mm)			
Life duration:	Up to 100,000 hrs			
Seal included in assembly.				
Voltage:	12 V DC	24 V DC	115 V AC	230 V AC
Current consumption:	80 mA	45 mA	15 mA	20 mA
red	**230 100 54**	**230 100 55**	**230 100 67**	**230 100 68**
yellow	**230 300 54**	**230 300 55**	**230 300 67**	**230 300 68**
clear	-	**230 400 55**	-	-
Further colours on request.				

↔ TECHNICAL DIAGRAM:

Mainly sideways illumination

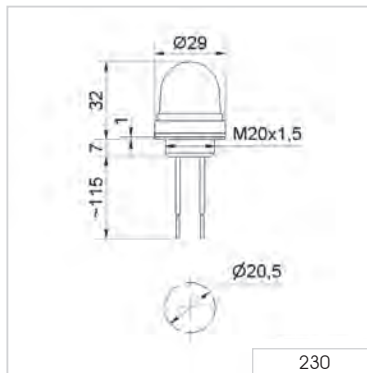

The LED Installation Beacon 230 can for example be used in applications with cable-operated switches or limit switch devices

Signalisation index	
LED Permanent Light	2

24 V

IP65   +50°C / -20°C   PLC

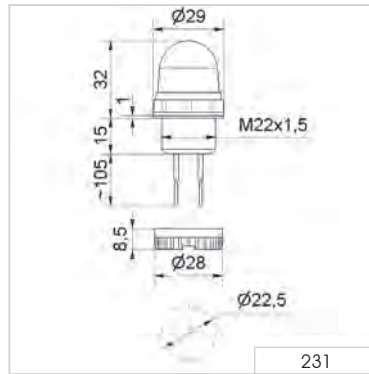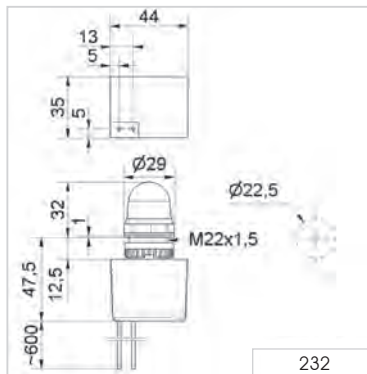# 231 LED Installation Beacon

ⓘ TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:

Dimensions (Ø x Height):	29 mm x 32 mm (Protrusion from panel)			
Housing:	PC/ABS-Blend			
Lens:	PC, transparent			
Connection:	2 wires, c. 105 mm long			
Fixing:	Installation mounting for Ø 22.5 mm (M22 x 1.5 mm)			
Life duration:	Up to 100,000 hrs			
Nut and seal included in assembly.				
Voltage:	12 V DC	24 V DC	115 V AC	230 V AC
Current consumption:	80 mA	45 mA	15 mA	20 mA
red	**231 100 54**	**231 100 55**	**231 100 67**	**231 100 68**
green	**231 200 54**	**231 200 55**	**231 200 67**	**231 200 68**
yellow	**231 300 54**	**231 300 55**	**231 300 67**	**231 300 68**
clear	**231 400 54**	**231 400 55**	**231 400 67**	**231 400 68**
blue	**231 500 54**	**231 500 55**	**231 500 67**	**231 500 68**

↔ TECHNICAL DIAGRAM:

Mainly sideways illumination

Signalisation index		
LED Permanent Light		2

24 V

IP65 · +50°C · -20°C · PLC

232 Installation Xenon Flashing Beacon

ⓘ TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:

Dimensions (Ø x Height):	29 mm x 32 mm (Protrusion from panel)	
Housing:	PC/ABS-Blend	
Lens:	PC, transparent	
Connection:	2 wires, c. 600 mm long	
Fixing:	Installation mounting for Ø 22.5 mm (M22 x 1.5 mm) with anti-twist device	
Flash frequency:	1.5 Hz	
Flash energy:	1 Ws	
Life duration:	4×10^6 flashes	
Nut and seal included in assembly.		
Voltage:	24 V DC	230 V AC
Current consumption:	140 mA	20 mA
red	**232 100 55**	**232 100 68**
yellow	**232 300 55**	**232 300 68**

↔ TECHNICAL DIAGRAM:

Signalisation index	
Xenon Flashing Light	4

CE · EAC · 54 g · IP65 · +50°C / -20°C · 1 Ws · 24 V · PLC
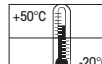
Mini Installation Beacons - 239/240

Your benefits

WERMA's mini installation beacons are perfect for use on machinery, and control panels. The colours can be set quite simply by means of binary inputs.

- Up to five different colours with just one light
- Low lens, where space is restricted
- Raised lens for best visibility also from the side

Typical applications

Signalling faults and statuses

- On control consoles of machinery
- In machine housings
- On control panels

Installation options

- M22 single-hole mounting (239)
- M30 single-hole mounting (240)

Features

- Bit-encoded actuation allows the three basic colours green, yellow and red to be displayed using just two PLC outputs. With a third output, white and blue can also be activated.
- With Spec. V 3.0, the special AS interface version is suitable for addressing (A/B mode) up to 62 modules – without an external power supply (239)

Size comparison
Mini 239/EvoSIGNAL Mini
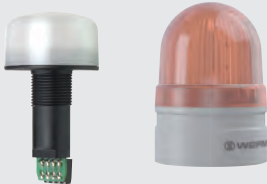
Signalisation index		
Optical		
LED Permanent Light (multicolour) 239		3
LED Permanent Light (multicolour) 240		4

239 LED Installation Beacon (Multicolour)

LED Installation Beacon
(Multicolour)

LED Installation Beacon
(Multicolour) with raised lens

Five colours in one beacon:
red, yellow, green, white and blue

ⓘ TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:

|	
Dimensions (Ø x Height):	50 mm x 22 mm (Protrusion from panel)
	50 mm x 32 mm (Protrusion from panel)
Housing:	PC/ABS-Blend, black
Lens:	PC, transparent
Fixing:	Installation mounting for Ø 22.5 mm (M22 x 1.5 mm)
Connection:	Screw terminal max. 0.5 mm² (239 480 55)
	Push In max. 1.5 mm² (239 482 55)
Colour options:	Red, yellow, green, white, blue (multicolour)
Life duration:	Up to 50,000 hrs
Nut and seal included in assembly.	
Voltage:	24 V DC
Current consumption:	Max. 75 mA
Low lens, clear	**239 480 55**
Raised lens, opaque	**239 482 55**

! ADDITIONAL INFORMATION:

The LED beacon 239 is suitable for applications on machines or in control panels.

The LED installation beacon (multicolour) can be single-hole mounted with ease thanks to its M22 installation dimensions.

X1	X2	X3	X4	X5	Colour
			nc	COM	OFF
		24V DC	nc	COM	RD
	24V DC		nc	COM	GN
	24V DC	24V DC	nc	COM	YE
24V DC			nc	COM	BU
24V DC	24V DC	24V DC	nc	COM	WH

↔ TECHNICAL DIAGRAM:
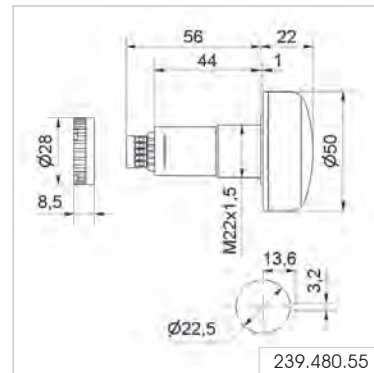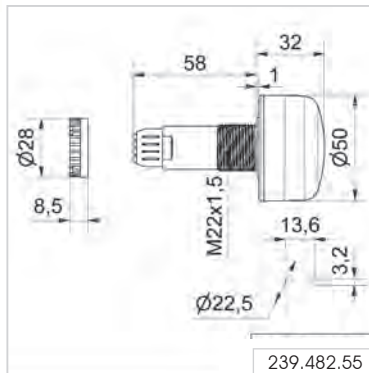
239.482.55

239.480.55

CE   EAC   31 g   IP65   +50°C -20°C   PLC
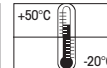
239 LED Installation Beacon (Multicolour) for AS-Interface

Five colours in one beacon:
red, yellow, green, white and blue

ⓘ TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:

|	
Dimensions (Ø x Height):	50 mm x 22 mm (Protrusion from panel)
Housing:	PC/ABS-Blend, black
Lens:	PC, transparent
Fixing:	Installation mounting for Ø 22.5 mm (M22 x 1.5 mm) with anti-twist device
Connection:	Screw terminal with wire protection max. 1.5 mm^2
Power supply AS-Interface:	Via bus conduction
Operating voltage:	25 V ... 31.6 V according to the AS-Interface specification
Current consumption:	≤ 100 mA
Specification:	V 3.0
IO-Code:	8_{HEX}
ID-Code:	A_{HEX}
ID2-Code:	E_{HEX}
Colour options:	Red, yellow, green, white, blue
Life duration:	Up to 50,000 hrs
Nut and seal included in assembly.	
LED Installation Beacon (multicolour) for AS-Interface	**239 780 55**

↔ TECHNICAL DIAGRAM:
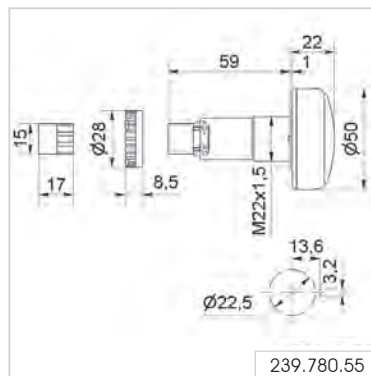
239.780.55

Approval No. 2001

C E

EAC

ASi

42 g

IP65

+50°C -20°C

PLC
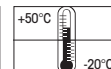
240 LED Installation Beacon (Multicolour)

ⓘ TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:

Dimensions (Ø x Height):	55 mm x 46 mm (Protrusion from panel)			
Housing:	PC/ABS-Blend, black			
Lens:	PC, transparent			
Fixing:	Installation mounting M30			
Colour options:	Red, yellow, green, white, blue, violet, turquoise (Multicolour)			
	Rot, yellow, green (Tricolour)			
Life duration:	Up to 50,000 hrs			
Without Buzzer	Voltage	Current consumption	Plug M12	Cable
Tricolour (RGY)	24 V DC	45 mA	**240 220 55**	**240 210 55**
Multicolour (RGB)	10-30 V DC	60 mA	**240 120 50**	**240 110 50**

↔ TECHNICAL DIAGRAM:

240
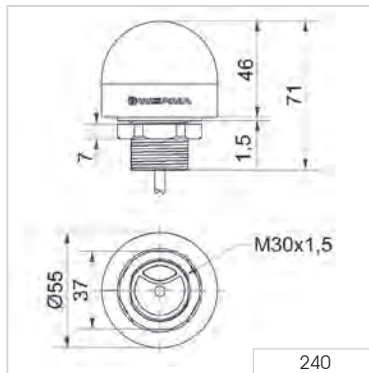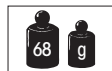
240.220.55   240.120.50   240.210.55   240.110.50

CE   68 g   72 g   105 g   120 g   IP65   +50°C / -20°C

EvoSIGNAL - LED Signal Beacon Mini, Midi, Maxi

Your benefits

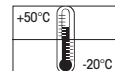The type of optical signals used depends on the application and the surroundings. With EvoSIGNAL, finding the right signal device has never been so easy: Almost all areas of application are optimally covered by only three sizes (signal lamps) with specific mounting adapters. The new modular, simple and clear standard solution. EvoSIGNAL is one of a kind.

- Simple and easy to use: Number of different articles reduced to 20% whilst retaining a full range
- Twin functions: TwinLIGHT and TwinFLASH unite two light pattern functions in one element. They can be remote-controlled via connection terminals and also used as escalation levels
- Poka Yoke: Simple and intuitive installation - incorrect installation is impossible
- Mini and Midi also available as TriCOLOUR variants
- Maxi TwinFLASH can be used as an attention-grabbing alternative to xenon strobes and rotating mirror beacons

Typical applications

Signal faults and statuses on machines and equipment, in building services engineering and in door and gate applications. All products are ideal for demanding indoor and outdoor applications.

- Mini – on installations with limited space
- Midi – signalling over medium distances (10–30 m)
- Maxi – signalling over long distances (> 20 m)

Installation options

- Base mounting
- M22/PG29 single-hole mounting
- Tube mounting
- Bracket mounting

Features

- Push-in connection terminals: Simple and permanently secure connection
- Fully compatible: Easy replacement of previous products
- Best-in-class equipment: Powerful, extremely robust (IP66), tamper-proof

Signalisation index	
Mini TwinLIGHT	4
Mini TwinFLASH	5
Midi TwinLIGHT	6
Midi TwinFLASH	8
Midi Rotation	7
Maxi TwinLIGHT	8
Maxi TwinFLASH	10
Maxi Rotation	9

Mini   Midi   Maxi

EvoSIGNAL **Mini** - LED Signal Beacon

85 mm

Scale 1:1

Ø 62 mm
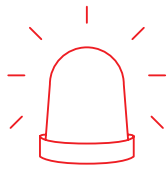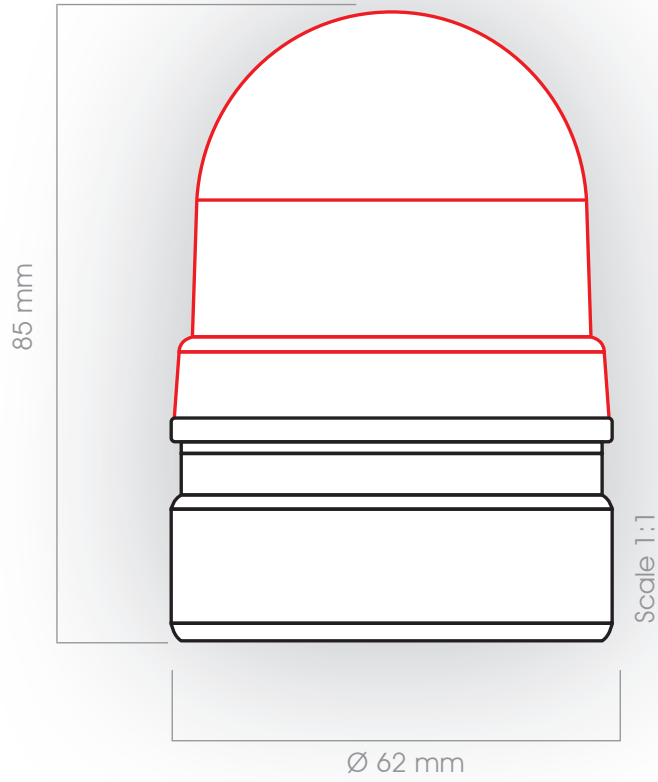
31
Twin*LIGHT*, Twin*FLASH*,
Tri*COLOUR*

6
Mounting adapter

Evo*SIGNAL* **Mini** - LED Signal Beacon

──── **OLD** ────

LED Permanent Beacon	Permanent Beacon	Xenon
201/204	200/203	202/205
211/214	210/213	212/215
221/224	220/223	222/225
209	209	209
219	219	219
207 (M22)	206	208 (M22)
	216	

──── **NEW** ────

Quick Finder EvoSIGNAL Mini - LED Signal Beacon

12 V AC/DC		24 V AC/DC		115-230 V AC	
Twin_LIGHT_	**Twin**_FLASH_	**Twin**_LIGHT_	**Twin**_FLASH_	**Twin**_LIGHT_	**Twin**_FLASH_
Order no.	Order no.	Order no.	Order no.	Order no.	Order no.
260 110 74	260 120 74	260 110 75	260 120 75	260 110 60	260 120 60
260 210 74	260 220 74	260 210 75	260 220 75	260 210 60	260 220 60
260 310 74	260 320 74	260 310 75	260 320 75	260 310 60	260 320 60
260 410 74	260 420 74	260 410 75	260 420 75	260 410 60	260 420 60
260 510 74	260 520 74	260 510 75	260 520 75	260 510 60	260 520 60

Tri_COLOUR_

260 430 75

+ Mounting adapter (compulsory!)

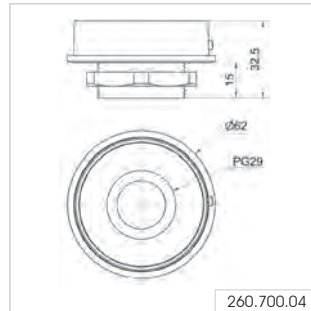| Base mounting	Installation mounting M22	Installation mounting PG 29	Tube mounting	Bracket mounting with cable gland	Bracket mounting
Order no. 260 700 01	Order no. 260 700 03	Order no. 260 700 04	Order no. 260 700 05	Order no. 260 700 06	Order no. 260 700 07
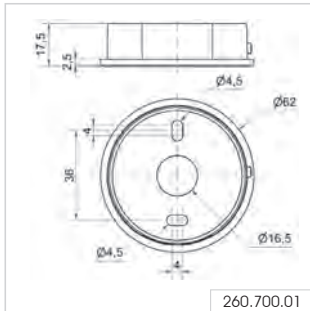
260.700.01
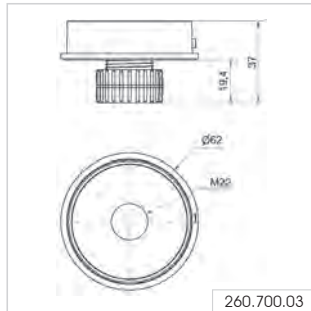
260.700.03
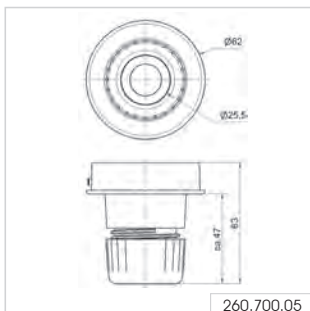
260.700.04

260.700.05
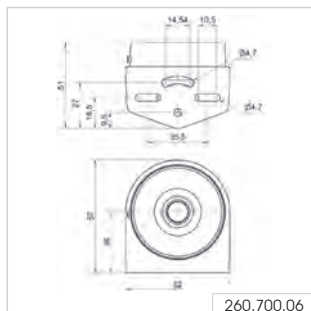
260.700.06
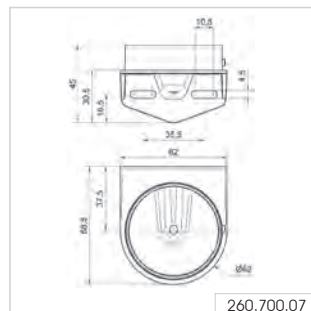
260.700.07

EvoSIGNAL Mini - LED Signal Beacon

Tube mounting

Bracket mounting with cable gland

ⓘ TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:

Dimensions (Ø x Height):	62 mm x 85 mm		
Housing:	PC-ABS, grey, high impact		
Lens:	PC, transparent		
Fixing:	Base/Installation7Tube/Wall mounting		
Cable entry:	Cable diameter 8-12 mm		
Connection:	Push-In terminal max.1.5 mm²		
Flash/Blink frequency:	1 Hz		
TwinLIGHT (Permanent/Blinking)			
Voltage:	12 V AC/DC	24 V AC/DC	115-230 V AC
Current consumption:	≤ 90 mA	≤ 75 mA	≤ 45 mA
red	**260 110 74**	**260 110 75**	**260 110 60**
green	**260 210 74**	**260 210 75**	**260 210 60**
yellow	**260 310 74**	**260 310 75**	**260 310 60**
white	**260 410 74**	**260 410 75**	**260 410 60**
blue	**260 510 74**	**260 510 75**	**260 510 60**
TwinFLASH (Flash/EVS)			
Voltage:	12 V AC/DC	24 V AC/DC	115-230 V AC
Current consumption:	≤ 70 mA	≤ 75 mA	≤ 45 mA
red	**260 120 74**	**260 120 75**	**260 120 60**
green	**260 220 74**	**260 220 75**	**260 220 60**
yellow	**260 320 74**	**260 320 75**	**260 320 60**
white	**260 420 74**	**260 420 75**	**260 420 60**
blue	**260 520 74**	**260 520 75**	**260 520 60**
TriCOLOUR			
Voltage:		24 V AC/DC	
Current consumption:		≤ 90 mA	
Order no.		**260 430 75**	

⚒ ACCESSORIES:

Base mounting	**260 700 01**
Installation mounting M22	**260 700 03**
Installation mounting PG 29	**260 700 04**
Tube mounting	**260 700 05**
Bracket mounting with cable gland	**260 700 06**
Bracket mounting	**260 700 07**

↔ TECHNICAL DIAGRAM:

85

Ø62

260

260

71 g

260.700.05
260.700.06

260.700.01   260.700.03   260.700.04   260.700.07

13 g   21 g   28 g   35 g   26 g

IP66

+60°C   -30°C
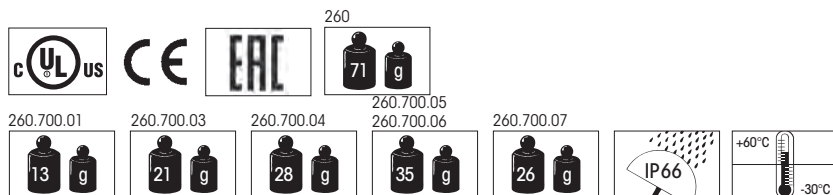
Mini Beacons - 800/801/802/815/816/817 families

Your benefits

The Mini Signal Beacons are used wherever space is restricted.

The beacons are easy to install and connect, even in tight spaces, thanks to convenient connection terminals and easily accessible mounting holes.

- Reliable signalling at close quarters
- Available as a permanent light or as a bright Xenon flash light to attract attention
- Robust and tamper-proof

Typical applications

Signalling of faults

- On small machines and equipment
- In building technology

Installation options

- Base mounting
- M22/PG29 single-hole mounting
- Bracket mounting
- Tube mounting

Features

- High protection rating IP65 for both indoor and outdoor use

The 815 / 816 / 817 family:

- Robust and shock-resistant up to 20 joules

Size comparison Mini 239/Mini

Signalisation index		
Optical		
LED Permanent Light 8xx		3
LED Blinking Light 8xx		3
Permanent Light 8xx		2
Xenon Flashing Light 8xx		4

801 LED Installation Permanent Beacon - PG29 (Ø 37 mm)
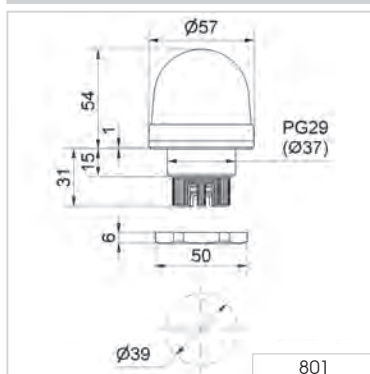
Tube adaptor as accessory

Accessories

ⓘ TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:

Dimensions (Ø x Height):	57 mm x 54 mm (Protrusion from panel)		
Housing:	PC/ABS-Blend		
	Socket: PA-GF, high impact		
Lens:	PC, transparent		
Fixing:	Installation mounting for Ø 37 mm (PG29)		
Connection:	Screw terminal 0.5 - 1.5 mm²		
Life duration:	Up to 100,000 hrs		
Voltage:	24 V AC/DC	115 V AC	230 V AC
Current consumption:	45 mA	25 mA	25 mA
red	**801 100 75**	**801 100 67**	**801 100 68**
green	**801 200 75**	**801 200 67**	**801 200 68**
yellow	**801 300 75**	**801 300 67**	**801 300 68**
Further colours and voltages on request.			

✖ ACCESSORIES:

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

↔ TECHNICAL DIAGRAM:

Signalisation index	
LED Permanent Light	3

24 V

PLC

816 LED Installation Permanent Beacon - PG29 (Ø 37 mm)

ⓘ TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:

Dimensions (Ø x Height):	75 mm x 66 mm (Protrusion from panel)		
Housing:	PC/ABS-Blend Socket: PA-GF, high impact		
Lens:	PC, transparent Shock resistance 20 Joules according to EN 60079-0		
Fixing:	Installation mounting for Ø 37 mm (PG29)		
Connection:	Screw terminal 0.5 - 1.5 mm²		
Life duration:	Up to 100,000 hrs		
Voltage:	24 V AC/DC	115 V AC	230 V AC
Current consumption:	45 mA	25 mA	25 mA
red	**816 100 55**	**816 100 67**	**816 100 68**
green	**816 200 55**	**816 200 67**	**816 200 68**
yellow	**816 300 55**	**816 300 67**	**816 300 68**
clear	**816 400 55**	**816 400 67**	**816 400 68**

Tube adaptor as accessory

✕ ACCESSORIES:

Tube adaptor	**975 812 01**
Base with integrated tube, Ø 25 mm, 110 mm long, plastic	**975 840 10**
Base for tube mounting	**975 840 90**
Base for base mounting	**975 812 02**
Tube Ø 25 mm, all anodised aluminium	
100 mm long	**975 845 10**
250 mm long	**975 840 25**
400 mm long	**975 840 40**
Anti-twist device	**975 815 22**
Surface housing IP 65	
for 1 Installation Beacon	**975 815 03**
for 2 Installation Beacons	**975 815 07**
for 3 Installation Beacons	**975 815 08**
for 4 Installation Beacons	**975 109 05**
Accessories see page 98	

Surface housing as accessory

↔ TECHNICAL DIAGRAM:

Ø75, 66, 31, 15, 1, Ø39, PG29 (Ø37), 50, 816

816 LED Installation Blinking Beacon - PG29 (Ø 37 mm)

Tube adaptor as accessory

Surface housing (accessory)

ⓘ TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:

Dimensions (Ø x Height):	75 mm x 66 mm (Protrusion from panel)
Housing:	PC/ABS-Blend
	Socket: PA-GF, high impact
Lens:	PC, transparent
	Shock resistance 20 Joules according to EN 60079-0
Fixing:	Installation mounting for Ø 37 mm (PG29)
Connection:	Screw terminal 0.5 - 1.5 mm^2
Blink frequency:	C. 1 Hz
Life duration:	Up to 50,000 hrs
Voltage:	24 V AC/DC
Current consumption:	45 mA
red	**816 110 55**
yellow	**816 310 55**
Further colours and voltages on request.	

✴ ACCESSORIES:

Tube adaptor	**975 812 01**
Base with integrated tube, Ø 25 mm, 110 mm long, plastic	**975 840 10**
Base for tube mounting	**975 840 90**
Base for base mounting	**975 812 02**
Tube Ø 25 mm, all anodised aluminium 100 mm long	**975 845 10**
250 mm long	**975 840 25**
400 mm long	**975 840 40**
Anti-twist device	**975 815 22**
Surface housing IP 65 for 1 Installation Beacon	**975 815 03**
for 2 Installation Beacons	**975 815 07**
for 3 Installation Beacons	**975 815 08**
for 4 Installation Beacons	**975 109 05**
Accessories see page 98	

↔ TECHNICAL DIAGRAM:

Ø75
66
31
15
1
Ø39
PG29 (Ø37)
6
50
816
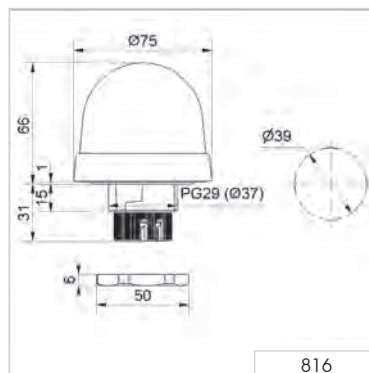
Signalisation index		
LED Blinking Light		3

c ⓊL us   CE   EAC   130 g   IP65   +50°C / -20°C   20J   PLC
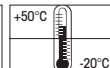
816 LED Permanent Beacon Multicolour - PG29 (Ø 37 mm)

816 Multicolour
with clear lens

816 Multicolour
with opaque lens

7 colours in one beacon:
red, yellow, green, white, blue,
violet and turquoise

ⓘ TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:

Dimensions (Ø x Height):	75 mm x 66 mm (Protrusion from panel)
Housing:	ABS/PC-Blend, black
Lens:	PC, transparent
	Shock resistance 20 Joules according to EN 60079-0
Fixing:	Installation mounting for Ø 37 mm (PG29)
Connection:	M12 plug (4 pole)
Colour options:	Red, yellow, green, white, blue, violet, turquoise (multicolour)
Life duration:	Up to 50,000 hrs
Voltage:	24 V DC
Current consumption:	max. 120 mA
clear lens	**816 480 55**

✕ ACCESSORIES:

Cable 5m with M12 plug	**960 693 05**
Base for base mounting	**975 812 02**
Tube adaptor	**975 812 01**
Base with integrated tube, Ø 25 mm, 110 mm long, plastic	**975 840 10**
Tube Ø 25 mm, all anodised aluminium 100 mm long	**975 845 10**
250 mm long	**975 840 25**
400 mm long	**975 840 40**
Base for tube mounting, metal	**975 840 91**
Anti-twist device	**975 815 22**

! ADDITIONAL INFORMATION:

Easy triggering

PIN				Colour
1	2	3	4	
24 V	-	GND	-	rd
-	24 V	GND	-	gn
24 V	24 V	GND	-	ye
-	-	GND	24 V	bu
24 V	24 V	GND	24 V	wh
24 V	-	GND	24 V	vt
-	24 V	GND	24 V	tg

↔ TECHNICAL DIAGRAM:

816.X80.55
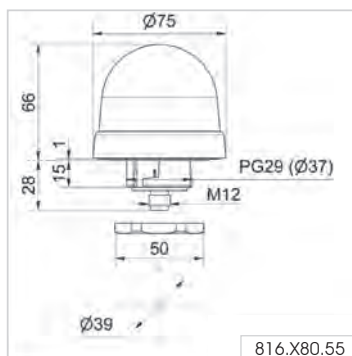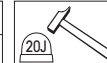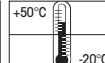
816 LED Beacon (Multicolour) with USB Interface - PG29 (Ø 37 mm)
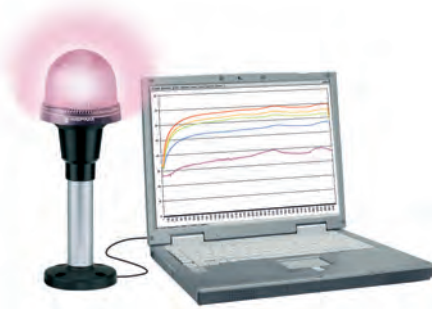
Simple triggering as no special software is required

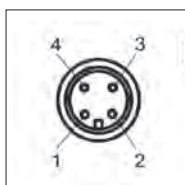## ⓘ TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:

Dimensions (Ø x Height):	75 mm x 66 mm (Protrusion from panel)
Housing:	ABS/PC-Blend, black
Lens:	PC, transparent
	Shock resistance 20 Joules according to EN 60079-0
Fixing:	Installation mounting for Ø 37 mm (PG29)
	Base and wall mounting possible (accessories)
Connection:	Mini USB 2.0 downward cable outlet
Power supply:	Via USB
Colour options:	More than 200,000 colours (RGB LED)
Suitable for:	Windows®, System requirements – see Handbook
Assembly:	LED beacon, demo software, driver
	and USB connection cable included, 1.8 m long
Life duration:	Up to 50,000 hrs
Voltage:	5 V (USB-Connection)
Current consumption:	≤ 500 mA
clear lens	**816 480 53**
opaque lens	**816 780 53**

✗ ACCESSORIES:

You will find the appropriate accessories for base or tube mounting on page 104 or under wwww.werma.com

! ADDITIONAL INFORMATION:

The installation LED Beacon with USB interface is compatible with USB 2.0 and 1.1.
A wide range of colours and light effects can be quickly and simply programmed by the customer and altered at any time.

↔ TECHNICAL DIAGRAM:

Ø75
66
15
Ø39
PG29 (Ø37)
6
50
816.X80.53

Signalisation index		
LED Permanent Light (multicolour)		3

CE EAC 90 g IP65 +50°C / -20°C 20J
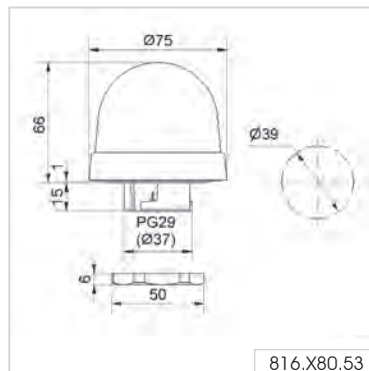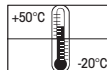
800 Installation Permanent Beacon - PG29 (Ø 37 mm)

Bulb change via rear access with bayonet holder

ⓘ TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:

Dimensions (Ø x Height):	57 mm x 54 mm (Protrusion from panel)
Housing:	PC/ABS-Blend
	Socket: PA-GF, high impact
Lens:	PC, transparent
Connection:	Screw terminal 0.5 -1.5 mm²
Fixing:	Installation mounting for Ø 37 mm (PG29)
Operating voltage:	12-230 V
Bulb socket:	BA15d, 5 Watt max.
Bulb change:	Via rear access with bayonet mechanism
Bulb not included in assembly.	
Voltage:	12-230 V
red	**800 100 00**
green	**800 200 00**
yellow	**800 300 00**
white	**800 400 00**
blue	**800 500 00**

⚒ ACCESSORIES:

Bulb BA15d, 5 W total length 42 mm

| **Voltage:**	12 V AC/DC	24 V AC/DC	30 V AC/DC	115 V AC/DC	230 V AC/DC
	955 840 34	**955 840 35**	**955 840 32**	**955 840 57**	**955 840 38**
Tube adaptor				**975 812 01**	
Base with integrated tube, Ø 25 mm, 110 mm long, plastic				**975 840 10**	
Base for tube mounting				**975 840 90**	
Base for base mounting				**975 812 02**	
Tube Ø 25 mm, all anodised aluminium					
100 mm long				**975 845 10**	
250 mm long				**975 840 25**	
400 mm long				**975 840 40**	
Anti-twist device				**975 815 22**	
Surface housing IP 65					
for 1 Installation Beacon				**975 815 03**	
for 2 Installation Beacons				**975 815 07**	
for 3 Installation Beacons				**975 815 08**	
for 4 Installation Beacons				**975 109 05**	

Accessories

↔ TECHNICAL DIAGRAM:

Signalisation index		
Permanent Light		2

Vandal-proof construction

Accessories

ⓘ TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:

Dimensions (Ø x Height):	75 mm x 66 mm (Protrusion from panel)
Housing:	PC/ABS-Blend, Socket: PA-GF, high impact
Lens:	PC, transparent
	Shock resistance 20 Joules according to EN 60079-0
Connection:	Screw terminal 0.5 -1.5 mm²
Fixing:	Installation mounting for Ø 37 mm (PG29)
Operating voltage:	12-230 V
Bulb socket:	BA15d, 5 Watt max.
Bulb change:	Via rear access with bayonet mechanism
Bulb not included in assembly.	
Voltage:	12-230 V
red	**815 100 00**
green	**815 200 00**
yellow	**815 300 00**
white	**815 400 00**
blue	**815 500 00**

✱ ACCESSORIES:

Bulb BA15d, 5 W total length 42 mm

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

↔ TECHNICAL DIAGRAM:

Signalisation index		
Permanent Light		2

802 Xenon Installation Flashing Beacon - PG29 (Ø 37 mm)

ⓘ **TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:**

Dimensions (Ø x Height):	57 mm x 54 mm (Protrusion from panel)		
Housing:	PC/ABS-Blend		
	Socket: PA-GF, high impact		
Lens:	PC, transparent		
Fixing:	Installation mounting for Ø 37 mm (PG29)		
Connection:	Screw terminal 0.5 - 1.5 mm^2		
Flash frequency:	0.75 Hz		
Flash energy:	1 Ws		
Life duration:	4 x 10^6 flashes		
Voltage:	24 V DC	115 V AC	230 V AC
Current consumption:	100 mA	20 mA	30 mA
red	**802 100 55**	**802 100 67**	**802 100 68**
yellow	**802 300 55**	**802 300 67**	**802 300 68**

Further colours and voltages on request.

🔧 **ACCESSORIES:**

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

↔ **TECHNICAL DIAGRAM:**

Tube adaptor as accessory

Accessories

Signalisation index
Xenon Flashing Light 4

817 Installation Flashing Beacon (Xenon) - PG29 (Ø 37 mm)

Tube adaptor as accessory

Accessories

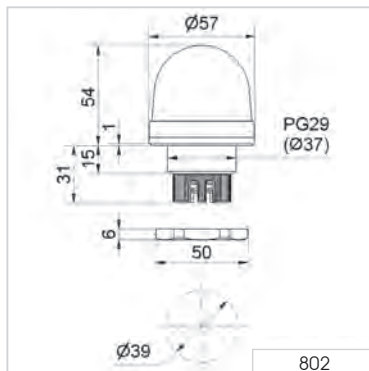## ⓘ TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:

Dimensions (Ø x Height):	75 mm x 66 mm (Protrusion from panel)			
Housing:	PC/ABS-Blend Socket: PA-GF, high impact			
Lens:	PC, transparent Shock resistance 20 Joules according to EN 60079-0			
Fixing:	Installation mounting for Ø 37 mm (PG29)			
Connection:	Screw terminal 0.5 - 1.5 mm²			
Flash frequency:	C. 1 Hz			
Flash energy:	2 Ws			
Life duration:	4 x 10⁶ flashes			
Voltage:	12 V DC	24 V DC	115 V AC	230 V AC
Current consumption:	< 195 mA	125 mA	22 mA	35 mA
red	**817 100 54**	**817 100 55**	**817 100 67**	**817 100 68**
yellow	**817 300 54**	**817 300 55**	**817 300 67**	**817 300 68**

Further colours and voltages on request.

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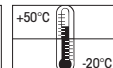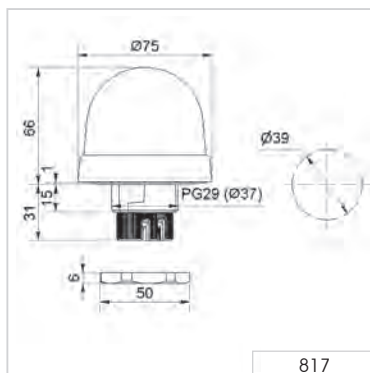
Tube adaptor	**975 812 01**
Base with integrated tube, Ø 25 mm, 110 mm long, plastic	**975 840 10**
Base for tube mounting	**975 840 90**
Base for base mounting	**975 812 02**
Tube Ø 25 mm, all anodised aluminium 100 mm long	**975 845 10**
250 mm long	**975 840 25**
400 mm long	**975 840 40**
Anti-twist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

↔ TECHNICAL DIAGRAM:

Ø75
66
15.1
31
Ø39
PG29 (Ø37)
6
50
817

Signalisation index
Xenon Flashing Light   4

EvoSIGNAL **Midi** - LED Signal Beacon

130 mm

Ø 85 mm
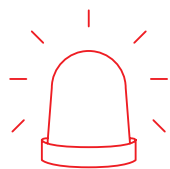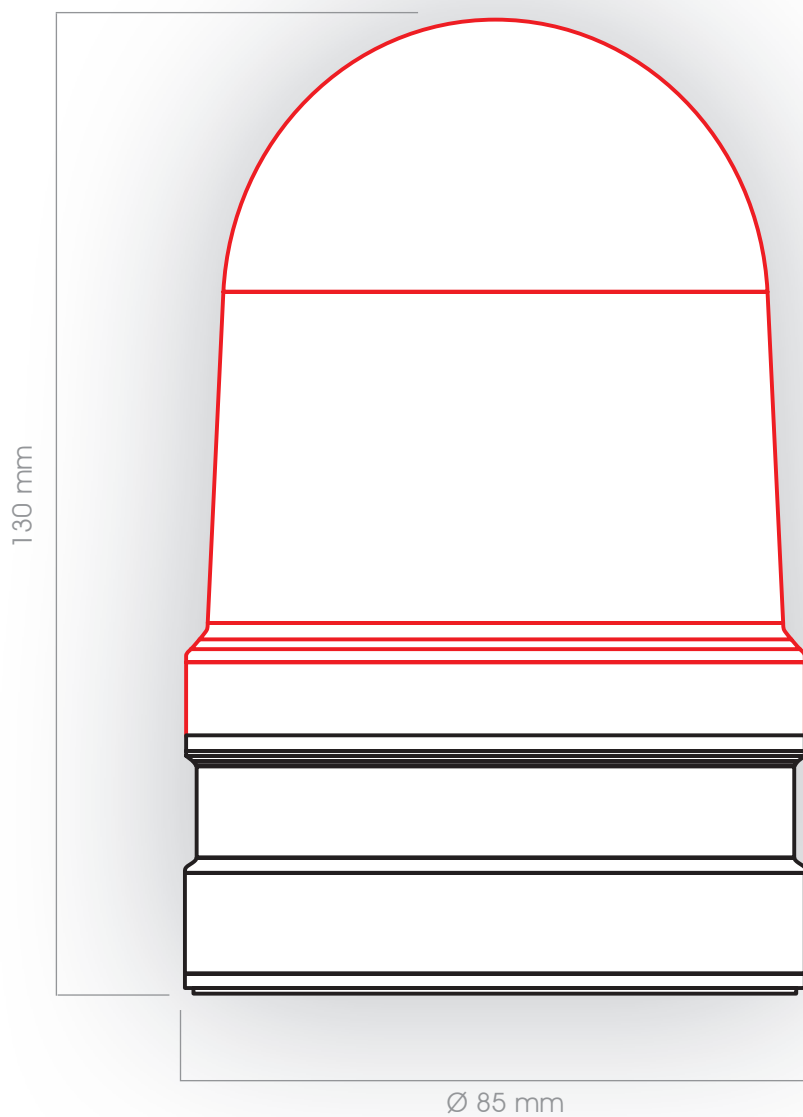
32
Twin*LIGHT*, Twin*FLASH*,
Tri*COLOUR,* Rotating Light

6
Mounting adapter

Evo*SIGNAL* **Midi** - LED Signal Beacon

──── **OLD** ────

829	826	827	828
LED Permanent Blinking Beacon	Permanent Beacon	Blinking Beacon	Xenon Flashing Beacon
LED Permanent/Blinking/Rotating Beacon with external triggering			Xenon Flashing Beacon for use in road tunnels
LED Rotating Beacon			
LED Double Flash Beacon			
LED EVS Beacon			

──── **NEW** ────

Evo*SIGNAL* **Midi** - LED Signal Beacon

12/24 V AC/DC		
Twin*LIGHT*	**Twin*FLASH***	**Rotating**
Order no.	Order no.	Order no.
261 110 70	261 120 70	261 140 70
261 210 70	261 220 70	261 240 70
261 310 70	261 320 70	261 340 70
261 410 70	261 420 70	261 440 70
261 510 70	261 520 70	261 540 70

Tri*COLOUR*

261 430 70

115-230 V AC		
Twin*LIGHT*	**Twin*FLASH***	**Rotating**
Order no.	Order no.	Order no.
261 110 60	261 120 60	261 140 60
261 210 60	261 220 60	261 240 60
261 310 60	261 320 60	261 340 60
261 410 60	261 420 60	261 440 60
261 510 60	261 520 60	261 540 60

Tri*COLOUR*

261 430 60

+ Mounting adapter (compulsory!)

Base mounting	Base mounting with cable gland	Tube mounting	Bracket mounting with cable gland	Bracket mounting	Horn
Order no. 261 700 01	Order no. 261 700 02	Order no. 261 700 05	Order no. 261 700 06	Order no. 261 700 07	Order no. 261 700 03
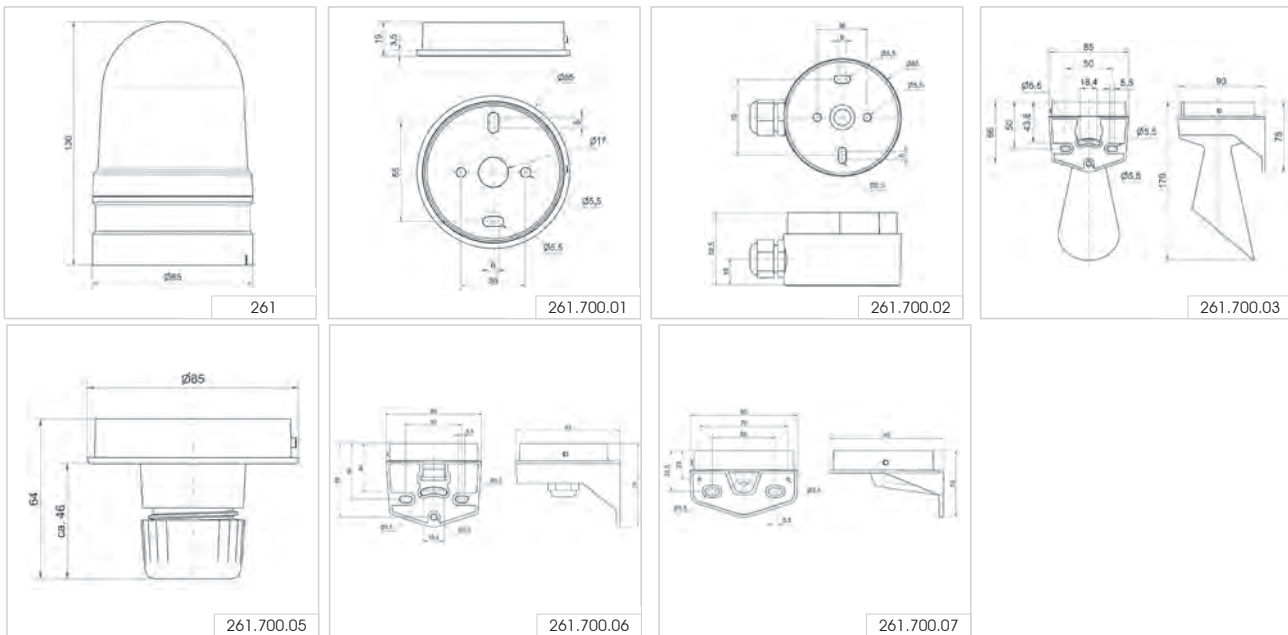
261

261.700.01

261.700.02

261.700.03

261.700.05

261.700.06

261.700.07

EvoSIGNAL Midi - LED Signal Beacon

Bracket mounting

Tube mounting

ⓘ TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:

Dimensions (Ø x Height):	85 mm x 130 mm	
Housing:	PC/ABS, grey, high impact	
Lens:	PC, transparent	
Fixing:	Base/Tube/Wall mounting	
Cable entry:	Cable Diameter 8-12 mm	
Connection:	Push-In terminal max. 1.5 mm^2	
TwinLIGHT		
Blinking/Flash frequency:	1 Hz	
Voltage:	12/24 V AC/DC	115-230 V AC
Current consumption:	≤ 185 mA	≤ 65 mA
red	**261 110 70**	**261 110 60**
green	**261 210 70**	**261 210 60**
yellow	**261 310 70**	**261 310 60**
white	**261 410 70**	**261 410 60**
blue	**261 510 70**	**261 510 60**
TwinFLASH		
Blinking/Flash frequency:	1 Hz	
Voltage:	12/24 V AC/DC	115-230 V AC
Current consumption:	≤ 850 mA	≤ 110 mA
red	**261 120 70**	**261 120 60**
green	**261 220 70**	**261 220 60**
yellow	**261 320 70**	**261 320 60**
white	**261 420 70**	**261 420 60**
blue	**261 520 70**	**261 520 60**
Rotation		
Rotation rate:	180 r.p.m.	
Voltage:	12/24 V AC/DC	115-230 V AC
Current consumption:	≤ 130 mA	≤ 110 mA
red	**261 140 70**	**261 140 60**
green	**261 240 70**	**261 240 60**
yellow	**261 340 70**	**261 340 60**
white	**261 440 70**	**261 440 60**
blue	**261 540 70**	**261 540 60**
TriCOLOUR		
Voltage:	12/24 V AC/DC	115-230 V AC
Current consumption:	≤ 145 mA	≤ 50 mA
clear	**261 430 70**	**261 430 60**

✴ ACCESSORIES:

Base mounting	**261 700 01**
Base mounting with cable gland	**261 700 02**
Tube mounting	**261 700 05**
Bracket mounting with cable gland	**261 700 06**
Bracket mounting	**261 700 07**
Horn	**261 700 03**

↔ TECHNICAL DIAGRAM:

c(UL)us CE EAC

261 461   261.700.01

186 g   38 g

261.700.02   261.700.05   261.700.06   261.700.07   261.700.03

98 g   56 g   95 g   47 g   127 g   IP66   +60°C / -30°C
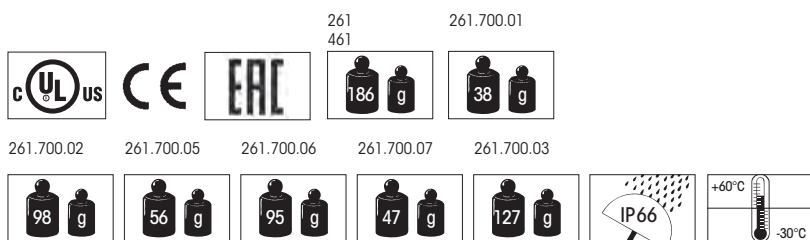
Midi Rotating Mirror Beacon – 885

Your benefits

The Midi Rotating Mirror Beacon provide flexible signalling over medium distances. The high protection rating IP65 ensures the safe operation in many areas – both indoor and outdoor applications.

- High intensity light thanks to halogen bulb in extremely compact housing
- Easy to connect, without removing the mechanical assembly

Typical applications

Signalling faults or relaying alarms

- in building service industry
- for electric gates and entry access systems
- on machinery and plant

Installation options

- Base mounting
- Tube mounting
- Bracket mounting with plastic bracket

Features

- Optional wire guard to protect against mechanical damage
- Quiet belt drive allows the beacon to be mounted and operated in any position, even upside down (with limited IP protection) or at 90° to the wall

Size comparison Evo*SIGNAL* Mini/Midi/Maxi

Signalisation index		
Optical		
Rotating Mirror		7

885 Rotating Mirror Beacon

Base mounting

Rotating Mirror Beacon 885 with
tube and base (accessories)

Plastic bracket und wire guard
(accessories)

ⓘ TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:

	Base/Bracket mounting	Tube mounting
Dimensions (Ø x Height):	98 mm x 151 mm	98 mm x 200 mm
Housing:	PC/ABS-Blend	
Lens:	PC, transparent	
Connection:	Screw terminal max. 1.5 mm²	
Cable entry:	Cable diameter 5-7 mm	
Installation position:	Standing, Tube mounting if required	
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.		

Base/Bracket mounting

Voltage:	12 V DC	24 V AC/DC	115 V AC/ 115 V DC / 230 V AC / 230 V DC
Current consumption:	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

Voltage:	12 V DC	24 V AC/DC	115 V AC/ 115 V DC / 230 V AC / 230 V DC
Current consumption:	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**
Tube Ø 25 mm, all anodised alluminium	
100 mm long	**975 845 10**
250 mm long	**975 840 25**
Base for tube mounting, plastic, Ø 25 mm	**975 840 90**
Base for tube mounting, metal, Ø 25 mm	**975 840 91**
SPARE PARTS:	
Halogen bulb 20 W/12 V for 12 V DC 115 V AC/DC, 230 V AC/DC	**955 885 24**
Halogen bulb 20 W/24 V for 24 V AC/DC	**955 885 25**
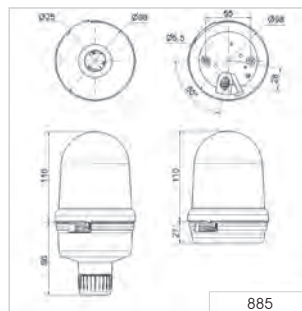
↔ TECHNICAL DIAGRAM:

885

Evo_SIGNAL_ **Maxi** - LED Signal Beacon

173 mm

Ø 120 mm

Scale 1:1
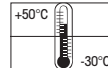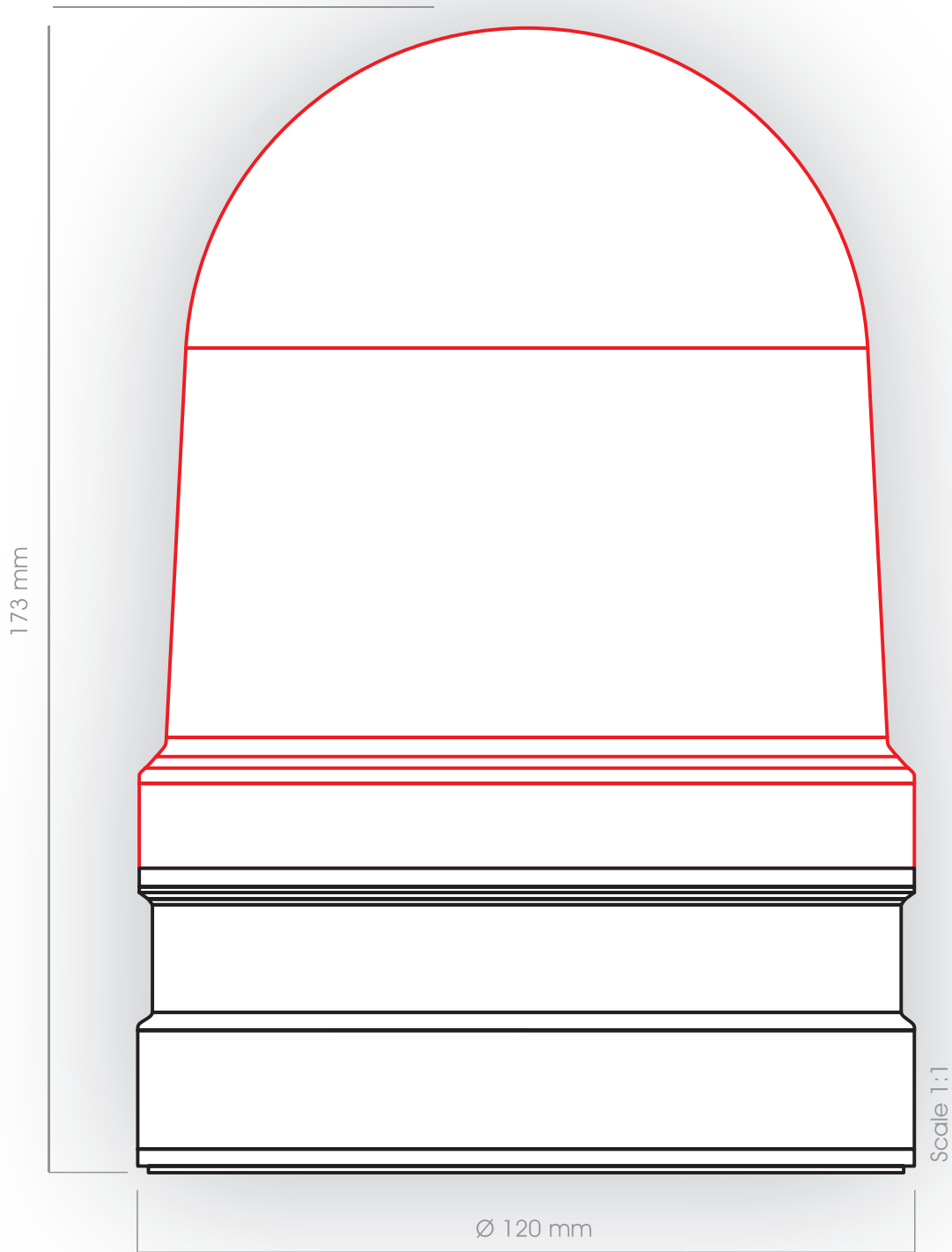
30
Twin_LIGHT_, Twin_FLASH_,
Rotating Light

4
Mounting adapter

Evo*SIGNAL* **Maxi** - LED Signal Beacon

280
LED Permanent Beacon
LED Rotating Beacon
LED Double Flash Beacon
LED EVS Beacon

NEW

Quick-Finder Evo*SIGNAL* **Maxi** - LED Signal Beacon

12/24 V AC/DC			115-230 V AC		
Twin*LIGHT*	Twin*FLASH*	Rotating	Twin*LIGHT*	Twin*FLASH*	Rotating
Order no.	Order no.	Order no.	Order no.	Order no.	Order no.
262 110 70	262 120 70	262 140 70	262 110 60	262 120 60	262 140 60
262 210 70	262 220 70	262 240 70	262 210 60	262 220 60	262 240 60
262 310 70	262 320 70	262 340 70	262 310 60	262 320 60	262 340 60
262 410 70	262 420 70	262 440 70	262 410 60	262 420 60	262 440 60
262 510 70	262 520 70	262 540 70	262 510 60	262 520 60	262 540 60

+ M o u n t i n g   a d a p t e r (compulsory!)

Base mounting	Base mounting with cable exit at side	Bracket mounting with cable gland	Bracket mounting with concealed cable entry
Order no. 262 700 01	Order no. 262 700 02	Order no. 262 700 06	Order no. 262 700 07

262.700.01

262.700.02

262.700.06

262.700.07

Evo*SIGNAL* **Maxi** - LED Signal Beacon

Bracket mounting with cable gland

Base mounting with cable exit at side

ⓘ TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:

Dimensions (Ø x Height):	120 mm x 173 mm	
Housing:	PC/ABS	
Lens:	PC, transparent	
Fixing:	Base/Wall/Tube mounting	
Cable entry:	Cable Diameter 8-12 mm	
Connection:	Push-In terminal max. 1.5 mm²	
Rotation rate:	180 r.p.m.	
Flash/Blinking frequency:	1 Hz	
Twin*LIGHT*		
Voltage:	12/24 V AC/DC	115-230 V AC
Current consumption:	≤ 700 mA	≤ 165 mA
red	**262 110 70**	**262 110 60**
green	**262 210 70**	**262 210 60**
yellow	**262 310 70**	**262 310 60**
white	**262 410 70**	**262 410 60**
blue	**262 510 70**	**262 510 60**
Twin*FLASH*		
Voltage:	12/24 V AC/DC	115-230 V AC
Current consumption:	≤ 760 mA	≤ 165 mA
red	**262 120 70**	**262 120 60**
green	**262 220 70**	**262 220 60**
yellow	**262 320 70**	**262 320 60**
white	**262 420 70**	**262 420 60**
blue	**262 520 70**	**262 520 60**
Rotating		
Voltage:	12/24 V AC/DC	115-230 V AC
Current consumption:	≤ 550 mA	≤ 170 mA
red	**262 140 70**	**262 140 60**
green	**262 240 70**	**262 240 60**
yellow	**262 340 70**	**262 340 60**
white	**262 440 70**	**262 440 60**
blue	**262 540 70**	**262 540 60**

✹ ACCESSORIES:

Base mounting	**262 700 01**
Base mounting with cable exit at side	**262 700 02**
Bracket mounting with cable gland	**262 700 06**
Bracket mounting with concealed cable entry	**262 700 07**

↔ TECHNICAL DIAGRAM:

173

Ø120

262
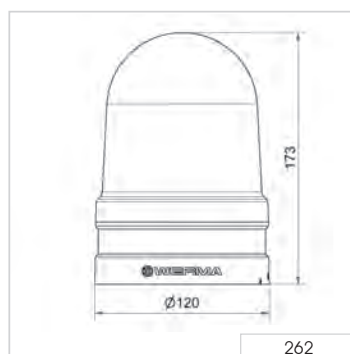
Signalisierungsindex	
Twin*LIGHT*	8
Twin*FLASH*	10
Rotating	9

262   262.700.01   262.700.02   262.700.06   262.700.07

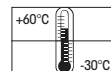| 348 g | 90 g | 179 g | 114 g | 120 g | IP66 | +60°C / -30°C |

Maxi Beacons – 838/883/884 families

Your benefits

WERMA's Maxi Beacons give flexible signalling over larger distances. The IP65 rated units are ideally suited for use in both indoor and outdoor applications.

838 xenon double flash:

- Very bright, even in direct sunlight and over longer distances

883/884 rotating mirror beacons:

- High intensity light and robust housing
- Easy to connect, without removing the mechanical assembly

Typical applications

Signalling faults and relaying alarms

- In building technology
- For door and gate systems
- On machinery and plant equipment, over long distances

Installation options

- Base mounting
- Tube mounting
- Bracket mounting

Features

- Tamper-proof and shock-resistant up to 20 joules
- Optional wire guard to protect against mechanical damage

883/884 rotating mirror beacons:

- Quiet, with low-wear wheel and disc drive

884 revolving beacon:

- Special Fresnel lenses produce beams of light that can be seen over longer distances even in poor light conditions

Size comparison Evo*SIGNAL* Midi/Maxi/Heavy Duty

Signalisation index	
Optical	
Xenon Flashing Light	9
Rotating Mirror/Rotating Light	9

838 Xenon Double Flash Beacon

ⓘ TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:

Dimensions (Ø x Height):	142 mm x 216 mm		
Housing:	PC/ABS-Blend		
Lens:	PC, transparent		
Fixing:	Base mounting, Bracket/Tube mounting (accessory)		
Cable entry:	Cable diameter 5-8 mm		
Connection:	Screw terminal 0.5 - 1.5 mm^2		
Flash energy:	15 Ws		
Flash frequency:	c. 1 Hz		
Life duration:	4×10^6 flashes		
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 DIAGRAM:

Wire guard
(accessory)
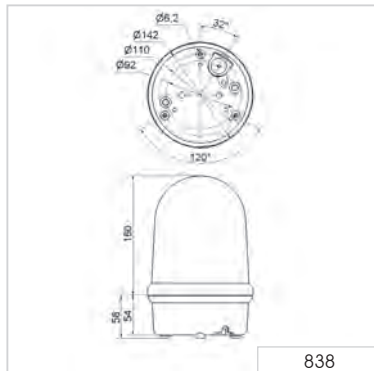
Adaptor for tube mounting
and plastic bracket
(accessories)
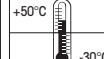
883 Rotating Mirror Beacon

Bracket (accessory)

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

ⓘ TECHNICAL SPECIFICATIONS/ORDER 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)
Cable entry:	Cable diameter 5-7 mm
Connection:	Screw terminal 0.5 -1.5 mm^2
Drive:	Wheel and disc drive, motor in centre of gravity
Halogen bulb:	G 6.35 35 W 12 V / 24 V
Mirror rotation rate:	180 r.p.m.
Service life of drive:	> 5,000 hrs
Duty cycle:	100 %

Halogen bulb included in assembly.

Voltage:	12 V DC	24 V AC/DC	115 V AC/DC	230 V AC
Current consumption:	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 230 V AC, 12 V DC, 115 V AC/DC	**955 883 34**
Halogen bulb 35 W/24 V for 24 V AC/DC	**955 883 35**

↔ TECHNICAL DIAGRAM:

883

Signalisation index	
Rotating Mirror	9

CE   EAC   670 g   IP65   +50°C / -30°C   20J

884 Revolving Signal Beacon

Bracket
(accessory)

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

ⓘ TECHNICAL SPECIFICATIONS/ORDER 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)
Cable entry:	Cable diameter 5-8 mm
Connection:	Screw terminal 0.5 - 1.5 mm²
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.

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

↔ TECHNICAL DIAGRAM:

884

Signalisation index	
Rotating Mirror	9

CE EAC 670 g IP65 +50°C / -30°C 20J

FlexSQUARE – Square shaped beacons

Your benefits

The compact 853 LED beacon is particularly versatile. With an IP67 protection rating, it is suitable for all indoor and outdoor applications, even in harsh environmental conditions.

- Powerful high-output, forward-directed light effect
- Clearly visible, also from the side
- Easy mounting and electrical installation thanks to the elastic, self-sealing, membranes or optional M20 cable gland for mounting on different sides
- Many combinations possible (traffic lights, for example)
- Where space is restricted: Multi-coloured version available, with up to seven colours

153 multi-tone siren:

- Loud audible signal to complement 853 beacon or as a stand-alone product
- Eight signal tones to choose from and a signal escalation option using three different externally triggerable tones

Typical applications

Signalling of faults

- In lift and hoist systems (48 V)
- In building technology

Installation options

- Wall mounting
- Base mounting

Features

- Signal escalation possible with LED permanent light, LED double flash and EVS light in different colours
- Wide range of light effects and voltage options (12V, 24V, 48V and 115-230V)
- With the multi-coloured version, the three basic colours red, yellow and green can be activated with just two PLC outputs. With a third output, a further four colours are available

153 multi-tone siren:

- The sound output can be adjusted remotely

Size comparison
EvoSIGNAL Mini/FlexSQUARE/EvoSIGNAL Maxi

Signalisation index	
Optical	
LED Permanent Light	5
LED Flashing Light	6
LED EVS	8

853 LED Permanent Beacon

ⓘ TECHNICAL SPECIFICATIONS/ORDER 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 0.5 - 1.5 mm²
	CAGE CLAMP® 0.5 to 1.5 mm² (Multicolour, RGY)
Fixing:	Wall, base and ceiling mounting
Possible colours:	Red, yellow, green, white, blue, violet, turquoise (multicolour)
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)
Life duration:	Up to 50,000 hrs

LED Permanent Beacon

Voltage:	12 V DC	24 V DC	48 V AC	115-230 V AC
Current consumption:	< 180 mA	< 80 mA	< 35 mA	< 40 mA
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**

LED Permanent Beacon (multicolour)

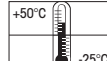| Voltage:		24 V DC		115-230 V AC
Current consumption:		< 150 mA		< 35 mA
Multicolour		**853 480 55**		-
RGY (red, green, yellow)		-		**853 480 60**

✖ ACCESSORIES:

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

↔ TECHNICAL DIAGRAM:

LED Permanent Light multicolour: 7 colours in one beacon: red, yellow, green, clear, blue, violet, turquoise

CE EAC 160 g IP67 +50°C / -25°C 24 V PLC
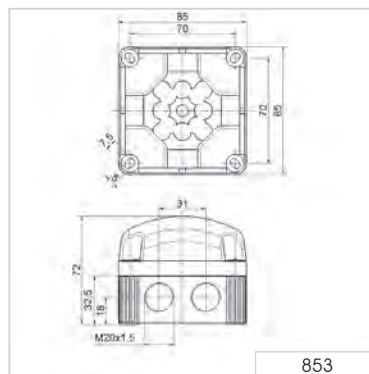
853 LED Double Flash Beacon

Intense double flash effect
with low power consumption

ⓘ TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:

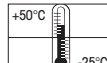|				
Dimensions (L x H x W):	85 mm x 85 mm x 72 mm			
Housing:	PP-GF, black			
Lens:	PC, transparent			
Connection:	Screw terminal 0.5 - 1.5 mm²			
Fixing:	Wall, base and ceiling mounting			
Equipment:	Elastic self-sealing membranes for cable entry without tools Eight integrated M20 threads, no nuts required Optional use of a cable gland, thread length of cable gland ≤ 9 mm (accessory)			
Assembly:	Incl. snap-on fixing bracket (optional use)			
Life duration:	Up to 50,000 hrs			
Voltage:	12 V DC	24 V DC	48 V AC	115-230 V AC
Current consumption:	< 100 mA	< 80 mA	< 95 mA	< 180 mA
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	**975 853 01**
Cable gland M20 x 1.5 mm, 8mm thread length	**975 853 02**

↔ TECHNICAL DIAGRAM:

853
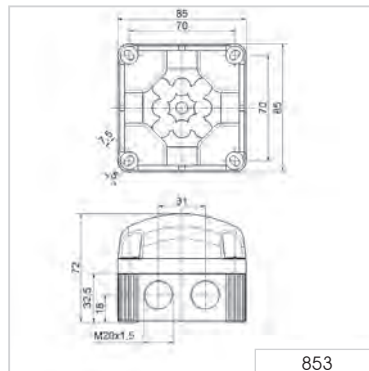
Signalisation index
LED Flashing Light   6

CE   160 g   IP67   +50°C -25°C   24 V   PLC

853 LED EVS Beacon

ⓘ TECHNICAL SPECIFICATIONS/ORDER 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 0.5 - 1.5 mm^2
Cable entry:	Cable diameter max. 8 mm, optional cable gland M20 (accessory)
Fixing:	Wall, base and ceiling mounting
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)
Life duration:	Up to 50,000 hrs

Voltage:	12 V DC	24 V DC	48 V AC	115-230 V AC
Current consumption:	< 400 mA	< 200 mA	< 95 mA	< 160 mA
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**

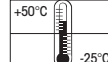## ✴ ACCESSORIES:

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

↔ TECHNICAL DIAGRAM:

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

The "EVS" light signal ensures a maximum attention-grabbing effect
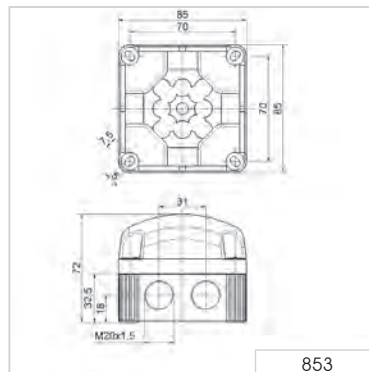
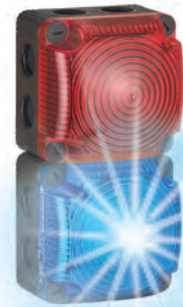| Signalisation index	
LED EVS Light	8

CE · 160 g · IP67 · +50℃ / -25℃ · 24 V · PLC

853 LED Traffic Light

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

Three highly visible light effects are available
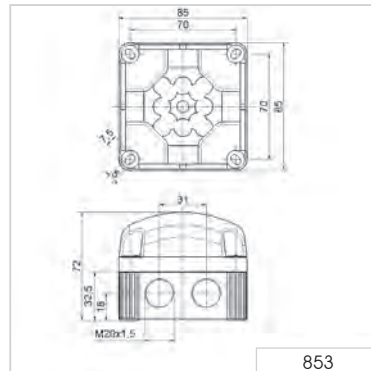
The LED beacon can be used with the sounder

ⓘ TECHNICAL SPECIFICATIONS/ORDER 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 0.5 - 1.5 mm²
	CAGE CLAMP® 0.5 - 1.5 mm² (Multicolour, RGY)
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)
	Max. 150 mA at 24 V (Multicolour)
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)
Life duration:	Up to 50,000 hrs

LED Permanent Beacon 853	**see page 122**
LED Permanent Beacon 853 (multicolour)	**see page 122**
LED Permanent Beacon 853 (RGY)	**see page 122**
LED Double Flash Beacon 853	**see page 123**
LED EVS Beacon 853	**see page 124**
Sounder 153	**see next page**

✄ ACCESSORIES:

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

↔ TECHNICAL DIAGRAM:

853

853 X00 XX   135 g

853 X10 XX   130 g

853 X20 XX   130 g

CE   EAC   IP67   +50°C / -25°C   24 V   PLC

853/153 Sounder/ LED Beacon Combination

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

ⓘ TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:

Dimensions (L x H x W):	85 mm x 85 mm x 72 mm
Housing:	PP-GF, black
Lens:	LED Beacon 853: PC, transparent
	Sounder 153: PC, tinted black
Connection:	Screw terminal 0.5 - 1.5 mm²
Cable entry:	Cable diameter max. 8 mm,
	optional Cable gland M20 (accessory)
Fixing:	Wall 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)

Voltage:	12 V DC	24 V DC	48 V AC	115-230 V AC
Current consumption:	70 mA	120 mA	150 mA	75 mA (115 V)
				150 mA (230 V)
Order no.:	**153 000 54**	**153 000 55**	**153 000 66**	**153 000 60**

The technical specifications and order specifications of the LED Beacons can be found at www.werma.com or on page 122 (LED Permanant Beacon), page 123 (LED Double Flash Beacon) and page 124 (LED EVS Beacon).

⚒ ACCESSORIES:

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

♫ TONE TYPES AND FREQUENCIES:

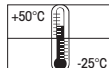| Tone	Tone type	Tone	Tone type
1	Continous tone (c. 3000 Hz)	5	800 - 970 Hz rising @ 1 H
2	Horn tone (c. 110 Hz)	6	2400 - 2850 Hz rising @ 7 Hz
3	1 Hz tone (c. 3,0 kHz)	7	1200 - 500 Hz falling @ 1 Hz
4	20 Hz whistle tone (c. 3,0 kHz)	8	Alternating tone 800 Hz/1200 Hz@1 Hz

↔ TECHNICAL DIAGRAM:

853

153
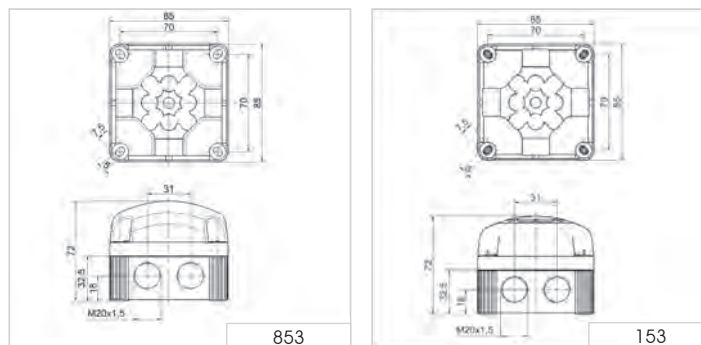
Signalistion index	
Multi-tone siren	7

CE · EAC · 160 g · IP65 · +50°C / -25°C · 105 dB · 12 V, 24 V · 8 ♫ · 48 V, 115-230 V · 1 ♫ · PLC

Heavy-Duty Beacons - 839

Your benefits

The heavy-duty beacons have the advantage of a robust and seawater-resistant aluminium housing unit in conjunction with a shock-resistant wire guard. These products are therefore especially suitable for use in harsh environments, locations exposed to seawater, or situations where excellent shock resistance is required.

- Maintenance-free operation permits use in locations where access is difficult
- Optimum protection against even severe mechanical strain or exposure to seawater

Typical applications

Signalling faults and relaying alarms

- In outdoor and indoor areas under extreme conditions
- For maritime applications on ships or in harbour areas

Installation options

- Base mounting
- Bracket mounting

Features

- Special screwed cable gland for equalising the pressure in the housing with the environmental pressure
- IP66 / 67 for use in harsh conditions

Size comparison EvoSIGNAL Midi/EvoSIGNAL Maxi/Heavy Duty

Signalisation index	
Optical	
LED Permanent Light	6
LED Rotating Light	7
Flashing Light Xenon	9
Rotating Mirror/Rotating Light	7

839 LED Permanent Beacon

ⓘ TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:

Dimensions (Ø x Height):	153 mm x 189 mm	
Housing:	Black coated aluminium with integral wire guard	
Lens:	PC, transparent	
Fixing:	Base mounting, Bracket mounting (accessory)	
Connection:	Screw terminal 0.5 - 1.5 mm²	
Cable entry:	Cable gland M20 x 1.5 mm (included in assembly)	
	Cable diameter 6-13 mm	
Installation position:	As required	
Life duration:	Up to 50,000 hrs	
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**

↔ TECHNICAL DIAGRAM:

839

CE EAC 1,28 kg IP67 +50°C / -30°C

839 LED Rotating Beacon

ⓘ TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:

Dimensions (Ø x Height):	153 mm x 189 mm	
Housing:	Black coated aluminium with integral wire guard	
Lens:	PC, transparent	
Fixing:	Base mounting, Bracket mounting (accessory)	
Connection:	Screw terminal 0.5 -1.5 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.	
Life duration:	Up to 50,000 hrs	
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**

✕ ACCESSORIES:

Mounting bracket	**975 839 02**

↔ TECHNICAL DIAGRAM:

Mounting bracket
(accessory)

CE   EAC   1,28 kg   IP67   +50°C -30°C

839 Xenon Double Flash Beacon

ⓘ TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:

Dimensions (Ø x Height):	153 mm x 189 mm	
Housing:	Black coated aluminium with integral wire guard	
Lens:	PC, transparent	
Fixing:	Base mounting, Bracket mounting (accessory)	
Connection:	Screw terminal 0.5 - 1.5 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	
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**

↔ TECHNICAL DIAGRAM:

839

CE EAC 1,31 kg IP67 +50°C / -30°C 15 Ws

839 Rotating Mirror Beacon

ⓘ TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:

Dimensions (Ø x Height):	153 mm x 189 mm	
Housing:	Black coated aluminium with integral wire guard	
Lens:	PC, transparent	
Fixing:	Base mounting, Bracket mounting (accessory)	
Connection:	Screw terminal 0.5 - 1.5 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 20W 12/24 V	
Mirror rotating rate:	180 r.p.m.	
Service life of drive:	> 5,000 hrs	
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 / 0.2 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, 115 V DC, 230 V AC, 230 V DC	**955 885 24**
Halogen bulb 20 W/24 V for 24 V AC/DC	**955 885 25**

↔ TECHNICAL DIAGRAM:

839

CE | EAC | 1,36 kg | IP67 | +50°C / -30°C

131
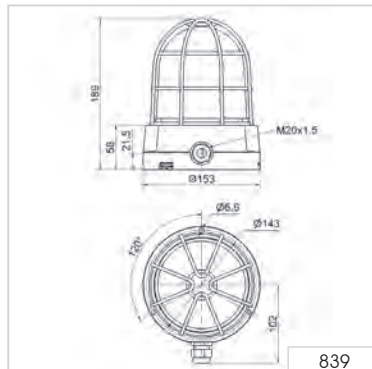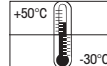
Obstruction Light

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.
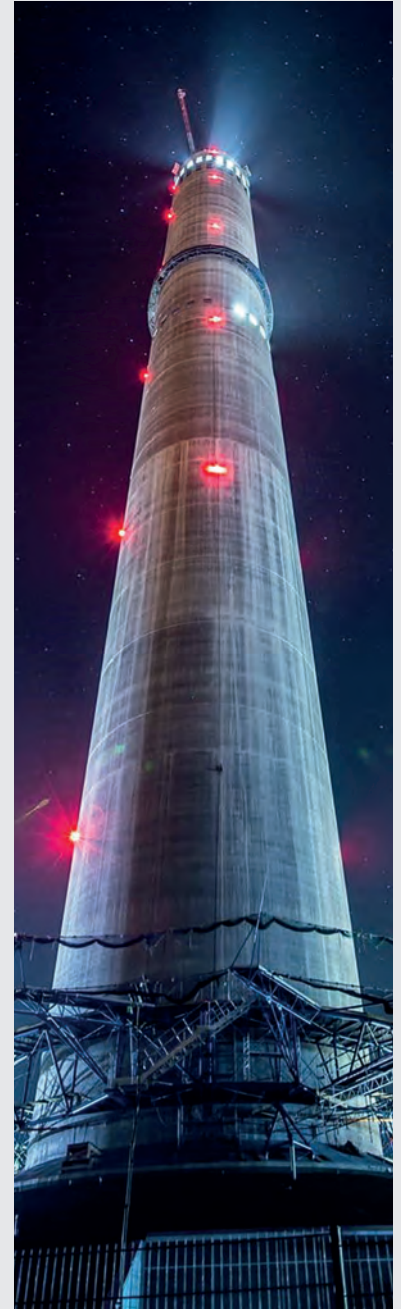
Where are obstacle lights deployed?

- **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"), aditionally in combination with "medium-intensity obstacle lights"

280 Low-intensity LED Obstruction Light Type A and B

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)

ⓘ TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:

Dimensions (Ø x Height):	142 mm x 218 mm
Housing:	PC/ABS-Blend
Lens:	PC, transparent, clear
Connection:	Screw terminal 0.5 - 1.5 mm²
Cable entry:	Cable diameter 5-7 mm
Fixing:	Base mounting, bracket mounting (accessory), tube mounting (accessory)
Duty cycle:	100 %
Life duration:	Up to 50,000 hrs
Current consumption at failure of 2 of the 12 LED strips: < 50mA	

Low-intensity LED Obstruction Light Type A			
Voltage:	12-50 V DC		
Current consumption:	500-100 mA		
aviation red	**280 410 55**		

Low-intensity LED Obstruction Light Type B (includes Type A)			
Voltage:	24 V DC	230 V AC	230 V AC (with monitoring funct.)
Current consumption:	~ 500 mA	~ 200 mA	~ 200 mA / < 50 mA (Failure mode)
aviation red	**280 470 55**	**280 470 68**	**280 480 68**

🛠 ACCESSORIES:

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

↔ TECHNICAL DIAGRAM:

280
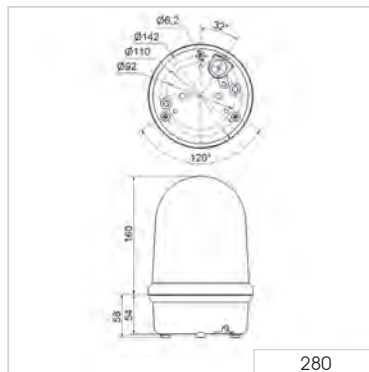
LED Obstruction Light Type B

LED Obstruction Light Type A

281 Low-intensity LED Obstruction Light Type A and B

ⓘ TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:

|	
Dimensions (Ø x Height):	165 mm x 205 mm
Housing:	Aluminium, coloured powder coating
Lens:	Reinforced borosilicate glass
Connection:	Screw terminal 0.5 - 1.5 mm²
Cable entry:	Cable gland M25 x 1.5 mm (included in assembly), Cable diameter 9-17 mm Reducer unit (included in assembly)
Fixing:	Base mounting, tube mounting M25 (no accessory required)
Life duration:	Up to 50,000 hrs

Low-intensity LED Obstruction Light Type A			
Voltage:	12-50 V DC		
Current consumption:	500-100 mA		
aviation red	**281 410 55**		

Low-intensity LED Obstruction Light Type B (includes Type A)			
Voltage:	24 V DC	230 V AC	230 V AC (with monitoring funct.)
Current consumption:	~ 500 mA	~ 200 mA	~ 200 mA / < 50 mA (Failure mode)
aviation red	**281 470 55**	**281 470 68**	**281 480 68**

↔ TECHNICAL DIAGRAM:

281

CE EAC 2 kg IP66/IP68 +50°C / -30°C
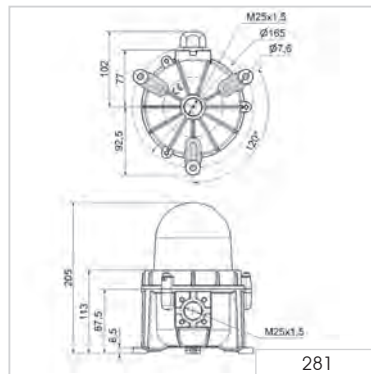
Traffic Lights - 890/895/897/894

Your benefits

Signal lights and traffic lights from the 890/895/897/494 range provide reliable signalling, both as single lights or as combined signalling lights.

Modular traffic lights 890 and multi-tone sounder 190:

- Cost-effective LED traffic light with clear lenses
- Easy installation in just a few steps and with any combination of 4 lights

Multi-colour variant (RGY):

- Drastic reduction in number of variants by combining three light colours in a single product – Ideal where space is restricted
- Additional high-output audible signalling of up to 110 dB(A) available in combination with multi-tone sounder/vocal alarm 190

Compact LED traffic light 894 for extreme ambient conditions:

- With high IP65/IP69K protection rating for use in extremely harsh conditions
- The 494 range combines a high-output optical signal with a powerful 90dB siren

Typical applications

- Garages and car parks
- Access control or buildings
- Traffic regulation on construction sites
- Signalling for loading bays
- Car washes/washing areas

Installation options

Modular traffic light 890:

- Direct mounting or bracket mounting of up to 4 lights with fixing bracket

Compact LED traffic light 894:

- Wall mounting and tube mounting with additional adapter

Features

190 Vocal Alarm:

- The vocal alarm enables the high-output playback of spoken messages, music and tones provided in mp3 format

Size comparison Midi/Traffic Lights

Signalisation index		
Optical		
LED Permanent Light 890		7
LED Permanent Light 894		6
Permanent Light (bulb) 890		4
Flashing Light Xenon 890		9
Audible		
Multi-tone 190		8
Vocal alarm 190		7
Siren 494		4

LED Permanent Beacon

LED Traffic Light Combination with mounting bracket (accessory)

Clear lenses ensure effective signalling even in direct sunlight

890 LED Beacon/LED Traffic Light

ⓘ TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:

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)
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.
Colours:	Red, green, yellow
Connection:	CAGE CLAMP® 0.5 - 1.5 mm²
Installation position:	As required
Life duration:	Up to 50,000 hrs

LED Beacon/LED Traffic Light

Voltage:	12-24 V DC	115-230 V AC
Current consumption:	< 260 mA	< 35 mA
red	**890 120 55**	**890 120 68**
green	**890 220 55**	**890 220 68**
yellow	**890 320 55**	**890 320 68**

LED Permanent Light (RGY)

Voltage:	12-24 V DC	230 V AC
Current consumption:	< 220 mA	< 40 mA
RGY (red, green, yellow)	**890 480 55**	**890 480 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.
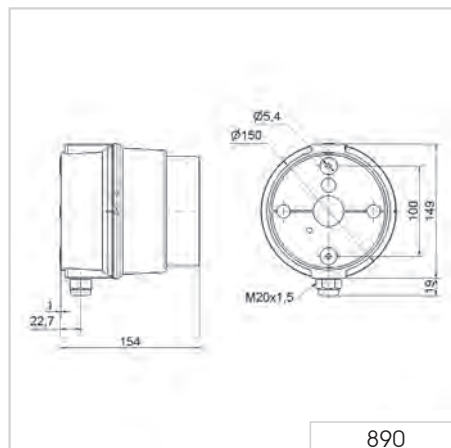Further information can be found on page 142.

CONNECTING GROMMET

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

! ADDITIONAL INFORMATION:

Traffic light configurator at **www.werma.com**

↔ TECHNICAL DIAGRAM:

Ø5,4
Ø150
100
149
19
M20x1,5
22,7
154
890

CE EAC 490 g IP65 +50°C / -20°C
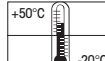
890/190 (LED) Beacon 890/Multi-Tone Sounder 190/Vocal alarm 190 Combination

High-output
traffic light combination

Vocal alarm 190

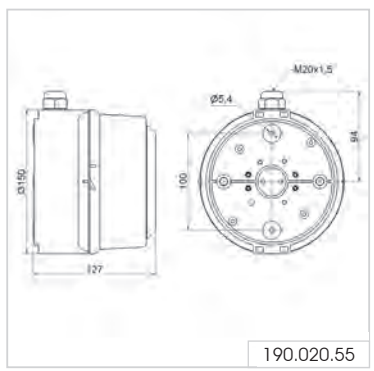## ⓘ TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:

(LED-)Beacon/Sounder 190/Vocal Alarm 190

Dimensions (Ø x Height):	150 mm x 154 mm (890) 150 mm x 127 mm (190) 150 mm x 148 mm (Vocal Alarm 190)
Housing:	PC/ABS-Blend, grey
Lens:	PC, transparent
Fixing:	Base mounting, 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, included in assembly
Connection:	CAGE CLAMP® 0.5 - 1.5 mm²

Vocal Alarm 190

Sound output:	Adjustable, up to 110 dB
File Transfer:	Via USB connection and provided software
Possible data format:	mp3 and wav files
Number of sequences:	15 files can be remotely triggered or one sequence with max. 50 files
Suitable for:	Windows®, System requirements - see Handbook
Assembly:	Vocal alarm, USB connection cable and software

Multi-Tone Sounder 190

Voltage:	10-30 V DC	115 V AC	230 V AC
Current consumption:	< 180 mA	< 55 mA	< 30 mA
grey	**190 000 55**	**190 000 67**	**190 000 68**

Vocal Alarm 190

Voltage:	24 V DC	
Current consumption:	< 500 mA Low Power < 1500 mA High Power	
grey	**190 020 55**	

LED Beacon 890 see page 136

Permanent Beacon 890 see page 139

✕ ACCESSORIES:

Fixing bracket, tube adaptor and connecting grommet see page 140

♫ TONE TYPES AND FREQUENCIES:

Selectable via DIP switch, see tone table on page 188.

↔ TECHNICAL DIAGRAM:

190.020.55

Signalisation index

LED Permanent Light
Vocal alarm
Multi-tone siren

CE

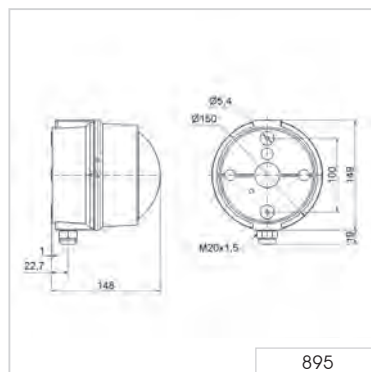EAC | 969 g | IP65 | +50°C / -30°C | (A) 110 dB | 32 ♫ | PLC

895 Permanent Beacon

ⓘ TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:

|	
Dimensions (Ø x Height):	150 mm x 148 mm
Housing:	PC/ABS-Blend, grey
Lens:	PC, transparent
Socket:	E27 max. 25 W
	with adhesive stickers E27 max. 15 W
Fixing:	Base mounting, tube mounting and fixing bracket (accessory)
Connection:	Screwed cable gland 0.5 - 1.5 mm²
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
Voltage:	12-230 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.	

🛠 ACCESSORIES:

Fixing bracket, additional reflector, Bulbs and LED Bulbs, Adhesive Stickers see Permanent/Traffic Light Beacon (page 140).

↔ TECHNICAL DIAGRAM:

895

890 Permanent/Traffic Light

Permanent Beacon

Traffic Light Combination
with mounting bracket
(accessory)

ⓘ TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:

Dimensions (Ø x Height):	150 mm x 154 mm
Housing:	PC/ABS-Blend, grey
Lens:	PC, transparent
Socket:	E27 max. 25 W for 890 X00 00 with adhesive stickers E27 max. 15 W
Fixing:	Base mounting, fixing bracket (accessory), tube mounting (accessory)
Connection:	Screwed cable gland 0.5 - 1.5 mm²
Cable entry:	From top or bottom with cable gland M20 x 1.5 mm or from the back with rubber

PERMANENT BEACON	
Voltage:	12-230 V AC/DC
red	**890 100 00**
green	**890 200 00**
yellow	**890 300 00**
clear	**890 400 00**
blue	**890 500 00**
Further colours and voltages on request.	

✗ ACCESSORIES: SEE NEXT PAGE

Signalization index		
Permanent Light		4

CE — EAC — 450 g — IP65 — +50°C / -30°C

890 Permanent/Traffic Light Beacon
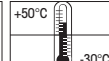
Beacon 890 in combination
with Multi-Tone Sounder 190
(see page 137)

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

⚒ 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 142.

CONNECTING GROMMET	
Connecting grommet for traffic light combinations	**975 890 25**
REFLECTOR	
Additional reflector for 890 X00 00	**975 890 02**
ADAPTER	
Tube adapter	**975 890 36**
BULBS	
LED bulb premium E27, 24 V	**956 X20 75**
LED bulb premium E27, 115 V	**956 X20 67**
LED bulb premium E27, 230 V	**956 X20 68**
For colours see page 143	
LED Bulb E27, 115 V AC, white	**956 050 67**
LED Bulb E27, 230 V AC, white	**956 050 68**
LED Bulb E27, 12-24 V AC/AC, white	**956 050 75**
ADHESIVE STICKERS:	
→	**975 890 52**
STOP	**975 890 53**
START	**975 890 54**
⚡	**975 890 64**
✋	**975 890 65**

↔ TECHNICAL DIAGRAM:

890 with adhesive sticker
(accessory)

890

897 Xenon Double Flash Beacon

ⓘ TECHNICAL SPECIFICATIONS/ORDER 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	
Voltage:	24 V DC	230 V AC
Current consumption:	700 mA	200 mA
red	**897 100 55**	**897 100 68**
yellow	**897 300 55**	**897 300 68**
Further colours and voltages on request.		

✴ ACCESSORIES:

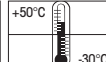Fixing bracket, adhesive stickers see Permanent/Traffic Light Beacon 890 (page 140).

↔ TECHNICAL DIAGRAM:

897

Signalization index	
Xenon Flashing Light	**9**

CE EAC 400 g IP65 +50°C / -30°C 15 Ws
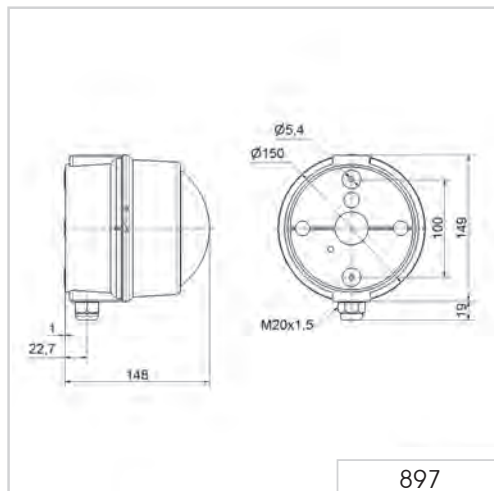
890 Fixing bracket for 890/190

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

The fixing bracket can be mounted
pointing inwards or outwards

ⓘ TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:

Material Fixing bracket:	PC/ABS-Blend, grey
Material Connecting Grommet:	PA 6.6
Assembly:	Fixing bracket with mounting material and connecting grommet
Suitable for:	LED Beacon/LED Traffic Light 890 Permanent/Traffic Light Beacon 890 Multi-Tone Sounder 190
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**

↔ TECHNICAL DIAGRAM:

	A	B
975.890.33	93	190
975.890.34	251,2	348,2
975.890.35	409,4	506,4
975.890.37	567,6	664,6

	A	B
975.890.33	245	338
975.890.34	403,2	496,2
975.890.35	561,4	654,4
975.890.37	719,6	812,6

975.890.3X

1 tier	2 tier	3 tier	4 tier		
158 g	175 g	195 g	215 g	IP65	+50°C / -20°C

956 LED Bulb E27 premium

ⓘ TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:			
Socket:	E27		
For use with:	890, 895		
Slight deviatons in the form of the bulbs are possible.			
Voltage:	24 V AC/DC	115 V AC	230 V AC
Current consumption:	≤ 20 mA	≤ 30 mA	≤ 20 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 139)

CE 28 g +50°C / -20°C

143

894 LED Traffic Light (IP69k)

LED Traffic Light (3 tier)

The direction of the optical signal can be individually adjusted

Clear lenses ensure effective signalling even in direct sunlight

ⓘ TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:

Dimensions (Ø x Height):	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)	
Cable entry:	Cable diameter max. 13 mm	
Connection:	Screw terminal 0.5 - 1.5 mm^2	
Installation position:	Vertical/hanging	
Duty cycle:	100 %	
Life duration:	Up to 50,000 hrs	
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**

↔ TECHNICAL DIAGRAM:

494

2 tier   3 tier

CE   EAC   380 g   410 g   IP65/IP69k   +50°C / -30°C
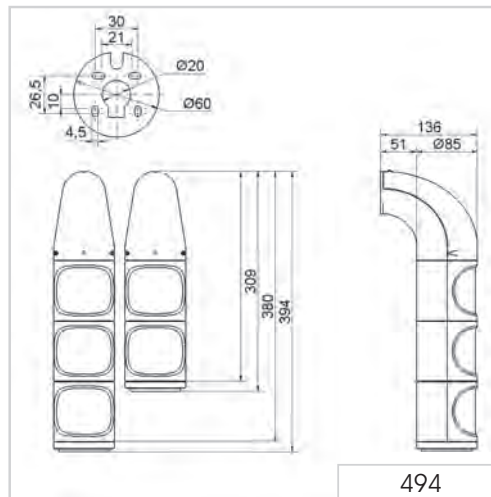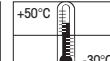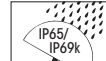
894 LED Traffic Light (IP69k)

The direction of the optical signal can be individually adjusted

ⓘ TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:

Dimensions (Ø x Height):	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)	
Cable entry:	Cable diameter max. 13 mm	
Connection:	Screw terminal 0.5 - 1.5 mm^2	
Installation position:	Vertical/hanging	
Duty cycle:	100 %	
Life duration:	Up to 50, 000 hrs	
Voltage:	24 V DC	115-230 V AC
Current consumption:	60 mA (red/yellow)	30 mA per tier at 230 V/50 Hz
red/green	**894 060 55**	**894 060 68**
red/yellow/green	**894 080 55**	**894 080 68**

↔ TECHNICAL DIAGRAM:

494
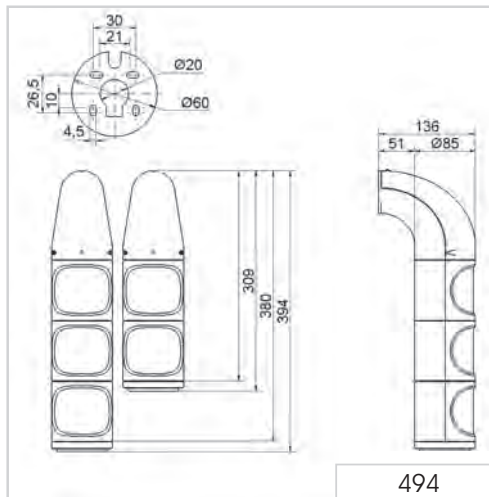
2 tier   3 tier
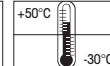
Monitored / Monitorable Beacons for safety applications – 806/826/829 families

Your benefits

For applications where safety is an issue, we recommend WERMA's monitored beacons. These beacons are certified by the TÜV Technical Inspection Agency and can be integrated into the safety assessment of your machinery/plant equipment in accordance with EN 13849-1 and EN 62061.

806 monitorable LED beacons:

- TÜV certified LED light that enables current monitoring
- Approved for muting applications in accordance with IEC 61496-1 and laser applications as per EN 60825-1

829 monitored LED beacons:

- Built-in monitoring electronics with two potential-free outputs; the light thus achieves PL e as per EN 13849-1 and safety category 4
- Approval confirmed by TÜV certificate
- Maintenance-free LED technology

826 monitored beacons:

- Built-in monitoring electronics with two potential-free outputs; the light thus achieves PL e as per EN 13849-1 and safety category 4
- Approval confirmed with a TÜV certificate

Typical applications

Signalling of faults in applications where safety is an issue

- on machinery and plant equipment
- in building service industry

Installation options

- Base mounting
- Bracket mounting with accessories
- Wire guard accessory to protect against mechanical damage

Features

- Further safety-related products are available – or request

Size comparison 806 / 826+829 / Evo*SIGNAL* Maxi

Signalisation index		
Optical		
LED Permanent Light		**4-5**
Permanent Light (bulb)		**4**

806 Monitorable LED Permanent Beacon

Bracket (accessory)

Accessories

ⓘ TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:

Dimensions (Ø x Height):	70 mm x 97 mm
Housing:	Terminal element: PA-GF, high impact Cap: PC
Lens:	PC, transparent
Fixing:	Base mounting, Bracket mounting
Cable entry:	Cable diameter max. 14 mm
Connection:	CAGE CLAMP® technology max. 2.5 mm²
Duty cycle:	100 %
Current consumption following failure of 3 of the 6 strips:	< 5 mA
Life duration:	Up to 100,000 hrs
Voltage:	24 V DC
Current consumption:	60 mA
yellow	**806 350 55**
clear	**806 450 55**

✱ ACCESSORIES:

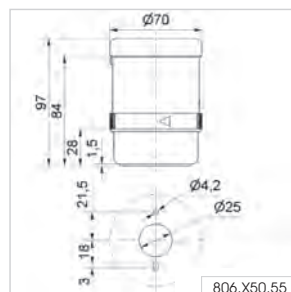|	
Bracket, including cable gland	**960 000 02**
Bracket for 1-sided mounting	**975 840 85**

! 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 staff 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.
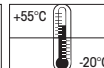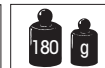The standard colour for muting signalisation is clear; yellow is however also permitted.
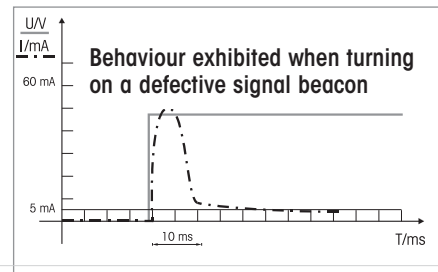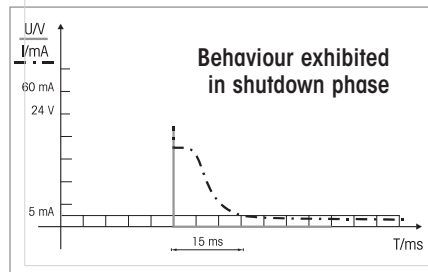
U/V
I/mA
60 mA
24 V
5 mA
Behaviour exhibited in shutdown phase
15 ms
T/ms

U/V
I/mA
60 mA
5 mA
Behaviour exhibited when turning on a defective signal beacon
10 ms
T/ms

↔ TECHNICAL DIAGRAM:

Ø70
97
84
28
1,5
21,5
18
3
Ø4,2
Ø25
806.X50.55

Signalisation index
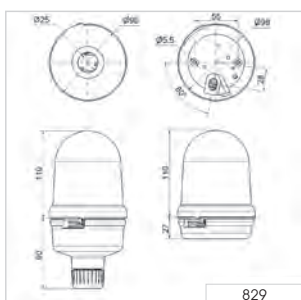
LED Permanent Light	4

147

829 Monitored LED Permanent Beacon

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

Bracket (accessory)

829

ⓘ TECHNICAL SPECIFICATIONS/ORDER 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 tube mounting - once as socket for beacon and once as base
Cable entry:	Cable diameter 5-7 mm
Connection:	Screw terminal with wire protection 0.5-1.5 mm^2
Installation position:	Vertical
Cable outlet:	Downwards
Duty cycle:	100 %
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, Peformance Level "e" EN ISO 13849-2:2008 validation
Life duration:	Up to 50,000 hrs
Voltage:	24 V DC
Current consumption:	≤ 150 mA
red	**829 170 55**
yellow	**829 370 55**
clear	**829 470 55**

✖ ACCESSORIES:

Bracket	**975 826 05**

! ADDITIONAL INFORMATION:

+
Input 24 V ⎓

Monitoring electronics

−
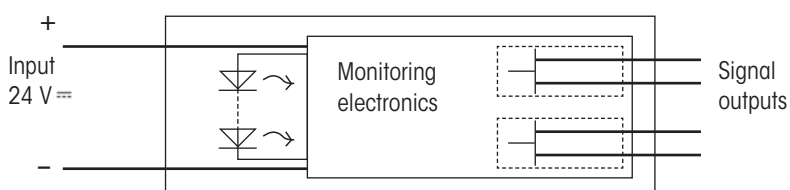
Signal outputs

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 DIAGRAM:

Signalisation index

LED Permanent Light	5

CE c(UL)us EAC 220 g IP65 +50°C / 0°C

826 Monitored Permanent Beacon

Bracket (accessory)

Tube with base (accessory)

ⓘ TECHNICAL SPECIFICATIONS/ORDER 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
Cable entry:	Cable diameter 5-7 mm
Connection:	Screw terminal 0.5 - 1.5 mm^2
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, Peformance Level „e" EN ISO 13849-2:2008 validation
Bulb included in assembly.	
Voltage:	24 V DC
red	**826 110 55**
yellow	**826 310 55**
clear	**826 410 55**

! ADDITIONAL INFORMATION:
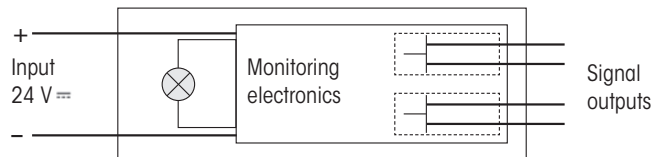
Function

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 specification after the lamp has been replaced by a lamp of equal wattage.
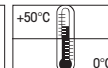
✕ ACCESSORIES:

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

↔ TECHNICAL DIAGRAM:
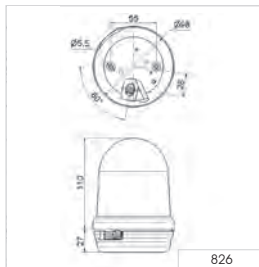
Ex Signal Beacons

Your benefits

Ex rated beacons from WERMA are designed for use in both gas and dust atmospheres that are potentially explosive.

- Their use in the highest explosion group IIC and IIIC has been tested, which means that they are suitable for all explosion groups in the relevant area
- Easy, customer-friendly connection thanks to "e" connection area
- Various light effects, also with LED technology, for all conceivable application types

Typical applications

Signalling faults and relaying alarms

- in potentially explosive atmospheres resulting from gases and liquids (in the chemical industry, filling lines for flammable liquids, petrochemical industry etc.)
- in potentially explosive atmospheres resulting from dust (in the plastics and metalwork industry, food industry, grain mills and the wood processing industry)

Installation options

- Base mounting
- Bracket mounting (accessory)
- Tube mounting (accessory)

Features

728 / 729:

- Extended Ex temperature range of -50 °C to 50°C is possible with accessories

728 / 729:

- Seawater resistant aluminium housing

Signalisation index	
LED Permanent Light	4
LED Rotating Light	6
LED Flashing Light	6
LED EVS Light	8
Xenon Flashing Light	7

729 Ex LED Permanent Beacon Midi

The maintenance-free LEDs have a life duration of up to 50,000 hours

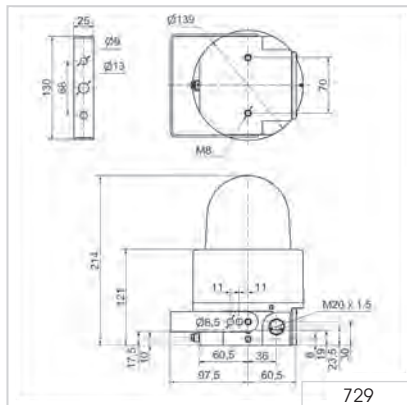Additional protection with the robust wire guard (accessory)

ⓘ TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:

Dimensions (Ø x Height):	139 x 214 mm	
Housing:	Black coated aluminium, salt water resistant	
Lens:	Reinforced borosilicate glass	
Connection:	CAGE CLAMP® max. 2.5 mm²	
Fixing:	Wall, base and ceiling mounting	
	Integrated mounting bracket, stainless steel	
Cable entry:	Cable gland M20 x 1.5 mm	
	Cable diameter 6-13 mm	
Life duration:	Up to 50,000 hrs	
Assembly:	Ex screw plug M20 x 1.5 mm	
	Ex cable gland M20 x 1.5 mm	
Voltage:	24 V DC	115 V/230 V AC
Current consumption:	130 mA	30 mA at 230 V AC
Explosion protection:	〈Ex〉 II 2G Ex d e IIC T6 Gb	
	〈Ex〉 II 2D Ex tb IIIC T80°C Db	
Approval:	BVS 11 ATEX E 107	
	IECEx_BVS_11.0082	
red	**729 100 55**	**729 100 68**
yellow	**729 300 55**	**729 300 68**

🛠 ACCESSORIES:

Ex wire guard, stainless steel	**975 729 03**
Ex cable gland M20 x 1.5 mm, metal	
To expand the temperature range from -40 °C to -50 °C	**975 729 04**
Ex screw plug M20 x 1.5 mm	**975 729 02**
Ex cable gland M20 x 1.5 mm	
For connecting to an additional beacon	**975 729 01**

↔ TECHNICAL DIAGRAM:

729

Signalisation index
LED Permanent Light   **4**

CE	〈Ex〉	IECEx	2 G Zone 1 + 2	2 D Zone 21 + 22	2,9 kg	IP66	+50°C / -40°C

729 Ex LED Rotating Beacon Midi

Intense rotating signal effect with low power consumption

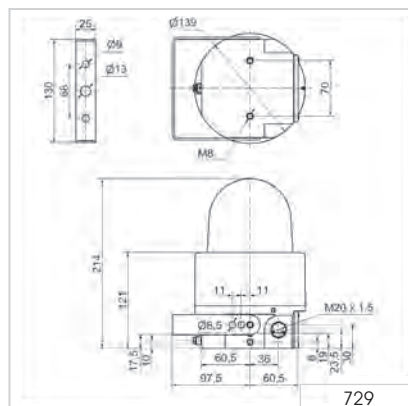Innovative solution: The universal mounting bracket (included in assembly)

ⓘ TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:

Dimensions (Ø x Height):	139 x 214 mm	
Housing:	Black coated aluminium, salt water resistant	
Lens:	Reinforced borosilicate glass	
Connection:	CAGE CLAMP® max. 2.5 mm²	
Fixing:	Wall, base and ceiling mounting Integrated mounting bracket, stainless steel	
Cable entry:	Cable gland M20 x 1.5 mm Cable diameter 6-13 mm	
Mirror rotation rate:	c. 180 r.p.m.	
Duty cycle:	100 %	
Life duration:	Up to 50,000 hrs	
Assembly:	Ex screw plug M20 x 1.5 mm Ex cable gland M20 x 1.5 mm	
Voltage:	24 V DC	115 V/230 V AC
Current consumption:	< 170 m A	150 mA at 230 V AC
Explosion protection:	⟨Ex⟩ II 2G Ex d e IIC T6 Gb ⟨Ex⟩ II 2D Ex tb IIIC T80°C Db	⟨Ex⟩ II 2G Ex d e IIC T5 Gb ⟨Ex⟩ II 2D Ex tb IIIC T95°C Db
Approval:	BVS 11 ATEX E 107 IECEx_BVS_11.0082	BVS 11 ATEX E 107 IECEx_BVS_11.0082
red	**729 120 55**	**729 120 68**
yellow	**729 320 55**	**729 320 68**

⚒ ACCESSORIES:

Ex wire guard, stainless steel	**975 729 03**
Ex cable gland M20 x 1.5 mm, metal To expand the temperature range from -40 °C to -50 °C	**975 729 04**
Ex screw plug M20 x 1.5 mm	**975 729 02**
Ex cable gland M20 x 1.5 mm For connecting to an additional beacon	**975 729 01**

↔ TECHNICAL DIAGRAM:

729
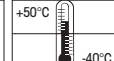
729 Ex LED Double Flash Beacon Midi

Intense double flash with low power consumption

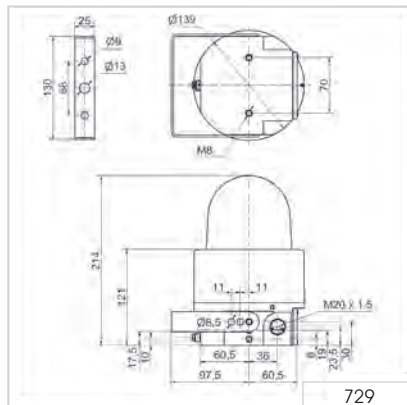Additional protection with the robust wire guard (accessory)

ℹ TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:

Dimensions (Ø x Height):	139 x 214 mm	
Housing:	Black coated aluminium, salt water resistant	
Lens:	Reinforced borosilicate glass	
Connection:	CAGE CLAMP® max. 2.5 mm²	
Fixing:	Wall, base and ceiling mounting Integrated mounting bracket, stainless steel	
Cable entry:	Cable gland M20 x 1.5 mm Cable diameter 6-13 mm	
Assembly:	Ex screw plug M20 x 1.5 mm Ex cable gland M20 x 1.5 mm	
Voltage:	24 V DC	115 V/230 V AC
Current consumption:	< 140 m A	140 mA at 230 V AC
Explosion protection:	⟨Ex⟩ II 2G Ex d e IIC T6 Gb ⟨Ex⟩ II 2D Ex tb IIIC T80°C Db	⟨Ex⟩ II 2G Ex d e IIC T5 Gb ⟨Ex⟩ II 2D Ex tb IIIC T95°C Db
Approval:	BVS 11 ATEX E 107 IECEx_BVS_11.0082	BVS 11 ATEX E 107 IECEx_BVS_11.0082
red	**729 150 55**	**729 150 68**
yellow	**729 350 55**	**729 350 68**

🛠 ACCESSORIES:

Ex wire guard, stainless steel	**975 729 03**
Ex cable gland M20 x 1.5 mm, metal To expand the temperature range from -40 °C to -50 °C	**975 729 04**
Ex screw plug M20 x 1.5 mm	**975 729 02**
Ex cable gland M20 x 1.5 mm For connecting to an additional beacon	**975 729 01**

↔ TECHNICAL DIAGRAM:

729

CE ⟨Ex⟩ IECEx | 2 G / Zone 1 + 2 | 2 D / Zone 21 + 22 | 2,9 kg | IP66 | +50°C / -40°C

729 Ex LED EVS Beacon Midi

The flickering light of the Ex LED EVS beacon generates an optimal awareness level

Random light signals prevent an acclimatisation effect occurring

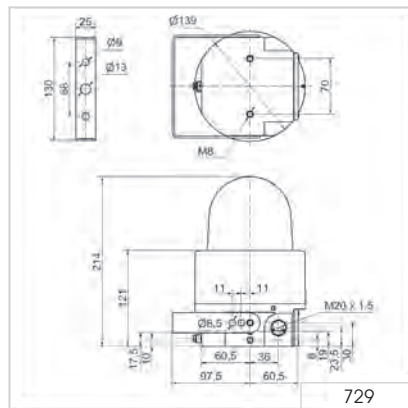## ① TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:

Dimensions (Ø x Height):	139 x 214 mm	
Housing:	Black coated aluminium, salt water resistant	
Lens:	Reinforced borosilicate glass	
Connection:	CAGE CLAMP® max. 2.5 mm²	
Fixing:	Wall, base and ceiling mounting Integrated mounting bracket, stainless steel	
Cable entry:	Cable gland M20 x 1.5 mm Cable diameter 6-13 mm	
Life duration:	Up to 50,000 hrs	
Assembly:	Ex screw plug M20 x 1.5 mm Ex cable gland M20 x 1.5 mm	
Voltage:	24 V DC	115 V/230 V AC
Current consumption:	< 240 m A	140 mA at 230 V AC
Explosion protection:	⟨Ex⟩ II 2G Ex d e IIC T6 Gb ⟨Ex⟩ II 2D Ex tb IIIC T80°C Db	⟨Ex⟩ II 2G Ex d e IIC T5 Gb ⟨Ex⟩ II 2D Ex tb IIIC T95°C Db
Approval:	BVS 11 ATEX E 107 IECEx_BVS_11.0082	BVS 11 ATEX E 107 IECEx_BVS_11.0082
red	**729 160 55**	**729 160 68**
yellow	**729 360 55**	**729 360 68**

⚒ ACCESSORIES:

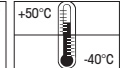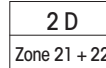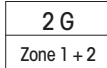|	
Ex wire guard, stainless steel	**975 729 03**
Ex cable gland M20 x 1.5 mm, metal To expand the temperature range from -40 °C to -50 °C	**975 729 04**
Ex screw plug M20 x 1.5 mm	**975 729 02**
Ex cable gland M20 x 1.5 mm For connecting to an additional beacon	**975 729 01**

↔ TECHNICAL DIAGRAM:

CE | ⟨Ex⟩ | IECEx | 2 G Zone 1 + 2 | 2 D Zone 21 + 22 | 2,9 kg | IP66 | +50°C / -40°C

728 Ex Xenon Flashing Beacon Midi

Ex Flashing Beacon for use in gas and dust explosion-endangered areas

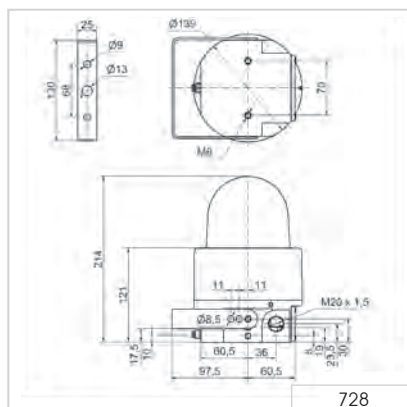Innovative solution: The universal mounting bracket (included in assembly)

ⓘ TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:

Dimensions (Ø x Height):	139 x 214 mm	
Housing:	Black coated aluminium, salt water resistant	
Lens:	Reinforced borosilicate glass	
Connection:	CAGE CLAMP® max. 2.5 mm²	
Fixing:	Wall, base and ceiling mounting Integrated mounting bracket, stainless steel	
Cable entry:	Cable gland M20 x 1.5 mm Cable diameter 6-13 mm	
Flash energy:	c. 5 Ws	
Flash frequency::	c. 1 Hz	
Life duration:	4×10^6 flashes	
Assembly:	Ex screw plug M20 x 1.5 mm Ex cable gland M20 x 1.5 mm	
Voltage:	24 V DC	115 V/230 V AC
Current consumption:	300 m A	150 mA
Explosion protection:	⟨Ex⟩ II 2G Ex d e IIC T6 Gb ⟨Ex⟩ II 2D Ex tb IIIC T80°C Db	⟨Ex⟩ II 2G Ex d e IIC T5 Gb ⟨Ex⟩ II 2D Ex tb IIIC T95°C Db
Approval:	BVS 11 ATEX E 107 IECEx_BVS_11.0082	BVS 11 ATEX E 107 IECEx_BVS_11.0082
red	**728 100 55**	**728 100 68**
yellow	**728 300 55**	**728 300 68**

🛠 ACCESSORIES:

Ex wire guard, stainless steel	**975 729 03**
Ex cable gland M20 x 1.5 mm, metal To expand the temperature range from -40 °C to -50 °C	**975 729 04**
Ex screw plug M20 x 1.5 mm	**975 729 02**
Ex cable gland M20 x 1.5 mm For connecting to an additional beacon	**975 729 01**

↔ TECHNICAL DIAGRAM:

728

CE ⟨Ex⟩ IECEx | 2 G Zone 1 + 2 | 2 D Zone 21 + 22 | 2.9 kg | IP66 | +50°C / -40°C | 5 Ws

Ex Signal Beacons