



# SIGNAL LAMPS AND ACOUSTIC INDICATORS

Extensive product portfolio  
for state indication



# ALWAYS KNOW EXACTLY WHAT'S HAPPENING

A professional visualization and state indication system enables process optimization and increased efficiency.



## INCREASE SAFETY, PRODUCTIVITY AND AVAILABILITY

A wide range of the latest LED signal lamps and acoustic indicators round out our offerings for reliable industrial automation. Visualization and state indication are essential for successful process optimization as well as for sustainable increases in efficiency.

Our solutions can ...

- Reduce reaction times and warn of emergency situations in advance
- Increase machine availability and avoid system downtime
- Check on complex processes and minimize monitoring times





## ONE THING IS IMPORTANT HERE — MAXIMUM RELIABILITY

Regardless of whether visual or acoustic signaler, anyone who uses such devices is counting 100% on their functional reliability. Our solutions are therefore equipped with an especially long-lasting technology that ensures a service life of up to 100,000 hours. The shock-resistant plastic, the high degree of protection of up to IP 66 as well as a temperature range from -30 °C to 60 °C also guarantee reliable operation, even in demanding environments. The consistent use of especially energy-saving, bright LED technology also sets standards in the areas of ecology and economy.

### *easy*handling.

- Ready-made column versions
- Simple mounting and connection of the modular columns via bayonet lock
- Standard M22 mounting for all built-in types
- Split and multicolor optical signalers in one housing

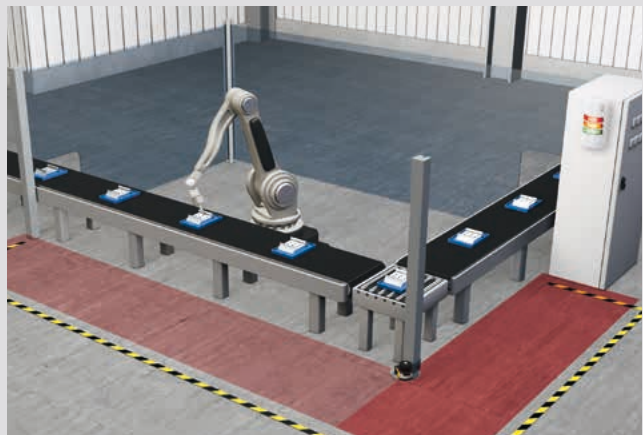
### *think*modular.

- Modular, individual configuration of the signalers as 40 mm or 70 mm column; can also be combined on request with sound module
- Single- and multicolor built-in lamps with various diameters 30 / 45 / 65 mm
- Optical, acoustic and combined signalers

Optical status indicator in the area of protective door monitoring



Optical signaler for wall mounting for the visualization of a safety area



# THE RIGHT SOLUTION FOR EVERY APPLICATION

Our wide product range of signaling columns and signalers with or without sound module covers all requirements.



Signaling columns  
Ready-made C3 / modular E4 and E7

	C3	E4	E7
Lenses Ø	30 mm	40 mm	70 mm
Signaling	Continuous LED light	Continuous or flashing LED light, combinable with acoustic indicator	
Colors	Fixed: red, orange, green	Selectable: red, clear, green, orange, blue, yellow	
Voltage	24 VAC / DC, ±10 %		
Current consumption	0.090 A	0.027 A to 0.039 A	0.051 A to 0.092 A
Degree of protection	IP 65	IP 66	
Connection	Standard UL cable, yellow, 1 m, open ends	Terminal	

## Ready-made C3

- Slim column with 3 LED modules
- No assembly, fast mounting
- Delivery incl. 1 m cable, open ends

## Modular E4 and E7

- Flexible configuration and mounting
- Mounting bracket for wall, post and horizontal mounting
- Vertical mounting: up to 5 modules
- Horizontal mounting: 2-sided, up to 10 modules
- Optional sound modules with the same high degree of protection



Signalers for wall mounting  
EMS and FBA / D9 wall lamp

	EMS siren	FBA signal lamp	D9 wall lamp
Dimension	94 x 94 x 97 mm		90 x 194 x 45 mm
Signaling	Various sound types	Continuous or flashing LED light	Continuous LED light, continuous or pulsed tone
Colors	Housing: red	Selectable: red, orange	Fixed: red, orange, green
Voltage	24 VAC / DC, ±10 % or 230 / 240 VAC		24 VAC / DC, ±10 %
Current consumption	0.022 A or 0.120 A	0.06 A or 0.110 A	0.194 A
Degree of protection	IP 66		IP 65
Connection	Terminal		

## EMS alarm indicator

- Sound chart (32 sounds) includes standardized signal sounds for, e.g., fire alarm
- Volume adjustable via potentiometer, max. 113 dB

## FBA single lamp for rough environments

- Bright, vibration-resistant, shock-resistant
- Also suitable for outdoor use

## Individual solutions through combination of EMS and FBA

- Can be mechanically combined by means of mounting kit
- Also suitable for a traffic-light-type solution

## D9 wall lamp in refined design

- Complete 3-color, semicircular signal lamp with sound module in gray housing for wall mounting
- Adjustable sound pressure 70–90 dB
- 180° visibility





Signalers for built-in mounting  
Built-in elements for M22 P series



Signaling of the muting state  
MS muting lamps

	PDS	PDV	PDW	PBZ	PDSBZ
Diameter	30, 45, 65 mm		65 mm	30 mm	45, 65 mm
Signaling	Continuous or flashing LED light	Continuous LED light		Continuous or pulsed tone	Continuous or flashing LED light, continuous or pulsed tone
Colors	Selectable: red, clear, green, orange, blue, yellow	Fixed: red, green	Fixed: red, green, yellow	–	Red, orange
Display of the lens color	Single-color, entire lens	Split, half lens	3-color, entire lens	–	Single-color, entire lens
Voltage	24 VAC/DC, ±10 %				
Current consumption	0.026 A / 0.037 A / 0.060 A	0.030 A / 0.039 A / 0.044 A	0.043 A	0.046 A	0.047 A / 0.058 A
Degree of protection	IP 65				
Connection	Removable terminal		Pre-wired		Removable terminal

	MS 70	MS 851
Lens Ø	70 mm	56 mm
Signaling	LED or incandescent lamp	Incandescent lamp E14
Colors	Clear, yellow	Clear
Voltage	MS70 24 VDC, ± 20 % or MS 851 4 W / 24 V	
Current consumption	0.060 A	0.166 A
Degree of protection	IP 65	IP 54
Connection	Terminal	

### Reliable signaling of the muting state

- Long-lasting and reliable LED muting lamp
- High redundancy through 6 LED strands connected in parallel
- Current monitoring possible
- e.g., as accessory for Leuze electronic safety light curtains or protective sensors

### Optical, acoustic and combined M22 built-in elements

- Two or more states in one element
- Simple connection through removable terminal
- Continuous or flashing light selectable through connection (PDS and PDSBZ)

# SIGNALING EXACTLY AS YOU NEED IT

Three simple steps for a custom signaling column

## 1 SELECT A TYPE OF MOUNTING

All bracket variants are available with a diameter of 40 mm or 70 mm.



### MP1

- Horizontal mounting
- Length 100/250/400 mm
- Up to 5 modules



### MH1

- Horizontal mounting
- Interior screw fitting
- Up to 5 modules



### MW1

- Vertical mounting
- 1-sided mounting
- Up to 5 modules



### MW2

- Vertical mounting
- 2-sided mounting
- Up to 10 modules

## 2 SELECT THE NUMBER AND COLOR OF LENSES

All lens models are available in diameters of 40 mm or 70 mm.

**E4 / E7-DS** — continuous LED light

**E4 / E7-DB** — flashing LED light



## 3 SELECT AN OPTIONAL SOUND MODULE

Sound module variants are available for E4 with a diameter of 40 mm and for E7 with a diameter of 70 mm.



E4-BZ1



E7-BZ1

## BAYONET LOCK

- Combine the modules without tools
- Electrical through-connection without manual wiring
- Discrete markings

### Mount



### Rotate



### Connected



# OUR PROMISE TO YOU

## SMARTER **PRODUCT USABILITY**

With regard to our product developments, we systematically place emphasis on the especially good usability of all devices. To this end, simple mounting and alignment are taken into account — just as the uncomplicated integrability of the sensors in existing field bus systems and easy configuration, e.g. via a web browser, are.

## SMARTER **APPLICATION KNOW-HOW**

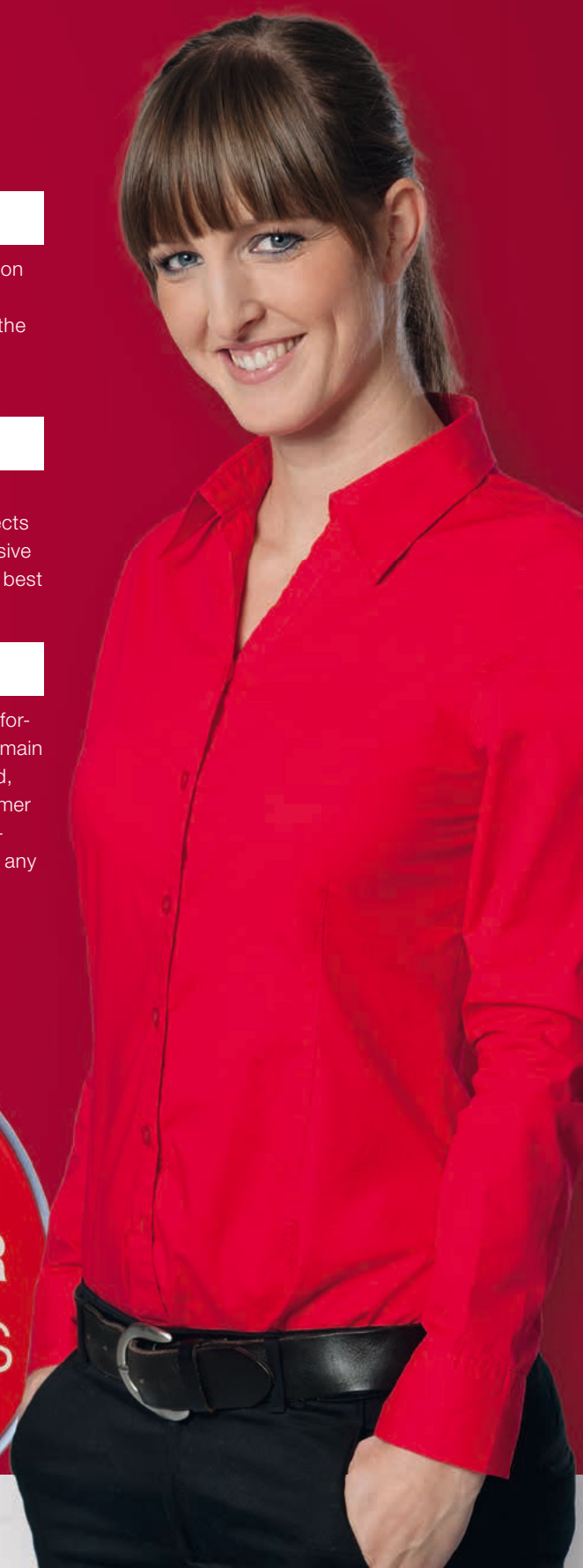
Whoever can do it all, can do nothing right. Which is why we concentrate on selected target sectors and applications. We are specialists and know all aspects inside out. For this purpose, we optimize our solutions and offer a comprehensive product range that makes it possible for our customers to obtain the absolute best solutions from a single source.

## SMARTER **CUSTOMER SERVICE**

The technical and personal closeness to our customers, and a skilled, straightforward handling of queries and problems, are among our strengths — and will remain so. Consequently, we will continue to expand our service offerings and, indeed, also forge ahead in new directions to persistently redefine the utmost in customer service. Whether on the phone, in the Internet or on-site with our customers — regardless of when and where the expertise of the sensor people is needed at any time.



Katrin Rieker,  
Sales Methods, Processes, Tools



### **Switching Sensors**

- Optical Sensors
- Ultrasonic Sensors
- Fiber Optic Sensors
- Inductive Switches
- Forked Sensors
- Light Curtains
- Special Sensors

### **Measuring Sensors**

- Distance Sensors
- Sensors for Positioning
- 3D Sensors
- Light Curtains
- Forked Sensors

### **Products for Safety at Work**

- Optoelectronic Safety Sensors
- Safe Locking Devices, Switches and Proximity Sensors
- Safe Control Components
- Machine Safety Services

### **Identification**

- Bar Code Identification
- 2D-Code Identification
- RF Identification

### **Data Transmission / Control Components**

- MA Modular Connection Units
- Data Transmission
- Safe Control Components
- Signaling Devices
- Connection Technology and Passive Distributors

### **Industrial Image Processing**

- Light Section Sensors
- Smart Camera

