

Stacklights & signal beacons

Pilot devices



Pilot devices
Stacklights
Signal beacons



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Stacklights

- Fast mounting of signal elements using bayonet fixing
- Easy changing of bulbs for each module without tools
- Up to 10 light elements possible with 2-sided mounting bracket
- Flexibility of signal element combination
- Flashing light elements can be mounted in each module
- Up to 5 flashing light elements possible
- High protection rating optical and audible signal elements with IP 54, UL Type 2, 5
- LED elements for long life

Signal beacons

- Rugged construction
- High protection rating IP 65, UL Type 2, 5, NEMA 4X
- Cap consists of high impact polycarbonate (up to 15 sq. ft.).
- Bulb change via inside of control box
- Available with LED bulbs.



Simple mounting with quick fix system

Each module is equipped with bayonet mounting with an integral contact system. The modules are fastened together by aligning the corresponding white marks; with a gentle twist, they are locked into place.

Stacklights Optical modules Selection



KL70-401G



KL70-302R



LED element

Light element

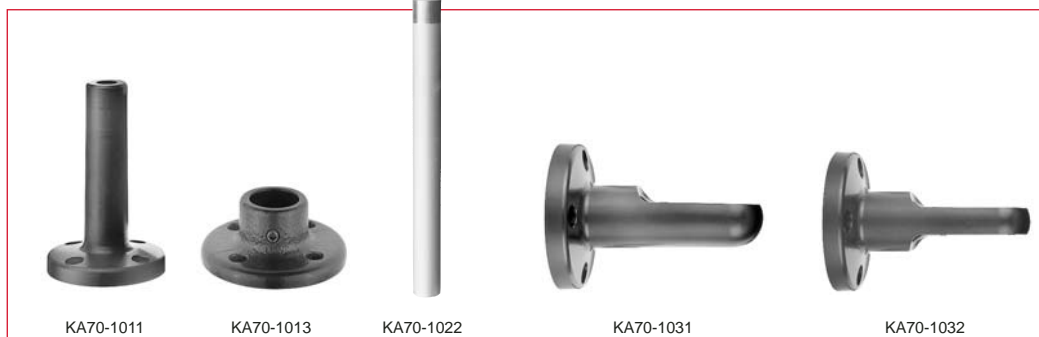
	Voltage range	Catalog number	List price
Permanent light, 12 – 240VAC/DC (Bulb not included)			
Red		KL70-401R	\$ 36
Green		KL70-401G	
Yellow		KL70-401Y	
Blue		KL70-401L	
Clear		KL70-401C	
Flashing light, 24VAC/DC (Bulb not included)			
Red		KL70-302R	100
Green		KL70-302G	
Yellow		KL70-302Y	
Blue		KL70-302L	
Clear		KL70-302C	
Strobe light, 24VDC			
Red		KL70-203R	165
Green		KL70-203G	
Yellow		KL70-203Y	
Blue		KL70-203L	
Clear		KL70-203C	
Flashing light, 115VAC/DC (Bulb not included)			
Red		KL70-312R	100
Green		KL70-312G	
Yellow		KL70-312Y	
Blue		KL70-312L	
Clear		KL70-312C	
Strobe light, 115VAC			
Red		KL70-113R	155
Green		KL70-113G	
Yellow		KL70-113Y	
Blue		KL70-113L	
Clear		KL70-113C	
Flashing light, 230VAC/DC (Bulb not included)			
Red		KL70-322R	100
Green		KL70-322G	
Yellow		KL70-322Y	
Blue		KL70-322L	
Clear		KL70-322C	
Strobe light, 230 VAC			
Red		KL70-123R	155
Green		KL70-123G	
Yellow		KL70-123Y	
Blue		KL70-123L	
Clear		KL70-123C	
LED permanent light, 24VAC/DC			
Red		KL70-305R	135
Green		KL70-305G	
Yellow		KL70-305Y	
LED flashing light, 24VAC/DC			
Red		KL70-306R	140
Green		KL70-306G	
Yellow		KL70-306Y	
LED rotating light, 24VAC/DC			
Red		KL70-307R	140
Green		KL70-307G	
Yellow		KL70-307Y	

Bulbs for stacklight K70 (7W max)

	Voltage range	Catalog number	List price
Bulb BA15d, 42mm			
24V, 5W		KLB24	\$ 8
115V, 5W		KLB1	
230V, 5W		KLB2	

Stacklights Accessories

Pilot Devices
Stacklights
Signal Beacons



Audible modules

Voltage range	Catalog number	List price
Buzzer element: continuous pulse tone, 85dB 230VAC 24VAC/DC 115VAC/DC	KB70-1201 KB70-3001 KB70-3101	\$ 115 95 115
Siren element: 8 different tones adjustable volume, 100dB 24VAC/DC 115VAC/DC 230VAC/DC	KS70-3004 KS70-1104 KS70-1204	145 155 155
Siren element: continuous tone, 108dB 24VDC	KS70-2002	100
Siren element: 7 different tones adjustable volume, 100dB 24VDC	KS70-2004	145

Terminal elements ^①

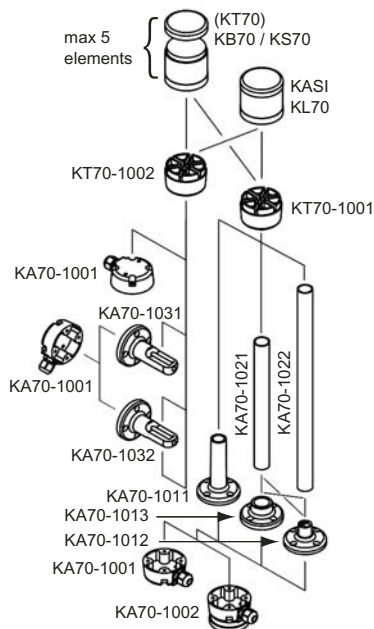
Voltage range	Catalog number	List price
For tube mounting For bracket or base	KT70-1001 KT70-1002	\$ 40

Special parts

Item	Catalog number	List price
Contact box Cable exit at side Magnetic base	KA70-1001 KA70-1002	\$ 23 65
Base with tube D=25mm L=110mm	KA70-1011	33
Base for tube D= 25mm, plastic D= 25mm, metal	KA70-1012 KA70-1013	15 32
Tube D= 25mm L=250mm D= 25mm L=400mm	KA70-1021 KA70-1022	20 27
Bracket 1-sided mounting 2-sided mounting	KA70-1031 KA70-1032	20

AS-Interface module

Voltage range	Catalog number	List price
18.5 – 31.6 VAC/DC 18.5 – 31.6 VAC/DC (for external voltages)	KASI-4101 KASI-4102	\$ 300



① Each signal tower assembly must contain a terminal element.

Signal beacons Selection



KSB-401Y

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Light element

	Voltage range	Catalog number	List price
Permanent light, 12 – 240VAC/DC (Bulb not included)			
Red		KSB-401R	\$ 55.00
Green		KSB-401G	
Yellow		KSB-401Y	
Blue		KSB-401L	
Clear		KSB-401C	
Strobe light, 24VDC			
Red		KSB-203R	180.00
Green		KSB-203G	
Yellow		KSB-203Y	
Blue		KSB-203L	
Clear		KSB-203C	
Strobe light, 115 VAC			
Red		KSB-113R	155.00
Green		KSB-113G	
Yellow		KSB-113Y	
Blue		KSB-113L	
Clear		KSB-113C	
Strobe light, 230 VAC			
Red		KSB-123R	155.00
Green		KSB-123G	
Yellow		KSB-123Y	
Blue		KSB-123L	
Clear		KSB-123C	
LED Permanent light, 24 VAC/DC			
Red		KSB-305R	190.00
Green		KSB-305G	
Yellow		KSB-305Y	
LED Flashing light, 24 VAC/DC			
Red		KSB-306R	195.00
Green		KSB-306G	
Yellow		KSB-306Y	
LED Rotating light, 24 VAC/DC			
Red		KSB-307R	195.00
Green		KSB-307G	
Yellow		KSB-307Y	

Bulbs for signal beacons (10W max)

	Voltage range	Catalog number	List price
Bulb BA15d, 52mm			
12V, 7W		KSBB12	\$ 8.00
24V, 7W		KSBB24	
115V, 7W		KSBB1	
230V, 7W		KSBB2	

Stacklights

Construction materials

- Lenses - transparent polycarbonate
- Terminal elements – high impact black polyamide
- Bulbs
 - BA 15d, max. 42mm, max 5W
 - KLB24, 24V, 208mA
 - KLB1, 115V, 45mA
 - KLB2, 230V, 22mA
- Terminal element
 - Connecting element with sealing cover for tube mounting or surface mounting
- Permanent light
 - KL70-401 ★ - 12-240 VAC/VDC
- Blinking light
 - KL70-302 - 24VAC/VDC, 100mA
 - KL70-312 - 115VAC/VDC, 20mA
 - KL70-322 - 230VAC/VDC, 10mA
- Flashing light
 - KL70-203 - 24VDC/125mA
 - KL70-113 - 115VAC/20mA
 - KL70-123 - 230VAC/15mA
- LED Permanent light
 - KL70-305 - 24VAC/VDC, 60mA
- LED Blinking light
 - KL70-306 - 24VAC/VDC, 40mA
- LED Rotating light
 - KL70-307 - 24VAC/VDC, 70mA
- Buzzer element
 - KB70-3001 - 85db, 24VAC/VDC, 25mA
 - KB70-3101 - 85db, 115VAC/VDC, 25mA
 - KB70-1201 - 85db, 230VAC, 25mA
- Siren element
 - KS70-2002 - 108db, 24VDC, 100mA
 - KS70-3004 - 100db, 24VAC/VDC, 80mA
 - KS70-1104 - 100db, 115VAC, 40mA
 - KS70-1204 - 100db, 230VAC, 40mA
 - KS70-2004 - 100db, 24VDC, 80mA

Cleaning

Clean the product from the outside with a light, non-scouring cleaning agent. Never use abrasive or diluting agents and never use benzine.

Signal beacons

Features

- Vandal-proof construction withstands every mechanical and natural challenge both indoors and outdoors
- High protection rating IP65
- Cap consists of high impact polycarbonate (up to 20J).
- Bulb change can be accomplished in seconds through lamp holder with bayonet

Function

Signal beacons produce visible (blinking, flashing or permanent light) or audible signals (buzzer, siren) via electrical signals. Signal beacons are approved according to EN 60598 / VDE 0711 T1.

Safety instructions

- Wiring must be installed by a qualified electrician.
- Turn off the power supply before connecting the signal beacon
- Only operate signal beacons when completely assembled.
- Observe the correct nominal voltage.
- The volume of signal element can cause damage to hearing when used at close quarters

Technical specifications

- Dimensions: 68mm x 96.5mm (diameter x height)
- Housing: PC/ABS-blend, high impact, black
- Cap: Polycarbonate, transparent; shock resistance 20J according to EN 50014
- Mounting: Drilled hole \varnothing 37mm (PG 29)
- Terminal: Screw, M3; Pull relief; Flex radial or axial laid; Contact - voltage proof according to VDE

Permanent light

- Operating voltage: 12 - 240V
- Bulb socket: B15d, 10 W max.
- Bulb change: Bayonet
- Current consumption: depends on bulb (bulb not included with assembly)
- Starting current: depends on bulb (bulb not included with assembly)

LED Model

- Permanent light: 24 VAC/VDC; 115VAC; 230VAC
- Blinking light: 24 VAC/VDC; blink frequency ca. 1 Hz
- Rotating light: 24 VAC/VDC; rotation frequency ca. 120 U/min
- Current consumption:
 - 24VDC: Permanent light, 60mA; Blinking light, 40mA; Rotating light, 70mA
 - 115VAC: 30mA
 - 230VAC: 30mA
- Starting current: <500mA

Flashing light

- Flash frequency: ca. 1 Hz
- Flash energy: 2W
- Operating voltage: 12VDC, 24VDC, 115VAC, 230VAC
- Current consumption:
 - 12VDC: 200mA
 - 24VDC: 125mA
 - 115VAC: 20mA
 - 230VAC: 15mA
- Starting current
 - 24VDC: <0.5A
 - 115VAC: <0.5A
 - 230VAC: <0.25A

Bulbs

- 12V, 7W
- 24V, 7W
- 115V, 7W
- 230V, 7W

Technical data

Signal tower with AS-interface element

Description

Signal towers KombiSIGN 50 and 70 with AS-interface element are capable of total communication: By simple integration of an AS-interface element, the actuators are connected to the networking system actuator-sensor interface; this considerably reduces complex wiring. This element is to be mounted as the lowermost element in the signal tower just like a light element.

Technical specifications

Item	AS-Interface element	AS-Interface element with additional external voltage
Dimensions	KS70: 67mm x 67mm	KS50: 52mm x 67mm
Number of signal elements	4	4
Type of signal elements	Flashing light element LED element Buzzer element Siren element (The total consumption of the single elements must not exceed 200 mA)	Permanent light element Flashing light element ① LED element Buzzer element Siren element ①
IO-Code	8	8
ID-Code	F	F
Power supply	through bus conduction	through bus conduction
Operating voltage	18.5V – 31.6V	18.5V – 31.6V
Current consumption	210mA	75mA ① / 50mA ②
Reverse battery protection	integrated	integrated
Watchdog	integrated	integrated
Terminals	4, electronic	4, relays
On-load voltage	through bus conduction	additional external voltage: 10V – 120V = ① 10V – 30V = ② 10V – 230V –
Current carrying cap. Σ I _{max}	200mA	1.5A
Short current/overload protection	integrated	fuse M 1.6A
Working temperature	-20° – +50°C	-20°C – +50°C
Protection rating	IP 54	IP 54

① Valid for KombiSIGN 70

② Valid for KombiSIGN 50

Technical data

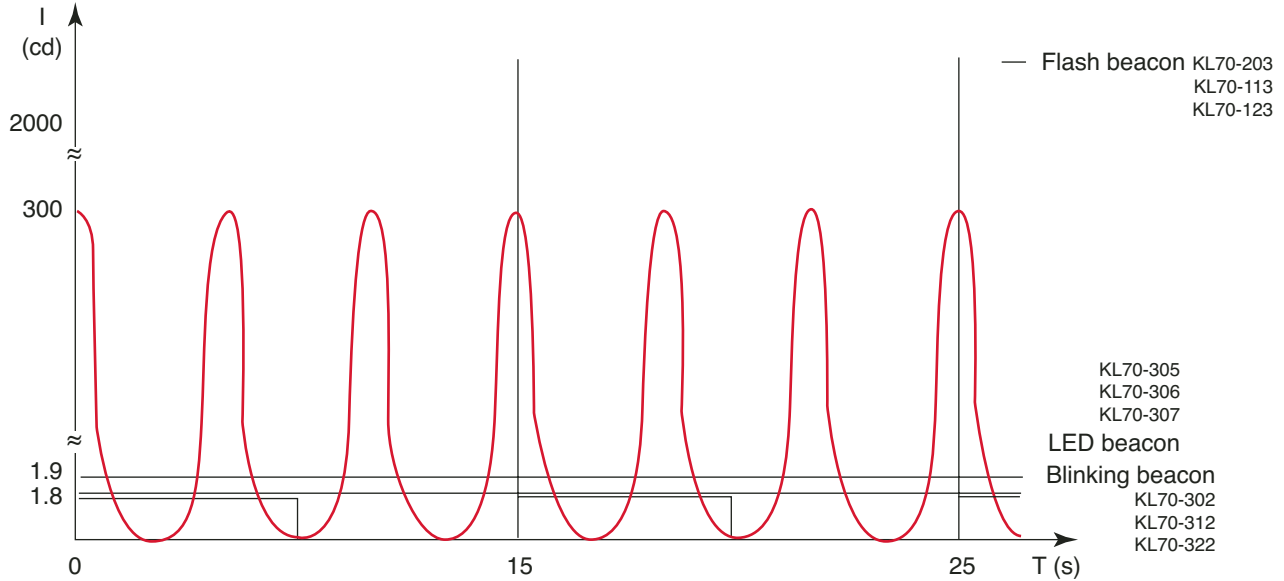
Signal beacons & stacklights

Light intensity of LED

Details pertaining to beacons with LED are based on a standing from December, 1999. Component-related improvements are continually developing; please inquire as to the current light intensity should the need arise.

Light intensity of beacons with bulbs

Light intensity pertains to the bulbs used by ABB; the use of other bulbs may lead to discrepancies.



Optical signals

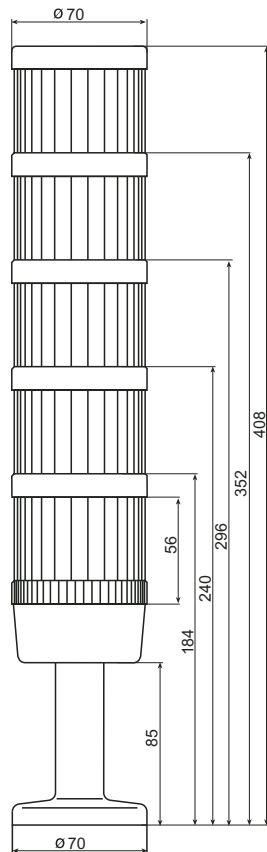
Signal tone	Meaning
Red	Extreme danger hazardous conditions
Yellow	Beware / dangerous conditions imminent
Green	Normal conditions
Blue	Conditions requiring defined action
White / Clear	No particular meaning

Audible signals

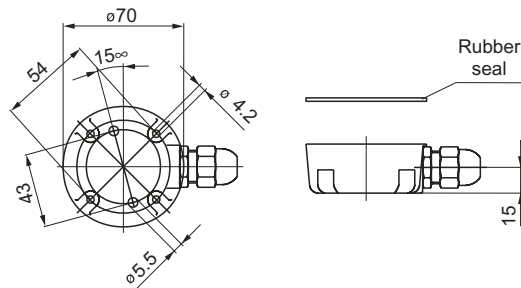
Signal tone	Meaning
Multi-tone Scale in differing frequencies (various high/low frequencies) with regular, cyclical intervals	Extreme danger Immediate action
Two-tone Scale in differing frequencies (one high, one low frequency) with regular, cyclical intervals	Extreme danger Immediate action
Modulated tone Permanent tone with graduated decrease and increase of sound frequencies	Danger Immediate action
Intermittent tone Regular intervals between on and off-cycle	Danger Immediate action
Linear tone Permanent tone in specific frequency	Safety

Approximate dimensions ^① Stacklights

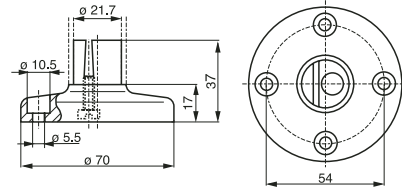
Stacklights



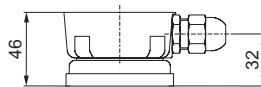
Contact box for cable exit at side



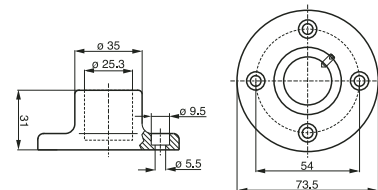
Base for tube, plastic



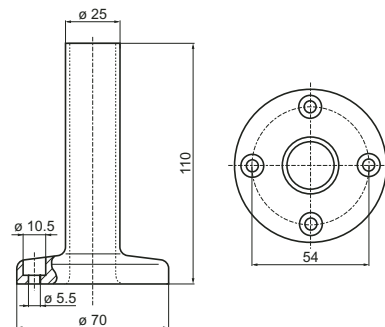
Contact box with magnetic base



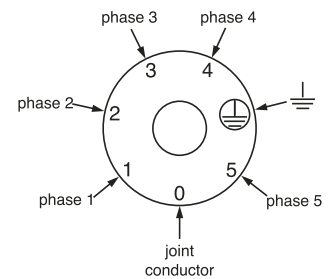
Base for tube, metal



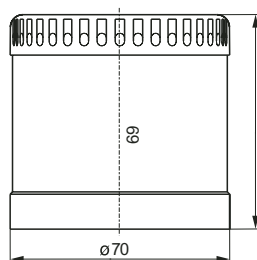
Base with integrated tube



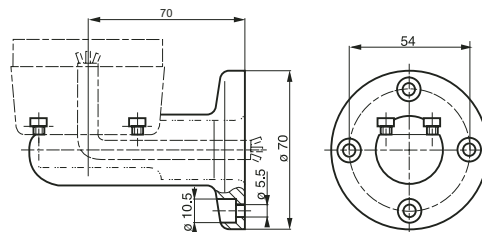
Connection plan



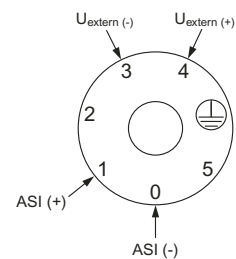
Module



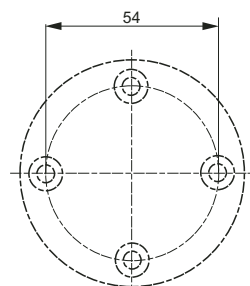
Bracket 1-sided mounting



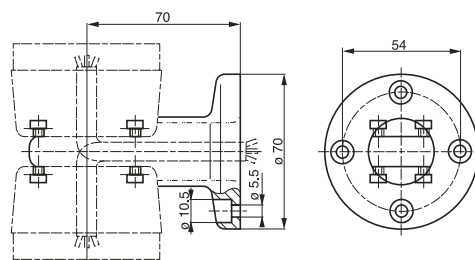
Connection plan with AS Interface module



Drilling plan for stacklights



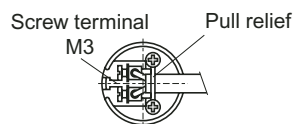
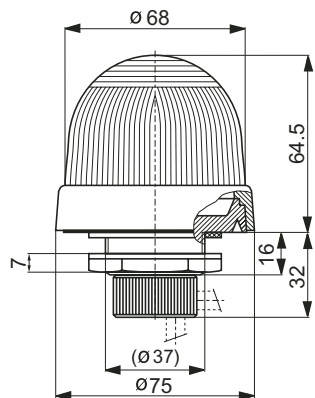
Bracket 2-sided mounting



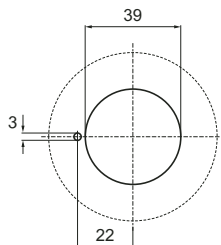
^① All dimensions in millimeters.

Approximate dimensions [Ⓢ] Signal beacons

Signal beacons



Drilling plan for signal beacons



[Ⓢ] All dimensions in millimeters.

