

Signal Towers

# **Overview Signal Towers**

Whether they are used on machinery and equipment, manual workstations or for access control and point-of-sale systems, WERMA signal towers reliably signal different statuses, such as faults or material replenishment requests. Professional signalling provides your application with greater safety and security and considerably reduces response times. The urgency of the signal can be easily increased using different signal effects. This enables employees to immediately react to faults and quickly resolve any problems that arise.

Monitor your processes, make them reliable and keep them running - saving time and money. We call this intelligent signalling technology.

Overview Signal Towers					
Product type		modular	modular	modular	modular
Technical details	Product range	KombiSIGN 40	KombiSIGN 72	KombiSIGN 71	CO <sub>2</sub> traffic light
Diameter*		40 mm	70 mm	70 mm	70 mm
Dimensions*					
Voltage	12 V				
	24 V	•	•	•	
	115 V			•	
	230 V			•	•
Protection rating		IP 66/69k	IP 65	IP 65	IP 20
Number of tiers possible		1-5	1-5	1-5	3
Interface		I/O-Link	ASi, USB, I/O-Link, SmartMONITOR, WeASS/ST	ASi, USB, I/O-Link, SmartMONITOR, WeASSIST	
Page		Page 26	Page 32	Page 38	Page 58

<sup>\*</sup> Technical diagrams can be found on the product page

### **Modular Signal Towers**

Optical and audible signal elements can be combined flexibly in the modular signal towers. The modular design also enables customers to add other elements separately when required. The mechanical and electrical connection of the signal tower elements takes mere seconds thanks to the bayonet fitting.

### Completely pre-assembled Signal Towers

Completely pre-assembled WERMA Signal Towers can be ordered as a compact unit under a single part number, which reduces ordering and installation effort. Impressive features include their stylish design and diverse installation options, allowing them to be used in a wide range of areas.



# KombiSIGN 40 - Modular Signal Tower

### Your benefits

There is no need to compromise with the KombiSIGN 40, because WERMA has combined quick installation, excellent visibility and the highest level of flexibility in this product. This saves time and money with regard to installation and order logistics.

- Save up to 50% on installation time thanks to self-explanatory connections and intuitive mechanics
- Maximum flexibility despite a small number of variants
- TwinLIGHT and TwinFLASH combine two easily selectable light effects in one element
- In ClassicLOOK or DesignLOOK to suit all machine surfaces
- Clearly visible from all positions thanks to the OmniVIEW lens with no blind spots
- Pre-configured standard versions are available (common configurations as a complete tower with a single part number)

### Typical applications

Fault signalling

- on machinery and equipment
- on automated systems
- in assembly plants, for example, in the automotive industry

### **Installation options**

- Base mounting
- Tube mounting
- Single-hole mounting
- Additional Installation options using accessories

### **Features**

- Multicolour element offers up to seven colours in a single element
- High IP66/69k protection rating prevents ingress of dust and water
- Compact and high-output 95 dB siren
- Optionally available with IO-Link technology or USB
- IP69k allows high pressure washing



TwinLIGHT
TwinFLASH







# How to assemble your KombiSIGN 40 signal tower

### ▶ STEP 1 Select the required optical or audible elements. Order numbers can be found on page 29.

# STEP 2 Select the terminal element and appropriate mounting solution for your application.

# STEP 3 Optional: Where appropriate, select the Extension tube. Can be installed between the terminal element and the mounting adapter.

▶ STEP 4 Select mounting adapter as required.





# KombiSIGN 40 - Modular Signal Tower

Or use one of our pre-configured signal towers. With just one part number you can obtain the most popular configurations.

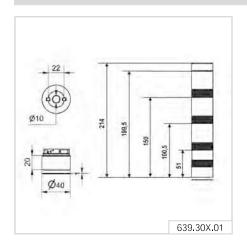


KombiS/GN 40 Signal Tower in ClassicLOOK und DesignLOOK

(i) TECHNICAL SPECIFICATI	ONS/ORDER SPECIFICAT	IONS:
Pre-configured signal tower	Classic <i>LOOK</i>	Design <i>LOOK</i>
Dimensions (Ø x Height):	40 mm x 214 mm	
Voltage:	24 V AC/DC	
TwinLIGHT green/yellow/red	639 300 01	639 301 01
Consisting of:	634 110 75 + 634 310 75 + 634 210 75 + 630 800 75 + 630 810 00	634 130 75 + 634 330 75 + 634 230 75 + 630 700 75 + 630 710 00

Technical details are given on the relevant product page.

* ACCESSORIES		
	ClassicLOOK	Design <i>LOOK</i>
Bracket for concealed cable entry	960 630 01	960 630 05













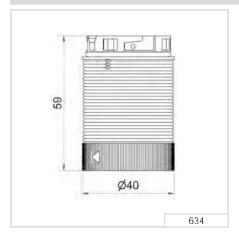


# KombiSIGN 40 - Optical Signal Elements



KombiSIGN 40 Signal Tower in ClassicLOOK and DesignLOOK

	Classic <i>LOOK</i>	Design <i>LOOK</i>	
Dimensions (Ø x Height):	40 mm x 59 mm		
Lens:	PC, transparent		
Life duration:	50,000 hrs		
Twin <i>LIGHT</i>			
Light effects:	LED Permanent or Blinking ligh	t, adjustable via slide switch	
Voltage:	24 V AC/DC		
Current consumption:	< 30 mA		
red	634 110 75	634 130 75	
green	634 210 75	634 230 75	
yellow	634 310 75	634 330 75	
white	634 430 75	634 430 75	
blue	634 510 75	634 530 75	
Twin <i>FLASH</i>			
Light effect:	LED Flash light or EVS, adjustable via DIP-Switch		
Voltage:	24 V DC		
Current consumption:	< 65 mA		
red	634 120 55	634 140 55	
green	634 220 55	634 240 55	
yellow	634 320 55	634 340 55	
white	634 440 55	634 440 55	
blue	634 520 55	634 540 55	
Multicolour			
Light effect:	•	LED Permanent light	
Colours:	, ,	Red, yellow, green, blue, white, violet, turquoise	
		controlled by binary inputs	
Voltage:	24 V DC		
Current consumption:	< 60 mA		
Order No.:	634 450 55	634 450 55	



















# KombiSIGN 40 - Audible Signal Elements

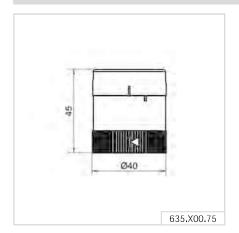


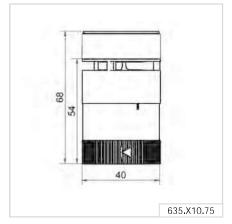
4 or 8 tone KombiS/GN 40 siren in DesignLOOK



2 tone KombiSIGN 40 siren in ClassicLOOK

① TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:			
	Classic <i>LOOK</i>	Design <i>LOOK</i>	
Housing:	PC		
Life duration:	5,000 hrs		
2 Tone Siren			
Dimensions (Ø x Height):	40 mm x 45 mm		
Sound output:	85 dB (A)		
Tone type:	Continuous or pulse tone, can	be set via slide switch	
Voltage:	24 V AC/DC		
Current consumption:	< 80 mA		
Order No.	635 800 75	635 700 75	
4 Tone Siren			
Dimensions (Ø x Height):	40 mm x 68 mm		
Sound output:	67-95 dB (A)		
Tone type:	4 tones, can be set via DIP switch		
Voltage:	24 V AC/DC		
Current consumption:	< 200 mA		
Order No.	635 820 75	635 720 75	
8 Tone Siren			
Dimensions (Ø x Height):	40 mm x 68 mm		
Sound output:	89-95 dB (A), can be set via DIP switch		
Tone type:	8 tones, can be set via slide sv	8 tones, can be set via slide switch	
Voltage:	24 V AC/DC	24 V AC/DC	
Current consumption:	< 200 mA	< 200 mA	
Order No.	635 810 75	635 710 75	

























# KombiSIGN 40 - Terminal Elements



KombiSIGN 40 DesignLOOK assembly adapter for single hole mounting



KombiSIGN 40 ClassicLOOK assembly adapter for base mounting



IO-Link/USB terminal element KombiS/GN 40 ClassicLOOK



KombiSIGN 40 DesignLOOK assembly adapter for tube mounting

(i) TECHNICAL SPECIFICATION	IS/ORDER SPECIFICATI	ONS:
	Classic LOOK	Design <i>LOOK</i>
Housing:	PC	200.9.1200.1
Number of tiers possible:	Max. 5	
Terminal element		
Dimensions (Ø x Height):	40 mm x 40 mm	
Cable entry:	Cable diameter max, 9 m	nm
Connection:	Push-in terminal max, 1,5 r	mm²
Voltage:	24 V AC/DC	
Order No.	630 800 75	630 700 75
IO Link Terminal element		
Dimensions (Ø x Height):	40 mm x 59 mm	
Cable entry:	Cable diameter max. 9 m	nm
Connection:	Push-in terminal max, 0.75 mm <sup>2</sup>	
Voltage:	24 V via IO-Link	
Current consumption:	10 mA	
Order No.	631 800 55	631 400 55
USB Terminal element		
Dimensions (Ø x Height):	40 mm x 59 mm	
Voltage:	5 V DC (USB)	
Current consumption:	500 mA	
Order No.	631 810 53	631 410 53
Adapter for base mounting		
Dimensions (Ø x Height):	40 mm x 30 mm	
Order No.	630 810 00	630 710 00
Adapter single hole mounting		
Dimensions (Ø x Height):	40 mm x 54 mm	
Order No.	630 820 00	630 720 00
Adapter tube mounting		
Discountings (OL. Halada).	40 mm x 75 mm	
Dimensions (Ø x Height):	401111111111111111111111111111111111111	

### **★ ACCESSORIES: SEE PAGE 27**































# KombiSIGN 72 - Signal Tower

### Your benefits

There is no need to compromise with the KombiSIGN 72, because this product combines quick installation, excellent visibility and the highest level of flexibility. This saves time and money with regard to installation and order logistics.

- Smooth surfaces prevent dirt gathering and make cleaning easy
- Easy, intuitive installation incorrect assembly is practically impossible (Poka Yoke)
- High-tech: the Signal Towers can easily be retrofitted with SmartMONITOR (smart MDC alternative), WeASSIST, AndonSPEED (call-for-action system) or AndonWIRELESS
- TwinLIGHT and TwinFLASH combine two easily selectable light effects in one element
- In ClassicLOOK or DesignLOOK to suit all machine surfaces
- Clearly visible from all positions thanks to the OmniVIEW lens with no blind spots
- Pre-configured standard versions are available (common configurations as a complete tower with a single part number)

### Typical applications

The new definition of the industry standard to signal faults

- · on machinery and equipment
- on automated systems
- in assembly plants, for example, in the automotive industry
- on conveyor belts in production and logistics
- at manual workstations as a call-for-action system
- upgradeable to SmartMONITOR, WeASSIST, AndonSPEED or AndonWIRELESS

### Installation options

- Base mounting
- Tube mounting
- Additional installation options using accessories

### **Features**

- Combine the KombiSIGN 72 light elements with special controller solutions such as I/O-Link, USB or ASi, or integrate one of the versatile audible elements
- Can be combined and retrofitted with all the KombiS/GN 71 elements and accessories, as well as the SmartMONITOR, WeASS/ST, AndonWIRELESS and AndonSPEED wireless-based systems
- High-output 105 dB siren



# TwinLIGHT TwinFLASH

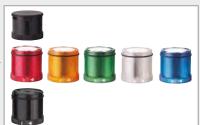






### How to assemble your KombiSIGN 72 signal tower

### ▶ STEP 1 Select the required optical or audible elements in the correct voltage (for details see page 35).



Audible Signal Element

- 2 tone siren
- 8 tone siren

Optical Signal Elements

- TwinLIGHT
- TwinFLASH

10 Link terminal element





▶ STEP 2 Select the appropriate mounting option for your application.

▶ STEP 3 Select the correct terminal element for your mounting option (for details see page 37).

# **Base Mounting**

Classic/OOK







### **Tube Mounting**



Terminal element with CAGE CLAMP® technology Order no. 640 800 00



Terminal element with CAGE CLAMP® technology Order no. 640 810 00



Terminal element with CAGE CLAMP® technology Order no. 640 900 00



Terminal element with CAGE CLAMP® technology Order no. 640 910 00

▶ STEP 4

Where appropriate, select a base and the desired tube length (only for tube mounting) (For details see page 74).



Base with integrated tube Order no. 975 840 10 Tube Ø 25 mm, all anodised Order no.

100 mm long 975 845 10 250 mm long **975 840 25** 400 mm long **975 840 40** 600 mm long **975 840 60** 800 mm long **975 840 80** 1000 mm long 975 840 03

Base for Tube, plastic Order no. 975 840 90

Base for Tube, metal Order no. 975 840 91



Base with integrated tube Order no. 960 000 51 Tube Ø 25 mm, all anodised Order no. 100 mm long 975 845 10

250 mm long 975 840 25 400 mm long **975 840 40** 600 mm long 975 840 60 800 mm long 975 840 80 1000 mm long **975 840 03** 

Base for Tube, plastic Order no. 960 000 50



▶ STEP 5 Where appropriate, select the bracket and the contact box (for details see page 74).



Bracket for base mounting Order no. 960 000 02



Bracket for 1-sided mounting Order no. 975 840 85



Bracket for 2-sided mounting Order no. 975 840 86



Bracket for base mounting with concealed cable entry

Order no. 960 000 14



Bracket for tube mounting Order no. 960 000 01



Bracket for base mounting Order no. **960 000 53** 



Bracket for 1-sided mounting Order no. 960 000 52



Bracket for base mounting with concealed cable entry Order no. 960 000 55



Bracket for tube mountina Order no. **960 000 54** 

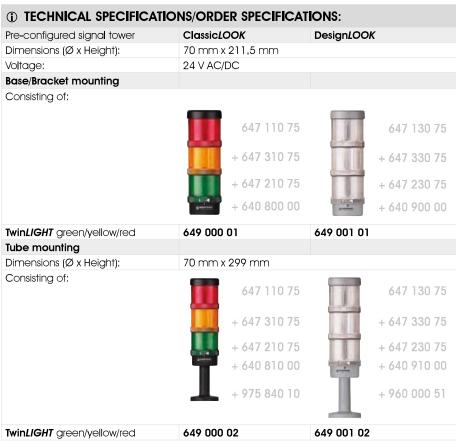
Look at the signal device section on: www.werma.com

With the new signal tower configurator you can put together your own individual signal tower.

Further accessories can be found in our main catalogue page 74 or at www.werma.com.

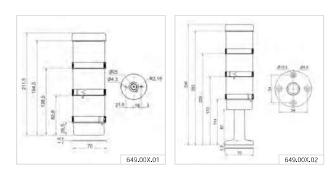
# KombiSIGN 72 - Modular Signal Tower

Or use one of our pre-configured signal towers. With just one part number you can obtain the most popular configurations.



Technical details are given on the relevant product page.

* ACCESSORIES:			
	Classic <i>LOOK</i>	Design <i>LOOK</i>	
Bracket for 1-sided mounting	975 840 85	960 000 52	
Bracket for base mounting	960 000 02	960 000 53	
Bracket for tube mounting	960 000 01	960 000 54	

















# KombiSIGN 72 - Optical Signal Elements

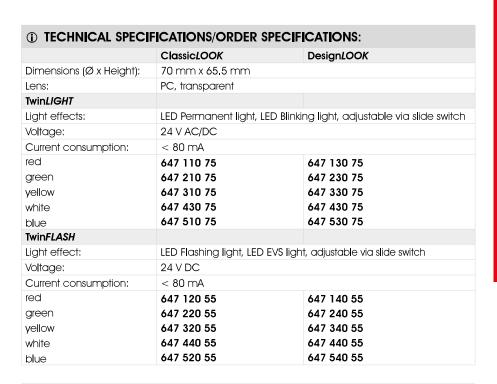


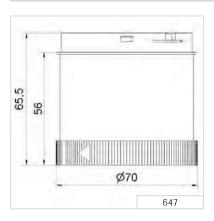
























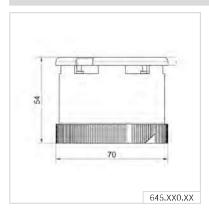


# KombiSIGN 72 - Audible Signal Elements



2 and 8 tone siren KombiSIGN 72 Design*LOOK* 

① TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:		
	Classic <i>LOOK</i>	Design <i>LOOK</i>
Housing:	PC	
Life duration:	5,000 hrs	
2 Tone Siren		
Dimensions (Ø x Height):	70 mm x 54 mm	
Sound output:	95-105 dB (A), adjustable by sli	de switch
Tone type:	Permanent tone or alternating tone, selectable by slide switch	
Voltage:	24 V AC/DC	24 V AC/DC
Current consumption:	< 40 mA	< 40 mA
Order no.	645 870 75	645 770 75
8 Tone Siren		
Dimensions (Ø x Height):	70 mm x 54 mm	
Sound output::	95-105 dB (A), adjustable by sli	de switch
Tone type:	8 tones, can be set via slide sw	vitch
Voltage:	24 V AC/DC	24 V AC/DC
Current consumption:	< 30 mA	< 30 mA
Order no.	645 890 75	645 790 75
Voltage:	115-230 V AC	115-230 V AC
Current consumption:	< 45 mA	< 45 mA
Order no.	645 890 60	645 790 60



















# KombiSIGN 72 - Terminal Elements





Terminal element Kombi*SIGN* 72 Design*LOOK* 





Terminal element KombiSIGN 72 ClassicLOOK



IO Link element KombiSIGN 72 ClassicLOOK

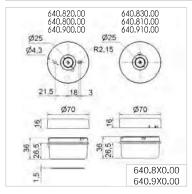


IO Link element KombiSIGN 72 DesignLOOK

① TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:		
	ClassicLOOK	Design <i>LOOK</i>
Dimensions (Ø x Height):	70 mm x 36 mm	
Housing:	Terminal element: PA-GF	
	Cap: PC	
Fixing:	Base mounting,	
	Tube mounting for tube Ø	25 mm (accessory),
	Bracket mounting (accessory)	
Cable entry:	Cable diameter max, 11 mm	
Connection:	CAGE CLAMP® technology max. 1.5 mm²	
Protection rating:	IP 65	
Number of tiers possible:	Max, 5	
Voltage:	12-230 V AC/DC	
Base mounting	640 800 00	640 900 00
Tube mounting	640 810 00	640 910 00
IO Link element		
Dimensions (Ø x Height):	70 mm x 65.5 mm	
Numbers of tiers possible:	Max. 5	
Voltage:	24 V via IO-Link	
Current consumption:	6 mA	
Order no.	646 840 55	646 440 55

	Classic <i>LOOK</i>	Design <i>LOOK</i>
Base with integrated tube	975 840 10	960 000 51
Bracket for 1-sided mounting	975 840 85	960 000 52
Bracket for base mounting	960 000 02	960 000 53
Bracket for tube mounting	960 000 01	960 000 54
Bracket for base mounting with concealed cable entry	960 000 14	960 000 55
Base for tube Ø 25 mm, plastic	975 840 90	960 000 50

### **↔ TECHNICAL DIAGRAMS:**





646.440.55 Class 2















646.440.55 646.840.55





# KombiSIGN 71 - Signal Tower

### Your benefits

The KombiSIGN 71 has successfully established itself as the standard in industrial applications over recent years. The patented bayonet mechanism enables elements to be installed or removed in a matter of seconds,

- · A wide range of accessories ensures maximum flexibility
- High-tech: The Signal Towers can easily be retrofitted with Smart/MONITOR (intelligent MDC alternative), WeASSIST or AndonSPEED (call-for-action system)
- Completely pre-configured standard versions are available (common configurations as a complete tower with a single part number)

### Typical applications

Signalling fault messages

- on machinery and equipment
- on automated systems
- in assembly plants, for example, in the automotive industry
- · in the building services industry

### Installation options

- Base mounting
- Tube mounting
- Additional installation options using accessories

### **Features**

- Different light effects are possible for individual signalling
- The Multicolour element offers up to seven colours in a single element
- The self-adjusting siren element automatically adapts to the ambient noise level
- Vocal element for your own mp3 or wav files
- Combine the KombiSIGN 71 light elements with special controller solutions such as USB, I/O-Link or ASi, or integrate one of the versatile audible elements





### How to assemble your KombiSIGN 71 signal tower

▶ STEP 1 Select the required optical or audible elements in the correct voltage (for details see page 41).



- ▶ STEP 2 Select the appropriate mounting option for your application.
- ▶ STEP 3 Select the correct terminal element for your mounting option (for details see page 45),

### Base Mounting



Terminal element M12 Order no. **640 880 00** 

### Tube Mounting



Terminal element with CAGE CLAMP<sup>®</sup> technology Order no. **640 810 00** 

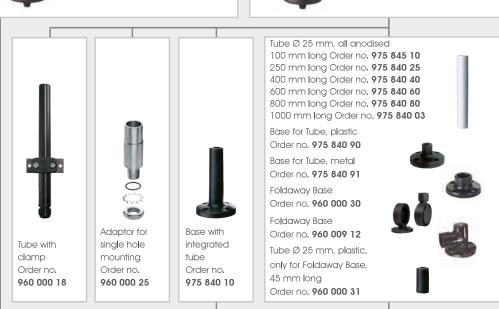


Screw terminal Order no. **640 830 00** 



Terminal element M12 Order no. **640 880 00** 

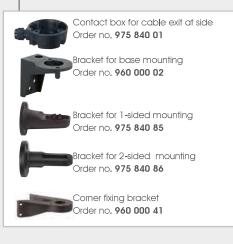
▶ STEP 4 Where appropriate, select a base and the desired tube length (only for tube mounting) (For details see page 74).



▶ STEP 5 Where appropriate, select the bracket and the contact box (for details see page 74).

Look at the signal device section on: www.werma.com

With the signal tower configurator you can put together your own individual signal tower,





# KombiSIGN 71 - Signal Tower

Or use one of our pre-configured signal towers. With just one part number you can obtain the most popular configurations.

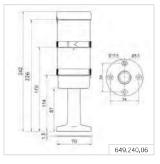


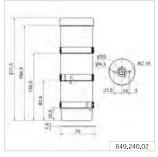
① TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:			
Pre-configured signal tower	2 tier	3 tier	
Voltage:	24 V AC/DC	24 V AC/DC	
Base/Bracket mounting			
Consisting of:	644 100 75 + 644 200 75 + 640 800 00	644 100 75 + 644 300 75 + 644 200 75	
Dimensions (Ø x Height):	70 mm x 155 mm	+ 640 800 00 70 mm x 211.5 mm	
LED Permanent Light green/yellow/rec	-	649 240 02	
LED Permanent Light green/red	649 240 04	-	
Tube mounting			
Consisting of:	644 100 75	644 100 75	
	+ 644 200 75	+ 644 300 75	
	+ 640 810 00	+ 644 200 75	
	+ 975 840 10	+ 640 810 00	
	1	+ 975 840 10	
Dimensions (Ø x Height):	70 mm x 242 mm	70 mm x 299 mm	
LED Permanent Light green/yellow/rec	-	649 240 05	
LED Permanent Light green/red	649 240 06	-	

Technical details are given on the relevant product page.

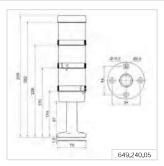
★ ACCESSORIES:	
Bracket for 1-sided mounting	975 840 85
Bracket for surface mounting	960 000 02
Bracket for base mounting	960 000 01

### **→ TECHNICAL DIAGRAMS:**









649 240 04

649 240 06

649 240 02

649 240 05



















# KombiSIGN 71 - Optical Signal Elements





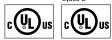




(i) TECHNICAL SPECIFICATIO	NS/ORDER S	PECIFICATI	ONS:	
Dimensions (Ø x Height):	70 mm x 65,5 mm			
Lens:	PC, transparent			
Socket:	Bayonet, BA15d, for bulbs max. 5 W			
Protection rating:	IP 65	o, rer sales ri	1G/11 0 11	
Life duration:	50,000 hrs (LE	DI		
Permanent light element	12-240 V AC/I			
red	641 100 00			
green	641 200 00			
yellow	641 300 00			
clear	641 400 00			
blue	641 500 00			
Life duration:	Dependent up	oon the bulbs	used	
Bulb not included in assembly.				
LED Permanent light element	24 V AC/DC	115 V AC	230 V AC	
Current consumption:	< 35 mA	< 25 mA	< 35 mA	
red	644 100 75	644 100 67	644 100 68	
green	644 200 75	644 200 67	644 200 68	
yellow	644 300 75	644 300 67	644 300 68	
clear	644 400 75	644 400 67	644 400 68	
blue	644 500 75	644 500 67	644 500 68	
LED Permanent light element ultrabright	24 V DC			
Current consumption:	< 195 mA			
red	644 180 55			
green	644 280 55			
yellow	644 380 55			
clear	644 480 55			
blue	644 580 55			
Flashing light element (Xenon)	24 V DC (ASI)	24 V DC	115 V AC	230 V AC
Current consumption:	< 80 mA	< 125 mA	< 22 mA	< 15 mA
red	643 110 55	643 100 55	643 100 67	643 100 68
green	643 210 55	643 200 55	643 200 67	643 200 68
yellow	643 310 55	643 300 55	643 300 67	643 300 68
clear	643 410 55	643 400 55	643 400 67	643 400 68
blue	643 510 55	643 500 55	643 500 67	643 500 68
Life duration:	4 x 10 <sup>6</sup> flashes	3		
Flash frequency:	c. 1 Hz			
LED Flashing light element	24 V DC			
Current consumption:	< 35 mA			
red	644 120 55			
green	644 220 55			
yellow	644 320 55			
clear	644 420 55			
blue	644 520 55			
Flash frequency:	c. 1 Hz (Doubl	e Flash)		



















# KombiSIGN 71 - Optical Signal Elements

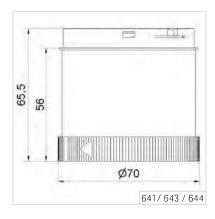








.ED EVS element	24 V AC/DC		
Current consumption:	350 mA		
red	644 140 55		
green	644 240 55		
yellow	644 340 55		
clear	644 440 55		
blue	644 540 55		
LED Blinking light element	24 V AC/DC	115 V AC	230 V AC
Current consumption:	< 25 mA	< 25 mA	< 35 mA
red	644 110 75	644 110 67	644 110 68
green	644 210 75	644 210 67	644 210 68
yellow	644 310 75	644 310 67	644 310 68
clear	644 410 75	644 410 67	644 410 68
blue	644 510 75	644 510 67	644 510 68
Blink frequency:	c. 1 Hz		
LED Rotating light element	24 V AC/DC		
Current consumption:	< 40 mA		
red	644 130 75		
green	644 230 75		
yellow	644 330 75		
clear	644 430 75		
blue	644 530 75		
Rotation frequency:	c. 120 r.p.m.		
LED Permanent light element multicolou	r 24 V DC		
Current consumption:	< 120  mA	< 120 mA	
Multicolour	644 450 55	644 450 55	
Possible colours:	Red, yellow, gre	Red, yellow, green, white, blue, violet, turquoise	
	controlled by b	controlled by binary inputs	
Number of modules possible:	Max, 3 (including multicolour element)		





















# KombiSIGN 71 - Audible Elements



Buzzer element



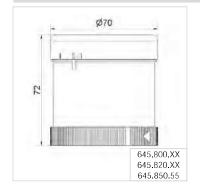
Siren element Classic*LOOK* 

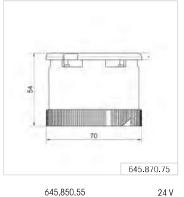


Siren element DesignLOOK

(i) TECHNICAL SPECIFICAT	IONS/ORDER SPE	CIFICATIONS:		
Dimensions (Ø x Height):	See below			
Lens:	PC	PC		
Protection rating:	IP 65			
Life duration:	5,000 hrs			
Buzzer element				
Dimensions (Ø x Height):	70 mm x 72 mr	n		
Sound output:	85 dB (A)			
Number/Tone type:	Continuous or pu	ulse tone		
Voltage:	24 V AC/DC	115 V AC	230 V AC	
Current consumption:	< 35 mA	< 25 mA	< 25 mA	
Order no.:	645 800 75	645 800 77	645 800 68	
Siren element				
Dimensions (Ø x Height):	70 mm x 54 mr	n		
Sound output:	95-105 dB (A), c	adjustable by slide sw	vitch	
Number/Tone type:	Continuous tone switch	e, alternating tone, sel	ectable by slide	
Voltage:	24 V AC/DC	115 V AC	230 V AC	
Current consumption:	< 40 mA	< 60 mA	< 60 mA	
Order no.:	645 870 75	645 870 67	645 870 68	
Siren element 8 tones				
Dimensions (Ø x Height):	70 mm x 72 mr	70 mm x 72 mm		
Sound output:	92-102 dB (A), c	idjustable sound outp	ut	
Number/Tone type:	8 tones	8 tones		
Classic <i>LOOK</i>				
Voltage:	24 V AC/DC	115-230 V AC		
Current consumption:	< 30 mA	< 45 mA		
Order no.:	645 890 75	645 890 60		
Design <i>LOOK</i>				
Voltage:	24 V AC/DC	115-230 V AC		
Current consumption:	< 30 mA	< 45 mA		
Order no.:	645 790 75	645 790 60		
Multi-functional Siren, with extern	al control			
Dimensions (Ø x Height):	70 mm x 72 mr	m		
Sound output:	100 dB (A), adjus	100 dB (A), adjustable sound output		
Number/Tone type:	Number of tone	s dependent on the	number of optical	
	elements	elements		
Tone triggering:		7 diff, tones can be triggered externally		
Voltage:	24 V DC	24 V DC		
Current consumption:	< 80 mA			
Order no.:	645 850 55			

### **↔ TECHNICAL DIAGRAMS:**





645.870.75 645.770.75 645.890.xx 645.790.xx

(€













PLC



# KombiSIGN 71 - Audible Elements

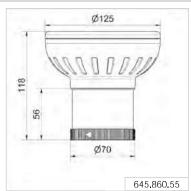


High output vocal element with up to 102 dB

(i) TECHNICAL SPECIFICATION	ONS/ORDER SPECIFICATION	ONS:
Dimensions (Ø x Height):	See below	
Lens:	PC	
Protection rating:	IP 65	
Life duration:	5,000 hrs	
Siren element with self-adjusting s	ound output	
Dimensions (Ø x Height):	70 mm x 111 mm	
Voltage:	24 V DC	
Current consumption:	< 150  mA	
Order no.:	645 810 55	
Tone type:	Pulse tone	
Tone frequency:	2.5 kHz	
Sound output:	80 dB (A) - max, 100 dB (A)	
Vocal element	88 dB (A)	102 dB (A)
Dimensions (Ø x Height):	70 mm x 111 mm	125 mm x 118 mm
Voltage:	24 V DC	24 V DC
Current consumption:	< 400 mA	< 400 mA
Order no.:	645 840 55	645 860 55
Number of tiers:	Max, 4 additional signal eleme	ents possible
Sound output:	Adjustable, up to 88 dB (A)	Adjustable, up to 102 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 depending	
	on the number of signal elements used or one	
	sequence with max, 50 files,	
Suitable for:	Windows®, System requirements – see Handbook	
Assembly:	Vocal element, USB connection cable and software	
Further Information:	With UL approval	No UL approval

### ← TECHNICAL DIAGRAMS:





CE

UK

















# KombiSIGN 71 - Terminal Elements







Screw terminal with cap









Terminal element with practical M12 connection socket in base

(i) TECHNICAL SPECIFICATION	ONS/ORDER SPECIFICA	FIONS:	
	Tube mounting	Base mounting	
Dimensions (Ø x Height):	See below		
Housing:	Terminal element: PA	Terminal element: PA fibrealass	
	Cap: PC	-	
Fixing:	Base mounting		
	Tube mounting, for tub	oe Ø 25 mm	
	Bracket mounting (ac	cessory)	
Cable entry:	Cable diameter max.	11 mm	
Protection rating:	IP 65		
Number of modules possible:	Max, 5		
Screw terminal			
Dimensions (Ø x Height):	70 mm x 42,5 mm		
Connection:	Screw terminal max.	1.5 mm <sup>2</sup>	
Voltage:	12-240 V AC/DC		
Order no.:	640 830 00	640 820 00	
	Incl. cap	Incl. cap and seal	
CAGE CLAMP® technology			
Dimensions (Ø x Height):	70 mm x 42,5 mm	70 mm x 42,5 mm	
Connection:	CAGE CLAMP® techr	nology max, 1,5 mm²	
Voltage:	12-240 V AC/DC		
Order no.:	640 810 00	640 800 00	
	Incl. cap	Incl. cap and sea	
Terminal element M12			
Dimensions (Ø x Height):	70 mm x 56 mm	70 mm x 50 mm	
Connection:	M12 connector (8 pc	ole)	
Voltage:	12-24 V DC		
Current carrying capacity:	≤ 2 A		
Order no.:	640 860 55	640 850 55	
	Incl. cap	Incl. cap and seal	
	No UL approval		

★ ACCESSORIES:	
Base with integrated tube	975 840 10
Base for tube (metal)	975 840 91
Tube Ø 25 mm, Aluminium eloxiert	
100 mm long	975 845 10
250 mm long	975 840 25
400 mm long	975 840 40
600 mm long	975 840 60
800 mm long	975 840 80
1000 mm long	975 840 03
Further accessories can be found on pa	ge 74.

### → TECHNICAL DIAGRAMS: next page

640 8X0 00 x = 0, 1, 2, 3

640.820.00 640.830.00 640.800.00 640.810.00

640.860.55 640.850.55











24 V







# KombiSIGN 71 - USB Terminal Element

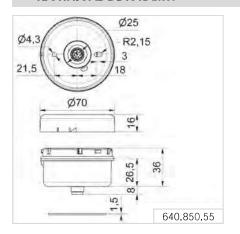


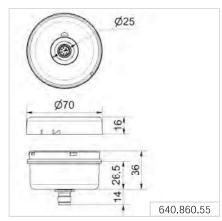


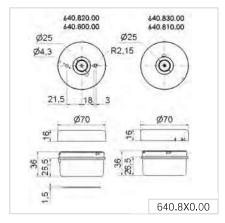
Direct triggering of the signal tower elements via USB Interface

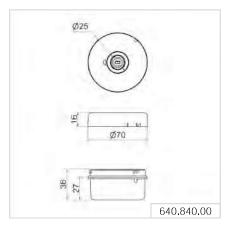
① TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:		
Terminal element with USB Interface		
Dimensions (Ø x Height):	70 mm x 36 mm	
Fixing:	Tube mounting	
Connection:	Via USB (Type B)	
Voltage:	Terminal element: Via USB (5 V DC)	
Voltage:	24 V DC	
Current carrying cap. ∑Imax:	90 mA at 24 V	
Order no.:	640 840 00	
Assembly:	Assembly includes installation software, drivers, handbook and USB connection cable (length 1.8 m)	
Suitable for:	Windows®, System requirements – see Handbook	

- Direct triggering of signal tower elements via USB Interface
- Simple integration into any customer-specific software
- No additional power supply or hardware necessary
- Up to five signal towers with a maximum of five tiers each can be connected
- Maximum cable length 5m





















# KombiSIGN 71 - AS-Interface Element

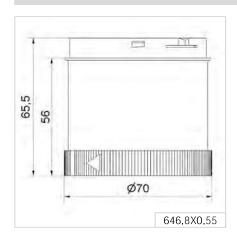


Cable not included in assembly

(i) TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:			
Specif, Power supply	Via bus conduction		
AS-Interface Element:			
Operating voltage:	18.5 V 31.6 V according to	o the AS-Interface specification	
Reverse battery protection:	Integrated		
Watchdog:	Integrated		
	Standard Slave	A/B-Slave	
Number of addresses:	Max. 31	Max. 62	
Number of tiers:	Max 4	Max. 3	
IO-Code:	8 <sub>Hex</sub>	8 <sub>Hex</sub>	
ID-Code:	F <sub>Hex</sub>	A <sub>Hex</sub>	
ID2-Code;	N/A	E <sub>Hex</sub>	
Outputs:	4 semiconductor relays	3 semiconductor relays	
Approved in accordance with:	Spec. V 3.0	Spec. V 3.0	
Order no.:	646 830 55	646 810 55	
	With internal add, voltage	With external add, voltage	
Additional external voltage:	24 V DC	24 V DC	
Current carrying cap. ∑ Imax:	200 mA	200 mA per signal	
Current consumption max:	235 mA	≤ 50 mA	
Voltage at signal element:	20 V 30 V DC	24 V +/- 10%	
Short circuit/overload protection:	Integrated	Pre-fuse M 1.6 A	



LEDs display the current status























### **AndonLIGHT**

### Your benefits

The introduction to professional call-for-action systems: the easy-to-retrofit Andon products in combination with WERMA KombiS/GN 71 and KombiS/GN 72 signal towers. With these products it is easy to improve safety and efficiency in the work-place.

- Rapid assistance reduces waiting times
- Reduces response times and prevents shutdowns
- Intuitive and self-explanatory light system
- More reliability and efficiency (no running about, calling out, etc.)
- It can be expanded to a networked system at any time

### Typical applications

- Professionally signal problems at workstations
- Manage supply of materials to workstations
- Optimise processes

### **Initial startup**

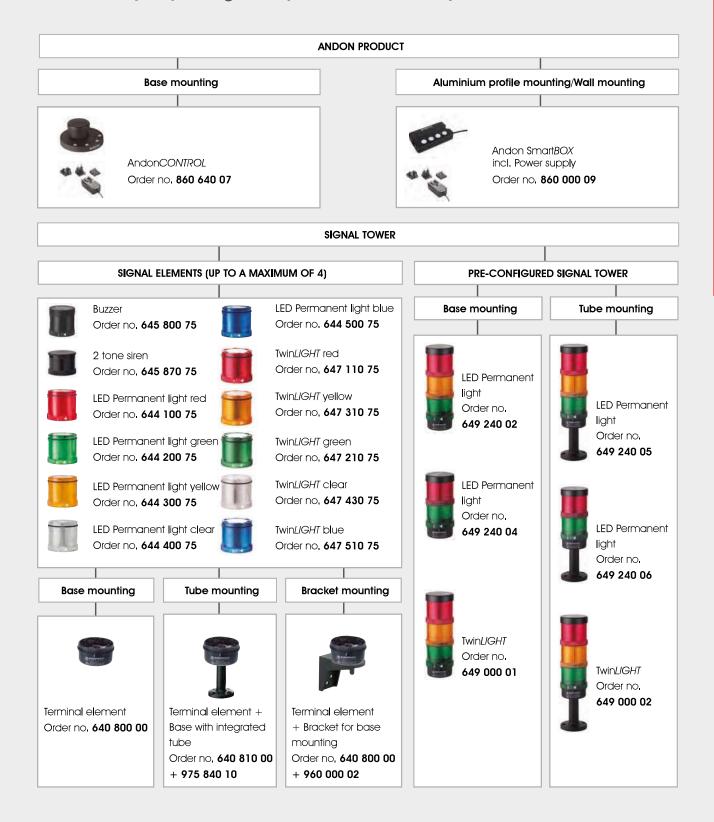
• Simply connect AndonLIGHT with mains plug

### **Features**

- Enables up to eight different statuses to be activated
- Signal directly on the signal tower with AndonCONTROL
- Activate signals on the signal tower with Andon SmartBOX

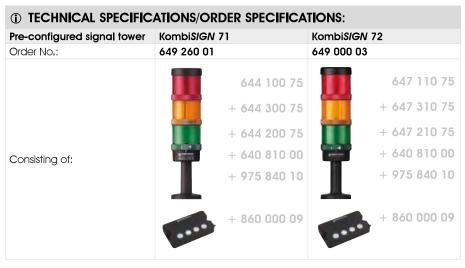


### This is how you put together your Andon LIGHT system

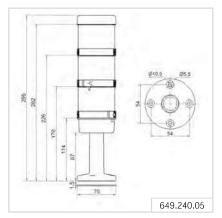


# Andon LIGHT - Pre-configured Signal Tower

Or select one of our pre-configured variants.



Technical details are given on the relevant product page.

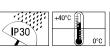














# Andon SmartBOX for Signal Towers



Andon SmartBOX for use in industrial applications

① TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:		
Dimensions (B x H x T):	161 mm x 79 mm x 138 mm	
Housing:	PA-GF	
	Switches: PC	
Fixing:	Base mounting, Wall mounting	
Connection:	Via 5 m cable	
Number of signal elements:	Max, 4 additional signal elements possible	
Assembly:	Andon SmartBOX, power supply unit with connection cable	
	(length 1.8 m), Adapter supplied (EU, UK, North America)	
Voltage power supply unit:	100-240 V AC	
Voltage signal elements:	24 V DC	
Current consumption:	Max, 1 A	
Order no.:	860 000 09	





Interchangeable adaptors (included in assembly) and wide input voltage range make the Power Supply suitable for worldwide use











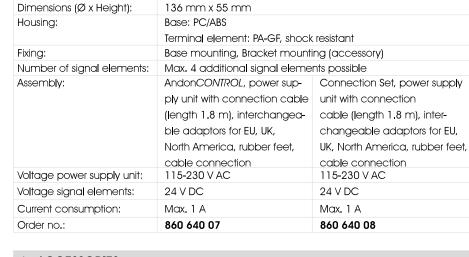


# AndonCONTROL / Connection Set for KombiSIGN 72 and 71

**(i)** TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:



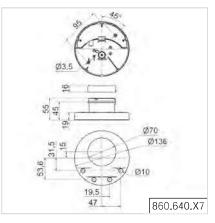
AndonCONTROL is a simple call system for a wide variety of applications

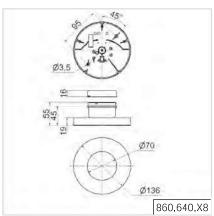


★ ACCESSORIES:	
Mounting bracket, metal	975 883 01

# Operation Material Warning Error

The four push buttons can be individually labelled







With the aid of the connection set, the master/receiver from KombiS/GN reflect can be used wherever an electrical socket is available (see page 55)





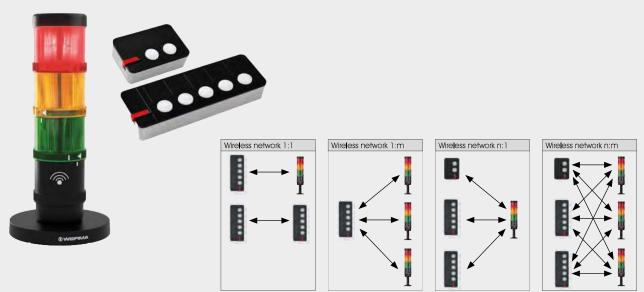








### AndonWIRELESS



### Your benefits

The WERMA Andon WIRELESS call for action system is the quick and easy way to report, display and rectify problems in a targeted manner. Have you been mainly been solving faults and problems by shouting over to colleagues or walking around to find or provide support? Using Andon WIRELESS, you can now report them professionally at the push of a button. The wireless connection between the buttons and signal towers makes installation easier and faster than ever before, saving you time and money. Every button (Andon Wireless BOX) can be operated using mains power or battery power. This allows you to use it as a stand-alone system for mobile applications, e.g. on forklifts or supply chain vehicles. Make sure your operation is ready for future requirements and flexible for greater efficiency in the workplace.

- Andon WirelessSET with 5-button box (Andon WirelessBOX) and 3-tier signal tower
- Andon WirelessSET with 2-button box (Andon WirelessBOX) and 2-tier signal tower

Configure your individual call for action system easily and conveniently using the Quickfinder,

## Typical applications

- Professional reporting of workstation problems
- Material replenishment control with acknowledgement function
- Optimisation of processes in production and logistics departments
- Access control for doors and gates

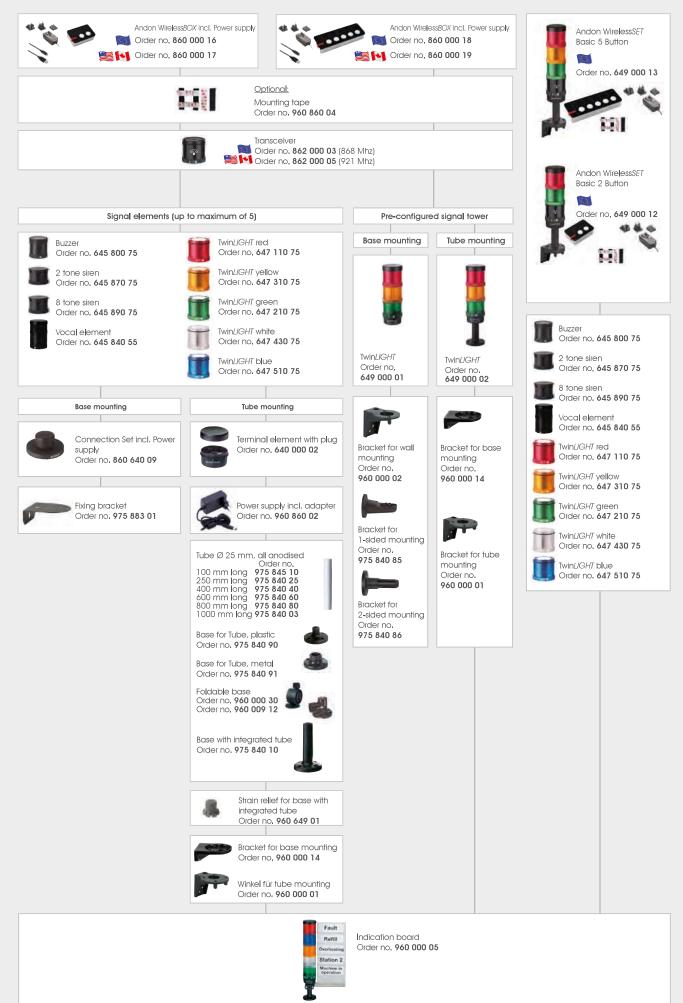
### Initial startup

- Configure the button box (Andon WirelessBOX) and receiver (transceiver)
- Power up the button box (Andon WirelessBOX) via the mains plug or battery
- Integrate the receiver (transceiver) into a signal tower without needing any tools

### **Features**

- Andon WirelessBOX with 2 or 5 buttons
- Signal tower with 2 to 5 tiers
- Configurable button illumination
- Multifunctional acknowledgement function
- Transceiver for wireless signal reception
- Simple configuration software
- Can be combined with control station function: easy to upgrade to SmartMONITOR or AndonSPEED

## How to assemble your individual Andon WirelessSET



### KombiSIGN reflect for KombiSIGN 72 and 71



### Your benefits

Do you have a machine or a workstation that is out of your line of sight? KombiS/GN reflect offers a simple solution that "reflects" the machine status to a KombiS/GN signal tower in your vicinity. The two elements are paired and ready for immediate use.

- Keep track of machines or processes that are out of view
- Reduce response times and prevent shutdowns
- Repair faults quickly
- Monitor machines/areas that are not yet networked

### Typical applications

- Report stoppages in complex production areas
- Manage the supply of materials where visibility is restricted
- Improve processes in complex production areas

### Initial startup

• Integrate transmitter and receiver into the signal towers (no tools necessary)

### **Features**

- Pre-configured for plug & play
- Simple reflection of machine statuses
- Large transmission range thanks to robust wireless network for production environments







# KombiSIGN reflect for KombiSIGN 72 and 71



The slave sends the status directly to the master, and reflects the status of the signal tower installed on the machine

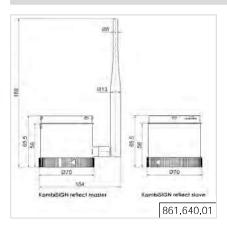
① TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:			
	Slave	Master	
Dimensions (Ø x Height):	70 mm x 66 mm	70 mm x 66 mm (without antenna)	
Housing:	Polycorbonate, black		
Connection:	Bayonet		
Wireless connection	868 MHz (conforms to the EU's EN 300220 harmonised standard and		
ISM frequency:	can thus be used in all EU member countries)		
	Further countries upon request		
Transmission range:	Up to 300 m (unobstructed line of sight)		
Operating voltage:	24 V AC/DC	24 V DC	
Current consumption:	40 mA	40-900 mA	
Order no.:	861 640 01		

Please check the wireless frequency. In Europe the version with 868 MHz is used. Please enquire about use in other countries,

### → TECHNICAL DIAGRAMS:



Simple monitoring of signal towers out of view





Simply fit the KombiSIGN reflect slave to the signal tower on the machine

861 X40 02 receiver: class 2















# KombiSIGN reflect for KombiSIGN 72 and 71



The transmitter sends the status directly to the receiver, and reflects the status of the signal tower installed on the machine

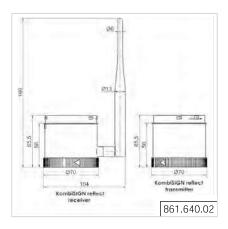
① TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:				
	Transmitter	Receiver		
Dimensions (Ø x Height):	70 mm x 66 mm	70 mm x 66 mm (without antenna)		
Housing:	Polycorbonate, black			
Connection:	Bayonet	Bayonet		
Wireless connection	915 MHz (only for use in North America)			
ISM frequency:	Further countries upon request			
Transmission range:	Up to 300 m (unobstructed lin	Up to 300 m (unobstructed line of sight)		
Operating voltage:	24 V AC/DC	24 V DC		
Current consumption:	40 mA	40-900 mA		
Order no.:	861 640 02			
In North America the version with 915 MHz is used, Please enquire about use in other				

countries.

### **↔ TECHNICAL DIAGRAMS:**



Simple monitoring of signal towers out of view





Simply fit the KombiS/GN reflect transmitter to the signal tower on the machine

861 X40 02 receiver: class 2















# CO<sub>2</sub> Traffic Light

### Your benefits

With this traffic light, the current carbon dioxide concentration in the ambient air can be measured and clearly displayed using the three traffic light colours.

- The system displays its concentration in the ambient air according to  ${\rm CO}_2$  thresholds: Green (ambient air OK), yellow (ventilation recommended), red (ventilation necessary), red blinking (ventilation urgently required)
- Provides clear feedback on CO<sub>2</sub> concentration
- Eliminate high concentrations of carbon dioxide and aerosols in enclosed spaces based on a reliable reminder for regular intense ventilation
- Ensure hygienic and productivity-friendly ambient air quality
- Clearly visible from all positions thanks to the OmniVIEW lens
- Increased safety for employees and customers

### Variants & typical applications

The  $\rm CO_2$  Traffic Light (1,000 ppm variant) is ideal for all interior spaces where people regularly spend long periods of time, such as public buildings, restaurants, shops, universities, schools and open-plan offices.

The  ${\rm CO}_2$  Traffic Light (800 ppm variant) is ideal for sensitive environments such as doctors' surgeries and hospitals.

### Installation options

Base mounting

### Initial startup

Thanks to its plug&play functionality, the  ${\rm CO_2}$  traffic light can be set up quickly and easily and is immediately ready for use. The power supply is provided by the included mains adapter (230V).

### Features (1,000 ppm variant)

- The traffic light is green up to 1,000 ppm\*
- The traffic light is yellow from 1,000 ppm to 2,000 ppm
- The traffic light is red from 2,000 ppm to 3,000 ppm
- The traffic light blinks red from 3,000 ppm

\*(The Federal Environment Agency officially recommends ventilation from 1,000 ppm / ppm = parts per million, i.e. parts by volume per million parts by volume).

### Features (800 ppm variant)

- The traffic light is green up to 800 ppm\*\*
- The traffic light is yellow from 800 ppm to 1,200 ppm
- The traffic light is red from 1,200 ppm to 2,000 ppm
- The traffic light blinks red from 2,000 ppm
- \*\* DIN EN 16798-1:2021-04





① TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS				
Dimensions (Ø x Height):	70 mm x 287 m	70 mm x 287 mm		
Lens:	PC, transparent			
Housings	Base: PC/ABS, b	lack		
Housing: Terminal element: PA, black				
Connection:	Plug-in connect	Plug-in connection		
Cable length:	1,5 m	1,5 m		
Light effects:	Blinking light, pe	Blinking light, permanent light		
Life duration optical:	max, 50,000 h	max, 50,000 h		
Voltage:	230 V AC	230 V AC		
Current consumption:	40 mA	40 mA		
	1000 ppm	800 ppm	1000 ppm UK/AU	
Order no.:	649 000 10	649 000 14	649 000 15	

* ACCESSORIES	
Bracket	975 883 41

# ↔ TECHNICAL DIAGRAM





649.000.15

649.000.10

649.000.14

649.000.15















# **KOMPAKT 37 - pre-assembled Signal Tower**

# Your benefits

The KOMPAKT 37 is a completely pre-assembled signal tower that can be easily ordered under a single part number. With 1-5 visual tiers, the slim signal tower can be installed quickly and easily. The compact and completely enclosed construction is ideal for use in all types of public areas because it is tamper-proof.

- Up to six levels of signal escalation possible including an audible signal
- In ClassicLOOK or DesignLOOK to suit all machine surfaces
- Clearly visible from all positions thanks to the OmniVIEW lens with no blind spots

# Typical applications

Fault signalling

- on smaller machines and equipment
- on point-of-sale and access control systems

# Installation options

- Single-hole mounting
- Additional installation options using accessories

# **Features**

Pre-assembled with easy cable connection or M12 plug for plug & play use





# How to select your KOMPAKT 37 signal tower

#### ▶ STEP 1 Select the signal tower of your choice with or without buzzer, with the appropriate connection,

housing colour, voltage and number of tiers.

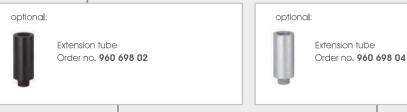
Part numbers can be found on page 62.



- 12 or 24 V
- 1-5 tiers
- With or without buzzer
- M12 plug or cable
- Black or silver finish

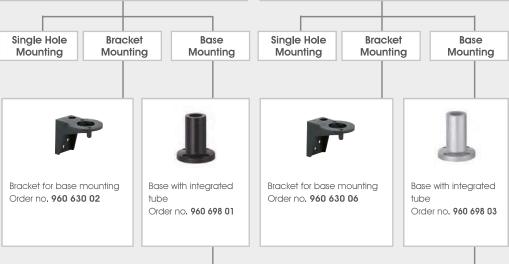


▶ STEP 2 Select up to two extension tubes



#### ▶ STEP 3

Select the appropriate fixing accessories for your application, using for example a tube and base or a bracket mount.



#### ▶ STEP 4

Where appropriate, select the bracket and the contact box,



Go to the signal devices page on:  $\ensuremath{\mathbf{www.werma.com}}$ 

Here you can use the selection tool "Configurator" to select the Kompakt 37 signal tower according to your requirements.

With the help of intuitive questions and pictures you will be able to make your choice with just a few mouse clicks.

# KOMPAKT 37 - pre-assembled Signal Tower

# **Classic***LOOK*



Two tier Kompakt 37 with integral tube and base (accessory)



Three tier Kompakt 37 with bracket (accessory)

① TEC	HNICAL SPECIFICATIONS	ORDER SPE	CIFICATIONS:	
Dimension	on (Ø x Height):	1 tier: 37.5 mm x 93.5 mm 2 tier: 37.5 mm x 127.5 mm 3 tier: 37,5 mm x 161,5 mm		
			m x 195,5 mm	
			m x 229.5 mm	
11		(Protrusion from	m panelj	
Housing: Fixing:		PC Single hele m	ounting for Ø 22.5 m	m (M00 v 1 5 mm)
rixirig.		•	et mounting (access	` '
Connec	tion:		ction: Cable, 2 m Ion	.,
Connec			ion: M12 Plug (1/2/3 ti	0.
		4/5 tier: 8 pole	= '	ci. o polo,
Current of	consumption:		r / buzzer 24 V	
	,		er / buzzer 12 V	
Nut and	seal included in assembly.			
	OOK with buzzer	Connection	24 V AC/DC	
1 tier	red	Plug	699 610 75	
	yellow	Plug	699 630 75	
2 tier	green/red	Cable	699 120 75	
	yellow/red	Cable	699 130 75	
	green/red	Plug	699 220 75	
	yellow/red	Plug	699 230 75	
3 tier	green/yellow/red	Cable	699 110 75	
	green/yellow/red	Plug	699 210 75	
4 tier	clear/green/yellow/red	Cable	699 140 75	
	blue/green/yellow/red	Cable	699 150 75	
	clear/green/yellow/red	Plug	699 240 75	
	blue/green/yellow/red	Plug	699 250 75	
5 tier	blue/clear/green/yellow/red	Cable	699 160 75	
011-1	blue/clear/green/yellow/red	Plug	699 260 75	10.1/40/00
	OOK without buzzer	Connection	24 V AC/DC	12 V AC/DC
2 tier	green/red	Cable	698 120 75 698 130 75	698 120 74
	yellow/red	Cable Plug	698 220 75	-
	green/red vellow/red	Plug	698 230 75	_
3 tier	green/yellow/red	Cable	698 110 75	698 110 74
J IICI	green/yellow/red	Plug	698 210 75	-
4 tier	clear/green/yellow/red	Cable	698 140 75	-
4 1101	blue/green/yellow/red	Cable	698 150 75	-
	clear/green/yellow/red	Plug	698 240 75	-
	blue/green/yellow/red	Plug	698 250 75	-
5 tier	blue/clear/green/yellow/red	Cable	698 160 75	-
	blue/clear/green/yellow/red	Plug	698 260 75	-
Design <i>L</i> e	OOK with buzzer	Connection	24 V AC/DC	
1 tier	red	Plug	699 810 75	
	yellow	Plug	699 830 75	
2 tier	green/red	Cable	699 320 75	
	yellow/red	Cable	699 330 75	
	green/red	Plug	699 420 75	
	yellow/red	Plug	699 430 75	
3 tier	green/yellow/red	Cable	699 310 75	
	green/yellow/red	Plug	699 410 75	

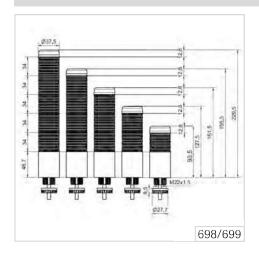
# Design*LOOK*



The height of the KOMPAKT 37 can be increased by max. 160 mm with the use of extension tubes, ensuring optimum visibility

Design <i>L</i>	OOK with buzzer	Connection	24 V AC/DC
4 tier	clear/green/yellow/red	Cable	699 340 75
	blue/green/yellow/red	Cable	699 350 75
	clear/green/yellow/red	Plug	699 440 75
	blue/green/yellow/red	Plug	699 450 75
5 tier	blue/clear/green/yellow/red	Cable	699 360 75
	blue/clear/green/yellow/red	Plug	699 460 75
Design <i>L</i>	OOK without buzzer	Connection	24 V AC/DC
2 tier	green/red	Cable	698 320 75
	yellow/red	Cable	698 330 75
	green/red	Plug	698 420 75
	yellow/red	Plug	698 430 75
3 tier	green/yellow/red	Cable	698 310 75
	green/yellow/red	Plug	698 410 75
4 tier	clear/green/yellow/red	Cable	698 340 75
	blue/green/yellow/red	Cable	698 350 75
	clear/green/yellow/red	Plug	698 440 75
	blue/green/yellow/red	Plug	698 450 75
5 tier	blue/clear/green/yellow/red	Cable	698 360 75
	blue/clear/green/yellow/red	Plug	698 460 75

★ ACCESSORIES:		
	Classic <i>LOOK</i>	DesignLOOK
Base with integrated tube	960 698 01	960 698 03
Extension tube	960 698 02	960 698 04
Cable 5 m with M12 plug (5 pole)	960 693 05	
Cable 5 m with M12 plug (8 pole)	960 000 47	
Cable 5 m with M12 connector and plug (8 pole)	960 000 46	
Bracket for base mounting	960 698 05	-
Further accessories can be found on page 74.		





























# eSIGN - electronic modular signal tower

#### Your benefits

The new eSIGN brings new dimensions to light. Electronic modularity enables the product to create a variety of signal modes with various colours, brightness levels and light effects, from the classic signal tower to completely customised settings. eSIGN can also switch with ease between variable filling level indications or full-surface signalling. In addition to providing you with an overview of your process cycles, this also opens up completely new options.

- Full-surface signalling: Clear, unmistakeable light effects for maximum visibility
- · Versatile customisation options: Different modes, light effects and tones for diverse applications
- Robust industrial design: UL Type 4X ensures resistance to UV radiation and environmental influences
- The right product for every application: 2 sizes, with/without siren, 24 V supply voltage / versions with IO-Link technology

# Typical applications

The new definition of the industry standard to signal faults

- on machinery and equipment
- on automated systems
- in assembly plants, for example, in the automotive industry
- on conveyor belts in production and logistics

# Installation options

• Base mounting, Wall mounting, Tube mounting

## **Features**

- Classic signal tower indication in individual tiers
- Autoscale mode for full-surface signalling and optimum visibility
- Variable filling level indication from 0 to 100 %
- Individual triggering to suit your requirements
- 9 or 15 segments, freely triggerable
- With or without siren
- Standard 24 V version with transfer of the configuration via USB
- Version with IO-Link technology
- M12 connection
- Duration of the acoustic warning adjustable
- A specific acoustic warning can be assigned to each optical warning







eSIGN with 15 segments

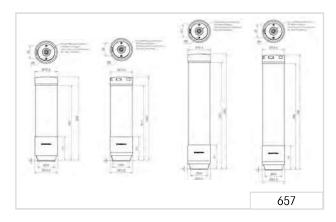


eSIGN with 9 segments

① TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:		
	15 segments	9 segments
Dimensions (Ø x Height):	72,5 mm x 371,5 mm	72,5 mm x 271 mm
Housing:	PC	
Lens colour/Housing colour:	clear/black	
Fixing:	Base mounting, wall mounting,	tube mounting
Connections:	M12 connector 4 pole (IO Link)	
	8 pole (standard 24 V)	
Light effects:	LED/Multicolour, various colours configurable	
	Permanent, blinking, flashing, double flash, triple flash, rotating	
Tone types:	Multi-tone, 10 tones are configurable	
Volume:	max. 105 dB (A), 4 stages / 80-1	05 dB (A) depending on tone type
Voltage:	24 V DC	24 V DC
Current consumption:	620 mA (with siren)	405 mA (with siren)
Culler II Corisai i Ipilori.	555 mA (without siren)	335 mA (without siren)
With siren		
24 V	657 600 55	657 100 55
IO Link	657 610 55	657 110 55
Without siren		
24 V	657 500 55	657 000 55
IO Link	657 510 55	657 010 55

* ACCESSORIES	
Tube Ø 25 mm, all anodised	975 845 10
100 mm long	
250 mm long	975 840 25
Base for tube, plastic	975 840 90
Base for tube, metal	975 840 91
Base with integrated tube	960 000 64
Bracket for 1-sided mounting	960 000 65
Bracket for base mounting	960 000 01
Corner fixing bracket	960 000 41
Cable 5m with M12 connector and plug	960 000 46
Cable 5m with M12 plug	960 000 47
USB cabel type C to type A 0,5m (for transferring the configuration)	960 000 69
Further accessories can be found on page 74.	

## → TECHNICAL DIAGRAMS:



657.610.55 657.510.55 657.600.55

657.500.55

657,110,55 657,010,55 657,100,55

657.000.55























# deSIGN 42 - pre-assembled Signal Tower

# Your benefits

Thanks to its high-quality stainless steel housing, the deSIGN 42 signal tower is an ideal accompaniment to modern, design-oriented assembly lines, production facilities and machinery. The robust housing provides the key benefit of being tamper-proof for installations in public areas.

- Elegant industrial design
- Tamper-proof for public areas

# Typical applications

Fault signalling

• on machinery and equipment

Access control

• on control points in public areas

# Installation options

- Single-hole mounting
- Bracket mounting using accessories

## **Features**

- High-quality, robust stainless-steel housing
- Award-winning design





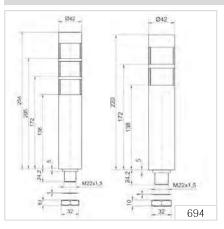




① TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:			
	2 tier	3 tier	
Dimensions (Ø x Height):	42 mm x 221 mm	42 mm x 255 mm	
Housing:	Stainless steel, brushed		
Fixing:	Installation mounting for Ø 22.5 mm (M22 x 1.5 mm)		
Connection:	Cable, 2 m long, included in assembly		
Voltage:	24 V DC	24 V DC	
Current consumption:	50 mA per tier	50 mA per tier	
red/green	694 010 55	-	
red/yellow	694 020 55	-	
red/yellow/green	-	694 000 55	

★ ACCESSORIES:	
Surface housing single	975 109 02
Bracket, stainless steel (Protection rating IP 33)	960 694 01

# → TECHNICAL DIAGRAMS:

















PLC

# CleanSIGN - pre-assembled Signal Tower

#### Your benefits

The CleanS/G/N signal tower has been specifically developed and certified for use in clean rooms, food and hygiene areas as well as the pharmaceutical industry. The signal tower ensures maximum safety in these environments by reducing the risk of contamination.

- Reliable signalling even in clean rooms
- Easy-to-clean, hygienic design for optimal cleaning and disinfection
- Ensures food safety through the absence of uneven surfaces, elevated or countersunk elements where dirt can accumulate
- Use of food safe materials (FDA approved) and resistant to cleaning agents
- · Application-specific selection of colours and light effects for maximum flexibility

# Typical applications

Fault signalling

- in clean rooms, e.g. semiconductor and solar industries
- in the food and beverage industry
- in pharmaceutical and cosmetic industries

# Installation options

- Base mounting
- Ceiling mounting
- Wall mounting

#### **Features**

- Fraunhofer IPA approval
  - » Bracket mounting fulfills Air Cleanliness Class 1 for Cleanroom applications in accordance with DIN EN ISO 14644-1
  - » Base or Ceiling mounting fulfills Air Cleanliness Class 1
- Electronic modularity of the individual tiers (colour and light effects individually adjustable/ can be externally triggered)





( WERMA



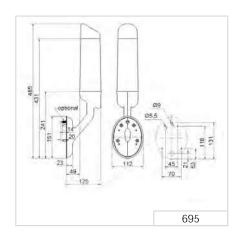


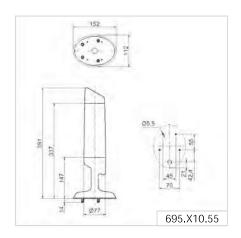
Fixed, three tier colour distribution in red, yellow and green



The "EVS" light effect ensures a maximum attention-grabbing effect (can be set with complete illumination)

① TECHNICAL SPECIFI	CATIONS/ORDER SPECIFICA	ATIONS:
	Wall mounting	Base/Ceiling mounting
Dimensions (L x H x W):	112 mm x 485 mm x 125 mm	112 mm x 391 mm x 125 mm
Housing:	PA, black	
Lens:	PA, transparent	
Fixing:	Wall mounting, integrated mour	nting bracket
	Base mounting, Ceiling mountin	g
Sound output:	85 dB (A)	
CleanSIGN red/green/yello	w	
Connection:	Cable, 2 m long, included in the	e assembly
Colours:	Pre-set colours: red/yellow/green	1
Voltage:	24 V DC	
Current consumption:	Optical: < 120 mA per tier	
	Buzzer: < 20 mA	
Order no.:	695 300 55	695 310 55
CleanSIGN RGY		
Connection:	Screw terminal max, 1,5 mm²	
Colours:	Colours selectable by dip-switch: red/yellow/green	
Voltage:	24 V DC	
Current consumption:	Optical: < 240 mA	
	Buzzer: < 20 mA	
Order no.:	695 200 55	695 210 55
CleanSIGN RGB		
Connection:	Screw terminal max, 1,5 mm²	
Colours:	Red, yellow, green, white, blue, violet, turquoise	
	Colours selectable by dip-switch	
Light effects:	Tier-by-tier illumination: Blinking light	
	Complete illumination: EVS	
Voltage:	24 V DC	
Current consumption:	Optical: < 240 mA	
	Buzzer: < 20 mA	
Order no.:	695 000 55	695 010 55































# FlatSIGN - pre-assembled Signal Tower

#### Your benefits

The curved front of the FlatS/G/N signal tower housing enables it to blend in uniformly with machine and building service applications. The 160-degree visibility angle ensures exceptional visibility even from the side.

- Easy to install also on flush-mount enclosures
- TwinLIGHT combines two easily selectable light effects

# Typical applications

Fault signalling or Access control

- in building service applications (e.g. server and equipment rooms)
- at access points in public areas

# Installation options

- Wall mounting
- Additional installation options using accessories

#### **Features**

- Permanent or blinking light selectable
- Available with transparent housing or in metal design
- Optional integrated audible signal



**Twin**LIGHT





In its inactive state, the signal tower blends into the background thanks to its colourless, translucent housing



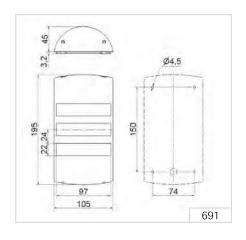
FlatS/GN in metallic finish



The fixing kit consists of two tube clamps and an adaptor (accessory)

① TECHNICAL SPECIFICATIONS/ORDER SPECIFICATIONS:		
	Multi-tone Sounder	Buzzer (Continuous tone)
Dimensions (L x H x W):	105 mm x 195 mm x 45 r	nm
Lower part:	PC-ABS, black	
Upper part:	PC, transparent or silver	
Fixing:	Wall mounting	
Cable entry:	Cable diameter max, 11	mm
Connection:	Screw terminal max, 1.5 r	nm²
Light effects:	Permanent or blinking light selectable	
Audible signal:	Buzzer or multi-tone sounder (8 tones)	
Sound output:	Max, 80 dB (A)	
Colours:	Green, yellow, red	
Voltage:	24 V DC	115-230 V AC
Current consumption:	Optical: 30 mA per tier	
	Audible: 30 mA	
FlatSIGN with transparent housing		
FlatS/G/V without audible signal	691 100 55	691 100 68
FlatS/GN with audible signal	691 200 55	691 200 68
FlatSIGN in Metal Design		
FlatS/GN without audible signal	691 300 55	691 300 68
FlatS/G/V with audible signal	691 400 55	691 400 68

★ ACCESSORIES:	
Fixing Kit	975 691 01





















# VarioSIGN - pre-assembled Signal Tower

# Your benefits

With the VarioS/GN light effects and colours can be individually set and adjusted via dip-switches at any time - depending on the variant. The eye-catching illumination of the entire lighting body ensures an exceptional appearance and visibility.

- Flexible selection of colours and light effects
- Award-winning design

# Typical applications

Fault signalling

- on machinery and equipment
- on automation systems

# Installation options

• Base mounting

## **Features**

- Optional integrated sounder
- Electronic modularity: i.e. colours and light effects are adjustable for each tier





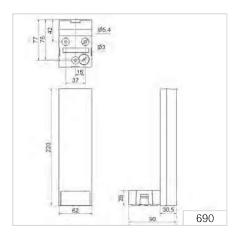


Fixed, three-tier colour distribution in red, yellow and green



The "EVS" light effect ensures a maximum attention-grabbing effect (single colour distribution can be selected)

① TECHNICAL SPECIFICATION	ONS/ORDER SPECIFICATION	DNS:						
	With buzzer	Without buzzer						
Dimensions (L x H x W):	62 mm x 220 mm x 90 mm							
Housing:	PC/ABS-Blend, black							
Lens:	PC, transparent							
Fixing:	Base mounting							
Cable entry:	Cable diameter max, 11 r	Cable diameter max, 11 mm						
Connection:	Screw terminal max, 1,5 m	nm²						
VarioSIGN - red/yellow/green								
Colours:	Pre-set colours (red/yellow/	Pre-set colours (red/yellow/green)						
Voltage:	24 V DC							
Current consumption:	Optical: < 55 mA per tier	Optical: < 55 mA per tier						
	Buzzer: < 20 mA	Buzzer: < 20 mA						
2-sided	690 300 55	690 320 55						
VarioSIGN - RGY								
Colours:	Red, yellow, green							
	Colours selectable by Dip-switch							
Voltage:	24 V DC	24 V DC						
Current consumption:	Optical: < 120 mA							
	Buzzer: < 20 mA							
2-sided	690 200 55	690 220 55						
VarioSIGN - RGB								
Colours:	, ,	Red, yellow, green, white, blue, violet, turquoise						
	Colours selectable by Dip-							
Light effects:	Tier-by-tier illumination: Flashing light							
	Complete illumination: EVS							
Voltage:	24 V DC							
Current consumption:	Optical: < 300 mA	•						
	Buzzer: < 20 mA							
2-sided	690 000 55	-						













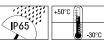














Overview Accessories for Signal Towers			Classic- LOOK	Design- LOOK	Classic- LOOK	Design- LOOK	Classic- LOOK	Design- LOOK		
Accessory		KombiSIGN 71	Kombi	SIGN 72	Kombis	SIGN 40	КОМ	PAKT 37	eSIGN	Page
Cable, 5m	0	•							•	76
Bullo BA15d	J	•								76
Bracket for surface mounting, incl. cable gland M16 x 1.5		•								76 + 78
Bracket for 1-sided mounting, incl. rubber seal		•	•	•					•	76 + 78
Bracket for 2-sided mounting, incl. rubber seal	<b> </b>	•	•	•						76
Bracket for tube mounting, incl. cable gland M16 x 1.5		•	•	•					•	82 + 83
Bracket for base mounting, with concealed cable entry, incl. rubber seal	<b>A</b>	•	•	•	•	•	•	•		82 + 83
Corner fixing bracket KOMPAKT 37 with Base-mount tube		•	•	•	•	•	•	•	•	82
Bracket for assembly on aluminium profiles, incl. cable gland M12 x 1.5		•	•	•	•	•				84 + 85
Bracket for concealed cable entry					•	•	•	•		84
Tube Ø 25 mm plastic, for direct mounting of the terminal element onto the Foldaway Base	•				•	•				79
Tube Ø 25 mm, all anodised aluminium		•	•	•					•	78 + 79
Tube with clamp Ø 25 mm, 250 mm long, incl, cable gland	+	•	•	•	•	•			•	79
Base with integrated tube Ø 25 mm, 110 mm long, plastic, incl. rubber seal	11	•	•	•	•	•			•	79 + 81
Base for tube Ø 25 mm, plastic, incl. rubber seal	4 4	•	•	•	•	•			•	79 + 81
Base for tube Ø 25 mm, metal, incl. rubber seal	4	•	•	•	•	•			•	79
Base with integrated tube	11						•	•		85
KombiS/GN reflect		•	•	•						76

Overview Accessories for Signal Towers		Classic- LOOK Design- LOOK	Classic- LOOK Design- LOOK	Classic- LOOK Design- LOOK		
Accessory	Kombi\$/GN 71	Kombi <i>SIGN</i> 72	Kombi <i>SIGN</i> 40	КОМРАКТ 37	e\$IGN*	Page
Cable gland for surface mounting, M16 x 1.5	•	•	• •			79 + 81
Adaptor for single hole mounting, Ø 25 mm, M18	•	•				76 + 78
Adaptor for tube mounting Ø 25 mm	•	•				76 + 78
Indication board	Signal Migrani Migrani Migrani Migrani	•	• •			76 +84
	<b>.</b>	•	• •		•	79
Foldaway Base, Signal Tower can be folded away, incl. rubber seal		•	•			79
Contact box for cable exit at side		•	• •	• •	•	82
Contact box with magnetic base and cable exit at side	•	• •	• •	• •	•	82
Extension tube	0			•		85

<sup>\*</sup> Usage of accessory dependent on version and connection cable. Please check instruction leaflet for compatibility.

Overview Accessories for Signal Towe	ers				
Accessory		design 42	Flats/GN		Page
Surface housing single	3	•			87
Fixing kit			•		87
Fixing bracket				•	87

#### KombiSIGN 71

Cable 5 m with M12 plug + socket Order no. 960 000 46 Cable 5 m with M12 socket Order no. 960 000 47 Cable 5 m with M12 plug Order no. 960 860 01



Bulb BA15d,

total length max, 42 mm

12 V, 5 Watt **955 840 34** 

24 V, 5 Watt **955 840 35** 

30 V, 5 Watt **955 840 32** 115 V, 5 Watt **955 840 57** 

230 V, 5 Watt **955 840 38** 



#### KombiSIGN 71 and 72 - ClassicLOOK

Bracket for surface mounting incl. cable gland M16 x 1,5 Order no. 960 000 02



Adaptor for single hole mounting Ø 25 mm, M18

Order no. 960 000 25



Indication board (for tube mounting)

Order no. 960 000 05

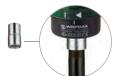
Dimensions of indication board (W x H): 153 x 345 mm

Surface area per section (W x H): c. 144 x 54 mm Avery/Zweckform 3424 (105 x 48 mm), Herma 4281 (105 x 50.8 mm) (not included in assembly)

Material: PMMA



Adaptor for tube mounting Ø 25 mm / 1/2" NPT thread **Order no. 975 840 02** 



Bracket for 1-sided mounting, incl. rubber seals

Order no. 975 840 85



- For one to five modules
- Simple mounting onto signal tower tube
- Ample space for written information
- Simply break off unwanted segments

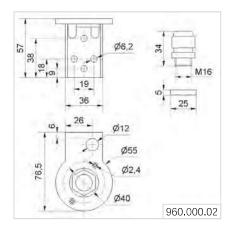
Bracket for 2-sided mounting, incl. rubber seals

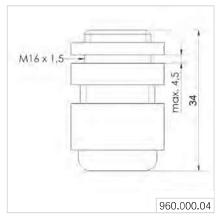
Order no. 975 840 86

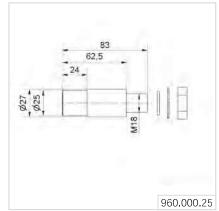


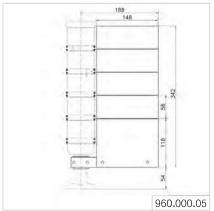
KombiSIGN reflect

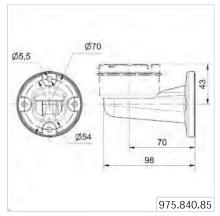
Order no. 861 640 01

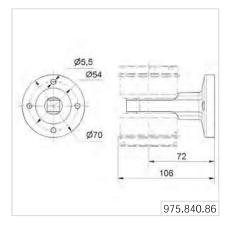


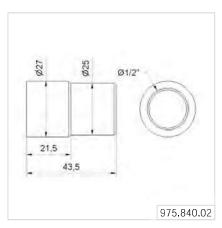


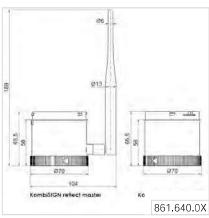












## KombiSIGN 72 - DesignLOOK

Adaptor for single hole mounting Ø 25 mm, M18

Order no. 960 000 25



Bracket for 1-sided mounting, incl. rubber seals

Order no. 960 000 52



Bracket for surface mounting incl. cable gland M16 x 1,5

Order no. 960 000 53

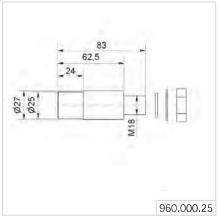


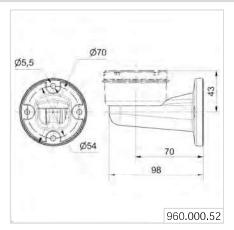
Adaptor for tube mounting Ø 25 mm / 1/2" NPT thread

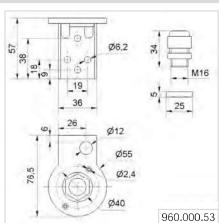
Order no. 975 840 02

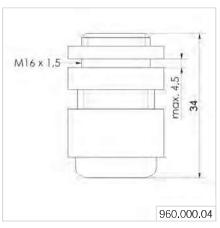


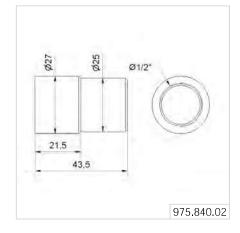
Tube Ø 25 mm, all anodised aluminium 100 mm long 975 845 10 250 mm long 975 840 25 400 mm long 975 840 40 600 mm long 975 840 60 800 mm long 975 840 80 1000 mm long 975 840 03 Technical Diagrams see page 80











#### KombiS/GN 71,72 and 40 - ClassicLOOK

seal, for tube (all anodised aluminium) Ø 25 mm

(not included in assembly)

Order no. 960 000 30



Dimensions (Ø x Height): 70 mm x 117 mm

Material: PA-GF Cable diameter: Max. 14 mm Fixing: Vertical, horizontal, Positioning in 7.5° steps

#### QUICK AND SIMPLE MOUNTING:



Place the lower part of the Foldaway Base in the desired position



Attach the upper part directly onto the signal tower tube. Insert the connection



Place the upper and lower parts together at the



lower parts togethe at the desired angle

Foldaway Base - Signal Tower can be folded away, including rubber | Foldaway Base - Signal Tower can be folded away, including rubber | seal, for tube (all anodised aluminium) Ø 25 mm (not included in assembly)

Order no. 960 009 12



Dimensions (Ø x Height): 70 mm x 85 mm

Material: PA-GF Cable diameter: Max. 8 mm Vertical, horizontal, Fixing: Positioning in 0° and 90°

#### **QUICK AND SIMPLE MOUNTING:**







Attach the tube adaptor directly to the signal tower and introduce the cable



Fix the whole assembly - tube adaptor and signal tower, in the desired position, vertically or horizontally - onto



Place the cover on the other open end

Tube with clamp, Ø 25 mm, 250 mm long, incl. cable gland

Order no. 960 000 18



Base for tube mounting, Ø 25 mm, plastic, incl. rubber seal

Order no. 975 840 90

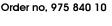


Tube Ø 25 mm, plastic, 45 mm long, for direct mounting on foldaway base (only for KombiSIGN 71 and 72)

Order no. 960 000 31



Base with integrated tube, Ø 25 mm, 110 mm long, plastic, incl. rubber seal





Base for tube Ø 25 mm, metal, incl. rubber seal, recommended for tube lenaths of 400 mm and longer

Order no. 975 840 91



the foldaway base Tube Ø 25 mm, all anodised aluminium

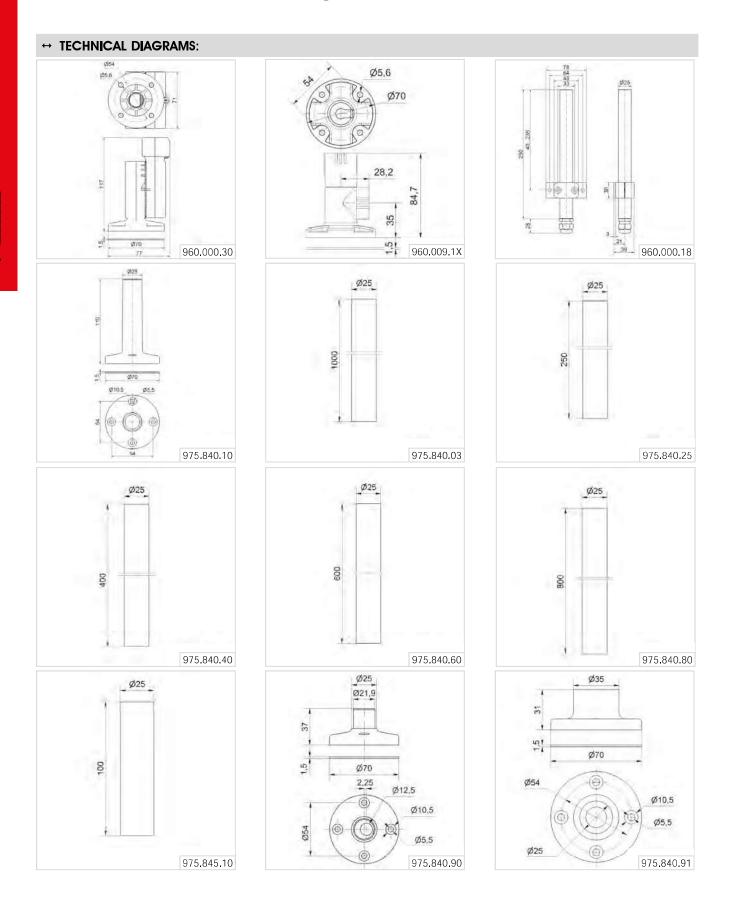
100 mm long 975 845 10 250 mm long 975 840 25 400 mm long **975 840 40** 600 mm long 975 840 60 800 mm long 975 840 80 1000 mm long 975 840 03



Cable gland for surface mounting, M16 x 1.5

Order no. 960 000 04





## KombiSIGN 72 and 40 - DesignLOOK

Base for tube mounting, Ø 25 mm, plastic, incl. rubber seal

Order no. 960 000 50



Base with integrated tube, Ø 25 mm, 110 mm long, plastic, incl. rubber seal

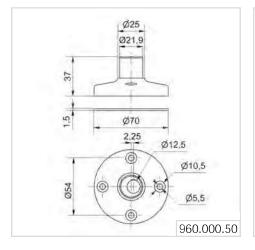
Order no. 960 000 51



Cable gland for surface mounting, M16 x 1.5

Order no. 960 000 04







## KombiSIGN 71, 72, 40 and KOMPAKT 37 - ClassicLOOK

Bracket for tube mounting, incl. cable gland M16  $\times$  1.5

Order no. 960 000 01



Bracket for base mounting, with concealed cable entry, incl. rubber seals

Order no. 960 000 14



Corner fixing bracket (KOMPAKT 37 with Base-mount tube) Order no. 960 000 41



Contact box for cable exit at side, with mounting material and seal, cable gland M16 x 1.5

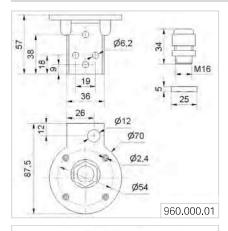
Order no. 975 840 01

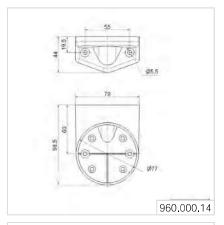


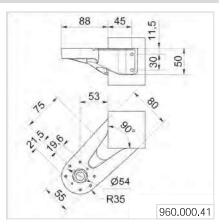
Contact box with magnetic base and cable exit at side cable gland M16 x 1.5

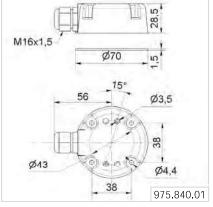
Order no. 975 840 04

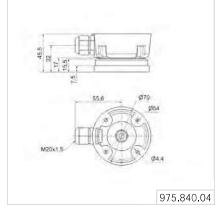












# KombiSIGN 72, 40 and KOMPAKT 37 - DesignLOOK

Bracket for tube mounting, incl. cable gland M16 x 1.5

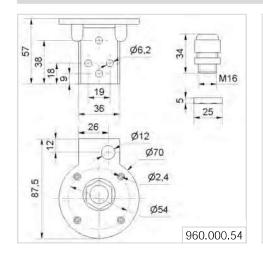
Order no. 960 000 54

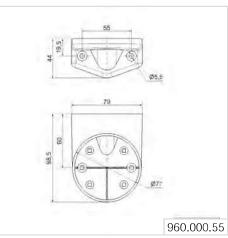


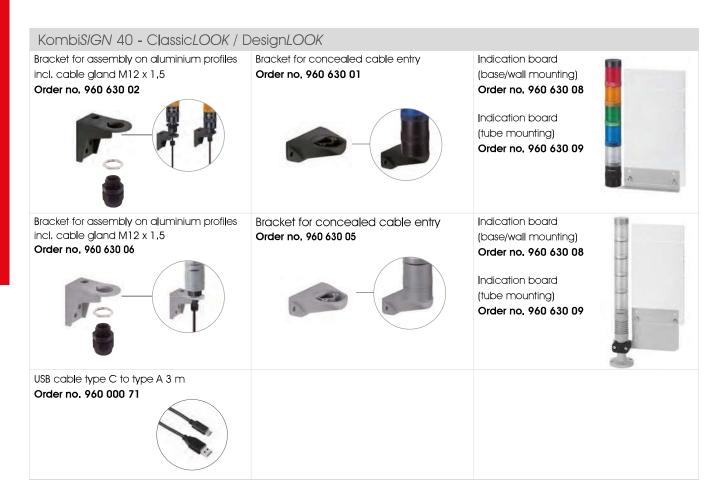
Bracket for base mounting, with concealed cable entry, incl. rubber seals

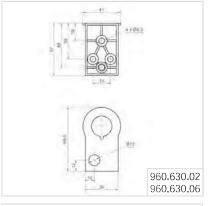
Order no. 960 000 55

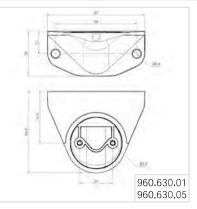


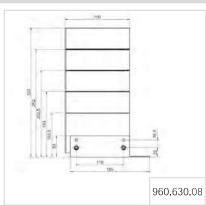














## KOMPAKT 37 - ClassicLOOK

Extension tube
Order no. 960 698 02



Base with integrated tube Order no. 960 698 01

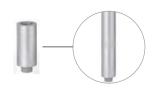


Bracket for base mounting Order no. 960 698 05



KOMPAKT 37 - DesignLOOK

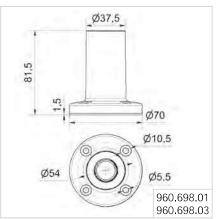
Extension tube
Order no. 960 698 04

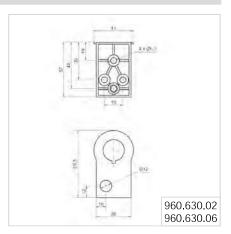


Base with integrated tube
Order no. 960 698 03









#### **eSIGN**

Cable 5 m with M12 connector and plug Order no. 960 000 46\*\* Cable 5 m with M12 plug

Order no. 960 000 47\*\*

USB cable type C to type A 0.5 m Order no. 960 000 69\*\*

USB cable type C to type A 1.8 m Order no. 960 000 70\*\*

Order no. 960 000 18

Tube with clamp, Ø 25 mm,

250 mm long, incl. cable gland



Base with integrated tube, Ø 25 mm, 110 mm long, plastic, incl. rubber seal

Bracket for 1-sided mounting

Order no. 960 000 65\*

Order no. 960 000 64\*



Base for tube mounting, Ø 25 mm, plastic, incl. rubber seal

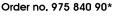
Tube Ø 25 mm, all anodised aluminium

Technical Diagrams see page 80

100 mm long 975 845 10

250 mm long 975 840 25

600 mm long 975 840 60





Base for tube Ø 25 mm, metal, incl. rubber seal, recommended for tube lengths of 400 mm and longer Order no. 975 840 91



Bracket for tube mounting, incl. cable gland M16 x 1.5 Order no. 960 000 01



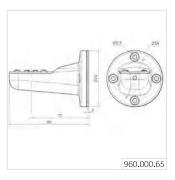
Corner fixing bracket

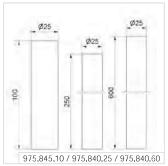
Order no. 960 000 41



\* = UL Type 4X and IP 66/69K (see instructions for exact details)

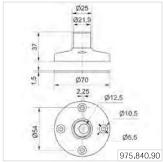
\*\* = Standard 24 V

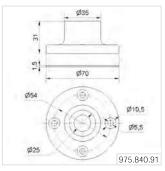


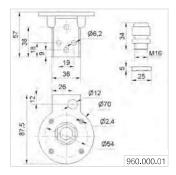














# DeSIGN 42

Surface housing single

Order no. 975 109 02

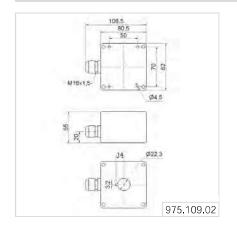


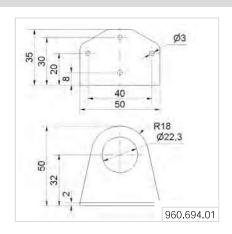
Bracket, stainless steel (Protection rating IP33)

Order no. 960 694 01



## **↔ TECHNICAL DIAGRAMS:**





# FlatSIGN Fixing kit Order no. 975 691 01

# CO<sub>2</sub> Traffic Light Fixing bracket

Order no. 975 883 41



