

# AUTOMAX

devices for the automation industry

GENERAL CATALOGUE



 **SIRENA**

MORE THAN  
BRIGHT IDEAS





# AUTOMAX

devices for the automation industry

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## INTRODUCTION



**S**irena, leader in the visual and acoustic signaling industry, is aware of the continuous manufacturing renovation process characterizing the industrial world. For this reason, two different ranges of stacklights have been developed, especially engineered for installation on machines and in industrial sites: **TWS** modular stacklights and **LUXOR** towers.

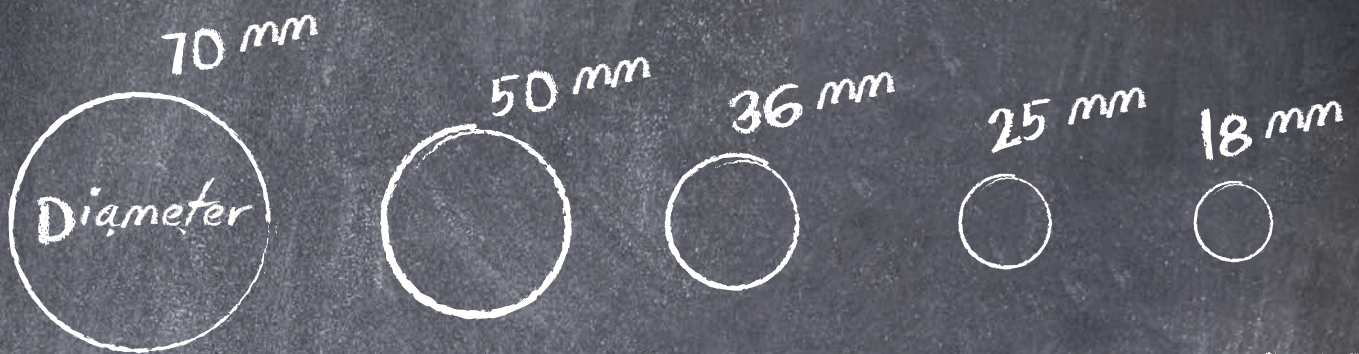
**TWS** is available in five different sizes suitable for all types of industrial applications:

- **TWS:** 70 mm diameter  
Traditional, integrated LED, Xenon and sounder modules completed with a wide range of accessories
- **miniTWS:** 50 mm diameter
- **babyTWS:** 36 mm diameter
- **microTWS:** 25 mm diameter
- **nanoTWS:** 18 mm diameter

The **LUXOR** range is destined for applications on large-size machineries and large-size industrial sites:

- **LUXOR 3:** 90 mm diameter
- **LUXOR 4:** 136 mm diameter

# TWS COMPARATIVE TABLE



TWS

miniTWS

babyTWS

microTWS

nanoTWS



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## MACHINE DIRECTIVE



**Sirena signaling devices are suitable for visual and acoustic signaling on machinery in conformity with the European Machine Directive 2006/42/EC (29/12/2009).**



**T**he 2006/42/EC Machine Directive refers to regulations that cover risk analysis in the design and construction process of machinery.

The directive requires manufacturers to make a detailed analysis regarding the safety of machinery and systems. Data relating to safety of machinery components must also be included at the project stage.

It must be specified that not all devices installed are directly involved in terms of safety of machinery and its applications. It is also necessary to distinguish between relevant and not relevant applications for the purpose of safety. For this reason, the visual and acoustic signaling devices used in numerous informative applications are to be considered not relevant for the purpose of safety. A signal can, for example, simply inform a person if a process is in progress or has been completed; often used to detect downtime and increase productivity.

Sirena's signaling devices comply with the Machinery Directive. They respect all the regulations relating to colors and safety signals and can be used by machine builders.

# MODULES' COLOR ACCORDING TO IEC 60073

-  The most critical situations are installed at the top part of the stacklight
-  The less critical situations are installed at the bottom part of the stacklight

## DANGER

DANGEROUS SITUATION, REQUIRES IMMEDIATE ACTION

*(example: pressure/temperature outwith safety standards)*

## MANDATORY

SITUATIONS THAT REQUIRE MANDATORY INTERVENTION

*(example: critical data input necessary to proceed)*

## NORMAL

NORMAL SITUATION

*(example: authorization to proceed/machinery in function)*

## ANOMALY

ANOMALY SITUATION, REQUIRES MONITORING AND/OR INTERVENTION

*(example: conveyor belt blocked, intervention required to correct the abnormal situation)*

## ASSIGNED

TO BE USED TO COMMUNICATE A MESSAGE DIFFERENT TO THAT FORESEEN BY THE STANDARD COLORS, REQUIRES MONITORING

*(example: machine in function)*



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**S**irena's priority is to offer customers with a customized product tailored for the final application rather than offering a standard product that is often a compromise to what is actually needed. TWS stacklights have been engineered specifically to meet the end-user requirements: for this reason Sirena has developed 3 types of lenses engineered for specific applications according to the surrounding environment.

## allCOLOR

The allCOLOR lens has been developed for Standard applications where the brightness of the color is the main priority. The light output of the colored lens is intensified by using the same color light source (color-on-color technology). This process allows optimization of the emission frequencies avoiding the filter effect of the lens. The color is, therefore, more vivid than a standard stacklight guaranteeing compliance with the Machine Directive specifications.



### > STANDARD USE

Colored lens with colored light source.

The use of a colored lens with the same color of light source allows optimization of the emission frequency producing a rich intense light output.

## allCLEAR

The allCLEAR lens has been developed for use in bright environments where the main priority is to give a precise signal regarding machine status to the operator. In very bright environments, the ambience light can cause confusion as to the ON/OFF state of the colored module: this condition is known as "phantom effect". The allCLEAR lens, with colored light LED source eliminates this possibility. When the module is switched OFF the lens is white/neutral and when it is switched ON the lens lights up according to the color of LEDs inside the module.



### > USE IN VERY BRIGHT ENVIRONMENTS

Clear lens with colored light source.

In very bright environments, it is possible that the ambience brightness lights up the module when it is switched OFF creating problems in distinguishing between the ON and OFF state of the stacklight (phantom effect). The clear lens module allows clear distinction between the ON and OFF status of the stacklight.

## PROXIMITY

The Proximity lens has been developed for use in areas where the stacklight is installed near the operator. Made with a mixture of opaline polycarbonate, this lens allows a signal to be given without dazzling. The operator located in the vicinity of the tower is, therefore, notified of the status of the machine without his attention being diverted by a light intensity greater than that actually required.

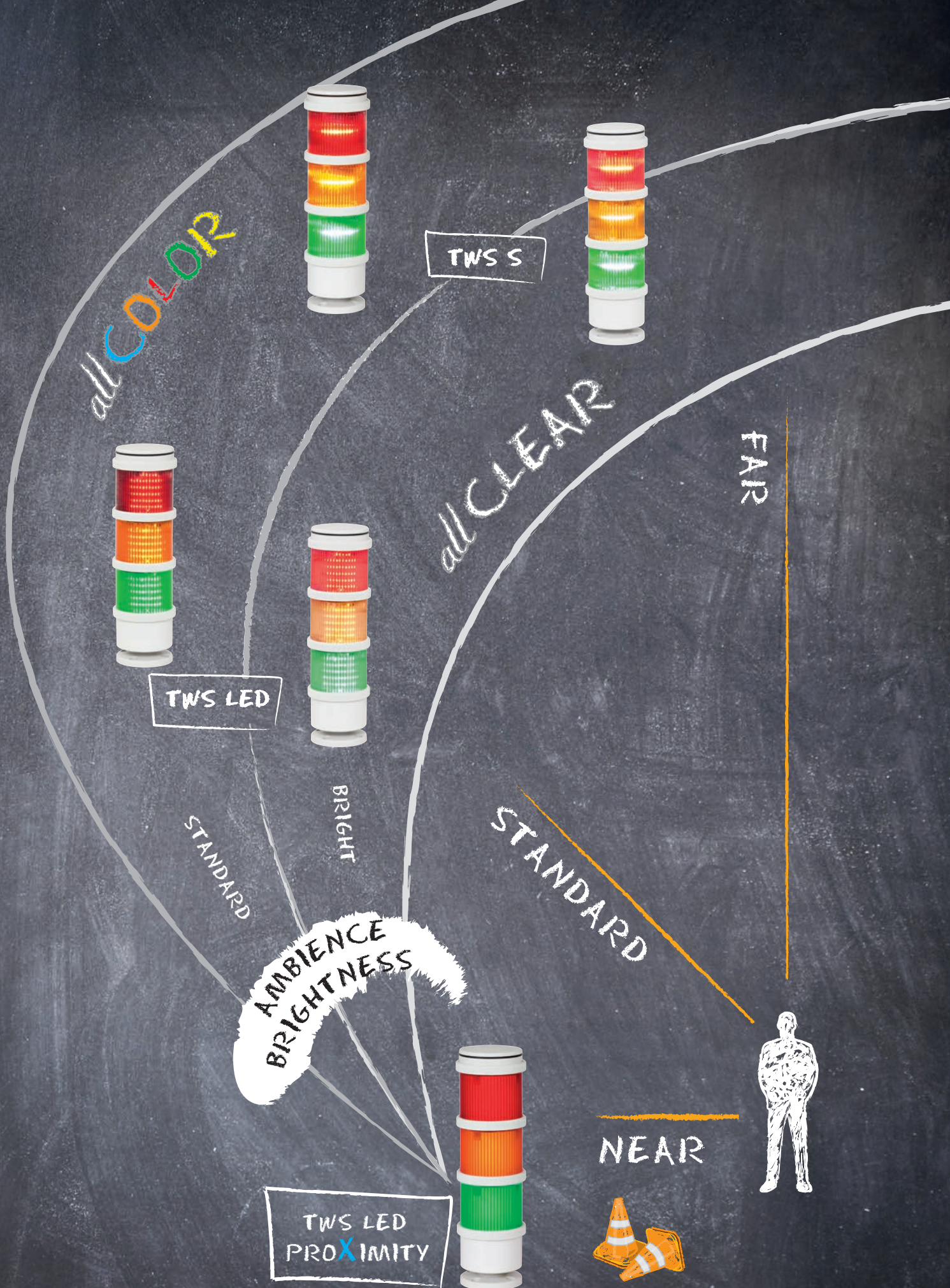


### > USE NEAR THE OPERATOR

Opaline colored lens with colored light source.

Ideal when the tower is installed near the operator. The opaline characteristic allows an optimal signaling function yet without disturbing.





DISTANCE BETWEEN OPERATOR AND STACKLIGHT

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**TWS**

**T**he main characteristics that distinguish the TWS stacklights range are:

- **UNIQUE ELECTRICAL SAFETY**

TWS stacklight provides an unprecedented electrical safety concept. The special connection board is inserted in the slots of the connecting module creating an electrical contact in total safety. All modules can be assembled/disassembled without removing the power supply.

- **EASY INSTALLATION**

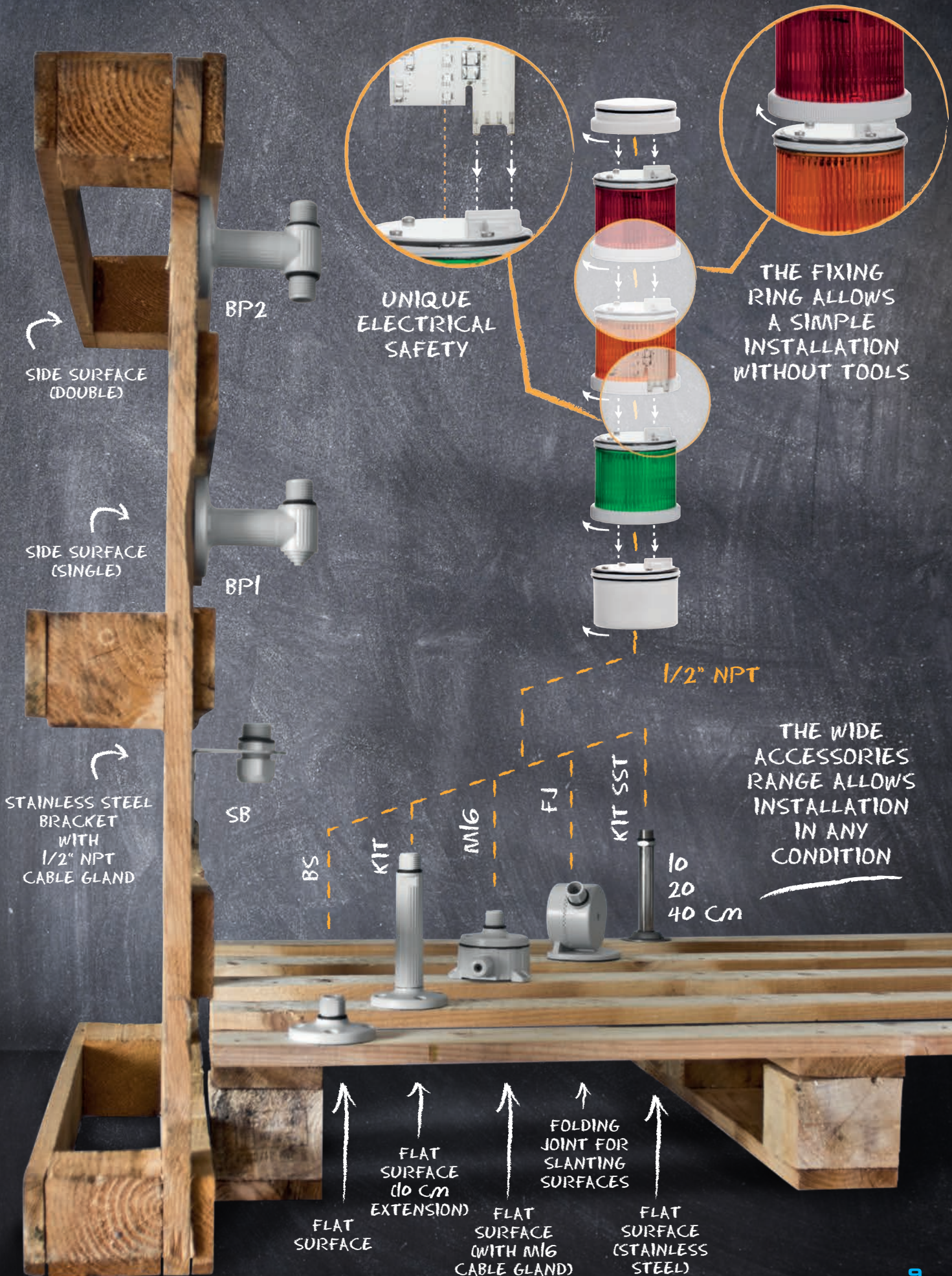
Quick and easy tool-less assembly. The locking ring allows modules to be tightly secured to each other and prevents accidental unscrewing thanks to the special connecting system.

- **A WIDE RANGE OF ACCESSORIES FOR OPTIMAL VERSATILITY**

The wide range of accessories allows multiple installation possibilities. The accessories are fitted with a 1/2" NPT thread and can be mounted on the TWS range maintaining all mechanical characteristics.



# MOUNTING COMBINATIONS



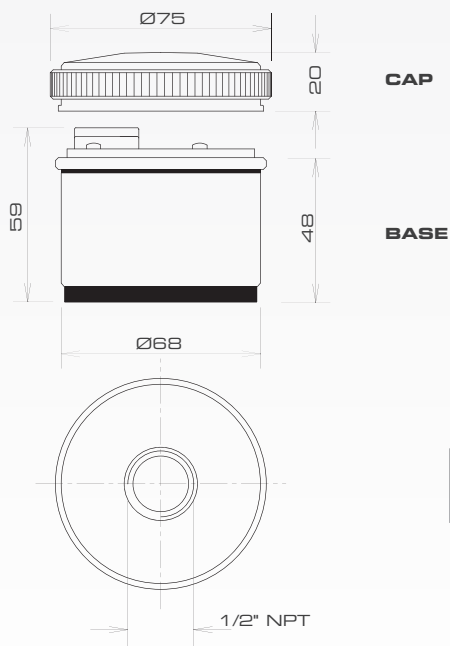
# TWS BASE



G B



## DRAWINGS, DIMENSIONS AND WEIGHTS



TWS BASE | PART NO

See page 19, section "BASES"

## TWS BASE

Wiring base for the TWS range. With 1 common + 5 independent contacts, allows mounting of maximum 5 light modules or 4 light modules + 1 sounder module.

Provided with top cap to be used when the sounder module is not installed.

### NOTE

Must be included with every stacklight

## KEY CHARACTERISTICS

### MAXIMUM NUMBER OF MODULES

5 light modules or 4 + 1 sounder module

### VOLTAGES

Max 240V

### PROTECTION GRADE

IP66, UL TYPE 4X, suitable for outdoor applications

### OPERATING TEMPERATURE

-30/+50 C°

## MECHANICAL FEATURES

Self extinguishing PC body with high impact resistance, suitable for outdoor use thanks to the IP66/TYPER 4X protection grade guaranteed by a double polyurethane gasket installed on every module. A 1/2" NPT-F thread allows mounting of the complete accessory line. Can also be installed directly (without accessories) on the machinery by drilling the marked pre-holes and using the provided gasket

## CERTIFICATIONS

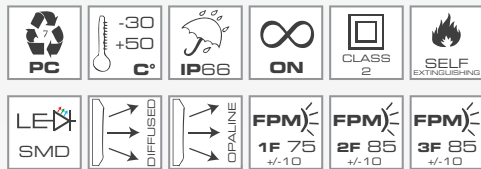


# AUTOMAX

# TWS LED

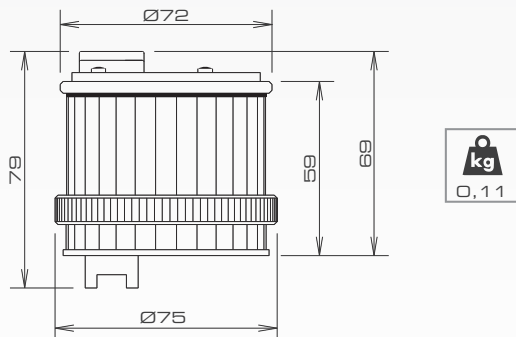


> LOW CONSUMPTION <  
> RESISTANCE TO VIBRATIONS <



TWS LED MULTI

## DRAWINGS, DIMENSIONS AND WEIGHTS



## TWS LED | PART NO

See page 19, section "TWS LED"

## TWS LED

Integrated LED light module.

Available in STEADY (steady light) and MULTI (steady light, single flash, double flash, triple flash) version, TWS LED offers versatility and excellent optical performance as well as virtually zero maintenance thanks to the built-in LED technology that guarantees up to 100.000\* hours of product life.

Available with allCOLOR, allCLEAR and Proximity lens, TWS LED is the right choice for a high-end stacklight module.

\* At normal conditions, without vibrations and heavy temperature changes

## KEY CHARACTERISTICS

### LIGHT EFFECTS

TWS LED STEADY | STEADY LIGHT  
TWS LED MULTI | STEADY, SINGLE FLASH, DOUBLE FLASH, TRIPLE FLASH (via dip-switch)

### VOLTAGES

24V ACDC, 110V AC, 240V AC +/-10%

### PROTECTION GRADE

IP66, UL TYPE 4X, suitable for outdoor applications

### OPERATING TEMPERATURE

-30/+50 C°

## MECHANICAL FEATURES

Self extinguishing PC body with high impact resistance, suitable for outdoor use thanks to the IP66/TYPER 4X protection grade guaranteed by a double polyurethane gasket installed on every module

## OPTICAL FEATURES

The vertically lined lens allows a perfect light distribution over 360°. Available with 3 different lens types, according to the final application

### allCOLOR

#### STANDARD USE

Colored lens with colored light source. The use of a colored lens with the same color of light source allows optimization of the emission frequency producing a rich intense light output

### allCLEAR

#### USE IN VERY BRIGHT ENVIRONMENTS

Clear lens with colored light source. In very bright environments it is possible that the ambient brightness lights up the module when it is switched OFF creating problems in distinguishing between the ON and OFF state of the stacklight (phantom effect). The clear lens module allows clear distinction between the ON and OFF status of the stacklight



### PROXIMITY

#### USE NEAR THE OPERATOR

Opaline colored lens with colored light source. Ideal when the tower is installed near the operator. The opaline characteristic allows an optimal signaling function yet without disturbing



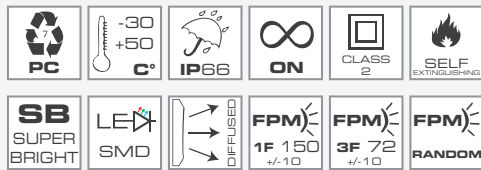
## CERTIFICATIONS



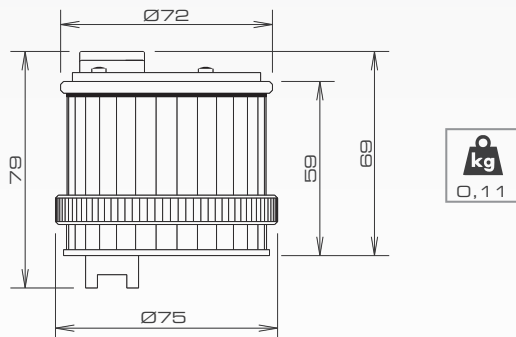
TOMAX



- > SUPERBRIGHT <
- > NEW RANDOM EFFECT <
- > LOW CONSUMPTION <
- > RESISTANCE TO VIBRATIONS <



## DRAWINGS, DIMENSIONS AND WEIGHTS



TWS S | PART NO

See page 19, section "TWS S"

## TWS S new

Superbright multifunctional integrated LED light module engineered for longer distance signalization.

Enriched by 4 light effects: steady, flashing, strobe and random. The random effect consists in an uneven flashing pattern, augmenting the ability of catching attention.

TWS S offers versatility and excellent optical performance as well as virtually zero maintenance thanks to the built-in LED technology that guarantees up to 100.000\* hours of product life.

Available with allCOLOR and allCLEAR lens, TWS LED is the right choice for a high-end superbright stacklight module.

\* At normal conditions, without vibrations and heavy temperature changes

## KEY CHARACTERISTICS

### LIGHT EFFECTS

STEADY, FLASHING, STROBE, RANDOM

### VOLTAGES

24V ACDC +/-10%

### PROTECTION GRADE

IP66, UL TYPE 4X, suitable for outdoor applications

### OPERATING TEMPERATURE

-30/+50 C°

## MECHANICAL FEATURES

Self extinguishing PC body with high impact resistance, suitable for outdoor use thanks to the IP66/TYPE 4X protection grade guaranteed by a double polyurethane gasket installed on every module

## OPTICAL FEATURES

The vertically lined lens allows a perfect light distribution over 360°. Available with 2 different lens types, according to the final application

### allCOLOR

#### STANDARD USE

Colored lens with colored light source.

The use of a colored lens with the same color of light source allows optimization of the emission frequency producing a rich intense light output

### allCLEAR

#### USE IN VERY BRIGHT ENVIRONMENTS

Clear lens with colored light source.

In very bright environments it is possible that the ambient brightness lights up the module when it is switched OFF creating problems in distinguishing between the ON and OFF state of the stacklight (phantom effect). The clear lens module allows clear distinction between the ON and OFF status of the stacklight

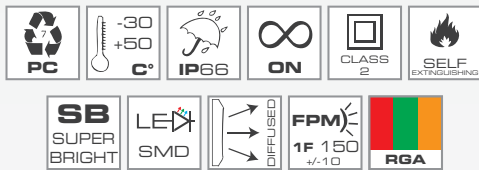


## CERTIFICATIONS

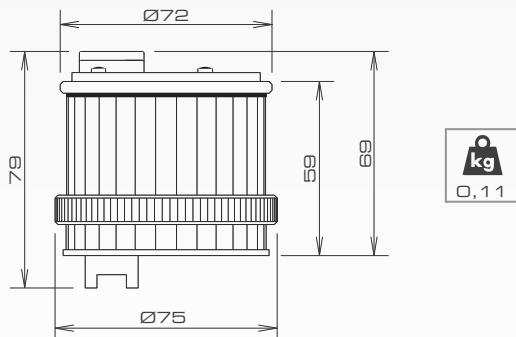




- > SUPERBRIGHT <
- > MULTICOLOR <
- > LOW CONSUMPTION <
- > RESISTANCE TO VIBRATIONS <



## DRAWINGS, DIMENSIONS AND WEIGHTS



TWS RGA | PART NO

See page 19, section "TWS RGA"

## TWS RGA new

Superbright multicolor integrated LED light module engineered for longer distance signalization.

Multicolor technology allows 3 different colors (red, amber, green) on the same module. Each color is controllable via an independent channel, allowing to deliver 3 different messages from a single module. Furthermore, each channel can be set to steady or flashing mode.

TWS RGA offers versatility and excellent optical performance as well as virtually zero maintenance thanks to the built-in LED technology that guarantees up to 100.000\* hours of product life.

Available with allCLEAR lens, TWS RGA is the right choice for a high-end multicolor stacklight module.

\* At normal conditions, without vibrations and heavy temperature changes

## KEY CHARACTERISTICS

**LIGHT EFFECTS**  
STEADY, FLASHING

**VOLTAGES**  
24V ACDC +/-10%

**PROTECTION GRADE**  
IP66, UL TYPE 4X, suitable for outdoor applications

**OPERATING TEMPERATURE**  
-30/+50 C°

## MECHANICAL FEATURES

Self extinguishing PC body with high impact resistance, suitable for outdoor use thanks to the IP66/TYPER 4X protection grade guaranteed by a double polyurethane gasket installed on every module

## OPTICAL FEATURES

The vertically lined lens allows a perfect light distribution over 360°. Available with allCLEAR lens

**allCLEAR USE IN VERY BRIGHT ENVIRONMENTS**  
Clear lens with colored light source. In very bright environments it is possible that the ambient brightness lights up the module when it is switched OFF creating problems in distinguishing between the ON and OFF state of the stacklight (phantom effect). The clear lens module allows clear distinction between the ON and OFF status of the stacklight

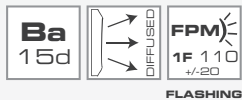


## CERTIFICATIONS

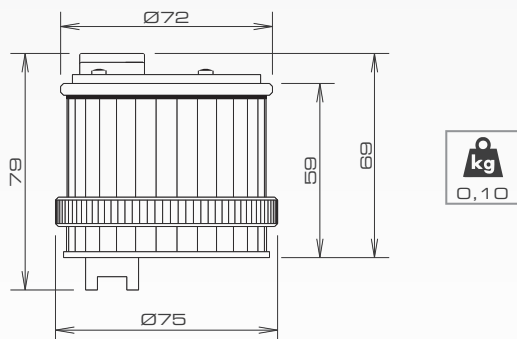




> BA15D <  
> LED BULB COMPATIBLE <



## DRAWINGS, DIMENSIONS AND WEIGHTS



TWS STEADY/FLASHING | PART NO

See page 19, section "TWS STEADY/FLASHING"

## TWS STEADY/FLASHING

Light module with traditional Ba15d lamp holder. Allows the use of traditional 5W incandescent filament bulbs as well as low consumption LED bulbs.

Available in STEADY and FLASHING version, this module is the ideal choice when economic efficiency is the priority and where a future upgrade to LED version (bulbs or integrated module) is foreseen.

## KEY CHARACTERISTICS

### LIGHT EFFECTS

TWS STEADY | STEADY LIGHT  
TWS FLASHING | FLASHING LIGHT

### VOLTAGES

TWS STEADY | 12/240V ACDC +/-10%  
TWS FLASHING | 12/48V DC, 24/240V AC +/-10%

### PROTECTION GRADE

IP66, UL TYPE 4X, suitable for outdoor applications

### OPERATING TEMPERATURE

-30/+50 C°

## MECHANICAL FEATURES

Self extinguishing PC body with high impact resistance, suitable for outdoor use thanks to the IP66/TYPER 4X protection grade guaranteed by a double polyurethane gasket installed on every module

## OPTICAL FEATURES

The vertically lined lens allows a perfect light distribution over 360°

## CERTIFICATIONS



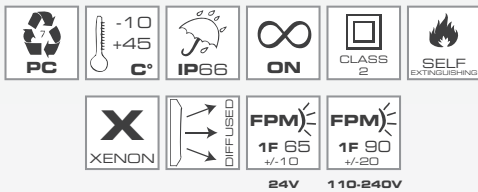


# TWS X

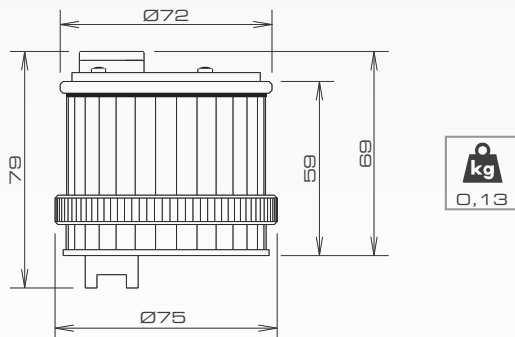


> XENON <

**B A R G Y N**      **G B**  
 MODULE                      RING



## DRAWINGS, DIMENSIONS AND WEIGHTS



TWS X | PART NO

See page 19, section "TWS X"

## TWS X

Light module with integrated Xenon discharge lamp.

Xenon technology allows a high intensity flash ideal for attracting attention in the most critical situations.

The powerful 2 Joules flash can be seen at a further distance when compared to incandescent bulbs, making this product ideal for all applications where a high light intensity value is required.

## KEY CHARACTERISTICS

**LIGHT EFFECTS**  
FLASHING

**VOLTAGES**  
24V ACDC, 110V AC, 240V AC +/-10%

**PROTECTION GRADE**  
IP66, UL TYPE 4X, suitable for outdoor applications

**OPERATING TEMPERATURE**  
-10/+45 C°

## MECHANICAL FEATURES

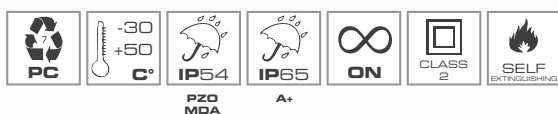
Self extinguishing PC body with high impact resistance, suitable for outdoor use thanks to the IP66/TYPE 4X protection grade guaranteed by a double polyurethane gasket installed on every module

## OPTICAL FEATURES

The vertically lined lens allows a perfect light distribution over 360°

## CERTIFICATIONS





## TWS SOUNDERS | PART NO

See page 19, section "SOUNDERS"

## TWS SOUNDERS

TWS sounder modules are the right complement to add acoustic signalization to the luminous part of the stacklight. According to each application need, there are 3 possible solutions:

### TWS PZO

Piezoelectrical sounder. 6 tones selectable via dip-switch

### TWS MDA

High output magnetodynamic sounder. 32 tones selectable via dip-switch

### TWS A+

High protection grade magnetodynamic sounder. 16 tones selectable via dip-switch, this IP65 module is ideal for outdoor applications

## KEY CHARACTERISTICS

### NUMBER OF TONES

PZO | 3 (low output) + 3 (high output)  
MDA | 32 (mixed tones)  
A+ | 16 (mixed tones)

### VOLTAGES

PZO | 12/48V ACDC, 110/240V AC +/-10%  
MDA | 12/24V ACDC, 48V AC, 110V AC, 240V AC +/-10%  
A+ | 12/24V ACDC, 110/240V AC +/-10%

### PROTECTION GRADE

PZO | IP54, UL TYPE 3R  
MDA | IP54, UL TYPE 3R  
A+ | IP65, UL TYPE 3R

### OPERATING TEMPERATURE

-30/+50 C°

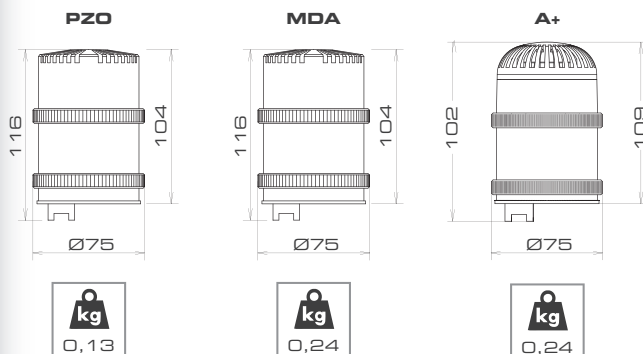
## MECHANICAL FEATURES

Self extinguishing PC body with high impact resistance, suitable for outdoor use thanks to the IP54/TYPER 3R (A+: IP65/ TYPER 3R) protection grade

## ACOUSTIC FEATURES

PZO | Piezoelectrical unit, frequency 2800Hz +/-100  
MDA | Magnetodynamic unit, frequency range 300-2850Hz  
A+ | Magnetodynamic unit, frequency range 300-2850Hz

## DRAWINGS, DIMENSIONS AND WEIGHTS



## CERTIFICATIONS



# TWS HD



TWS HD SS



AISI 316 SST

BODY



TUBE



UV RESISTANT

HD HEAVY DUTY



Assembly example with 3 TWS S allCLEAR modules

> STAINLESS STEEL <  
> IP69K <

TWS HD AL



BODY



TUBE



UV RESISTANT

HD HEAVY DUTY



Assembly example with 3 TWS LED PROXIMITY modules

> ANODIZED ALUMINIUM <  
> IP69K <

TWS HD | PART NO

See page 19, section "TWS HD"

## TWS HD SS new

IP69K stainless steel enclosure engineered for the TWS range.

IP69K grade protects stacklight from high temperature and pressure dust/water, making this product ideal in all situations where machineries need to be accurately sanitized.

Particularly in the food industry, where hygiene is a must, machinery needs to be able to withstand wash-down (high pressure/high temperature washing) procedures.

IP69K is the highest protection grade available.

TWS HD enclosure can be installed on a threaded pole, on flat surfaces or on lateral (wall) surfaces using the accessories range.

## TWS HD AL new

Heavy Duty anodized aluminum enclosure engineered for the TWS range.

Allows protection from high pressure and temperature dust/water (protection grade IP69K).

### KEY CHARACTERISTICS

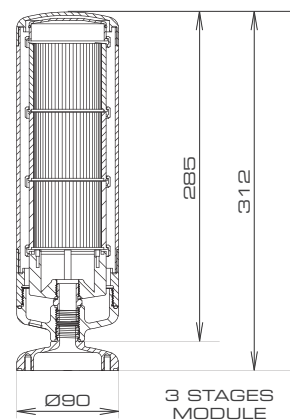
**PROTECTION GRADE**  
TUV SUD IP69K

### MECHANICAL FEATURES

**SS** | Polished stainless steel (AISI 316) body. UV resistant polycarbonate tube. A Goretex valve installed at the bottom of the enclosure allows a condense-free environment

**AL** | Black anodized aluminum body. UV resistant polycarbonate tube. A Goretex valve installed at the bottom of the enclosure allows a condense-free environment

### DRAWINGS, DIMENSIONS AND WEIGHTS



**kg** SS  
2,70

**kg** AL  
1,10

### CERTIFICATIONS



# TWS B4D

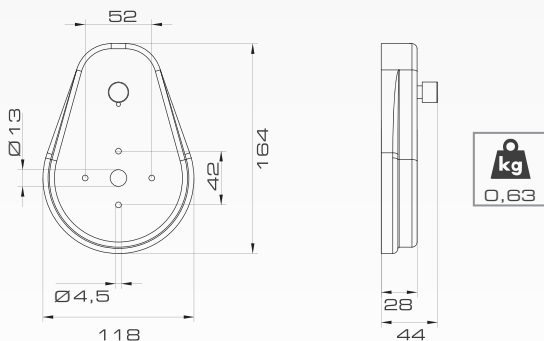


B

> **DESK-TOP BASE** <  
> **COMPATIBLE WITH TWS RANGE** <



## DRAWINGS, DIMENSIONS AND WEIGHTS



TWS B4D | PART NO

See page 19, section "BASES"

## TWS B4D **new**

Desk-top base compatible with the TWS (70 mm) range: can be used with all light modules of the range and in conjunction with one sounder module. It allows stacklight temporary placement directly on the area where signalization is required.

Can be turned on manually via on-board switching. TWS B4D allows bringing stacked signaling where industrial automation is not installed. Can be used in a smaller size production facilities to signal specific operator requests, as well as details of operations progress.

TWS B4D allows activating one single module at the time or all modules together. Can be used with a maximum of 3 light modules or with 2 light modules + 1 sounder module.

## KEY CHARACTERISTICS

### OPERATING MODES

Four independent functions:

Set to 0 | OFF

Set to 1 | Module 1 ON

Set to 2 | Module 2 ON

Set to 3 | Module 3 ON

Set to 4 | Module 1+2+3 ON

### VOLTAGES

90/240V AC +/-10% (power supply included)

### PROTECTION GRADE

Internal use

### OPERATING TEMPERATURE

-30/+50 C°

### MECHANICAL FEATURES

Self extinguishing PC for internal use. Anti-skid polyurethane gasket on the base of the product



## CERTIFICATIONS



UTOMAX

**TWS LED** - Integrated LED light module

	B		A		R		G		Y		N		
	GY	BK	GY	BK	GY	BK	GY	BK	GY	BK	GY	BK	
<b>STEADY</b>													
allCOLOR	24V ACDC	36471	36681	36472	36682	36473	36683	36474	36684	36475	36685	36476	36686
	110V AC	36481	36691	36482	36692	36483	36693	36484	36694	36485	36695	36486	36696
	240V AC	36491	36701	36492	36702	36493	36703	36494	36704	36495	36705	36496	36706
allCLEAR	24V ACDC	33121	33151	33122	33152	33123	33153	33124	33154	33125	33155	33126	33156
	110V AC	33131	33161	33132	33162	33133	33163	33134	33164	33135	33165	33136	33166
	240V AC	33141	33171	33142	33172	33143	33173	33144	33174	33145	33175	33146	33176
proximity	24V ACDC	32201	32231	32202	32232	32203	32233	32204	32234	32205	32235	32206	32236
	110V AC	32211	32241	32212	32242	32213	32243	32214	32244	32215	32245	32216	32246
	240V AC	32221	32251	32222	32252	32223	32253	32224	32254	32225	32255	32226	32256
<b>MULTI</b>													
allCOLOR	24V ACDC	36501	36711	36502	36712	36503	36713	36504	36714	36505	36715	36506	36716
	110V AC	36511	36721	36512	36722	36513	36723	36514	36724	36515	36725	36516	36726
	240V AC	36521	36731	36522	36732	36523	36733	36524	36734	36525	36735	36526	36736
allCLEAR	24V ACDC	33181	33211	33182	33212	33183	33213	33184	33214	33185	33215	33186	33216
	110V AC	33191	33221	33192	33222	33193	33223	33194	33224	33195	33225	33196	33226
	240V AC	33201	33231	33202	33232	33203	33233	33204	33234	33205	33235	33206	33236
proximity	24V ACDC	32261	32291	32262	32292	32263	32293	32264	32294	32265	32295	32266	32296
	110V AC	32271	32301	32272	32302	32273	32303	32274	32304	32275	32305	32276	32306
	240V AC	32281	32311	32282	32312	32283	32313	32284	32314	32285	32315	32286	32316

**TWS S** - Superbright multifunctional integrated LED light module

	B		A		R		G		Y		N		
	GY	BK	GY	BK	GY	BK	GY	BK	GY	BK	GY	BK	
allCOLOR	12/24V ACDC	33411	33421	33412	33422	33413	33423	33414	33424	33415	33425	33416	33426
allCLEAR	12/24V ACDC	33431	33441	33432	33442	33433	33443	33434	33444	33435	33445	33436	33446

**TWS STEADY/FLASHING** - Light module with traditional Ba15d lamp holder

	B		A		R		G		Y		N		
	GY	BK	GY	BK	GY	BK	GY	BK	GY	BK	GY	BK	
<b>STEADY</b>													
	12/240V ACDC	27701	27631	27702	27632	27703	27633	27704	27634	27705	27635	27706	27636
<b>FLASHING</b>													
	12/48V DC	27711	27641	27712	27642	27713	27643	27714	27644	27715	27645	27716	27646
	24/240V AC	27721	27651	27722	27652	27723	27653	27724	27654	27725	27655	27726	27656

**TWS X** - Light module with integrated Xenon discharge lamp

	B		A		R		G		Y		N		
	GY	BK	GY	BK	GY	BK	GY	BK	GY	BK	GY	BK	
	24V ACDC	27731	27661	27732	27662	27733	27663	27734	27664	27735	27665	27736	27666
	110V AC	27741	27671	27742	27672	27743	27673	27744	27674	27745	27675	27746	27676
	240V AC	27751	27681	27752	27682	27753	27683	27754	27684	27755	27685	27756	27686

**TWS RGA** - Superbright multicolor integrated LED light module

	GY	BK
12/24V ACDC	33447	33448

**TWS HD**

	SS	AL
ENCLOSURE (2)	27602	27603
ENCLOSURE (3)	27677	27840
ENCLOSURE (4)	27606	27607
FLAT MOUNTER	27679	27841
POLE MOUNTER	27678	27842
SIDE MOUNTER	27680	27843

**SOUNDERS**

		GY	BK
PZO	12/48V ACDC	27718	27625
PZO	110/240V ACDC	27719	27628
MDA	12/24V ACDC	27790	27794
MDA	48V AC	27791	27795
MDA	110V AC	27792	27796
MDA	240V AC	27793	27797
A+	12/24V ACDC	33400	33402
A+	110/240V AC	33401	33403

**BASES**

		GY	BK
BASE	24V ACDC	27700	27690
B4D	24V ACDC	-	21437

**ACCESSORIES**

	WH	GY	BK
BP1	27708	27762	27693
BP2	-	27763	27694
SB	33359	33357	33358
BS	-	27760	27691
KIT	-	27764	27695
PR	-	27761	27692
M16	-	27777	27778
FJ	33349	33347	33348
KIT SS L10			27765
KIT SS L20			27766
KIT SS L40			27767

# AUTOMAX

devices for the automation industry

## miniTWS

**M**iniTWS has the same safety and assembly characteristics as the 70 mm version. It is a compact version suitable for installation on smaller machines or to provide signaling in the vicinity of the operator. The light modules are fitted with integrated LEDs.

Available in gray (industrial), black (industrial) and white (civil), the miniTWS range is particularly suitable for use in civil environments where the signaling function is important but where the overall appearance of the stacklight shall remain minimal.

Can be complemented with a sounder module and can be used with the complete range of TWS accessories.





> **LOW CONSUMPTION** <  
> **RESISTANCE TO VIBRATIONS** <



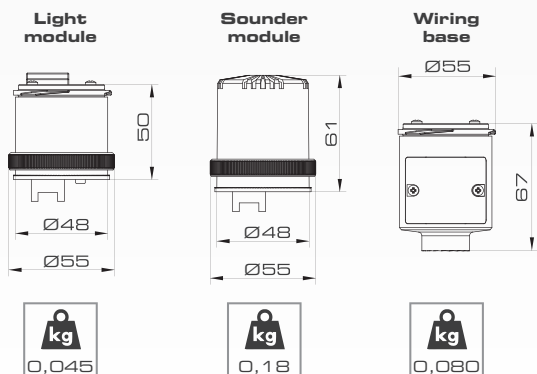
**Sounder module**



**Wiring base**



## DRAWINGS, DIMENSIONS AND WEIGHTS



miniTWS | PART NO

See page 29, section "miniTWS"

## miniTWS

### LIGHT MODULE

Integrated LED light module can be set to STEADY or FLASHING via internal jumper. miniTWS offers versatility and excellent optical performance as well as virtually zero maintenance thanks to the built-in LED technology that guarantees up to 100.000\* hours of product life.

Available with allCOLOR and allCLEAR lens, miniTWS is the right choice for a compact stacklight module.

### SOUNDER MODULE

Sounder module adds acoustic signalization to the luminous part of the stacklight.

### WIRING BASE

Wiring base for the miniTWS range. With 1 common + 5 independent contacts, allows mounting of maximum 5 light modules or 4 light modules + 1 sounder module.

Provided with top cap to be used when the sounder module is not installed.

\* At normal conditions, without vibrations and heavy temperature changes

## KEY CHARACTERISTICS

### LIGHT EFFECTS

STEADY, FLASHING

### ACOUSTIC

BITONAL SOUND, 77dB

### VOLTAGES

24V ACDC, 110V AC, 240V AC +/-10%

### PROTECTION GRADE

IP66, UL TYPE 4X, suitable for outdoor applications

### OPERATING TEMPERATURE

-30/+50 C°

## MECHANICAL FEATURES

Self extinguishing PC body with high impact resistance, suitable for outdoor use thanks to the IP66/TYPER 4X protection grade guaranteed by a double polyurethane gasket installed on every module

## OPTICAL FEATURES

The vertically lined lens allows a perfect light distribution over 360°. Available with 2 different lens types, according to the final application

### allCOLOR

#### STANDARD USE

Colored lens with colored light source. The use of a colored lens with the same color of light source allows optimization of the emission frequency producing a rich intense light output

### allCLEAR

#### USE IN VERY BRIGHT ENVIRONMENTS

Clear lens with colored light source. In very bright environments it is possible that the ambient brightness lights up the module when it is switched OFF creating problems in distinguishing between the ON and OFF state of the stacklight (phantom effect). The clear lens module allows clear distinction between the ON and OFF status of the stacklight



## ACOUSTIC FEATURES

Magnetodynamic module with bitonal sound with frequency of 800/1000Hz and 77dB output

## CERTIFICATIONS



# AUTOMAX

devices for the automation industry

babyTWS

**B**abyTWS has been developed to fulfil all applications where a compact-size stacklight is required, and where aesthetic is a must.

Available in gray (industrial), black (industrial) and white (civil), the babyTWS range is particularly suitable for use in civil environments where the signaling function is important but where the overall appearance of the stacklight shall remain minimal.

Can be complemented with a sounder module and can be used with the complete range of TWS accessories.

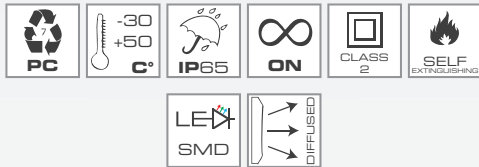






> **LOW CONSUMPTION** <  
> **RESISTANCE TO VIBRATIONS** <

**B A R G Y N**



**Sounder module**

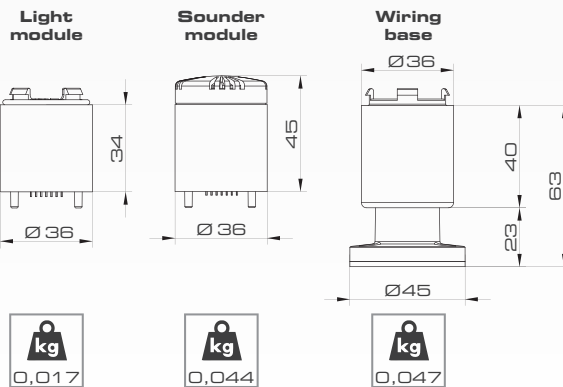
**Wiring base**



**G B W**

**G B W**

## DRAWINGS, DIMENSIONS AND WEIGHTS



babyTWS | PART NO

See page 29, section "babyTWS"

## babyTWS

### LIGHT MODULE

Integrated LED STEADY light module babyTWS offers versatility and excellent optical performance as well as virtually zero maintenance thanks to the built-in LED technology that guarantees up to 100.000\* hours of product life.

Available with allCOLOR and allCLEAR lens, babyTWS is the right choice for a compact stacklight module.

### SOUNDER MODULE

Sounder module adds acoustic signalization to the luminous part of the stacklight.

### WIRING BASE

Wiring base for the babyTWS range. With 1 common + 6 independent contacts, allows mounting of maximum 6 light modules or 5 light modules + 1 sounder module.

Provided with top cap to be used when the sounder module is not installed.

\* At normal conditions, without vibrations and heavy temperature changes

## KEY CHARACTERISTICS

### LIGHT EFFECTS

STEADY

### ACOUSTIC

INTERMITTENT SOUND, 72dB

### VOLTAGES

24V ACDC +/-10%

### PROTECTION GRADE

IP65, UL TYPE 3R

### OPERATING TEMPERATURE

-30/+50 C°

## MECHANICAL FEATURES

Self extinguishing PC body with IP65/TYPE 3R protection grade

## OPTICAL FEATURES

The vertically lined lens allows a perfect light distribution over 360°. Available with 2 different lens types, according to the final application

### allCOLOR STANDARD USE

Colored lens with colored light source. The use of a colored lens with the same color of light source allows optimization of the emission frequency producing a rich intense light output

### allCLEAR USE IN VERY BRIGHT ENVIRONMENTS

Clear lens with colored light source. In very bright environments it is possible that the ambient brightness lights up the module when it is switched OFF creating problems in distinguishing between the ON and OFF state of the stacklight (phantom effect). The clear lens module allows clear distinction between the ON and OFF status of the stacklight



## ACOUSTIC FEATURES

Piezoelectric module with intermittent sound with frequency of 4000 +/-300Hz and 72dB output

## CERTIFICATIONS



# AUTOMAX

devices for the automation industry

## microTWS

**M**icroTWS range is intended for all applications where it is necessary to use a very small stacklight such as industrial electrical panels and small machinery.

Available in gray (industrial), black (industrial) and white (civil), the microTWS range is particularly suitable for use in civil environments where the signaling function is important but where the overall appearance of the stacklight shall remain minimal.

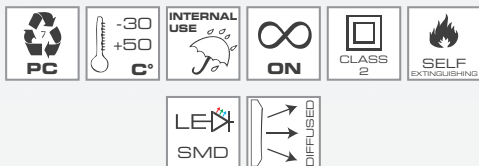
Can be complemented with a sounder module.





> **LOW CONSUMPTION** <  
> **RESISTANCE TO VIBRATIONS** <

**B A R G Y N**



**Sounder module**



**Wiring base**



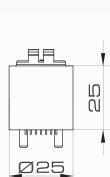
**G B W**



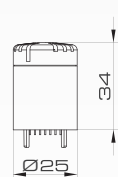
**G B W**

## DRAWINGS, DIMENSIONS AND WEIGHTS

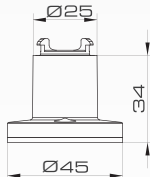
**Light module**



**Sounder module**



**Wiring base**



microTWS | PART NO

See page 29, section "microTWS"

## microTWS

### LIGHT MODULE

Integrated LED STEADY light module babyTWS offers versatility and excellent optical performance as well as virtually zero maintenance thanks to the built-in LED technology that guarantees up to 100.000\* hours of product life.

Available with allCOLOR and allCLEAR lens, microTWS is the right choice for a luminous column for small site applications.

### SOUNDER MODULE

Sounder module adds acoustic signalization to the luminous part of the stacklight.

### WIRING BASE

Wiring base for the microTWS range. With 1 common + 6 independent contacts, allows mounting of maximum 6 light modules or 5 light modules + 1 sounder module.

Provided with top cap to be used when the sounder module is not installed.

\* At normal conditions, without vibrations and heavy temperature changes

## KEY CHARACTERISTICS

**LIGHT EFFECTS**  
STEADY

**ACOUSTIC**  
INTERMITTENT SOUND, 65 dB

**VOLTAGES**  
24V ACDC +/-10%

**PROTECTION GRADE**  
Internal use

**OPERATING TEMPERATURE**  
-30/+50 C°

## MECHANICAL FEATURES

Self extinguishing PC

## OPTICAL FEATURES

The vertically lined lens allows a perfect light distribution over 360°. Available with 2 different lens types, according to the final application

### allCOLOR STANDARD USE

Colored lens with colored light source. The use of a colored lens with the same color of light source allows optimization of the emission frequency producing a rich intense light output

### allCLEAR USE IN VERY BRIGHT ENVIRONMENTS

Clear lens with colored light source. In very bright environments it is possible that the ambient brightness lights up the module when it is switched OFF creating problems in distinguishing between the ON and OFF state of the stacklight (phantom effect). The clear lens module allows clear distinction between the ON and OFF status of the stacklight



## ACOUSTIC FEATURES

Piezoelectric module with intermittent sound with frequency of 3600+/-300Hz and 65dB output

## CERTIFICATIONS



# AUTOMAX

devices for the automation industry

## nanoTWS

**N**anoTWS is suitable when an extremely small size module is required. It is the smallest stacklight on the market with a diameter of only 18 mm. Can be used on industrial electric panels or on small machinery.

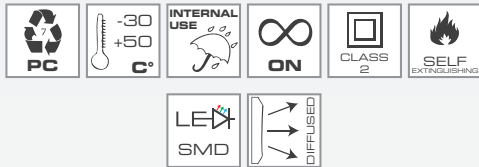
Available in gray (industrial), black (industrial) and white (civil), the microTWS range is particularly suitable for use in civil environments where the signaling function is important but where the overall appearance of the stacklight shall remain minimal.





> LOW CONSUMPTION <  
> RESISTANCE TO VIBRATIONS <

B A R G Y N

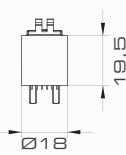


Wiring base

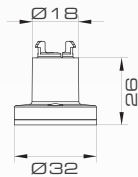


## DRAWINGS, DIMENSIONS AND WEIGHTS

Light module



Wiring base



nanoTWS | PART NO

See page 29, section "nanoTWS"

## nanoTWS

### LIGHT MODULE

Integrated LED STEADY light module nanoTWS offers versatility and excellent optical performance as well as virtually zero maintenance thanks to the built-in LED technology that guarantees up to 100.000\* hours of product life.

Available with allCOLOR and allCLEAR lens, nanoTWS is the right choice for a compact stacklight module.

### WIRING BASE

Wiring base for the nanoTWS range. With 1 common + 5 independent contacts, allows mounting of maximum 5 light modules.

\* At normal conditions, without vibrations and heavy temperature changes

## KEY CHARACTERISTICS

**LIGHT EFFECTS**  
STEADY

**VOLTAGES**  
24V ACDC +/-10%

**PROTECTION GRADE**  
Internal use

**OPERATING TEMPERATURE**  
-30/+50 C°

### MECHANICAL FEATURES

Self extinguishing PC

### OPTICAL FEATURES

The vertically lined lens allows a perfect light distribution over 360°. Available with 2 different lens types, according to the final application

#### allCOLOR STANDARD USE

Colored lens with colored light source. The use of a colored lens with the same color of light source allows optimization of the emission frequency producing a rich intense light output

#### allCLEAR USE IN VERY BRIGHT ENVIRONMENTS

Clear lens with colored light source. In very bright environments it is possible that the ambient brightness lights up the module when it is switched OFF creating problems in distinguishing between the ON and OFF state of the stacklight (phantom effect). The clear lens module allows clear distinction between the ON and OFF status of the stacklight



## CERTIFICATIONS



# AUTOMAX

devices for the automation industry

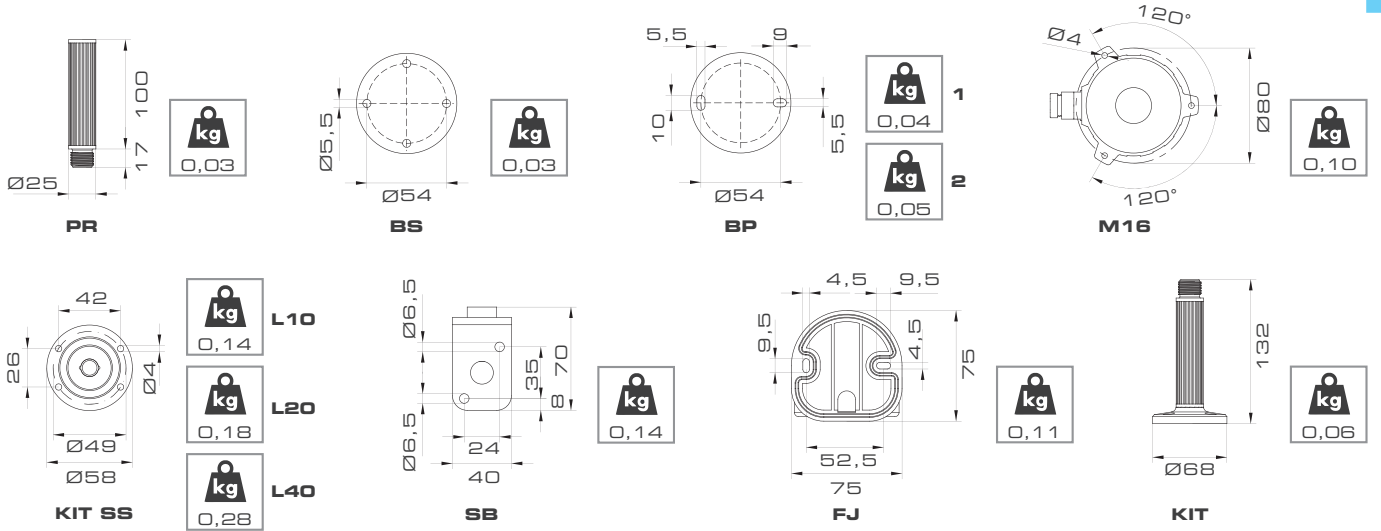
## ACCESSORIES

**T**WS accessories complement the TWS range offering multiple installation possibilities on all types of surfaces or machine equipment. They are compatible with TWS, miniTWS and babyTWS bases, available in gray, black and white, and are both versatile and easy to mount.

- BS** Flat base for surface mount
- KIT** Flat base for surface mount with 10 cm extension
- BP1** Wall base for side mount
- BP2** Wall base for side mount of 2 towers
- PR** 10 cm extension
- SB** Stainless steel bracket with 1/2" NPT cable gland
- FJ** Folding joint for mounting on slanting surfaces (also suitable for bending the tower to the side)
- M16** Flat base with M16 cable gland for surface mount
- KIT SS** Stainless steel flat base for surface mount with 10 cm extension (also available in 20 and 40 cm sizes)



**DRAWINGS, DIMENSIONS AND WEIGHTS**



PART NUMBERS

**miniTWS** - Integrated LED steady/flashing light module

		B		A		R		G		Y		N	
		allCOLOR	allBLEAR	allCOLOR	allBLEAR	allCOLOR	allBLEAR	allCOLOR	allBLEAR	allCOLOR	allBLEAR	allCOLOR	allBLEAR
GY	24V ACDC	31501	33241	31502	33242	31503	33243	31504	33244	31505	33245	31506	33246
	110V AC	31511	33261	31512	33262	31513	33263	31514	33264	31515	33265	31516	33266
	240V AC	31521	33251	31522	33252	31523	33253	31524	33254	31525	33255	31526	33256
BK	24V ACDC	31541	33301	31542	33302	31543	33303	31544	33304	31545	33305	31546	33306
	110V AC	31551	33321	31552	33322	31553	33323	31554	33324	31555	33325	31556	33326
	240V AC	31561	33311	31562	33312	31563	33313	31564	33314	31565	33315	31566	33316
WH	24V ACDC	33331	33361	33332	33362	33333	33363	33334	33364	33335	33365	33336	33366
	110V AC	33391	33381	33392	33382	33393	33383	33394	33384	33395	33385	33396	33386
	240V AC	33351	33371	33352	33372	33353	33373	33354	33374	33355	33375	33356	33376

**babyTWS** - Integrated LED steady light module

		B		A		R		G		Y		N	
		allCOLOR	allBLEAR	allCOLOR	allBLEAR	allCOLOR	allBLEAR	allCOLOR	allBLEAR	allCOLOR	allBLEAR	allCOLOR	allBLEAR
	24V ACDC	36451	33271	36452	33272	36453	33273	36454	33274	36455	33275	36456	33276

**microTWS** - Integrated LED steady light module

		B		A		R		G		Y		N	
		allCOLOR	allBLEAR	allCOLOR	allBLEAR	allCOLOR	allBLEAR	allCOLOR	allBLEAR	allCOLOR	allBLEAR	allCOLOR	allBLEAR
	24V ACDC	31571	33281	31572	33282	31573	33283	31574	33284	31575	33285	31576	33286

**nanoTWS** - Integrated LED steady light module

		B		A		R		G		Y		N	
		allCOLOR	allBLEAR	allCOLOR	allBLEAR	allCOLOR	allBLEAR	allCOLOR	allBLEAR	allCOLOR	allBLEAR	allCOLOR	allBLEAR
	24V ACDC	31581	33291	31582	33292	31583	33293	31584	33294	31585	33295	31586	33296

**SOUNDERS**

		WH	GY	BK
miniTWS	24V ACDC	33327	31531	31534
	110V AC	33328	31532	31535
	240V AC	33329	31533	31536
babyTWS	24V ACDC	36464	36461	36462
microTWS	24V ACDC	31568	31538	31539

**ACCESSORIES**

	WH	GY	BK
BP1	27708	27762	27693
BP2	-	27763	27694
SB	33359	33357	33358
BS	-	27760	27691
KIT	-	27764	27695
PR	-	27761	27692
M16	-	27777	27778
FJ	33349	33347	33348
KIT SS L10			27765
KIT SS L20			27766
KIT SS L40			27767

**BASES**

	WH	GY	BK
miniTWS	33330	31500	31508
babyTWS	36463	36450	36449
microTWS	31567	31537	31540
nanoTWS	31589	31587	31588

# AUTOMAX

devices for the automation industry

# LUXOR

**L**UXOR stacklights have been developed to meet modern requirements in industrial signaling. It is the only stacklight on the market with a diameter of 135 mm (LUXOR 4) and 90 mm (LUXOR 3) and, thanks to the numerous configurations offered solves all types of installation solutions in larger-size industrial sites and machinery.





# LUXOR LED

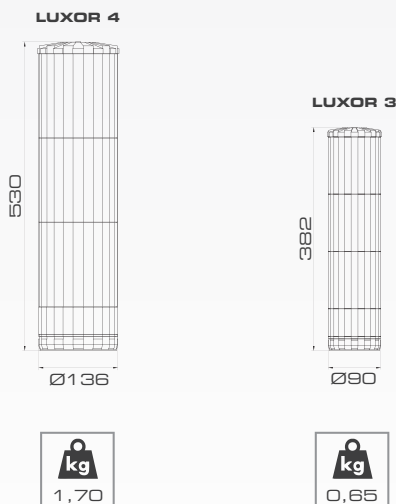


LUXOR 3

LUXOR 4



## DRAWINGS, DIMENSIONS AND WEIGHTS



## LUXOR LED | PART NO

LUXOR 3	24V ACDC	16693
LUXOR 4	24V ACDC	16664

More configurations upon request:  
automax@sirena.it

## LUXOR LED

Large size 3 stage stacklight (green, amber, red) available in 2 diameters: LUXOR 4 (136 mm) e LUXOR 3 (90 mm).

An integrated LED luminous source allows maximizing color emission frequency guaranteeing an outstanding color output.

Thanks to its larger size, LUXOR is particularly indicated for larger scale automated installation.

Configured with a flat mounting base, can also be available with a lateral base for side/wall installations.

### NOTE

LUXOR is also available with traditional incandescent filament bulbs (steady and flashing), with built-in rotating beacon, with Xenon discharge lamps, with a sounder module and in a range of voltages from 12 to 240V.

Furthermore, LUXOR can be configured with a wide selection of accessories to facilitate all mounting scenarios. Please contact us for further information: automax@sirena.it

## KEY CHARACTERISTICS

**LIGHT EFFECTS**  
STEADY

**VOLTAGES**  
24V ACDC +/-10%

**PROTECTION GRADE**  
IP54

**OPERATING TEMPERATURE**  
-30/+50 C°

## MECHANICAL FEATURES

Self extinguishing PC domes with high impact resistance. Body in fiber glass reinforced nylon (PA66 FV30)

## OPTICAL FEATURES

The vertically lined lens allows a perfect light distribution over 360°

### allCOLOR

### STANDARD USE

Colored lens with colored light source. The use of a colored lens with the same color of light source allows optimization of the emission frequency producing a rich intense light output


## CERTIFICATIONS




# AUTOMAX

devices for the automation industry

## CERTIFICATIONS

 The TWS range is certified according to CE (EN60598-1, EN61000-6-3, EN61000-6-2) standards

 The TWS range also achieved GOST certification and can be used in the CIS region according to local standards

 TWS HD (to be used in conjunction with the TWS range) has been certified according to IP69K protection grade standards by TUV SUD



**LISTED 85DA IND. CONT. EQ.**  
TYPE 4X ENCLOSURE

TWS has achieved UL certification for the U.S. and Canada with protection grade TYPE 4X, the highest in its category.

### UL LISTED TO U.S. AND CANADIAN SAFETY STANDARDS

MODEL	ELECTRICAL RATING	MAXIMUM AMBIENT TEMPERATURE ALLOWED
TWS BC	Max 240V ACDC	60° C
TWS STEADY	12V ACDC	59° C
	24V ACDC	60° C
	48V ACDC	57° C
	110, 240V ACDC	60° C
TWS FLASHING	12/48V DC	60° C
	24/48V AC	60° C
	110, 240V AC	54° C
TWS X	24V ACDC	41° C
	110, 240V AC	43° C
TWS LED	24V ACDC	60° C
	110, 240V AC	60° C
TWS S	12/24V ACDC	60° C
TWS RGA	12/24V ACDC	60° C
TWS PZO	12/48V DCAC	60° C
	110/240V AC	56° C
TWS MDA	12/24V ACDC	60° C
	48V AC	55° C
	110, 240V AC	50° C
TWS A+	12/24V ACDC	60° C
	110/240V AC	60° C
miniTWS	24V ACDC	50° C
miniTWS BC	Max 240V ACDC	50° C
miniTWS A	24V ACDC	50° C
babyTWS	24V ACDC	50° C
babyTWS BC	Max 24V ACDC	50° C
babyTWS A	24V ACDC	50° C
microTWS	24V ACDC	50° C
microTWS BC	Max 24V ACDC	50° C
microTWS A	24V ACDC	50° C
nanoTWS	24V ACDC	50° C
nanoTWS BC	Max 24V ACDC	50° C

AUTOMAX

# AUTOMAX

devices for the automation industry

**S**ince many years, AUTOMAX represents a point of reference for signaling devices engineered for industrial automation applications. With TWS and LUXOR, Sirena offers a complete range of products able to satisfy the most critical conditions.

Furthermore, a continuous R+D project, allows to deliver new modules and products, completing the range and upgrading the line to the latest quality and performance standards.

With AUTOMAX, Sirena guarantees a range of products engineered around your needs. Since 1974 we engineer, develop and manufacture the best industrial signaling devices on the market. With a 40 years experience and R+D + manufacturing facilities located in Italy, our knowhow and heritage is the added value that we offer in every single product we create.

AUTOMAX by Sirena: the right choice.



**AUTOMAX** is Sirena's range of  
multifunctional stacklights engineered  
for the automation industry

[automax@sirena.it](mailto:automax@sirena.it)



**MADE IN ITALY**  
Engineered,  
Developed and  
Assembled in  
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