Pilot devices
Stacklights
Signal beacons

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.

Spec Tech Industrial 203 Vest Ave. Valley Park, MO 63088 Phone: 888 SPECTECH
Fax: 636 537-1405 www.spectechind.com

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

Bulbs for stacklight K70 (7W max)

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

Stacklights
Accessories

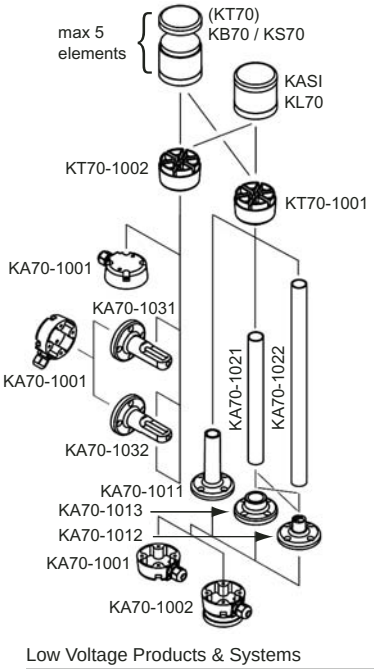
KB70-3101

KT70-1001

KA70-1001

KA70-1002

KA70-1012



KA70-1011 KA70-1013 KA70-1022 KA70-1031 KA70-1032

Audible modules

Voltage range	Catalog number	List price
Buzzer element: continuous pulse tone, 85dB		
230VAC	KB70-1201	$ 115
24VAC/DC	KB70-3001	95
115VAC/DC	KB70-3101	115
Siren element: 8 different tones adjustable volume, 100dB		
24VAC/DC	KS70-3004	145
115VAC/DC	KS70-1104	155
230VAC/DC	KS70-1204	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	KT70-1001	
For bracket or base	KT70-1002	$ 40

Special parts

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

AS-Interface module

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

① Each signal tower assembly must contain a terminal element.

Signal beacons
Selection

KSB-40IY

Light element

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

Bulbs for signal beacons (10W max)

Voltage range	Catalog number	List price
Bulb BA15d, 52mm		
12V, 7W	KSBB12	
24V, 7W	KSBB24	**$ 8.00**
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 ø 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

8

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 ID-Code	8 F	8 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 Imax	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

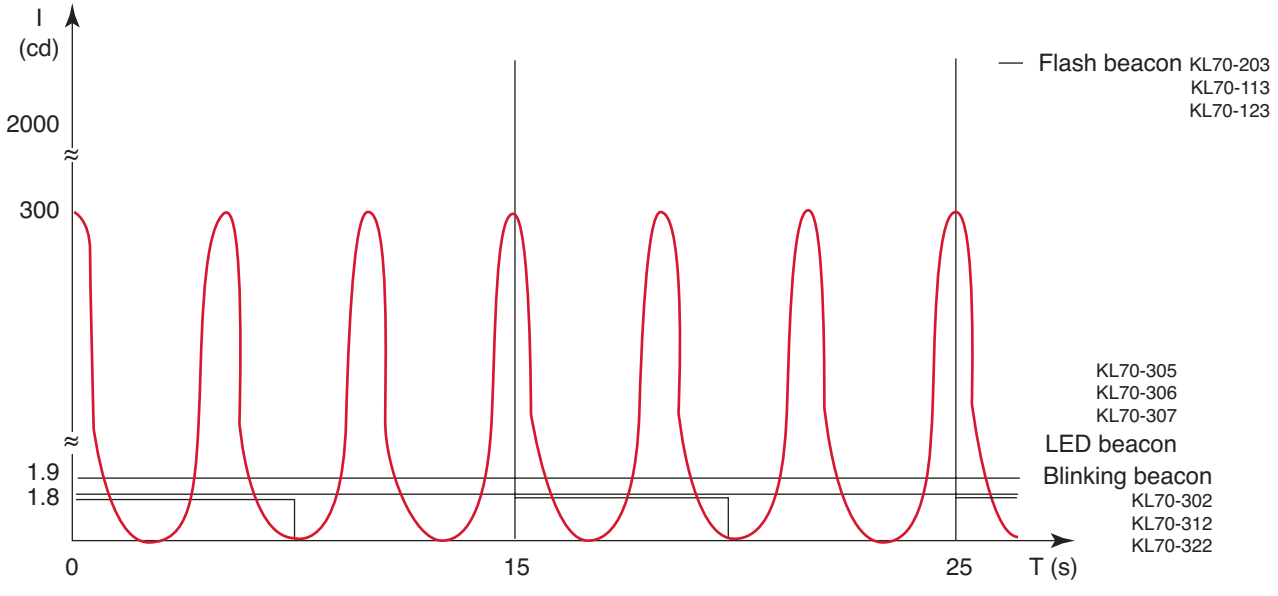
① Valid for KombiSIGN 70
② Valid for KombiSIGN 50

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

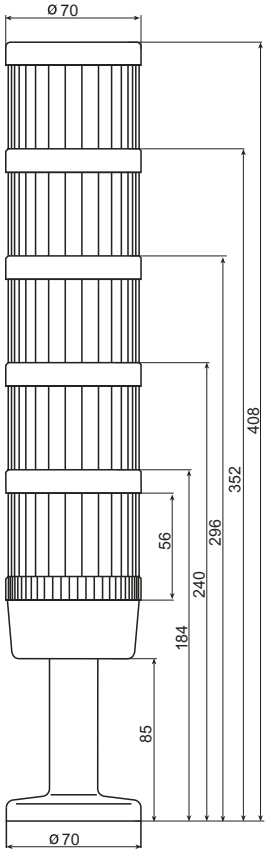
Signal tone	Meaning
Red	Extreme danger hazardous conditions
Yellow	Beware / dangerous conditions imminent
Green	Normal conditions
Blue	Conditions requiring defined action
White / Clear	No particular meaning

Audible signals

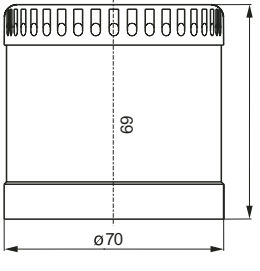
Signal tone	Meaning
Multi-tone Scale in differing frequencies (various high/low frequencies) with regular, cyclical intervals	Extreme danger Immediate action
Two-tone Scale in differing frequencies (one high, one low frequency) with regular, cyclical intervals	Extreme danger Immediate action
Modulated 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

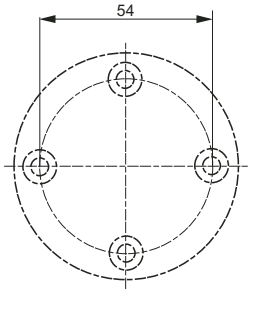
Stacklights



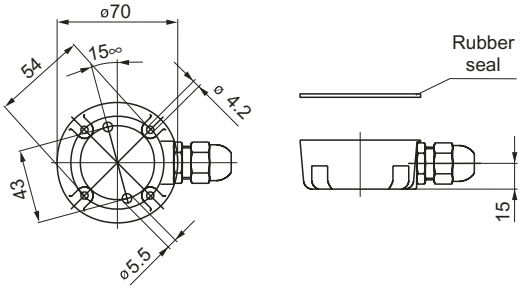
Module



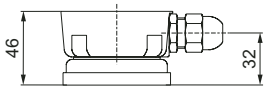
Drilling plan for stacklights



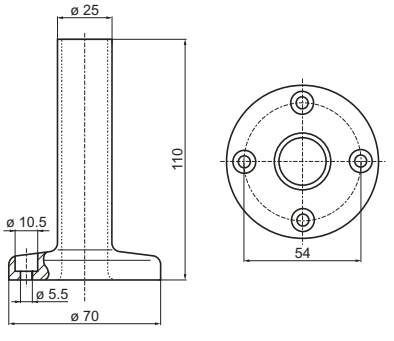
Contact box for cable exit at side



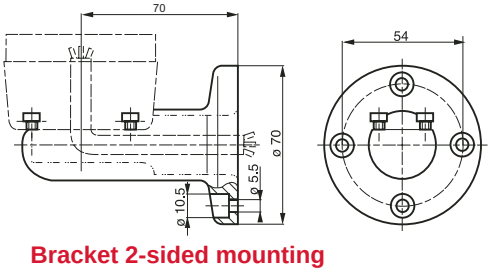
Contact box with magnetic base



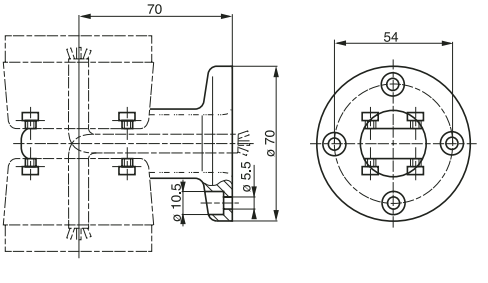
Base with integrated tube



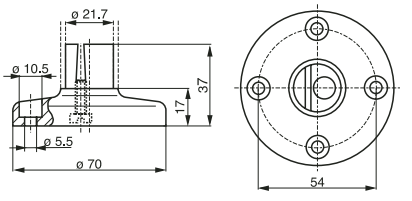
Bracket 1-sided mounting



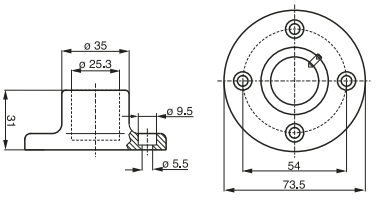
Bracket 2-sided mounting



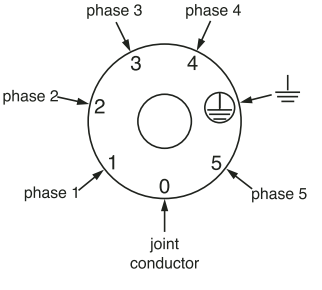
Base for tube, plastic



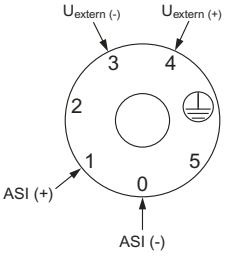
Base for tube, metal



Connection plan



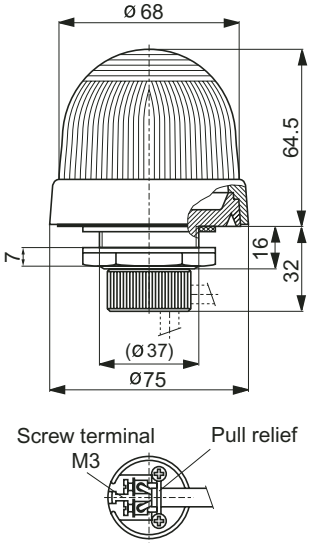
Connection plan with AS Interface module



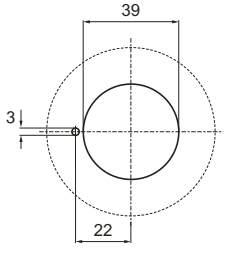
① All dimensions in millimeters.

Approximate dimensions [1]
Signal beacons

Signal beacons



Drilling plan for signal beacons



[1] All dimensions in millimeters.

Notes