# Monitored / Monitorable Beacons for safety applications -806 / 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 begcons:

- 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



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 on request









# 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 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 |

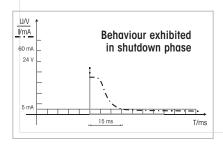
### ! ADDITIONAL INFORMATION:

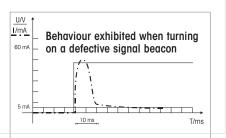
### What does Muting mean?

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.

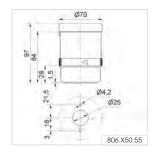
It is therefore necessary that the signal beacon in such applications can be triggered by failsafe technology and the bulb function can be monitored.

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





### **↔ TECHNICAL DIAGRAM:**



















# 829 Monitored LED Permanent Beacon

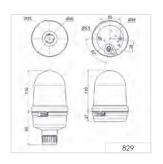




Monitored Permanent Beacon with long life, maintenance-free LED technology



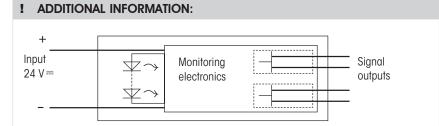
Bracket (accessory)



| 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 <sup>2</sup> |
| 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 $\ge 1 A$ )             |
| 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



#### 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:**













