Visual Indicators and Pilot Devices

Combine up to seven signal units!
Guaranteed high visibility!
Simple bayonet fixing system!

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Why should I use Visual Indicators and Pilot Devices?

Visual indication is a key element in the design and implementation of machine safeguarding solutions. Color choice and arrangement is described in various North American standards including ANSI, CSA and OSHA 1910. Visual indication also fulfills the requirements of the third level of the "Hierarchy of Safeguarding Controls".

Most Effective → Least Effective		
1 Elimination or Substitution	• Eliminate human interaction in the process • Eliminate pinch points (increase clearance) • Automated material handling	
2 Engineering Controls *(Safeguarding Technology)*	• Mechanical hard stops • Presence sensing devices • Two-hand controls	• Barriers • Interlocks
3 Awareness Means	• Lights, beacons and strobes • Computer warnings • Restricted space painted on floor	• Signs • Beepers • Horns • Labels
4 Training and Procedures *(Administrative Controls)*	• Safe job procedures • Safety equipment inspections • Training	• Lockout
5 Personal Protective Equipment	• Safety glasses • Face shields	• Ear plugs • Gloves

Illuminate Modular Visual Stack Light Indicators

Ultra bright LEDs and an accurate illumination system for each unit guarantees high visibility. By means of a simple manual operation, the bayonet fixing system makes it possible to combine up to seven signal units and simultaneously connect them electrically.

   Illuminate 70mm stack lights are available in red, yellow, green, blue and white with either LED or incandescent AC or DC elements.

Applications

Visual indication to show different conditions for machine safe guarding solutions.

Features

- Simple manual bayonet system makes it possible to connect up to seven signal units both electrically and mechanically with one easy action
- Ultra bright LEDs or incandescent AC or DC elements
- Low current consumption
- Long duration
- High protection class (IP64) — if correctly assembled with cap and gasket — according to EN 60068-2-6
- Can be used as a single multicolor lamp or as an alternative to the traditional three color units with no changes in the electric installation required
- Resistant to vibrations

Regulations and Standards

Illuminate is designed and approved in accordance with appropriate standards. Examples of such are: EN 60947.5.1, En 60073, EN 60529, EN 60068-2-6, EN 457, EN 981 and IEC 536.

Approvals

c(UL)us

Illuminate Technical Data

Manufacturer.. JOKAB SAFETY
Ordering Data/Article Numbers....................see page 14:7
Color
Fittings..black
Light Units.............................. red, yellow, green, blue, white
Material
Visual Module, Cable Unit,
Cap and Base... polycarbonate
Tube............................anodized aluminum or polycarbonate
Operating Temperature.............................. -20°C to +50°C
(12 V 40°C)
Voltage..250 V max
Resistance to Vibrations....................2 g min (10 - 150 Hz)
(according to EN 60068-2-6)
Bulb...................bayonet connection type BA 15d - 5W max
Number of
Combinable Units.............each cable unit can be combined
with up to seven modular units
(for all indicators)
Connections.......................screw clamps with binding post
(max gauge 1.5mm²)
Connection ID Code
C..common to all signal units
Numbers 1 to 7................................ each single module from
the base to the top
Compliance
Low Voltage......................................EEC regulation 2006/95
Electromagnetic Compatibility.............EEC regulation 89/336
Protection Class...IP 64
*(according to EN 60529 if correctly
assembled with cap and gasket)*

LED and Filament Replacement Bulbs

LED Bulb BA 15d

Ordering Data
Article Numbers..............see page 14:8
Current Consumption
24VDC...50mA
115VAC...18mA
Colors.....red, yellow, green, blue, white
Duration.....................over 25,000 rated
working hours
Maintenance
or Service Costs...........................none
Resistance to
Impact/Vibrations................... excellent

Filament Bulb BA 15d

Ordering Data
Article Numbers..............see page 14:8
Current Consumption
24V...5W
130VAC..5W
Duration.......................over 2,000 rated
working hours
Resistance to
Impact/Vibrations.................. excellent
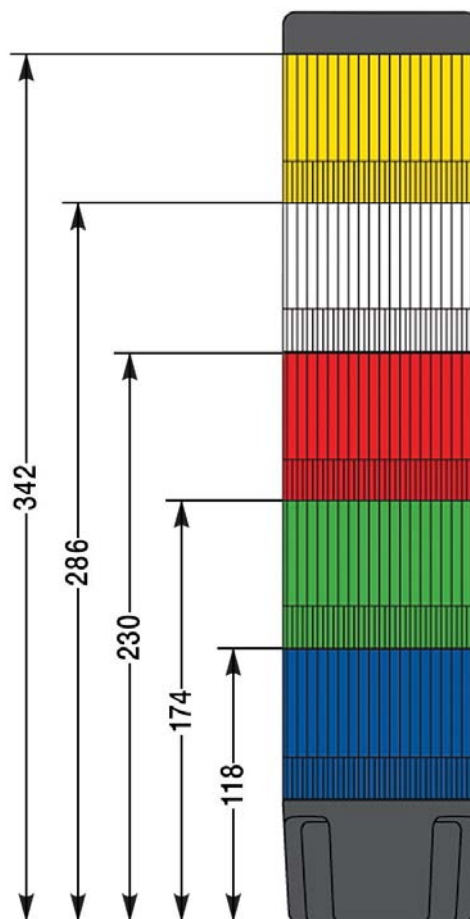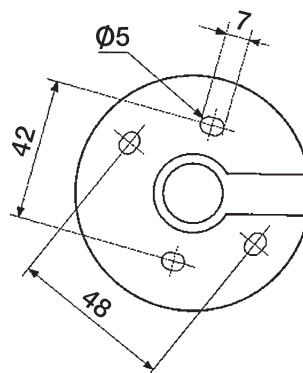
*Simple manual bayonet system makes
it possible to connect up to seven signal
units both electrically and mechanically
with one easy action.*

JOKAB SAFETY   www.jokabsafetyna.com   1-888-282-2123

Illuminate Steady Light Unit

Ordering Data
Article Numbers.............................see page 14:7

Illumination.......................... LED or filament bulb

Bulb Type................................BA 15d - max 5 W
(with bayonet connection)

Current Consumption
With LED Bulbs............................... 24 V < 50 mA
115 V < 18 mA
240 V < 17 mA
With 5 W Filament Bulbs...............24 V < 210 mA
115 V 43 mA
240 V 22 mA

Voltage................................12 V to 240 V DC/AC

Color...................... red, yellow, green, blue, white
(blue shown at right)

Illuminate Wiring Unit

Ordering Data
Article Numbers.............................see page 14:8

Connections.......screw clamps with binding post

Max Gauge..1.5mm²

Connection ID Code
C.................................common to all signal units
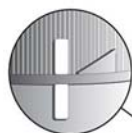Numbers 1 to 7................each single module from
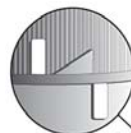the base to the top

Illuminate Modular Assembly

Place signalling unit onto terminal unit.
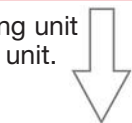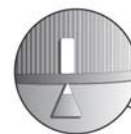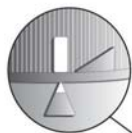
Align reference marks.

Then twist clockwise until they click locked.

Follow the same steps as above to add more signalling units.

On the last unit mount the cap.

To fix the extension tube, insert it into the relevant hole and tighten the screw on the side.

To make the connections, reach the terminal board by prying the black disc.

Connect to terminals.

Colored units are numbered from base to top.

Place the terminal board back into position by aligning the reference marks and pressing inward.
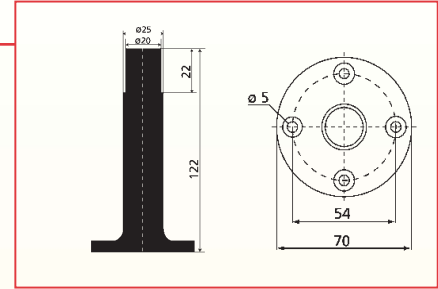
Illuminate Mounting Fittings

Designation...........................Mounting Base with
Integrated Tube
Ordering Data
Article Numbers............................. see page 14:8
Material..................................black polycarbonate

Designation...........................Mounting Base with
90º Tube
Ordering Data
Article Numbers............................. see page 14:8
Material..................................black polycarbonate
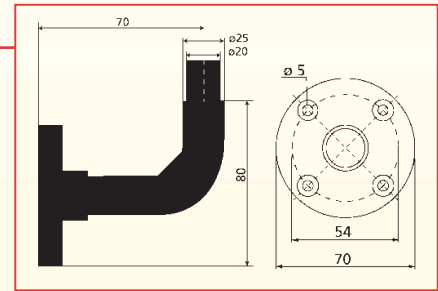
Designation..........................Panel Mount Adapter
Ordering Data
Article Numbers............................. see page 14:8
Material..................................black polycarbonate

*Panel
Surface*
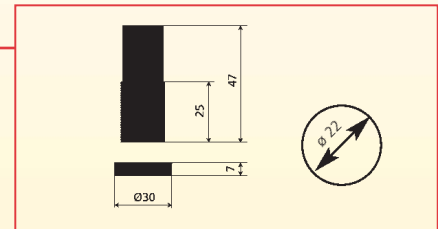
Designation....................................Extension Tube
Ordering Data
Article Numbers............................. see page 14:8
Material..................................black polycarbonate
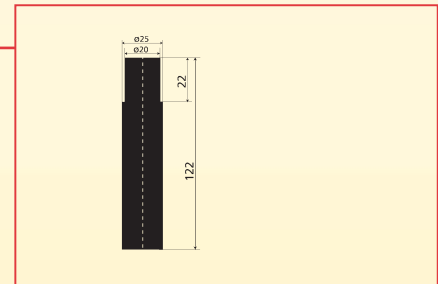
Component List - Illuminate

Designation	Article Number	Description
Steady Light Unit - Red	50-019-02	70mm permanent IP64 polycarbonate bayonet style stack light, w/o bulb.
Steady Light Unit - Yellow	50-019-03	70mm permanent IP64 polycarbonate bayonet style stack light, w/o bulb.
Steady Light Unit - Green	50-019-04	70mm permanent IP64 polycarbonate bayonet style stack light, w/o bulb.
Steady Light Unit - Blue	50-019-05	70mm permanent IP64 polycarbonate bayonet style stack light, w/o bulb.
Steady Light Unit - White	50-019-06	70mm permanent IP64 polycarbonate bayonet style stack light, w/o bulb.

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Component List - Illuminate

Designation	Article Number	Description
LED Bulb - Red	50-019-07	24VDC BA15d for 70mm stack light. Over 25,000 rated working hours, 50mA current consumption.
LED Bulb - Yellow	50-019-08	24VDC BA15d for 70mm stack light. Over 25,000 rated working hours, 50mA current consumption.
LED Bulb - Green	50-019-09	24VDC BA15d for 70mm stack light. Over 25,000 rated working hours, 50mA current consumption.
LED Bulb - Blue	50-019-10	24VDC BA15d for 70mm stack light. Over 25,000 rated working hours, 50mA current consumption.
LED Bulb - White	50-019-11	24VDC BA15d for 70mm stack light. Over 25,000 rated working hours, 50mA current consumption.
LED Bulb - Red	50-019-12	115VAC BA15d for 70mm stack light. Over 25,000 rated working hours, 18mA current consumption.
LED Bulb - Yellow	50-019-13	115VAC BA15d for 70mm stack light. Over 25,000 rated working hours, 18mA current consumption.
LED Bulb - Green	50-019-14	115VAC BA15d for 70mm stack light. Over 25,000 rated working hours, 18mA current consumption.
LED Bulb - Blue	50-019-15	115VAC BA15d for 70mm stack light. Over 25,000 rated working hours, 18mA current consumption.
LED Bulb - White	50-019-16	115VAC BA15d for 70mm stack light. Over 25,000 rated working hours, 18mA current consumption.
Filament Bulb	50-019-17	24V/5W BA15d for 70mm stack light. 2,000 rated working hours.
Filament Bulb	50-019-18	130VAC/5W BA15d for 70mm stack light. 2,000 rated working hours.
Wiring Terminal with Top Cover Seal	50-019-19	Base unit for 70mm stack light, with Top Cover Seal 7 screw clamp terminals with binding post for power and 1 for common. IP64, black.
Mounting Base with Integrated Tube	50-019-20	Mount with 100mm pole for 70mm stack light. Black polycarbonate, 4 fixing screw holes.
Mounting Base with 90º Tube	50-019-21	Mount with 90 degree pole for 70mm stack light. Black polycarbonate, 4 fixing screw holes.
Panel Mount Adapter	50-019-22	Panel mount pole for 70mm stack light. Black polycarbonate for 22mm holes.
Extension Tube	50-019-65	100mm extension tube for 70mm stack light. Black polycarbonate.