



**LUZ DE LEDS DE ALTA EFICIENCIA  
CON FIJACIÓN PERMANENTE**

**HIGH-EFFICIENCY LED LIGHT  
WITH PERMANENT MOUNT**

**Pilot Solaris**

**FEDERAL SIGNAL VAMA, S.A.**

C/Dr.Ferrán,7(08339)VILASSAR DE DALT - SPAIN

Tel: (34) 93.741.79.00

Telefax: (34) 93.753.03.62

WEB: [www.fedsigvama.com](http://www.fedsigvama.com)



**E** Contenido

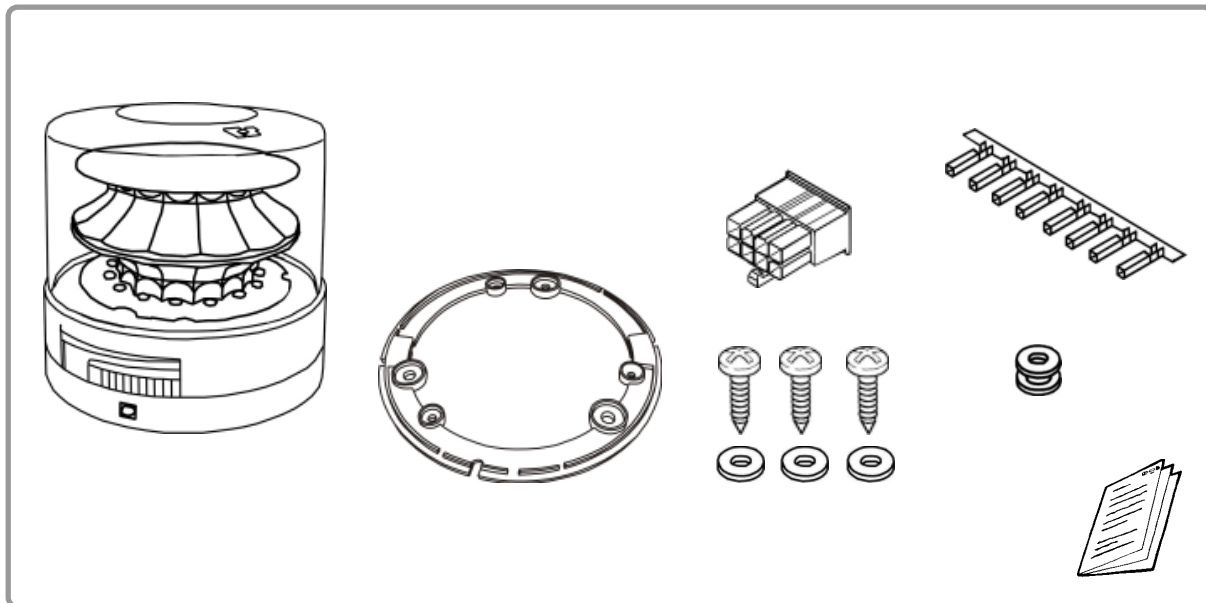
**GB** Contents

**E** PILOT Solaris 2 niveles

Luz de LEDs, alta intensidad, 2 reflectores parabólicos Solaris de 15 leds, fijación permanente, 10-30V  
refs. 2010492 (azul), 2010491 (ámbar),  
refs. 2010493 (rojo), 2010519 (verde)

**GB** PILOT Solaris 2 levels

LED light, high-intensity, 2 Solaris parabolic reflectors of 15 LEDs, permanent mount, 10-30V  
refs. 2010492 (blue), 2010491 (amber),  
refs. 2010493 (red), 2010519 (green)



**E** Contenido

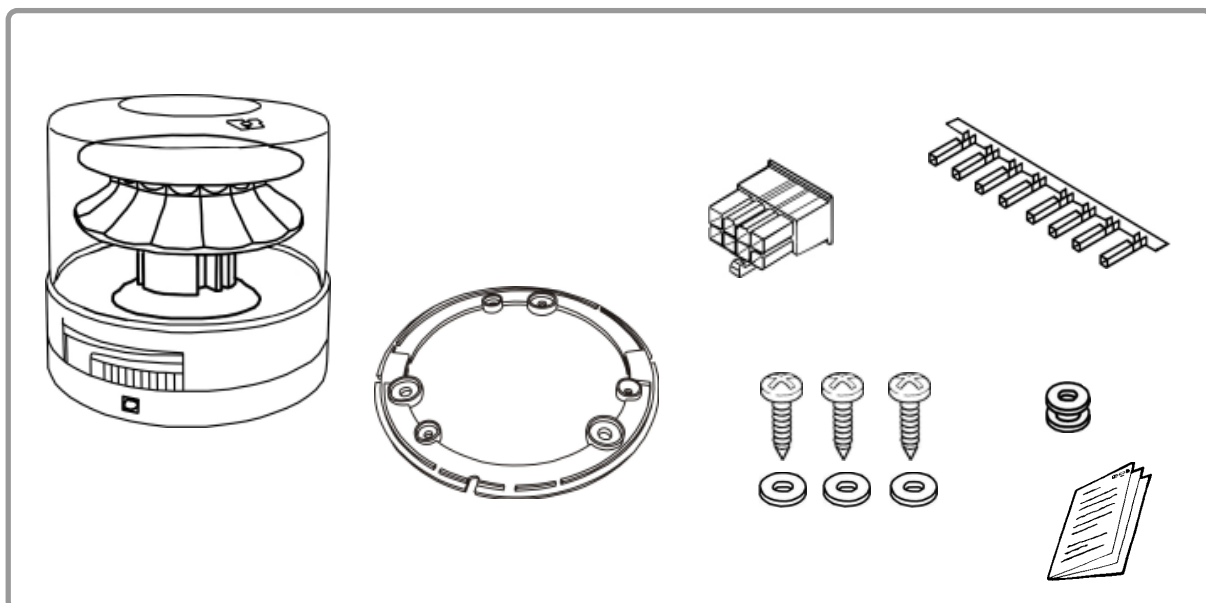
**GB** Contents

**E** PILOT Solaris 1 nivel

Luz de LEDs, alta intensidad, 1 reflector parabólico Solaris de 15 leds, fijación permanente, 10-30V  
refs. 2010472 (azul), 2010473 (ámbar),  
refs. 2010471 (rojo), 2010518 (verde)

**GB** PILOT Solaris 1 level

LED light, high-intensity, 1 Solaris parabolic reflector of 15 LEDs, permanent mount, 10-30V  
refs. 2010472 (blue), 2010473 (amber),  
refs. 2010471 (red), 2010518 (green)

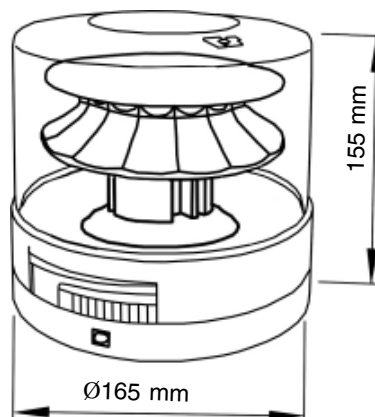
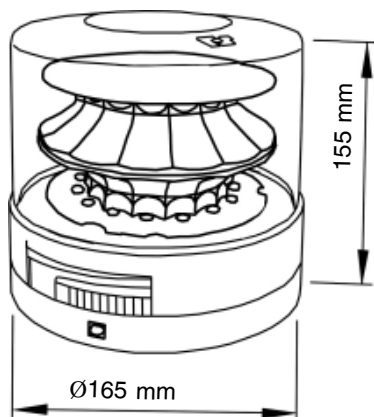


**(E) Especificaciones**

**(GB) Specifications**

**PILOT Solaris 2 niveles / 2 levels**

**PILOT Solaris 1 nivel / 1 level**



**(E)**

Tensión de alimentación: 10-30Vcc  
 Intensidad media consumida:  
 -Azul/ámbar rotativo (1/2 niveles): 0,9-1,9A (12V)  
 -Azul flash (1/2 niveles): 1-1,3A (12V)  
 -Rojo flash (1 nivel): 1A (12V)  
 -Ámbar flash (1 nivel): 0,6A (12V)  
 Temperatura de uso: -40°C a 55°C  
 Peso Pilot Solaris 2 niveles: 1,0 kg

**(GB)**

Voltage: 10-30Vcc  
 Current consumption:  
 -Blue/amber rotating (1/2 levels): 0.9-1.9A (12V)  
 -Blue flash (1/2 levels): 1-1.3A (12V)  
 -Red flash (1 level): 1A (12V)  
 -Amber flash (1 level): 0.6A (12V)  
 Operating temperature: -40°C to 55°C  
 Pilot Solaris 2 levels weight: 1.0 kg

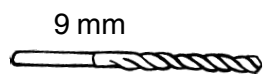
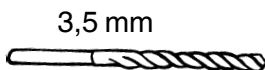
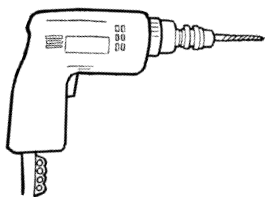
**(E) Modelos homologados R65**

**(GB) R65 approved models**

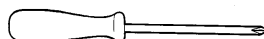
ref.	color / colour	tipo / type	R65 rotativo / rotating	R65 flash
2010492	azul / blue	2 niveles / levels	Clase 1 / Class 1	Clase 2 / Class 2
2010491	ámbar / amber	2 niveles / levels	no	no
2010472	azul / blue	1 nivel / level	no	Clase 1 / Class 1
2010473	ámbar / amber	1 nivel / level	no	Clase 1 / Class 1
2010519	verde / green	1 nivel / level	no	no
2010518	verde / green	2 niveles / levels	no	no

**(E) Material necesario (No suministrado)**

**(GB) Needed material (Not supplied)**



Philips PH4



**(E) NITRATO DE ZINC**

**(GB) ZINC NITRATE**



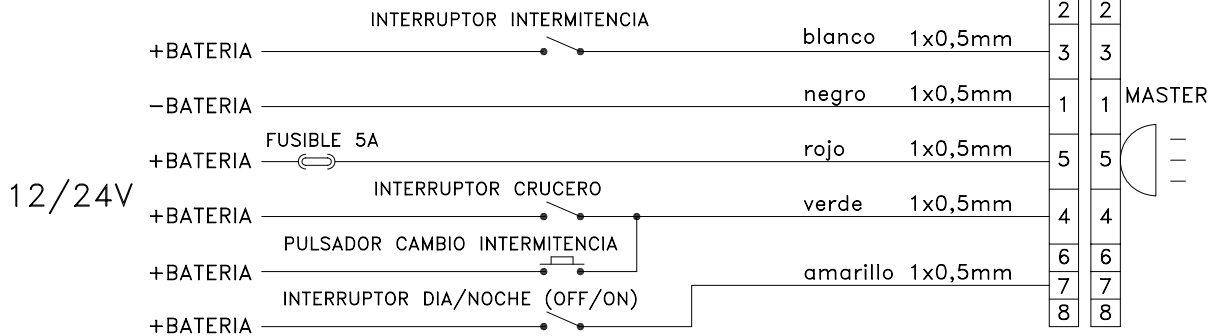
E PILOT Solaris 1/2 niveles, fijación permanente

GB PILOT Solaris 1/2 levels, permanent mount

E BATERÍA, INTERRUPTORES, CABLEADO Y FUSIBLES NO INCLUIDOS.

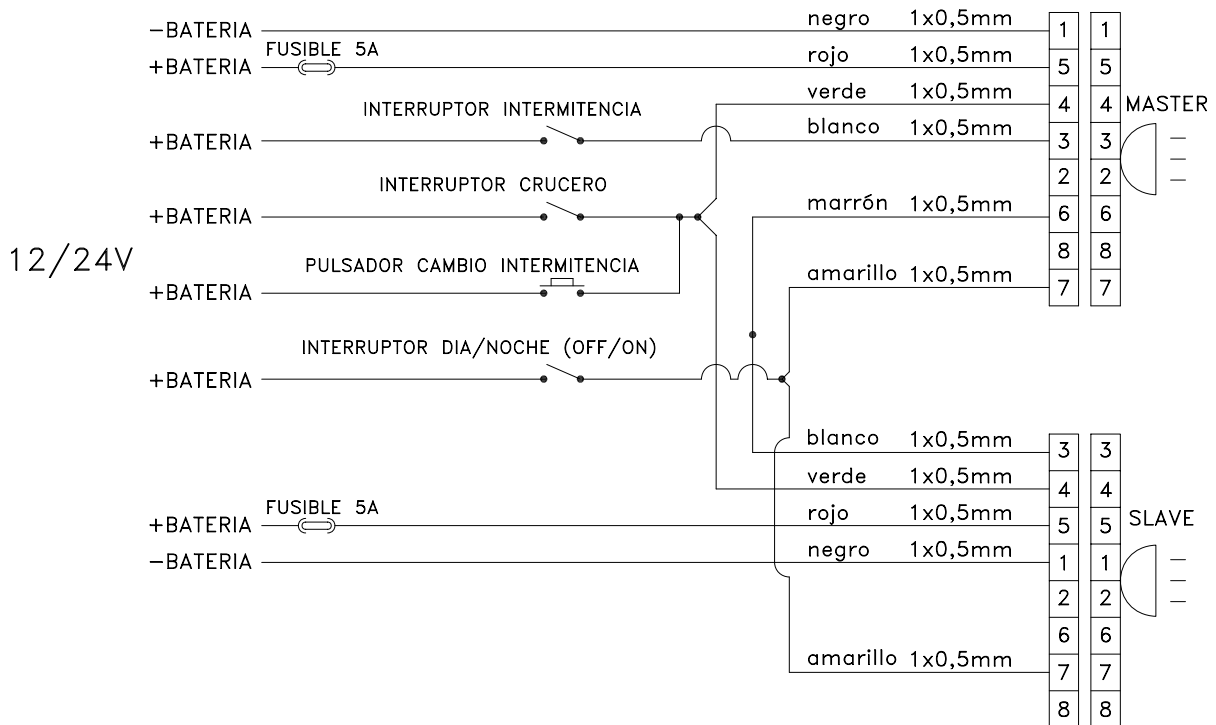
GB BATTERY, SWITCHES, WIRING AND FUSES NOT INCLUDED.

1 PILOT Solaris



2 PILOTs Solaris

1 nivel: luces alternadas      1 level: alternated lights  
2 niveles: luces simultaneas      2 levels: simultaneous lights



E	GB	E	GB
amarillo	yellow	interruptor	switch
azul	blue	luces alternadas	alternated lights
batería	battery	luces simultaneas	simultaneous lights
blanco	white	marrón	brown
cambio intermitencia	flash pattern change	master	master
crucero	cruise	negro	black
día/noche	day/night	pulsador	push-button
fusible	fuse	rojo	red
intermitencia	flash pattern	slave	slave
		verde	verde

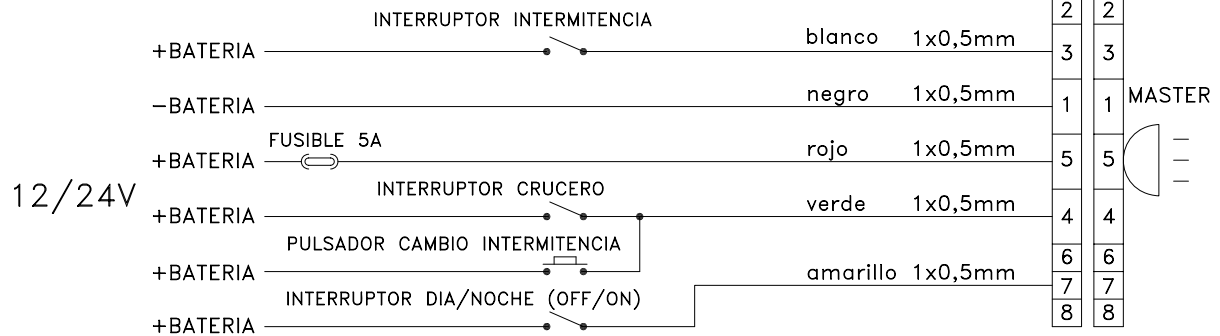
E PILOT Solaris 1/2 niveles, fijación permanente

GB PILOT Solaris 1/2 levels, permanent mount

E BATERÍA, INTERRUPTORES, CABLEADO Y FUSIBLES NO INCLUIDOS.

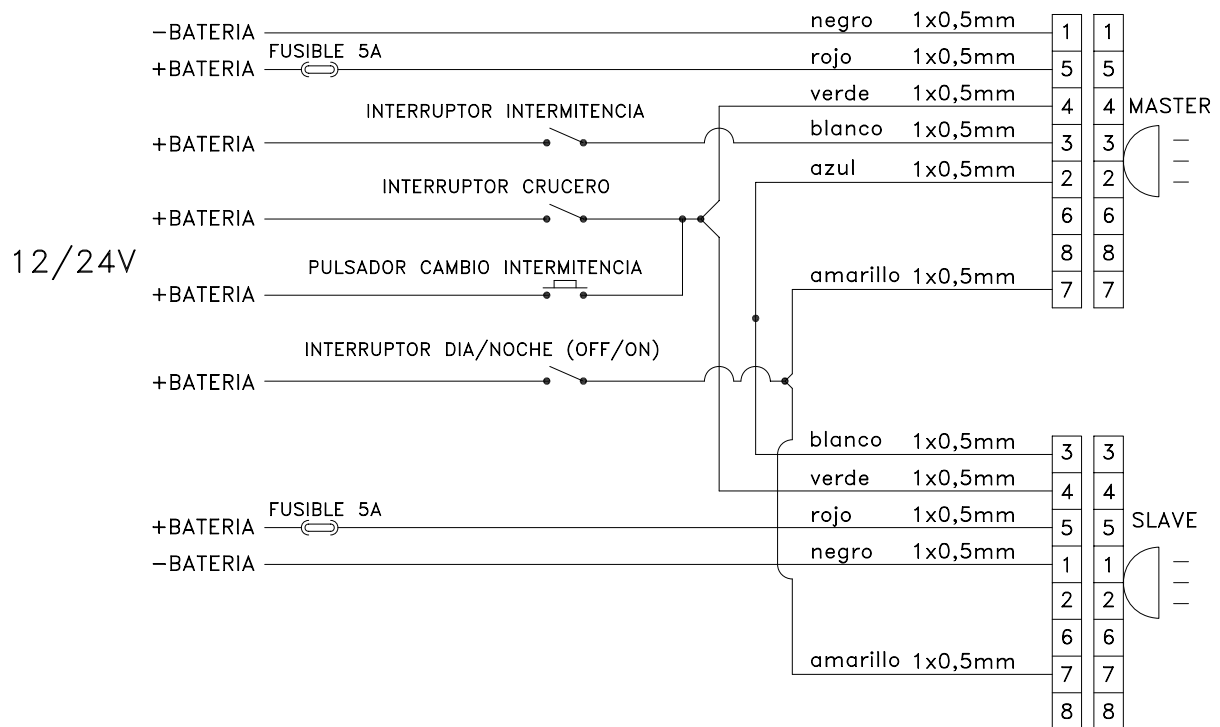
GB BATTERY, SWITCHES, WIRING AND FUSES NOT INCLUDED.

1 PILOT Solaris



2 PILOTs Solaris

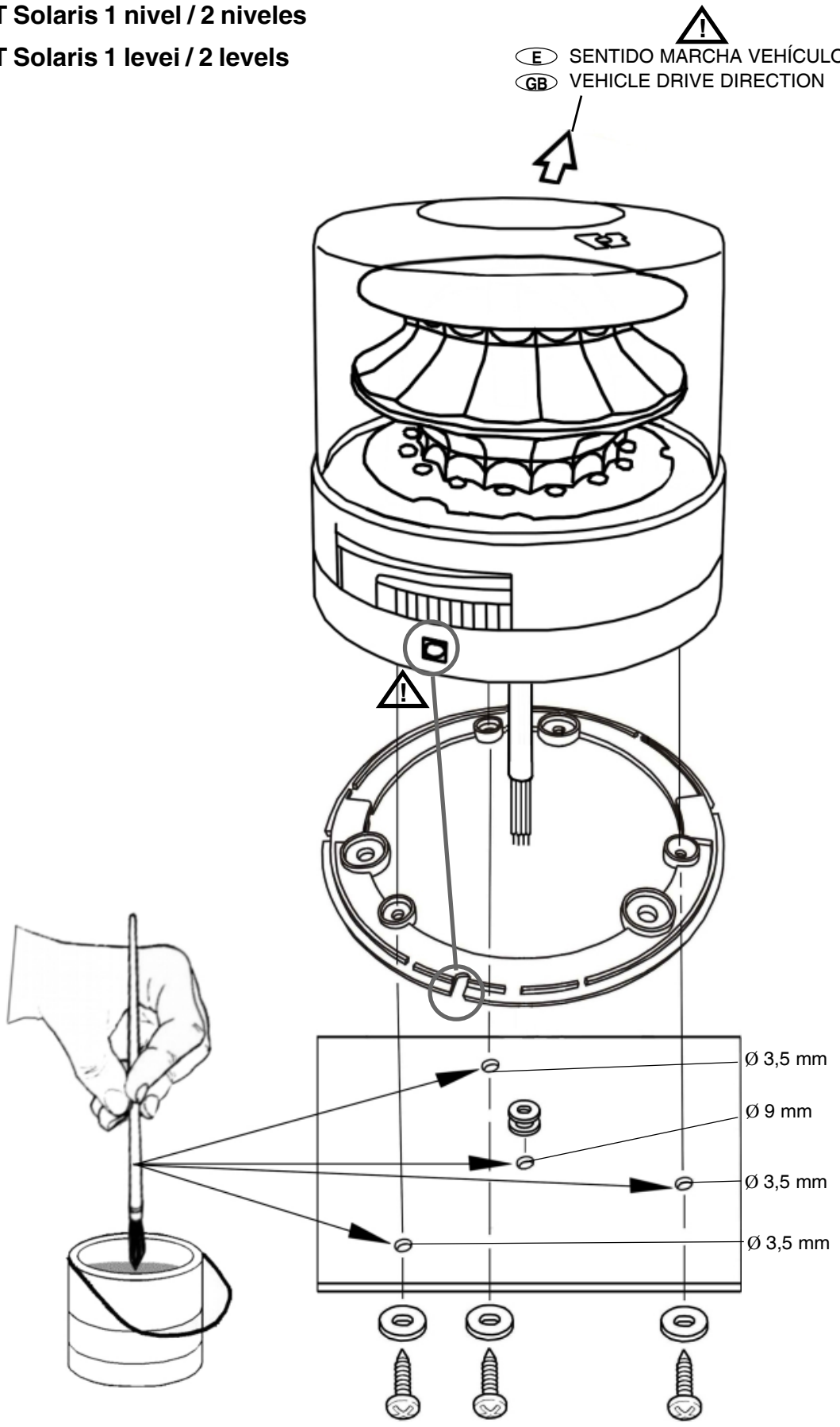
1 nivel: luces simultaneas      1 level: simultaneous lights  
2 niveles: luces alternadas      2 levels: alternated lights



E	GB	E	GB
amarillo	yellow	interruptor	switch
azul	blue	luces alternadas	alternated lights
batería	battery	luces simultaneas	simultaneous lights
blanco	white	marrón	brown
cambio intermitencia	flash pattern change	master	master
crucero	cruise	negro	black
día/noche	day/night	pulsador	push-button
fusible	fuse	rojo	red
intermitencia	flash pattern	slave	slave
		verde	verde

PILOT Solaris 1 nivel / 2 niveles  
PILOT Solaris 1 level / 2 levels

  
E SENTIDO MARCHA VEHÍCULO  
GB VEHICLE DRIVE DIRECTION



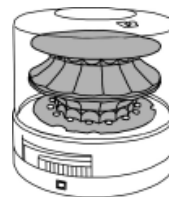
**1**

**E**  
 Intermitencia OFF  
 Crucero OFF  
 Cambio Intermitencia OFF  
 Día / Noche OFF

**GB**  
 OFF Flash Pattern  
 OFF Cruise Light  
 OFF Flash Pattern Change  
 OFF Day / Night

**2**

**E** Pilot Solaris desactivado (OFF)  
**GB** Deactivated Pilot Solaris (OFF)



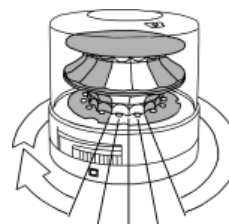
**3**

**E**  
**INTERMITENCIA ON**  
 Crucero OFF  
 Cambio Intermitencia OFF  
 Día / Noche OFF

**GB**  
**ON FLASH PATTERN**  
 OFF Cruise Light  
 OFF Flash Pattern Change  
 OFF Day / Night

**4**

**E** Luz activada intermitencia R65  
**GB** R65 flash pattern activated light



**5**

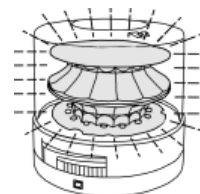
Cambiar modo intermitencia (pulsar ON 1 segundo)  
 Flash pattern change (push ON 1 second)

**E**  
 INTERMITENCIA ON  
 Crucero OFF  
**Cambio Intermitencia ON-OFF**  
 Día / Noche OFF

**GB**  
 ON FLASH PATTERN  
 OFF Cruise Light  
**ON-OFF Flash Pattern Change**  
 OFF Day / Night

**6**

**E** Modo intermitencia cambiada (ON)  
**GB** Changed flash pattern (ON)



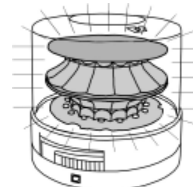
**7**

**E**  
 Intermitencia ON o OFF  
**CRUCERO ON**  
 Cambio Intermitencia OFF  
 Día / Noche OFF

**GB**  
 OFF or ON Flash Pattern  
**ON CRUISE LIGHT**  
 OFF Flash Pattern Change  
 OFF Day / Night

**8**

**E** Luz crucero encendida (ON)  
**GB** Illuminated cruise light (ON)



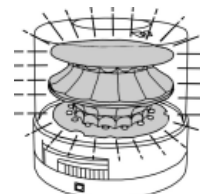
**9**

**E**  
 Intermitencia ON  
 Crucero OFF  
 Cambio Intermitencia OFF  
**Día / NOCHE ON**

**GB**  
 ON Flash Pattern  
 OFF Cruise Light  
 OFF Flash Pattern Change  
**ON Day / NIGHT**

**10**

**E** Pilot Solaris modo Noche (ON)  
**GB** Night mode Pilot Solaris (ON)



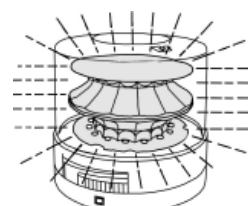
**11**

**E**  
 Intermitencia ON  
 Crucero OFF  
 Cambio Intermitencia OFF  
**DIA / Noche OFF**

**GB**  
 ON Flash Pattern  
 OFF Cruise Light  
 OFF Flash Pattern Change  
**OFF DAY / NIGHT**

**12**

**E** Pilot Solaris modo Día (OFF)  
**GB** Day mode Pilot Solaris (OFF)



**E** CAMBIO MODO INTERMITENCIA  
LUCES SIMULTANEAS

**GB** FLASH PATTERN CHANGE  
SIMULTANEOUS LIGHTS

**1**

**E**  
INTERMITENCIA ON

**GB**  
ON FLASH PATTERN

**R65**  
Ver página 2  
See page 2

**ON**

**2**

**E**  
Cambio Intermitencia  
(pulsar ON 1 segundo)

**GB**  
Flash Pattern Change  
(push ON 1 second)

**R65**  
Ver página 2  
See page 2

**S-S (2Hz)**

**3**

**E**  
Cambio Intermitencia  
(pulsar ON 1 segundo)

**GB**  
Flash Pattern Change  
(push ON 1 second)

**ON 4DF (2,2Hz)**

**4**

**E**  
Cambio Intermitencia  
(pulsar ON 1 segundo)

**GB**  
Flash Pattern Change  
(push ON 1 second)

**ON QUAD (1,1Hz)**

**5**

**E**  
Cambio Intermitencia  
(pulsar ON 1 segundo)

**GB**  
Flash Pattern Change  
(push ON 1 second)

**ON SAE-4 (1,6Hz)**

**6**

**E**  
Cambio Intermitencia  
(pulsar ON 1 segundo)

**GB**  
Flash Pattern Change  
(push ON 1 second)

**ON SAE-3 (3Hz)**

**7**

**E**  
Cambio Intermitencia  
(pulsar ON 1 segundo)

**GB**  
Flash Pattern Change  
(push ON 1 second)

**ON DOUBLE-150 (2,5Hz)**

**8**

**E**  
Cambio Intermitencia  
(pulsar ON 1 segundo)

**GB**  
Flash Pattern Change  
(push ON 1 second)

**ON SINGLE-200 (2Hz)**

**8** → **1**



**E** CAMBIO MODO INTERMITENCIA  
LUCES ALTERNADAS

**GB** FLASH PATTERN CHANGE  
ALTERNATED LIGHTS

**1**

**E**  
INTERMITENCIA ON

**GB**  
ON FLASH PATTERN

**R65**  
Ver página 2  
See page 2

**ON**

**2**

**E**  
Cambio Intermitencia  
(pulsar ON 1 segundo)

**GB**  
Flash Pattern Change  
(push ON 1 second)

**R65**  
Ver página 2  
See page 2

**S-A (2Hz)**

**3**

**E**  
Cambio Intermitencia  
(pulsar ON 1 segundo)

**GB**  
Flash Pattern Change  
(push ON 1 second)

**ON 4DF (2,2Hz)**

**4**

**E**  
Cambio Intermitencia  
(pulsar ON 1 segundo)

**GB**  
Flash Pattern Change  
(push ON 1 second)

**ON QUAD (1,1Hz)**

**5**

**E**  
Cambio Intermitencia  
(pulsar ON 1 segundo)

**GB**  
Flash Pattern Change  
(push ON 1 second)

**ON SAE-4 (1,6Hz)**

**6**

**E**  
Cambio Intermitencia  
(pulsar ON 1 segundo)

**GB**  
Flash Pattern Change  
(push ON 1 second)

**ON SAE-3 (3Hz)**

**7**

**E**  
Cambio Intermitencia  
(pulsar ON 1 segundo)

**GB**  
Flash Pattern Change  
(push ON 1 second)

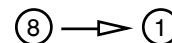
**ON DOUBLE-150 (2,5Hz)**

**8**

**E**  
Cambio Intermitencia  
(pulsar ON 1 segundo)

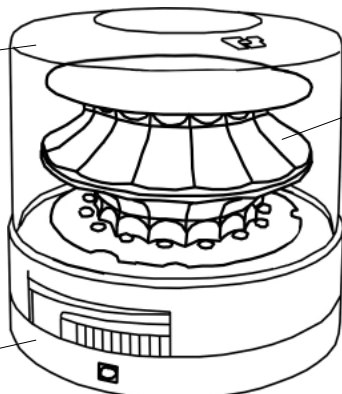
**GB**  
Flash Pattern Change  
(push ON 1 second)

**ON SINGLE-200 (2Hz)**



**PILOT Solaris 2 niveles  
PILOT Solaris 2 levels**

- 1x  
ref. # 9133711-05TPREC  
(azul/blue)
- 1x  
ref. # 9133711-06TPREC  
(ámbar/amber)
- 1x  
ref. # 9133869-REC  
(roja/red)
- 1x  
ref. # 9151103-REC  
(verde/green)
- 1x  
ref. # 8233380REC



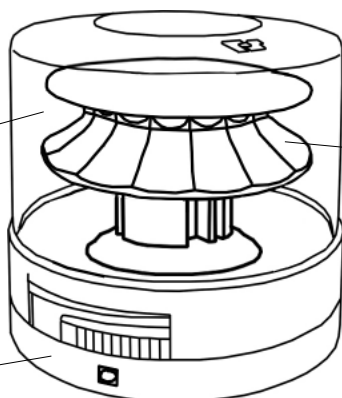
- 1x  
ref. # 8235963B  
(azul/blue)
- 1x  
ref. # 8235963A  
(ámbar/amber)
- 1x  
ref. # 8235963R  
(roja/red)
- 1x  
ref. # 8235963V  
(verde/green)

+  
3x  
ref. # 9027786



**PILOT Solaris 1 nivel  
PILOT Solaris 1 level**

- 1x  
ref. # 9133711-05TPREC  
(azul/blue)
- 1x  
ref. # 9133711-06TPREC  
(ámbar/amber)
- 1x  
ref. # 9133869-REC  
(roja/red)
- 1x  
ref. # 9151103-REC  
(verde/green)
- 1x  
ref. # 8233380REC



- 1x  
ref. # 8235967B  
(azul/blue)
- 1x  
ref. # 8235967A  
(ámbar/amber)
- 1x  
ref. # 8235967R  
(roja/red)
- 1x  
ref. # 8235967V  
(verde/green)

+  
3x  
ref. # 9027786



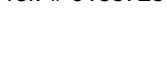
1x  
ref. # 9015032



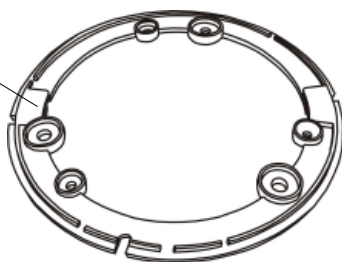
3x  
ref. # 9027102



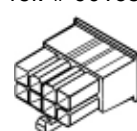
1x  
ref. # 9133723



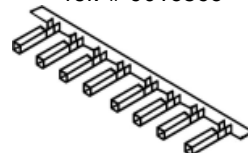
3x  
ref. # 9027259



1x  
ref. # 9018354



8x  
ref. # 9018368



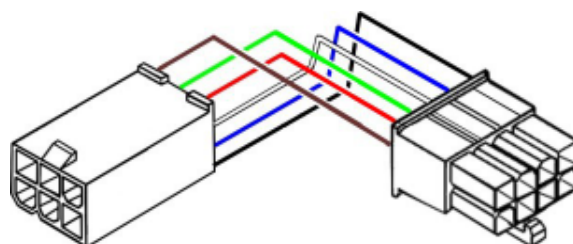
1x  
ref. # 82441391

**E**

Cableado necesario para  
reemplazar focos Pilot Solaris 12V  
fabricados antes de 2010

**GB**

Wiring required for  
replace Pilot Solaris 12V lights  
manufactured before 2010



**CN6V**

**CN8V**

1x  
ref. # 9018710

1x  
ref. # 9018354



## Mensaje de seguridad para el instalador

La vida de las personas depende de una instalación adecuada y segura de nuestros productos. Es importante que Vd. lea, comprenda y siga atentamente todas las instrucciones que se acompañan a este producto y sus productos complementarios. Además, a continuación le relacionamos una serie de instrucciones de seguridad y precauciones importantes que Vd. debería observar:

- Para instalar adecuadamente este equipo: Vd. debe tener un buen conocimiento de electricidad del automóvil, además de formación en la instalación y utilización de equipos de Seguridad.
- Cuando proceda a taladrar la estructura o chapa del vehículo, asegúrese de que ambos lados de la superficie se encuentran libres de cualquier elemento que pudiera resultar dañado. Limpie los agujeros realizados de cualquier resto de material que haya podido quedar. Para prevenir cortocircuitos, se aconseja usar pasacables aislantes en los agujeros por donde pase el cable.
- Un sistema de luz de señalización óptica es un dispositivo por el que circula una intensidad alta de corriente. Para que pueda funcionar adecuadamente, debe instalarse una conexión separada a masa. En el caso de que sea posible, aconsejamos conectarlo al terminal negativo de la batería. Como mínimo debería fijarse a un elemento metálico sólido o a una parte del chasis, que proporcione un paso a masa efectivo cuando el equipo sea utilizado.
- Se producen voltajes altos dentro de los modelos equipados con luces estroboscópicas durante y después de su funcionamiento. Asegúrese de que la fuente de alimentación se encuentra desconectada y espere al menos DIEZ MINUTOS antes de desmontar la lente de la luz.
- Disponga los equipos de modo que el VEHÍCULO y los CONTROLES puedan ser manejados con seguridad bajo cualquier condición de conducción.
- Vd. debería revisar frecuentemente los equipos para asegurar que funcionan adecuadamente y que se encuentran convenientemente fijados al vehículo.
- Conserve estas instrucciones en un lugar seguro y remítase a ellas cuando efectúe operaciones de mantenimiento o reinstale el producto.

El no cumplimiento de estas normas de precaución puede dar como resultado daños a la propiedad, lesiones graves o muerte tanto para Vd. como para otras personas.



## Safety message to installers

People's lives depend on your safe installation of our products. It is important to read, understand and follow all instructions shipped with this product and the related add-on products. In addition, listed below are some other important safety instructions and precautions you should follow:

- To properly install this product: you must have a good understanding of automotive electrical procedures and systems, along with proficiency in the installation and use of safety warning equipment.
  - When drilling into a vehicle structure, be sure that both sides of the surface are clear of anything that could be damaged. Remove all burrs from drilled holes. To prevent electrical shorts, grommet all drilled holes through which wiring passes.
  - An emergency light system is a high current device. In order for it to function properly, a separate ground connection must be made. If practical, it should be connected to the negative battery terminal. At a minimum, it may be attached to a solid metal body or chassis part that will provide an effective ground path as long as the equipment is to be used.
  - High voltages are present inside the strobe light equipped models during and after operation. Ensure that power is disconnected and wait at least TEN MINUTES before removing the dome.
  - Locate the equipment so that the VEHICLE and CONTROLLERS can be operated safely under all driving conditions.
  - You should frequently inspect the equipment to ensure that it is operating properly and that it is securely attached to the vehicle.
  - File these instructions in a safe place and refer to them when maintaining and reinstalling the product.
- Failure to follow all safety precautions and instructions may result in property damage, serious injury, or death to you or to others.