

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



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806 Monitorable LED Permanent Beacon



Bracket (accessory)



Accessories

① 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 mm ²
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:

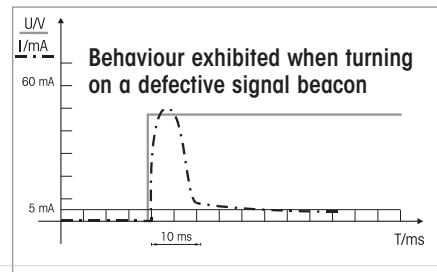
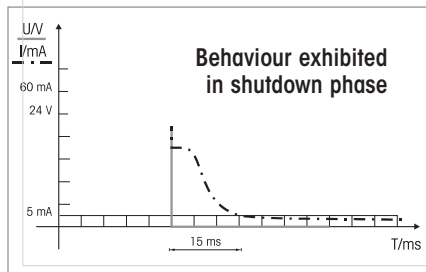
Bracket, including cable gland	960 000 02
Bracket for 1-sided mounting	975 840 85

! ADDITIONAL INFORMATION:

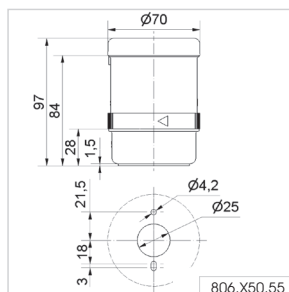
What does Muting mean?

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.

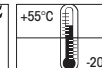


↔ TECHNICAL DIAGRAM:



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LED Permanent Light 4

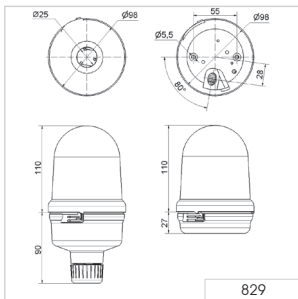




Monitored Permanent Beacon with long life, maintenance-free LED technology



Bracket (accessory)



829 Monitored LED Permanent Beacon

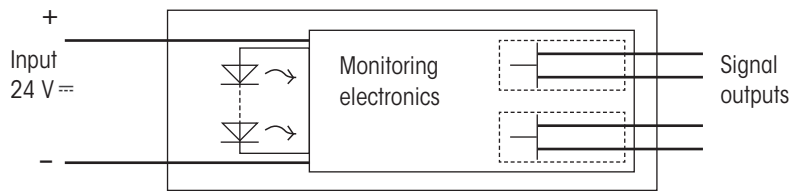
① TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:

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, Performance 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
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! ADDITIONAL INFORMATION:



Function

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

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

↔ TECHNICAL DIAGRAM:

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826 Monitored Permanent Beacon



Bracket (accessory)

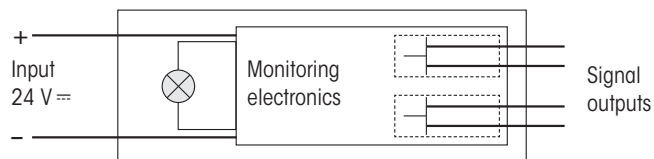


Tube with base (accessory)

① 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, Performance 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

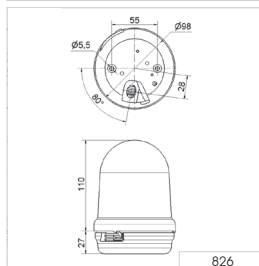
The device is equipped with a lamp monitor which signals the current flow of the incandescent lamp back to two electrically isolated, potential-free semiconductor outputs A and B (outputs closed). If the lamp has not been actuated, both outputs are open. In case of a fault and/or a lamp failure at least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



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Permanent Light (bulb) 4

