

CATÁLOGO 2018

# Pulsantería

## La gama completa



**La pulsantería de ABB está diseñada para ofrecer una fiabilidad total. Su diseño innovador simplifica todo el proceso, desde la selección hasta la instalación. Envoltorios, columnas y balizas de señalización completan la gama.**

INFORMACIÓN  
GENERAL  
P.2

# Pulsantería

## La gama completa

GAMA MODULAR  
P.11

GAMA COMPACTA  
P.51

ENVOLVENTES  
Y ESTACIONES  
MONTADAS  
P.81

PLACAS DE LEYENDA  
Y TAPAS DE TEXTO  
P.95

TORRES DE  
SEÑALIZACIÓN  
Y BALIZAS DE  
SEÑALIZACIÓN  
P.101

DATOS TÉCNICOS  
GENERALES  
P.109

ÍNDICE  
P.112

MATERIALES  
DE MARKETING  
P. 128

## Pulsantería

### Fiabilidad en todas las aplicaciones

Ya esté instalada en un cargador de un VE o en el equipo de ensayo de un ascensor, la pulsantería de ABB funcionará como una interfaz fiable para los usuarios. Están diseñados y probados para soportar entornos extremos.



01



02



03

01 Ascensor

02 Carga de VE

03 Aplicaciones marinas

## Una pequeña actualización puede marcar una gran diferencia.

La confianza lo es todo. En entornos industriales, es fundamental tener interfaces hombre-máquina con las que poder sentirse seguro. Siempre que inicie o detenga un proceso, la respuesta debe estar garantizada. Por este motivo, la pulsantería de ABB está diseñada para ofrecer total fiabilidad.

Producción continua, disponibilidad máxima y mayores beneficios requieren una fiabilidad del proceso excepcional.

—  
04

—  
04 Alimentos y bebidas

—  
05 Puertos y aplicaciones marítimas

En lo referente a la seguridad de su personal, la fiabilidad es crucial.

—  
05

Los detalles importan. El trabajo comienza y se detiene con la pulsantería y también lo hace su productividad y seguridad. Confíe en la pulsantería de ABB para dar la cara cuando más importa.



# Pulsantería

Productos fiables, fáciles de seleccionar e instalar



La pulsantería de ABB está diseñada para ofrecer fiabilidad total. Nuestros productos se ponen a prueba en condiciones extremas y se analizan en los entornos más hostiles. Su diseño innovador simplifica todo el proceso, desde la selección hasta la instalación. Envolventes, columnas y balizas de señalización completan la gama.



**Funcionamiento continuo**

**Diseñada para entornos hostiles**

La pulsantería de ABB está diseñada con un grado de protección de hasta IP69K y 4X, lo que garantiza la fiabilidad en entornos extremos; por ello, la pulsantería de ABB es perfecta para su uso en sectores exigentes como la construcción y el de alimentos y bebidas. Un diseño innovador que limpia automáticamente los contactos garantiza la alta fiabilidad para todos los productos.



**Disponibilidad global**

**Sencilla selección y gestión del stock**

La oferta principal de ABB incluye la pulsantería más demandada, por lo que la selección de productos es sencilla, la gestión del stock es más simple y la disponibilidad de productos es mayor.

El servicio a las empresas exportadoras a nivel mundial está garantizada gracias a la gama estandarizada de ABB, contando con las principales certificaciones internacionales a nivel mundial.



**Facilidad de instalación**

**Ahorro de tiempo y espacio**

El diseño exclusivo de la gama modular de ABB permite una instalación sin herramientas sencilla y rápida. Ofrece alta flexibilidad para cambios de último minuto. Gracias a su construcción integral, la gama compacta disminuye el espacio requerido para la instalación y ahorra tiempo.

# Pulsantería

## Fiabilidad que dura

### Funcionamiento continuo

#### Vida útil más larga

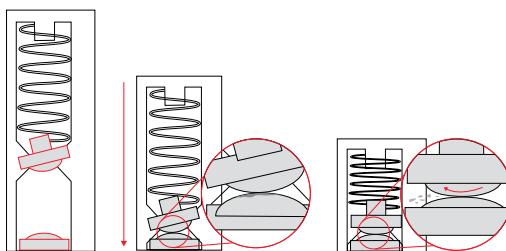
- La pulsantería de ABB está diseñada y probada para soportar el uso frecuente a lo largo del tiempo en cualquier entorno

#### Alta durabilidad mecánica

- Probada para ofrecer una vida útil mecánica de hasta 10 millones de operaciones

#### Garantía de conectividad eléctrica

- Los contactos con limpieza automática garantizan un funcionamiento fiable sin necesidad de mantenimiento, lo que aumenta la disponibilidad



El mecanismo de auto cepillado integrado limpia los contactos cuando se utilizan para eliminar el polvo y óxido de los contactos y mejorar la conductividad.

—  
01 Ensayo de durabilidad mecánica

—  
02 Protección total frente a todo tipo de suciedad

—  
03 Potentes chorros de agua proyectados a la parte frontal desde una distancia de 3 metros

#### Ensayos más allá de las normas



[Vea el vídeo](#)

#### Resistencia al polvo y al agua

Para el polvo, toda la pulsantería de ABB es inexpugnable, además, es increíblemente resistente a la exposición al agua.

#### IP66

La pulsantería de grado IP66 puede soportar chorros de agua de alta presión y es apta para el uso en exteriores hostiles.

#### IP67

La pulsantería de grado IP67 puede soportar la inmersión en un metro de agua durante 30 minutos. Es apta para usarse en los entornos más agresivos con agua y polvo.

#### IP69K

La pulsantería de grado IP69K puede soportar tanto el trato brusco e intenso como la limpieza a alta temperatura. Es perfecta para entornos con requisitos sanitarios estrictos, como el sector de alimentos y bebidas.

**Descubra una descripción técnica general sobre los ensayos en la sección de datos técnicos generales.**

Confíe en ABB para crear productos que funcionen en todos los entornos.



# Pulsantería

Calidad global, asistencia local



## Disponibilidad global

### Disponibilidad mundial de ABB

Lograr verdaderas soluciones globales

- Mismos productos y misma calidad en todo el mundo
- Asistencia local disponible en cualquier lugar con la red de distribución mundial de ABB
- Todos los certificados y piezas de repuesto disponibles en cualquier parte del planeta.

## Facilidad de instalación

Reduzca el tiempo de instalación eligiendo entre la gama modular flexible o la gama compacta.

Combinando ambas gamas, podrá optar a una solución y diseño más rápidos y flexibles.

La tuerca se aprieta sin herramientas y una amplia mayoría de accesorios sirven para ambas gamas.

### Siempre la solución correcta con la amplia gama de LED

Ahorre tiempo y dinero en sus proyectos con menos códigos de pedido para dispositivos con iluminación.

Con una tensión de alimentación de 6.3 V CC a 415 V CA tanto para la gama modular como para la compacta, ABB cubre todas las necesidades sin transformadores adicionales.

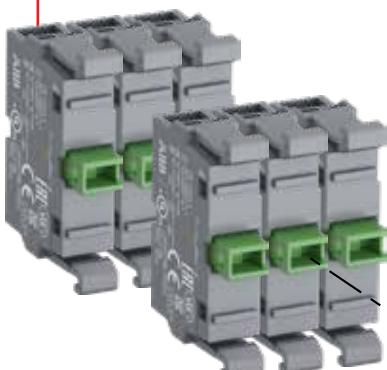
# Gama modular

## Configuración flexible

Una selección versátil de actuadores con una gran flexibilidad y una amplia variedad de dispositivos. Encuentre la solución perfecta para casi todas las aplicaciones.

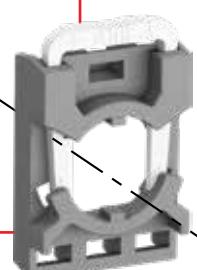


Más flexibilidad:  
Cambios de última hora fáciles de realizar  
Hasta 6 bloques de contactos, NA y NC



Opción de soportes de 3 y 5 posiciones

Ahorre hasta un 30 % de tiempo de instalación con componentes exclusivos que se fijan a presión sin herramientas



Soluciones de tuerca sin necesidad de herramientas



Cubrimos todo tipo de aplicaciones con una amplia gama de dispositivos y embellecedores

Altos valores eléctricos nominales AC-15 de 6 A a 230 V.  
La solución flexible que simplifica la gestión de sus stocks.

## Gama compacta

### Solución todo en uno

La solución más eficiente del mercado para reducir el tiempo y el coste de instalación. La gama compacta presenta el mayor nivel de resistencia al polvo y al agua del mercado.



Menos códigos de pedido para facilitar la selección y ahorrar tiempo. Su diseño compacto permite una instalación rápida y sencilla.



# Pulsantería

## Gama modular

### Detalles de pedido

- 12 Instrucciones de montaje
- 13 Pulsadores no luminosos
- 15 Pulsadores luminosos
- 17 Pulsadores dobles no luminosos
- 18 Pulsadores dobles luminosos
- 20 Pulsadores de seta
- 21 Pulsadores de parada de emergencia
- 22 Pulsadores de parada de máquinas
- 23 Pulsadores para ambientes extremos
- 23 Pilotos
- 24 Selectores no luminosos
- 29 Selectores luminosos
- 33 Selectores accionados por llave
- 35 Potenciómetros
- 36 Pulsadores de rearme
- 37 Pulsadores de rearne con eje
- 38 Joysticks
- 39 Selectores de palanca

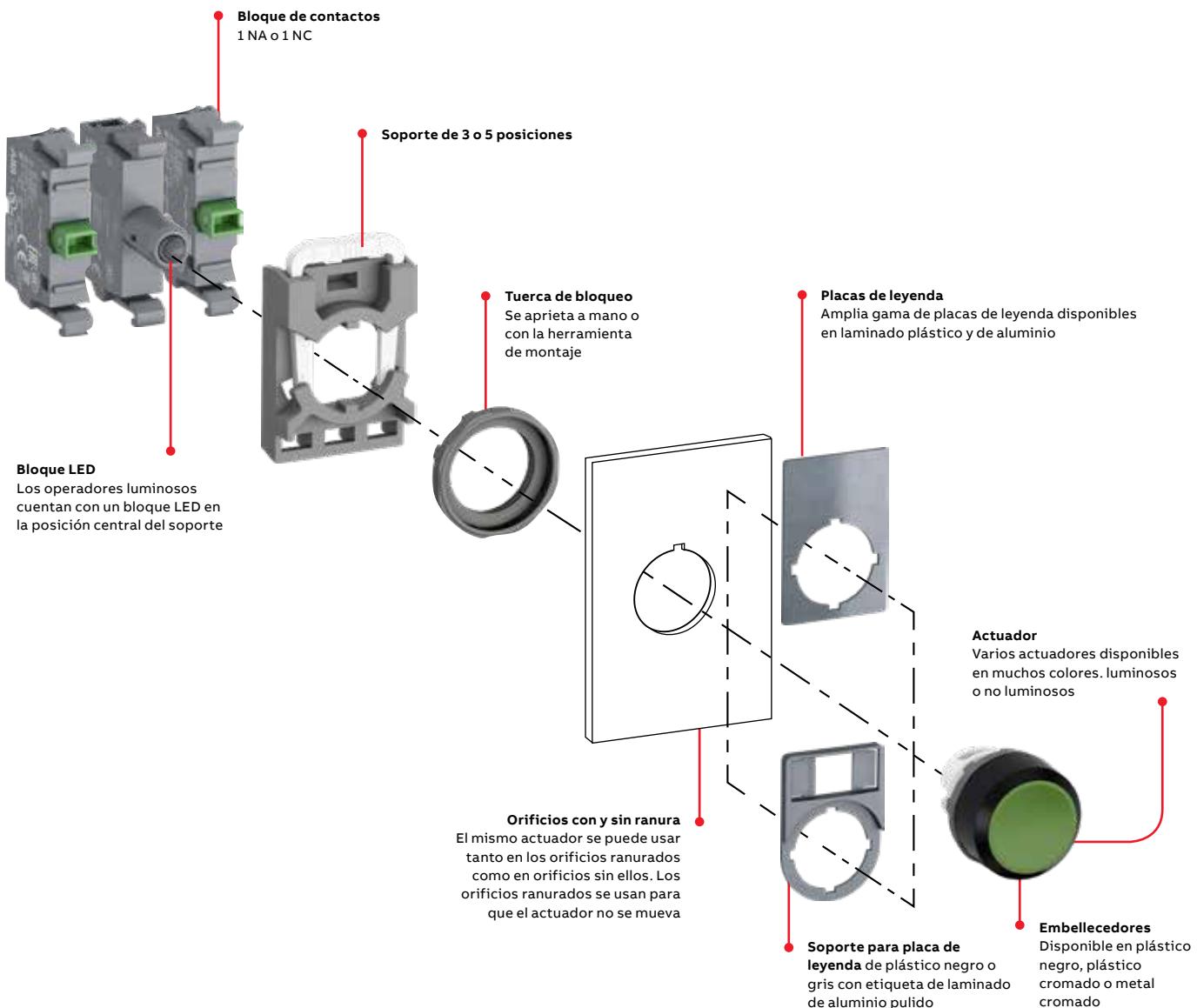
### Accesorios para la gama modular

- 40 Configuración del bloque de contactos
- 41 Soportes y bloques de contactos para montaje frontal
- 42 Bloques LED para montaje frontal
- 44 Otros accesorios

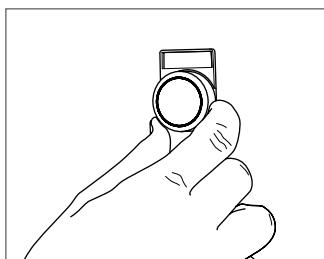
### Datos técnicos

- 46
- 50 Plan para taladrar

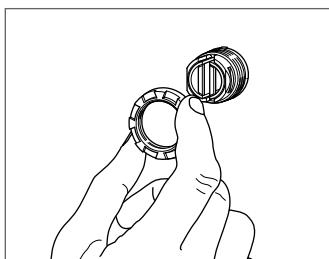
## Gama modular



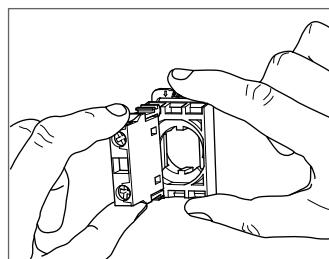
### Facilidad de instalación



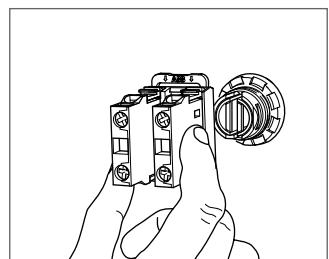
El actuador se instala desde la parte frontal...



...y se sujetta por la parte trasera con la tuerca.

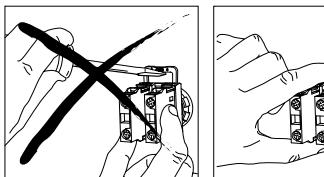


Los bloques de contactos/bloque LED se fijan a presión en el soporte...



...y el soporte se coloca en el operador.

### ...y de desmontaje



Presione hacia abajo el muelle del soporte y retire el soporte del actuador.

### Instalación rápida y sencilla



Vea el vídeo

## Gama modular

Pulsadores rasante modulares no luminosos



MP1-10R

ISFC151004V0001



MP1-10Y

ISFC151016V0001



MP1-30L

ISFC151031V0001



MP2-10G

ISFC151015V0001



MP2-10W

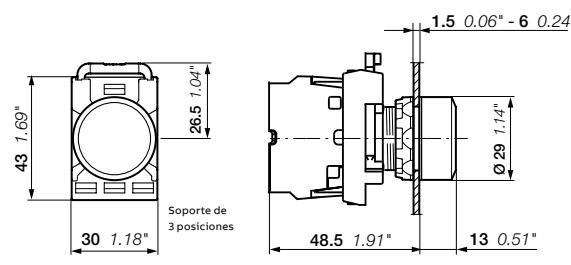
ISFC151018V0001



MP2-20B

ISFC151029V0001

| Color             | Embellecedor     | Tipo    | Código de pedido | Cant. paq. | Peso (1 ud.) kg |
|-------------------|------------------|---------|------------------|------------|-----------------|
| <b>Momentáneo</b> |                  |         |                  |            |                 |
| ● Rojo            | Plástico negro   | MP1-10R | 1SFA611100R1001  | 10         | 0.016           |
|                   | Plástico cromado | MP1-20R | 1SFA611100R2001  | 10         | 0.016           |
|                   | Metálico cromado | MP1-30R | 1SFA611100R3001  | 10         | 0.026           |
| ● Verde           | Plástico negro   | MP1-10G | 1SFA611100R1002  | 10         | 0.016           |
|                   | Plástico cromado | MP1-20G | 1SFA611100R2002  | 10         | 0.016           |
|                   | Metálico cromado | MP1-30G | 1SFA611100R3002  | 10         | 0.026           |
| ● Amarillo        | Plástico negro   | MP1-10Y | 1SFA611100R1003  | 10         | 0.016           |
|                   | Plástico cromado | MP1-20Y | 1SFA611100R2003  | 10         | 0.016           |
|                   | Metálico cromado | MP1-30Y | 1SFA611100R3003  | 10         | 0.026           |
| ● Azul            | Plástico negro   | MP1-10L | 1SFA611100R1004  | 10         | 0.016           |
|                   | Plástico cromado | MP1-20L | 1SFA611100R2004  | 10         | 0.016           |
|                   | Metálico cromado | MP1-30L | 1SFA611100R3004  | 10         | 0.026           |
| ○ Blanco          | Plástico negro   | MP1-10W | 1SFA611100R1005  | 10         | 0.016           |
|                   | Plástico cromado | MP1-20W | 1SFA611100R2005  | 10         | 0.016           |
|                   | Metálico cromado | MP1-30W | 1SFA611100R3005  | 10         | 0.026           |
| ● Negro           | Plástico negro   | MP1-10B | 1SFA611100R1006  | 10         | 0.016           |
|                   | Plástico cromado | MP1-20B | 1SFA611100R2006  | 10         | 0.016           |
|                   | Metálico cromado | MP1-30B | 1SFA611100R3006  | 10         | 0.026           |
| ○ Claro           | Plástico negro   | MP1-10C | 1SFA611100R1008  | 10         | 0.016           |
|                   | Plástico cromado | MP1-20C | 1SFA611100R2008  | 10         | 0.016           |
|                   | Metálico cromado | MP1-30C | 1SFA611100R3008  | 10         | 0.026           |
| <b>Mantenido</b>  |                  |         |                  |            |                 |
| ● Rojo            | Plástico negro   | MP2-10R | 1SFA611101R1001  | 10         | 0.016           |
|                   | Plástico cromado | MP2-20R | 1SFA611101R2001  | 10         | 0.016           |
|                   | Metálico cromado | MP2-30R | 1SFA611101R3001  | 10         | 0.026           |
| ● Verde           | Plástico negro   | MP2-10G | 1SFA611101R1002  | 10         | 0.016           |
|                   | Plástico cromado | MP2-20G | 1SFA611101R2002  | 10         | 0.016           |
|                   | Metálico cromado | MP2-30G | 1SFA611101R3002  | 10         | 0.026           |
| ● Amarillo        | Plástico negro   | MP2-10Y | 1SFA611101R1003  | 10         | 0.016           |
|                   | Metálico cromado | MP2-30Y | 1SFA611101R3003  | 10         | 0.026           |
| ● Azul            | Plástico negro   | MP2-10L | 1SFA611101R1004  | 10         | 0.016           |
|                   | Plástico cromado | MP2-20L | 1SFA611101R2004  | 10         | 0.016           |
|                   | Metálico cromado | MP2-30L | 1SFA611101R3004  | 10         | 0.026           |
| ○ Blanco          | Plástico negro   | MP2-10W | 1SFA611101R1005  | 10         | 0.016           |
|                   | Plástico cromado | MP2-20W | 1SFA611101R2005  | 10         | 0.016           |
| ● Negro           | Plástico negro   | MP2-10B | 1SFA611101R1006  | 10         | 0.016           |
|                   | Plástico cromado | MP2-20B | 1SFA611101R2006  | 10         | 0.016           |
|                   | Metálico cromado | MP2-30B | 1SFA611101R3006  | 10         | 0.026           |
| ○ Claro           | Plástico negro   | MP2-10C | 1SFA611101R1008  | 10         | 0.016           |



MP1, MP2

Dimensiones (mm, pulgadas)

## Gama modular

Pulsadores salientes no luminoso



MP3-10R

1SFC151006V0001



MP3-20Y

1SFC151028V0001



MP3-10W

1SFC151013V0001



MP3-10C

1SFC151353V0001



MP4-10G

1SFC151012V0001



MP4-10L

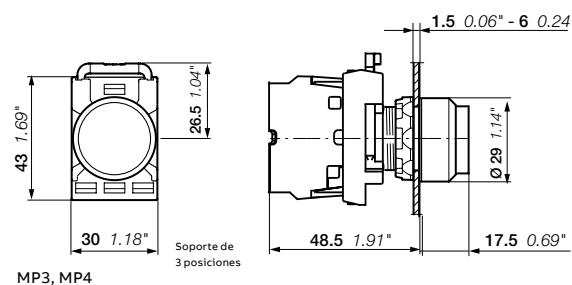
1SFC151019V0001



MP4-10B

1SFC151011V0001

| Operador          | Embellecedor     | Tipo    | Código de pedido | Cant. paq. | Peso (1 ud.) kg |
|-------------------|------------------|---------|------------------|------------|-----------------|
| <b>Momentáneo</b> |                  |         |                  |            |                 |
| ● Rojo            | Plástico negro   | MP3-10R | 1SFA611102R1001  | 10         | 0.016           |
|                   | Plástico cromado | MP3-20R | 1SFA611102R2001  | 10         | 0.016           |
|                   | Metálico cromado | MP3-30R | 1SFA611102R3001  | 10         | 0.026           |
| ● Verde           | Plástico negro   | MP3-10G | 1SFA611102R1002  | 10         | 0.016           |
|                   | Plástico cromado | MP3-20G | 1SFA611102R2002  | 10         | 0.016           |
|                   | Metálico cromado | MP3-30G | 1SFA611102R3002  | 10         | 0.026           |
| ● Amarillo        | Plástico negro   | MP3-10Y | 1SFA611102R1003  | 10         | 0.016           |
|                   | Plástico cromado | MP3-20Y | 1SFA611102R2003  | 10         | 0.016           |
|                   | Metálico cromado | MP3-30Y | 1SFA611102R3003  | 10         | 0.026           |
| ● Azul            | Plástico negro   | MP3-10L | 1SFA611102R1004  | 10         | 0.016           |
|                   | Plástico cromado | MP3-20L | 1SFA611102R2004  | 10         | 0.016           |
|                   | Metálico cromado | MP3-30L | 1SFA611102R3004  | 10         | 0.026           |
| ○ Blanco          | Plástico negro   | MP3-10W | 1SFA611102R1005  | 10         | 0.016           |
|                   | Plástico cromado | MP3-20W | 1SFA611102R2005  | 10         | 0.016           |
|                   | Metálico cromado | MP3-30W | 1SFA611102R3005  | 10         | 0.026           |
| ● Negro           | Plástico negro   | MP3-10B | 1SFA611102R1006  | 10         | 0.016           |
|                   | Plástico cromado | MP3-20B | 1SFA611102R2006  | 10         | 0.016           |
|                   | Metálico cromado | MP3-30B | 1SFA611102R3006  | 10         | 0.026           |
| ○ Claro           | Plástico negro   | MP3-10C | 1SFA611102R1008  | 10         | 0.016           |
|                   | Metálico cromado | MP3-30C | 1SFA611102R3008  | 10         | 0.026           |
| <b>Mantenido</b>  |                  |         |                  |            |                 |
| ● Rojo            | Plástico negro   | MP4-10R | 1SFA611103R1001  | 10         | 0.016           |
|                   | Plástico cromado | MP4-20R | 1SFA611103R2001  | 10         | 0.016           |
| ● Verde           | Plástico negro   | MP4-10G | 1SFA611103R1002  | 10         | 0.016           |
|                   | Plástico cromado | MP4-20G | 1SFA611103R2002  | 10         | 0.016           |
|                   | Metálico cromado | MP4-30G | 1SFA611103R3002  | 10         | 0.026           |
| ● Amarillo        | Plástico negro   | MP4-10Y | 1SFA611103R1003  | 10         | 0.016           |
|                   | Plástico cromado | MP4-20Y | 1SFA611103R2003  | 10         | 0.016           |
| ● Azul            | Plástico negro   | MP4-10L | 1SFA611103R1004  | 10         | 0.016           |
|                   | Plástico cromado | MP4-20L | 1SFA611103R2004  | 10         | 0.016           |
| ○ Blanco          | Plástico negro   | MP4-10W | 1SFA611103R1005  | 10         | 0.016           |
| ● Negro           | Plástico negro   | MP4-10B | 1SFA611103R1006  | 10         | 0.016           |
|                   | Metálico cromado | MP4-30B | 1SFA611103R3006  | 10         | 0.026           |
| ○ Claro           | Plástico negro   | MP4-10C | 1SFA611103R1008  | 10         | 0.016           |



Dimensiones (mm, pulgadas)

1SFC151005S0701

## Gama modular

Pulsadores rasante modulares luminoso



MP1-31G

ISFC151048V0001



MP1-11Y

ISFC151042V0001



MP1-21L

ISFC151045V0001



MP2-31R

ISFC151046V0001



MP2-11L

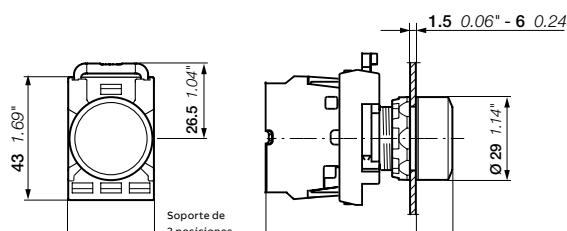
ISFC151040V0001



MP2-11C

ISFC151046V0001

| Operador          | Embellecedor     | Tipo    | Código de pedido | Cant. paq. | Peso (1 ud.) kg |
|-------------------|------------------|---------|------------------|------------|-----------------|
| <b>Momentáneo</b> |                  |         |                  |            |                 |
| ● Rojo            | Plástico negro   | MP1-11R | 1SFA611100R1101  | 10         | 0.016           |
|                   | Plástico cromado | MP1-21R | 1SFA611100R2101  | 10         | 0.016           |
|                   | Metálico cromado | MP1-31R | 1SFA611100R3101  | 10         | 0.026           |
| ● Verde           | Plástico negro   | MP1-11G | 1SFA611100R1102  | 10         | 0.016           |
|                   | Plástico cromado | MP1-21G | 1SFA611100R2102  | 10         | 0.016           |
|                   | Metálico cromado | MP1-31G | 1SFA611100R3102  | 10         | 0.026           |
| ● Amarillo        | Plástico negro   | MP1-11Y | 1SFA611100R1103  | 10         | 0.016           |
|                   | Plástico cromado | MP1-21Y | 1SFA611100R2103  | 10         | 0.016           |
|                   | Metálico cromado | MP1-31Y | 1SFA611100R3103  | 10         | 0.026           |
| ● Azul            | Plástico negro   | MP1-11L | 1SFA611100R1104  | 10         | 0.016           |
|                   | Plástico cromado | MP1-21L | 1SFA611100R2104  | 10         | 0.016           |
|                   | Metálico cromado | MP1-31L | 1SFA611100R3104  | 10         | 0.026           |
| ○ Blanco          | Plástico negro   | MP1-11W | 1SFA611100R1105  | 10         | 0.016           |
|                   | Plástico cromado | MP1-21W | 1SFA611100R2105  | 10         | 0.016           |
|                   | Metálico cromado | MP1-31W | 1SFA611100R3105  | 10         | 0.026           |
| ○ Claro           | Plástico negro   | MP1-11C | 1SFA611100R1108  | 10         | 0.016           |
|                   | Plástico cromado | MP1-21C | 1SFA611100R2108  | 10         | 0.016           |
|                   | Metálico cromado | MP1-31C | 1SFA611100R3108  | 10         | 0.026           |
| <b>Mantenido</b>  |                  |         |                  |            |                 |
| ● Rojo            | Plástico negro   | MP2-11R | 1SFA611101R1101  | 10         | 0.016           |
|                   | Plástico cromado | MP2-21R | 1SFA611101R2101  | 10         | 0.016           |
|                   | Metálico cromado | MP2-31R | 1SFA611101R3101  | 10         | 0.026           |
| ● Verde           | Plástico negro   | MP2-11G | 1SFA611101R1102  | 10         | 0.016           |
|                   | Plástico cromado | MP2-21G | 1SFA611101R2102  | 10         | 0.016           |
|                   | Metálico cromado | MP2-31G | 1SFA611101R3102  | 10         | 0.026           |
| ● Amarillo        | Plástico negro   | MP2-11Y | 1SFA611101R1103  | 10         | 0.016           |
|                   | Plástico cromado | MP2-21Y | 1SFA611101R2103  | 10         | 0.016           |
|                   | Metálico cromado | MP2-31Y | 1SFA611101R3103  | 10         | 0.026           |
| ● Azul            | Plástico negro   | MP2-11L | 1SFA611101R1104  | 10         | 0.016           |
|                   | Plástico cromado | MP2-21L | 1SFA611101R2104  | 10         | 0.016           |
|                   | Metálico cromado | MP2-31L | 1SFA611101R3104  | 10         | 0.026           |
| ○ Blanco          | Plástico negro   | MP2-11W | 1SFA611101R1105  | 10         | 0.016           |
|                   | Plástico cromado | MP2-21W | 1SFA611101R2105  | 10         | 0.016           |
|                   | Metálico cromado | MP2-31W | 1SFA611101R3105  | 10         | 0.026           |
| ○ Claro           | Plástico negro   | MP2-11C | 1SFA611101R1108  | 10         | 0.016           |
|                   | Metálico cromado | MP2-31C | 1SFA611101R3108  | 10         | 0.026           |



MP1, MP2

Dimensiones (mm, pulgadas)

## Gama modular

### Pulsadores salientes luminosos



MP3-11R

ISFCI51065V0001



MP3-31G

ISFCI51066V0001



MP3-11W

ISFCI51072V0001



MP4-11Y

ISFCI51063V0001



MP4-31L

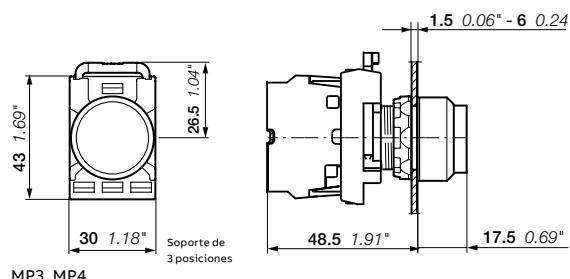
ISFCI51061V0001



MP4-21C

ISFCI51067V0001

| Operador          | Embellecedor     | Tipo    | Código de pedido | Cant. paq. | Peso (1 ud.) kg |
|-------------------|------------------|---------|------------------|------------|-----------------|
| <b>Momentáneo</b> |                  |         |                  |            |                 |
| ● Rojo            | Plástico negro   | MP3-11R | 1SFA611102R1101  | 10         | 0.016           |
|                   | Plástico cromado | MP3-21R | 1SFA611102R2101  | 10         | 0.016           |
|                   | Metálico cromado | MP3-31R | 1SFA611102R3101  | 10         | 0.026           |
| ● Verde           | Plástico negro   | MP3-11G | 1SFA611102R1102  | 10         | 0.016           |
|                   | Plástico cromado | MP3-21G | 1SFA611102R2102  | 10         | 0.016           |
|                   | Metálico cromado | MP3-31G | 1SFA611102R3102  | 10         | 0.026           |
| ● Amarillo        | Plástico negro   | MP3-11Y | 1SFA611102R1103  | 10         | 0.016           |
|                   | Plástico cromado | MP3-21Y | 1SFA611102R2103  | 10         | 0.016           |
|                   | Metálico cromado | MP3-31Y | 1SFA611102R3103  | 10         | 0.026           |
| ● Azul            | Plástico negro   | MP3-11L | 1SFA611102R1104  | 10         | 0.016           |
|                   | Plástico cromado | MP3-21L | 1SFA611102R2104  | 10         | 0.016           |
|                   | Metálico cromado | MP3-31L | 1SFA611102R3104  | 10         | 0.026           |
| ○ Blanco          | Plástico negro   | MP3-11W | 1SFA611102R1105  | 10         | 0.016           |
|                   | Plástico cromado | MP3-21W | 1SFA611102R2105  | 10         | 0.016           |
|                   | Metálico cromado | MP3-31W | 1SFA611102R3105  | 10         | 0.026           |
| ○ Claro           | Plástico negro   | MP3-11C | 1SFA611102R1108  | 10         | 0.016           |
|                   | Plástico cromado | MP3-21C | 1SFA611102R2108  | 10         | 0.016           |
|                   | Metálico cromado | MP3-31C | 1SFA611102R3108  | 10         | 0.026           |
| <b>Mantenido</b>  |                  |         |                  |            |                 |
| ● Rojo            | Plástico negro   | MP4-11R | 1SFA611103R1101  | 10         | 0.016           |
|                   | Plástico cromado | MP4-21R | 1SFA611103R2101  | 10         | 0.016           |
|                   | Metálico cromado | MP4-31R | 1SFA611103R3101  | 10         | 0.026           |
| ● Verde           | Plástico negro   | MP4-11G | 1SFA611103R1102  | 10         | 0.016           |
|                   | Plástico cromado | MP4-21G | 1SFA611103R2102  | 10         | 0.016           |
|                   | Metálico cromado | MP4-31G | 1SFA611103R3102  | 10         | 0.026           |
| ● Amarillo        | Plástico negro   | MP4-11Y | 1SFA611103R1103  | 10         | 0.016           |
|                   | Plástico cromado | MP4-21Y | 1SFA611103R2103  | 10         | 0.016           |
| ● Azul            | Plástico negro   | MP4-11L | 1SFA611103R1104  | 10         | 0.016           |
|                   | Plástico cromado | MP4-21L | 1SFA611103R2104  | 10         | 0.016           |
|                   | Metálico cromado | MP4-31L | 1SFA611103R3104  | 10         | 0.026           |
| ○ Blanco          | Plástico negro   | MP4-11W | 1SFA611103R1105  | 10         | 0.016           |
|                   | Plástico cromado | MP4-21W | 1SFA611103R2105  | 10         | 0.016           |
| ○ Claro           | Plástico negro   | MP4-11C | 1SFA611103R1108  | 10         | 0.016           |
|                   | Plástico cromado | MP4-21C | 1SFA611103R2108  | 10         | 0.016           |
|                   | Metálico cromado | MP4-31C | 1SFA611103R3108  | 10         | 0.026           |



Dimensiones (mm, pulgadas)

ISFCI5100750701

## Gama modular

Pulsadores dobles opacos momentáneos



MPD1-11B

1SFCA151050V00001



MPD5-11B

1SFCA151051V0001



MPD13-11B

1SFCA151056V0001



MPD15-11B

1SFCA151058V0001



MA1-8139

1SFCA151344F0001

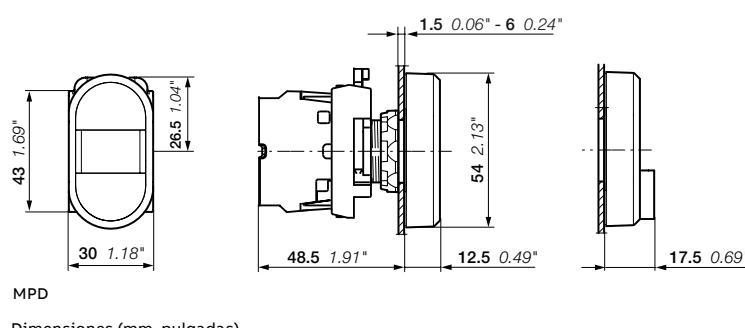
| Pulsador superior                 | Pulsador inferior | Tipo           | Código de pedido | Cant. | Peso<br>paq.<br>(1 ud.) |
|-----------------------------------|-------------------|----------------|------------------|-------|-------------------------|
| <b>Pulsadores opacos dobles</b>   |                   |                |                  |       |                         |
| <b>● Verde</b>                    |                   | <b>● Rojo</b>  |                  |       |                         |
| Sin texto                         | Sin texto         | MPD1-11B       | 1SFA611130R1106  | 10    | 0.025                   |
| I                                 | 0                 | MPD2-11B       | 1SFA611131R1106  | 10    | 0.025                   |
| ON                                | OFF               | MPD3-11B       | 1SFA611132R1106  | 10    | 0.025                   |
| START                             | STOP              | MPD4-11B       | 1SFA611133R1106  | 10    | 0.025                   |
| <b>○ Blanco</b>                   |                   | <b>● Negro</b> |                  |       |                         |
| Sin texto                         | Sin texto         | MPD5-11B       | 1SFA611134R1106  | 10    | 0.025                   |
| I                                 | 0                 | MPD6-11B       | 1SFA611135R1106  | 10    | 0.025                   |
| ON                                | OFF               | MPD7-11B       | 1SFA611136R1106  | 10    | 0.025                   |
| START                             | STOP              | MPD8-11B       | 1SFA611137R1106  | 10    | 0.025                   |
| <b>● Negro</b>                    |                   | <b>● Rojo</b>  |                  |       |                         |
| Sin texto                         | Sin texto         | MPD9-11B       | 1SFA611138R1106  | 10    | 0.025                   |
| <b>Pulsador inferior saliente</b> |                   |                |                  |       |                         |
| <b>● Verde</b>                    |                   | <b>● Rojo</b>  |                  |       |                         |
| Sin texto                         | Sin texto         | MPD12-11B      | 1SFA611141R1106  | 10    | 0.025                   |
| I                                 | 0                 | MPD13-11B      | 1SFA611142R1106  | 10    | 0.025                   |
| ON                                | OFF               | MPD14-11B      | 1SFA611143R1106  | 10    | 0.025                   |
| START                             | STOP              | MPD15-11B      | 1SFA611144R1106  | 10    | 0.025                   |
| <b>○ Blanco</b>                   |                   | <b>● Negro</b> |                  |       |                         |
| Sin texto                         | Sin texto         | MPD16-11B      | 1SFA611145R1106  | 10    | 0.025                   |
| I                                 | 0                 | MPD17-11B      | 1SFA611146R1106  | 10    | 0.025                   |
| ON                                | OFF               | MPD18-11B      | 1SFA611147R1106  | 10    | 0.025                   |
| START                             | STOP              | MPD19-11B      | 1SFA611148R1106  | 10    | 0.025                   |

### Accesorios

#### Soporte para placa de leyenda

|              |          |                 |    |       |
|--------------|----------|-----------------|----|-------|
| 2 posiciones | MA1-8139 | 1SFA611920R8139 | 10 | 0.030 |
|--------------|----------|-----------------|----|-------|

Nota: Etiqueta no incluida. Apto para tamaño de etiquetas 27 x 15 mm. Consulte la sección Placas de leyenda.



1SFCA15100850701

## Gama modular

Pulsadores dobles luminosos momentáneos - Pulsador inferior modular



ISFC151098V0001

MPD4-11C



ISFC151100V0001

MPD5-11C



ISFC151078V0001

MPD2-11R



ISFC151098V0001

MDP3-11G

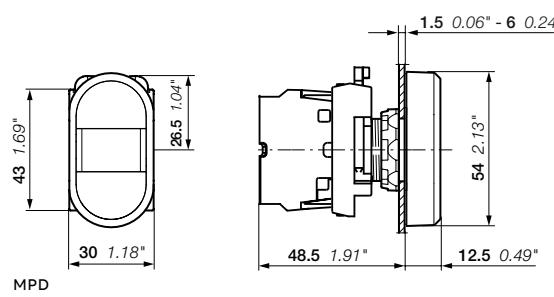


ISFC151341F0001

MA1-8139

| Pulsador superior                     | Pulsador inferior | Tipo     | Código de pedido | Cant. | Peso<br>paq.<br>(1 ud.) |
|---------------------------------------|-------------------|----------|------------------|-------|-------------------------|
| <b>Indicador con luz transparente</b> |                   |          |                  |       |                         |
| ● Verde                               | ● Rojo            |          |                  |       |                         |
| Sin texto                             | Sin texto         | MPD1-11C | 1SFA611130R1108  | 10    | 0.025                   |
| I                                     | 0                 | MPD2-11C | 1SFA611131R1108  | 10    | 0.025                   |
| ON                                    | OFF               | MPD3-11C | 1SFA611132R1108  | 10    | 0.025                   |
| START                                 | STOP              | MPD4-11C | 1SFA611133R1108  | 10    | 0.025                   |
| ○ Blanco                              | ● Negro           |          |                  |       |                         |
| Sin texto                             | Sin texto         | MPD5-11C | 1SFA611134R1108  | 10    | 0.025                   |
| I                                     | 0                 | MPD6-11C | 1SFA611135R1108  | 10    | 0.025                   |
| START                                 | STOP              | MPD8-11C | 1SFA611137R1108  | 10    | 0.025                   |
| <b>Indicador con luz roja</b>         |                   |          |                  |       |                         |
| ● Verde                               | ● Rojo            |          |                  |       |                         |
| Sin texto                             | Sin texto         | MPD1-11R | 1SFA611130R1101  | 10    | 0.025                   |
| I                                     | 0                 | MPD2-11R | 1SFA611131R1101  | 10    | 0.025                   |
| ON                                    | OFF               | MPD3-11R | 1SFA611132R1101  | 10    | 0.025                   |
| START                                 | STOP              | MPD4-11R | 1SFA611133R1101  | 10    | 0.025                   |
| ○ Blanco                              | ● Negro           |          |                  |       |                         |
| Sin texto                             | Sin texto         | MPD5-11R | 1SFA611134R1101  | 10    | 0.025                   |
| <b>Indicador con luz verde</b>        |                   |          |                  |       |                         |
| ● Verde                               | ● Rojo            |          |                  |       |                         |
| Sin texto                             | Sin texto         | MPD1-11G | 1SFA611130R1102  | 10    | 0.025                   |
| I                                     | 0                 | MPD2-11G | 1SFA611131R1102  | 10    | 0.025                   |
| ON                                    | OFF               | MPD3-11G | 1SFA611132R1102  | 10    | 0.025                   |
| START                                 | STOP              | MPD4-11G | 1SFA611133R1102  | 10    | 0.025                   |
| ○ Blanco                              | ● Negro           |          |                  |       |                         |
| Sin texto                             | Sin texto         | MPD5-11G | 1SFA611134R1102  | 10    | 0.025                   |
| I                                     | 0                 | MPD6-11G | 1SFA611135R1102  | 10    | 0.025                   |
| ON                                    | OFF               | MPD7-11G | 1SFA611136R1102  | 10    | 0.025                   |
| START                                 | STOP              | MPD8-11G | 1SFA611137R1102  | 10    | 0.025                   |
| <b>Indicador con luz amarilla</b>     |                   |          |                  |       |                         |
| ● Verde                               | ● Rojo            |          |                  |       |                         |
| Sin texto                             | Sin texto         | MPD1-11Y | 1SFA611130R1103  | 10    | 0.025                   |
| I                                     | 0                 | MPD2-11Y | 1SFA611131R1103  | 10    | 0.025                   |
| ON                                    | OFF               | MPD3-11Y | 1SFA611132R1103  | 10    | 0.025                   |
| START                                 | STOP              | MPD4-11Y | 1SFA611133R1103  | 10    | 0.025                   |
| ○ Blanco                              | ● Negro           |          |                  |       |                         |
| Sin texto                             | Sin texto         | MPD5-11Y | 1SFA611134R1103  | 10    | 0.025                   |
| <b>Accesorios</b>                     |                   |          |                  |       |                         |
| <b>Soporte para placa de leyenda</b>  |                   |          |                  |       |                         |
| 2 posiciones                          |                   | MA1-8139 | 1SFA611920R8139  | 10    | 0.030                   |

Nota: Etiqueta no incluida. Apto para tamaño de etiquetas 27 x 15 mm. Consulte la sección Placas de leyenda.



Dimensiones (mm, pulgadas)

ISFC1510950701

## Gama modular

Pulsadores dobles luminosos momentáneos - Pulsador inferior extendido



ISFA611141R1108



ISFA611143R1108



ISFA611142R1101



ISFA611143R1102



ISFA611141R1103

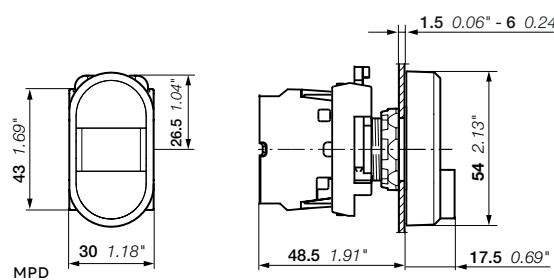


ISFA611920R8139

MA1-8139

| Pulsador superior                     | Pulsador inferior | Tipo      | Código de pedido | Cant. paq. | Peso (1 ud.) kg |
|---------------------------------------|-------------------|-----------|------------------|------------|-----------------|
| <b>Indicador con luz transparente</b> |                   |           |                  |            |                 |
| ● Verde                               | ● Rojo            |           |                  |            |                 |
| Sin texto                             | Sin texto         | MPD12-11C | ISFA611141R1108  | 10         | 0.025           |
| I                                     | 0                 | MPD13-11C | ISFA611142R1108  | 10         | 0.025           |
| ON                                    | OFF               | MPD14-11C | ISFA611143R1108  | 10         | 0.025           |
| START                                 | STOP              | MPD15-11C | ISFA611144R1108  | 10         | 0.025           |
| ○ Blanco                              | ● Negro           |           |                  |            |                 |
| Sin texto                             | Sin texto         | MPD16-11C | ISFA611145R1108  | 10         | 0.025           |
| I                                     | 0                 | MPD17-11C | ISFA611146R1108  | 10         | 0.025           |
| START                                 | STOP              | MPD19-11C | ISFA611148R1108  | 10         | 0.025           |
| <b>Indicador con luz roja</b>         |                   |           |                  |            |                 |
| ● Verde                               | ● Rojo            |           |                  |            |                 |
| Sin texto                             | Sin texto         | MPD12-11R | ISFA611141R1101  | 10         | 0.025           |
| I                                     | 0                 | MPD13-11R | ISFA611142R1101  | 10         | 0.025           |
| ON                                    | OFF               | MPD14-11R | ISFA611143R1101  | 10         | 0.025           |
| START                                 | STOP              | MPD15-11R | ISFA611144R1101  | 10         | 0.025           |
| ○ Blanco                              | ● Negro           |           |                  |            |                 |
| Sin texto                             | Sin texto         | MPD16-11R | ISFA611145R1101  | 10         | 0.025           |
| <b>Indicador con luz verde</b>        |                   |           |                  |            |                 |
| ● Verde                               | ● Rojo            |           |                  |            |                 |
| Sin texto                             | Sin texto         | MPD12-11G | ISFA611141R1102  | 10         | 0.025           |
| I                                     | 0                 | MPD13-11G | ISFA611142R1102  | 10         | 0.025           |
| ON                                    | OFF               | MPD14-11G | ISFA611143R1102  | 10         | 0.025           |
| START                                 | STOP              | MPD15-11G | ISFA611144R1102  | 10         | 0.025           |
| ○ Blanco                              | ● Negro           |           |                  |            |                 |
| Sin texto                             | Sin texto         | MPD16-11G | ISFA611145R1102  | 10         | 0.025           |
| I                                     | 0                 | MPD17-11G | ISFA611146R1102  | 10         | 0.025           |
| START                                 | STOP              | MPD19-11G | ISFA611148R1102  | 10         | 0.025           |
| <b>Indicador con luz amarilla</b>     |                   |           |                  |            |                 |
| ● Verde                               | ● Rojo            |           |                  |            |                 |
| Sin texto                             | Sin texto         | MPD12-11Y | ISFA611141R1103  | 10         | 0.025           |
| I                                     | 0                 | MPD13-11Y | ISFA611142R1103  | 10         | 0.025           |
| ON                                    | OFF               | MPD14-11Y | ISFA611143R1103  | 10         | 0.025           |
| START                                 | STOP              | MPD15-11Y | ISFA611144R1103  | 10         | 0.025           |
| ○ Blanco                              | ● Negro           |           |                  |            |                 |
| Sin texto                             | Sin texto         | MPD16-11Y | ISFA611145R1103  | 10         | 0.025           |
| I                                     | 0                 | MPD17-11Y | ISFA611146R1103  | 10         | 0.025           |
| <b>Accesorios</b>                     |                   |           |                  |            |                 |
| <b>Soporte para placa de leyenda</b>  |                   |           |                  |            |                 |
| 2 posiciones                          |                   | MA1-8139  | ISFA611920R8139  | 1          | 0.030           |

Nota: Etiqueta no incluida. Apto para tamaño de etiquetas 27 x 15 mm. Consulte la sección Placas de leyenda.



Dimensiones (mm, pulgadas)

## Gama modular

Pulsadores de seta momentáneos



1SFC151007V0001



1SFC151010V0001



1SFC151073V0001



1SFC151074V0001



1SFC151173V0001



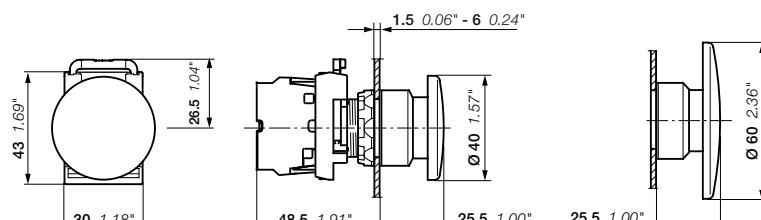
1SFC151155V0001

### No luminoso

| Actuador       | Tipo     | Código de pedido | Cant. paq. | Peso (1 ud.) kg |
|----------------|----------|------------------|------------|-----------------|
| <b>Ø 40 mm</b> |          |                  |            |                 |
| ● Rojo         | MPM1-10R | 1SFA611124R1001  | 10         | 0.018           |
| ● Verde        | MPM1-10G | 1SFA611124R1002  | 10         | 0.018           |
| ● Amarillo     | MPM1-10Y | 1SFA611124R1003  | 10         | 0.018           |
| ● Negro        | MPM1-10B | 1SFA611124R1006  | 10         | 0.018           |
| <b>Ø 60 mm</b> |          |                  |            |                 |
| ● Rojo         | MPM2-10R | 1SFA611125R1001  | 10         | 0.020           |
| ● Amarillo     | MPM2-10Y | 1SFA611125R1003  | 10         | 0.020           |
| ● Negro        | MPM2-10B | 1SFA611125R1006  | 10         | 0.020           |

### luminoso

| Actuador       | Tipo     | Código de pedido | Cant. paq. | Peso (1 ud.) kg |
|----------------|----------|------------------|------------|-----------------|
| <b>Ø 40 mm</b> |          |                  |            |                 |
| ● Rojo         | MPM1-11R | 1SFA611124R1101  | 10         | 0.018           |
| ● Verde        | MPM1-11G | 1SFA611124R1102  | 10         | 0.018           |
| ● Amarillo     | MPM1-11Y | 1SFA611124R1103  | 10         | 0.018           |
| <b>Ø 60 mm</b> |          |                  |            |                 |
| ● Rojo         | MPM2-11R | 1SFA611125R1101  | 10         | 0.020           |
| ● Amarillo     | MPM2-11Y | 1SFA611125R1103  | 10         | 0.020           |



MPM1, MPM2

Dimensiones (mm, pulgadas)

1SFC151010S0701

## Gama modular

### Pulsadores de parada de emergencia



MPET3-10R

1SFC151070V0001



MPEK3-10R

1SFC15108V0001



MPET4-10R

1SFC15096V0001



MPMP4-10R

1SFC15106V0001

#### No luminoso

Los pulsadores de parada de emergencia cumplen la norma EN/IEC 60947-5-5, Seguridad de máquinas EN/ISO 13850, IEC 60204-1 y la Directiva de máquinas 2006/42/CE.

| Color          | Modo de desbloqueo      | Tipo      | Código de pedido | Cant. paq. | Peso (1 ud.) kg |
|----------------|-------------------------|-----------|------------------|------------|-----------------|
| <b>Ø 30 mm</b> |                         |           |                  |            |                 |
| ● Rojo         | Desbloqueo por giro     | MPET3-10R | 1SFA611520R1001  | 1          | 0.036           |
| ● Rojo         | Desbloqueo por tiro     | MPEP3-10R | 1SFA611521R1001  | 1          | 0.036           |
| ● Rojo         | Con llave código 455    | MPEK3-11R | 1SFA611522R1101  | 1          | 0.065           |
| ● Rojo         | Con llave código 421    | MPEK3-12R | 1SFA611522R1201  | 1          | 0.065           |
| ● Rojo         | Con llave código 3433-E | MPEK3-13R | 1SFA611522R1301  | 1          | 0.065           |
| <b>Ø 40 mm</b> |                         |           |                  |            |                 |
| ● Rojo         | Desbloqueo por giro     | MPET4-10R | 1SFA611523R1001  | 1          | 0.036           |
| ● Rojo         | Desbloqueo por tiro     | MPEP4-10R | 1SFA611524R1001  | 1          | 0.036           |
| ● Rojo         | Con llave código 455    | MPEK4-11R | 1SFA611525R1101  | 1          | 0.065           |
| ● Rojo         | Con llave código 421    | MPEK4-12R | 1SFA611525R1201  | 1          | 0.065           |
| ● Rojo         | Con llave código 3433-E | MPEK4-13R | 1SFA611525R1301  | 1          | 0.065           |
| <b>Ø 60 mm</b> |                         |           |                  |            |                 |
| ● Rojo         | Desbloqueo por giro     | MPMT4-10R | 1SFA611513R1001  | 1          | 0.048           |
| ● Rojo         | Desbloqueo por tiro     | MPMP4-10R | 1SFA611514R1001  | 1          | 0.048           |



MPMP3-11R

1SFC15103V0001

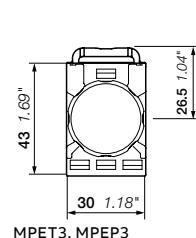


MPMT4-11R

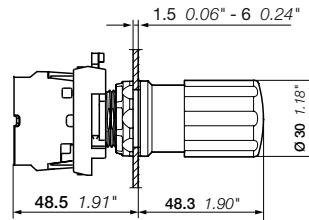
1SFC15105V0001

#### Iluminado

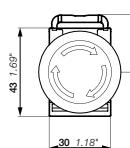
| Color          | Modo de desbloqueo  | Tipo      | Código de pedido | Cant. paq. | Peso (1 ud.) kg |
|----------------|---------------------|-----------|------------------|------------|-----------------|
| <b>Ø 40 mm</b> |                     |           |                  |            |                 |
| ● Rojo         | Desbloqueo por giro | MPMT3-11R | 1SFA611510R1101  | 1          | 0.041           |
| ● Rojo         | Desbloqueo por tiro | MPMP3-11R | 1SFA611511R1101  | 1          | 0.041           |
| <b>Ø 60 mm</b> |                     |           |                  |            |                 |
| ● Rojo         | Desbloqueo por giro | MPMT4-11R | 1SFA611513R1101  | 1          | 0.048           |
| ● Rojo         | Desbloqueo por tiro | MPMP4-11R | 1SFA611514R1101  | 1          | 0.048           |



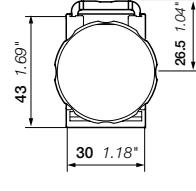
MPET3, MPEP3



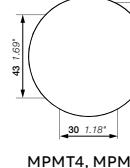
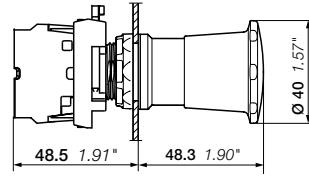
MPET3, MPEP3



MPMT3, MPMP3



MPET4, MPEP4



MPMT4, MPMP4

Dimensiones (mm, pulgadas)

1SFC151011S0701

## Gama modular

Pulsadores de parada de máquinas



MPET3-10B

1SFC151094V0001



MPET4-10B

1SFC151096V0001

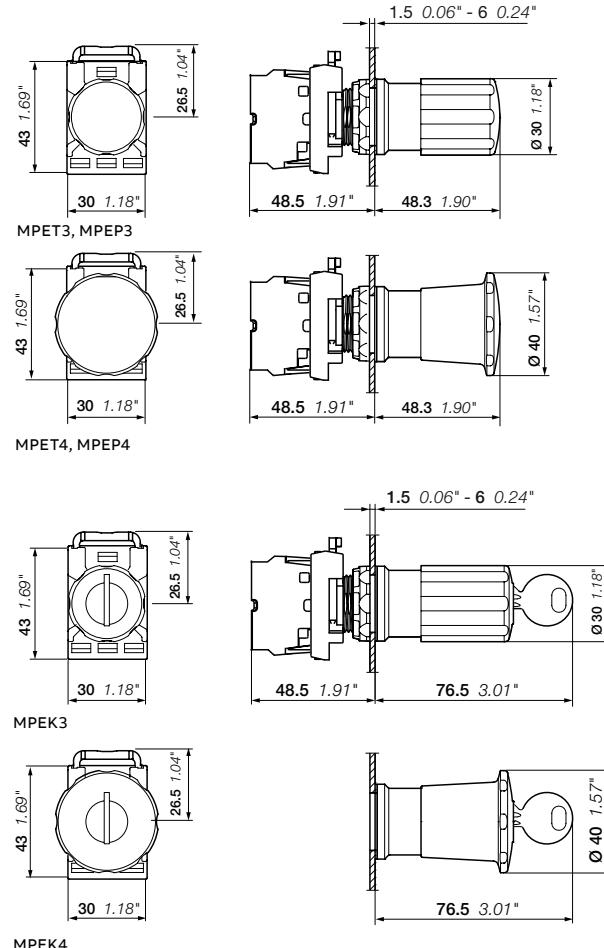


MPEK4-11B

1SFC15110V0001

### No luminosos

| Operador       | Modo de desbloqueo   | Tipo      | Código de pedido | Cant. paq. | Peso (1 ud.) kg |
|----------------|----------------------|-----------|------------------|------------|-----------------|
| <b>Ø 30 mm</b> |                      |           |                  |            |                 |
| ● Negro        | Desbloqueo por giro  | MPET3-10B | 1SFA611520R1006  | 1          | 0.036           |
| ● Negro        | Desbloqueo por tiro  | MPEP3-10B | 1SFA611521R1006  | 1          | 0.036           |
| ● Negro        | Con llave código 455 | MPEK3-11B | 1SFA611522R1106  | 1          | 0.065           |
| <b>Ø 40 mm</b> |                      |           |                  |            |                 |
| ● Negro        | Desbloqueo por giro  | MPET4-10B | 1SFA611523R1006  | 1          | 0.036           |
| ● Negro        | Desbloqueo por tiro  | MPEP4-10B | 1SFA611524R1006  | 1          | 0.036           |
| ● Negro        | Con llave código 455 | MPEK4-11B | 1SFA611525R1106  | 1          | 0.065           |



Dimensiones (mm, pulgadas)

1SFC15101290701

## Gama modular

Pulsadores para ambientes extremos



KP6-40R

1SFC151335V0001



KP6-40G

1SFC151336V0001



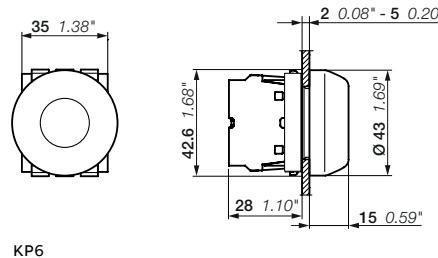
KP6-40B

1SFC151337V0001

### Descripción

En el caso del orificio de montaje de 30 mm se incluye el soporte de 3 posiciones

| Color   | Tipo    | Código de pedido | Cant. paq. | Peso (1 ud.) kg |
|---------|---------|------------------|------------|-----------------|
| ● Rojo  | KP6-40R | 1SFA616105R4001  | 1          | 0.028           |
| ● Verde | KP6-40G | 1SFA616105R4002  | 1          | 0.028           |
| ● Negro | KP6-40B | 1SFA616105R4006  | 1          | 0.028           |



KP6

## Gama modular

Pilotos



ML1-100R

1SFC15134V0001



ML1-100G

1SFC15135V0001



ML1-100Y

1SFC15136V0001



### Lente

Lente difusora de luz KA1-8005 1SFA616920R8005

| Color      | Tipo     | Código de pedido | Cant. paq. | Peso (1 ud.) kg |
|------------|----------|------------------|------------|-----------------|
| ● Rojo     | ML1-100R | 1SFA611400R1001  | 10         | 0.018           |
| ● Verde    | ML1-100G | 1SFA611400R1002  | 10         | 0.018           |
| ● Amarillo | ML1-100Y | 1SFA611400R1003  | 10         | 0.018           |
| ● Azul     | ML1-100L | 1SFA611400R1004  | 10         | 0.018           |
| ○ Blanco   | ML1-100W | 1SFA611400R1005  | 10         | 0.018           |
| ○ Claro    | ML1-100C | 1SFA611400R1008  | 10         | 0.018           |

| Color      | Tipo     | Código de pedido | Cant. paq. | Peso (1 ud.) kg |
|------------|----------|------------------|------------|-----------------|
| ● Rojo     | ML1-100R | 1SFA611400R1001  | 10         | 0.018           |
| ● Verde    | ML1-100G | 1SFA611400R1002  | 10         | 0.018           |
| ● Amarillo | ML1-100Y | 1SFA611400R1003  | 10         | 0.018           |
| ● Azul     | ML1-100L | 1SFA611400R1004  | 10         | 0.018           |
| ○ Blanco   | ML1-100W | 1SFA611400R1005  | 10         | 0.018           |
| ○ Claro    | ML1-100C | 1SFA611400R1008  | 10         | 0.018           |

### Lente

Lente difusora de luz KA1-8005 1SFA616920R8005

| Color      | Tipo     | Código de pedido | Cant. paq. | Peso (1 ud.) kg |
|------------|----------|------------------|------------|-----------------|
| ● Rojo     | ML1-100R | 1SFA611400R1001  | 10         | 0.018           |
| ● Verde    | ML1-100G | 1SFA611400R1002  | 10         | 0.018           |
| ● Amarillo | ML1-100Y | 1SFA611400R1003  | 10         | 0.018           |
| ● Azul     | ML1-100L | 1SFA611400R1004  | 10         | 0.018           |
| ○ Blanco   | ML1-100W | 1SFA611400R1005  | 10         | 0.018           |
| ○ Claro    | ML1-100C | 1SFA611400R1008  | 10         | 0.018           |

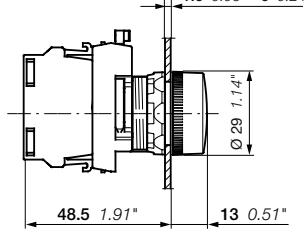
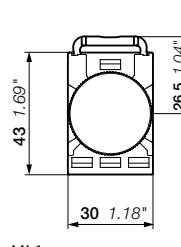
Nota: La lente difusora de luz se usa para mejorar el alcance de la iluminación desde los bloques LED. Incompatible con etiquetas.



ML1-100L

1SFC15137V0001

1SFC15138V0001



Dimensiones (mm, pulgadas)

1SFC1510275701

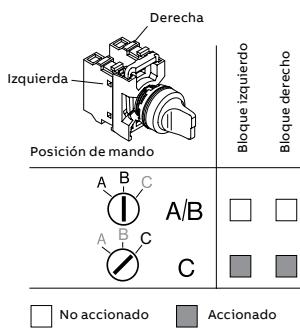
## Gama modular

Selectores no luminosos - 2 posiciones - Maneta corta

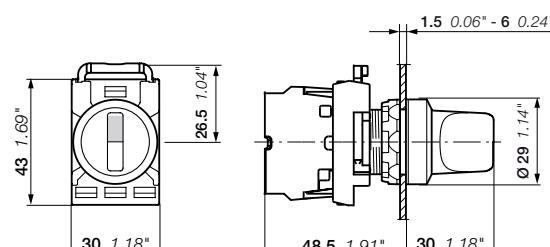


| Descripción | Color   | Embellecedor     | Tipo      | Código de pedido | Cant. paq. | Peso (1 ud.) kg |
|-------------|---------|------------------|-----------|------------------|------------|-----------------|
|             | ● Rojo  | Plástico negro   | M2SS1-10R | 1SFA611200R1001  | 10         | 0.015           |
|             |         | Plástico cromado | M2SS1-20R | 1SFA611200R2001  | 10         | 0.015           |
|             |         | Metálico cromado | M2SS1-30R | 1SFA611200R3001  | 10         | 0.024           |
|             | ● Negro | Plástico negro   | M2SS1-10B | 1SFA611200R1006  | 10         | 0.015           |
|             |         | Plástico cromado | M2SS1-20B | 1SFA611200R2006  | 10         | 0.015           |
|             |         | Metálico cromado | M2SS1-30B | 1SFA611200R3006  | 10         | 0.024           |
|             | ● Gris  | Plástico negro   | M2SS1-10U | 1SFA611200R1007  | 10         | 0.015           |
|             |         | Plástico cromado | M2SS1-20U | 1SFA611200R2007  | 10         | 0.015           |
|             | ● Rojo  | Plástico negro   | M2SS2-10R | 1SFA611201R1001  | 10         | 0.015           |
|             |         | Plástico cromado | M2SS2-20R | 1SFA611201R2001  | 10         | 0.015           |
|             |         | Metálico cromado | M2SS2-30R | 1SFA611201R3001  | 10         | 0.024           |
|             | ● Negro | Plástico negro   | M2SS2-10B | 1SFA611201R1006  | 10         | 0.015           |
|             |         | Plástico cromado | M2SS2-20B | 1SFA611201R2006  | 10         | 0.015           |
|             |         | Metálico cromado | M2SS2-30B | 1SFA611201R3006  | 10         | 0.024           |
|             | ● Gris  | Plástico negro   | M2SS2-10U | 1SFA611201R1007  | 10         | 0.015           |
|             |         | Plástico cromado | M2SS2-20U | 1SFA611201R2007  | 10         | 0.015           |
|             |         | Metálico cromado | M2SS2-30U | 1SFA611201R3007  | 10         | 0.024           |
|             | ● Rojo  | Plástico negro   | M2SS3-10R | 1SFA611202R1001  | 10         | 0.015           |
|             |         | Plástico cromado | M2SS3-20R | 1SFA611202R2001  | 10         | 0.015           |
|             |         | Metálico cromado | M2SS3-30R | 1SFA611202R3001  | 10         | 0.024           |
|             | ● Negro | Plástico negro   | M2SS3-10B | 1SFA611202R1006  | 10         | 0.015           |
|             |         | Plástico cromado | M2SS3-20B | 1SFA611202R2006  | 10         | 0.015           |
|             |         | Metálico cromado | M2SS3-30B | 1SFA611202R3006  | 10         | 0.024           |
|             | ● Gris  | Plástico negro   | M2SS3-10U | 1SFA611202R1007  | 10         | 0.015           |
|             |         | Plástico cromado | M2SS3-20U | 1SFA611202R2007  | 10         | 0.015           |

### Actuación de contactos



No accionado     Accionado



## Gama modular

Selectores no luminosos - 2 posiciones - Maneta larga



M2SS4-10R



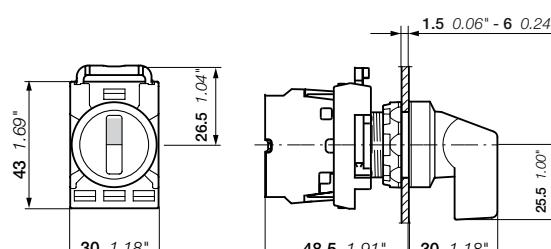
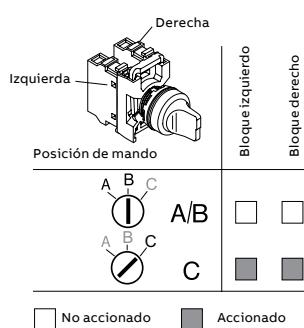
M2SS4-30B



M2SS4-10U

| Descripción | Color   | Embellecedor     | Tipo      | Código de pedido | Cant. paq. | Peso (1 ud.) kg |
|-------------|---------|------------------|-----------|------------------|------------|-----------------|
|             | ● Rojo  | Plástico negro   | M2SS4-10R | 1SFA611203R1001  | 10         | 0.018           |
|             |         | Plástico cromado | M2SS4-20R | 1SFA611203R2001  | 10         | 0.018           |
|             | ● Negro | Plástico negro   | M2SS4-10B | 1SFA611203R1006  | 10         | 0.018           |
|             |         | Plástico cromado | M2SS4-20B | 1SFA611203R2006  | 10         | 0.018           |
|             | ● Gris  | Metálico cromado | M2SS4-30B | 1SFA611203R3006  | 10         | 0.027           |
|             |         | Plástico negro   | M2SS4-10U | 1SFA611203R1007  | 10         | 0.018           |
|             | ● Rojo  | Plástico negro   | M2SS5-10R | 1SFA611204R1001  | 10         | 0.018           |
|             |         | Plástico cromado | M2SS5-20R | 1SFA611204R2001  | 10         | 0.018           |
|             |         | Metálico cromado | M2SS5-30R | 1SFA611204R3001  | 10         | 0.027           |
|             | ● Negro | Plástico negro   | M2SS5-10B | 1SFA611204R1006  | 10         | 0.018           |
|             |         | Plástico cromado | M2SS5-20B | 1SFA611204R2006  | 10         | 0.018           |
|             | ● Gris  | Metálico cromado | M2SS5-30B | 1SFA611204R3006  | 10         | 0.027           |
|             | ● Rojo  | Plástico negro   | M2SS6-10R | 1SFA611205R1001  | 10         | 0.018           |
|             | ● Negro | Plástico negro   | M2SS6-10B | 1SFA611205R1006  | 10         | 0.018           |
|             |         | Plástico cromado | M2SS6-20B | 1SFA611205R2006  | 10         | 0.018           |
|             |         | Metálico cromado | M2SS6-30B | 1SFA611205R3006  | 10         | 0.027           |
|             | ● Gris  | Plástico negro   | M2SS6-10U | 1SFA611205R1007  | 10         | 0.018           |
|             |         | Plástico cromado | M2SS6-20U | 1SFA611205R2007  | 10         | 0.018           |

### Actuación de contactos



Dimensiones (mm, pulgadas)

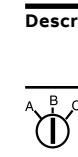
## Gama modular

Selectores no luminoso - 3 posiciones - Maneta corta



M3SS1-30R

1SFC151317V0001



● Rojo

Plástico negro  
Plástico cromado  
Metálico cromadoM3SS1-10R  
M3SS1-20R  
M3SS1-30R1SFA611210R1001  
1SFA611210R2001  
1SFA611210R3001Cant. paq.  
(1 ud.)  
kg

10 0.015

10 0.015

10 0.024

● Negro

Plástico negro  
Plástico cromado  
Metálico cromadoM3SS1-10B  
M3SS1-20B  
M3SS1-30B1SFA611210R1006  
1SFA611210R2006  
1SFA611210R3006

10 0.015

10 0.015

10 0.024

● Gris

Plástico negro  
Plástico cromado  
Metálico cromadoM3SS1-10U  
M3SS1-20U  
M3SS1-30U1SFA611210R1007  
1SFA611210R2007  
1SFA611210R3007

10 0.015

10 0.015

10 0.024



● Rojo

Plástico negro  
Plástico cromado  
Metálico cromadoM3SS2-10R  
M3SS2-20R  
M3SS2-30R1SFA611211R1001  
1SFA611211R2001  
1SFA611211R3001

10 0.015

10 0.015

10 0.024

● Negro

Plástico negro  
Plástico cromado  
Metálico cromadoM3SS2-10B  
M3SS2-20B  
M3SS2-30B1SFA611211R1006  
1SFA611211R2006  
1SFA611211R3006

10 0.015

10 0.015

10 0.024

● Gris

Plástico negro  
Plástico cromadoM3SS2-10U  
M3SS2-20U1SFA611211R1007  
1SFA611211R2007

10 0.015

10 0.015



● Rojo

Plástico negro  
Plástico cromado  
Metálico cromadoM3SS3-10R  
M3SS3-20R  
M3SS3-30R1SFA611212R1001  
1SFA611212R2006  
1SFA611212R3006

10 0.015

10 0.015

10 0.024

● Negro

Plástico negro  
Plástico cromado  
Metálico cromadoM3SS3-10B  
M3SS3-20B  
M3SS3-30B1SFA611212R1006  
1SFA611212R2006  
1SFA611212R3006

10 0.015

10 0.015

10 0.024

● Gris

Plástico negro  
Plástico cromadoM3SS3-10U  
M3SS3-20U1SFA611212R1007  
1SFA611212R2007

10 0.015

10 0.015



● Rojo

Plástico negro  
Plástico cromado  
Metálico cromadoM3SS7-10R  
M3SS7-20R  
M3SS7-30B1SFA611216R1001  
1SFA611216R2001  
1SFA611216R3006

10 0.015

10 0.015

10 0.015

● Negro

Plástico negro  
Plástico cromado  
Metálico cromadoM3SS7-10B  
M3SS7-20B  
M3SS7-30B1SFA611216R1006  
1SFA611216R2006  
1SFA611216R3006

10 0.015

10 0.015

10 0.024

● Gris

Plástico negro  
Plástico cromado

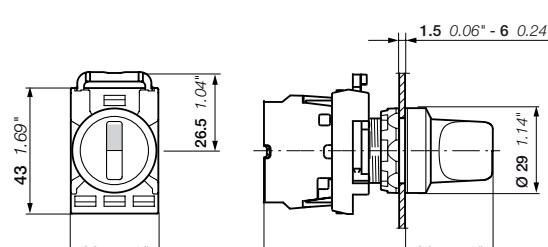
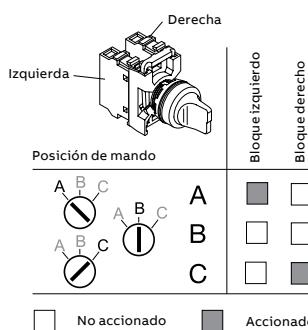
M3SS7-10U

1SFA611216R1007

10 0.015

10 0.015

### Actuación de contactos



## Gama modular

Selectores no luminosos - 3 posiciones - Maneta larga



M3SS4-10R



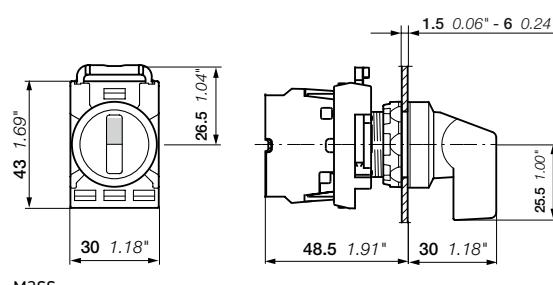
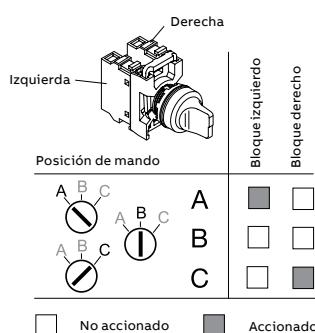
M3SS5-30B



M3SS6-10U

| Descripción | Color   | Embellecedor     | Tipo      | Código de pedido | Cant. paq. | Peso (1 ud.) kg |
|-------------|---------|------------------|-----------|------------------|------------|-----------------|
| M3SS4-10R   | ● Rojo  | Plástico negro   | M3SS4-10R | 1SFA611213R1001  | 10         | 0.018           |
|             |         | Plástico cromado | M3SS4-20R | 1SFA611213R2001  | 10         | 0.018           |
| M3SS4-10B   | ● Negro | Plástico negro   | M3SS4-10B | 1SFA611213R1006  | 10         | 0.018           |
|             |         | Plástico cromado | M3SS4-20B | 1SFA611213R2006  | 10         | 0.018           |
| M3SS4-30B   |         | Metálico cromado | M3SS4-30B | 1SFA611213R3006  | 10         | 0.027           |
| M3SS5-10U   | ● Gris  | Plástico negro   | M3SS5-10U | 1SFA611213R1007  | 10         | 0.018           |
|             |         | Plástico cromado | M3SS5-20U | 1SFA611213R2007  | 10         | 0.018           |
| M3SS5-10R   | ● Rojo  | Plástico negro   | M3SS5-10R | 1SFA611214R1001  | 10         | 0.018           |
|             |         | Metálico cromado | M3SS5-30R | 1SFA611214R3001  | 10         | 0.018           |
| M3SS5-10B   | ● Negro | Plástico negro   | M3SS5-10B | 1SFA611214R1006  | 10         | 0.018           |
|             |         | Plástico cromado | M3SS5-20B | 1SFA611214R2006  | 10         | 0.018           |
| M3SS5-30B   |         | Metálico cromado | M3SS5-30B | 1SFA611214R3006  | 10         | 0.027           |
| M3SS6-10U   | ● Gris  | Plástico negro   | M3SS6-10U | 1SFA611214R1007  | 10         | 0.018           |
|             |         | Plástico cromado | M3SS6-20U | 1SFA611214R2007  | 10         | 0.018           |
| M3SS6-10R   | ● Rojo  | Plástico negro   | M3SS6-10R | 1SFA611215R1001  | 10         | 0.018           |
|             | ● Negro | Plástico negro   | M3SS6-10B | 1SFA611215R1006  | 10         | 0.018           |
| M3SS6-20B   |         | Plástico cromado | M3SS6-20B | 1SFA611215R2006  | 10         | 0.018           |
| M3SS6-30B   |         | Metálico cromado | M3SS6-30B | 1SFA611215R3006  | 10         | 0.027           |
| M3SS8-10U   | ● Gris  | Plástico negro   | M3SS8-10U | 1SFA611215R1007  | 10         | 0.018           |
| M3SS8-10R   | ● Rojo  | Plástico negro   | M3SS8-10R | 1SFA611217R1001  | 10         | 0.018           |
|             | ● Negro | Plástico negro   | M3SS8-10B | 1SFA611217R1006  | 10         | 0.018           |
| M3SS8-20B   |         | Plástico cromado | M3SS8-20B | 1SFA611217R2006  | 10         | 0.018           |
| M3SS8-30B   |         | Metálico cromado | M3SS8-30B | 1SFA611217R3006  | 10         | 0.027           |
| M3SS8-10U   | ● Gris  | Plástico negro   | M3SS8-10U | 1SFA611217R1007  | 10         | 0.018           |

### Actuación de contactos



Dimensiones (mm, pulgadas)

## Gama modular

Selectores no luminosos - 3 posiciones - Maneta corta



M3SSC1-10B



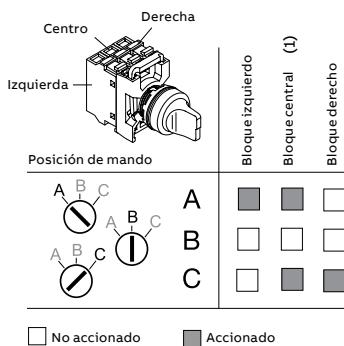
M3SSC3-30B

1SFCL51315V0001

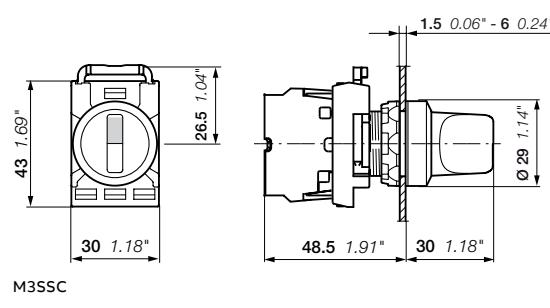
### Funcionamiento del bloque central

| Descripción | Color   | Embellecedore    | Tipo       | Código de pedido | Cant. paq. | Peso (1 ud.) kg |
|-------------|---------|------------------|------------|------------------|------------|-----------------|
| A<br>B<br>C | ● Negro | Plástico negro   | M3SSC1-10B | 1SFA611250R1006  | 10         | 0.015           |
|             |         | Metálico cromado | M3SSC1-30B | 1SFA611250R3006  | 10         | 0.024           |
| A<br>B<br>C | ● Negro | Plástico negro   | M3SSC2-10B | 1SFA611251R1006  | 10         | 0.015           |
|             |         | Metálico cromado | M3SSC2-30B | 1SFA611251R3006  | 10         | 0.024           |
| A<br>B<br>C | ● Negro | Plástico negro   | M3SSC3-10B | 1SFA611252R1006  | 10         | 0.015           |
|             |         | Metálico cromado | M3SSC3-30B | 1SFA611252R3006  | 10         | 0.024           |
| A<br>B<br>C | ● Negro | Plástico negro   | M3SSC7-10B | 1SFA611256R1006  | 10         | 0.015           |
|             |         | Metálico cromado | M3SSC7-30B | 1SFA611256R3006  | 10         | 0.024           |

### Actuación de contactos



(1) Para conectar 3 circuitos separados, uno a cada posición ABC, use 1 NA en las posiciones izquierda y derecha y 1 NC en la posición central.



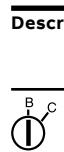
Dimensiones (mm, pulgadas)

## Gama modular

Selectores no luminosos - 2 posiciones - Maneta corta



M2SS1-11R



B C



ISFC151145V0001

M2SS1-31G



ISFC151140V0001

A C



ISFC151142V0001

M2SS2-11L

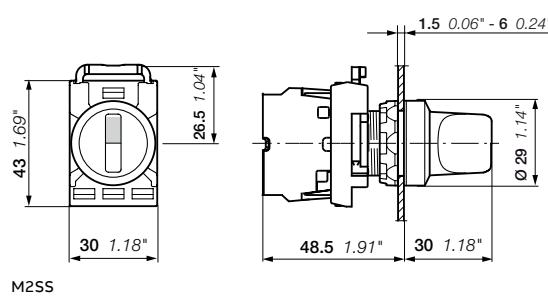


ISFC151143V0001

### Actuación de contactos

|                                       |   |
|---------------------------------------|---|
| Izquierda                             | Derecha   |
| Posición de mando                     | Bloque izquierdo Bloque derecho                   |
|                                       |   |
| A B C                                 | <input type="checkbox"/> <input type="checkbox"/> |
|                                       |   |
| A B C                                 | <input type="checkbox"/> <input type="checkbox"/> |
|                                       |   |
| A B C                                 | <input type="checkbox"/> <input type="checkbox"/> |
| <input type="checkbox"/> No accionado | <input checked="" type="checkbox"/> Accionado     |

| Descripción | Color      | Embellecedor     | Tipo      | Código de pedido | Cant. paq. | Peso (1 ud.) kg |
|-------------|------------|------------------|-----------|------------------|------------|-----------------|
|             | ● Rojo     | Plástico negro   | M2SS1-11R | 1SFA611200R1101  | 10         | 0.015           |
|             |            | Plástico cromado | M2SS1-21R | 1SFA611200R2101  | 10         | 0.015           |
|             |            | Metálico cromado | M2SS1-31R | 1SFA611200R3101  | 10         | 0.024           |
|             | ● Verde    | Plástico negro   | M2SS1-11G | 1SFA611200R1102  | 10         | 0.015           |
|             |            | Plástico cromado | M2SS1-21G | 1SFA611200R2102  | 10         | 0.015           |
|             |            | Metálico cromado | M2SS1-31G | 1SFA611200R3102  | 10         | 0.024           |
|             | ● Amarillo | Plástico negro   | M2SS1-11Y | 1SFA611200R1103  | 10         | 0.015           |
|             |            | Plástico cromado | M2SS1-21Y | 1SFA611200R2103  | 10         | 0.015           |
|             |            | Metálico cromado | M2SS1-31Y | 1SFA611200R3103  | 10         | 0.024           |
|             | ● Azul     | Plástico negro   | M2SS1-11L | 1SFA611200R1104  | 10         | 0.015           |
|             |            | Plástico cromado | M2SS1-21L | 1SFA611200R2104  | 10         | 0.015           |
|             | ○ Claro    | Plástico negro   | M2SS1-11C | 1SFA611200R1108  | 10         | 0.015           |
|             |            | Plástico cromado | M2SS1-21C | 1SFA611200R2108  | 10         | 0.015           |
|             |            | Metálico cromado | M2SS1-31C | 1SFA611200R3108  | 10         | 0.024           |
|             | ● Rojo     | Plástico negro   | M2SS2-11R | 1SFA611201R1101  | 10         | 0.015           |
|             |            | Plástico cromado | M2SS2-21R | 1SFA611201R2101  | 10         | 0.015           |
|             |            | Metálico cromado | M2SS2-31R | 1SFA611201R3101  | 10         | 0.024           |
|             | ● Verde    | Plástico negro   | M2SS2-11G | 1SFA611201R1102  | 10         | 0.015           |
|             |            | Plástico cromado | M2SS2-21G | 1SFA611201R2102  | 10         | 0.015           |
|             |            | Metálico cromado | M2SS2-31G | 1SFA611201R3102  | 10         | 0.024           |
|             | ● Amarillo | Plástico negro   | M2SS2-11Y | 1SFA611201R1103  | 10         | 0.015           |
|             |            | Plástico cromado | M2SS2-21Y | 1SFA611201R2103  | 10         | 0.015           |
|             |            | Metálico cromado | M2SS2-31Y | 1SFA611201R3103  | 10         | 0.024           |
|             | ● Azul     | Plástico negro   | M2SS2-11L | 1SFA611201R1104  | 10         | 0.015           |
|             |            | Plástico cromado | M2SS2-21L | 1SFA611201R2104  | 10         | 0.015           |
|             |            | Metálico cromado | M2SS2-31L | 1SFA611201R3104  | 10         | 0.024           |
|             | ○ Claro    | Plástico negro   | M2SS2-11C | 1SFA611201R1108  | 10         | 0.015           |
|             |            | Plástico cromado | M2SS2-21C | 1SFA611201R2108  | 10         | 0.015           |
|             |            | Metálico cromado | M2SS2-31C | 1SFA611201R3108  | 10         | 0.024           |
|             | ● Rojo     | Plástico negro   | M2SS3-11R | 1SFA611202R1101  | 10         | 0.015           |
|             |            | Plástico cromado | M2SS3-21R | 1SFA611202R2101  | 10         | 0.015           |
|             |            | Metálico cromado | M2SS3-31R | 1SFA611202R3101  | 10         | 0.024           |
|             | ● Verde    | Plástico negro   | M2SS3-11G | 1SFA611202R1102  | 10         | 0.015           |
|             |            | Plástico cromado | M2SS3-21G | 1SFA611202R2102  | 10         | 0.015           |
|             |            | Metálico cromado | M2SS3-31G | 1SFA611202R3102  | 10         | 0.024           |
|             | ● Amarillo | Plástico negro   | M2SS3-11Y | 1SFA611202R1103  | 10         | 0.015           |
|             |            | Metálico cromado | M2SS3-31Y | 1SFA611202R3103  | 10         | 0.024           |
|             | ● Azul     | Plástico negro   | M2SS3-11L | 1SFA611202R1104  | 10         | 0.015           |
|             | ○ Claro    | Plástico negro   | M2SS3-11C | 1SFA611202R1108  | 10         | 0.015           |
|             |            | Metálico cromado | M2SS3-31C | 1SFA611202R3108  | 10         | 0.024           |



## Gama modular

Selectores luminosos - 2 posiciones - Maneta larga



M2SS4-11R

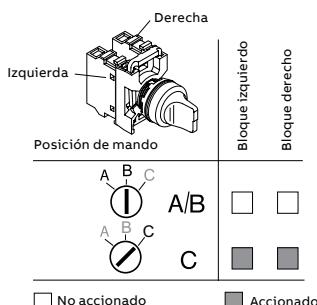


M2SS4-31G

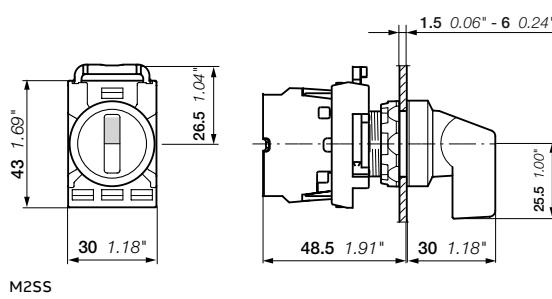


M2SS5-11Y

### Actuación de contactos



| Descripción    | Color      | Embellecedore    | Tipo      | Código de pedido | Cant. | Peso paq. (1 ud.) kg |
|----------------|------------|------------------|-----------|------------------|-------|----------------------|
| <br>B      C   | ● Rojo     | Plástico negro   | M2SS4-11R | 1SFA611203R1101  | 10    | 0.018                |
|                |            | Plástico cromado | M2SS4-21R | 1SFA611203R2101  | 10    | 0.018                |
| <br>● Verde    | ● Verde    | Plástico negro   | M2SS4-11G | 1SFA611203R1102  | 10    | 0.018                |
|                |            | Plástico cromado | M2SS4-21G | 1SFA611203R2102  | 10    | 0.018                |
| <br>● Amarillo | ● Amarillo | Plástico negro   | M2SS4-11Y | 1SFA611203R1103  | 10    | 0.018                |
|                |            | Plástico cromado | M2SS4-21Y | 1SFA611203R2103  | 10    | 0.018                |
| <br>● Azul     | ● Azul     | Plástico negro   | M2SS4-11L | 1SFA611203R1104  | 10    | 0.018                |
|                |            | Plástico cromado | M2SS4-21L | 1SFA611203R2104  | 10    | 0.018                |
| <br>○ Claro    | ○ Claro    | Plástico negro   | M2SS4-11C | 1SFA611203R1108  | 10    | 0.018                |
|                |            | Plástico cromado | M2SS4-21C | 1SFA611203R2108  | 10    | 0.018                |
| <br>● Rojo     | ● Rojo     | Plástico negro   | M2SS5-11R | 1SFA611204R1101  | 10    | 0.018                |
|                |            | Plástico cromado | M2SS5-21R | 1SFA611204R2101  | 10    | 0.018                |
| <br>● Verde    | ● Verde    | Plástico negro   | M2SS5-11G | 1SFA611204R1102  | 10    | 0.018                |
|                |            | Plástico cromado | M2SS5-21G | 1SFA611204R2102  | 10    | 0.018                |
| <br>● Amarillo | ● Amarillo | Plástico negro   | M2SS5-11Y | 1SFA611204R1103  | 10    | 0.018                |
|                |            | Plástico cromado | M2SS5-21Y | 1SFA611204R2103  | 10    | 0.018                |
| <br>● Azul     | ● Azul     | Plástico negro   | M2SS5-11L | 1SFA611204R1104  | 10    | 0.018                |
|                |            | Plástico cromado | M2SS5-21L | 1SFA611204R2104  | 10    | 0.018                |
| <br>○ Claro    | ○ Claro    | Plástico negro   | M2SS5-11C | 1SFA611204R1108  | 10    | 0.018                |
|                |            | Plástico cromado | M2SS5-21C | 1SFA611204R2108  | 10    | 0.018                |
| <br>● Rojo     | ● Rojo     | Plástico negro   | M2SS6-11R | 1SFA611205R1101  | 10    | 0.018                |
|                |            | Plástico cromado | M2SS6-31R | 1SFA611205R3108  | 10    | 0.027                |
| <br>● Verde    | ● Verde    | Plástico negro   | M2SS6-11G | 1SFA611205R1102  | 10    | 0.018                |
|                |            | Plástico cromado | M2SS6-31Y | 1SFA611205R1103  | 10    | 0.018                |
| <br>● Amarillo | ● Amarillo | Plástico negro   | M2SS6-11Y | 1SFA611205R1103  | 10    | 0.018                |
|                |            | Plástico cromado | M2SS6-31Y | 1SFA611205R1104  | 10    | 0.018                |
| <br>● Azul     | ● Azul     | Plástico negro   | M2SS6-11L | 1SFA611205R1104  | 10    | 0.018                |
|                |            | Plástico cromado | M2SS6-31L | 1SFA611205R1104  | 10    | 0.027                |
| <br>○ Claro    | ○ Claro    | Plástico negro   | M2SS6-11C | 1SFA611205R1108  | 10    | 0.018                |
|                |            | Plástico cromado | M2SS6-31C | 1SFA611205R3108  | 10    | 0.027                |



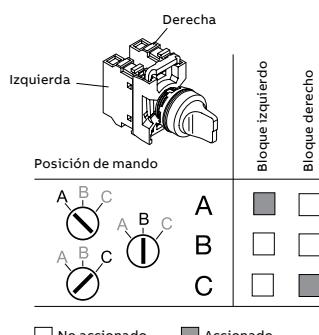
Dimensiones (mm, pulgadas)

## Gama modular

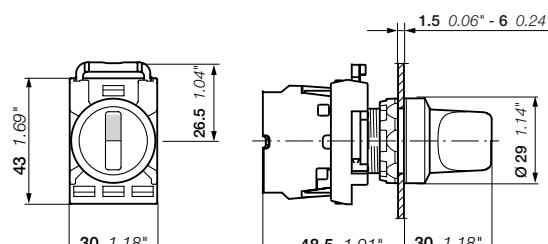
Selectores luminosos - 3 posiciones - Maneta corta



### Actuación de contactos



| Descripción | Color      | Embellecedor     | Tipo      | Código de pedido | Cant. paq. | Peso (1 ud.) kg |
|-------------|------------|------------------|-----------|------------------|------------|-----------------|
|             | ● Rojo     | Plástico negro   | M3SS1-11R | 1SFA611210R1101  | 10         | 0.015           |
|             |            | Plástico cromado | M3SS1-21R | 1SFA611210R2101  | 10         | 0.015           |
|             |            | Metálico cromado | M3SS1-31R | 1SFA611210R3101  | 10         | 0.024           |
|             | ● Verde    | Plástico negro   | M3SS1-11G | 1SFA611210R1102  | 10         | 0.015           |
|             |            | Plástico cromado | M3SS1-21G | 1SFA611210R2102  | 10         | 0.015           |
|             |            | Metálico cromado | M3SS1-31G | 1SFA611210R3102  | 10         | 0.024           |
|             | ● Amarillo | Plástico negro   | M3SS1-11Y | 1SFA611210R1103  | 10         | 0.015           |
|             |            | Plástico cromado | M3SS1-21Y | 1SFA611210R2103  | 10         | 0.015           |
|             |            | Metálico cromado | M3SS1-31Y | 1SFA611210R3103  | 10         | 0.024           |
|             | ● Azul     | Plástico negro   | M3SS1-11L | 1SFA611210R1104  | 10         | 0.015           |
|             |            | Plástico cromado | M3SS1-21L | 1SFA611210R2104  | 10         | 0.015           |
|             |            | Metálico cromado | M3SS1-31L | 1SFA611210R3104  | 10         | 0.024           |
|             | ○ Claro    | Plástico negro   | M3SS1-11C | 1SFA611210R1108  | 10         | 0.015           |
|             |            | Plástico cromado | M3SS1-21C | 1SFA611210R2108  | 10         | 0.015           |
|             |            | Metálico cromado | M3SS1-31C | 1SFA611210R3108  | 10         | 0.024           |
|             | ● Rojo     | Plástico negro   | M3SS2-11R | 1SFA611211R1101  | 10         | 0.015           |
|             |            | Plástico cromado | M3SS2-21R | 1SFA611211R2101  | 10         | 0.015           |
|             |            | Metálico cromado | M3SS2-31R | 1SFA611211R3101  | 10         | 0.024           |
|             | ● Verde    | Plástico negro   | M3SS2-11G | 1SFA611211R1102  | 10         | 0.015           |
|             |            | Plástico cromado | M3SS2-21G | 1SFA611211R2102  | 10         | 0.015           |
|             |            | Metálico cromado | M3SS2-31G | 1SFA611211R3102  | 10         | 0.024           |
|             | ● Amarillo | Plástico negro   | M3SS2-11Y | 1SFA611211R1103  | 10         | 0.015           |
|             |            | Plástico cromado | M3SS2-21Y | 1SFA611211R2103  | 10         | 0.015           |
|             | ● Azul     | Plástico negro   | M3SS2-11L | 1SFA611211R1104  | 10         | 0.015           |
|             |            | Plástico cromado | M3SS2-21L | 1SFA611211R2104  | 10         | 0.015           |
|             |            | Metálico cromado | M3SS2-31L | 1SFA611211R3104  | 10         | 0.024           |
|             | ○ Claro    | Plástico negro   | M3SS2-11C | 1SFA611211R1108  | 10         | 0.015           |
|             |            | Plástico cromado | M3SS2-21C | 1SFA611211R2108  | 10         | 0.015           |
|             |            | Metálico cromado | M3SS2-31C | 1SFA611211R3108  | 10         | 0.024           |
|             | ● Rojo     | Plástico negro   | M3SS3-11R | 1SFA611212R1101  | 10         | 0.015           |
|             |            | Plástico cromado | M3SS3-21R | 1SFA611212R2101  | 10         | 0.015           |
|             | ● Verde    | Plástico negro   | M3SS3-11G | 1SFA611212R1102  | 10         | 0.015           |
|             |            | Plástico cromado | M3SS3-21G | 1SFA611212R2102  | 10         | 0.015           |
|             | ● Amarillo | Plástico negro   | M3SS3-11Y | 1SFA611212R1103  | 10         | 0.015           |
|             | ● Azul     | Plástico negro   | M3SS3-11L | 1SFA611212R1104  | 10         | 0.015           |
|             | ○ Claro    | Plástico negro   | M3SS3-11C | 1SFA611212R1108  | 10         | 0.015           |
|             |            | Plástico cromado | M3SS3-21C | 1SFA611212R2108  | 10         | 0.015           |
|             |            | Metálico cromado | M3SS3-31C | 1SFA611212R3108  | 10         | 0.024           |
|             | ● Rojo     | Plástico negro   | M3SS7-11R | 1SFA611216R1101  | 10         | 0.015           |
|             | ● Verde    | Plástico negro   | M3SS7-11G | 1SFA611216R1102  | 10         | 0.015           |
|             |            | Plástico cromado | M3SS7-21G | 1SFA611216R2102  | 10         | 0.015           |
|             |            | Metálico cromado | M3SS7-31G | 1SFA611216R3102  | 10         | 0.024           |
|             | ● Amarillo | Plástico negro   | M3SS7-11Y | 1SFA611216R1103  | 10         | 0.015           |
|             | ● Azul     | Plástico negro   | M3SS7-11L | 1SFA611216R1104  | 10         | 0.015           |
|             | ○ Claro    | Plástico negro   | M3SS7-11C | 1SFA611216R1108  | 10         | 0.015           |
|             |            | Plástico cromado | M3SS7-21C | 1SFA611216R2108  | 10         | 0.015           |
|             |            | Metálico cromado | M3SS7-31C | 1SFA611216R3108  | 10         | 0.024           |



Dimensiones (mm, pulgadas)

## Gama modular

Selectores luminosos - 3 posiciones - Maneta larga



M3SS4-11R



M3SS4-11G

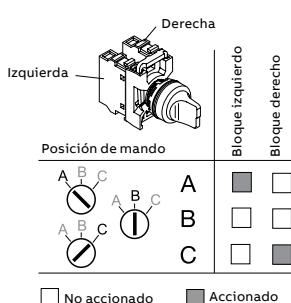


M3SS4-11Y

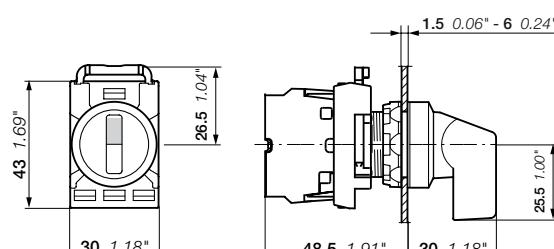


M3SS4-31C

### Actuación de contactos



| Descripción | Color      | Embellecedor     | Tipo      | Código de pedido | Cant. paq. | Peso (1 ud.) kg |
|-------------|------------|------------------|-----------|------------------|------------|-----------------|
| M3SS4-11R   | ● Rojo     | Plástico negro   | M3SS4-11R | 1SFA611213R1101  | 10         | 0.018           |
|             |            | Plástico cromado | M3SS4-21R | 1SFA611213R2101  | 10         | 0.018           |
|             |            | Metálico cromado | M3SS4-31R | 1SFA611213R3101  | 10         | 0.027           |
| M3SS4-11G   | ● Verde    | Plástico negro   | M3SS4-11G | 1SFA611213R1102  | 10         | 0.018           |
|             |            | Plástico cromado | M3SS4-21G | 1SFA611213R2102  | 10         | 0.018           |
| M3SS4-11Y   | ● Amarillo | Plástico negro   | M3SS4-11Y | 1SFA611213R1103  | 10         | 0.018           |
|             |            | Plástico cromado | M3SS4-21Y | 1SFA611213R2103  | 10         | 0.018           |
| M3SS4-31C   | ● Azul     | Plástico negro   | M3SS4-11L | 1SFA611213R1104  | 10         | 0.018           |
|             |            | Plástico cromado | M3SS4-21L | 1SFA611213R2104  | 10         | 0.018           |
|             | ○ Claro    | Plástico negro   | M3SS4-11C | 1SFA611213R1108  | 10         | 0.018           |
|             |            | Plástico cromado | M3SS4-21C | 1SFA611213R2108  | 10         | 0.018           |
|             |            | Metálico cromado | M3SS4-31C | 1SFA611213R3108  | 10         | 0.027           |
| M3SS5-11R   | ● Rojo     | Plástico negro   | M3SS5-11R | 1SFA611214R1101  | 10         | 0.018           |
|             |            | Plástico cromado | M3SS5-21R | 1SFA611214R2101  | 10         | 0.018           |
| M3SS5-11G   | ● Verde    | Plástico negro   | M3SS5-11G | 1SFA611214R1102  | 10         | 0.018           |
|             |            | Plástico cromado | M3SS5-21G | 1SFA611214R2102  | 10         | 0.018           |
| M3SS5-11Y   | ● Amarillo | Plástico negro   | M3SS5-11Y | 1SFA611214R1103  | 10         | 0.018           |
|             |            | Plástico cromado | M3SS5-21Y | 1SFA611214R2103  | 10         | 0.018           |
| M3SS5-11L   | ● Azul     | Plástico negro   | M3SS5-11L | 1SFA611214R1104  | 10         | 0.018           |
|             |            | Plástico cromado | M3SS5-21L | 1SFA611214R2104  | 10         | 0.018           |
| M3SS5-11C   | ○ Claro    | Plástico negro   | M3SS5-11C | 1SFA611214R1108  | 10         | 0.018           |
|             |            | Plástico cromado | M3SS5-21C | 1SFA611214R2108  | 10         | 0.018           |
|             |            | Metálico cromado | M3SS5-31C | 1SFA611214R3108  | 10         | 0.027           |
| M3SS6-11R   | ● Rojo     | Plástico negro   | M3SS6-11R | 1SFA611215R1101  | 10         | 0.018           |
| M3SS6-11G   | ● Verde    | Plástico negro   | M3SS6-11G | 1SFA611215R1102  | 10         | 0.018           |
|             |            | Plástico cromado | M3SS6-21G | 1SFA611215R2102  | 10         | 0.018           |
| M3SS6-11Y   | ● Amarillo | Plástico negro   | M3SS6-11Y | 1SFA611215R1103  | 10         | 0.018           |
|             |            | Plástico cromado | M3SS6-21Y | 1SFA611215R2103  | 10         | 0.018           |
| M3SS6-11L   | ● Azul     | Plástico negro   | M3SS6-11L | 1SFA611215R1104  | 10         | 0.018           |
|             |            | Metálico cromado | M3SS6-31L | 1SFA611215R3104  | 10         | 0.027           |
| M3SS6-11C   | ○ Claro    | Plástico negro   | M3SS6-11C | 1SFA611215R1108  | 10         | 0.018           |
| M3SS8-11R   | ● Rojo     | Plástico negro   | M3SS8-11R | 1SFA611217R1101  | 10         | 0.018           |
|             |            | Plástico cromado | M3SS8-21R | 1SFA611217R2101  | 10         | 0.018           |
| M3SS8-11G   | ● Verde    | Plástico negro   | M3SS8-11G | 1SFA611217R1102  | 10         | 0.018           |
|             |            | Plástico cromado | M3SS8-21G | 1SFA611217R2102  | 10         | 0.018           |
| M3SS8-11Y   | ● Amarillo | Plástico negro   | M3SS8-11Y | 1SFA611217R1103  | 10         | 0.018           |
|             |            | Plástico cromado | M3SS8-21Y | 1SFA611217R2103  | 10         | 0.018           |
| M3SS8-11L   | ● Azul     | Plástico negro   | M3SS8-11L | 1SFA611217R1104  | 10         | 0.018           |
| M3SS8-11C   | ○ Claro    | Plástico negro   | M3SS8-11C | 1SFA611217R1108  | 10         | 0.018           |



Dimensiones (mm, pulgadas)

## Gama modular

Selectores accionados por llave - 2 posiciones



M2SSK1-101

ISFCI51133V0001

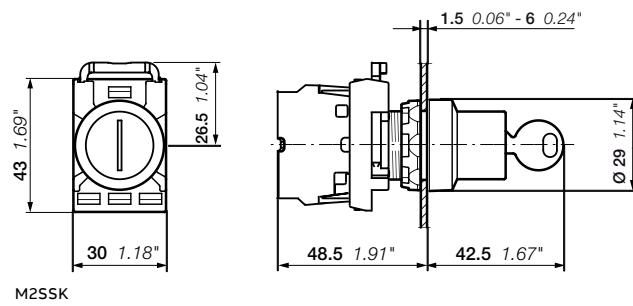
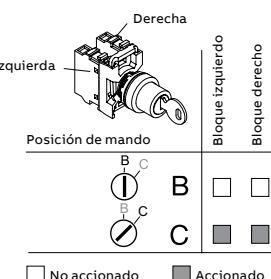
### Descripción

Todos los selectores accionados por llave son de color negro.

| Descripción   | Desbloqueo con llave | Embellecedores          | Tipo   | Código de pedido                       | Cant. paq. (1 ud.)                                    | Peso kg                       |  |
|---|----------------------|-------------------------|--|--|---|-------------------------------|--|
| La llave puede ser retirada en ambas posiciones         | B C                  | Código de llave 455     | Plástico negro<br>Plástico cromado<br>Metálico cromado | M2SSK1-101<br>M2SSK1-201<br>M2SSK1-301 | 1SFA611280R1001<br>1SFA611280R2001<br>1SFA611280R3001 | 1 0.045<br>1 0.045<br>1 0.054 |  |
|   |                      | Código de llave 421     | Plástico negro<br>Metálico cromado                     | M2SSK1-102<br>M2SSK1-302               | 1SFA611280R1002<br>1SFA611280R3002                    | 1 0.045<br>1 0.054            |  |
|   |                      | Código de llave 3433-E  | Plástico negro<br>Metálico cromado                     | M2SSK1-103<br>M2SSK1-303               | 1SFA611280R1003<br>1SFA611280R3003                    | 1 0.045<br>1 0.054            |  |
|   |                      | Selección aleatoria (1) | Plástico negro<br>Metálico cromado                     | M2SSK1-104<br>M2SSK1-304               | 1SFA611280R1004<br>1SFA611280R3004                    | 25 0.045<br>25 0.054          |  |
|   |                      |                         |  |  |   |                               |  |
| La llave puede ser retirada únicamente en la posición B | B C                  | Código de llave 455     | Plástico negro<br>Plástico cromado<br>Metálico cromado | M2SSK2-101<br>M2SSK2-201<br>M2SSK2-301 | 1SFA611281R1001<br>1SFA611281R2001<br>1SFA611281R3001 | 1 0.045<br>1 0.045<br>1 0.054 |  |
|   |                      | Código de llave 421     | Plástico negro<br>Metálico cromado                     | M2SSK2-102<br>M2SSK2-302               | 1SFA611281R1002<br>1SFA611281R3002                    | 1 0.045<br>1 0.054            |  |
|   |                      | Código de llave 3433-E  | Plástico negro<br>Metálico cromado                     | M2SSK2-103<br>M2SSK2-203<br>M2SSK2-303 | 1SFA611281R1003<br>1SFA611281R2003<br>1SFA611281R3003 | 1 0.045<br>1 0.045<br>1 0.054 |  |
|   |                      | Selección aleatoria (1) | Plástico negro<br>Metálico cromado                     | M2SSK2-104<br>M2SSK2-304               | 1SFA611281R1004<br>1SFA611281R3004                    | 25 0.045<br>25 0.054          |  |
|   |                      |                         |  |  |   |                               |  |
| La llave puede ser retirada únicamente en la posición B | B C                  | Código de llave 455     | Plástico negro<br>Metálico cromado                     | M2SSK3-101<br>M2SSK3-301               | 1SFA611282R1001<br>1SFA611282R3001                    | 1 0.045<br>1 0.054            |  |
|   |                      | Código de llave 421     | Plástico negro<br>Metálico cromado                     | M2SSK3-102<br>M2SSK3-302               | 1SFA611282R1002<br>1SFA611282R3002                    | 1 0.045<br>1 0.054            |  |
|   |                      | Código de llave 3433-E  | Plástico negro<br>Metálico cromado                     | M2SSK3-103<br>M2SSK3-303               | 1SFA611282R1003<br>1SFA611282R3003                    | 1 0.045<br>1 0.054            |  |
|   |                      | Selección aleatoria (1) | Plástico negro<br>Metálico cromado                     | M2SSK3-104<br>M2SSK3-304               | 1SFA611282R1004<br>1SFA611282R3004                    | 25 0.045<br>25 0.054          |  |
|   |                      |                         |  |  |   |                               |  |
| La llave puede ser retirada únicamente en la posición A | B C                  | Código de llave 455     | Plástico negro   | M2SSK4-101                             | 1SFA611289R1001                                       | 1 0.045                       |  |
|   |                      |                         |  |  |   |                               |  |

(1) Código de pedido para embalaje de 25 unidades de selectores accionados por llave. Cada interruptor selector presenta un código de llave único. Códigos de llave 455, 421 y 3433-E no incluidos.

### Actuación de contactos



Dimensiones (mm, pulgadas)

## Gama modular

Selector accionado por llave - 3 posiciones



M2SSK1-101

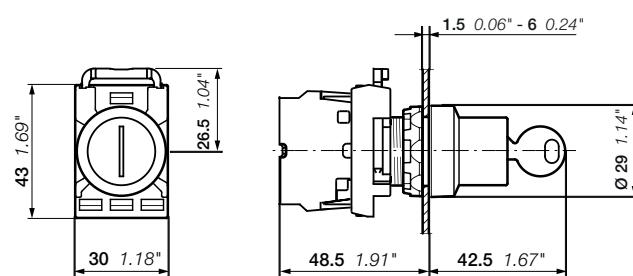
ISFCI51133V0001

### Descripción

Todos los selectores accionados por llave son de color negro.

| Descripción                                       | Color                   | Embellecedores   | Tipo                                   | Código de pedido                                      | Cant. paq. (1 ud.) | Peso kg                 |
|---|-------------------------|--|--|---|--------------------|-------------------------|
| La llave puede ser retirada en cualquier posición | Código de clave 455     | Plástico negro<br>Plástico cromado<br>Metálico cromado | M3SSK1-101<br>M3SSK1-201<br>M3SSK1-301 | 1SFA611283R1001<br>1SFA611283R2001<br>1SFA611283R3001 | 1<br>1<br>1        | 0.045<br>0.045<br>0.054 |
|   | Código de clave 421     | Plástico negro<br>Metálico cromado                     | M3SSK1-102<br>M3SSK1-302               | 1SFA611283R1002<br>1SFA611283R3002                    | 1<br>1             | 0.045<br>0.054          |
|   | Código de clave 3433-E  | Plástico negro<br>Metálico cromado                     | M3SSK1-103<br>M3SSK1-303               | 1SFA611283R1003<br>1SFA611283R3003                    | 1<br>1             | 0.045<br>0.054          |
|   | Selección aleatoria (1) | Plástico negro   | M3SSK1-104                             | 1SFA611283R1004                                       | 25                 | 0.045                   |
|   | Plástico negro          | Metálico cromado                                       | M3SSK1-304                             | 1SFA611283R3004                                       | 25                 | 0.054                   |
|   | Código de clave 455     | Plástico negro<br>Metálico cromado                     | M3SSK2-101<br>M3SSK2-301               | 1SFA611284R1001<br>1SFA611284R3001                    | 1<br>1             | 0.045<br>0.054          |
|   | Código de clave 421     | Plástico negro   | M3SSK2-102                             | 1SFA611284R1002                                       | 1                  | 0.045                   |
|   | Código de clave 3433-E  | Plástico negro   | M3SSK2-103                             | 1SFA611284R1003                                       | 1                  | 0.045                   |
|   | Selección aleatoria (1) | Plástico negro   | M3SSK2-104                             | 1SFA611284R1004                                       | 25                 | 0.045                   |
|   | Código de clave 455     | Plástico negro<br>Metálico cromado                     | M3SSK3-101<br>M3SSK3-301               | 1SFA611285R1001<br>1SFA611285R3001                    | 1<br>1             | 0.045<br>0.054          |
|   | Código de clave 421     | Plástico negro<br>Metálico cromado                     | M3SSK3-102<br>M3SSK3-302               | 1SFA611285R1002<br>1SFA611285R3002                    | 1<br>1             | 0.045<br>0.054          |
|   | Código de clave 3433-E  | Plástico negro<br>Metálico cromado                     | M3SSK3-103<br>M3SSK3-303               | 1SFA611285R1003<br>1SFA611285R3003                    | 1<br>1             | 0.045<br>0.054          |
|   | Selección aleatoria (1) | Plástico negro   | M3SSK3-104                             | 1SFA611285R1004                                       | 25                 | 0.045                   |
|   | Código de clave 455     | Plástico negro<br>Metálico cromado                     | M3SSK4-101<br>M3SSK4-301               | 1SFA611286R1001<br>1SFA611286R3001                    | 1<br>1             | 0.045<br>0.054          |
|   | Código de clave 421     | Plástico negro<br>Metálico cromado                     | M3SSK4-102<br>M3SSK4-302               | 1SFA611286R1002<br>1SFA611286R3002                    | 1<br>1             | 0.045<br>0.054          |
|   | Código de clave 3433-E  | Plástico negro   | M3SSK4-103                             | 1SFA611286R1003                                       | 1                  | 0.045                   |
|   | Selección aleatoria (1) | Plástico negro   | M3SSK4-104                             | 1SFA611286R1004                                       | 25                 | 0.045                   |
|   | Código de clave 455     | Plástico negro<br>Metálico cromado                     | M3SSK5-101<br>M3SSK5-301               | 1SFA611287R1001<br>1SFA611287R3001                    | 1<br>1             | 0.045<br>0.054          |
|   | Código de clave 3433-E  | Plástico negro   | M3SSK5-102                             | 1SFA611287R1002                                       | 1                  | 0.045                   |
|   | Selección aleatoria (1) | Plástico negro   | M3SSK5-103                             | 1SFA611287R1003                                       | 1                  | 0.045                   |
|   | Código de clave 455     | Plástico negro   | M3SSK6-101                             | 1SFA611288R1001                                       | 1                  | 0.045                   |

(1) Código de pedido para embalaje de 25 unidades de selectores accionados por llave. Cada interruptor selector presenta un código de llave único. Códigos de llave 455, 421 y 3433-E no incluidos.



Dimensiones (mm, pulgadas)

ISFCI5102350701

## Gama modular

### Potenciómetros



MT-110B

ISFC151139V0001

#### Descripción

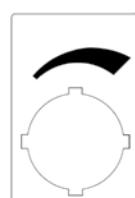
Maneta negra con indicación de posición integrada y marcado en blanco.

| Embellecedor                          | Tipo    | Código de pedido | Cant. paq.      | Peso (1 ud.) kg |
|---------------------------------------|---------|------------------|-----------------|-----------------|
| <b>Mando con resistencia de 5 kΩ</b>  |         |                  |                 |                 |
| Plástico negro                        | MT-105B | 1SFA611410R1056  | 1               | 0.040           |
| Plástico cromado                      | MT-205B | 1SFA611410R2056  | 1               | 0.040           |
| Metálico cromado                      | MT-305B | 1SFA611410R3056  | 1               | 0.049           |
| <b>Mando con resistencia de 10 kΩ</b> |         |                  |                 |                 |
| Plástico negro                        | MT-110B | 1SFA611410R1106  | 1               | 0.040           |
| Plástico cromado                      | MT-210B | 1SFA611410R2106  | 1               | 0.036           |
| Metálico cromado                      | MT-310B | 1SFA611410R3106  | 1               | 0.048           |
| <b>Mando con resistencia de 50 kΩ</b> |         |                  |                 |                 |
| Plástico negro                        | MT-150B | 1SFA611410R1506  | 1               | 0.040           |
| Plástico cromado                      | MT-250B | 1SFA611410R2506  | 1               | 0.040           |
| Metálico cromado                      | MT-350B | 1SFA611410R3506  | 1               | 0.049           |
| <b>Mando sin resistencia (1)</b>      |         |                  |                 |                 |
| Plástico negro                        | MT-1B   | 1SFA611410R1006  | 10              | 0.010           |
| Plástico cromado                      | MT-2B   | 1SFA611410R2006  | 10              | 0.010           |
| Metálico cromado                      | MT-3B   | 1SFA611410R3006  | 10              | 0.019           |
| <b>Placas de leyenda de aluminio</b>  |         |                  |                 |                 |
| 29.6 x 44.5 mm                        | Ø 22 mm | –                | SK615562-87     | 10 0.002        |
| 48.5 x 44.5 mm, escala: 0-10          | Ø 22 mm | –                | SK615562-88     | 10 0.002        |
| 48.5 x 44.5 mm, escala: 0-50          | Ø 22 mm | MA6-1252         | 1SFA611930R1252 | 10 0.002        |

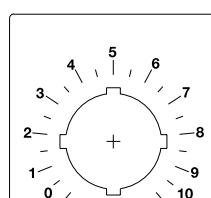
(1) Mando sin resistencia: para diámetros de eje de 6 a 6.35 mm. Longitud mínima de eje de 20 mm.



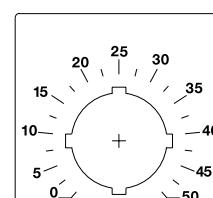
MA6-1252



SK615562-87



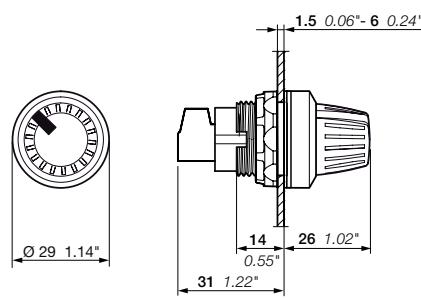
SK615562-88



MA6-1252

#### Datos técnicos

|                              |             |
|------------------------------|-------------|
| Potencia nominal             | 2 W         |
| Ángulo mecánico              | 280°        |
| Tensión de aislamiento       | 900 V       |
| Temperatura de operación     | -1 - +70° C |
| Tolerancia de la resistencia | ± 10 ohmios |



MT

Dimensiones (mm, pulgadas)

## Gama modular

### Pulsadores de rearme



KPR1-100G

1SFC151235V0001



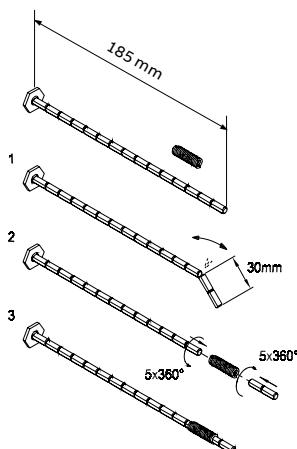
KPR1-101L

1SFC151234V0001



KPR1-104B

1SFC151229V0001



KA1-8047

1SFC151381W0001

#### Descripción

Los pulsadores de rearme son momentáneos e incluyen únicamente embellecedores de plástico negro.

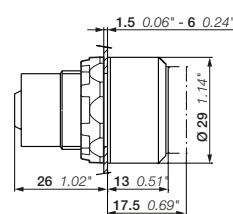
| Color                                 | Texto     | Tipo      | Código de pedido | Cant. paq. | Peso (1 ud.) kg |
|---------------------------------------|-----------|-----------|------------------|------------|-----------------|
| <b>Pulsadores modulares de rearme</b> |           |           |                  |            |                 |
| ● Rojo                                | Sin texto | KPR1-100R | 1SFA616160R1001  | 10         | 0.020           |
| ● Verde                               | Sin texto | KPR1-100G | 1SFA616160R1002  | 10         | 0.020           |
|                                       | I         | KPR1-102G | 1SFA616160R1022  | 10         | 0.020           |
|                                       | II        | KPR1-103G | 1SFA616160R1032  | 10         | 0.020           |
| ● Amarillo                            | Sin texto | KPR1-100Y | 1SFA616160R1003  | 10         | 0.020           |
| ● Azul                                | Sin texto | KPR1-100L | 1SFA616160R1004  | 10         | 0.020           |
|                                       | R         | KPR1-101L | 1SFA616160R1014  | 10         | 0.020           |
| ○ Blanco                              | Sin texto | KPR1-100W | 1SFA616160R1005  | 10         | 0.020           |
|                                       | R         | KPR1-101W | 1SFA616160R1015  | 10         | 0.020           |
|                                       | I         | KPR1-102W | 1SFA616160R1025  | 10         | 0.020           |
|                                       | II        | KPR1-103W | 1SFA616160R1035  | 10         | 0.020           |
| ● Negro                               | Sin texto | KPR1-100B | 1SFA616160R1006  | 10         | 0.020           |
|                                       | RESET     | KPR1-104B | 1SFA616160R1046  | 10         | 0.020           |

#### Pulsador de rearme extendido

|         |           |           |                 |    |       |
|---------|-----------|-----------|-----------------|----|-------|
| ● Rojo  | Sin texto | KPR2-100R | 1SFA616161R1001 | 10 | 0.021 |
|         | O         | KPR2-105R | 1SFA616161R1051 | 10 | 0.021 |
| ● Azul  | Sin texto | KPR2-100L | 1SFA616161R1005 | 10 | 0.021 |
| ● Negro | Sin texto | KPR2-100B | 1SFA616161R1006 | 10 | 0.021 |
|         | O         | KPR2-105B | 1SFA616161R1056 | 10 | 0.021 |

#### Accesorios

|                | Tipo     | Código de pedido | Cant. paq. | Peso (1 ud.) kg |
|----------------|----------|------------------|------------|-----------------|
| Eje            | KA1-8046 | 1SFA616920R8046  | 10         | 0.007           |
| Unión flexible | KA1-8047 | 1SFA616920R8047  | 10         | 0.005           |



KPR1, KPR2

Dimensiones (mm, pulgadas)

1SFC151025S0701

## Gama modular

### Pulsadores de rearme con eje



KPR3-100R

ISFC151225V0001



KPR3-104B

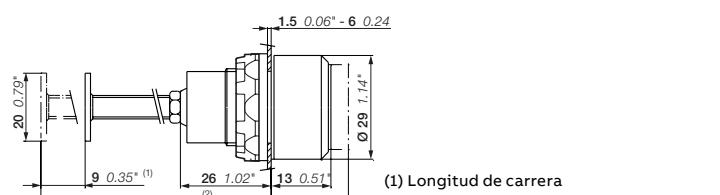
ISFC151222V0001

#### Descripción

Los pulsadores de rearme son momentáneos e incluyen únicamente embellecedores de plástico negro.

| Color                                 | Texto     | Tipo      | Código de pedido | Cant. paq. | Peso (1 ud.) kg |
|---------------------------------------|-----------|-----------|------------------|------------|-----------------|
| <b>Pulsadores modulares de rearme</b> |           |           |                  |            |                 |
| ● Rojo                                | Sin texto | KPR3-100R | 1SFA616162R1001  | 10         | 0.027           |
| ● Verde                               | Sin texto | KPR3-100G | 1SFA616162R1002  | 10         | 0.027           |
|                                       | II        | KPR3-103G | 1SFA616162R1032  | 10         | 0.027           |
|                                       | START     | KPR3-106G | 1SFA616162R1062  | 10         | 0.027           |
| ● Amarillo                            | Sin texto | KPR3-100Y | 1SFA616162R1003  | 10         | 0.027           |
| ● Azul                                | Sin texto | KPR3-100L | 1SFA616162R1004  | 10         | 0.027           |
|                                       | R         | KPR3-101L | 1SFA616162R1014  | 10         | 0.027           |
| ○ Blanco                              | Sin texto | KPR3-100W | 1SFA616162R1005  | 10         | 0.027           |
|                                       | R         | KPR3-101W | 1SFA616162R1015  | 10         | 0.027           |
|                                       | I         | KPR3-102W | 1SFA616162R1025  | 10         | 0.027           |
| ● Negro                               | Sin texto | KPR3-100B | 1SFA616162R1006  | 10         | 0.027           |
|                                       | RESET     | KPR3-104B | 1SFA616162R1046  | 10         | 0.027           |
| <b>Pulsador de rearme extendido</b>   |           |           |                  |            |                 |
| ● Rojo                                | Sin texto | KPR4-100R | 1SFA616163R1001  | 10         | 0.028           |
|                                       | O         | KPR4-105R | 1SFA616163R1051  | 10         | 0.028           |
| ○ Blanco                              | Sin texto | KPR4-100W | 1SFA616163R1005  | 10         | 0.028           |
| ● Negro                               | Sin texto | KPR4-100B | 1SFA616163R1006  | 10         | 0.028           |
|                                       | O         | KPR4-105B | 1SFA616163R1056  | 10         | 0.028           |

Nota: Unión flexible no incluida.



KPR3, KPR4

Dimensiones (mm, pulgadas)

ISFC15102650701

## Gama modular

### Joysticks



MJS1-60B

ISFC151544V0001

#### Descripción

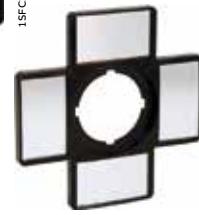
Grado de protección IP: IP66, IP67 e IP69K. Se incluye el soporte de 4 posiciones.

| Posición                        | Embellecedor     | Tipo      | Código de pedido | Cant. paq. | Peso (1 ud.) kg |
|---------------------------------|------------------|-----------|------------------|------------|-----------------|
| <b>Sin función de retención</b> |                  |           |                  |            |                 |
|                                 | Plástico negro   | MJS1-40B  | 1SFA611701R4006  | 1          | 0.043           |
|                                 | Metálico cromado | MJS1-60B  | 1SFA611701R6006  | 1          | 0.052           |
|                                 | Plástico negro   | MJS2-40B  | 1SFA611702R4006  | 1          | 0.043           |
|                                 | Metálico cromado | MJS2-60B  | 1SFA611702R6006  | 1          | 0.052           |
|                                 | Plástico negro   | MJS3-40B  | 1SFA611703R4006  | 1          | 0.043           |
|                                 | Metálico cromado | MJS3-60B  | 1SFA611703R6006  | 1          | 0.052           |
|                                 | Plástico negro   | MJS4-40B  | 1SFA611704R4006  | 1          | 0.043           |
|                                 | Metálico cromado | MJS4-60B  | 1SFA611704R6006  | 1          | 0.052           |
|                                 | Plástico negro   | MJS5-40B  | 1SFA611705R4006  | 1          | 0.043           |
|                                 | Metálico cromado | MJS5-60B  | 1SFA611705R6006  | 1          | 0.052           |
|                                 | Plástico negro   | MJS6-40B  | 1SFA611706R4006  | 1          | 0.043           |
|                                 | Metálico cromado | MJS6-60B  | 1SFA611706R6006  | 1          | 0.052           |
| <b>Con función de retención</b> |                  |           |                  |            |                 |
|                                 | Plástico negro   | MJS7-40B  | 1SFA611707R4006  | 1          | 0.043           |
|                                 | Metálico cromado | MJS7-60B  | 1SFA611707R6006  | 1          | 0.052           |
|                                 | Plástico negro   | MJS9-40B  | 1SFA611709R4006  | 1          | 0.043           |
|                                 | Metálico cromado | MJS9-60B  | 1SFA611709R6006  | 1          | 0.052           |
|                                 | Plástico negro   | MJS8-40B  | 1SFA611708R4006  | 1          | 0.043           |
|                                 | Metálico cromado | MJS8-60B  | 1SFA611708R6006  | 1          | 0.052           |
|                                 | Metálico cromado | MJS10-60B | 1SFA611710R6006  | 1          | 0.052           |
|                                 | Plástico negro   | MJS12-40B | 1SFA611712R4006  | 1          | 0.043           |
|                                 | Metálico cromado | MJS12-60B | 1SFA611712R6006  | 1          | 0.052           |
|                                 | Plástico negro   | MJS11-40B | 1SFA611711R4006  | 1          | 0.043           |
|                                 | Metálico cromado | MJS11-60B | 1SFA611711R6006  | 1          | 0.052           |



MA1-8138

ISFC15154816001

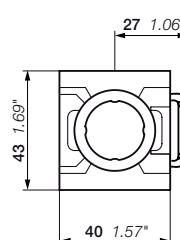


MA1-8137

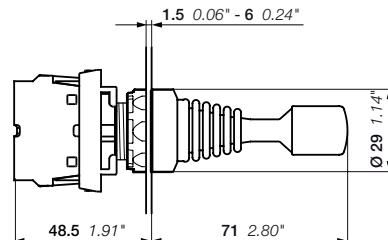
ISFC15154816001

#### Accesorios

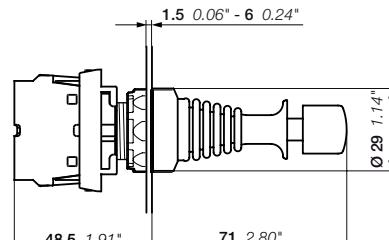
|   | Tipo     | Código de pedido | Cant. paq. | Peso (1 ud.) kg |
|---|----------|------------------|------------|-----------------|
| <b>Placas de leyenda, laminado de aluminio de 66 x 59 con parte posterior adhesiva</b>                |          |                  |            |                 |
| 2 posiciones: arriba y abajo  | MA6-1240 | 1SFA611930R1240  | 10         | 0.004           |
| 2 posiciones: izquierda y derecha   | MA6-1241 | 1SFA611930R1241  | 10         | 0.004           |
| 4 posiciones: arriba, abajo, derecha e izquierda  | MA6-1242 | 1SFA611930R1242  | 10         | 0.004           |
| <b>Soporte de placas de leyenda (etiquetas no incluidas, adecuado para etiquetas de tamaño 27x15)</b> |          |                  |            |                 |
| 2 posiciones  | MA1-8138 | 1SFA611920R8138  | 10         | 0.002           |
| 4 posiciones  | MA1-8137 | 1SFA611920R8137  | 10         | 0.003           |



MJS



sin función de retención



con función de retención

Dimensiones (mm, pulgadas)

ISFC151502850701

## Gama modular

### Selectores de palanca



ISFC151132V0001

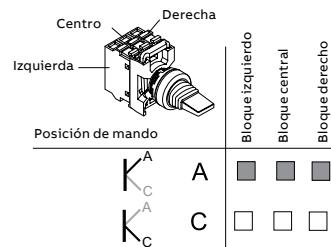
MTS1-10B



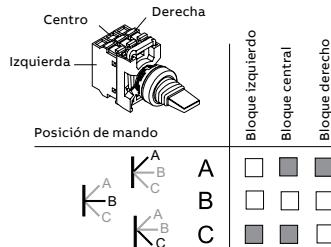
ISFC151346V0001

MTS1-30B

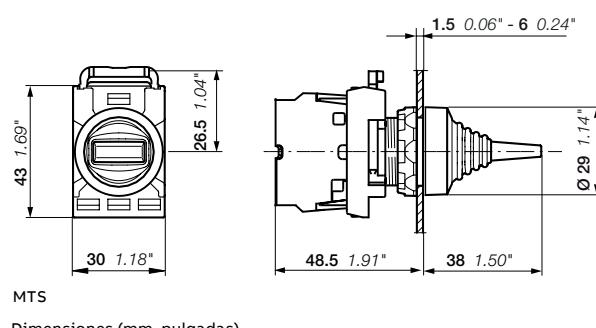
#### Actuación de contactos, 2 posiciones

 No accionado Accionado

#### Actuación de contactos, 3 posiciones

 No accionado Accionado

| Descripción         | Embellecedor     | Tipo     | Código de pedido | Cant. paq. | Peso (1 ud.) kg |
|---------------------|------------------|----------|------------------|------------|-----------------|
| <b>2 posiciones</b> |                  |          |                  |            |                 |
|                     | Plástico negro   | MTS1-10B | 1SFA611300R1006  | 10         | 0.014           |
|                     | Plástico cromado | MTS1-20B | 1SFA611300R2006  | 10         | 0.014           |
|                     | Metálico cromado | MTS1-30B | 1SFA611300R3006  | 10         | 0.023           |
| <b>3 posiciones</b> |                  |          |                  |            |                 |
|                     | Plástico negro   | MTS3-10B | 1SFA611302R1006  | 10         | 0.014           |
|                     | Plástico cromado | MTS3-20B | 1SFA611302R2006  | 10         | 0.014           |
|                     | Metálico cromado | MTS3-30B | 1SFA611302R3006  | 10         | 0.023           |
|                     | Plástico negro   | MTS2-10B | 1SFA611301R1006  | 10         | 0.014           |
|                     | Plástico cromado | MTS2-20B | 1SFA611301R2006  | 10         | 0.014           |
|                     | Metálico cromado | MTS2-30B | 1SFA611301R3006  | 10         | 0.023           |



ISFC15103050701

## Gama modular

Configuración de bloques de contactos

### Pulsadores - Pulsadores para ambientes extremos (1) - Pulsadores de seta



(1) Soporte incluido con los pulsadores para ambientes extremos

### Pulsadores dobles



### Selectores



### Pulsadores de parada de emergencia - Pulsadores de parada de máquinas



### Selectores de maneta - Selectores de funcionamiento del bloque central



### Pilotos



### Joysticks (2)



Nota: Tuerca de bloqueo incluida con todos los actuadores.

(2) Soporte incluido para el joystick.

## Gama modular

Soportes y bloques de contactos para montaje frontal



MCBH-00

ISFC151010V0001



MCBH5-00

ISFC151277V0001



MCB-10

ISFC151366V0001



MCB-02

ISFC151369V0001

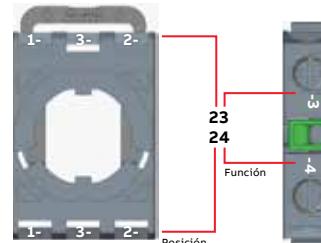
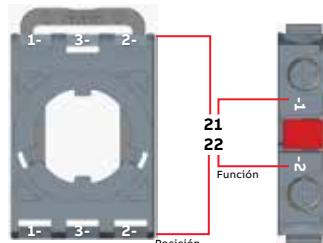


MCBL-01

ISFC151283V0001.

| Descripción   | Contactos | Tipo     | Código de pedido | Cant. paq. | Peso (1 ud.) |
|---|-----------|----------|------------------|------------|--------------|
|   |           |          |                  |            |              |
| <b>Soportes</b>   |           |          |                  |            |              |
| 3 posiciones  | --        | MCBH-00  | 1SFA611605R1100  | 10         | 0.006        |
| 5 posiciones  | --        | MCBH5-00 | 1SFA611601R1100  | 10         | 0.008        |
| <b>Bloques de contactos individuales</b>                            |           |          |                  |            |              |
| Para soportes de  | 1 0       | MCB-10   | 1SFA611610R1001  | 10         | 0.013        |
| 3 y 5 posiciones  | 0 1       | MCB-01   | 1SFA611610R1010  | 10         | 0.013        |
| <b>Bloques de contactos individuales, contactos chapados en oro</b> |           |          |                  |            |              |
| Para soportes de  | 1 0       | MCB-10G  | 1SFA611610R1101  | 10         | 0.013        |
| 3 y 5 posiciones  | 0 1       | MCB-01G  | 1SFA611610R1110  | 10         | 0.013        |
| <b>Bloques de contactos dobles</b>                                  |           |          |                  |            |              |
| Soporte de 5 posiciones   | 2 0       | MCB-20   | 1SFA611610R1002  | 10         | 0.026        |
|   | 0 2       | MCB-02   | 1SFA611610R1020  | 10         | 0.026        |
|   | 1 1       | MCB-11   | 1SFA611610R1011  | 10         | 0.026        |
| <b>Bloques de contactos de microinterruptores</b>                   |           |          |                  |            |              |
| Soporte de 3 posiciones   | 1 0       | MCBL-10  | 1SFA611612R1010  | 10         | 0.013        |
|   | 0 1       | MCBL-01  | 1SFA611612R1001  | 10         | 0.013        |

Nota: Se permiten bloques de contactos con 3 microinterruptores como máximo. Si se necesitan más de 3 bloques de contactos, el bloque de contactos con el microinterruptor se debe montar en la segunda fila.

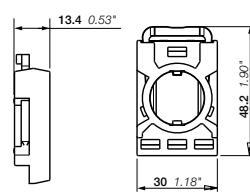


### Marcas combinadas

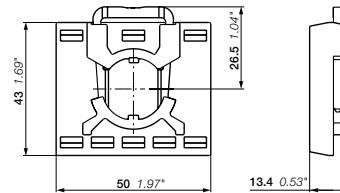
|    |    |    |
|----|----|----|
| 11 | 31 | 21 |
| 12 | 32 | 22 |

### Marcas combinadas

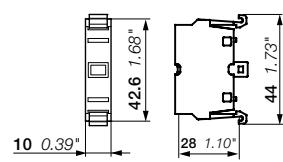
|    |    |    |
|----|----|----|
| 13 | 33 | 23 |
| 14 | 34 | 24 |



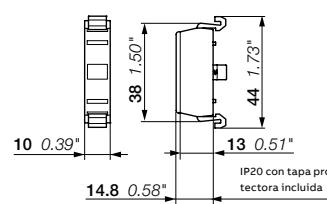
MCBH



MCBH5



MCB



MCBL

Dimensiones (mm, pulgadas)

ISFC1510329701

## Gama modular

Bloque LED para montaje frontal



1SFC151417V0001

MLBL-00W

| Color  | Intensidad nominal<br>mA | Longitud de onda<br>nm | Luminosidad<br>mcd | Tipo      | Código de pedido | Cant. paq.<br>(1 ud.) | Peso<br>kg |
|--|--------------------------|------------------------|--------------------|-----------|------------------|-----------------------|------------|
| <b>Tensión nominal 12 V CC</b>                                       |                          |                        |                    |           |                  |                       |            |
| ● Rojo   | 12.0                     | 620                    | 320                | MLBL-00R  | 1SFA611621R1001  | 10                    | 0.012      |
| ● Verde  | 12.0                     | 520                    | 1500               | MLBL-00G  | 1SFA611621R1002  | 10                    | 0.012      |
| ● Amarillo   | 12.0                     | 588                    | 380                | MLBL-00Y  | 1SFA611621R1003  | 10                    | 0.012      |
| ● Azul   | 12.0                     | 468                    | 450                | MLBL-00L  | 1SFA611621R1004  | 10                    | 0.012      |
| ○ Blanco   | 12.0                     | (1)                    | 600                | MLBL-00W  | 1SFA611621R1005  | 10                    | 0.012      |
| <b>Tensión nominal 24 V CA/CC</b>                                    |                          |                        |                    |           |                  |                       |            |
| ● Rojo   | 10.0                     | 620                    | 250                | MLBL-01R  | 1SFA611621R1011  | 10                    | 0.012      |
| ● Verde  | 10.0                     | 520                    | 1500               | MLBL-01G  | 1SFA611621R1012  | 10                    | 0.012      |
| ● Amarillo   | 10.0                     | 588                    | 250                | MLBL-01Y  | 1SFA611621R1013  | 10                    | 0.012      |
| ● Azul   | 10.0                     | 468                    | 450                | MLBL-01L  | 1SFA611621R1014  | 10                    | 0.012      |
| ○ Blanco   | 10.0                     | (1)                    | 600                | MLBL-01W  | 1SFA611621R1015  | 10                    | 0.012      |
| <b>Tensión nominal 48 V CA/CC</b>                                    |                          |                        |                    |           |                  |                       |            |
| ● Rojo   | 10.0                     | 620                    | 260                | MLBL-02R  | 1SFA611621R1021  | 10                    | 0.012      |
| ● Verde  | 13.0                     | 520                    | 1500               | MLBL-02G  | 1SFA611621R1022  | 10                    | 0.012      |
| ● Amarillo   | 10.0                     | 588                    | 300                | MLBL-02Y  | 1SFA611621R1023  | 10                    | 0.012      |
| ● Azul   | 13.0                     | 468                    | 450                | MLBL-02L  | 1SFA611621R1024  | 10                    | 0.012      |
| ○ Blanco   | 13.0                     | (1)                    | 600                | MLBL-02W  | 1SFA611621R1025  | 10                    | 0.012      |
| <b>Tensión nominal 60 V CA/CC</b>                                    |                          |                        |                    |           |                  |                       |            |
| ● Rojo   | 13.0                     | 620                    | 350                | MLBL-03R  | 1SFA611621R1031  | 10                    | 0.012      |
| ● Verde  | 13.0                     | 520                    | 2000               | MLBL-03G  | 1SFA611621R1032  | 10                    | 0.012      |
| ● Amarillo   | 13.0                     | 588                    | 400                | MLBL-03Y  | 1SFA611621R1033  | 10                    | 0.012      |
| ● Azul   | 13.0                     | 468                    | 550                | MLBL-03L  | 1SFA611621R1034  | 10                    | 0.012      |
| ○ Blanco   | 13.0                     | (1)                    | 750                | MLBL-03W  | 1SFA611621R1035  | 10                    | 0.012      |
| <b>Tensión nominal 110-130 V CA</b>                                  |                          |                        |                    |           |                  |                       |            |
| ● Rojo   | 10.0                     | 620                    | 200                | MLBL-04R  | 1SFA611621R1041  | 10                    | 0.012      |
| ● Verde  | 10.0                     | 520                    | 1200               | MLBL-04G  | 1SFA611621R1042  | 10                    | 0.012      |
| ● Amarillo   | 10.0                     | 588                    | 250                | MLBL-04Y  | 1SFA611621R1043  | 10                    | 0.012      |
| ● Azul   | 10.0                     | 468                    | 400                | MLBL-04L  | 1SFA611621R1044  | 10                    | 0.012      |
| ○ Blanco   | 10.0                     | (1)                    | 500                | MLBL-04W  | 1SFA611621R1045  | 10                    | 0.012      |
| <b>Tensión nominal 110-130 V CA, alta tensión anti inductiva (2)</b> |                          |                        |                    |           |                  |                       |            |
| ● Rojo   | 10.0                     | 620                    | 250                | MLBL-04AR | 1SFA611621R3041  | 10                    | 0.012      |
| ● Verde  | 10.0                     | 520                    | 1500               | MLBL-04AG | 1SFA611621R3042  | 10                    | 0.012      |
| ● Amarillo   | 10.0                     | 582                    | 300                | MLBL-04AY | 1SFA611621R3043  | 10                    | 0.012      |
| ● Azul   | 10.0                     | 468                    | 450                | MLBL-04AL | 1SFA611621R3044  | 10                    | 0.012      |
| ○ Blanco   | 10.0                     | (1)                    | 600                | MLBL-04AW | 1SFA611621R3045  | 10                    | 0.012      |
| <b>Tensión nominal 110-130 V CC</b>                                  |                          |                        |                    |           |                  |                       |            |
| ● Rojo   | 10.0                     | 620                    | 250                | MLBL-05R  | 1SFA611621R1051  | 10                    | 0.012      |
| ● Verde  | 10.0                     | 520                    | 1500               | MLBL-05G  | 1SFA611621R1052  | 10                    | 0.012      |
| ● Amarillo   | 10.0                     | 588                    | 300                | MLBL-05Y  | 1SFA611621R1053  | 10                    | 0.012      |
| ● Azul   | 10.0                     | 468                    | 450                | MLBL-05L  | 1SFA611621R1054  | 10                    | 0.012      |
| ○ Blanco   | 10.0                     | (1)                    | 600                | MLBL-05W  | 1SFA611621R1055  | 10                    | 0.012      |
| <b>Tensión nominal 220 V CC</b>                                      |                          |                        |                    |           |                  |                       |            |
| ● Rojo   | 8.0                      | 620                    | 180                | MLBL-06R  | 1SFA611621R1061  | 10                    | 0.012      |
| ● Verde  | 8.0                      | 520                    | 110                | MLBL-06G  | 1SFA611621R1062  | 10                    | 0.012      |
| ● Amarillo   | 8.0                      | 588                    | 200                | MLBL-06Y  | 1SFA611621R1063  | 10                    | 0.012      |
| ● Azul   | 8.0                      | 468                    | 450                | MLBL-06L  | 1SFA611621R1064  | 10                    | 0.012      |
| ○ Blanco   | 8.0                      | (1)                    | 600                | MLBL-06W  | 1SFA611621R1065  | 10                    | 0.012      |

Nota: Con la alimentación de CC, se debe prestar atención a la polarización correcta de los terminales + y -. Aparecen marcados con X1 (+) y X2 (-) en el producto.

(1) X=0,31, Y=0,32 según el diagrama de cromaticidad ICI.

(2) Umbral más alto para iluminar el LED para su uso en aplicaciones en las que existe riesgo de grandes tensiones inducidas.

## Gama modular

Bloque LED para montaje frontal



ISFCI51417V0001

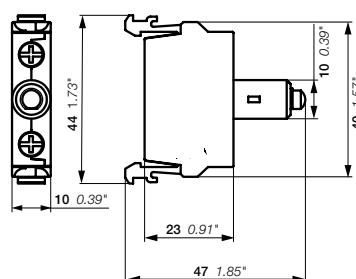
MLBL-00W

| Color  | Intensidad nominal<br>mA | Longitud de onda<br>nm | Luminosidad<br>mcd | Tipo     | Código de pedido | Cant. paq.<br>(1 ud.) | Peso<br>kg |
|--|--------------------------|------------------------|--------------------|----------|------------------|-----------------------|------------|
| <b>Tensión nominal 230 V CA</b>                                  |                          |                        |                    |          |                  |                       |            |
| ● Rojo   | 10.0                     | 620                    | 250                | MLBL-07R | 1SFA611621R1071  | 10                    | 0.012      |
| ● Verde  | 10.0                     | 520                    | 1500               | MLBL-07G | 1SFA611621R1072  | 10                    | 0.012      |
| ● Amarillo   | 10.0                     | 588                    | 300                | MLBL-07Y | 1SFA611621R1073  | 10                    | 0.012      |
| ● Azul   | 10.0                     | 468                    | 450                | MLBL-07L | 1SFA611621R1074  | 10                    | 0.012      |
| ○ Blanco   | 10.0                     | (1)                    | 600                | MLBL-07W | 1SFA611621R1075  | 10                    | 0.012      |
| <b>Tensión nominal 230 V CA, alta tensión anti inductiva (2)</b> |                          |                        |                    |          |                  |                       |            |
| ● Rojo   | 10.0                     | 620                    | 250                | MLBL-99R | 1SFA611621R1991  | 10                    | 0.012      |
| ● Verde  | 10.0                     | 520                    | 1500               | MLBL-99G | 1SFA611621R1992  | 10                    | 0.012      |
| ● Amarillo   | 10.0                     | 588                    | 300                | MLBL-99Y | 1SFA611621R1993  | 10                    | 0.012      |
| ● Azul   | 10.0                     | 468                    | 450                | MLBL-99L | 1SFA611621R1994  | 10                    | 0.012      |
| ○ Blanco   | 10.0                     | (1)                    | 600                | MLBL-99W | 1SFA611621R1995  | 10                    | 0.012      |
| <b>Tensión nominal 380 V CA</b>                                  |                          |                        |                    |          |                  |                       |            |
| ● Rojo   | 10.0                     | 620                    | 250                | MLBL-08R | 1SFA611621R1081  | 10                    | 0.012      |
| ● Verde  | 10.0                     | 520                    | 1500               | MLBL-08G | 1SFA611621R1082  | 10                    | 0.012      |
| ● Amarillo   | 10.0                     | 582                    | 300                | MLBL-08Y | 1SFA611621R1083  | 10                    | 0.012      |
| ● Azul   | 10.0                     | 468                    | 450                | MLBL-08L | 1SFA611621R1084  | 10                    | 0.012      |
| ○ Blanco   | 10.0                     | (1)                    | 600                | MLBL-08W | 1SFA611621R1085  | 10                    | 0.012      |
| <b>Tensión nominal 415 V CA</b>                                  |                          |                        |                    |          |                  |                       |            |
| ● Rojo   | 11                       | 620                    | 280                | MLBL-09R | 1SFA611621R1091  | 10                    | 0.012      |
| ● Verde  | 11                       | 520                    | 1800               | MLBL-09G | 1SFA611621R1092  | 10                    | 0.012      |
| ● Amarillo   | 11                       | 588                    | 350                | MLBL-09Y | 1SFA611621R1093  | 10                    | 0.012      |
| ● Azul   | 11                       | 468                    | 500                | MLBL-09L | 1SFA611621R1094  | 10                    | 0.012      |
| ○ Blanco   | 11                       | (1)                    | 650                | MLBL-09W | 1SFA611621R1095  | 10                    | 0.012      |

Nota: Con la alimentación de CC, se debe prestar atención a la polarización correcta de los terminales + y -. Aparecen marcados con X1 (+) y X2 (-) en el producto.

(1) X=0.31, Y=0.32 según el diagrama de cromaticidad ICI.

(2) Umbral más alto para iluminar el LED para su uso en aplicaciones en las que existe riesgo de grandes tensiones inducidas.



MLBL

Dimensiones (mm, pulgadas)

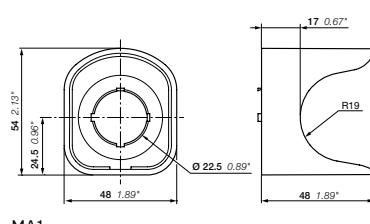
## Gama modular

### Accesorios



| Descripción  | Embellededor / color                                   | Tipo                             | Código de pedido                                      | Cant. paq. (1 ud.) | Peso kg                 |
|--|--|----------------------------------|---|--------------------|-------------------------|
| <b>Adaptadores de 30 mm para el operador de 22 mm (1,5 - 4 mm de grosor de panel)</b>                  |  |                                  |   |                    |                         |
| Pulsadores de parada de emergencia, MPM  | Plástico negro<br>Metálico cromado                     | KA1-8027<br>KA1-8028             | 1SFA616920R8027<br>1SFA616920R8028                    | 1<br>1             | 0.007<br>0.021          |
| Pulsadores, interruptores selectores, pilotos, potenciómetros, pulsadores de parada de emergencia, MPE | Plástico negro   | KA1-8029                         | 1SFA616920R8029                                       | 1                  | 0.010                   |
| Pulsadores modulares   | Metálico cromado                                       | KA1-8073                         | 1SFA616920R8073                                       | 1                  | 0.050                   |
| Selectores modulares   | Metálico cromado                                       | MA1-8074                         | 1SFA611920R8074                                       | 1                  | 0.050                   |
| <b>Membrana protectora, silicona</b>   |  |                                  |   |                    |                         |
| Pulsador modular   |  | MA1-8052                         | 1SFA611920R8052                                       | 10                 | 0.002                   |
| Pulsador doble   |  | MA1-8126                         | 1SFA611920R8126                                       | 10                 | 0.002                   |
| Pulsador extendido   |  | MA1-8002                         | 1SFA611920R8002                                       | 10                 | 0.002                   |
| <b>Anillo protector</b>  |  |                                  |   |                    |                         |
| Para prevenir el manejo accidental. No se puede utilizar junto con el soporte de placa de leyenda      |  |                                  |   |                    |                         |
| Pulsadores modulares y extendidos  | Plástico transparente                                  | -                                | SK615512-1  | 10                 | 0.002                   |
| Pulsadores modulares   | Metal y plástico negro                                 | KA1-8010                         | 1SFA616920R8010                                       | 10                 | 0.008                   |
| <b>Embellededores</b>  |  |                                  |   |                    |                         |
| Pulsadores   | Plástico negro<br>Plástico cromado<br>Metálico cromado | KA1-8022<br>KA1-8020<br>KA1-8021 | 1SFA616920R8022<br>1SFA616920R8020<br>1SFA616920R8021 | 10<br>10<br>10     | 0.002<br>0.002<br>0.015 |
| Interruptores selectores   | Plástico negro<br>Plástico cromado<br>Metálico cromado | KA1-8080<br>KA1-8023<br>KA1-8024 | 1SFA616920R8080<br>1SFA616920R8023<br>1SFA616920R8024 | 10<br>10<br>10     | 0.002<br>0.002<br>0.015 |
| <b>Embellededor cuadrado</b>   |  |                                  |   |                    |                         |
| Plástico negro   | -  |                                  | SK616016-2  | 10                 | 0.001                   |
| <b>Envolvente bloqueable</b>   |  |                                  |   |                    |                         |
| Pulsadores, interruptores selectores   | Plástico   | MA1-8153                         | 1SFA611920R8153                                       | 10                 | 0.023                   |
| Parada de emergencia 30 mm   | Metal  | -                                | SK615502-D  | 1                  | 0.080                   |
| <b>Protección táctil</b>   |  |                                  |   |                    |                         |
| Protección táctil  |  | MA1-8152                         | 1SFA611920R8152                                       | 10                 | 0.023                   |
| <b>Protector para paro de emergencia antigiro, ranura para candado y drenaje de agua</b>               |  |                                  |   |                    |                         |
| Parada de emergencia, parada de máquina 40 mm  | Amarillo<br>Gris                                       | MA1-8053<br>MA1-8128             | 1SFA611920R8053<br>1SFA611920R8128                    | 10<br>10           | 0.020<br>0.020          |

Nota: El adaptador de carril DIN se debe utilizar con 2 bloques de contactos para montaje posterior tipo MCB...B.



Dimensiones (mm, pulgadas)

## Gama modular

### Accesorios

|          |                 |
|----------|-----------------|
| MA1-8131 | 1SFC151276V0001 |
| MA1-8015 | 1SFC151275V0001 |
| MA1-8149 | 1SFC151004F0001 |
| MDB-2    | 1SFC151455F0001 |

| Descripción  | Embellecedor / Tipo color | Código de pedido | Cant. paq. (1 ud.) | Peso kg |
|--|---------------------------|------------------|--------------------|---------|
| <b>Adaptador de carril DIN</b>   |                           |                  |                    |         |
| Adaptador de carril DIN  | MA1-8131                  | 1SFA611920R8131  | 1                  | 0.020   |
| Adaptador de carril DIN con 1 bloque falso   | MA1-8001                  | 1SFA611920R8001  | 1                  | 0.028   |
| Bloque falso   | MDB-2                     | 1SFA611630R1002  | 10                 | 0.003   |
| Nota: El adaptador de carril DIN se debe utilizar con 2 bloques de contactos para montaje posterior tipo MCB...B.                        |                           |                  |                    |         |
| Nota: Los bloques falsos se usan cuando se usa un único bloque de contactos o pulsantería compacta junto con el adaptador de carril DIN. |                           |                  |                    |         |
| <b>Herramientas de montaje</b>   |                           |                  |                    |         |
| Herramienta de montaje para apretar la tuerca de bloqueo   | MA1-8015                  | 1SFA611920R8015  | 1                  | 0.021   |
| Herramienta de montaje para herramienta eléctrica  | MA1-8149                  | 1SFA611920R8149  | 1                  | 0.155   |
| <b>Llave adicional</b>   |                           |                  |                    |         |
| Código de llave 455  |                           | SK616021-71      | 10                 | 0.007   |
| Código de llave 421  |                           | SK616021-72      | 10                 | 0.007   |
| Código de llave 3433-E   |                           | SK616021-73      | 10                 | 0.007   |
| Tuerca de bloqueo  | MA1-8019                  | 1SFA611920R8019  | 10                 | 0.001   |

## Gama modular

### Datos técnicos

#### Normas y homologaciones

|                    |  |
|--------------------|--|
| IEC / EN 60947-1   | Aparmenta de baja tensión. Parte 1: Reglas generales   |
| IEC / EN 60947-5-1 | Aparmenta de baja tensión. Parte 5-1: Aparatos y elementos de conmutación para circuitos de mando. Aparatos electromecánicos para circuitos de mando                         |
| IEC / EN 60947-5-5 | Aparmenta de baja tensión. Parte 5-5: Aparatos y elementos de conmutación para circuitos de mando. Dispositivos de parada de emergencia eléctrica con enclavamiento mecánico |
| IEC / EN 60073     | Principios básicos y de seguridad para la interfaz hombre-máquina, el marcado y la identificación. Principios de codificación para los indicadores y los actuadores.         |
| IEC / EN 60529     | Grados de protección ofrecidos por las envolventes (código IP)   |
| EN 50013           | Aparmenta industrial de baja tensión. Marcado de bornes y numero característico para auxiliares de mando definidos   |
| DIN 40050-9        | Vehículos de carretera, grados de protección (código IP), protección frente a objetos extraños, agua y el contacto, equipos eléctricos                                       |
| UL 508             | Equipos de control industrial  |
| CSA C22.2 N.º 14   | Equipos de control industrial  |

#### Datos ambientales

##### Grados de protección

| Operadores   | IEC/EN DIN    | UL/CSA                        |
|--|---------------|-------------------------------|
| Pulsador: MP   | IP66          | Tipo 1, 3R, 4, 4X, 12, 13     |
| Pulsador doble: MPD  | IP66          | Tipo 1, 3R, 4, 4X, 12, 13     |
| Pulsador de seta: MPM  | IP66          | Tipo 1, 3R, 4, 4X, 12, 13     |
| Pulsadores de parada de emergencia: MPMT, MPMP, MPET, MPEP, MPEK | IP66          | Tipo 1, 3R, 4, 4X, 12, 13     |
| Selector:  |               |                               |
| M2SS, M3SS   | IP66          | Tipo 1, 3R, 4, 4X, 12, 13     |
| Selector accionado por llave: M2SSK, M3SSK                       | IP66          | Tipo 1, 3R, 4, 4X, 12         |
| Selector de palanca: MTS2, MTS3                                  | IP66          | Tipo 1, 3R, 4, 4X, 12, 13     |
| Pulsador para ambientes extremos: KP6                            | -             | Tipo 1, 3R, 4, 4X             |
| Pulsador de rearme: KPR  | IP66          | Tipo 1, 3R, 4, 4X, 12, 13     |
| Joystick: MJS  | IP66, 67, 69K | Tipo 1, 4X (interior), 12, 13 |
| Piloto: ML   | IP66          | Tipo 1, 3R, 4, 4X, 12, 13     |
| Potenciómetro: MT  | IP66          | Tipo 1, 3R, 4, 4X, 12, 13     |
| Bloque de contactos: MCB   | IP20          | -                             |
| Envolvente de plástico: MEP                                      | IP66          | Tipo 1, 3R, 4, 4X, 12, 13     |
| Envolventes metálicas: KEM                                       | IP66, 67, 69K | -                             |

Nota: El grado de protección especificado es para un operador montado en un panel. Si se montan otros elementos entre medias, asegúrese de que estén correctamente sellados.

#### Temperatura

|  |              |
|--|--------------|
| Temperatura ambiente durante el funcionamiento | -25 a +70 °C |
| Temperatura de almacenamiento                  | -40 a +85 °C |

#### Datos técnicos

##### Bornes

Más/menos tornillos Pozidriv n.º 2 con arandela DIN.

Área conectable mín. 1 x 0.5 mm<sup>2</sup> /AWG 20  
máx. 2 x 2.5 mm<sup>2</sup>/2 x AWG 14

##### Par de apriete

|                                |                         |
|--------------------------------|-------------------------|
| Tuerca de bloqueo del operador | Mín. 2 Nm / Máx. 2.3 Nm |
|--------------------------------|-------------------------|

|                     |        |
|---------------------|--------|
| Terminales de cable | 0.9 Nm |
|---------------------|--------|

##### Material

Para su fabricación no se utilizan productos que puedan dañar la capa de ozono. Toda la parte frontal de los componentes de plástico del panel están hechos de policarbonato

|                    |  |
|--------------------|--|
| Policarbonato (PC) | Alta resistencia a los impactos, buena resistencia en exterior. Resistencia a productos químicos (consulte la siguiente tabla) |
|--------------------|--|

|                   |   |
|-------------------|---|
| Polisulfona (PSU) | Capaz de soportar altas temperaturas, ácidos, soluciones básicas, compuestos alcalinos, aceites y alcoholes |
|-------------------|---|

|                |   |
|----------------|---|
| Poliamida (PA) | Capaz de soportar altas temperaturas, hidrocarburos aromáticos, clorados y alifáticos, ésteres, aldehídos y cetonas, alcoholes y soluciones básicas |
|----------------|---|

|     |  |
|-----|--|
| PBT | Capaz de soportar altas temperaturas, hidrocarburos aromáticos y alifáticos, ácidos, soluciones básicas, alcoholes, grasas y aceites |
|-----|--|

|      |   |
|------|---|
| Cinc | Buena resistencia a la corrosión en atmósferas terrestres, marinas e industriales |
|------|---|

|                 |   |
|-----------------|---|
| Aleación ligera | Buena resistencia a la corrosión en atmósferas terrestres, marinas e industriales |
|-----------------|---|

#### Resistencia a productos químicos para policarbonato

##### Categoría química Efectos

|                     |  |
|---------------------|--|
| Alcoholes y álcalis | Compatible generalmente en bajas concentraciones y a temperatura ambiente. Concentraciones más elevadas y temperaturas más altas pueden provocar que la descomposición genere marcas y otros desperfectos. |
|---------------------|--|

|                          |                          |
|--------------------------|--------------------------|
| Hidrocarburos alifáticos | Generalmente compatibles |
|--------------------------|--------------------------|

|        |   |
|--------|---|
| Aminas | Cristalización de la superficie y ataque químico. |
|--------|---|

Evitar

|                          |  |
|--------------------------|--|
| Hidrocarburos aromáticos | Disolventes parciales y agentes de agrietamiento por estrés intenso (p. ej., xileno o tolueno) |
|--------------------------|--|

Evitar

|                           |  |
|---------------------------|--|
| Detergentes y limpiadores | Las soluciones jabonosas suaves generalmente son compatibles. Se deben evitar materiales alcalinos fuertes |
|---------------------------|--|

Evitar

|         |  |
|---------|--|
| Ésteres | Provocan cristalización intensa. Disolventes parciales |
|---------|--|

Evitar

|                  |   |
|------------------|---|
| Grasas y aceites | Los tipos de petróleo puro generalmente son compatibles. Muchos de los aditivos que se usan con ellos no lo son |
|------------------|---|

|                          |             |
|--------------------------|-------------|
| Halógenos, hidrocarburos | Disolventes |
|--------------------------|-------------|

Evitar

|         |   |
|---------|---|
| Cetonas | Provocan cristalización intensa y agrietamiento por estrés. Disolventes parciales |
|---------|---|

Evitar

|                              |                                      |
|------------------------------|--------------------------------------|
| Grasas y aceites de silicona | Generalmente compatibles hasta 85 °C |
|------------------------------|--------------------------------------|

## Gama modular

### Datos técnicos

#### Datos eléctricos

Bloques de contactos estándar MCB (estándar y chapados en oro)  
 Contactos de plata autolimpiables, contacto NC con abertura positiva.  
 En el caso de las tensiones y corrientes que se muestran a continuación de 24 V y 5.6 mA, recomendamos nuestros bloques de microinterruptores.

#### Capacidades según IEC 60947-5-1

|  |          |        |
|--|----------|--------|
| Tensión nominal de aislamiento, Ui   | 690 V    |        |
| Intensidad térmica nominal, Ith  | 10 A     |        |
| Corriente de funcionamiento nominal, Ie Categoría de utilización CA 15,        | a: 120 V | 8 A    |
|  | a: 230 V | 6 A    |
|  | a: 400 V | 4 A    |
|  | a: 690 V | 2 A    |
| Corriente de funcionamiento nominal, es decir, categoría de utilización CC 13, | a: 24 V  | 5 A    |
|  | a: 125 V | 1.1 A  |
|  | a: 250 V | 0.55 A |
| Tensión nominal de resistencia a impulsos                                      | Uiimp    | 6 kV   |
| Grado de contaminación   | 3        |        |

#### Capacidades según UL, CSA, NEMA

|                                     | A600<br>AC | Q600<br>DC |
|-------------------------------------|------------|------------|
| Tensión nominal de aislamiento      | 600 V      | 600 V      |
| Intensidad térmica nominal          | 10 A       | 2.5 A      |
| Corriente de funcionamiento nominal | a: 120 V   | 6 A        |
|                                     | a: 240 V   | 3 A        |
|                                     | a: 480 V   | 1.5 A      |
|                                     | a: 600 V   | 1.2 A      |
| a: 125 V                            | a: 125 V   | 0.55 A     |
|                                     | a: 250 V   | 0.27 A     |
|                                     | a: 480 V   | 0.10 A     |
|                                     | a: 600 V   | 0.10 A     |

#### Cantidad máxima de bloques de contactos por operador

Los bloques de contactos se pueden apilar en un máximo de dos niveles en el soporte de 3 bloques. Tan solo se acepta un nivel en el soporte de 5 bloques.

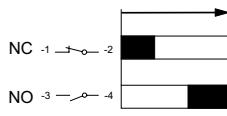
Pulsador, selector de palanca, pulsador de seta, pulsador doble, selector, selector accionado por llave y operador de parada de emergencia

Joystick 8

#### Protección contra cortocircuitos

Fusible máx. a 1 kA gG 16 A

Diagrama de contacto de reposo-trabajo MCB, MCBL



■ = Contacto cerrado

#### Bloque de microinterruptores

#### Capacidades según IEC 60947-5-1

|  |          |       |
|--|----------|-------|
| Tensión nominal de aislamiento, Ui   | 125 V    |       |
| Intensidad térmica nominal, Ith  | 3 A      |       |
| Corriente de funcionamiento nominal, es decir, categoría de utilización AC-14, | a: 125 V | 0.5 A |
| Corriente de funcionamiento nominal, es decir, categoría de utilización DC-13, | a: 24 V  | 0.3 A |
| Corriente de funcionamiento nominal, es decir, categoría de utilización DC-12, | a: 24 V  | 0.1 A |

#### Capacidades según UL 508

|          |       |  |
|----------|-------|--|
| 125 V CA | 3 A   |  |
| 60 V CC  | 0.2 A |  |
| 48 V CC  | 0.1 A |  |

#### Capacidad de conmutación mínima

|                                      |         |        |
|--------------------------------------|---------|--------|
| Bloques de contactos estándar        | 24 V CC | 5.6 mA |
| Bloques de contactos chapados en oro | 5 V CC  | 12 mA  |
| Bloques de microinterruptores        | 12 V CC | 1 mA   |

#### Datos mecánicos

Durabilidad mecánica

|   |                            |
|---|----------------------------|
| Bloques de contactos estándar MCB                 | 10 millones de operaciones |
| Bloque de microinterruptores MCBL                 | 1 millón de operaciones    |
| Pulsadores MP, pulsadores de seta momentáneos MPM | 2 millones de operaciones  |

#### Selectores M2SS, M3SS

|  |                         |                     |
|--|-------------------------|---------------------|
| Bloques de contactos estándar y bloque de microinterruptores | Soporte de 3 posiciones | 500 000 operaciones |
| Bloques de contactos estándar                                | Soporte de 3 posiciones |                     |
| Bloques de contactos estándar                                | Soporte de 5 posiciones |                     |
| Bloques de contactos estándar en dos pilas                   | Soporte de 3 posiciones |                     |

#### Selectores - funcionamiento del bloque central M3SSC

|  |                         |                     |
|--|-------------------------|---------------------|
| Bloques de contactos estándar              | Soporte de 3 posiciones | 250 000 operaciones |
| Bloques de contactos estándar en dos pilas | Soporte de 3 posiciones | 150 000 operaciones |

#### Selector accionado por llave M2SSK,

#### M3SSK y pulsador doble MPD

|   |                     |
|---|---------------------|
| Pulsadores de parada de emergencia MPET, MPEP, MPEK | 100 000 operaciones |
|---|---------------------|

#### Selector de palanca MTS

1 millón de operaciones

#### Joystick MJS

|  |                         |                     |
|--|-------------------------|---------------------|
| Bloque de microinterruptores                                 | Soporte de 4 posiciones | 500 000 operaciones |
| Bloques de contactos estándar                                | Soporte de 4 posiciones |                     |
| Bloques de contactos estándar y bloque de microinterruptores | Soporte de 4 posiciones | 400 000 operaciones |
| Bloques de contactos estándar en dos pilas                   | Soporte de 4 posiciones | 300 000 operaciones |

#### Bloques LED MLBL

La vida útil del LED se traduce en el número de horas de funcionamiento hasta que el brillo se reduce a un 50 %. Vida útil de 50 000 horas funcionando a 25 °C, 40-70 % de humedad relativa

|                                      |  |
|--------------------------------------|--|
| Color del LED blanco                 | x=0.31 Y=0.32 representa la posición del color en el diagrama de cromatididad ICI                  |
| Tolerancia de tensión en bloques LED | -30 a +10 % de tensión es aceptable sin que la vida útil se vea afectada                           |
| Picos de tensión de los bloques LED  | Picos de tensión de hasta 1000 V. Los picos actuales llegan a 500 mA durante unos pocos ms.        |
| Luz encendida                        | Todas las bombillas LED integradas tienen una función integrada para parar las corrientes de fuga. |

## Gama modular

### Datos técnicos

#### Bloques LED con montaje frontal y posterior MLBL

| Color  | Corriente          | Luminosidad                    | Tensión anti inductiva | Longitud de onda principal | Temperatura de color |
|--|--------------------|--------------------------------|------------------------|----------------------------|----------------------|
|  | mA<br>Mín.<br>Máx. | I <sub>x</sub><br>Mín.<br>Máx. | V                      | Nm                         | K                    |
| <b>Tensión nominal 6.3 V CC</b>  |                    |                                |                        |                            |                      |
| ● Rojo   | 8                  | 12                             | 900                    | 3100                       | 2                    |
| ● Verde  | 6                  | 11                             | 3000                   | 11500                      | 2                    |
| ● Amarillo   | 8                  | 12                             | 1000                   | 3400                       | 2                    |
| ● Azul   | 6                  | 11                             | 1200                   | 4350                       | 2                    |
| ○ Claro  | 6                  | 11                             | 1850                   | 8800                       | 2                    |
|  |                    |                                |                        |                            |                      |
| <b>Tensión nominal 12 V CC</b>   |                    |                                |                        |                            |                      |
| ● Rojo   | 11                 | 15                             | 1000                   | 3500                       | 5                    |
| ● Verde  | 8                  | 12                             | 3700                   | 12500                      | 5                    |
| ● Amarillo   | 11                 | 15                             | 1200                   | 4250                       | 5                    |
| ● Azul   | 8                  | 12                             | 1500                   | 5300                       | 5                    |
| ○ Claro  | 8                  | 12                             | 1800                   | 8500                       | 5                    |
|  |                    |                                |                        |                            |                      |
| <b>Tensión nominal 24 V CA/CC</b>                                      |                    |                                |                        |                            |                      |
| ● Rojo   | 8                  | 12                             | 900                    | 3100                       | 5                    |
| ● Verde  | 8                  | 12                             | 3000                   | 11500                      | 5                    |
| ● Amarillo   | 8                  | 12                             | 1000                   | 3400                       | 5                    |
| ● Azul   | 8                  | 12                             | 1500                   | 5300                       | 5                    |
| ○ Claro  | 8                  | 11                             | 1800                   | 8500                       | 5                    |
|  |                    |                                |                        |                            |                      |
| <b>Tensión nominal 48 V CA/CC</b>                                      |                    |                                |                        |                            |                      |
| ● Rojo   | 8                  | 12                             | 900                    | 3100                       | 5                    |
| ● Verde  | 8                  | 12                             | 3000                   | 11500                      | 5                    |
| ● Amarillo   | 8                  | 12                             | 1000                   | 3400                       | 5                    |
| ● Azul   | 8                  | 12                             | 1500                   | 5300                       | 5                    |
| ○ Claro  | 8                  | 12                             | 1800                   | 8500                       | 5                    |
|  |                    |                                |                        |                            |                      |
| <b>Tensión nominal 60 V CA/CC</b>                                      |                    |                                |                        |                            |                      |
| ● Rojo   | 8                  | 12                             | 900                    | 3100                       | 5                    |
| ● Verde  | 8                  | 12                             | 3000                   | 11500                      | 5                    |
| ● Amarillo   | 8                  | 12                             | 1000                   | 3400                       | 5                    |
| ● Azul   | 8                  | 12                             | 1500                   | 5300                       | 5                    |
| ○ Claro  | 8                  | 12                             | 1800                   | 8500                       | 5                    |
|  |                    |                                |                        |                            |                      |
| <b>Tensión nominal 110 - 130 V CA</b>                                  |                    |                                |                        |                            |                      |
| ● Rojo   | 8                  | 12                             | 900                    | 3100                       | 15                   |
| ● Verde  | 8                  | 12                             | 3200                   | 12000                      | 15                   |
| ● Amarillo   | 8                  | 12                             | 1000                   | 3700                       | 15                   |
| ● Azul   | 8                  | 12                             | 1550                   | 5500                       | 15                   |
| ○ Claro  | 8                  | 12                             | 1850                   | 8800                       | 15                   |
|  |                    |                                |                        |                            |                      |
| <b>Tensión nominal 110 - 130 V CA, alta tensión anti inductiva (1)</b> |                    |                                |                        |                            |                      |
| ● Rojo   | 14                 | 16                             | 700                    | 2600                       | 25                   |
| ● Verde  | 14                 | 16                             | 2100                   | 8200                       | 25                   |
| ● Amarillo   | 14                 | 16                             | 750                    | 3000                       | 25                   |
| ● Azul   | 14                 | 16                             | 1000                   | 5000                       | 25                   |
| ○ Claro  | 14                 | 16                             | 1500                   | 8100                       | 25                   |
|  |                    |                                |                        |                            |                      |
| <b>Tensión nominal 110 - 130 V CC</b>                                  |                    |                                |                        |                            |                      |
| ● Rojo   | 8                  | 12                             | 900                    | 3100                       | 15                   |
| ● Verde  | 8                  | 12                             | 3000                   | 11500                      | 15                   |
| ● Amarillo   | 8                  | 12                             | 1000                   | 3400                       | 15                   |
| ● Azul   | 8                  | 12                             | 1500                   | 5300                       | 15                   |
| ○ Claro  | 8                  | 12                             | 1800                   | 8500                       | 15                   |
|  |                    |                                |                        |                            |                      |

Nota:

La distancia de ensayo de la luminosidad es de 2 mm entre la parte superior de la lente y la superficie del sensor. Entorno del ensayo limpio, tensión de alimentación a 50/60 Hz con onda armonizada y sin alta frecuencia de longitud.

Tolerancia de tensión nominal de los bloques LED: 30 % a +10 %.

(1) Valor más alto para iluminar el LED para su uso en aplicaciones en las que existe riesgo de grandes tensiones inducidas.

## Gama modular

### Datos técnicos

| Color  | Corriente |    | Luminosidad |       | Tensión anti inductiva | Longitud de onda principal | Temperatura de color |
|--|-----------|----|-------------|-------|------------------------|----------------------------|----------------------|
|  | mA        | Ix | Mín.        | Máx.  | V                      | Nm                         | K                    |
| <b>Tensión nominal 220 V CC</b>                                  |           |    |             |       |                        |                            |                      |
| ● Rojo   | 7         | 10 | 700         | 2300  | 15                     | 620 a 625 m                | -                    |
| ● Verde  | 7         | 10 | 2400        | 8000  | 15                     | 515 a 520 m                | -                    |
| ● Amarillo   | 7         | 10 | 800         | 3100  | 15                     | 585 a 590 m                | -                    |
| ● Azul   | 7         | 10 | 1200        | 4350  | 15                     | 465 a 470 m                | -                    |
| ○ Claro  | 7         | 10 | 1400        | 7000  | 15                     | -                          | 8000 a 12000 m       |
| <b>Tensión nominal 230 V CA</b>                                  |           |    |             |       |                        |                            |                      |
| ● Rojo   | 8         | 12 | 900         | 3100  | 15                     | 620 a 625 m                | -                    |
| ● Verde  | 8         | 12 | 3000        | 11500 | 15                     | 515 a 520 m                | -                    |
| ● Amarillo   | 8         | 12 | 1000        | 3400  | 15                     | 585 a 590 m                | -                    |
| ● Azul   | 7         | 11 | 1500        | 5300  | 15                     | 465 a 470 m                | -                    |
| ○ Claro  | 7         | 11 | 1800        | 8500  | 15                     | -                          | 8000 a 12000 m       |
| <b>Tensión nominal 380 V CA</b>                                  |           |    |             |       |                        |                            |                      |
| ● Rojo   | 8         | 12 | 900         | 3100  | 15                     | 620 a 625 m                | -                    |
| ● Verde  | 8         | 12 | 3000        | 11500 | 15                     | 515 a 520 m                | -                    |
| ● Amarillo   | 8         | 12 | 1000        | 3400  | 15                     | 585 a 590 m                | -                    |
| ● Azul   | 8         | 12 | 1500        | 5300  | 15                     | 465 a 470 m                | -                    |
| ○ Claro  | 8         | 12 | 1800        | 8500  | 15                     | -                          | 8000 a 12000 m       |
| <b>Tensión nominal 415 V CA</b>                                  |           |    |             |       |                        |                            |                      |
| ● Rojo   | 8         | 12 | 900         | 3100  | 15                     | 620 a 625 m                | -                    |
| ● Verde  | 8         | 12 | 3000        | 11500 | 15                     | 515 a 520 m                | -                    |
| ● Amarillo   | 8         | 12 | 1000        | 3400  | 15                     | 585 a 590 m                | -                    |
| ● Azul   | 8         | 12 | 1500        | 5300  | 15                     | 465 a 470 m                | -                    |
| ○ Claro  | 8         | 12 | 1800        | 8500  | 15                     | -                          | 8000 a 12000 m       |
| <b>Tensión nominal 230 V CA, alta tensión anti inductiva (1)</b> |           |    |             |       |                        |                            |                      |
| ● Rojo   | 8         | 12 | 480         | 1700  | 55                     | 620 a 625 m                | -                    |
| ● Verde  | 6         | 11 | 1500        | 5800  | 55                     | 515 a 520 m                | -                    |
| ● Amarillo   | 8         | 12 | 530         | 1900  | 55                     | 585 a 590 m                | -                    |
| ● Azul   | 6         | 11 | 850         | 3100  | 55                     | 465 a 470 m                | -                    |
| ○ Claro  | 6         | 11 | 1000        | 5200  | 55                     | -                          | 8000 a 12000 m       |

Nota:

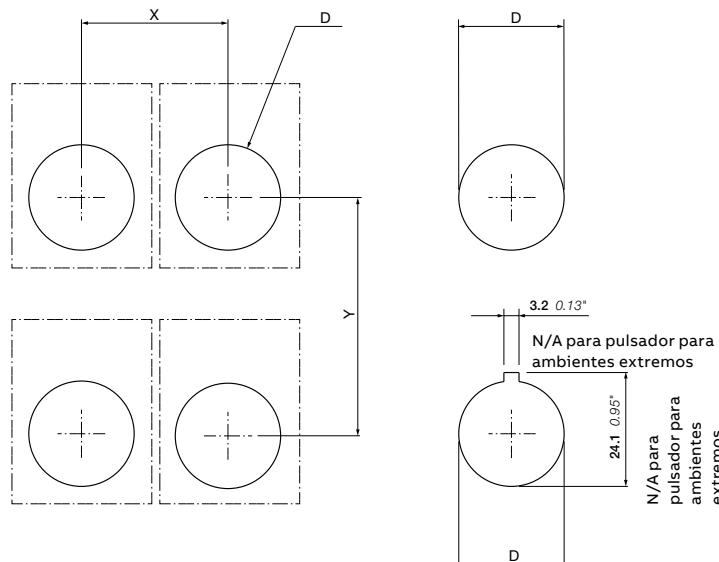
La distancia de ensayo de la luminosidad es de 2 mm entre la parte superior de la lente y la superficie del sensor. Entorno del ensayo limpio, tensión de alimentación a 50/60 Hz con onda armónica y sin alta frecuencia de longitud.

Tolerancia de tensión nominal de los bloques LED: ... 30 % a +10 %.

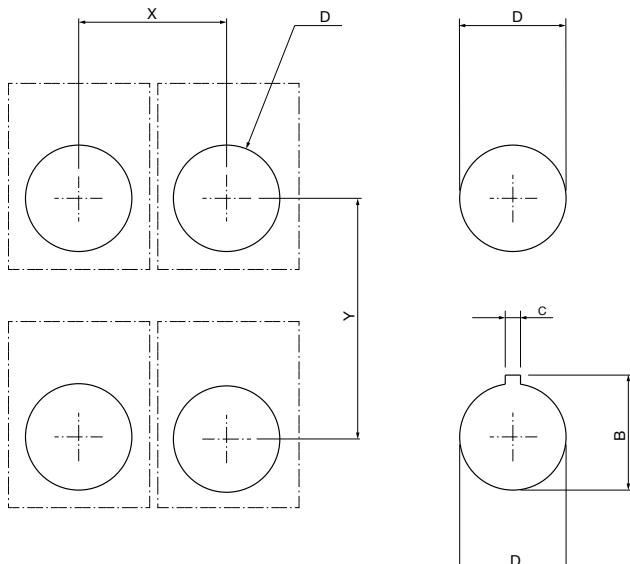
(1) Umbral más alto para iluminar el LED para su uso en aplicaciones en las que existe riesgo de grandes tensiones inducidas.

## Gama modular

### Plan para taladrar



| Descripción   | X         | S         | D            | Grosor de panel     |
|---|-----------|-----------|--------------|---------------------|
| Pulsador, piloto, selector con maneta corta, potenciómetro, selector de palanca | 31 1.22"  | 50 1.97"  | Ø 22.3 0.88" | 1.5 0.06" - 6 0.24" |
| Pulsador, piloto, selector con maneta corta (con placa de leyenda)              | 31 1.22"  | 55 2.17"  | Ø 22.3 0.88" | 1.5 0.06" - 6 0.24" |
| Pulsador de seta (60 mm)  | 45 1.77"  | 50 1.97"  | Ø 22.3 0.88" | 1.5 0.06" - 6 0.24" |
| Pulsador de seta (40 mm)  | 65 2.56"  | 70 2.76"  | Ø 22.3 0.88" | 1.5 0.06" - 6 0.24" |
| Pulsador doble  | 31 1.22"  | 55 2.17"  | Ø 22.3 0.88" | 1.5 0.06" - 6 0.24" |
| Pulsador doble (con placa de leyenda)   | 31 1.22"  | 95 3.74"  | Ø 22.3 0.88" | 1.5 0.06" - 6 0.24" |
| Pulsador para ambientes extremos  | 50 1.97"  | 50 1.97"  | Ø 30.5 1.20" | 2 0.08" - 5 0.20"   |
| Potenciómetro (con placa de leyenda)  | 51 2.01"  | 50 1.97"  | Ø 22.3 0.88" | 1.5 0.06" - 6 0.24" |
| Selector de palanca (con placa de leyenda)                                      | 31 1.22"  | 66 2.60"  | Ø 22.3 0.88" | 1.5 0.06" - 6 0.24" |
| Joystick (con placa de leyenda)   | 100 3.94" | 100 3.94" | Ø 22.3 0.88" | 1.5 0.06" - 6 0.24" |



| Accesorios           | X        | S        | D            | B          | C         | Grosor de panel     |
|----------------------|----------|----------|--------------|------------|-----------|---------------------|
| Soporte de 5 bloques | 51 2.01" | 50 1.97" | Ø 22.3 0.88" | 24.1 0.95" | 3.2 0.13" | 1.5 0.06" - 6 0.24" |
| Adaptador de 30 mm   | 42 1.65" | 52 2.05" | Ø 30.5 1.20" | 33 1.30"   | 5 0.20"   | 2 0.08" - 7 0.28"   |

# Pulsantería

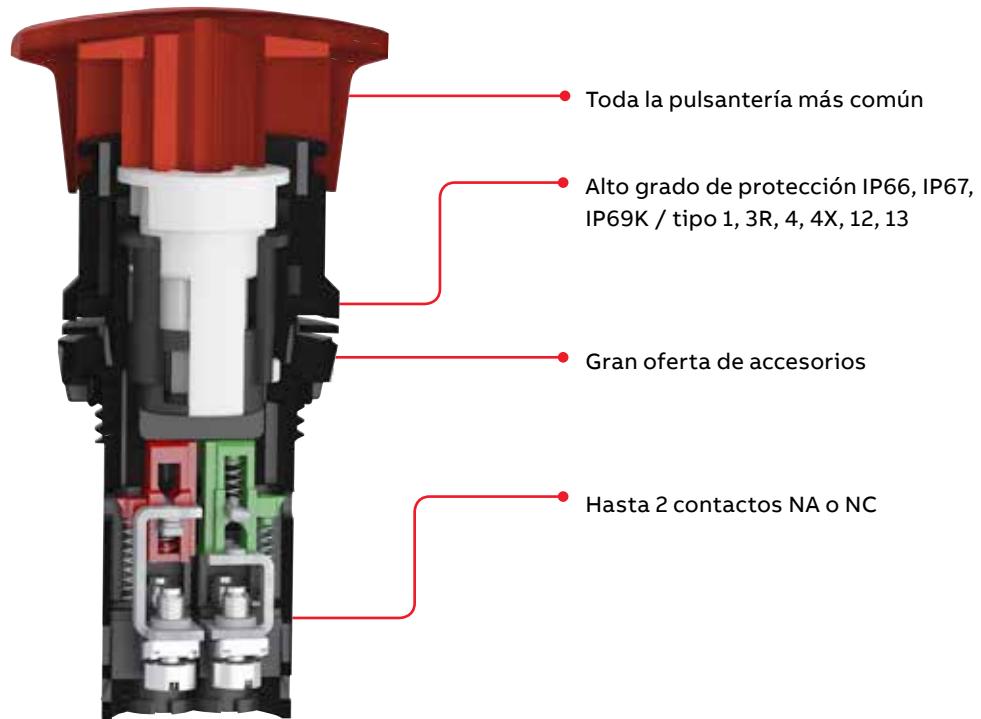
## Gama compacta

### Detalles de pedido

|    |                                      |
|----|--------------------------------------|
| 53 | Pulsadores no luminosos              |
| 57 | Pulsadores luminosos                 |
| 61 | Pulsadores de seta                   |
| 62 | Pulsadores de parada de emergencia   |
| 63 | Pulsadores de parada de máquinas     |
| 64 | Pulsadores para ambientes extremos   |
| 65 | Pilotos                              |
| 67 | Pilotos BA 9s                        |
| 67 | Bombillas LED                        |
| 69 | Selectores                           |
| 71 | Zumbadores                           |
| 72 | <b>Accesorios</b>                    |
| 74 | <b>Datos técnicos</b>                |
| 80 | <b>Dimensiones para los taladros</b> |

## Gama compacta

La gama compacta es la solución más eficiente y reduce tanto el tiempo de instalación como los costes, gracias al diseño todo en uno. Ideal para entornos agresivos gracias a que es líder del mercado en resistencia al polvo y al agua.

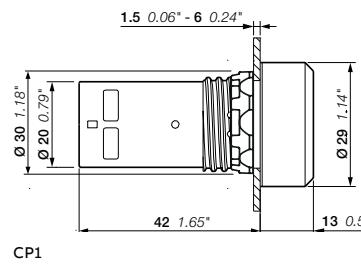


## Gama compacta

Pulsadores modulares no luminosos - Momentáneo



| Operador   | Embellecedor     | Contactos | Tipo       | Código de pedido | Cant. | Peso<br>(1 ud.) |
|------------|------------------|-----------|------------|------------------|-------|-----------------|
| ● Rojo     | Plástico negro   | 1 0       | CP1-10R-10 | 1SFA619100R1011  | 10    | 0.018           |
|            |                  | 0 1       | CP1-10R-01 | 1SFA619100R1041  | 10    | 0.018           |
|            |                  | 1 1       | CP1-10R-11 | 1SFA619100R1071  | 10    | 0.022           |
|            |                  | 2 0       | CP1-10R-20 | 1SFA619100R1021  | 10    | 0.022           |
|            |                  | 0 2       | CP1-10R-02 | 1SFA619100R1051  | 10    | 0.022           |
|            | Metálico cromado | 1 0       | CP1-30R-10 | 1SFA619100R3011  | 10    | 0.032           |
|            |                  | 0 1       | CP1-30R-01 | 1SFA619100R3041  | 10    | 0.032           |
|            |                  | 1 1       | CP1-30R-11 | 1SFA619100R3071  | 10    | 0.036           |
|            |                  | 2 0       | CP1-30R-20 | 1SFA619100R3021  | 10    | 0.036           |
|            |                  | 0 2       | CP1-30R-02 | 1SFA619100R3051  | 10    | 0.036           |
| ● Verde    | Plástico negro   | 1 0       | CP1-10G-10 | 1SFA619100R1012  | 10    | 0.018           |
|            |                  | 1 1       | CP1-10G-11 | 1SFA619100R1072  | 10    | 0.022           |
|            |                  | 2 0       | CP1-10G-20 | 1SFA619100R1022  | 10    | 0.022           |
|            |                  | 1 0       | CP1-30G-10 | 1SFA619100R3012  | 10    | 0.032           |
|            |                  | 1 1       | CP1-30G-11 | 1SFA619100R3072  | 10    | 0.036           |
|            | Metálico cromado | 2 0       | CP1-30G-20 | 1SFA619100R3022  | 10    | 0.036           |
|            |                  | 1 0       | CP1-10Y-10 | 1SFA619100R1013  | 10    | 0.018           |
|            |                  | 1 1       | CP1-10Y-11 | 1SFA619100R1073  | 10    | 0.022           |
|            |                  | 2 0       | CP1-10Y-20 | 1SFA619100R1023  | 10    | 0.022           |
|            |                  | 1 0       | CP1-30Y-10 | 1SFA619100R3013  | 10    | 0.032           |
| ● Amarillo | Plástico negro   | 1 1       | CP1-30Y-11 | 1SFA619100R3073  | 10    | 0.036           |
|            |                  | 2 0       | CP1-30Y-20 | 1SFA619100R3023  | 10    | 0.036           |
|            |                  | 1 0       | CP1-10L-10 | 1SFA619100R1014  | 10    | 0.018           |
|            |                  | 1 1       | CP1-10L-11 | 1SFA619100R1074  | 10    | 0.022           |
|            |                  | 2 0       | CP1-10L-20 | 1SFA619100R1024  | 10    | 0.022           |
|            | Metálico cromado | 1 0       | CP1-30L-10 | 1SFA619100R3014  | 10    | 0.032           |
|            |                  | 1 1       | CP1-30L-11 | 1SFA619100R3074  | 10    | 0.036           |
|            |                  | 2 0       | CP1-30L-20 | 1SFA619100R3024  | 10    | 0.036           |
| ● Azul     | Plástico negro   | 1 0       | CP1-10W-10 | 1SFA619100R1015  | 10    | 0.018           |
|            |                  | 1 1       | CP1-10W-11 | 1SFA619100R1075  | 10    | 0.022           |
|            |                  | 2 0       | CP1-10W-20 | 1SFA619100R1025  | 10    | 0.022           |
|            |                  | 1 0       | CP1-30W-10 | 1SFA619100R3015  | 10    | 0.032           |
|            |                  | 1 1       | CP1-30W-11 | 1SFA619100R3075  | 10    | 0.036           |
|            | Metálico cromado | 2 0       | CP1-30W-20 | 1SFA619100R3025  | 10    | 0.036           |
|            |                  | 1 0       | CP1-10B-10 | 1SFA619100R1016  | 10    | 0.018           |
|            |                  | 0 1       | CP1-10B-01 | 1SFA619100R1046  | 10    | 0.018           |
|            |                  | 1 1       | CP1-10B-11 | 1SFA619100R1076  | 10    | 0.022           |
|            |                  | 2 0       | CP1-10B-20 | 1SFA619100R1026  | 10    | 0.022           |
| ● Blanco   | Plástico negro   | 0 2       | CP1-10B-02 | 1SFA619100R1056  | 10    | 0.022           |
|            |                  | 1 0       | CP1-30B-10 | 1SFA619100R3016  | 10    | 0.032           |
|            |                  | 0 1       | CP1-30B-01 | 1SFA619100R3046  | 10    | 0.032           |
|            |                  | 1 1       | CP1-30B-11 | 1SFA619100R3076  | 10    | 0.036           |
|            |                  | 2 0       | CP1-30B-20 | 1SFA619100R3026  | 10    | 0.036           |
|            | Metálico cromado | 0 2       | CP1-30B-02 | 1SFA619100R3056  | 10    | 0.036           |



CP1

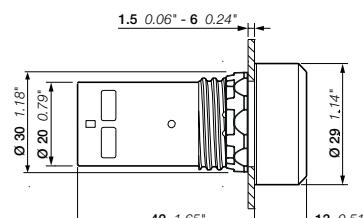
Dimensiones (mm, pulgadas)

## Gama compacta

Pulsadores modulares no luminosos - Mantenido



| Operador | Embellecedor     | Contactos | Tipo       | Código de pedido | Cant. paq. | Peso (1 ud.) |
|----------|------------------|-----------|------------|------------------|------------|--------------|
| ● Rojo   | Plástico negro   | 1 0       | CP2-10R-10 | 1SFA619101R1011  | 10         | 0.018        |
|          |                  | 0 1       | CP2-10R-01 | 1SFA619101R1041  | 10         | 0.018        |
|          |                  | 1 1       | CP2-10R-11 | 1SFA619101R1071  | 10         | 0.022        |
|          |                  | 2 0       | CP2-10R-20 | 1SFA619101R1021  | 10         | 0.022        |
|          |                  | 0 2       | CP2-10R-02 | 1SFA619101R1051  | 10         | 0.022        |
|          | Metálico cromado | 1 0       | CP2-30R-10 | 1SFA619101R3011  | 10         | 0.032        |
|          |                  | 0 1       | CP2-30R-01 | 1SFA619101R3041  | 10         | 0.032        |
|          |                  | 1 1       | CP2-30R-11 | 1SFA619101R3071  | 10         | 0.036        |
|          |                  | 2 0       | CP2-30R-20 | 1SFA619101R3021  | 10         | 0.036        |
|          |                  | 0 2       | CP2-30R-02 | 1SFA619101R3051  | 10         | 0.036        |
| ● Verde  | Plástico negro   | 1 0       | CP2-10G-10 | 1SFA619101R1012  | 10         | 0.018        |
|          |                  | 1 1       | CP2-10G-11 | 1SFA619101R1072  | 10         | 0.022        |
|          |                  | 2 0       | CP2-10G-20 | 1SFA619101R1022  | 10         | 0.022        |
|          |                  | 1 0       | CP2-30G-10 | 1SFA619101R3012  | 10         | 0.032        |
|          |                  | 1 1       | CP2-30G-11 | 1SFA619101R3072  | 10         | 0.036        |
|          | Metálico cromado | 2 0       | CP2-30G-20 | 1SFA619101R3022  | 10         | 0.036        |
|          |                  | 1 0       | CP2-10Y-10 | 1SFA619101R1013  | 10         | 0.018        |
|          |                  | 1 1       | CP2-10Y-11 | 1SFA619101R1073  | 10         | 0.022        |
|          |                  | 2 0       | CP2-10Y-20 | 1SFA619101R1023  | 10         | 0.022        |
|          |                  | 1 1       | CP2-30Y-11 | 1SFA619101R3073  | 10         | 0.036        |
| ● Azul   | Plástico negro   | 2 0       | CP2-30Y-20 | 1SFA619101R3023  | 10         | 0.036        |
|          |                  | 1 0       | CP2-10L-10 | 1SFA619101R1014  | 10         | 0.018        |
|          |                  | 1 1       | CP2-10L-11 | 1SFA619101R1074  | 10         | 0.022        |
|          |                  | 2 0       | CP2-10L-20 | 1SFA619101R1024  | 10         | 0.022        |
|          | Metálico cromado | 1 0       | CP2-30L-10 | 1SFA619101R3014  | 10         | 0.032        |
|          |                  | 2 0       | CP2-30L-20 | 1SFA619101R3024  | 10         | 0.036        |
|          |                  | 1 0       | CP2-10W-10 | 1SFA619101R1015  | 10         | 0.018        |
|          |                  | 1 1       | CP2-10W-11 | 1SFA619101R1075  | 10         | 0.022        |
|          |                  | 2 0       | CP2-10W-20 | 1SFA619101R1025  | 10         | 0.022        |
| ○ Blanco | Plástico negro   | 1 0       | CP2-30W-10 | 1SFA619101R3015  | 10         | 0.032        |
|          |                  | 2 0       | CP2-30W-20 | 1SFA619101R3025  | 10         | 0.036        |
|          |                  | 1 0       | CP2-10B-10 | 1SFA619101R1016  | 10         | 0.018        |
|          |                  | 0 1       | CP2-10B-01 | 1SFA619101R1046  | 10         | 0.018        |
|          |                  | 1 1       | CP2-10B-11 | 1SFA619101R1076  | 10         | 0.022        |
|          | Metálico cromado | 2 0       | CP2-10B-20 | 1SFA619101R1026  | 10         | 0.022        |
|          |                  | 0 2       | CP2-10B-02 | 1SFA619101R1056  | 10         | 0.022        |
|          |                  | 1 0       | CP2-30B-10 | 1SFA619101R3016  | 10         | 0.032        |
|          |                  | 0 1       | CP2-30B-01 | 1SFA619101R3046  | 10         | 0.032        |
|          |                  | 1 1       | CP2-30B-11 | 1SFA619101R3076  | 10         | 0.036        |
| ● Negro  | Plástico negro   | 2 0       | CP2-30B-20 | 1SFA619101R3026  | 10         | 0.036        |
|          |                  | 1 0       | CP2-10B-10 | 1SFA619101R1016  | 10         | 0.018        |
|          |                  | 0 1       | CP2-10B-01 | 1SFA619101R1046  | 10         | 0.018        |
|          |                  | 1 1       | CP2-10B-11 | 1SFA619101R1076  | 10         | 0.022        |
|          |                  | 2 0       | CP2-10B-20 | 1SFA619101R1026  | 10         | 0.022        |
|          | Metálico cromado | 0 2       | CP2-10B-02 | 1SFA619101R1056  | 10         | 0.022        |
|          |                  | 1 0       | CP2-30B-10 | 1SFA619101R3016  | 10         | 0.032        |
|          |                  | 0 1       | CP2-30B-01 | 1SFA619101R3046  | 10         | 0.032        |
|          |                  | 1 1       | CP2-30B-11 | 1SFA619101R3076  | 10         | 0.036        |
|          |                  | 2 0       | CP2-30B-20 | 1SFA619101R3026  | 10         | 0.036        |



CP2

Dimensiones (mm, pulgadas)

## Gama compacta

Pulsadores extendidos no luminosos - Momentáneo



CP3-10R-10

1SFC15198V0001



CP3-10G-10

1SFC151204V0001



CP3-30Y-10

1SFC15197V0001



CP3-10L-10

1SFC15194V0001



CP3-30W-10

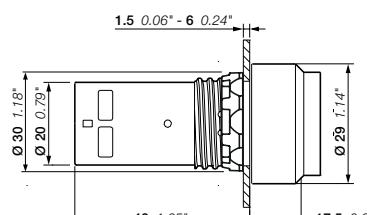
1SFC151203V0001



CP3-10B-10

1SFC151205V0001

| Operador | Embellecedor     | Contactos | Tipo       | Código de pedido | Cant. paq. | Peso (1 ud.) |
|----------|------------------|-----------|------------|------------------|------------|--------------|
| ● Rojo   | Plástico negro   | 1 0       | CP3-10R-10 | 1SFA619102R1011  | 10         | 0.019        |
|          |                  | 0 1       | CP3-10R-01 | 1SFA619102R1041  | 10         | 0.019        |
|          |                  | 1 1       | CP3-10R-11 | 1SFA619102R1071  | 10         | 0.022        |
|          |                  | 2 0       | CP3-10R-20 | 1SFA619102R1021  | 10         | 0.022        |
|          |                  | 0 2       | CP3-10R-02 | 1SFA619102R1051  | 10         | 0.022        |
|          | Metálico cromado | 0 1       | CP3-30R-01 | 1SFA619102R3041  | 10         | 0.033        |
|          |                  | 1 1       | CP3-30R-11 | 1SFA619102R3071  | 10         | 0.036        |
|          |                  | 2 0       | CP3-30R-20 | 1SFA619102R3021  | 10         | 0.036        |
|          |                  | 1 0       | CP3-10G-10 | 1SFA619102R1012  | 10         | 0.019        |
|          |                  | 1 1       | CP3-10G-11 | 1SFA619102R1072  | 10         | 0.022        |
| ● Verde  | Plástico negro   | 2 0       | CP3-10G-20 | 1SFA619102R1022  | 10         | 0.022        |
|          |                  | 1 0       | CP3-30G-10 | 1SFA619102R3012  | 10         | 0.033        |
|          |                  | 1 1       | CP3-30G-11 | 1SFA619102R3072  | 10         | 0.036        |
|          |                  | 2 0       | CP3-30G-20 | 1SFA619102R3022  | 10         | 0.036        |
|          |                  | 1 0       | CP3-10Y-10 | 1SFA619102R1013  | 10         | 0.019        |
|          | Metálico cromado | 1 1       | CP3-10Y-11 | 1SFA619102R1073  | 10         | 0.022        |
|          |                  | 2 0       | CP3-10Y-20 | 1SFA619102R1023  | 10         | 0.022        |
|          |                  | 2 0       | CP3-30Y-20 | 1SFA619102R3023  | 10         | 0.036        |
|          |                  | 1 0       | CP3-10L-10 | 1SFA619102R1014  | 10         | 0.019        |
|          |                  | 1 1       | CP3-10L-11 | 1SFA619102R1074  | 10         | 0.022        |
| ● Azul   | Plástico negro   | 2 0       | CP3-10L-20 | 1SFA619102R1024  | 10         | 0.022        |
|          |                  | 2 0       | CP3-30L-20 | 1SFA619102R3024  | 10         | 0.036        |
|          |                  | 1 0       | CP3-10W-10 | 1SFA619102R1015  | 10         | 0.019        |
|          |                  | 1 1       | CP3-10W-11 | 1SFA619102R1075  | 10         | 0.022        |
|          |                  | 2 0       | CP3-10W-20 | 1SFA619102R1025  | 10         | 0.022        |
|          | Metálico cromado | 1 0       | CP3-30W-10 | 1SFA619102R3015  | 10         | 0.033        |
|          |                  | 1 1       | CP3-30W-11 | 1SFA619102R3075  | 10         | 0.036        |
|          |                  | 2 0       | CP3-30W-20 | 1SFA619102R3025  | 10         | 0.036        |
|          |                  | 1 0       | CP3-10B-10 | 1SFA619102R1016  | 10         | 0.019        |
|          |                  | 0 1       | CP3-10B-01 | 1SFA619102R1046  | 10         | 0.019        |
| ○ Blanco | Plástico negro   | 1 1       | CP3-10B-11 | 1SFA619102R1076  | 10         | 0.022        |
|          |                  | 2 0       | CP3-10B-20 | 1SFA619102R1026  | 10         | 0.022        |
|          |                  | 0 2       | CP3-10B-02 | 1SFA619102R1056  | 10         | 0.022        |
|          |                  | 1 0       | CP3-30B-10 | 1SFA619102R3016  | 10         | 0.033        |
|          |                  | 0 1       | CP3-30B-01 | 1SFA619102R3046  | 10         | 0.033        |
|          | Metálico cromado | 1 1       | CP3-30B-11 | 1SFA619102R3076  | 10         | 0.036        |
|          |                  | 2 0       | CP3-30B-20 | 1SFA619102R3026  | 10         | 0.036        |



CP3

Dimensiones (mm, pulgadas)

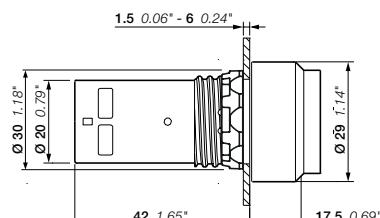
1SFC15103750701

## Gama compacta

Pulsadores extendidos no luminosos - Mantenido



| Operador   | Embellecedor     | Contactos | Tipo       | Código de pedido | Cant. paq. | Peso (1 ud.) |
|------------|------------------|-----------|------------|------------------|------------|--------------|
| ● Rojo     | Plástico negro   | 1 0       | CP4-10R-10 | 1SFA619103R1011  | 10         | 0.019        |
|            |                  | 0 1       | CP4-10R-01 | 1SFA619103R1041  | 10         | 0.019        |
|            |                  | 1 1       | CP4-10R-11 | 1SFA619103R1071  | 10         | 0.022        |
|            |                  | 2 0       | CP4-10R-20 | 1SFA619103R1021  | 10         | 0.022        |
|            |                  | 0 2       | CP4-10R-02 | 1SFA619103R1051  | 10         | 0.022        |
|            | Metálico cromado | 1 1       | CP4-30R-11 | 1SFA619103R3071  | 10         | 0.036        |
|            |                  | 1 0       | CP4-10G-10 | 1SFA619103R1012  | 10         | 0.019        |
|            |                  | 1 1       | CP4-10G-11 | 1SFA619103R1072  | 10         | 0.022        |
|            |                  | 2 0       | CP4-10G-20 | 1SFA619103R1022  | 10         | 0.022        |
|            |                  | 1 0       | CP4-30G-10 | 1SFA619103R3012  | 10         | 0.033        |
| ● Verde    | Plástico negro   | 2 0       | CP4-30G-20 | 1SFA619103R3022  | 10         | 0.036        |
|            |                  | 1 0       | CP4-10Y-10 | 1SFA619103R1013  | 10         | 0.019        |
|            | Metálico cromado | 1 1       | CP4-10Y-11 | 1SFA619103R1073  | 10         | 0.022        |
| ● Amarillo | Plástico negro   | 1 0       | CP4-10L-10 | 1SFA619103R1014  | 10         | 0.019        |
|            |                  | 1 1       | CP4-10L-11 | 1SFA619103R1074  | 10         | 0.022        |
| ● Azul     | Plástico negro   | 1 0       | CP4-10W-10 | 1SFA619103R1015  | 10         | 0.019        |
| ○ Blanco   | Plástico negro   | 1 1       | CP4-10W-11 | 1SFA619103R1075  | 10         | 0.022        |
| ● Negro    | Plástico negro   | 1 0       | CP4-10B-10 | 1SFA619103R1016  | 10         | 0.019        |
|            |                  | 1 1       | CP4-10B-11 | 1SFA619103R1076  | 10         | 0.022        |
|            |                  | 2 0       | CP4-10B-20 | 1SFA619103R1026  | 10         | 0.022        |
|            |                  | 0 2       | CP4-10B-02 | 1SFA619103R1056  | 10         | 0.022        |



CP4

Dimensiones (mm, pulgadas)

## Gama compacta

Pulsadores modulares luminosos - Momentáneo



CP1-11R-10

1SFC15115W0001



CP1-11G-10

1SFC15115B0001



CP1-31Y-10

1SFC15115Y0001



CP1-11L-10

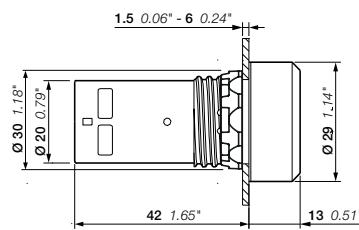
1SFC1511490001



CP1-31C-10

1SFC1511750001

| Operador                                 | Embellecedor   | Contactos | Tipo       | Código de pedido | Cant. paq. | Peso (1 ud.) |
|--|----------------|-----------|------------|------------------|------------|--------------|
|  |                |           |            | Y L              |            | kg           |
| <b>Tensión nominal 24 V CA/CC</b>        |                |           |            |                  |            |              |
| ● Rojo                                   | Plástico negro | 1 0       | CP1-11R-10 | 1SFA619100R1111  | 10         | 0.025        |
|  |                | 0 1       | CP1-11R-01 | 1SFA619100R1141  | 10         | 0.025        |
| ● Verde                                  | Plástico negro | 1 0       | CP1-31R-10 | 1SFA619100R3111  | 10         | 0.039        |
|  |                | 0 1       | CP1-31R-01 | 1SFA619100R3141  | 10         | 0.039        |
| ● Amarillo                               | Plástico negro | 1 0       | CP1-11Y-10 | 1SFA619100R1113  | 10         | 0.025        |
|  |                | 0 1       | CP1-31Y-10 | 1SFA619100R3113  | 10         | 0.039        |
| ● Azul                                   | Plástico negro | 1 0       | CP1-11L-10 | 1SFA619100R1114  | 10         | 0.025        |
|  |                | 0 1       | CP1-31L-10 | 1SFA619100R3114  | 10         | 0.039        |
| ○ Claro                                  | Plástico negro | 1 0       | CP1-11C-10 | 1SFA619100R1118  | 10         | 0.025        |
|  |                | 0 1       | CP1-31C-10 | 1SFA619100R3118  | 10         | 0.039        |
| <b>Tensión nominal 110 a 130 V CA/CC</b> |                |           |            |                  |            |              |
| ● Rojo                                   | Plástico negro | 1 0       | CP1-12R-10 | 1SFA619100R1211  | 10         | 0.025        |
|  |                | 0 1       | CP1-12R-01 | 1SFA619100R1241  | 10         | 0.025        |
| ● Verde                                  | Plástico negro | 1 0       | CP1-12G-10 | 1SFA619100R1212  | 10         | 0.025        |
| ● Amarillo                               | Plástico negro | 1 0       | CP1-12Y-10 | 1SFA619100R1213  | 10         | 0.025        |
| ● Azul                                   | Plástico negro | 1 0       | CP1-12L-10 | 1SFA619100R1214  | 10         | 0.025        |
| ○ Claro                                  | Plástico negro | 1 0       | CP1-12C-10 | 1SFA619100R1218  | 10         | 0.025        |
| <b>Tensión nominal 220 V CA/CC</b>       |                |           |            |                  |            |              |
| ● Rojo                                   | Plástico negro | 1 0       | CP1-13R-10 | 1SFA619100R1311  | 10         | 0.025        |
|  |                | 0 1       | CP1-13R-01 | 1SFA619100R1341  | 10         | 0.025        |
| ● Verde                                  | Plástico negro | 1 0       | CP1-13G-10 | 1SFA619100R1312  | 10         | 0.025        |
| ● Amarillo                               | Plástico negro | 1 0       | CP1-13Y-10 | 1SFA619100R1313  | 10         | 0.025        |
| ● Azul                                   | Plástico negro | 1 0       | CP1-13L-10 | 1SFA619100R1314  | 10         | 0.025        |
| ○ Claro                                  | Plástico negro | 1 0       | CP1-13C-10 | 1SFA619100R1318  | 10         | 0.025        |



CP1

Dimensiones (mm, pulgadas)

ISFC15103950701

## Gama compacta

Pulsadores modulares luminosos - Mantenido



CP2-11G-10

ISFCI51188V0001



CP2-11Y-10

ISFCI51150V0001



CP1-11L-10

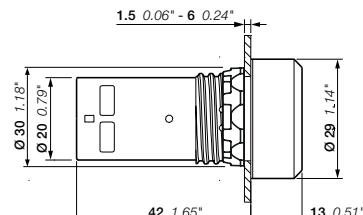
ISFCI51149V0001



CP2-11C-10

ISFCI51152V0001

| Operador                                 | Embellecedor   | Contactos | Tipo       | Código de pedido | Cant. paq. | Peso (1 ud.) |
|--|----------------|-----------|------------|------------------|------------|--------------|
|  |                |           |            | Y Y              |            | kg           |
| <b>Tensión nominal 24 V CA/CC</b>        |                |           |            |                  |            |              |
| ● Rojo                                   | Plástico negro | 1 0       | CP2-11R-10 | 1SFA619101R1111  | 10         | 0.025        |
|  |                | 0 1       | CP2-11R-01 | 1SFA619101R1141  | 10         | 0.025        |
| ● Verde                                  | Plástico negro | 1 0       | CP2-11G-10 | 1SFA619101R1112  | 10         | 0.025        |
| ● Amarillo                               | Plástico negro | 1 0       | CP2-11Y-10 | 1SFA619101R1113  | 10         | 0.025        |
| ● Azul                                   | Plástico negro | 1 0       | CP2-11L-10 | 1SFA619101R1114  | 10         | 0.025        |
| ○ Claro                                  | Plástico negro | 1 0       | CP2-11C-10 | 1SFA619101R1118  | 10         | 0.025        |
| <b>Tensión nominal 110 a 130 V CA/CC</b> |                |           |            |                  |            |              |
| ● Rojo                                   | Plástico negro | 1 0       | CP2-12R-10 | 1SFA619101R1211  | 10         | 0.025        |
|  |                | 0 1       | CP2-12R-01 | 1SFA619101R1241  | 10         | 0.025        |
| ● Verde                                  | Plástico negro | 1 0       | CP2-12G-10 | 1SFA619101R1212  | 10         | 0.025        |
| ● Amarillo                               | Plástico negro | 1 0       | CP2-12Y-10 | 1SFA619101R1213  | 10         | 0.025        |
| ● Azul                                   | Plástico negro | 1 0       | CP2-12L-10 | 1SFA619101R1214  | 10         | 0.025        |
| ○ Claro                                  | Plástico negro | 1 0       | CP2-12C-10 | 1SFA619101R1218  | 10         | 0.025        |
| <b>Tensión nominal 220 V CA/CC</b>       |                |           |            |                  |            |              |
| ● Rojo                                   | Plástico negro | 1 0       | CP2-13R-10 | 1SFA619101R1311  | 10         | 0.025        |
|  |                | 0 1       | CP2-13R-01 | 1SFA619101R1341  | 10         | 0.025        |
| ● Verde                                  | Plástico negro | 1 0       | CP2-13G-10 | 1SFA619101R1312  | 10         | 0.025        |
| ● Amarillo                               | Plástico negro | 1 0       | CP2-13Y-10 | 1SFA619101R1313  | 10         | 0.025        |
| ● Azul                                   | Plástico negro | 1 0       | CP2-13L-10 | 1SFA619101R1314  | 10         | 0.025        |
| ○ Claro                                  | Plástico negro | 1 0       | CP2-13C-10 | 1SFA619101R1318  | 10         | 0.025        |



CP1

Dimensiones (mm, pulgadas)

ISFCI5104050701

## Gama compacta

Pulsadores extendidos luminosos - Momentáneo



CP3-11R-10

ISFC15120V0001



CP3-11G-10

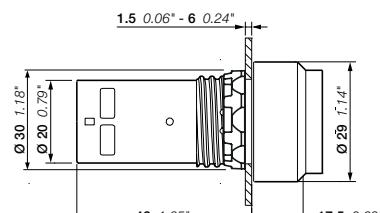
ISFC15123V0001



CP3-11Y-10

ISFC15120V0001

| Operador                                 | Embellecedor   | Contactos | Tipo       | Código de pedido | Cant. paq. | Peso (1 ud.) |
|--|----------------|-----------|------------|------------------|------------|--------------|
|  |                |           |            |                  |            |              |
| ● Rojo                                   | Plástico negro | 1 0       | CP3-11R-10 | 1SFA619102R1111  | 10         | 0.025        |
|  |                | 0 1       | CP3-11R-01 | 1SFA619102R1141  | 10         | 0.025        |
| ● Verde                                  | Plástico negro | 1 0       | CP3-11G-10 | 1SFA619102R1112  | 10         | 0.025        |
| ● Amarillo                               | Plástico negro | 1 0       | CP3-11Y-10 | 1SFA619102R1113  | 10         | 0.025        |
| ● Azul                                   | Plástico negro | 1 0       | CP3-11L-10 | 1SFA619102R1114  | 10         | 0.025        |
| ○ Claro                                  | Plástico negro | 1 0       | CP3-11C-10 | 1SFA619102R1118  | 10         | 0.025        |
| <b>Tensión nominal 24 V CA/CC</b>        |                |           |            |                  |            |              |
| ● Rojo                                   | Plástico negro | 1 0       | CP3-12R-10 | 1SFA619102R1211  | 10         | 0.025        |
|  |                | 0 1       | CP3-12R-01 | 1SFA619102R1241  | 10         | 0.025        |
| ● Verde                                  | Plástico negro | 1 0       | CP3-12G-10 | 1SFA619102R1212  | 10         | 0.025        |
| ● Amarillo                               | Plástico negro | 1 0       | CP3-12Y-10 | 1SFA619102R1213  | 10         | 0.025        |
| ● Azul                                   | Plástico negro | 1 0       | CP3-12L-10 | 1SFA619102R1214  | 10         | 0.025        |
| ○ Claro                                  | Plástico negro | 1 0       | CP3-12C-10 | 1SFA619102R1218  | 10         | 0.025        |
| <b>Tensión nominal 110 a 130 V CA/CC</b> |                |           |            |                  |            |              |
| ● Rojo                                   | Plástico negro | 1 0       | CP3-13R-10 | 1SFA619102R1311  | 10         | 0.025        |
|  |                | 0 1       | CP3-13R-01 | 1SFA619102R1341  | 10         | 0.025        |
| ● Verde                                  | Plástico negro | 1 0       | CP3-13G-10 | 1SFA619102R1312  | 10         | 0.025        |
| ● Amarillo                               | Plástico negro | 1 0       | CP3-13Y-10 | 1SFA619102R1313  | 10         | 0.025        |
| ● Azul                                   | Plástico negro | 1 0       | CP3-13L-10 | 1SFA619102R1314  | 10         | 0.025        |
| ○ Claro                                  | Plástico negro | 1 0       | CP3-13C-10 | 1SFA619102R1318  | 10         | 0.025        |
| <b>Tensión nominal 220 V CA/CC</b>       |                |           |            |                  |            |              |
| ● Rojo                                   | Plástico negro | 1 0       | CP3-13R-10 | 1SFA619102R1311  | 10         | 0.025        |
|  |                | 0 1       | CP3-13R-01 | 1SFA619102R1341  | 10         | 0.025        |
| ● Verde                                  | Plástico negro | 1 0       | CP3-13G-10 | 1SFA619102R1312  | 10         | 0.025        |
| ● Amarillo                               | Plástico negro | 1 0       | CP3-13Y-10 | 1SFA619102R1313  | 10         | 0.025        |
| ● Azul                                   | Plástico negro | 1 0       | CP3-13L-10 | 1SFA619102R1314  | 10         | 0.025        |
| ○ Claro                                  | Plástico negro | 1 0       | CP3-13C-10 | 1SFA619102R1318  | 10         | 0.025        |



CP3

Dimensiones (mm, pulgadas)

ISFC15104150701

## Gama compacta

Pulsadores extendidos luminosos - Mantenido



CP4-11R-10

1SFC15120V0001



CP4-11G-10

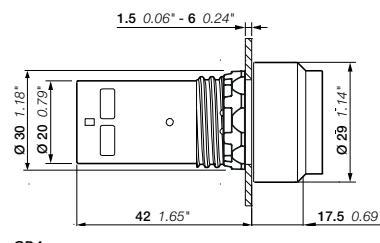
1SFC151213V0001



CP4-11Y-10

1SFC151208V0001

| Operador                                 | Embellededor   | Contactos | Tipo       | Código de pedido | Cant. paq. | Peso (1 ud.) |
|--|----------------|-----------|------------|------------------|------------|--------------|
| 1 1 1 1                                  |                |           |            |                  |            |              |
| <b>Tensión nominal 24 V CA/CC</b>        |                |           |            |                  |            |              |
| ● Rojo                                   | Plástico negro | 1 0       | CP4-11R-10 | 1SFA619103R1111  | 10         | 0.025        |
|  |                | 0 1       | CP4-11R-01 | 1SFA619103R1141  | 10         | 0.025        |
| ● Verde                                  | Plástico negro | 1 0       | CP4-11G-10 | 1SFA619103R1112  | 10         | 0.025        |
| ● Amarillo                               | Plástico negro | 1 0       | CP4-11Y-10 | 1SFA619103R1113  | 10         | 0.025        |
| ● Azul                                   | Plástico negro | 1 0       | CP4-11L-10 | 1SFA619103R1114  | 10         | 0.025        |
| ○ Claro                                  | Plástico negro | 1 0       | CP4-11C-10 | 1SFA619103R1118  | 10         | 0.025        |
| <b>Tensión nominal 110 a 130 V CA/CC</b> |                |           |            |                  |            |              |
| ● Rojo                                   | Plástico negro | 1 0       | CP4-12R-10 | 1SFA619103R1211  | 10         | 0.025        |
|  |                | 0 1       | CP4-12R-01 | 1SFA619103R1241  | 10         | 0.025        |
| ● Verde                                  | Plástico negro | 1 0       | CP4-12G-10 | 1SFA619103R1212  | 10         | 0.025        |
| ● Amarillo                               | Plástico negro | 1 0       | CP4-12Y-10 | 1SFA619103R1213  | 10         | 0.025        |
| ● Azul                                   | Plástico negro | 1 0       | CP4-12L-10 | 1SFA619103R1214  | 10         | 0.025        |
| ○ Claro                                  | Plástico negro | 1 0       | CP4-12C-10 | 1SFA619103R1218  | 10         | 0.025        |
| <b>Tensión nominal 220 V CA/CC</b>       |                |           |            |                  |            |              |
| ● Rojo                                   | Plástico negro | 1 0       | CP4-13R-10 | 1SFA619103R1311  | 10         | 0.025        |
|  |                | 0 1       | CP4-13R-01 | 1SFA619103R1341  | 10         | 0.025        |
| ● Verde                                  | Plástico negro | 1 0       | CP4-13G-10 | 1SFA619103R1312  | 10         | 0.025        |
| ● Amarillo                               | Plástico negro | 1 0       | CP4-13Y-10 | 1SFA619103R1313  | 10         | 0.025        |
| ● Azul                                   | Plástico negro | 1 0       | CP4-13L-10 | 1SFA619103R1314  | 10         | 0.025        |
| ○ Claro                                  | Plástico negro | 1 0       | CP4-13C-10 | 1SFA619103R1318  | 10         | 0.025        |



CP4

Dimensiones (mm, pulgadas)

1SFC15104250701

## Gama compacta

Pulsadores de seta no luminosos - Momentáneo



CPM3-10R-11

1SFC151258V0001



CPM3-10G-11

1SFC151357V0001



CPM3-10Y-11

1SFC151259V0001



CPM3-10L-11

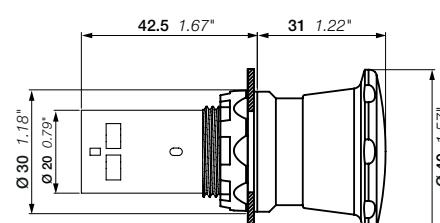
1SFC151260V0001



CPM3-10B-11

1SFC151358V0001

| Operador       | Contactos | Tipo        | Código de pedido | Cant. | Peso paq.<br>(1 ud.) |
|----------------|-----------|-------------|------------------|-------|----------------------|
|                |           |             |                  |       |                      |
| <b>Ø 40 mm</b> |           |             |                  |       |                      |
| ● Rojo         | 1 1       | CPM3-10R-11 | 1SFA619126R1071  | 1     | 0.036                |
| ● Verde        | 1 1       | CPM3-10G-11 | 1SFA619126R1072  | 1     | 0.036                |
| ● Amarillo     | 1 1       | CPM3-10Y-11 | 1SFA619126R1073  | 1     | 0.036                |
| ● Azul         | 1 1       | CPM3-10L-11 | 1SFA619126R1074  | 1     | 0.036                |
| ● Negro        | 1 1       | CPM3-10B-11 | 1SFA619126R1076  | 1     | 0.036                |



CPM3

Dimensiones (mm, pulgadas)

1SFC151043S0701

## Gama compacta

Pulsadores de parada de emergencia no luminosos



CE3T-10R-01

1SFCL51616V0001



CE3K1-10R-01

1SFCL51639V0001



CE4T-10R-01

1SFCL5164V0001



CE4P-10R-01

1SFCL5165V0001



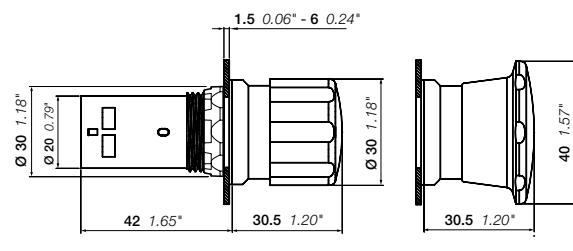
CE4K1-10R-02

1SFCL5166V0001

### Descripción

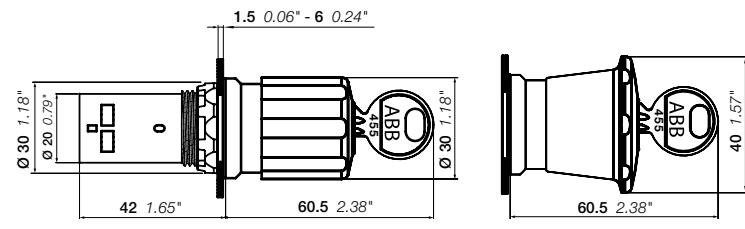
Los pulsadores de parada de emergencia cumplen la norma EN/IEC 60947-5-5, la norma Seguridad de máquinas EN/ISO 13850, IEC 60204-1 y la Directiva de máquinas 2006/42/CE.

| Operador       | Modo de desbloqueo  | Contactos | Tipo         | Código de pedido | Cant. paq. | Peso (1 ud.) |
|----------------|---------------------|-----------|--------------|------------------|------------|--------------|
|                |                     |           |              |                  |            |              |
| kg             |                     |           |              |                  |            |              |
| <b>Ø 30 mm</b> |                     |           |              |                  |            |              |
| ● Rojo         | Desbloqueo de giro  | 0 1       | CE3T-10R-01  | 1SFA619500R1041  | 1          | 0.032        |
|                |                     | 1 1       | CE3T-10R-11  | 1SFA619500R1071  | 1          | 0.032        |
|                |                     | 0 2       | CE3T-10R-02  | 1SFA619500R1051  | 1          | 0.032        |
| ● Rojo         | Desbloqueo de tiro  | 0 1       | CE3P-10R-01  | 1SFA619501R1041  | 1          | 0.032        |
|                |                     | 1 1       | CE3P-10R-11  | 1SFA619501R1071  | 1          | 0.032        |
|                |                     | 0 2       | CE3P-10R-02  | 1SFA619501R1051  | 1          | 0.032        |
| ● Rojo         | Código de llave 455 | 0 1       | CE3K1-10R-01 | 1SFA619502R1041  | 1          | 0.060        |
|                |                     | 1 1       | CE3K1-10R-11 | 1SFA619502R1071  | 1          | 0.060        |
|                |                     | 0 2       | CE3K1-10R-02 | 1SFA619502R1051  | 1          | 0.060        |
| <b>Ø 40 mm</b> |                     |           |              |                  |            |              |
| ● Rojo         | Desbloqueo de giro  | 0 1       | CE4T-10R-01  | 1SFA619550R1041  | 1          | 0.036        |
|                |                     | 1 1       | CE4T-10R-11  | 1SFA619550R1071  | 1          | 0.036        |
|                |                     | 0 2       | CE4T-10R-02  | 1SFA619550R1051  | 1          | 0.036        |
| ● Rojo         | Desbloqueo de tiro  | 0 1       | CE4P-10R-01  | 1SFA619551R1041  | 1          | 0.036        |
|                |                     | 1 1       | CE4P-10R-11  | 1SFA619551R1071  | 1          | 0.036        |
|                |                     | 0 2       | CE4P-10R-02  | 1SFA619551R1051  | 1          | 0.036        |
| ● Rojo         | Código de llave 455 | 0 1       | CE4K1-10R-01 | 1SFA619552R1041  | 1          | 0.064        |
|                |                     | 1 1       | CE4K1-10R-11 | 1SFA619552R1071  | 1          | 0.064        |
|                |                     | 0 2       | CE4K1-10R-02 | 1SFA619552R1051  | 1          | 0.064        |



CE3P, CE3T

CE4P, CE4T



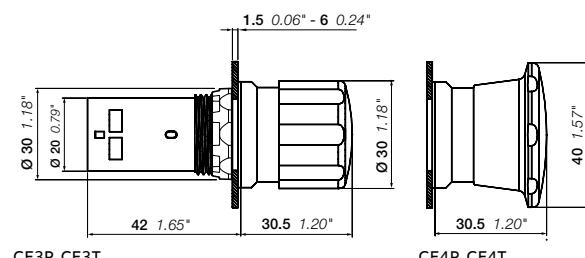
Dimensiones (mm, pulgadas)

## Gama compacta

Pulsadores de parada de máquinas no luminosos

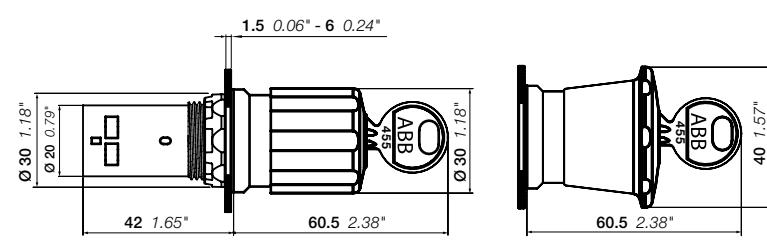


| Operador       | Modo de desbloqueo  | Contactos | Tipo         | Código de pedido | Cant. paq. | Peso (1 ud.) |
|----------------|---------------------|-----------|--------------|------------------|------------|--------------|
|                |                     |           |              |                  |            |              |
| <b>Ø 30 mm</b> |                     |           |              |                  |            |              |
| ● Negro        | Desbloqueo de giro  | 0 1       | CE3T-10B-01  | 1SFA619500R1046  | 1          | 0.032        |
|                |                     | 1 1       | CE3T-10B-11  | 1SFA619500R1076  | 1          | 0.032        |
| ● Negro        | Desbloqueo de tiro  | 1 1       | CE3P-10B-11  | 1SFA619501R1076  | 1          | 0.032        |
| ● Negro        | Código de llave 455 | 1 1       | CE3K1-10B-11 | 1SFA619502R1076  | 1          | 0.060        |
| <b>Ø 40 mm</b> |                     |           |              |                  |            |              |
| ● Negro        | Desbloqueo de giro  | 1 0       | CE4T-10B-10  | 1SFA619550R1016  | 1          | 0.032        |
|                |                     | 0 1       | CE4T-10B-01  | 1SFA619550R1046  | 1          | 0.032        |
|                |                     | 1 1       | CE4T-10B-11  | 1SFA619550R1076  | 1          | 0.032        |
|                |                     | 2 0       | CE4T-10B-20  | 1SFA619550R1026  | 1          | 0.032        |
|                |                     | 0 2       | CE4T-10B-02  | 1SFA619550R1056  | 1          | 0.032        |
| ● Negro        | Desbloqueo de tiro  | 1 1       | CE4P-10B-11  | 1SFA619551R1076  | 1          | 0.032        |
| ● Negro        | Código de llave 455 | 1 1       | CE4K1-10B-11 | 1SFA619552R1076  | 1          | 0.064        |



CE3P, CE3T

CE4P, CE4T



CE3K

CE4K

Dimensiones (mm, pulgadas)

## Gama compacta

Pulsadores para ambientes extremos



CP6-10R-11

1SFCL5025V0001



CP6-10G-11

1SFCL5024V0001



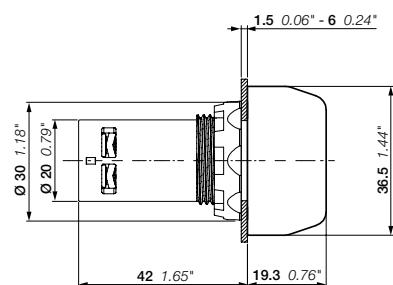
CP6-10B-11

1SFCL5023V0001

### Descripción

Tapa de goma de silicona

| Color   | Contactos         | Tipo                                   | Código de pedido                                      | Cant. paq. | Peso (1 ud.) |
|---------|-------------------|--|---|------------|--------------|
| ● Rojo  | 1 1<br>2 0<br>0 2 | CP6-10R-11<br>CP6-10R-20<br>CP6-10R-02 | 1SFA619105R1071<br>1SFA619105R1021<br>1SFA619105R1051 | 10         | 0.031        |
| ● Verde | 1 1<br>2 0        | CP6-10G-11<br>CP6-10G-20               | 1SFA619105R1072<br>1SFA619105R1022                    | 10         | 0.031        |
| ● Negro | 1 1<br>2 0<br>0 2 | CP6-10B-11<br>CP6-10B-20<br>CP6-10B-02 | 1SFA619105R1076<br>1SFA619105R1026<br>1SFA619105R1056 | 10         | 0.031        |



CP6

Dimensiones (mm, pulgadas)

1SFCL504850701

## Gama compacta

### Pilotos



CL2-502R

ISFCI51338V/0001



CL2-506G

ISFCI51339V/0001



CL2-508Y

ISFCI51340V/0001



CL2-506L

ISFCI51341V/0001



CL2-506C

ISFCI51342V/0001

#### Descripción

LED integrado, sin necesidad de bombilla.

| Color | Intensidad nominal | Tensión anti-inductiva | Longitud de onda | Luminosidad | Tipo | Código de pedido | Cant. paq. (1 ud.) | Peso kg |
|-------|--------------------|------------------------|------------------|-------------|------|------------------|--------------------|---------|
|       | mA                 | Vp                     | nm               | Ix          |      |                  |                    |         |

#### Tensión 6.3 V

|            |    |   |     |     |          |                 |    |       |
|------------|----|---|-----|-----|----------|-----------------|----|-------|
| ● Rojo     | 16 | 2 | 625 | 70  | CL2-506R | 1SFA619403R5061 | 10 | 0.016 |
| ● Verde    | 16 | 2 | 520 | 125 | CL2-506G | 1SFA619403R5062 | 10 | 0.016 |
| ● Amarillo | 16 | 2 | 590 | 75  | CL2-506Y | 1SFA619403R5063 | 10 | 0.016 |
| ● Azul     | 16 | 2 | 470 | 10  | CL2-506L | 1SFA619403R5064 | 10 | 0.016 |
| ○ Claro    | 16 | 2 | (1) | 290 | CL2-506C | 1SFA619403R5068 | 10 | 0.016 |

#### Tensión 12 V CC

|            |    |     |     |     |          |                 |    |       |
|------------|----|-----|-----|-----|----------|-----------------|----|-------|
| ● Rojo     | 16 | 2   | 625 | 110 | CL2-501R | 1SFA619403R5011 | 10 | 0.016 |
| ● Verde    | 16 | 2.5 | 520 | 165 | CL2-501G | 1SFA619403R5012 | 10 | 0.016 |
| ● Amarillo | 16 | 2.5 | 590 | 85  | CL2-501Y | 1SFA619403R5013 | 10 | 0.016 |
| ● Azul     | 16 | 2.5 | 470 | 15  | CL2-501L | 1SFA619403R5014 | 10 | 0.016 |
| ○ Claro    | 16 | 2.5 | (1) | 320 | CL2-501C | 1SFA619403R5018 | 10 | 0.016 |

#### Tensión 24 V CA/CC

|            |    |   |     |     |          |                 |    |       |
|------------|----|---|-----|-----|----------|-----------------|----|-------|
| ● Rojo     | 16 | 6 | 625 | 80  | CL2-502R | 1SFA619403R5021 | 10 | 0.016 |
| ● Verde    | 16 | 6 | 520 | 135 | CL2-502G | 1SFA619403R5022 | 10 | 0.016 |
| ● Amarillo | 16 | 6 | 590 | 55  | CL2-502Y | 1SFA619403R5023 | 10 | 0.016 |
| ● Azul     | 16 | 6 | 470 | 10  | CL2-502L | 1SFA619403R5024 | 10 | 0.016 |
| ○ Claro    | 16 | 6 | (1) | 230 | CL2-502C | 1SFA619403R5028 | 10 | 0.016 |

#### Tensión 48 a 60 V CA/CC

|            |       |   |     |     |          |                 |    |       |
|------------|-------|---|-----|-----|----------|-----------------|----|-------|
| ● Rojo     | 13-17 | 7 | 625 | 75  | CL2-507R | 1SFA619403R5071 | 10 | 0.016 |
| ● Verde    | 13-17 | 7 | 520 | 140 | CL2-507G | 1SFA619403R5072 | 10 | 0.016 |
| ● Amarillo | 13-17 | 7 | 590 | 80  | CL2-507Y | 1SFA619403R5073 | 10 | 0.016 |
| ● Azul     | 13-17 | 7 | 470 | 10  | CL2-507L | 1SFA619403R5074 | 10 | 0.016 |
| ○ Claro    | 13-17 | 7 | (1) | 260 | CL2-507C | 1SFA619403R5078 | 10 | 0.016 |

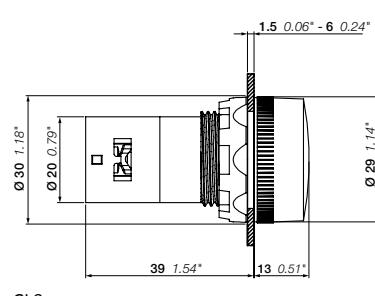
#### Tensión 110 a 130 V CA

|            |       |    |     |     |          |                 |    |       |
|------------|-------|----|-----|-----|----------|-----------------|----|-------|
| ● Rojo     | 15-17 | 20 | 625 | 85  | CL2-513R | 1SFA619403R5131 | 10 | 0.016 |
| ● Verde    | 15-17 | 20 | 520 | 90  | CL2-513G | 1SFA619403R5132 | 10 | 0.016 |
| ● Amarillo | 15-17 | 20 | 590 | 85  | CL2-513Y | 1SFA619403R5133 | 10 | 0.016 |
| ● Azul     | 15-17 | 20 | 470 | 10  | CL2-513L | 1SFA619403R5134 | 10 | 0.016 |
| ○ Claro    | 15-17 | 20 | (1) | 340 | CL2-513C | 1SFA619403R5138 | 10 | 0.016 |

#### Tensión 110 a 130 V CC

|            |     |    |     |     |          |                 |    |       |
|------------|-----|----|-----|-----|----------|-----------------|----|-------|
| ● Rojo     | 8-9 | 20 | 625 | 55  | CL2-515R | 1SFA619403R5151 | 10 | 0.016 |
| ● Verde    | 8-9 | 20 | 520 | 125 | CL2-515G | 1SFA619403R5152 | 10 | 0.016 |
| ● Amarillo | 8-9 | 20 | 590 | 50  | CL2-515Y | 1SFA619403R5153 | 10 | 0.016 |
| ● Azul     | 8-9 | 20 | 470 | 10  | CL2-515L | 1SFA619403R5154 | 10 | 0.016 |
| ○ Claro    | 8-9 | 20 | (1) | 210 | CL2-515C | 1SFA619403R5158 | 10 | 0.016 |

(1) X = 0.31, Y = 0.32



## Gama compacta

### Pilotos



CL2-502R

ISFC151338V0001



CL2-506G

ISFC151339V0001



CL2-508Y

ISFC151340V0001



CL2-506L

ISFC151341V0001



CL2-506C

ISFC151342V0001

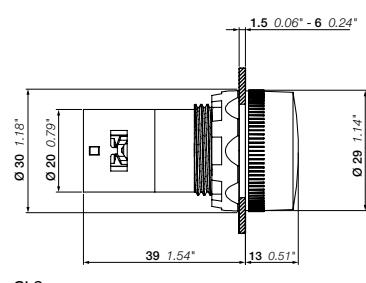
#### Descripción

LED integrado, sin necesidad de bombilla.

| Color  | Intensidad nominal | Tensión anti inductiva | Longitud de onda | Luminosidad | Tipo     | Código de pedido | Cant. paq. (1 ud.) | Peso kg |
|--|--------------------|------------------------|------------------|-------------|----------|------------------|--------------------|---------|
|  | mA                 | Vp                     | nm               | Ix          |          |                  |                    |         |
| <b>Tensión 220 V CC</b>  |                    |                        |                  |             |          |                  |                    |         |
| ● Rojo   | 6                  | 20                     | 625              | 40          | CL2-520R | 1SFA619403R5201  | 10                 | 0.016   |
| ● Verde  | 6                  | 20                     | 520              | 90          | CL2-520G | 1SFA619403R5202  | 10                 | 0.016   |
| ● Amarillo   | 6                  | 20                     | 590              | 30          | CL2-520Y | 1SFA619403R5203  | 10                 | 0.016   |
| ● Azul   | 6                  | 20                     | 470              | 5           | CL2-520L | 1SFA619403R5204  | 10                 | 0.016   |
| ○ Claro  | 6                  | 20                     | (1)              | 120         | CL2-520C | 1SFA619403R5208  | 10                 | 0.016   |
| <b>Tensión 230 V CA</b>  |                    |                        |                  |             |          |                  |                    |         |
| ● Rojo   | 17                 | 30                     | 625              | 95          | CL2-523R | 1SFA619403R5231  | 10                 | 0.016   |
| ● Verde  | 17                 | 35                     | 520              | 155         | CL2-523G | 1SFA619403R5232  | 10                 | 0.016   |
| ● Amarillo   | 17                 | 35                     | 590              | 70          | CL2-523Y | 1SFA619403R5233  | 10                 | 0.016   |
| ● Azul   | 17                 | 35                     | 470              | 10          | CL2-523L | 1SFA619403R5234  | 10                 | 0.016   |
| ○ Claro  | 17                 | 35                     | (1)              | 225         | CL2-523C | 1SFA619403R5238  | 10                 | 0.016   |
| <b>Tensión nominal 230 V CA, alta tensión anti inductiva (2)</b> |                    |                        |                  |             |          |                  |                    |         |
| ● Rojo   | 17                 | 60                     | 625              | 75          | CL2-623R | 1SFA619403R6231  | 10                 | 0.016   |
| ● Verde  | 17                 | 80                     | 520              | 70          | CL2-623G | 1SFA619403R6232  | 10                 | 0.016   |
| ● Amarillo   | 17                 | 70                     | 590              | 50          | CL2-623Y | 1SFA619403R6233  | 10                 | 0.016   |
| ● Azul   | 17                 | 80                     | 470              | 5           | CL2-623L | 1SFA619403R6234  | 10                 | 0.016   |
| ○ Claro  | 17                 | 80                     | (1)              | 155         | CL2-623C | 1SFA619403R6238  | 10                 | 0.016   |
| <b>Tensión nominal 380 - 415 V CA</b>                            |                    |                        |                  |             |          |                  |                    |         |
| ● Rojo   | 15-17              | 55                     | 625              | 85          | CL2-542R | 1SFA619403R5421  | 10                 | 0.016   |
| ● Verde  | 15-17              | 65                     | 520              | 130         | CL2-542G | 1SFA619403R5422  | 10                 | 0.016   |
| ● Amarillo   | 15-17              | 65                     | 590              | 60          | CL2-542Y | 1SFA619403R5423  | 10                 | 0.016   |
| ● Azul   | 15-17              | 65                     | 470              | 10          | CL2-542L | 1SFA619403R5424  | 10                 | 0.016   |
| ○ Claro  | 15-17              | 65                     | (1)              | 395         | CL2-542C | 1SFA619403R5428  | 10                 | 0.016   |

(1) X = 0.31, Y = 0.32

(2) Valor más alto para iluminar el LED para su uso en aplicaciones en las que existe riesgo de grandes tensiones inducidas.



CL2

Dimensiones (mm, pulgadas)

ISFC151051S0701

## Gama compacta

### Pilotos BA 9s



CL-100R

1SFC151256V0001



CL-100L

1SFC151257V0001

#### Descripción

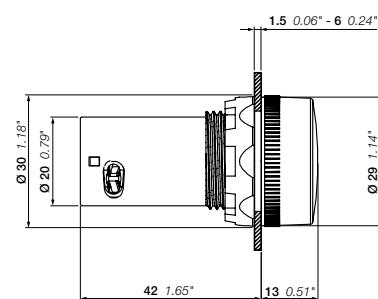
La bombilla no se incluye y se debe pedir por separado, consulte la sección Accesorios para códigos de pedido e información.

| Color      | Tipo    | Código de pedido | Cant. paq. | Peso (1 ud.) kg |
|------------|---------|------------------|------------|-----------------|
| ● Rojo     | CL-100R | 1SFA619402R1001  | 10         | 0.018           |
| ● Verde    | CL-100G | 1SFA619402R1002  | 10         | 0.018           |
| ● Amarillo | CL-100Y | 1SFA619402R1003  | 10         | 0.018           |
| ● Azul     | CL-100L | 1SFA619402R1004  | 10         | 0.018           |
| ○ Blanco   | CL-100W | 1SFA619402R1005  | 10         | 0.018           |
| ○ Claro    | CL-100C | 1SFA619402R1008  | 10         | 0.018           |

## Accesorios para la gama compacta

Bombillas LED intermitentes para pilotos CL-100

| Color   | Longitud de onda<br>nm | Tipo | Código de pedido | Cant. paq. | Peso (1 ud.) kg |
|---|------------------------|------|------------------|------------|-----------------|
| <b>Tensión nominal 24 V CC, intensidad nominal 25 mA, vida útil &gt; 50 000 h</b> |                        |      |                  |            |                 |
| ● Rojo  | 630                    | –    | 4950512-1        | 20         | 0.005           |
| ● Verde   | 565                    | –    | 4950512-2        | 20         | 0.005           |
| ● Amarillo  | 585                    | –    | 4950512-3        | 20         | 0.005           |



CL100

Dimensiones (mm, pulgadas)

1SFC151051S0701

## Accesorios para la gama compacta

Bombillas LED para pilotos CL-100



ISFC151178FO0001

KA2...

| Color   | Longitud de onda nm | Luminosidad mdc | Tipo     | Código de pedido | Cant. paq. | Peso (1 ud.) kg |
|---|---------------------|-----------------|----------|------------------|------------|-----------------|
| <b>Tensión nominal 12 V CC, intensidad nominal 15 mA, vida útil &gt; 50 000 h</b>         |                     |                 |          |                  |            |                 |
| ● Rojo  | 630                 | 250             | KA2-2011 | 1SFA616921R2011  | 20         | 0.005           |
| ● Verde   | 525                 | 1000            | KA2-2012 | 1SFA616921R2012  | 20         | 0.005           |
| ● Amarillo  | 592                 | 250             | KA2-2013 | 1SFA616921R2013  | 20         | 0.005           |
| ● Azul  | 470                 | 450             | KA2-2014 | 1SFA616921R2014  | 20         | 0.005           |
| ○ Blanco  | (1)                 | 600             | KA2-2015 | 1SFA616921R2015  | 20         | 0.005           |
| <b>Tensión nominal 24 V (CA)/CC, intensidad nominal 15 mA, vida útil &gt; 50 000 h</b>    |                     |                 |          |                  |            |                 |
| ● Rojo  | 630                 | 250             | KA2-2021 | 1SFA616921R2021  | 20         | 0.005           |
| ● Verde   | 525                 | 800             | KA2-2022 | 1SFA616921R2022  | 20         | 0.005           |
| ● Amarillo  | 592                 | 250             | KA2-2023 | 1SFA616921R2023  | 20         | 0.005           |
| ● Azul  | 470                 | 400             | KA2-2024 | 1SFA616921R2024  | 20         | 0.005           |
| ○ Blanco  | (1)                 | 500             | KA2-2025 | 1SFA616921R2025  | 20         | 0.005           |
| <b>Tensión nominal 36 V (CA)/CC, intensidad nominal 12 mA, vida útil &gt; 50 000 h</b>    |                     |                 |          |                  |            |                 |
| ● Rojo  | 630                 | 200             | KA2-2031 | 1SFA616921R2031  | 20         | 0.005           |
| ● Verde   | 525                 | 2000            | KA2-2032 | 1SFA616921R2032  | 20         | 0.005           |
| ● Amarillo  | 592                 | 200             | KA2-2033 | 1SFA616921R2033  | 20         | 0.005           |
| ● Azul  | 470                 | 750             | KA2-2034 | 1SFA616921R2034  | 20         | 0.005           |
| ○ Blanco  | (1)                 | 1400            | KA2-2035 | 1SFA616921R2035  | 20         | 0.005           |
| <b>Tensión nominal 48 V (CA)/CC, intensidad nominal 12 mA, vida útil &gt; 50 000 h</b>    |                     |                 |          |                  |            |                 |
| ● Rojo  | 630                 | 200             | KA2-2041 | 1SFA616921R2041  | 20         | 0.005           |
| ● Verde   | 525                 | 1700            | KA2-2042 | 1SFA616921R2042  | 20         | 0.005           |
| ● Amarillo  | 592                 | 240             | KA2-2043 | 1SFA616921R2043  | 20         | 0.005           |
| ● Azul  | 470                 | 720             | KA2-2044 | 1SFA616921R2044  | 20         | 0.005           |
| ○ Blanco  | (1)                 | 1200            | KA2-2045 | 1SFA616921R2045  | 20         | 0.005           |
| <b>Tensión nominal 60 V (CA)/CC, intensidad nominal 10 mA, vida útil &gt; 50 000 h</b>    |                     |                 |          |                  |            |                 |
| ● Rojo  | 630                 | 160             | KA2-2051 | 1SFA616921R2051  | 20         | 0.005           |
| ● Verde   | 525                 | 1400            | KA2-2052 | 1SFA616921R2052  | 20         | 0.005           |
| ● Amarillo  | 592                 | 200             | KA2-2053 | 1SFA616921R2053  | 20         | 0.005           |
| ● Azul  | 470                 | 600             | KA2-2054 | 1SFA616921R2054  | 20         | 0.005           |
| ○ Blanco  | (1)                 | 1000            | KA2-2055 | 1SFA616921R2055  | 20         | 0.005           |
| <b>Tensión nominal 110 - 130 V CA, intensidad nominal 4-6 mA, vida útil 25 000 h</b>      |                     |                 |          |                  |            |                 |
| ● Rojo  | 630                 | 60-100          | KA2-2131 | 1SFA616921R2131  | 20         | 0.005           |
| ● Verde   | 525                 | 500-850         | KA2-2132 | 1SFA616921R2132  | 20         | 0.005           |
| ● Amarillo  | 592                 | 70-120          | KA2-2133 | 1SFA616921R2133  | 20         | 0.005           |
| ● Azul  | 470                 | 220-350         | KA2-2134 | 1SFA616921R2134  | 20         | 0.005           |
| ○ Blanco  | (1)                 | 350-600         | KA2-2135 | 1SFA616921R2135  | 20         | 0.005           |
| <b>Tensión nominal 110 - 130 V (CA)/CC, intensidad nominal 4-6 mA, vida útil 25 000 h</b> |                     |                 |          |                  |            |                 |
| ● Rojo  | 630                 | 60              | KA2-2141 | 1SFA616921R2141  | 20         | 0.005           |
| ● Verde   | 525                 | 500             | KA2-2142 | 1SFA616921R2142  | 20         | 0.005           |
| ● Amarillo  | 592                 | 70              | KA2-2143 | 1SFA616921R2143  | 20         | 0.005           |
| ● Azul  | 470                 | 220             | KA2-2144 | 1SFA616921R2144  | 20         | 0.005           |
| ○ Blanco  | (1)                 | 350             | KA2-2145 | 1SFA616921R2145  | 20         | 0.005           |
| <b>Tensión nominal 230 V CA, intensidad nominal 4 mA, vida útil 25 000 h</b>              |                     |                 |          |                  |            |                 |
| ● Rojo  | 630                 | 60              | KA2-2221 | 1SFA616921R2221  | 20         | 0.005           |
| ● Verde   | 525                 | 500             | KA2-2222 | 1SFA616921R2222  | 20         | 0.005           |
| ● Amarillo  | 592                 | 70              | KA2-2223 | 1SFA616921R2223  | 20         | 0.005           |
| ● Azul  | 470                 | 220             | KA2-2224 | 1SFA616921R2224  | 20         | 0.005           |
| ○ Blanco  | (1)                 | 350             | KA2-2225 | 1SFA616921R2225  | 20         | 0.005           |
| <b>Tensión nominal 230 V (CA)/CC, intensidad nominal 4 mA, vida útil 25 000 h</b>         |                     |                 |          |                  |            |                 |
| ● Rojo  | 630                 | 60              | KA2-2231 | 1SFA616921R2231  | 20         | 0.005           |
| ● Verde   | 525                 | 500             | KA2-2232 | 1SFA616921R2232  | 20         | 0.005           |
| ● Amarillo  | 592                 | 70              | KA2-2233 | 1SFA616921R2233  | 20         | 0.005           |
| ● Azul  | 470                 | 220             | KA2-2234 | 1SFA616921R2234  | 20         | 0.005           |
| ○ Blanco  | (1)                 | 350             | KA2-2235 | 1SFA616921R2235  | 20         | 0.005           |

Nota: Elija el mismo color para el LED que para la tapa de la lámpara. (1) X=0.31, Y=0.32 según el diagrama de cromatricidad ICI.

## Gama compacta

Selectores no luminosos - 2 posiciones



C2SS1-10B-10

ISFC15125V0001



C2SS3-30B-10

ISFC15135V0001

### Actuación de contactos

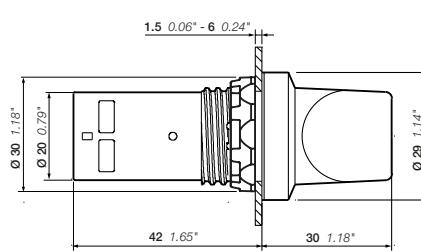
Selector de 2 posiciones  
Contactos incluidos,

|             | B  | C  | A  | C  | accionados en posición C |
|-------------|----|----|----|----|--------------------------|
|             | NC | NA | NC | NA |                          |
| 1 NA        | -  | 1  | -  | -  |                          |
| 2 NA        | -  | 1  | -  | 1  |                          |
| 1 NC        | 1  | -  | -  | -  |                          |
| 2 NC        | 1  | -  | 1  | -  |                          |
| 1 NA + 1 NC | -  | 1  | 1  | -  |                          |

### Descripción

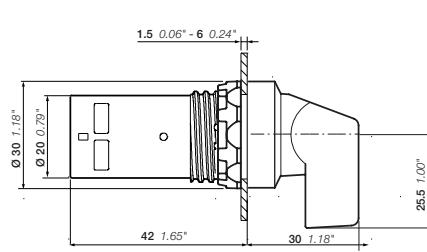
Todos los selectores compactos son de color negro.

| Descripción         | Embellecedor | Contactos | Tipo         | Código de pedido | Cant. paq. | Peso (1 ud.) |  |
|---------------------|--------------|-----------|--------------|------------------|------------|--------------|--|
|                     |              |           |              |                  |            |              |  |
| <b>Maneta corta</b> |              |           |              |                  |            |              |  |
|                     |              |           |              |                  |            |              |  |
| Plástico negro      |              | 1 0       | C2SS1-10B-10 | 1SFA619200R1016  | 10         | 0.02         |  |
|                     |              | 0 1       | C2SS1-10B-01 | 1SFA619200R1046  | 10         | 0.02         |  |
|                     |              | 1 1       | C2SS1-10B-11 | 1SFA619200R1076  | 10         | 0.024        |  |
|                     |              | 2 0       | C2SS1-10B-20 | 1SFA619200R1026  | 10         | 0.024        |  |
| Metálico cromado    |              | 1 0       | C2SS1-30B-10 | 1SFA619200R3016  | 10         | 0.029        |  |
|                     |              | 0 1       | C2SS1-30B-01 | 1SFA619200R3046  | 10         | 0.029        |  |
|                     |              | 1 1       | C2SS1-30B-11 | 1SFA619200R3076  | 10         | 0.032        |  |
|                     |              | 2 0       | C2SS1-30B-20 | 1SFA619200R3026  | 10         | 0.032        |  |
|                     |              |           |              |                  |            |              |  |
| Plástico negro      |              | 1 0       | C2SS2-10B-10 | 1SFA619201R1016  | 10         | 0.02         |  |
|                     |              | 0 1       | C2SS2-10B-01 | 1SFA619201R1046  | 10         | 0.02         |  |
|                     |              | 1 1       | C2SS2-10B-11 | 1SFA619201R1076  | 10         | 0.024        |  |
|                     |              | 2 0       | C2SS2-10B-20 | 1SFA619201R1026  | 10         | 0.024        |  |
| Metálico cromado    |              | 1 0       | C2SS2-30B-10 | 1SFA619201R3016  | 10         | 0.029        |  |
|                     |              | 0 1       | C2SS2-30B-01 | 1SFA619201R3046  | 10         | 0.029        |  |
|                     |              | 1 1       | C2SS2-30B-11 | 1SFA619201R3076  | 10         | 0.032        |  |
|                     |              | 2 0       | C2SS2-30B-20 | 1SFA619201R3026  | 10         | 0.032        |  |
|                     |              |           |              |                  |            |              |  |
| Plástico negro      |              | 1 0       | C2SS3-10B-10 | 1SFA619202R1016  | 10         | 0.02         |  |
|                     |              | 0 1       | C2SS3-10B-01 | 1SFA619202R1046  | 10         | 0.02         |  |
|                     |              | 1 1       | C2SS3-10B-11 | 1SFA619202R1076  | 10         | 0.024        |  |
|                     |              | 2 0       | C2SS3-10B-20 | 1SFA619202R1026  | 10         | 0.024        |  |
| Metálico cromado    |              | 1 0       | C2SS3-30B-10 | 1SFA619202R3016  | 10         | 0.029        |  |
|                     |              | 1 1       | C2SS3-30B-11 | 1SFA619202R3076  | 10         | 0.032        |  |
|                     |              | 2 0       | C2SS3-30B-20 | 1SFA619202R3026  | 10         | 0.032        |  |
|                     |              |           |              |                  |            |              |  |
| <b>Maneta larga</b> |              |           |              |                  |            |              |  |
|                     |              |           |              |                  |            |              |  |
| Metálico cromado    |              | 1 0       | C2SS5-30B-10 | 1SFA619204R3016  | 10         | 0.029        |  |
|                     |              | 1 1       | C2SS5-30B-11 | 1SFA619204R3076  | 10         | 0.032        |  |



C2SS, manija corta

Dimensiones (mm, pulgadas)



C2SS, manija larga

ISFC15104650701

## Gama compacta

Selectores no luminosos - 3 posiciones



C3SS1-10B-11

ISFC151255V00001



C3SS2-30B-20

ISFC151359V00001

### Descripción

Todos los actuadores de los selectores compactos son de color negro.

| Descripción | Embellecededor | Contactos Tipo | Código de pedido | Cant. paq. (1 ud.) | Peso kg |
|-------------|----------------|----------------|------------------|--------------------|---------|
|             |                |                |                  |                    |         |

### Manija corta

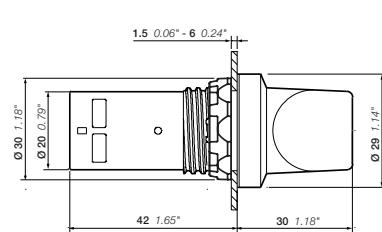
|           |                  |     |                              |    |       |
|-----------|------------------|-----|------------------------------|----|-------|
| <br>A B C | Plástico negro   | 1 1 | C3SS1-10B-11 1SFA619210R1076 | 10 | 0.024 |
|           | Metálico cromado | 2 0 | C3SS1-10B-20 1SFA619210R1026 | 10 | 0.024 |
| <br>A B C | Plástico negro   | 1 1 | C3SS1-30B-11 1SFA619210R3076 | 10 | 0.032 |
|           | Metálico cromado | 2 0 | C3SS1-30B-20 1SFA619210R3026 | 10 | 0.032 |
| <br>A B C | Plástico negro   | 1 1 | C3SS2-10B-11 1SFA619211R1076 | 10 | 0.024 |
|           | Metálico cromado | 2 0 | C3SS2-10B-20 1SFA619211R1026 | 10 | 0.024 |
| <br>A B C | Plástico negro   | 1 1 | C3SS2-30B-11 1SFA619211R3076 | 10 | 0.032 |
|           | Metálico cromado | 2 0 | C3SS2-30B-20 1SFA619211R3026 | 10 | 0.032 |
| <br>A B C | Plástico negro   | 1 1 | C3SS3-10B-11 1SFA619212R1076 | 10 | 0.024 |
|           | Metálico cromado | 2 0 | C3SS3-10B-20 1SFA619212R1026 | 10 | 0.024 |
| <br>A B C | Plástico negro   | 1 1 | C3SS3-30B-11 1SFA619212R3076 | 10 | 0.032 |
|           | Metálico cromado | 2 0 | C3SS3-30B-20 1SFA619212R3026 | 10 | 0.032 |
| <br>A B C | Plástico negro   | 1 1 | C3SS7-10B-11 1SFA619216R1076 | 10 | 0.024 |
|           | Metálico cromado | 2 0 | C3SS7-10B-20 1SFA619216R1026 | 10 | 0.024 |

### Manija larga

|           |                  |     |                              |    |       |
|-----------|------------------|-----|------------------------------|----|-------|
| <br>A B C | Plástico negro   | 1 1 | C3SS4-10B-11 1SFA619213R1076 | 10 | 0.024 |
|           | Metálico cromado | 2 0 | C3SS4-10B-20 1SFA619213R1026 | 10 | 0.024 |
| <br>A B C | Plástico negro   | 1 1 | C3SS5-10B-11 1SFA619214R1076 | 10 | 0.024 |
|           | Metálico cromado | 2 0 | C3SS5-10B-20 1SFA619214R1026 | 10 | 0.024 |
| <br>A B C | Plástico negro   | 1 1 | C3SS5-30B-11 1SFA619214R3076 | 10 | 0.032 |
|           | Metálico cromado | 2 0 | C3SS5-30B-20 1SFA619214R3026 | 10 | 0.032 |
| <br>A B C | Plástico negro   | 2 0 | C3SS6-10B-20 1SFA619215R1026 | 10 | 0.024 |
|           | Plástico negro   | 2 0 | C3SS8-10B-20 1SFA619217R1026 | 10 | 0.024 |

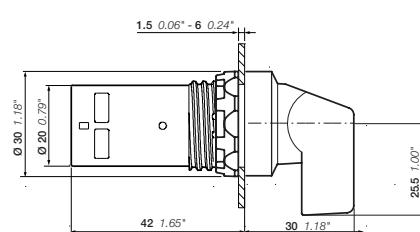
### Actuación de contactos

|                          |                      |                         |
|--------------------------|----------------------|-------------------------|
| Selector de 3 posiciones | Controles incluidos, | accionados en posición: |
| A B C                    | A B C                |                         |
| NC NA                    | NC NA                |                         |
| 21 23                    | 11 13                |                         |
| 22 24                    | 12 14                |                         |
| 2 NA                     | — 1                  | — 1                     |
| 2 NC                     | 1 —                  | 1 —                     |
| 1 N/A + 1 NC             | 1 —                  | — 1                     |



C3SS, manija corta

Dimensiones (mm, pulgadas)



C3SS, manija larga

ISFC15104750701

## Gama compacta

### Zumbadores



CB1-600G

1SFC151157V0001



CB1-610R

1SFC151159V0001



CB1-610Y

1SFC151158V0001

#### Iluminado

| Color                                 | Salida de luz y sonido | Intensidad nominal mA | Luminosidad mcd | Tipo     | Código de pedido | Cant. paq. | Peso (1 ud.) kg |
|---------------------------------------|------------------------|-----------------------|-----------------|----------|------------------|------------|-----------------|
| <b>Tensión nominal 24 V CA/CC</b>     |                        |                       |                 |          |                  |            |                 |
| ● Verde                               | Continuo               | 48                    | 126             | CB1-600G | 1SFA619600R6002  | 10         | 0.021           |
| ● Rojo                                | Pulsación              | 53                    | 60              | CB1-610R | 1SFA619600R6101  | 10         | 0.021           |
| ● Amarillo                            | Pulsación              | 53                    | 60              | CB1-610Y | 1SFA619600R6103  | 10         | 0.021           |
| <b>Tensión nominal 110 - 130 V CA</b> |                        |                       |                 |          |                  |            |                 |
| ● Verde                               | Continuo               | 55                    | 126             | CB1-601G | 1SFA619600R6012  | 10         | 0.021           |
| ● Rojo                                | Pulsación              | 70                    | 60              | CB1-611R | 1SFA619600R6111  | 10         | 0.021           |
| ● Amarillo                            | Pulsación              | 70                    | 60              | CB1-611Y | 1SFA619600R6113  | 10         | 0.021           |
| <b>Tensión nominal 110 a 130 V CC</b> |                        |                       |                 |          |                  |            |                 |
| ● Verde                               | Continuo               | 15                    | 126             | CB1-602G | 1SFA619600R6022  | 10         | 0.021           |
| ● Rojo                                | Pulsación              | 15                    | 60              | CB1-612R | 1SFA619600R6121  | 10         | 0.021           |
| ● Amarillo                            | Pulsación              | 15                    | 60              | CB1-612Y | 1SFA619600R6123  | 10         | 0.021           |
| <b>Tensión nominal 230 V CA</b>       |                        |                       |                 |          |                  |            |                 |
| ● Verde                               | Continuo               | 55                    | 126             | CB1-603G | 1SFA619600R6032  | 10         | 0.021           |
| ● Rojo                                | Pulsación              | 70                    | 60              | CB1-613R | 1SFA619600R6131  | 10         | 0.021           |
| ● Amarillo                            | Pulsación              | 70                    | 60              | CB1-613Y | 1SFA619600R6133  | 10         | 0.021           |

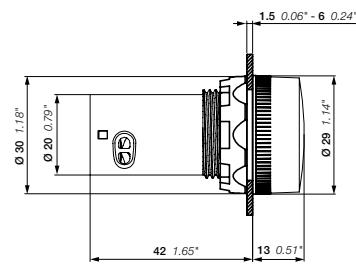


CB1-620B

1SFC151160V0001

#### No iluminado

| Color                                 | Salida de luz y sonido | Intensidad nominal mA | Luminosidad mcd | Tipo     | Código de pedido | Cant. paq. | Peso (1 ud.) kg |
|---------------------------------------|------------------------|-----------------------|-----------------|----------|------------------|------------|-----------------|
| <b>Tensión nominal 110 - 130 V CA</b> |                        |                       |                 |          |                  |            |                 |
| ● Negro                               | Continuo               | 40                    | -               | CB1-620B | 1SFA619600R6206  | 10         | 0.021           |
| ● Negro                               | Pulsación              | 48                    | -               | CB1-630B | 1SFA619600R6306  | 10         | 0.021           |
| <b>Tensión nominal 110 a 130 V CC</b> |                        |                       |                 |          |                  |            |                 |
| ● Negro                               | Continuo               | 40                    | -               | CB1-621B | 1SFA619600R6216  | 10         | 0.021           |
| ● Negro                               | Pulsación              | 48                    | -               | CB1-631B | 1SFA619600R6316  | 10         | 0.021           |
| <b>Tensión nominal 230 V CA</b>       |                        |                       |                 |          |                  |            |                 |
| ● Negro                               | Continuo               | 15                    | -               | CB1-622B | 1SFA619600R6226  | 10         | 0.021           |
| ● Negro                               | Pulsación              | 15                    | -               | CB1-632B | 1SFA619600R6326  | 10         | 0.021           |
| <b>Tensión nominal 230 V CA</b>       |                        |                       |                 |          |                  |            |                 |
| ● Negro                               | Continuo               | 40                    | -               | CB1-623B | 1SFA619600R6236  | 10         | 0.021           |
| ● Negro                               | Pulsación              | 40                    | -               | CB1-633B | 1SFA619600R6336  | 10         | 0.021           |



CB1

Dimensiones (mm, pulgadas)

1SFC15104950701

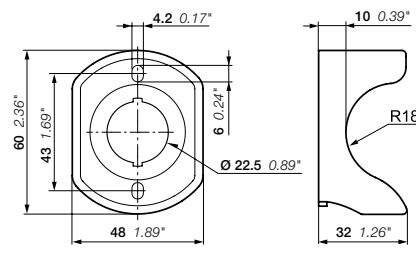
## Gama compacta

### Accesorios



| Descripción  | Embellecedor / color   | Tipo              | Código de pedido                | Cant. paq. (1 ud.) | Peso kg     |
|--|------------------------|-------------------|---------------------------------|--------------------|-------------|
| <b>Adaptadores de 30 mm para el operador de 22 mm (1.5 - 4 mm de grosor de panel)</b>                  |                        |                   |                                 |                    |             |
| Pulsadores de parada de emergencia, Plástico negro MPM   | Plástico negro         | KA1-8027 KA1-8028 | ISFA616920R8027 ISFA616920R8028 | 1 1                | 0.007 0.021 |
| Pulsadores, interruptores selectores, Pilotos, potenciómetros, pulsadores de parada de emergencia, MPE | Plástico negro         | KA1-8029          | ISFA616920R8029                 | 1                  | 0.010       |
| Pulsadores modulares empotados   | Metálico cromado       | KA1-8073          | ISFA616920R8073                 | 1                  | 0.050       |
| Interruptores selectores empotados   | Metálico cromado       | MA1-8074          | ISFA611920R8074                 | 1                  | 0.050       |
| <b>Membrana protectora, silicona</b>   |                        |                   |                                 |                    |             |
| Pulsador modular   |                        | MA1-8052          | ISFA611920R8052                 | 10                 | 0.002       |
| Pulsador extendido   |                        | MA1-8002          | ISFA611920R8002                 | 10                 | 0.002       |
| <b>Anillo protector</b>  |                        |                   |                                 |                    |             |
| Para prevenir el manejo accidental. No se puede utilizar junto con el soporte de placa de leyenda      |                        |                   |                                 |                    |             |
| Pulsadores modulares y extendidos  | Plástico transparente  | -                 | SK615512-1                      | 10                 | 0.002       |
| Pulsadores modulares   | Metal y plástico negro | KA1-8010          | ISFA616920R8010                 | 10                 | 0.008       |
| <b>Embellecedor</b>  |                        |                   |                                 |                    |             |
| Pulsadores   | Plástico negro         | KA1-8022          | ISFA616920R8022                 | 10                 | 0.002       |
|  | Plástico cromado       | KA1-8020          | ISFA616920R8020                 | 10                 | 0.002       |
|  | Metálico cromado       | KA1-8021          | ISFA616920R8021                 | 10                 | 0.015       |
| Selectores   | Plástico negro         | CA1-8077          | ISFA619920R8077                 | 10                 | 0.002       |
|  | Metálico cromado       | CA1-8078          | ISFA619920R8078                 | 10                 | 0.010       |
| <b>Embellecedor cuadrado</b>   |                        |                   |                                 |                    |             |
| Plástico negro   | -                      |                   | SK616016-2                      | 10                 | 0.001       |
| <b>Cubierta bloqueable</b>   |                        |                   |                                 |                    |             |
| Pulsadores, interruptores selectores   | Plástico               | MA1-8153          | ISFA611920R8153                 | 10                 | 0.023       |
| Parada de emergencia 30 mm   | Metal                  | -                 | SK615502-D                      | 1                  | 0.080       |
| <b>Protección táctil</b>   |                        |                   |                                 |                    |             |
| Protección táctil  |                        | MA1-8152          | ISFA611920R8152                 | 10                 | 0.023       |
| <b>Protector para paro de emergencia antigiro, ranura para candado y drenaje de agua</b>               |                        |                   |                                 |                    |             |
| Parada de emergencia, parada de máquina 40 mm  | ● Amarillo             | CA1-8053          | ISFA619920R8053                 | 10                 | 0.016       |
|  | ● Gris                 | CA1-8054          | ISFA619920R8054                 | 10                 | 0.016       |
| <b>Herramienta para cambio de lámpara</b>  |                        |                   |                                 |                    |             |
| Herramienta para cambio de lámpara   |                        | KA1-8072          | ISFA616920R8072                 | 1                  | 0.002       |

Nota: El adaptador de carril DIN se debe utilizar con 2 bloques de contactos para montaje posterior tipo MCB...B.



CA1

Dimensiones (mm, pulgadas)

## Gama compacta

### Accesorios



1SFC151276V0001

CA1-8080



1SFC151455F0001

MDB-2



1SFC151275V0001

MA1-8015



1SFC151004F0001

MA1-8149



1SFC151335V0001

MA1-8019

| Descripción  | Embelecedor / color | Tipo     | Código de pedido | Cant. paq. (1 ud.) | Peso kg |
|--|---------------------|----------|------------------|--------------------|---------|
| <b>Adaptador de carril DIN</b>   |                     |          |                  |                    |         |
| Adaptador de carril DIN  |                     | CA1-8054 | 1SFA619920R8054  | 1                  | 0.020   |
| Adaptador de carril DIN con 2 bloques falsos   |                     | CA1-8080 | 1SFA619920R8080  | 1                  | 0.028   |
| Bloque falso   |                     | MDB-2    | 1SFA611630R1002  | 10                 | 0.003   |
| Nota: El adaptador de carril DIN se debe utilizar con 2 bloques de contactos para montaje posterior tipo MCB...B.                            |                     |          |                  |                    |         |
| Nota: Los bloques falsos se utilizan cuando se usa un único bloque de contactos o pulsantería compacta junto con el adaptador de carril DIN. |                     |          |                  |                    |         |
| <b>Herramientas de montaje</b>   |                     |          |                  |                    |         |
| Para apretar la tuerca de bloqueo  |                     |          |                  |                    |         |
| Plástico / Herramienta de montaje manual   |                     | MA1-8015 | 1SFA611920R8015  | 1                  | 0.021   |
| Metal / Herramienta de montaje para herramienta eléctrica  |                     | MA1-8149 | 1SFA611920R8149  | 1                  | 0.155   |
| <b>Llave adicional</b>   |                     |          |                  |                    |         |
| Código de llave 455  |                     |          | SK616021-71      | 10                 | 0.007   |
| Código de llave 421  |                     |          | SK616021-72      | 10                 | 0.007   |
| Código de llave 3433-E   |                     |          | SK616021-73      | 10                 | 0.007   |
| Tuerca de bloqueo  |                     | MA1-8019 | 1SFA611920R8019  | 10                 | 0.001   |

## Gama compacta

### Datos técnicos

#### Normas y homologaciones

|                    |  |
|--------------------|--|
| IEC / EN 60947-1   | Aparatamiento de baja tensión. Parte 1: Reglas generales   |
| IEC / EN 60947-5-1 | Aparatamiento de baja tensión. Parte 5-1: Aparatos y elementos de conmutación para circuitos de mando. Aparatos electromecánicos para circuitos de mando                         |
| IEC / EN 60947-5-5 | Aparatamiento de baja tensión. Parte 5-5: Aparatos y elementos de conmutación para circuitos de mando. Dispositivos de parada de emergencia eléctrica con enclavamiento mecánico |
| IEC / EN 60073     | Principios básicos y de seguridad para la interfaz hombre-máquina, el marcado y la identificación. Principios de codificación para los indicadores y los actuadores.             |
| IEC / EN 60529     | Grados de protección ofrecidos por las envolventes (código IP)   |
| EN 50013           | Aparatamiento industrial de baja tensión. Marcado de bornes y número característico para auxiliares de mando definidos   |
| DIN 40050-9        | Vehículos de carretera, grados de protección (código IP), protección frente a objetos extraños, agua y el contacto, equipos eléctricos   |
| UL 508             | Equipos de control industrial  |
| CSA C22.2 N.º 14   | Equipos de control industrial  |

#### Datos ambientales

##### Grados de protección

| Actuadores            | IEC/EN DIN         | UL/CSA                    |
|-----------------------|--------------------|---------------------------|
| Pulsador              | IP66, IP67 e IP69K | Tipo 1, 3R, 4, 4X, 12, 13 |
| Selectores            | IP66, IP67 e IP69K | Tipo 1, 3R, 4, 4X, 12, 13 |
| Zumbador              | IP66, IP67 e IP69K | Tipo 1, 3R, 4, 4X, 12, 13 |
| Ambientes extremos    | IP66, IP67 e IP69K | Tipo 1, 3R, 4, 4X, 12, 13 |
| Pilotos               | IP66, IP67 e IP69K | Tipo 1, 3R, 4, 4X, 12, 13 |
| Paradas de emergencia | IP66, IP67 e IP69K | Tipo 1, 3R, 4, 4X, 12, 13 |
| Bornes                | IP20               | -                         |

#### Temperatura

|  |              |
|--|--------------|
| Temperatura ambiente durante el funcionamiento | -25 a +70 °C |
| Temperatura de almacenamiento                  | -40 a +85 °C |

#### Datos técnicos

##### Conexiones de cables

| Operador             | Terminal de cable  |
|----------------------|--|
| Pulsador             | Más/menos Pozidriv n.º 2   |
| Selector             | Área conectable:<br>mín. 1 x 0.5 mm <sup>2</sup> / 1 x AWG 22  |
| Parada de emergencia | máx. 2 x 1.5 mm <sup>2</sup> / 2 x AWG 14  |
| Piloto               | Área conectable:<br>mín. 1 x 0.5 mm <sup>2</sup> / 1 x AWG 20<br>máx. 2 x 2.5 mm <sup>2</sup> / 2 x AWG 14 |

##### Par de apriete

|                                |                         |
|--------------------------------|-------------------------|
| Tuerca de bloqueo del operador | Mín. 2 Nm / Máx. 2.3 Nm |
| Terminales de cable M3         | 0.8 Nm                  |
| Terminales de cable M3.5       | 0.9 Nm                  |

##### Protección contra cortocircuitos

|                     |         |
|---------------------|---------|
| Fusible máx. a 1 kA | gG 10 A |
|---------------------|---------|

##### Durabilidad mecánica

|  |                     |
|--|---------------------|
| Pulsadores, interruptores selectores, ambientes extremos | 500 000 operaciones |
| Parada de emergencia pulsador                            | 50 000 operaciones  |

##### Productos LED (pilotos, pulsadores iluminados)

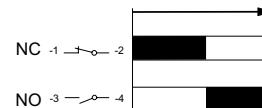
|   |   |
|---|---|
| La vida útil del LED se traduce en el número de horas de funcionamiento hasta que el brillo se reduce a un 50 %. Vida útil de 50 000 horas funcionando a 25 °C, 40~70 % de humedad relativa | x=0.31 Y=0.32 representa la posición del color en el diagrama de cromaticidad ICI           |
| Color del LED blanco  | x=0.31 Y=0.32 representa la posición del color en el diagrama de cromaticidad ICI           |
| Tolerancia de tensión en LED  | -30 a +10 % de tensión es aceptable sin que la vida útil se vea afectada                    |
| Picos de tensión de los LED   | Picos de tensión de hasta 1000 V. Los picos actuales llegan a 500 mA durante unos pocos ms. |
| Luz encendida   | Todos los LED integrados tienen una función integrada para detener las corrientes de fuga.  |

##### Contactos de reposo-trabajo

|          |                                    |
|----------|------------------------------------|
| Pulsador | Pulsadores de parada de emergencia |
|----------|------------------------------------|



■ = CContacto cerrado



■ = CContacto cerrado

## Gama compacta

### Datos técnicos

#### Material

|  |   |
|--|---|
| Sin sustancias que dañen a la capa de ozono en los productos que lo componen.                |   |
| Toda la parte frontal de los componentes de plástico del panel están hechos de policarbonato |   |
| Policarbonato (PC)   | Alta resistencia a los impactos, buena resistencia en exterior. Resistencia a productos químicos (consulte la siguiente tabla)                      |
| Polisulfona (PSU)  | Capaz de soportar altas temperaturas, ácidos, soluciones básicas, compuestos alcalinos, aceites y alcoholes   |
| Poliamida (PA)   | Capaz de soportar altas temperaturas, hidrocarburos aromáticos, clorados y alifáticos, ésteres, aldehídos y cetonas, alcoholes y soluciones básicas |
| PBT  | Capaz de soportar altas temperaturas, hidrocarburos aromáticos y alifáticos, ácidos, soluciones básicas, alcoholes, grasas y aceites                |
| Cinc   | Buena resistencia a la corrosión en atmósferas terrestres, marinas e industriales   |
| Aleación ligera  | Buena resistencia a la corrosión en atmósferas terrestres, marinas e industriales   |

#### Resistencia a productos químicos para policarbonato

| Categoría química            | Efectos  |        |
|------------------------------|--|--------|
| Ácidos                       | Sin efecto significativo en las condiciones más típicas de concentración y temperatura   |        |
| Alcoholes y álcalis          | Compatible generalmente en bajas concentraciones y a temperatura ambiente. Concentraciones más elevadas y temperaturas más altas pueden provocar que la descomposición genere marcas y otros desperfectos. |        |
| Hidrocarburos alifáticos     | Generalmente compatibles   |        |
| Aminas                       | Cristalización de la superficie y ataque químico   | Evitar |
| Hidrocarburos aromáticos     | Disolventes parciales y agentes de agrietamiento por estrés intenso (p. ej., xileno o tolueno).  | Evitar |
| Detergentes y limpiadores    | Las soluciones jabonosas suaves generalmente son compatibles. Se deben evitar materiales alcalinos fuertes   |        |
| Ésteres                      | Provocan cristalización intensa. Disolventes parciales.  | Evitar |
| Grasas y aceites             | Los tipos de petróleo puro generalmente son compatibles. Muchos de los aditivos que se usan con ellos no lo son  |        |
| Halógenos, hidrocarburos     | Disolventes  | Evitar |
| Cetonas                      | Provocan cristalización intensa y agrietamiento por estrés. Disolventes parciales.   | Evitar |
| Grasas y aceites de silicona | Generalmente compatibles hasta 85 °C   |        |

Nota: El grado de protección especificado es para un operador montado en un panel. Si se montan otros elementos entre medias, asegúrese de que estén correctamente sellados.

#### Datos eléctricos

##### Contactos

#### Capacidades según IEC 60947-5-1

|  |                                 |
|--|---------------------------------|
| Tensión nominal de aislamiento, Ui   | 300 V                           |
| Intensidad térmica nominal, $I_{th}$   | 5 A                             |
| Corriente de funcionamiento nominal, es decir, Categoría de utilización CA 15, | a: 240 V 1 A                    |
| Corriente de funcionamiento nominal, es decir, categoría de utilización CC 13, | a: 24 V 0.3 A<br>a: 125 V 0.2 A |
| Tensión nominal de resistencia a impulsos                                      | Uimp 6 kV                       |
| Grado de contaminación   | 3                               |

| Capacidades según UL, CSA, NEMA     | C300 AC   | R300 DC |
|-------------------------------------|---|---------|
| Tensión nominal de aislamiento      | 250 V   | 250 V   |
| Intensidad térmica nominal          | 2.5 A   | 1 A     |
| Corriente de funcionamiento nominal | a: 120 V 1.5 A<br>a: 125 V 0.22 A<br>a: 240 V 0.75 A<br>a: 250 V 0.11 A |         |

#### Protección contra cortocircuitos

Fusible máx. a 1 kA gG 10 A

#### Zumbador

Protección contra cortocircuitos

Fusible máx. a 1 kA gG 10 A

#### Capacidades según IEC 60947-5-1

|  |                 |
|--|-----------------|
| Tensión nominal de aislamiento, Ui             | 300 V           |
| Tensión nominal de resistencia a impulsos Uimp | 4 kV            |
| Frecuencia                                     | 50-60 Hz        |
| dB de nivel de sonido                          | ≥ 80 dB / 10 cm |
| Vida útil del producto                         | >5000 horas     |

#### Salida de señal

Frecuencia pulsante de salida de luz y sonido 2 Hz

## Gama compacta

### Datos técnicos

#### Pulsadores luminosos CP

| Color                                    | Corriente  |      | Luminosidad de tapa modular |      | Luminosidad de tapa extendida |      | Tensión pico anti inductiva | Longitud de onda principal | Temperatura de color |
|--|------------|------|-----------------------------|------|-------------------------------|------|-----------------------------|----------------------------|----------------------|
|  | mA<br>Mín. | Máx. | Ix<br>Mín.                  | Máx. | Ix<br>Mín.                    | Máx. |                             |                            |                      |
| <b>Tensión nominal 24 V CA/CC</b>        |            |      |                             |      |                               |      |                             |                            |                      |
| ● Rojo                                   | 8.5        | 11.5 | 150                         | 600  | 120                           | 400  | 5                           | 620 a 625 m                | –                    |
| ● Verde                                  | 8.0        | 11.0 | 200                         | 800  | 150                           | 500  | 5                           | 515 a 520 m                | –                    |
| ● Amarillo                               | 8.5        | 11.5 | 200                         | 800  | 120                           | 400  | 5                           | 585 a 590 m                | –                    |
| ● Azul                                   | 8.5        | 10.5 | 200                         | 500  | 200                           | 400  | 5                           | 465 a 470 m                | –                    |
| ○ Claro                                  | 8.5        | 10.5 | 620                         | 1000 | 360                           | 700  | 5                           | –                          | 8000 a 12000 m       |
| <b>Tensión nominal 110 - 130 V CA/CC</b> |            |      |                             |      |                               |      |                             |                            |                      |
| ● Rojo                                   | 6.5        | 9.0  | 150                         | 600  | 100                           | 350  | 15                          | 620 a 625 m                | –                    |
| ● Verde                                  | 6.5        | 9.0  | 150                         | 600  | 100                           | 350  | 15                          | 515 a 520 m                | –                    |
| ● Amarillo                               | 6.5        | 9.0  | 150                         | 600  | 100                           | 350  | 15                          | 585 a 590 m                | –                    |
| ● Azul                                   | 6.5        | 9.0  | 200                         | 450  | 180                           | 300  | 15                          | 465 a 470 m                | –                    |
| ○ Claro                                  | 6.5        | 9.0  | 520                         | 860  | 300                           | 600  | 15                          | –                          | 8000 a 12000 m       |
| <b>Tensión nominal 230 V CA/CC</b>       |            |      |                             |      |                               |      |                             |                            |                      |
| ● Rojo                                   | 4.0        | 6.0  | 150                         | 600  | 120                           | 400  | 15                          | 620 a 625 m                | –                    |
| ● Verde                                  | 4.0        | 6.0  | 150                         | 900  | 150                           | 500  | 15                          | 515 a 520 m                | –                    |
| ● Amarillo                               | 4.0        | 6.0  | 150                         | 600  | 150                           | 500  | 15                          | 585 a 590 m                | –                    |
| ● Azul                                   | 4.0        | 6.0  | 250                         | 500  | 250                           | 400  | 15                          | 465 a 470 m                | –                    |
| ○ Claro                                  | 4.0        | 6.0  | 650                         | 1050 | 380                           | 720  | 15                          | –                          | 8000 a 12000 m       |

Nota: La distancia de ensayo de la luminosidad es de 2 mm entre la parte superior de la lente y la superficie del sensor. Entorno del ensayo limpio, tensión de alimentación a 50 / 60 Hz con onda armonizada y sin alta frecuencia.

## Gama compacta

### Datos técnicos

#### Piloto CL2

| Color                                  | Corriente  |      | Iluminancia            |      | Tensión pico anti inductiva | Longitud de onda principal | Temperatura de color |
|--|------------|------|------------------------|------|-----------------------------|----------------------------|----------------------|
|  | mA<br>Mín. | Máx. | I <sub>x</sub><br>Mín. | Máx. |                             |                            |                      |
| <b>Tensión nominal 6.3 V CC</b>        |            |      |                        |      |                             |                            |                      |
| ● Rojo                                 | 13         | 16   | 45                     | 250  | 2                           | 620 a 625 m                | -                    |
| ● Verde                                | 9.5        | 12.5 | 114                    | 245  | 2                           | 515 a 520 m                | -                    |
| ● Amarillo                             | 13         | 16   | 65                     | 210  | 2                           | 585 a 590 m                | -                    |
| ● Azul                                 | 9.5        | 12.5 | 8                      | 35   | 2                           | 465 a 470 m                | -                    |
| ○ Claro                                | 10         | 13   | 300                    | 850  | 2                           | -                          | 8000 a 12000 m       |
| <b>Tensión nominal 12 V CC</b>         |            |      |                        |      |                             |                            |                      |
| ● Rojo                                 | 14         | 16   | 100                    | 280  | 2                           | 620 a 625 m                | -                    |
| ● Verde                                | 12         | 14   | 165                    | 310  | 2.5                         | 515 a 520 m                | -                    |
| ● Amarillo                             | 13.5       | 16   | 85                     | 230  | 2.5                         | 585 a 590 m                | -                    |
| ● Azul                                 | 12         | 14   | 10                     | 50   | 2.5                         | 465 a 470 m                | -                    |
| ○ Claro                                | 12.5       | 14.5 | 480                    | 850  | 2.5                         | -                          | 8000 a 12000 m       |
| <b>Tensión nominal 24 V CA/CC</b>      |            |      |                        |      |                             |                            |                      |
| ● Rojo                                 | 14         | 16   | 75                     | 240  | 6                           | 620 a 625 m                | -                    |
| ● Verde                                | 13.5       | 15   | 120                    | 320  | 6                           | 515 a 520 m                | -                    |
| ● Amarillo                             | 14         | 16   | 55                     | 230  | 6                           | 585 a 590 m                | -                    |
| ● Azul                                 | 13.5       | 15   | 8                      | 30   | 6                           | 465 a 470 m                | -                    |
| ○ Claro                                | 13.5       | 15   | 450                    | 700  | 6                           | -                          | 8000 a 12000 m       |
| <b>Tensión nominal 48 - 60 V CA/CC</b> |            |      |                        |      |                             |                            |                      |
| ● Rojo                                 | 14.5       | 16.5 | 75                     | 200  | 7                           | 620 a 625 m                | -                    |
| ● Verde                                | 14.5       | 16.5 | 140                    | 340  | 7                           | 515 a 520 m                | -                    |
| ● Amarillo                             | 14.5       | 16.5 | 55                     | 330  | 7                           | 585 a 590 m                | -                    |
| ● Azul                                 | 14.5       | 16.5 | 10                     | 45   | 7                           | 465 a 470 m                | -                    |
| ○ Claro                                | 14.5       | 16.5 | 550                    | 800  | 7                           | -                          | 8000 a 12000 m       |
| <b>Tensión nominal 110 - 130 V CA</b>  |            |      |                        |      |                             |                            |                      |
| ● Rojo                                 | 14.5       | 17   | 85                     | 340  | 20                          | 620 a 625 m                | -                    |
| ● Verde                                | 14.5       | 17   | 95                     | 400  | 20                          | 515 a 520 m                | -                    |
| ● Amarillo                             | 14.5       | 17   | 85                     | 250  | 20                          | 585 a 590 m                | -                    |
| ● Azul                                 | 14.5       | 17   | 8                      | 30   | 20                          | 465 a 470 m                | -                    |
| ○ Claro                                | 14.5       | 17   | 400                    | 700  | 20                          | -                          | 8000 a 12000 m       |
| <b>Tensión nominal 110 - 130 V CC</b>  |            |      |                        |      |                             |                            |                      |
| ● Rojo                                 | 7.5        | 9.5  | 40                     | 110  | 20                          | 620 a 625 m                | -                    |
| ● Verde                                | 7.5        | 9.5  | 80                     | 250  | 20                          | 515 a 520 m                | -                    |
| ● Amarillo                             | 7.5        | 9.5  | 45                     | 165  | 20                          | 585 a 590 m                | -                    |
| ● Azul                                 | 7.5        | 9.5  | 6                      | 35   | 20                          | 465 a 470 m                | -                    |
| ○ Claro                                | 7.5        | 9.5  | 300                    | 400  | 20                          | -                          | 8000 a 12000 m       |

Nota: La distancia de ensayo de la luminosidad es de 2 mm entre la parte superior de la lente y la superficie del sensor. Entorno del ensayo limpio, tensión de alimentación a 50 / 60 Hz con onda armonizada y sin alta frecuencia.

## Gama compacta

### Datos técnicos

#### Piloto CL2

| Color  | Corriente  |      | Luminosidad            |      | Tensión pico<br>anti inductiva | Longitud de onda<br>principal | Temperatura<br>de color |
|--|------------|------|------------------------|------|--------------------------------|-------------------------------|-------------------------|
|  | mA<br>Mín. | Máx. | I <sub>x</sub><br>Mín. | Máx. |                                |                               |                         |
| <b>Tensión nominal 220 V CC</b>                              |            |      |                        |      |                                |                               |                         |
| ● Rojo   | 5          | 6    | 15                     | 85   | 20                             | 620 a 625 m                   | –                       |
| ● Verde  | 5          | 6    | 55                     | 180  | 20                             | 515 a 520 m                   | –                       |
| ● Amarillo   | 5          | 6    | 15                     | 115  | 20                             | 585 a 590 m                   | –                       |
| ● Azul   | 5          | 6    | 5                      | 35   | 20                             | 465 a 470 m                   | –                       |
| ○ Claro  | 5          | 6    | 200                    | 320  | 20                             | –                             | 8000 a 12000 m          |
| <b>Tensión nominal 230 V CA</b>                              |            |      |                        |      |                                |                               |                         |
| ● Rojo   | 14.5       | 17   | 85                     | 340  | 30                             | 620 a 625 m                   | –                       |
| ● Verde  | 14.5       | 17   | 95                     | 400  | 35                             | 515 a 520 m                   | –                       |
| ● Amarillo   | 14.5       | 17   | 85                     | 235  | 35                             | 585 a 590 m                   | –                       |
| ● Azul   | 14.5       | 17   | 8                      | 30   | 35                             | 465 a 470 m                   | –                       |
| ○ Claro  | 14.5       | 17   | 400                    | 700  | 35                             | –                             | 8000 a 12000 m          |
| <b>Tensión nominal 380 - 415 V CA</b>                        |            |      |                        |      |                                |                               |                         |
| ● Rojo   | 14.5       | 17   | 85                     | 340  | 55                             | 620 a 625 m                   | –                       |
| ● Verde  | 14.5       | 17   | 95                     | 400  | 65                             | 515 a 520 m                   | –                       |
| ● Amarillo   | 14.5       | 17   | 100                    | 270  | 65                             | 585 a 590 m                   | –                       |
| ● Azul   | 14.5       | 17   | 8                      | 30   | 65                             | 465 a 470 m                   | –                       |
| ○ Claro  | 14.5       | 17   | 400                    | 700  | 65                             | –                             | 8000 a 12000 m          |
| <b>Tensión nominal 230 V CA, alta tensión anti inductiva</b> |            |      |                        |      |                                |                               |                         |
| ● Rojo   | 14.5       | 17   | 55                     | 255  | 60                             | 620 a 625 m                   | –                       |
| ● Verde  | 14.5       | 17   | 60                     | 265  | 80                             | 515 a 520 m                   | –                       |
| ● Amarillo   | 14.5       | 17   | 45                     | 210  | 70                             | 585 a 590 m                   | –                       |
| ● Azul   | 14.5       | 17   | 5                      | 25   | 80                             | 465 a 470 m                   | –                       |
| ○ Claro  | 14.5       | 17   | 280                    | 490  | 80                             | –                             | 8000 a 12000 m          |

Nota: La distancia de ensayo de la luminosidad es de 2 mm entre la parte superior de la lente y la superficie del sensor. Entorno del ensayo limpio, tensión de alimentación a 50 / 60 Hz con onda armónica y sin alta frecuencia.

## Gama compacta

### Datos técnicos

#### Zumbador CB

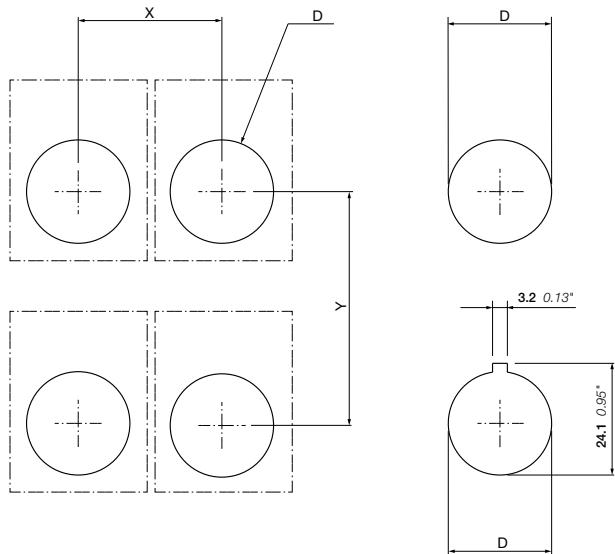
| Color                                 | Salida de luz y sonido | Corriente<br>mA<br>Mín. | Corriente<br>mA<br>Máx. | Iluminancia<br>lx<br>Mín. | Iluminancia<br>lx<br>Máx. | Nivel de presión sonora<br>(dB/10 cm) |
|---------------------------------------|------------------------|-------------------------|-------------------------|---------------------------|---------------------------|---------------------------------------|
| <b>Tensión nominal 24 V CA/CC</b>     |                        |                         |                         |                           |                           |                                       |
| ● Rojo                                | Pulsación              | 63                      | 75                      | 150                       | 450                       | ≥90                                   |
| ● Amarillo                            | Pulsación              | 63                      | 75                      | 70                        | 300                       | ≥90                                   |
| ● Verde                               | Mantenido              | 43                      | 53                      | 150                       | 600                       | ≥90                                   |
| ● Negro                               | Pulsación              | 58                      | 72                      | –                         | –                         | ≥90                                   |
| ● Negro                               | Mantenido              | 40                      | 50                      | –                         | –                         | ≥90                                   |
| <b>Tensión nominal 110 - 30 V CA</b>  |                        |                         |                         |                           |                           |                                       |
| ● Rojo                                | Pulsación              | 71                      | 81                      | 70                        | 300                       | ≥90                                   |
| ● Amarillo                            | Pulsación              | 72                      | 87                      | 150                       | 450                       | ≥90                                   |
| ● Verde                               | Mantenido              | 50                      | 60                      | 150                       | 600                       | ≥90                                   |
| ● Negro                               | Pulsación              | 42                      | 54                      | –                         | –                         | ≥90                                   |
| ● Negro                               | Mantenido              | 40                      | 50                      | –                         | –                         | ≥90                                   |
| <b>Tensión nominal 110 - 130 V CC</b> |                        |                         |                         |                           |                           |                                       |
| ● Rojo                                | Pulsación              | 13                      | 18                      | 5                         | 50                        | ≥80                                   |
| ● Amarillo                            | Pulsación              | 13                      | 18                      | 5                         | 50                        | ≥80                                   |
| ● Verde                               | Mantenido              | 13                      | 18                      | 15                        | 100                       | ≥80                                   |
| ● Negro                               | Pulsación              | 13                      | 18                      | –                         | –                         | ≥80                                   |
| ● Negro                               | Mantenido              | 13                      | 18                      | –                         | –                         | ≥80                                   |
| <b>Tensión nominal 230 V CA</b>       |                        |                         |                         |                           |                           |                                       |
| ● Rojo                                | Pulsación              | 70                      | 84                      | 150                       | 450                       | ≥90                                   |
| ● Amarillo                            | Pulsación              | 72                      | 82                      | 70                        | 300                       | ≥90                                   |
| ● Verde                               | Mantenido              | 50                      | 62                      | 350                       | 900                       | ≥90                                   |
| ● Negro                               | Pulsación              | 42                      | 54                      | –                         | –                         | ≥90                                   |
| ● Negro                               | Mantenido              | 43                      | 53                      | –                         | –                         | ≥90                                   |

Nota: La distancia de ensayo de la luminosidad es de 2 mm entre la parte superior de la lente y la superficie del sensor. Entorno del ensayo limpio, tensión de alimentación a 50 / 60 Hz con onda armónica y sin alta frecuencia.

Fluctuación de tensión nominal: -10 % a +10 %.

## Gama compacta

Dimensiones para los orificios



| <b>Tipo</b>     | <b>Descripción</b>  | <b>X</b> | <b>S</b> | <b>D</b>     | <b>Grosor de panel</b> |
|-----------------|---|----------|----------|--------------|------------------------|
| CP, CL, CSS, CB | Pulsador, piloto, selector, zumbador                        | 31 1.22" | 50 1.97" | Ø 22.3 0.88" | 1.5 0.06" - 6 0.24"    |
| CP, CL, CSS, CB | Pulsador, piloto, selector, zumbador (con placa de leyenda) | 31 1.22" | 55 2.17" | Ø 22.3 0.88" | 1.5 0.06" - 6 0.24"    |
| CPM, CP6        | Pulsador de seta, pulsador para ambientes extremos          | 41 1.61" | 55 2.17" | Ø 22.3 0.88" | 1.5 0.06" - 6 0.24"    |

# Pulsantería

## Envoltorios y cajas montadas

### Detalles de pedido

- 83 Envoltorios de plástico para la gama modular y compacta
- 84 Accesorios para envoltorios de plástico
- 85 Bloques LED para montaje posterior
- 87 Soporte para placa de leyenda
- 88 Placa de leyenda para envoltorios de plástico MEP y CEP
- 89 Selectores para montaje vertical
- 90 Cajas montadas
- 91 Medidas
- 92 Accesorios y envoltorios de metal
- 93 **Medidas**

## Envolvente



### Envolvente de plástico para la gama modular y compacta

Esta envolvente se puede ajustar tanto con pulsantería modulares como compactos con la posibilidad exclusiva de montar hasta 5 bloques de contactos asignados a un único actuador.

Grado de protección IP66 UL/NEMA tipo 1, 3R, 4, 4X, 12, 13



### Envolvente de plástico compacta

La envolvente de plástico es una de las más pequeñas del mercado, dirigida a operadores compactos.

Grado de protección IP66, 67, 69K UL/NEMA tipo 1, 3R, 4, 4X, 12, 13

### Envolvente de metal

La línea de metal se fabrica junto con las de plástico cuando se necesita una solución metálica. Con un grado de protección alto y mucho espacio de instalación.

Grado de protección IP66, 67, 69K



### Cajas montadas

También podemos ofrecer algunas de las cajas montadas más comunes como estándar junto con la gama compacta y la modular.

## Envolvente

Envolventes de plástico para la gama modular y compacta



MEPY1-0

1SFC151270V0001



MEP2-0

1SFC151272V0001



MEP3-0

1SFC151274V0001



MA1-8053

1SFC151384V0001



MA1-8152



CEP1-0

1SFC151284V0001



CEPY1-0



CA1-8054

1SFC151287V0001

### Descripción

Al solicitar envolventes completas:

- Seleccione los actuadores (modular o compacto)
- En el caso de los modulares, seleccione los bloques de contactos y bloques LED para el montaje posterior (en la sección de accesorios)
- Para el operador, elija:
  - Una placa de leyenda
  - Una cubierta (solo para 1 asiento)
  - Un separador
  - Sin accesorios (solo para la gama compacta)
- Seleccione los prensaestopas

Aplicaciones enumeradas en UL: Para usar solo al final de línea

Según la norma EN / ISO 13850 sobre seguridad de las máquinas, los pulsadores de parada de emergencia se deben montar sobre un fondo amarillo.

| Descripción  | Color  | Aberturas para<br>presaestopas | Tipo    | Código de pedido | Cant.<br>paq. | Peso<br>(1 ud.)<br>kg |
|--|--|--------------------------------|---------|------------------|---------------|-----------------------|
| <b>Envolventes de plástico</b>   |  |                                |         |                  |               |                       |
| Envolventes de plástico vacías con tornillos de acero inoxidable para la gama modular y compacta |  |                                |         |                  |               |                       |
| 1 hueco  | Gris oscuro / M20 y Pg 13.5/<br>gris claro Pg 16 y (M20) |                                | MEP1-0  | 1SFA611811R1000  | 1             | 0.15                  |
| 1 hueco  | Amarillo / M20 y Pg 13.5/<br>gris claro Pg 16 y (M20)    |                                | MEPY1-0 | 1SFA611821R1000  | 1             | 0.15                  |
| 2 huecos   | Gris oscuro / M20 y Pg 13.5/<br>gris claro Pg 16 y (M20) |                                | MEP2-0  | 1SFA611812R1000  | 1             | 0.17                  |
| 3 huecos   | Gris oscuro / M20 y Pg 13.5/<br>gris claro Pg 16 y (M20) |                                | MEP3-0  | 1SFA611813R1000  | 1             | 0.20                  |
| 4 huecos   | Gris oscuro / M25/Pg 16 y (M20)<br>gris claro            |                                | MEP4-0  | 1SFA611814R1000  | 1             | 0.23                  |
| 6 huecos   | Gris oscuro / M25/Pg 16 y (M20)<br>gris claro            |                                | MEP6-0  | 1SFA611816R1000  | 1             | 0.30                  |

### Protector para paro de emergencia

Para montaje en envolventes de 1 hueco MEP o en paneles

|          |          |                 |    |      |
|----------|----------|-----------------|----|------|
| Amarillo | MA1-8053 | 1SFA611920R8053 | 10 | 0.02 |
| Gris     | MA1-8152 | 1SFA611920R8152 | 10 | 0.02 |

### Envolventes de plásticos vacías compactas

Envolvente vacío para la gama compacta

|         |  |         |                 |   |       |
|---------|--|---------|-----------------|---|-------|
| 1 hueco | Amarillo / M20 y Pg 13.5/<br>gris claro Pg 16 y (M20)    | CEPY1-0 | 1SFA619821R1000 | 1 | 0.072 |
| 1 hueco | Gris oscuro / M20 y Pg 13.5/<br>gris claro Pg 16 y (M20) | CEP1-0  | 1SFA619811R1000 | 1 | 0.072 |

### Protector para paro de emergencia

Para montaje en envolventes de la serie CEP o en paneles

|          |          |                 |   |       |
|----------|----------|-----------------|---|-------|
| Amarillo | CA1-8053 | 1SFA619920R8053 | 1 | 0.016 |
| Gris     | CA1-8054 | 1SFA619920R8054 | 1 | 0.016 |

## Envolvente

Accesorios para envolventes de plástico



MCB-10B

1SFC151373V0001



MCB-11B

1SFC151373V0001



MCB-02B

1SFC151373V0001



MCB-01BG

1SFC151373V0001



MA1-8129

1SFC151394V0001



MA5-8130

1SFC151395V0001



MA5-3001

MAS-300



MA1-8136

1SFC151393V0001

### Descripción

Para usarse con envolventes de plástico MEP o con carril DIN

| Descripción | Contactos | Tipo | Código de pedido | Cant. paq. | Peso (1 ud.) |
|-------------|-----------|------|------------------|------------|--------------|
|             |           |      | Y Y              |            | kg           |

### Bloques de contactos para montaje posterior

|                                   |     |         |                 |    |       |
|-----------------------------------|-----|---------|-----------------|----|-------|
| Bloques de contactos individuales | 1 0 | MCB-10B | 1SFA611610R2001 | 10 | 0.013 |
|                                   | 0 1 | MCB-01B | 1SFA611610R2010 | 10 | 0.013 |
| Bloques de contactos dobles       | 1 1 | MCB-11B | 1SFA611610R2011 | 10 | 0.026 |
|                                   | 2 0 | MCB-20B | 1SFA611610R2002 | 10 | 0.026 |
|                                   | 0 2 | MCB-02B | 1SFA611610R2020 | 10 | 0.026 |

### Bloques de contactos con contactos chapados en oro

|                                   |     |          |                 |    |       |
|-----------------------------------|-----|----------|-----------------|----|-------|
| Bloques de contactos individuales | 1 0 | MCB-10BG | 1SFA611610R2101 | 10 | 0.013 |
|                                   | 0 1 | MCB-01BG | 1SFA611610R2110 | 10 | 0.013 |

### Prensaestopas

Plástico gris, casquillo exterior roscado con anillo de sellado incluido. Tuerca no incluida

|         |          |                 |    |       |
|---------|----------|-----------------|----|-------|
| M25     | MA5-3001 | 1SFA611925R3001 | 10 | 0.015 |
| M20     | MA5-3002 | 1SFA611925R3002 | 10 | 0.015 |
| PG 13.5 | MA5-3006 | 1SFA611925R3006 | 10 | 0.010 |
| PG 16   | MA5-3007 | 1SFA611925R3007 | 10 | 0.015 |

### Tuercas

Plástico gris para prensaestopas anteriores

|         |          |                 |    |       |
|---------|----------|-----------------|----|-------|
| M25     | MA5-3003 | 1SFA611925R3003 | 10 | 0.005 |
| M20     | MA5-3004 | 1SFA611925R3004 | 10 | 0.005 |
| PG 13.5 | MA5-3008 | 1SFA611925R3008 | 10 | 0.001 |
| PG 16   | MA5-3009 | 1SFA611925R3009 | 10 | 0.001 |

### Borne de puesta a tierra

|                             |          |                 |    |       |
|-----------------------------|----------|-----------------|----|-------|
| Para envolvente de plástico | MA5-3005 | 1SFA611925R3005 | 10 | 0.005 |
|-----------------------------|----------|-----------------|----|-------|

### Tapa para hueco libre de la caja

|                             |          |                 |     |       |
|-----------------------------|----------|-----------------|-----|-------|
| Para envolvente de plástico | MA1-8150 | 1SFA611920H8150 | 100 | 0.001 |
|-----------------------------|----------|-----------------|-----|-------|

### Separadores

Necesarios si las placas de leyenda o cubiertas no se usan en cubiertas de plástico con bloques de contactos de montaje posterior. 1 mm de grosor.

|   |          |                  |    |       |
|---|----------|------------------|----|-------|
| Separador                                   | -        | SK615516-1       | 10 | 0.002 |
| Separador para parada de emergencia modular | KA1-8045 | 1SFA6116920R8045 | 10 | 0.004 |

### Tapones obturadores

|            |          |                 |    |       |
|------------|----------|-----------------|----|-------|
| Gris       | MA1-8129 | 1SFA611920R8129 | 10 | 0.005 |
| Negro      | MA1-8130 | 1SFA611920R8130 | 10 | 0.005 |
| Gris claro | MA1-8136 | 1SFA611920R8136 | 10 | 0.005 |

### Adaptador

|           |          |                 |    |       |
|-----------|----------|-----------------|----|-------|
| PG 16/M20 | MA5-3010 | 1SFA611925R3010 | 10 | 0.010 |
|-----------|----------|-----------------|----|-------|

## Envolvente

Bloques de LED para montaje posterior



1SFC151416V0001

MLBL-00BW

### Descripción

Para usarse con envolventes de plástico MEP o con carril DIN

| Color                                     | Intensidad nominal<br>mA | Longitud de onda<br>nm | Luminosidad<br>mcd | Tipo      | Código de pedido | Cant. paq.<br>(1 ud.) | Peso<br>kg |
|---|--------------------------|------------------------|--------------------|-----------|------------------|-----------------------|------------|
| <b>Tensión nominal 12 V CC (1)</b>        |                          |                        |                    |           |                  |                       |            |
| ● Rojo                                    | 12.0                     | 620                    | 320                | MLBL-00BR | 1SFA611621R2001  | 10                    | 0.012      |
| ● Verde                                   | 9.3                      | 520                    | 1500               | MLBL-00BG | 1SFA611621R2002  | 10                    | 0.012      |
| ● Amarillo                                | 12.0                     | 588                    | 380                | MLBL-00BY | 1SFA611621R2003  | 10                    | 0.012      |
| ● Azul                                    | 9.5                      | 468                    | 450                | MLBL-00BL | 1SFA611621R2004  | 10                    | 0.012      |
| ○ Blanco                                  | 9.3                      | (2)                    | 600                | MLBL-00BW | 1SFA611621R2005  | 10                    | 0.012      |
| <b>Tensión nominal 24 V CA/CC (1)</b>     |                          |                        |                    |           |                  |                       |            |
| ● Rojo                                    | 9.9                      | 620                    | 250                | MLBL-01BR | 1SFA611621R2011  | 10                    | 0.012      |
| ● Verde                                   | 9.2                      | 520                    | 1500               | MLBL-01BG | 1SFA611621R2012  | 10                    | 0.012      |
| ● Amarillo                                | 9.9                      | 588                    | 250                | MLBL-01BY | 1SFA611621R2013  | 10                    | 0.012      |
| ● Azul                                    | 9.3                      | 468                    | 450                | MLBL-01BL | 1SFA611621R2014  | 10                    | 0.012      |
| ○ Blanco                                  | 9.2                      | (2)                    | 600                | MLBL-01BW | 1SFA611621R2015  | 10                    | 0.012      |
| <b>Tensión nominal 48 V CA/CC (1)</b>     |                          |                        |                    |           |                  |                       |            |
| ● Rojo                                    | 10.0                     | 620                    | 260                | MLBL-02BR | 1SFA611621R2021  | 10                    | 0.012      |
| ● Verde                                   | 9.7                      | 520                    | 1500               | MLBL-02BG | 1SFA611621R2022  | 10                    | 0.012      |
| ● Amarillo                                | 10.0                     | 588                    | 300                | MLBL-02BY | 1SFA611621R2023  | 10                    | 0.012      |
| ● Azul                                    | 9.7                      | 468                    | 450                | MLBL-02BL | 1SFA611621R2024  | 10                    | 0.012      |
| ○ Blanco                                  | 9.7                      | (2)                    | 600                | MLBL-02BW | 1SFA611621R2025  | 10                    | 0.012      |
| <b>Tensión nominal 60 V CA/CC (1)</b>     |                          |                        |                    |           |                  |                       |            |
| ● Rojo                                    | 13.0                     | 620                    | 350                | MLBL-03BR | 1SFA611621R2031  | 10                    | 0.012      |
| ● Verde                                   | 12.7                     | 520                    | 2000               | MLBL-03BG | 1SFA611621R2032  | 10                    | 0.012      |
| ● Amarillo                                | 13.0                     | 588                    | 400                | MLBL-03BY | 1SFA611621R2033  | 10                    | 0.012      |
| ● Azul                                    | 12.7                     | 468                    | 550                | MLBL-03BL | 1SFA611621R2034  | 10                    | 0.012      |
| ○ Blanco                                  | 12.7                     | (2)                    | 750                | MLBL-03BW | 1SFA611621R2035  | 10                    | 0.012      |
| <b>Tensión nominal 110 - 130 V CA</b>     |                          |                        |                    |           |                  |                       |            |
| ● Rojo                                    | 8.6                      | 620                    | 200                | MLBL-04BR | 1SFA611621R2041  | 10                    | 0.012      |
| ● Verde                                   | 8.5                      | 520                    | 1200               | MLBL-04BG | 1SFA611621R2042  | 10                    | 0.012      |
| ● Amarillo                                | 8.6                      | 588                    | 250                | MLBL-04BY | 1SFA611621R2043  | 10                    | 0.012      |
| ● Azul                                    | 7.0                      | 468                    | 400                | MLBL-04BL | 1SFA611621R2044  | 10                    | 0.012      |
| ○ Blanco                                  | 7.0                      | (2)                    | 500                | MLBL-04BW | 1SFA611621R2045  | 10                    | 0.012      |
| <b>Tensión nominal 110 a 130 V CC (1)</b> |                          |                        |                    |           |                  |                       |            |
| ● Rojo                                    | 9.9                      | 620                    | 250                | MLBL-05BR | 1SFA611621R2051  | 10                    | 0.012      |
| ● Verde                                   | 9.8                      | 520                    | 1500               | MLBL-05BG | 1SFA611621R2052  | 10                    | 0.012      |
| ● Amarillo                                | 9.9                      | 588                    | 300                | MLBL-05BY | 1SFA611621R2053  | 10                    | 0.012      |
| ● Azul                                    | 9.8                      | 468                    | 450                | MLBL-05BL | 1SFA611621R2054  | 10                    | 0.012      |
| ○ Blanco                                  | 9.8                      | (2)                    | 600                | MLBL-05BW | 1SFA611621R2055  | 10                    | 0.012      |
| <b>Tensión nominal 220 V CC (1)</b>       |                          |                        |                    |           |                  |                       |            |
| ● Rojo                                    | 8.0                      | 620                    | 180                | MLBL-06BR | 1SFA611621R2061  | 10                    | 0.012      |
| ● Verde                                   | 8.0                      | 520                    | 110                | MLBL-06BG | 1SFA611621R2062  | 10                    | 0.012      |
| ● Amarillo                                | 8.0                      | 588                    | 200                | MLBL-06BY | 1SFA611621R2063  | 10                    | 0.012      |
| ● Azul                                    | 8.0                      | 468                    | 450                | MLBL-06BL | 1SFA611621R2064  | 10                    | 0.012      |
| ○ Blanco                                  | 8.0                      | (2)                    | 600                | MLBL-06BW | 1SFA611621R2065  | 10                    | 0.012      |

Nota:

(1) Con la alimentación de CC, se debe prestar atención a la polarización correcta de los terminales + y -. Aparecen marcados con X1 (+) y X2 (-) en el producto.

(2) X=0.31, Y=0.32 según el diagrama de cromaticidad ICI.

Para los datos técnicos, consulte la sección de la gama modular.

## Envolvente

Bloques de LED para montaje posterior



ISFCI51416V0001

MLBL-07BW

### Descripción

Para usarse con envolventes de plástico MEP o con carril DIN

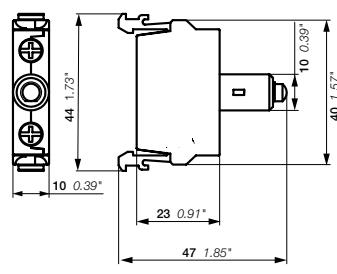
| Color                           | Intensidad nominal | Longitud de onda | Luminosidad | Tipo      | Código de pedido | Cant. paq. (1 ud.) | Peso kg |
|---------------------------------|--------------------|------------------|-------------|-----------|------------------|--------------------|---------|
|                                 | mA                 | nm               | mcd         |           |                  |                    |         |
| <b>Tensión nominal 230 V CA</b> |                    |                  |             |           |                  |                    |         |
| ● Rojo                          | 9.5                | 620              | 250         | MLBL-07BR | 1SFA611621R2071  | 10                 | 0.012   |
| ● Verde                         | 9.4                | 520              | 1500        | MLBL-07BG | 1SFA611621R2072  | 10                 | 0.012   |
| ● Amarillo                      | 9.5                | 588              | 300         | MLBL-07BY | 1SFA611621R2073  | 10                 | 0.012   |
| ● Azul                          | 8.2                | 468              | 450         | MLBL-07BL | 1SFA611621R2074  | 10                 | 0.012   |
| ○ Blanco                        | 8.2                | (2)              | 600         | MLBL-07BW | 1SFA611621R2075  | 10                 | 0.012   |
| <b>Tensión nominal 380 V CA</b> |                    |                  |             |           |                  |                    |         |
| ● Rojo                          | 10.2               | 620              | 250         | MLBL-08BR | 1SFA611621R2081  | 10                 | 0.012   |
| ● Verde                         | 10.2               | 520              | 1500        | MLBL-08BG | 1SFA611621R2082  | 10                 | 0.012   |
| ● Amarillo                      | 10.2               | 582              | 300         | MLBL-08BY | 1SFA611621R2083  | 10                 | 0.012   |
| ● Azul                          | 9.1                | 468              | 450         | MLBL-08BL | 1SFA611621R2084  | 10                 | 0.012   |
| ○ Blanco                        | 9.1                | (2)              | 600         | MLBL-08BW | 1SFA611621R2085  | 10                 | 0.012   |
| <b>Tensión nominal 415 V CA</b> |                    |                  |             |           |                  |                    |         |
| ● Rojo                          | 11.2               | 620              | 280         | MLBL-09BR | 1SFA611621R2091  | 10                 | 0.012   |
| ● Verde                         | 11.2               | 520              | 1800        | MLBL-09BG | 1SFA611621R2092  | 10                 | 0.012   |
| ● Amarillo                      | 11.2               | 588              | 350         | MLBL-09BY | 1SFA611621R2093  | 10                 | 0.012   |
| ● Azul                          | 9.9                | 468              | 500         | MLBL-09BL | 1SFA611621R2094  | 10                 | 0.012   |
| ○ Blanco                        | 9.9                | (2)              | 650         | MLBL-09BW | 1SFA611621R2095  | 10                 | 0.012   |

Nota:

(1) Con la alimentación de CC, se debe prestar atención a la polarización correcta de los terminales + y -. Aparecen marcados con X1 (+) y X2 (-) en el producto.

(2) X=0.31, Y=0.32 según el diagrama de cromaticidad ICI.

Para los datos técnicos, consulte la sección de la gama modular.



MLBL

Dimensiones (mm, pulgadas)

## Envolvente

Soportes y etiquetas de placas de leyenda



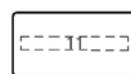
ISFC151400V0001

MA6-1060

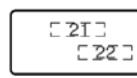


ISFC151380V0001

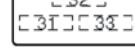
MA6-1061



Etiqueta de 1 posición



Etiqueta de 2 posiciones



Etiqueta de 3 posiciones

### Descripción

Para un operador de Ø 22 mm, se puede usar con envolventes de plástico MEP, marcado láser con texto o símbolos. Las etiquetas están hechas de plástico o laminado de aluminio.

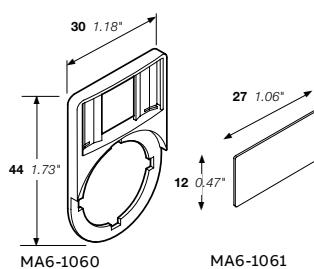
| Descripción                          | Tipo     | Código de pedido | Cant. paq. | Peso (1 ud.) kg |
|--------------------------------------|----------|------------------|------------|-----------------|
| <b>Soporte para placa de leyenda</b> |          |                  |            |                 |
| Plástico gris                        | MA6-1060 | 1SFA611930R1060  | 10         | 0.002           |
| <b>Etiqueta</b>                      |          |                  |            |                 |
| Sin texto ni símbolo                 | MA6-1061 | 1SFA611930R1061  | 10         | 0.001           |
| <b>Etiqueta de 1 posición</b>        |          |                  |            |                 |
| O                                    | MA6-1062 | 1SFA611930R1062  | 10         | 0.001           |
| I                                    | MA6-1063 | 1SFA611930R1063  | 10         | 0.001           |
| II                                   | MA6-1064 | 1SFA611930R1064  | 10         | 0.001           |
| →                                    | MA6-1065 | 1SFA611930R1065  | 10         | 0.001           |
| →                                    | MA6-1130 | 1SFA611930R1130  | 10         | 0.001           |
| → →                                  | MA6-1131 | 1SFA611930R1131  | 10         | 0.001           |
| Cerrar                               | MA6-1132 | 1SFA611930R1132  | 10         | 0.001           |
| Abrir                                | MA6-1133 | 1SFA611930R1133  | 10         | 0.001           |
| ON                                   | MA6-1134 | 1SFA611930R1134  | 10         | 0.001           |
| OFF                                  | MA6-1135 | 1SFA611930R1135  | 10         | 0.001           |
| Rápida                               | MA6-1136 | 1SFA611930R1136  | 10         | 0.001           |
| Lento                                | MA6-1137 | 1SFA611930R1137  | 10         | 0.001           |
| Abajo                                | MA6-1138 | 1SFA611930R1138  | 10         | 0.001           |
| Arriba                               | MA6-1139 | 1SFA611930R1139  | 10         | 0.001           |
| Inicio                               | MA6-1140 | 1SFA611930R1140  | 10         | 0.001           |
| Parada                               | MA6-1141 | 1SFA611930R1141  | 10         | 0.001           |
| Avance                               | MA6-1152 | 1SFA611930R1152  | 10         | 0.001           |
| Retroceso                            | MA6-1153 | 1SFA611930R1153  | 10         | 0.001           |

### Etiquetas de 2 posiciones para selectores

| Pos. 21        | Pos. 22   |          |                 |          |
|----------------|-----------|----------|-----------------|----------|
| O              | I         | MA6-1170 | 1SFA611930R1170 | 10 0.001 |
| I              | II        | MA6-1171 | 1SFA611930R1171 | 10 0.001 |
| →              | → →       | MA6-1172 | 1SFA611930R1172 | 10 0.001 |
| OFF            | ON        | MA6-1173 | 1SFA611930R1173 | 10 0.001 |
| Parada         | Inicio    | MA6-1174 | 1SFA611930R1174 | 10 0.001 |
| Baja           | Alta      | MA6-1175 | 1SFA611930R1175 | 10 0.001 |
| Lento          | Rápida    | MA6-1176 | 1SFA611930R1176 | 10 0.001 |
| Cerrar         | Abrir     | MA6-1177 | 1SFA611930R1177 | 10 0.001 |
| Desplazamiento | Ejecución | MA6-1178 | 1SFA611930R1178 | 10 0.001 |
| Manual         | Auto      | MA6-1179 | 1SFA611930R1179 | 10 0.001 |

### Etiquetas de 3 posiciones para selectores

| Pos. 31 | Pos. 32 | Pos. 33 |          |                 |
|---------|---------|---------|----------|-----------------|
| ←       | O       | →       | MA6-1190 | 1SFA611930R1190 |
| →       | O       | → →     | MA6-1191 | 1SFA611930R1191 |
| I       | O       | II      | MA6-1192 | 1SFA611930R1192 |
| Manual  | O       | Auto    | MA6-1193 | 1SFA611930R1193 |
| Lento   | OFF     | Rápida  | MA6-1194 | 1SFA611930R1194 |



Dimensiones (mm, pulgadas)

## Envolvente

Placas de leyenda para envolventes de plástico MEP y CEP



1SFC151264V0001



MA6-1002

1SFC151267V0001



MA6-1003

1SFC151267V0001



MA6-1006

1SFC151263V0001



MA6-1007

1SFC151268V0001



MA6-1024

1SFC151264V0001



MA6-1026

1SFC151390V0001

### Placas de leyenda para envolventes de plástico MEP

Para un operador de Ø 22 mm, plástico y laminado de aluminio con parte posterior adhesiva. Combine la parada de emergencia con las placas de leyenda amarillas y texto negro para cumplir con la norma EN/ISO 13850 sobre seguridad de máquinas.

| Descripción                                    | Símbolo de texto | Tipo     | Código de pedido | Cant. paq. | Peso (1 ud.) kg |
|--|------------------|----------|------------------|------------|-----------------|
| <b>Laminado plástico y aluminio</b>            |                  |          |                  |            |                 |
| 1 hueco  | sin texto        | MA6-1000 | 1SFA611930R1000  | 1          | 0.004           |
| 2 huecos                                       | sin texto        | MA6-1002 | 1SFA611930R1002  | 1          | 0.006           |
| 3 huecos                                       | sin texto        | MA6-1003 | 1SFA611930R1003  | 1          | 0.008           |
| 4 huecos                                       | sin texto        | MA6-1004 | 1SFA611930R1004  | 1          | 0.010           |
| 6 huecos                                       | sin texto        | MA6-1005 | 1SFA611930R1005  | 1          | 0.012           |
| 1 hueco  | O                | MA6-1012 | 1SFA611930R1012  | 1          | 0.004           |
| 1 hueco  | I                | MA6-1013 | 1SFA611930R1013  | 1          | 0.004           |
| 2 huecos                                       | O I              | MA6-1014 | 1SFA611930R1014  | 1          | 0.006           |
| 3 huecos                                       | O II             | MA6-1015 | 1SFA611930R1015  | 1          | 0.008           |
| 3 huecos                                       | I O II           | MA6-1016 | 1SFA611930R1016  | 1          | 0.008           |
| <b>Pos. 1, plástico o laminado de aluminio</b> |                  |          |                  |            |                 |
| 2 huecos                                       | sin texto        | MA6-1006 | 1SFA611930R1006  | 1          | 0.006           |
| 3 huecos                                       | sin texto        | MA6-1007 | 1SFA611930R1007  | 1          | 0.008           |
| 4 huecos                                       | sin texto        | MA6-1008 | 1SFA611930R1008  | 1          | 0.010           |
| 6 huecos                                       | sin texto        | MA6-1009 | 1SFA611930R1009  | 1          | 0.012           |

### Placas de leyenda de parada de emergencia para envolventes de 1 hueco

Para envolventes de montaje horizontal. Laminado plástico amarillo. 66 x 59 mm.

|                 |          |                 |    |       |
|-----------------|----------|-----------------|----|-------|
| Sin texto       | MA6-1024 | 1SFA611930R1024 | 10 | 0.004 |
| Nöd Stopp       | MA6-1025 | 1SFA611930R1025 | 10 | 0.004 |
| Emergency stop  | MA6-1026 | 1SFA611930R1026 | 10 | 0.004 |
| Not Aus         | MA6-1027 | 1SFA611930R1027 | 10 | 0.004 |
| ARRET D'URGENCE | MA6-1028 | 1SFA611930R1028 | 10 | 0.004 |
| Hätäseis        | MA6-1029 | 1SFA611930R1029 | 10 | 0.004 |

Para envolventes de montaje vertical. Laminado plástico amarillo. 59 x 66 mm.

|                 |          |                 |    |       |
|-----------------|----------|-----------------|----|-------|
| Nöd Stopp       | MA6-1100 | 1SFA611930R1100 | 10 | 0.004 |
| Emergency stop  | MA6-1101 | 1SFA611930R1101 | 10 | 0.004 |
| Not Aus         | MA6-1102 | 1SFA611930R1102 | 10 | 0.004 |
| ARRET D'URGENCE | MA6-1103 | 1SFA611930R1103 | 10 | 0.004 |
| Hätäseis        | MA6-1104 | 1SFA611930R1104 | 10 | 0.004 |

### Placas de leyenda para envolventes de plástico CEP

Para un operador de Ø 22 mm

| Descripción | Símbolo de texto | Tipo | Código de pedido | Cant. paq. | Peso (1 ud.) kg |
|-------------|------------------|------|------------------|------------|-----------------|
|-------------|------------------|------|------------------|------------|-----------------|

### Placas de leyenda de parada de emergencia

Texto negro en placa de aluminio amarilla de Ø 59 mm

|                |          |                 |    |       |
|----------------|----------|-----------------|----|-------|
| Sin texto      | CA6-1024 | 1SFA619930R1024 | 10 | 0.004 |
| Emergency stop | CA6-1026 | 1SFA619930R1026 | 10 | 0.004 |
| Not Aus        | CA6-1027 | 1SFA619930R1027 | 10 | 0.004 |

## Envolvente

Selectores para montaje vertical



M2SSV1-10B

ISFA611220R1006

### Descripción

Al solicitar envolventes completas de montaje vertical:

- Seleccione selectores para el montaje vertical
- Seleccione los bloques de contactos y bloques LED para el montaje posterior.

Para el operador, elija:

- Una placa de leyenda para envolventes verticales
- Un separador

Seleccione el prensaestopas.

| Descripción | Color | Tipo | Código de pedido | Cant. paq. (1 ud.) | Peso kg |
|-------------|-------|------|------------------|--------------------|---------|
|-------------|-------|------|------------------|--------------------|---------|

#### Selector de 2 posiciones

Maneta corta, no retroiluminada

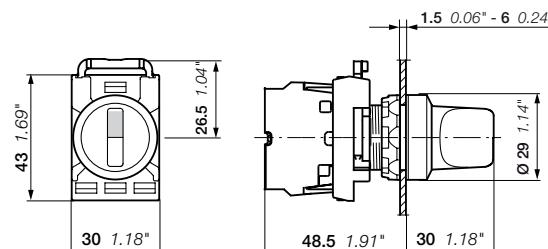
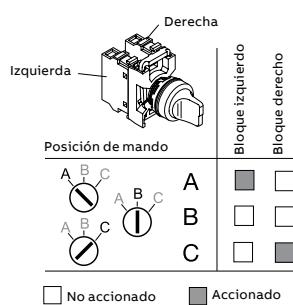
|  |         |            |                 |    |       |
|--|---------|------------|-----------------|----|-------|
|  | ● Negro | M2SSV1-10B | 1SFA611220R1006 | 10 | 0.015 |
|  | ● Negro | M2SSV2-10B | 1SFA611221R1006 | 10 | 0.015 |
|  | ● Negro | M2SSV3-10B | 1SFA611222R1006 | 10 | 0.015 |

#### Selector de 3 posiciones

Maneta corta, no retroiluminada

|  |         |            |                 |    |       |
|--|---------|------------|-----------------|----|-------|
|  | ● Negro | M3SSV1-10B | 1SFA611230R1006 | 10 | 0.015 |
|  | ● Negro | M3SSV2-10B | 1SFA611231R1006 | 10 | 0.015 |
|  | ● Negro | M3SSV3-10B | 1SFA611232R1006 | 10 | 0.015 |

#### Actuación de contactos



M2SSV, M3SSV

Dimensiones (mm, pulgadas)

## Envolvente

### Cajas montadas



MEPY1-1042

1SFC15145V0001



CEPY1-2001

1SFC15138V0001



MEP2-1001

1SFC151273V0001

#### Descripción

Envolventes montadas con pulsadores de parada de emergencia, diseño en amarillo / gris claro según la norma EN/ISO 13850 sobre seguridad de máquinas para paradas de emergencia.

| Modo de desbloqueo | Contactos | Tipo | Código de pedido | Cant. paq. (1 ud.) | Peso kg |
|--------------------|-----------|------|------------------|--------------------|---------|
|                    | Y         |      |                  |                    |         |

#### Envolventes de plástico de 1 hueco con pulsadores de parada de emergencia modulares de 40 mm

Color amarillo / gris claro

|  |     |            |                 |   |       |
|--|-----|------------|-----------------|---|-------|
| Desbloqueo de giro   | 0 2 | MEPY1-1042 | 1SFA611821R1042 | 1 | 0.240 |
| Desbloqueo de giro   | 2 1 | MEPY1-1041 | 1SFA611821R1041 | 1 | 0.250 |
| Desbloqueo de tiro   | 0 2 | MEPY1-1035 | 1SFA611821R1035 | 1 | 0.466 |
| Desbloqueo de giro con placa de leyenda de plástico "Parada de emergencia" | 0 2 | MEPY1-1040 | 1SFA611821R1040 | 1 | 0.240 |

#### Envolventes de plástico de 1 hueco con pulsadores de parada de emergencia compactos de 40 mm

Color amarillo / gris claro

|                                       |     |            |                 |   |       |
|---------------------------------------|-----|------------|-----------------|---|-------|
| Desbloqueo de giro                    | 0 2 | CEPY1-1001 | 1SFA619821R1001 | 1 | 0.108 |
| Desbloqueo de tiro                    | 0 2 | CEPY1-1002 | 1SFA619821R1002 | 1 | 0.108 |
| Desbloqueo con llave                  | 1 1 | CEPY1-1006 | 1SFA619821R1006 | 1 | 0.105 |
| Desbloqueo de giro, cubierta amarilla | 0 2 | CEPY1-2001 | 1SFA619821R2001 | 1 | 0.124 |
| Desbloqueo de tiro, cubierta amarilla | 0 2 | CEPY1-2002 | 1SFA619821R2002 | 1 | 0.124 |

#### Envolventes de plástico de 1 hueco con pulsadores de parada de emergencia compactos de 40 mm

Color gris oscuro / gris claro

|                                   |     |           |                 |   |       |
|-----------------------------------|-----|-----------|-----------------|---|-------|
| Desbloqueo de giro                | 1 1 | CEP1-1001 | 1SFA619811R1001 | 1 | 0.108 |
| Desbloqueo de tiro                | 1 1 | CEP1-1002 | 1SFA619811R1002 | 1 | 0.108 |
| Desbloqueo de giro, cubierta gris | 1 1 | CEP1-2001 | 1SFA619811R2001 | 1 | 0.124 |
| Desbloqueo de giro, cubierta gris | 1 1 | CEP1-2002 | 1SFA619811R2002 | 1 | 0.124 |

#### Envolvente de plástico de 2 huecos con pulsadores modulares

Gris oscuro / gris claro

Dos pulsadores modulares, momentáneos, embellecedor negro

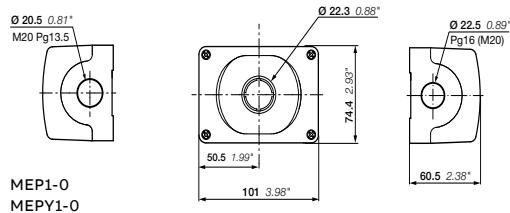
|         |        |           |                 |   |       |
|---------|--------|-----------|-----------------|---|-------|
| ● Verde | ● Rojo | MEP2-1001 | 1SFA611812R1001 | 1 | 0.220 |
| 1 NA    | 1 NC   |           |                 |   |       |
| I       | O      |           |                 |   |       |

## Envolvente

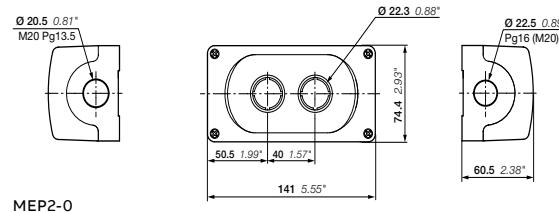
### Medidas

#### Envolventes de plástico MEP

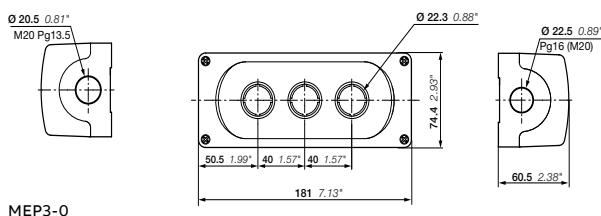
##### 1 hueco



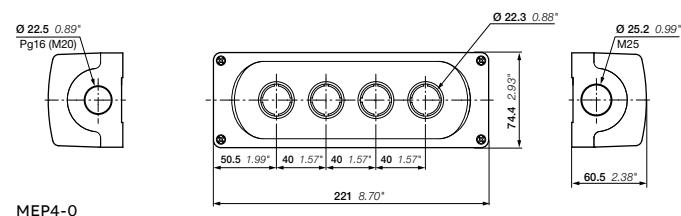
##### 2 asientos



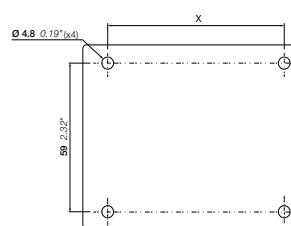
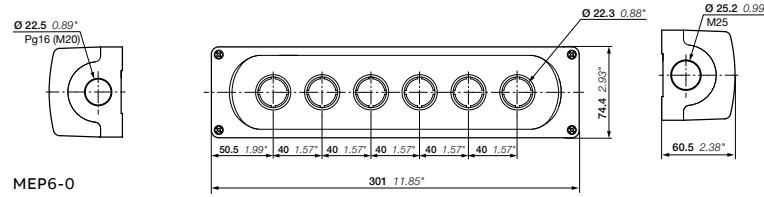
##### 3 huecos



##### 4 asientos



##### 6 huecos

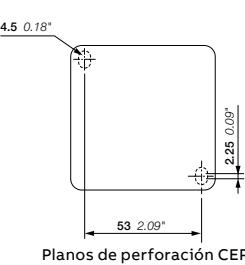
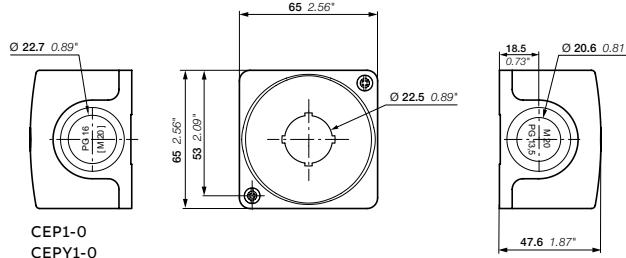


Planos de perforación MEP

| Tipo       | X               |
|------------|-----------------|
| 1 asiento  | 72 mm / 2.83"   |
| 2 asientos | 112 mm / 4.41"  |
| 3 asientos | 152 mm / 5.98"  |
| 4 asientos | 192 mm / 7.56"  |
| 6 asientos | 272 mm / 10.71" |

#### Envolvente de plástico CEP para la gama compacta

##### 1 hueco



Planos de perforación CEP

## Envolvente

Accesorios y envolventes de metal



KEM

1SFC151309F0001



SK1750152



SK1707685

1SFC151488F0001



SK172105-AE

1SFC151490F0001



MA1-8129



MA1-8130

1SFC151395V0001



MA1-8136

### Descripción

Al solicitar una envolvente completa:

- Seleccionar operadores
- Seleccione los bloques de contactos y bloques LED para el montaje frontal y el soporte
- Seleccione un prensaestopas (orificios para prensaestopas en pág. 16)
- Para envolventes de 4 y 6 huecos seleccionando la placa de obturación.

| Descripción | Color | Tipo | Código de pedido | Cant. paq. (1 ud.) | Peso kg |
|-------------|-------|------|------------------|--------------------|---------|
|-------------|-------|------|------------------|--------------------|---------|

### Envolventes de aluminio fundido vacías para montaje frontal de pulsantería.

Grado de protección IP66, IP67 e IP69K.

|          |            |        |             |   |      |
|----------|------------|--------|-------------|---|------|
| 1 hueco  | Gris claro | KEM1-0 | SK616701-AA | 1 | 0.40 |
| 2 huecos | Gris claro | KEM2-0 | SK616702-AA | 1 | 0.70 |
| 3 huecos | Gris claro | KEM3-0 | SK616703-AA | 1 | 0.80 |
| 4 huecos | Gris claro | KEM4-0 | SK616704-AA | 1 | 1.20 |
| 6 huecos | Gris claro | KEM6-0 | SK616706-AA | 1 | 1.40 |

### Accesorios

| Par | PG | Diámetro | Código de pedido | Cant. paq. (1 ud.) | Peso kg |
|-----|----|----------|------------------|--------------------|---------|
| mm  |    |          |                  |                    |         |

### Prensaestopas

Casquillo externo roscado de metal

|      |    |               |           |   |       |
|------|----|---------------|-----------|---|-------|
| 22.5 | 16 | 8.5 a 11.5 m  | SK1707685 | 1 | 0.040 |
| 22.5 | 16 | 10.5 a 13.5 m | SK1707686 | 1 | 0.045 |
| 22.5 | 16 | 12.5 a 15.0 m | SK1707687 | 1 | 0.050 |

### Tuerca hexagonal de metal

Para usarse con los prensaestopas anteriores

|      |    |           |   |       |
|------|----|-----------|---|-------|
| 22.5 | 16 | SK1750152 | 1 | 0.010 |
|------|----|-----------|---|-------|

### Placas obturadoras sin orificios

Metal, negro, para envolventes de metal de 4 y 6 huecos

|                        |                         |             |   |       |
|------------------------|-------------------------|-------------|---|-------|
| Para apertura de brida | Junta de brida adecuada |             |   |       |
| FL 13                  | SK1704536               | SK172105-AA | 1 | 0.010 |

Nota: Junta de brida no incluida

### Placas obturadoras con orificios

Metal, negro, para envolventes de metal de 4 y 6 huecos

|                                     |                         |             |   |       |
|-------------------------------------|-------------------------|-------------|---|-------|
| Para apertura de brida              | Junta de brida adecuada |             |   |       |
| Dos orificios                       | Par 22.5 (pág. 16)      | SK172105-AD | 1 | 0.110 |
| Distancia al orificio central 50 mm |                         |             |   |       |
| FL 13                               | SK1704536               |             |   |       |
| Tres orificios                      | Par 22.5 (pág. 16)      | SK172105-AE | 1 | 0.110 |
| Distancia al orificio central 38 mm |                         |             |   |       |
| FL 13                               | SK1704536               |             |   |       |

Nota: Junta de brida no incluida

### Junta de brida

|       |           |   |       |
|-------|-----------|---|-------|
| FL 13 | SK1704536 | 1 | 0.005 |
|-------|-----------|---|-------|

### Tapón obturador

Para orificio de 22 mm

|            |          |                 |    |       |
|------------|----------|-----------------|----|-------|
| Gris       | MA1-8129 | 1SFA611920R8129 | 10 | 0.005 |
| Negro      | MA1-8130 | 1SFA611920R8130 | 10 | 0.005 |
| Gris claro | MA1-8136 | 1SFA611920R8136 | 10 | 0.005 |

Nota: Adecuado para cubrir un orificio de 22 mm en una envolvente en lugar de un operador. Junta y tuerca incluidas.

### Tapón de cierre

Plástico gris

|      |    |            |    |       |
|------|----|------------|----|-------|
| Par  | PG |            |    |       |
| 22.5 | 16 | SK175919-3 | 10 | 0.010 |

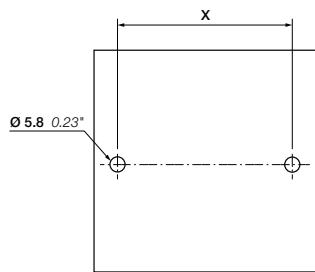
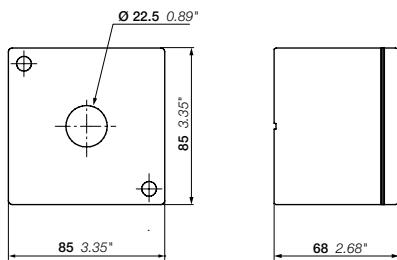
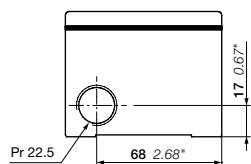
Nota: Para usar cuando no se necesite el prensaestopas.

## Envolvente

### Medidas

#### Envolventes de metal KEM

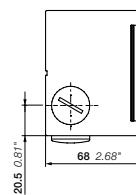
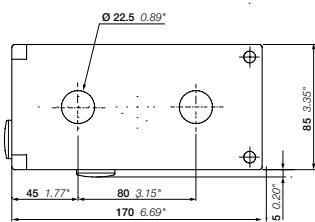
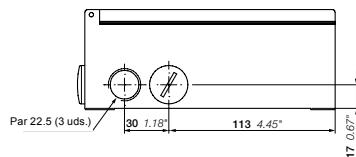
1 hueco



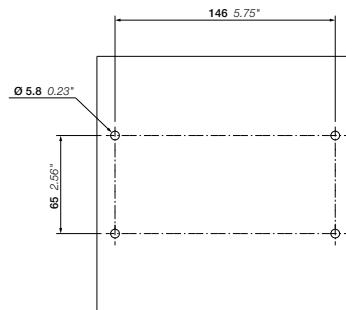
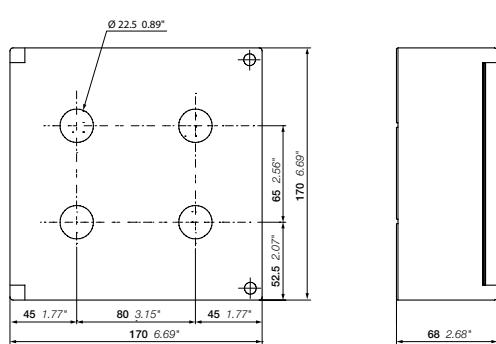
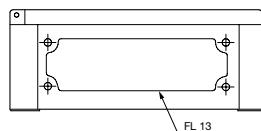
| Tipo           | X              |
|----------------|----------------|
| 1 asiento      | 67 mm / 2.64"  |
| 2 y 3 asientos | 146 mm / 5.75" |

Plan para taladrar KEM de 1, 2 y 3 asientos

KEM2-0, KEM3-0 de 2 y 3 asientos



KEM4-0, KEM6-0 de 4 o 6 huecos



Plan para taladrar KEM de 4 o 6 asientos



---

## Placas de leyenda y tapas de texto

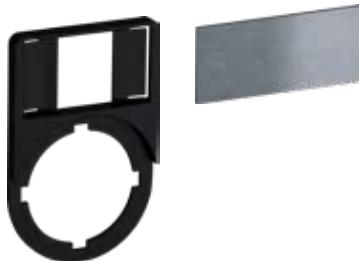
96 **Placas de leyenda**

100 **Tapas de texto**

## Placas de leyenda y tapas de texto

ABB ofrece un amplio abanico de alternativas para etiquetar nuestros productos.

Elija entre placas de leyenda de aluminio marcadas, soportes de etiquetas con una gran variedad de etiquetas marcadas o tapas de texto para montarlas bajo la lente de la pulsanterioría.



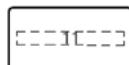
## Placas de leyenda y tapas de texto

Soporte para placa de leyenda con etiquetas

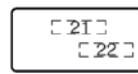


KA1-8120

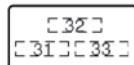
ISFCI51599V0001



Etiqueta de 1 posición



Etiqueta de 2 posiciones



Etiqueta de 3 posiciones

### Descripción

Para operadores de Ø 22 mm instalados en panel o envolvente de metal KEM, marcado láser con texto o símbolos. Etiquetas de plástico o laminado de aluminio.

| Descripción | Tipo | Código de pedido | Cant. paq. | Peso (1 ud.) kg |
|-------------|------|------------------|------------|-----------------|
|-------------|------|------------------|------------|-----------------|

### Soporte para placa de leyenda

|                |          |                 |     |       |
|----------------|----------|-----------------|-----|-------|
| Plástico negro | KA1-8120 | 1SFA616920R8120 | 100 | 0.002 |
|----------------|----------|-----------------|-----|-------|

### Etiqueta

|                      |          |                 |     |       |
|----------------------|----------|-----------------|-----|-------|
| Sin texto ni símbolo | KA1-8121 | 1SFA616920R8121 | 100 | 0.001 |
|----------------------|----------|-----------------|-----|-------|

### Etiqueta de 1 posición

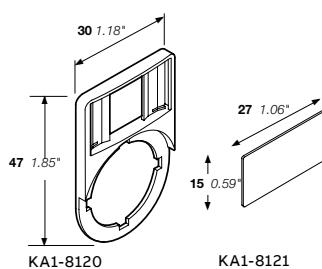
|           |          |                 |    |       |
|-----------|----------|-----------------|----|-------|
| O         | MA6-1032 | 1SFA611930R1032 | 10 | 0.001 |
| I         | MA6-1033 | 1SFA611930R1033 | 10 | 0.001 |
| →         | MA6-1034 | 1SFA611930R1034 | 10 | 0.001 |
| → →       | MA6-1035 | 1SFA611930R1035 | 10 | 0.001 |
| Cerrar    | MA6-1036 | 1SFA611930R1036 | 10 | 0.001 |
| Abrir     | MA6-1037 | 1SFA611930R1037 | 10 | 0.001 |
| ON        | MA6-1038 | 1SFA611930R1038 | 10 | 0.001 |
| OFF       | MA6-1039 | 1SFA611930R1039 | 10 | 0.001 |
| Rápida    | MA6-1040 | 1SFA611930R1040 | 10 | 0.001 |
| Lento     | MA6-1041 | 1SFA611930R1041 | 10 | 0.001 |
| Abajo     | MA6-1042 | 1SFA611930R1042 | 10 | 0.001 |
| Arriba    | MA6-1043 | 1SFA611930R1043 | 10 | 0.001 |
| Inicio    | MA6-1044 | 1SFA611930R1044 | 10 | 0.001 |
| Parada    | MA6-1045 | 1SFA611930R1045 | 10 | 0.001 |
| Reinicio  | MA6-1047 | 1SFA611930R1047 | 10 | 0.001 |
| Ejecución | MA6-1054 | 1SFA611930R1054 | 10 | 0.001 |
| Fallo     | MA6-1058 | 1SFA611930R1058 | 10 | 0.001 |
| Disparo   | MA6-1118 | 1SFA611930R1118 | 10 | 0.001 |
| ⋮         | MA6-1210 | 1SFA611930R1210 | 10 | 0.001 |

### Etiquetas de 2 posiciones para selectores

| Pos. 21        | Pos. 22   |          |                 |    |       |
|----------------|-----------|----------|-----------------|----|-------|
| O              | I         | MA6-1070 | 1SFA611930R1070 | 10 | 0.001 |
| I              | II        | MA6-1071 | 1SFA611930R1071 | 10 | 0.001 |
| OFF            | ON        | MA6-1073 | 1SFA611930R1073 | 10 | 0.001 |
| Parada         | Inicio    | MA6-1074 | 1SFA611930R1074 | 10 | 0.001 |
| Baja           | Alta      | MA6-1075 | 1SFA611930R1075 | 10 | 0.001 |
| Lento          | Rápida    | MA6-1076 | 1SFA611930R1076 | 10 | 0.001 |
| Cerrar         | Abrir     | MA6-1077 | 1SFA611930R1077 | 10 | 0.001 |
| Desplazamiento | Ejecución | MA6-1078 | 1SFA611930R1078 | 10 | 0.001 |
| Manual         | Auto      | MA6-1079 | 1SFA611930R1079 | 10 | 0.001 |

### Etiquetas de 3 posiciones para selectores

| Pos. 31 | Pos. 32 | Pos. 33  |                 |                 |       |       |
|---------|---------|----------|-----------------|-----------------|-------|-------|
| ←       | O       | →        | MA6-1080        | 1SFA611930R1080 | 10    | 0.001 |
| I       | O       | II       | MA6-1082        | 1SFA611930R1082 | 10    | 0.001 |
| Manual  | O       | Auto     | MA6-1083        | 1SFA611930R1083 | 10    | 0.001 |
| Lento   | OFF     | Rápida   | MA6-1084        | 1SFA611930R1084 | 10    | 0.001 |
| Manual  | Auto    | MA6-1085 | 1SFA611930R1085 | 10              | 0.001 |       |
| Manual  | OFF     | Auto     | MA6-1086        | 1SFA611930R1086 | 10    | 0.001 |
| O       | I       | MA6-1087 | 1SFA611930R1087 | 10              | 0.001 |       |



Dimensiones (mm, pulgadas)

## Placas de leyenda y tapas de texto

Placas de leyenda para parada de emergencia



1SFA616915R1005

ISFCI5138890001



SK615546-2

### Descripción

Para operadores de Ø 22 mm instalados en panel o envolvente de metal KEM. Combine las paradas de emergencia con las placas de leyenda amarillas y texto negro para cumplir con la norma EN/ISO 13850 sobre seguridad de máquinas.

Las placas de leyenda laminadas tienen la parte posterior adhesiva.

| Descripción   | Tipo     | Código de pedido | Cant. paq. | Peso (1 ud.) kg |
|---|----------|------------------|------------|-----------------|
| <b>Plástico de Ø 70 mm</b>                              |          |                  |            |                 |
| Sin texto   | -        | 1SFA616915R1038  | 10         | 0.003           |
| Emergency stop  | -        | 1SFA616915R1005  | 10         | 0.003           |
| Not Aus   | -        | 1SFA616915R6005  | 10         | 0.003           |
| <b>Aluminio de Ø 70 mm</b>                              |          |                  |            |                 |
| Sin texto   | -        | SK615546-8       | 10         | 0.010           |
| Nöd Stopp   | -        | SK615546-1       | 10         | 0.010           |
| Emergency stop  | -        | SK615546-2       | 10         | 0.010           |
| Not Aus   | -        | SK615546-3       | 10         | 0.010           |
| ARRET D'URGENCE   | -        | SK615546-4       | 10         | 0.010           |
| HÄTÄSEIS  | -        | SK615546-5       | 10         | 0.010           |
| PARADA DE EMERGENCIA                                    | -        | SK615546-6       | 10         | 0.010           |
| Nød Stop  | -        | SK615546-7       | 10         | 0.010           |
| Emergency stop NOT AUS ARRET D'URGENCE                  | -        | SK615546-13      | 10         | 0.010           |
| Noodstop  | -        | SK615546-15      | 10         | 0.010           |
| <b>Laminado de aluminio rectangular de 59 x 39.5 mm</b> |          |                  |            |                 |
| Sin texto   | MA6-1010 | 1SFA611930R1010  | 10         | 0.005           |
| Nöd stopp   | MA6-1017 | 1SFA611930R1017  | 10         | 0.005           |
| Not Aus   | MA6-1018 | 1SFA611930R1018  | 10         | 0.005           |
| Emergency stop  | MA6-1019 | 1SFA611930R1019  | 10         | 0.005           |
| ARRET D'URGENCE   | MA6-1020 | 1SFA611930R1020  | 10         | 0.005           |
| Hätäseis  | MA6-1021 | 1SFA611930R1021  | 10         | 0.005           |
| PARADA DE EMERGENCIA                                    | MA6-1022 | 1SFA611930R1022  | 10         | 0.005           |
| <b>Laminado de plástico rectangular de 59 x 39.5 mm</b> |          |                  |            |                 |
| Sin texto   | MA6-1011 | 1SFA611930R1011  | 10         | 0.002           |
| Parada de emergencia                                    | MA6-1023 | 1SFA611930R1023  | 10         | 0.002           |

## Placas de leyenda y tapas de texto

Placas de leyenda para paneles y envolventes de metal KEM



MA16-1001

ISFC151582EV0001



SK615552-14

-

### Descripción

Para operadores de Ø 22 mm, hechos de aluminio gris plateado.

|  | Tipo | Código de pedido | Cant. paq. | Peso (1 ud.) kg |
|--|------|------------------|------------|-----------------|
|--|------|------------------|------------|-----------------|

### Sin texto

|                                     |           |                 |    |       |
|-------------------------------------|-----------|-----------------|----|-------|
| Placa de leyenda de 39 mm de altura | MA16-1000 | 1SFA611940R1000 | 10 | 0.002 |
| Placa de leyenda de 44 mm de altura | MA16-1001 | 1SFA611940R1001 | 10 | 0.002 |



SK615550-6

SK615550-61



SK615552-25

-

### Grabado con 1 posición para selectores y pulsadores

Placa de leyenda de 39 mm de altura

|                      |   |             |    |       |
|----------------------|---|-------------|----|-------|
| O                    | - | SK615550-61 | 10 | 0.002 |
| I                    | - | SK615550-62 | 10 | 0.002 |
| →                    | - | SK615562-12 | 10 | 0.002 |
| →→                   | - | SK615562-27 | 10 | 0.002 |
| Cerrar               | - | SK615552-13 | 10 | 0.002 |
| Abajo                | - | SK615552-14 | 10 | 0.002 |
| Parada de emergencia | - | SK615552-15 | 10 | 0.002 |
| Rápida               | - | SK615552-16 | 10 | 0.002 |
| Avance               | - | SK615552-17 | 10 | 0.002 |
| Interior             | - | SK615550-29 | 10 | 0.002 |
| Inferior             | - | SK615552-20 | 10 | 0.002 |
| OFF                  | - | SK615552-21 | 10 | 0.002 |
| ON                   | - | SK615552-22 | 10 | 0.002 |
| Abrir                | - | SK615552-23 | 10 | 0.002 |
| Subir                | - | SK615552-25 | 10 | 0.002 |
| Reinicio             | - | SK615552-27 | 10 | 0.002 |
| Retroceso            | - | SK615552-28 | 10 | 0.002 |
| Derecha              | - | SK615552-40 | 10 | 0.002 |
| Ejecución            | - | SK615552-29 | 10 | 0.002 |
| Lento                | - | SK615552-30 | 10 | 0.002 |
| Inicio               | - | SK615550-44 | 10 | 0.002 |
| Parada               | - | SK615552-31 | 10 | 0.002 |
| Arriba               | - | SK615552-32 | 10 | 0.002 |



SK615550-81

SK615550-81



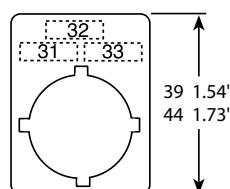
SK615562-82

-

### Grabado con 3 posiciones para selectores y pulsadores

Placa de leyenda de 39 mm de altura

| Pos. 31 | Pos. 32 | Pos. 33 |   |             |
|---------|---------|---------|---|-------------|
| I       | O       | II      | - | SK615550-81 |
| ←       | O       | →       | - | SK615562-82 |
| →       | O       | →→      | - | SK615562-83 |
| Manual  | O       | Auto    | - | SK615550-80 |



Grabado con 3 posiciones

Dimensiones (mm, pulgadas)

## Placas de leyenda y tapas de texto

Tapas de texto para pulsadores iluminados y pilotos



KTC1-1020

1SFC151298V0001



KTC1-9004

1SFC151296V0001



KTC1-1019

9BA186913



KTC2-1020

1SFC151299V0001



KTC3-1019

9BA186938



KTC3-1020

1SFC151294V0001



Piloto

1SFC151312V0001

### Descripción

Para montaje bajo la lente del pulsador iluminado o piloto para añadir símbolos o texto.

Seleccione solo las tapas de texto blancas con productos iluminados debido a la alta opacidad de las tapas de texto con color.

Seleccione las tapas de texto con color combinadas con lentes claras.

| Texto/símbolo                     | Color    | Tipo      | Código de pedido | Cant. paq. | Peso (1 ud.) kg |
|-----------------------------------|----------|-----------|------------------|------------|-----------------|
| <b>Para pulsadores modulares</b>  |          |           |                  |            |                 |
| Sin texto                         | ○ Blanco | KTC1-9000 | 1SFA616901R9000  | 10         | 0.001           |
| START                             | ○ Blanco | KTC6-1042 | 1SFA616906R1042  | 10         | 0.001           |
| R                                 | ○ Blanco | KTC1-9009 | 1SFA616901R9009  | 10         | 0.001           |
| Encendido                         | ○ Blanco | KTC1-1020 | 1SFA616901R1020  | 10         | 0.001           |
| ON                                | ○ Blanco | KTC1-1039 | 1SFA616901R1039  | 10         | 0.001           |
| ● Verde                           | ○ Verde  | KTC6-1039 | 1SFA616906R1039  | 10         | 0.001           |
| ● Negro                           | ○ Negro  | KTC8-1039 | 1SFA616908R1039  | 10         | 0.001           |
| OFF                               | ○ Blanco | KTC1-1019 | 1SFA616901R1019  | 10         | 0.001           |
| Parada                            | ○ Blanco | KTC1-1031 | 1SFA616901R1031  | 10         | 0.001           |
| STOP                              | ● Rojo   | KTC4-1047 | 1SFA616904R1047  | 10         | 0.001           |
| Reinicio                          | ○ Blanco | KTC1-1025 | 1SFA616901R1025  | 10         | 0.001           |
| O                                 | ○ Blanco | KTC1-9004 | 1SFA616901R9004  | 10         | 0.001           |
| ● Rojo                            | ○ Rojo   | KTC4-9004 | 1SFA616904R9004  | 10         | 0.001           |
| ● Negro                           | ○ Negro  | KTC8-9004 | 1SFA616908R9004  | 10         | 0.001           |
| I                                 | ○ Blanco | KTC1-9002 | 1SFA616901R9002  | 10         | 0.001           |
| ● Verde                           | ○ Verde  | KTC6-9002 | 1SFA616906R9002  | 10         | 0.001           |
| ● Negro                           | ○ Negro  | KTC8-9002 | 1SFA616908R9002  | 10         | 0.001           |
| II                                | ○ Blanco | KTC1-9003 | 1SFA616901R9003  | 10         | 0.001           |
| ● Negro                           | ○ Negro  | KTC8-9003 | 1SFA616908R9003  | 10         | 0.001           |
| III                               | ○ Blanco | KTC1-9028 | 1SFA616901R9028  | 10         | 0.001           |
| +                                 | ● Negro  | KTC8-9011 | 1SFA616908R9011  | 10         | 0.001           |
| -                                 | ● Negro  | KTC8-9012 | 1SFA616908R9012  | 10         | 0.001           |
| ▲                                 | ○ Blanco | KTC1-9005 | 1SFA616901R9005  | 10         | 0.001           |
| ● Negro                           | ○ Negro  | KTC8-9005 | 1SFA616908R9005  | 10         | 0.001           |
| ◀▶                                | ● Negro  | KTC8-9015 | 1SFA616908R9015  | 10         | 0.001           |
| ◀▶▶                               | ○ Blanco | KTC1-9016 | 1SFA616901R9016  | 10         | 0.001           |
| ◀▶▶                               | ● Negro  | KTC8-9016 | 1SFA616908R9016  | 10         | 0.001           |
| →                                 | ○ Blanco | KTC1-9006 | 1SFA616901R9006  | 10         | 0.001           |
| ⊕                                 | ● Negro  | KTC8-9018 | 1SFA616908R9018  | 10         | 0.001           |
| ◎                                 | ○ Blanco | KTC1-9020 | 1SFA616901R9020  | 10         | 0.001           |
| ↓                                 | ○ Blanco | KTC1-9026 | 1SFA616901R9026  | 10         | 0.001           |
| ● Negro                           | ○ Negro  | KTC8-9026 | 1SFA616908R9026  | 10         | 0.001           |
| <b>Para pulsadores extendidos</b> |          |           |                  |            |                 |
| Sin texto                         | ○ Blanco | KTC2-9000 | 1SFA616902R9000  | 10         | 0.001           |
| Encendido                         | ○ Blanco | KTC2-1020 | 1SFA616902R1020  | 10         | 0.001           |
| OFF                               | ● Rojo   | KTC5-1040 | 1SFA616905R1040  | 10         | 0.001           |
| Parada                            | ○ Blanco | KTC2-1031 | 1SFA616902R1031  | 10         | 0.001           |
| STOP                              | ● Rojo   | KTC5-1047 | 1SFA616905R1047  | 10         | 0.001           |
| Reinicio                          | ○ Blanco | KTC2-1025 | 1SFA616902R1025  | 10         | 0.001           |
| O                                 | ● Rojo   | KTC5-9004 | 1SFA616905R9004  | 10         | 0.001           |
| I                                 | ○ Blanco | KTC2-9002 | 1SFA616902R9002  | 10         | 0.001           |
| II                                | ○ Blanco | KTC2-9003 | 1SFA616902R9003  | 10         | 0.001           |
| III                               | ○ Blanco | KTC2-9028 | 1SFA616902R9028  | 10         | 0.001           |
| ▲                                 | ○ Blanco | KTC2-9005 | 1SFA616902R9005  | 10         | 0.001           |
| ◀▶                                | ○ Blanco | KTC2-9015 | 1SFA616902R9015  | 10         | 0.001           |
| ◀▶▶                               | ○ Blanco | KTC2-9016 | 1SFA616902R9016  | 10         | 0.001           |
| →                                 | ○ Blanco | KTC2-9006 | 1SFA616902R9006  | 10         | 0.001           |
| <b>Para pilotos</b>               |          |           |                  |            |                 |
| Sin texto                         | ○ Blanco | KTC3-9000 | 1SFA616903R9000  | 10         | 0.001           |
| Encendido                         | ○ Blanco | KTC3-1020 | 1SFA616903R1020  | 10         | 0.001           |
| ON                                | ○ Blanco | KTC3-1039 | 1SFA616903R1039  | 10         | 0.001           |
| OFF                               | ○ Blanco | KTC3-1019 | 1SFA616903R1019  | 10         | 0.001           |
| I                                 | ○ Blanco | KTC3-9002 | 1SFA616903R9002  | 10         | 0.001           |

---

## Pulsantería

Torres de señalización y balizas de señalización

**Detalles de pedido**

103 Torres de señalización y balizas de señalización

**Datos técnicos**

108 Dimensiones y planos de perforación

## Columnas y balizas de señalización



### Columnas de señalización

- Montaje rápido de los elementos de señalización con fijación de bayoneta
- Cambio sencillo de las bombillas para cada módulo sin herramientas
- Flexibilidad de la combinación de elementos de señal
- Hasta 5 elementos posibles/hasta 10 elementos con soporte para el montaje por 2 lados
- Elementos de señalización óptica y acústica con grado de protección elevado con IP54
- Elementos LED para una larga vida útil

### Balizas de señalización

- Alto grado de protección IP65
- La tapa se realiza de policarbonato de alto impacto (hasta 20 J)
- Cambio de bombilla por el interior de la caja de control

### Acoplamiento sencillo con sistema de fijación rápido

Cada módulo de torre de señalización está equipado con una fijación de bayoneta con sistema de contacto integrado. Los módulos se aprietan conjuntamente al alinear las marcas blancas correspondientes y, después, con un giro suave, se colocan en su sitio (consulte las imágenes).

### Balizas y torres de señalización

- Luz permanente
- Luz parpadeante
- Luz con destellos
- Acústico
- Luz permanente LED
- Luz parpadeante LED
- Baliza giratoria LED

## Columnas y balizas de señalización

### Columnas de señalización - Elemento luminosos



KL70-401B

ISFC151507F0001



KL70-401Y

ISFC151508F0001



KA4-102...

ISFC151509F0001

#### Descripción

Al solicitar:

- Seleccione hasta 5 elementos luminosos
- Seleccione hasta 10 elementos si usa un soporte para el montaje por 2 lados
- Seleccione hasta 2 elementos acústicos (opcional)
- Seleccione la bombilla (opcional)
- Seleccione el terminal para el tipo de montaje que desea
- Seleccione los accesorios para el tipo de montaje que desea.

| Color   | Tensión nominal  | Tipo             | Código de pedido | Cant.           | Peso paq. (1 ud.) |
|---|------------------|------------------|------------------|-----------------|-------------------|
|   |                  |                  |                  |                 | kg                |
| <b>Elemento luminoso con LED integrado</b>                          |                  |                  |                  |                 |                   |
| ● Rojo  | 24 V CA/CC       | Luz permanente   | KL70-305R        | 1SFA616070R3051 | 1 0.100           |
| ● Verde   | 24 V CA/CC       | Luz permanente   | KL70-305G        | 1SFA616070R3052 | 1 0.100           |
| ● Amarillo  | 24 V CA/CC       | Luz permanente   | KL70-305Y        | 1SFA616070R3053 | 1 0.100           |
| ● Azul  | 24 V CA/CC       | Luz permanente   | KL70-305L        | 1SFA616070R3054 | 1 0.100           |
| ○ Claro   | 24 V CA/CC       | Luz permanente   | KL70-305C        | 1SFA616070R3058 | 1 0.100           |
| ● Rojo  | 24 V CA/CC       | Luz parpadeante  | KL70-306R        | 1SFA616070R3061 | 1 0.100           |
| ● Verde   | 24 V CA/CC       | Luz parpadeante  | KL70-306G        | 1SFA616070R3062 | 1 0.100           |
| ● Amarillo  | 24 V CA/CC       | Luz parpadeante  | KL70-306Y        | 1SFA616070R3063 | 1 0.100           |
| ● Azul  | 24 V CA/CC       | Luz parpadeante  | KL70-306L        | 1SFA616070R3064 | 1 0.100           |
| ○ Claro   | 24 V CA/CC       | Luz parpadeante  | KL70-306C        | 1SFA616070R3068 | 1 0.100           |
| ● Rojo  | 24 V CA/CC       | Baliza giratoria | KL70-307R        | 1SFA616070R3071 | 1 0.100           |
| ● Verde   | 24 V CA/CC       | Baliza giratoria | KL70-307G        | 1SFA616070R3072 | 1 0.100           |
| ● Amarillo  | 24 V CA/CC       | Baliza giratoria | KL70-307Y        | 1SFA616070R3073 | 1 0.100           |
| ● Azul  | 24 V CA/CC       | Baliza giratoria | KL70-307L        | 1SFA616070R3074 | 1 0.100           |
| ○ Claro   | 24 V CA/CC       | Baliza giratoria | KL70-307C        | 1SFA616070R3078 | 1 0.100           |
| ● Rojo  | 115 V CA         | Luz parpadeante  | KL70-342R        | 1SFA616070R3421 | 1 0.100           |
| ● Verde   | 115 V CA         | Luz parpadeante  | KL70-342G        | 1SFA616070R3422 | 1 0.100           |
| ● Amarillo  | 115 V CA         | Luz parpadeante  | KL70-342Y        | 1SFA616070R3423 | 1 0.100           |
| ● Azul  | 115 V CA         | Luz parpadeante  | KL70-342L        | 1SFA616070R3424 | 1 0.100           |
| ○ Claro   | 115 V CA         | Luz parpadeante  | KL70-342C        | 1SFA616070R3428 | 1 0.100           |
| ● Rojo  | 230 V CA         | Luz parpadeante  | KL70-352R        | 1SFA616070R3521 | 1 0.100           |
| ● Verde   | 230 V CA         | Luz parpadeante  | KL70-352G        | 1SFA616070R3522 | 1 0.100           |
| ● Amarillo  | 230 V CA         | Luz parpadeante  | KL70-352Y        | 1SFA616070R3523 | 1 0.100           |
| ● Azul  | 230 V CA         | Luz parpadeante  | KL70-352L        | 1SFA616070R3524 | 1 0.100           |
| ○ Claro   | 230 V CA         | Luz parpadeante  | KL70-352C        | 1SFA616070R3528 | 1 0.100           |
| <b>Elemento luminoso para bombilla Ba 15d, bombilla no incluida</b> |                  |                  |                  |                 |                   |
| ● Rojo  | 12 - 230 V CA/CC | Luz permanente   | KL70-401R        | 1SFA616070R4011 | 1 0.090           |
| ● Verde   | 12 - 230 V CA/CC | Luz permanente   | KL70-401G        | 1SFA616070R4012 | 1 0.090           |
| ● Amarillo  | 12 - 230 V CA/CC | Luz permanente   | KL70-401Y        | 1SFA616070R4013 | 1 0.090           |
| ● Azul  | 12 - 230 V CA/CC | Luz permanente   | KL70-401L        | 1SFA616070R4014 | 1 0.090           |
| ○ Claro   | 12 - 230 V CA/CC | Luz permanente   | KL70-401C        | 1SFA616070R4018 | 1 0.090           |

## Columnas y balizas de señalización

Columnas de señalización - Bombillas y módulos acústicos



KL70-401B

ISFC151507F0001



KL70-401Y

ISFC151508F0001



KA4-102...

ISFC151509F0001

### Descripción

Al solicitar:

- Seleccione hasta 5 elementos luminosos
- Seleccione hasta 10 elementos si usa un soporte para el montaje por 2 lados
- Seleccione hasta 2 elementos acústicos (opcional)
- Seleccione la bombilla (opcional)
- Seleccione el terminal para el tipo de montaje que desea
- Seleccione los accesorios para el tipo de montaje que desea.

| Descripción | Tensión nominal | Tipo | Código de pedido | Cant. paq. (1 ud.) | Peso kg |
|-------------|-----------------|------|------------------|--------------------|---------|
|-------------|-----------------|------|------------------|--------------------|---------|

#### Bombillas para elemento luminoso

Bombilla Ba 15d, 42 mm máx. 7 W

|  |                  |          |                 |    |       |
|--|------------------|----------|-----------------|----|-------|
| Para elemento luminoso intermitente o permanente | 24 V CA/CC, 5 W  | KA4-1028 | 1SFA616923R1028 | 10 | 0.009 |
| Para elemento luminoso intermitente o permanente | 115 V CA/CC, 5 W | KA4-1118 | 1SFA616923R1118 | 10 | 0.009 |
| Para elemento luminoso intermitente o permanente | 230 V CA/CC, 5 W | KA4-1148 | 1SFA616923R1148 | 10 | 0.009 |

#### Bombillas LED Ba 15d, 40 mA

|            |            |          |                 |   |       |
|------------|------------|----------|-----------------|---|-------|
| ● Rojo     | 24 V CA/CC | KA4-1021 | 1SFA616924R1021 | 1 | 0.009 |
| ● Verde    | 24 V CA/CC | KA4-1022 | 1SFA616924R1022 | 1 | 0.009 |
| ● Amarillo | 24 V CA/CC | KA4-1023 | 1SFA616924R1023 | 1 | 0.009 |
| ● Azul     | 24 V CA/CC | KA4-1024 | 1SFA616924R1024 | 1 | 0.009 |
| ○ Claro    | 24 V CA/CC | KA4-1025 | 1SFA616924R1025 | 1 | 0.009 |

### Módulos acústicos

#### Elemento zumbador

Tono ajustable, 85 dB

|                          |            |           |                 |   |       |
|--------------------------|------------|-----------|-----------------|---|-------|
| Tono continuo o pulsante | 230 V CA   | KB70-1201 | 1SFA616071R1201 | 1 | 0.120 |
| Tono continuo o pulsante | 24 V CA/CC | KB70-3001 | 1SFA616071R3001 | 1 | 0.110 |
| Tono continuo o pulsante | 115 V CA   | KB70-3101 | 1SFA616071R3101 | 1 | 0.110 |

#### Elemento de sirena

|  |            |           |                 |   |       |
|--|------------|-----------|-----------------|---|-------|
| Multifunción con 8 tonos diferentes, volumen ajustable, 100 dB | 115 V CA   | KS70-1104 | 1SFA616073R1104 | 1 | 0.130 |
| Multifunción con 8 tonos diferentes, volumen ajustable, 100 dB | 230 V CA   | KS70-1204 | 1SFA616073R1204 | 1 | 0.120 |
| Multifunción con 7 tonos diferentes, volumen ajustable, 100 dB | 24 V CC    | KS70-2004 | 1SFA616073R2004 | 1 | 0.120 |
| Multifunción con 8 tonos diferentes, volumen ajustable, 100 dB | 24 V CA/CC | KS70-3004 | 1SFA616073R3004 | 1 | 0.120 |
| Tono continuo alterno 108 dB                                   | 24 V CC    | KS70-2002 | 1SFA616073R2002 | 1 | 0.150 |

## Columnas y balizas de señalización

### Accesorios



ISFC151510F0001

KT70-1001



ISFC151511F0001

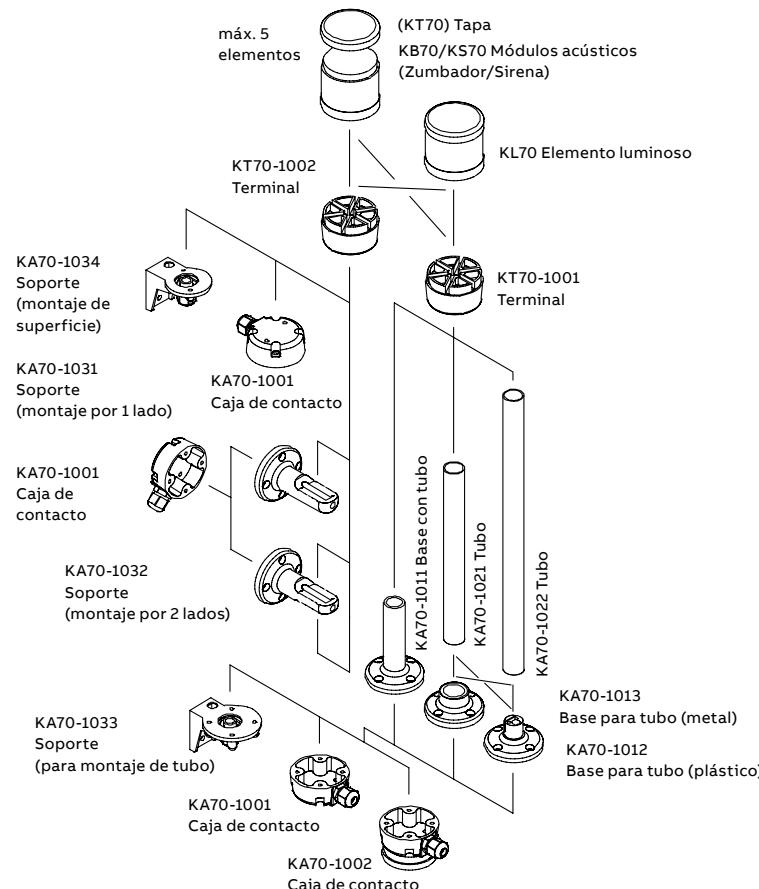
KA70-1001



ISFC151512F0001

KA70-1034

| Descripción                            | Tipo      | Código de pedido | Cant.<br>paq. | Peso<br>(1 ud.)<br>kg |
|--|-----------|------------------|---------------|-----------------------|
| <b>Terminales</b>                      |           |                  |               |                       |
| Para montaje de tubo, tapa incluida    | KT70-1001 | 1SFA616075R1001  | 1             | 0.150                 |
| Para soporte o base, tapa incluida     | KT70-1002 | 1SFA616075R1002  | 1             | 0.150                 |
| <b>Piezas especiales</b>               |           |                  |               |                       |
| <b>Caja de contacto</b>                |           |                  |               |                       |
| Salida de cable lateral                | KA70-1001 | 1SFA616077R1001  | 1             | 0.070                 |
| Base magnética                         | KA70-1002 | 1SFA616077R1002  | 1             | 0.070                 |
| <b>Base con tubo</b>                   |           |                  |               |                       |
| P = 25 mm, L = 110 mm                  | KA70-1011 | 1SFA616077R1011  | 1             | 0.060                 |
| <b>Base para tubo</b>                  |           |                  |               |                       |
| P = 25 mm, plástico                    | KA70-1012 | 1SFA616077R1012  | 1             | 0.030                 |
| P = 25 mm, metal                       | KA70-1013 | 1SFA616077R1013  | 1             | 0.320                 |
| <b>Aluminio anodizado, tubo</b>        |           |                  |               |                       |
| P = 25 mm, L = 250 mm                  | KA70-1021 | 1SFA616077R1021  | 1             | 0.080                 |
| P = 25 mm, L = 400 mm                  | KA70-1022 | 1SFA616077R1022  | 1             | 0.120                 |
| P = 25 mm, L = 800 mm                  | KA70-1023 | 1SFA616077R1023  | 1             | 0.240                 |
| <b>Soporte</b>                         |           |                  |               |                       |
| Montaje por 1 lado, máx. 5 elementos   | KA70-1031 | 1SFA616077R1031  | 1             | 0.070                 |
| Montaje por 2 lados, máx. 10 elementos | KA70-1032 | 1SFA616077R1032  | 1             | 0.070                 |
| Para montaje de tubo                   | KA70-1033 | 1SFA616077R1033  | 1             | 0.070                 |
| Para montaje de superficie             | KA70-1034 | 1SFA616077R1034  | 1             | 0.070                 |



## Columnas y balizas de señalización

### Balizas de señalización



KSB-401G

ISFC15153F0001



KASB-100

ISFC15154F0001

#### Descripción

Para montaje en panel con diámetro de orificio de 37 mm, con dispositivo antígido opcional.

| Color | Tensión nominal | Tipo | Código de pedido | Cant. paq. (1 ud.) | Peso kg |
|-------|-----------------|------|------------------|--------------------|---------|
|-------|-----------------|------|------------------|--------------------|---------|

#### LED integrado

|            |            |                  |          |                 |   |       |
|------------|------------|------------------|----------|-----------------|---|-------|
| ● Rojo     | 24 V CA/CC | Luz permanente   | KSB-305R | 1SFA616080R3051 | 1 | 0.140 |
| ● Verde    | 24 V CA/CC | Luz permanente   | KSB-305G | 1SFA616080R3052 | 1 | 0.140 |
| ● Amarillo | 24 V CA/CC | Luz permanente   | KSB-305Y | 1SFA616080R3053 | 1 | 0.140 |
| ● Rojo     | 24 V CA/CC | Luz parpadeante  | KSB-306R | 1SFA616080R3061 | 1 | 0.140 |
| ● Verde    | 24 V CA/CC | Luz parpadeante  | KSB-306G | 1SFA616080R3062 | 1 | 0.140 |
| ● Amarillo | 24 V CA/CC | Luz parpadeante  | KSB-306Y | 1SFA616080R3063 | 1 | 0.140 |
| ● Rojo     | 24 V CA/CC | Baliza giratoria | KSB-307R | 1SFA616080R3071 | 1 | 0.140 |
| ● Verde    | 24 V CA/CC | Baliza giratoria | KSB-307G | 1SFA616080R3072 | 1 | 0.140 |
| ● Amarillo | 24 V CA/CC | Baliza giratoria | KSB-307Y | 1SFA616080R3073 | 1 | 0.140 |
| ● Rojo     | 115 V CA   | Luz permanente   | KSB-115R | 1SFA616080R1151 | 1 | 0.140 |
| ● Verde    | 115 V CA   | Luz permanente   | KSB-115G | 1SFA616080R1152 | 1 | 0.140 |
| ● Amarillo | 115 V CA   | Luz permanente   | KSB-115Y | 1SFA616080R1153 | 1 | 0.140 |

#### Tubo de xenón integrado

|            |          |                   |          |                 |   |       |
|------------|----------|-------------------|----------|-----------------|---|-------|
| ● Rojo     | 24 V CC  | Luz con destellos | KSB-203R | 1SFA616080R2031 | 1 | 0.140 |
| ● Verde    | 24 V CC  | Luz con destellos | KSB-203G | 1SFA616080R2032 | 1 | 0.140 |
| ● Amarillo | 24 V CC  | Luz con destellos | KSB-203Y | 1SFA616080R2033 | 1 | 0.140 |
| ● Azul     | 24 V CC  | Luz con destellos | KSB-203L | 1SFA616080R2034 | 1 | 0.140 |
| ○ Claro    | 24 V CC  | Luz con destellos | KSB-203C | 1SFA616080R2038 | 1 | 0.140 |
| ● Rojo     | 115 V CA | Luz con destellos | KSB-113R | 1SFA616080R1131 | 1 | 0.140 |
| ● Verde    | 115 V CA | Luz con destellos | KSB-113G | 1SFA616080R1132 | 1 | 0.140 |
| ● Amarillo | 115 V CA | Luz con destellos | KSB-113Y | 1SFA616080R1133 | 1 | 0.140 |
| ● Azul     | 115 V CA | Luz con destellos | KSB-113L | 1SFA616080R1134 | 1 | 0.140 |
| ○ Claro    | 115 V CA | Luz con destellos | KSB-113C | 1SFA616080R1138 | 1 | 0.140 |
| ● Rojo     | 230 V CA | Luz con destellos | KSB-123R | 1SFA616080R1231 | 1 | 0.140 |
| ● Verde    | 230 V CA | Luz con destellos | KSB-123G | 1SFA616080R1232 | 1 | 0.140 |
| ● Amarillo | 230 V CA | Luz con destellos | KSB-123Y | 1SFA616080R1233 | 1 | 0.140 |
| ● Azul     | 230 V CA | Luz con destellos | KSB-123L | 1SFA616080R1234 | 1 | 0.140 |
| ○ Claro    | 230 V CA | Luz con destellos | KSB-123C | 1SFA616080R1238 | 1 | 0.140 |

#### Para bombilla Ba 15d, bombilla no incluida

|            |                  |                |          |                 |   |       |
|------------|------------------|----------------|----------|-----------------|---|-------|
| ● Rojo     | 12 - 240 V CA/CC | Luz permanente | KSB-401R | 1SFA616080R4011 | 1 | 0.130 |
| ● Verde    | 12 - 240 V CA/CC | Luz permanente | KSB-401G | 1SFA616080R4012 | 1 | 0.130 |
| ● Amarillo | 12 - 240 V CA/CC | Luz permanente | KSB-401Y | 1SFA616080R4013 | 1 | 0.130 |
| ● Azul     | 12 - 240 V CA/CC | Luz permanente | KSB-401L | 1SFA616080R4014 | 1 | 0.130 |
| ○ Claro    | 12 - 240 V CA/CC | Luz permanente | KSB-401C | 1SFA616080R4018 | 1 | 0.130 |

#### Bombillas para elemento luminoso

Bombilla Ba 15d, 42 mm  
máx. 10 W para luz permanente

|                             |          |                 |    |       |
|-----------------------------|----------|-----------------|----|-------|
| 12 V CA/CC, 7 W             | KA3-1018 | 1SFA616922R1018 | 10 | 0.011 |
| 24 V CA/CC, 7 W             | KA3-1028 | 1SFA616922R1028 | 10 | 0.011 |
| 115 V CA/CC, 7 W            | KA3-1118 | 1SFA616922R1118 | 10 | 0.011 |
| 220 - 260 V CA/CC, 7 - 10 W | KA3-1148 | 1SFA616922R1148 | 10 | 0.011 |

#### Piezas especiales

|                      |           |                 |   |       |
|----------------------|-----------|-----------------|---|-------|
| Dispositivo antígido | KASB-1000 | 1SFA616087R1000 | 1 | 0.005 |
|----------------------|-----------|-----------------|---|-------|

## Columnas y balizas de señalización

### Datos técnicos

#### Columnas de señalización K70

##### Especificaciones técnicas

|  |   |  |
|--|---|--|
| Carcasa y accesorios                               | Poliamida, alto impacto, negro                      |  |
| Cúpula   | Policarbonato, transparente                         |  |
| Fijación   | Fondo, tubo de Ø 25 mm, montaje del soporte         |  |
| Base   | B 15 d, para bombilla máx. 7 W                      |  |
| Conexión   | Conexión con tornillos de hasta 2.5 mm <sup>2</sup> |  |
| Número de módulos posibles para soporte de 1 lado  | máx. 5  |  |
| Número de módulos posibles para soporte de 2 lados | máx. 10   |  |

##### Grados de protección

|                     |       |           |
|---------------------|-------|-----------|
| Elementos luminosos | IP 54 | UL tipo 5 |
| Elementos acústicos | IP 54 | UL tipo 5 |

#### Datos eléctricos

|  |                      |  |
|--|----------------------|--|
| Elemento luminoso permanente           | 12 - 240 V           |  |
| Casquillo de bombilla B 15 d, máx. 7 W | Bombilla no incluida |  |

#### Elemento de luz con destellos

|                           | 24 V CC                 | 115 V CA | 230 V CA |
|---------------------------|-------------------------|----------|----------|
| Frecuencia de destellos   | 1 Hz                    | 1 Hz     | 1 Hz     |
| Energía de destellos      | 2 Ws                    | 2 Ws     | 2 Ws     |
| Duración de la vida útil  | 4 millones de destellos |          |          |
| Consumo actual            | 125 mA                  | 22 mA    | 15 mA    |
| Reducido para interfaz AS | 80 mA                   | 80 mA    | 80 mA    |
| Intensidad de arranque    | < 0.5 A a 24 V          |          |          |

#### Elemento luminoso permanente LED

|                          | 24 V CA/CC     | 115 V CA | 230 V CA |
|--------------------------|----------------|----------|----------|
| Duración de la vida útil | 100 000 horas  |          |          |
| Consumo actual           | 45 mA          | 25 mA    | 25 mA    |
| Intensidad de arranque   | < 0.5 A a 24 V |          |          |

#### Para elemento luminoso intermitente LED

|                             | 24 V CA/CC     | 115 V CA | 230 V CA |
|-----------------------------|----------------|----------|----------|
| Duración de la vida útil    | 100 000 horas  |          |          |
| Consumo actual              | 25 mA          | 25 mA    | 25 mA    |
| Intensidad de arranque      | < 0.5 A a 24 V |          |          |
| Frecuencia de intermitencia | ~ 1 Hz         | ~ 1 Hz   | ~ 1 Hz   |

#### Elemento de baliza

|                          | 24 V CA/CC     |
|--------------------------|----------------|
| Duración de la vida útil | 50 000 horas   |
| Consumo actual           | 40 mA          |
| Intensidad de arranque   | < 0.5 A a 24 V |
| Frecuencia de giro       | ~ 120 r.p.m.   |

#### Temperatura

|  |              |
|--|--------------|
| Temperatura ambiente durante el funcionamiento | -20 a +50 °C |
|--|--------------|

#### Balizas de señalización KSB

##### Especificaciones técnicas

|                       |  |  |
|-----------------------|--|--|
| Carcasa y accesorios  | Mezcla de PC/ABS, alto impacto, negro                                    |  |
| Cúpula                | Policarbonato, transparente  |  |
| Fijación              | Montaje de instalación para Ø 37 mm, (PG 29)                             |  |
| Casquillo de bombilla | B 15 d, para bombilla máx. 10 W  |  |
| Cambio de bombilla    | Mediante acceso trasero con mecanismo de bayoneta (bombilla no incluida) |  |
| Conexión              | Conexión con tornillos, máx. 2.5 mm <sup>2</sup>                         |  |
| Grados de protección  | IP 65, UL tipo 5   |  |

#### Datos eléctricos

| Elemento luminoso permanente            |                      |
|---|----------------------|
| Tensión de funcionamiento               | máx. 250 V           |
| Duración de la vida útil                | 100 000 horas        |
| Casquillo de bombilla B 15 d, máx. 10 W | Bombilla no incluida |
| Versión LED: Luz permanente             | 24 V CA/CC           |
| Duración de la vida útil                | 100 000 horas        |
| Consumo actual                          | 45 mA                |
| Elemento luminoso intermitente          | 24 V CA/CC           |
| Duración de la vida útil                | 100 000 horas        |
| Consumo actual                          | 25 mA                |

#### Elemento de baliza giratoria

|                          | 24 V CA/CC    |
|--------------------------|---------------|
| Duración de la vida útil | 100 000 horas |
| Consumo actual           | 70 mA         |
| Intensidad de arranque   | <0.5 A        |

#### Elemento de luz con destellos

| Tensión de funcionamiento | 24 V CA/CC              | 115 V CA | 230 V CA |
|---------------------------|-------------------------|----------|----------|
| Frecuencia de destellos   | 1 Hz                    | 1 Hz     | 1 Hz     |
| Energía de destellos      | 2 Ws                    | 2 Ws     | 2 Ws     |
| Duración de la vida útil  | 4 millones de destellos |          |          |
| Consumo actual            | 125 mA                  | 20 mA    | 35 mA    |
| Intensidad de arranque    | <0.5 A                  | <0.5 A   | <0.5 A   |

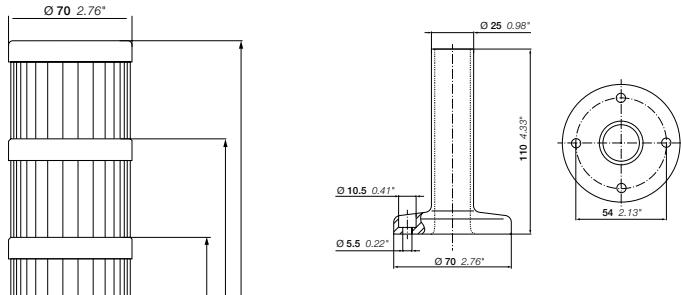
#### Temperatura

|  |              |
|--|--------------|
| Temperatura ambiente durante el funcionamiento | -20 a +50 °C |
|--|--------------|

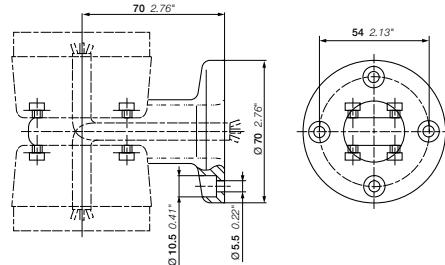
## Columnas y balizas de señalización

### Dimensiones y planos de perforación

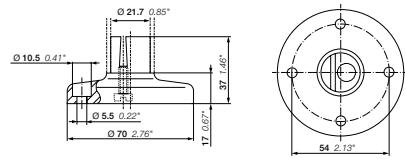
Torres de señalización K70      Base con tubo integrado



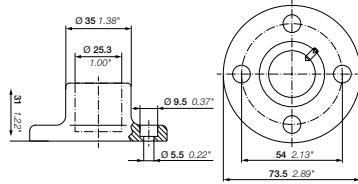
Soporte para montaje por 2 lados



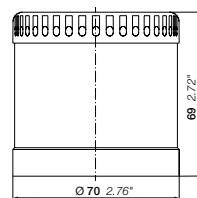
Base para tubo, plástico



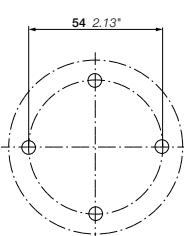
Base para tubo, metal



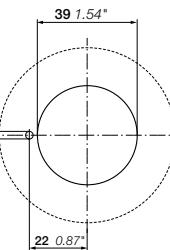
Módulo acústico



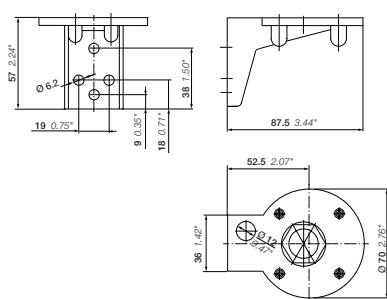
Plan para taladrar para torres de señalización K70



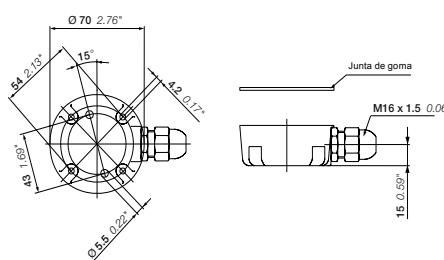
Plan para taladrar para balizas de señalización KSB



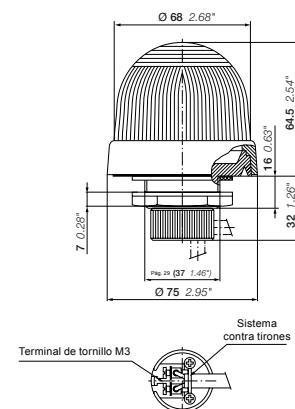
Soporte para montaje de tubo



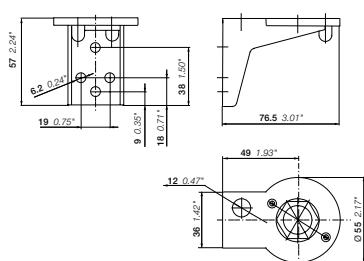
Caja de contacto para salida de cable en el lateral



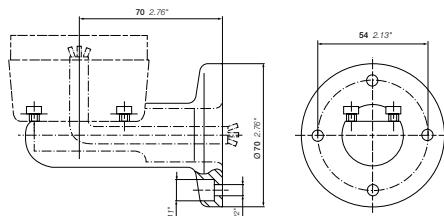
Balizas de señalización KSB



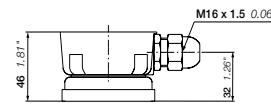
Soporte para montaje de superficie



Soporte para montaje por 1 lado



Caja de contacto con base magnética



## Selección de colores

### Datos técnicos generales

#### Selección de colores según IEC 60073

IEC 60073 especifica principios de codificación para indicadores y actuadores, además de ofrecer recomendaciones relacionadas con el uso de los colores.

A continuación, se muestra un fragmento de la norma. Para obtener información más detallada, consulte la norma.

#### Significado de los colores: Principios generales

| Color                   | Seguridad de las personas o el entorno | Condición del proceso | Estado de los equipos |
|-------------------------|--|-----------------------|-----------------------|
| ● Rojo                  | Peligro                                | Emergencia            | Avería                |
| ■ Amarillo              | Advertencia/precaución                 | Anormal               | Anormal               |
| ● Verde                 | Seguro                                 | Normal                | Normal                |
| ● Azul                  | Obligatoriedad                         |                       |                       |
| ○ ● Blanco, gris, negro | Sin significado concreto asignado      |                       |                       |

#### Actuadores no luminosos

##### Actuadores de emergencia

Los actuadores de PARADA DE EMERGENCIA / APAGADO deben estar identificados en color ROJO.

##### Actuadores de PARADA / APAGADO

BLANCO, GRIS y NEGRO son los colores de preferencia para los actuadores de PARADA / APAGADO, siendo el principal el color NEGRO. También se permite el color ROJO. No se debe usar el color VERDE.

##### Actuadores de INICIO / ENCENDIDO

BLANCO, GRIS y NEGRO son los colores de preferencia para los actuadores de INICIO / ENCENDIDO, que provocan el cierre de los aparatos de conexión y que el equipo se inicie, siendo el color principal el BLANCO. También se permite el color VERDE. No se debe usar el color ROJO.

##### Uso de BLANCO y NEGRO con significados concretos

Si se usan los colores BANCO y NEGRO para distinguir entre los actuadores de INICIO / ENCENDIDO y PARADA / APAGADO, el color BLANCO se usará para los actuadores de INICIO / ENCENDIDO y el color NEGRO se usará para los actuadores de PARADA / APAGADO.

#### Se usan los mismos actuadores para INICIO / PARADA o ENCENDIDO / APAGADO

BLANCO, GRIS y NEGRO son los colores de preferencia para los actuadores que, si se accionan varias veces, funcionan de manera alterna como actuador de INICIO / ENCENDIDO y de PARADA / APAGADO.

No se deben usar los colores AMARILLO ni VERDE. El color ROJO se debe utilizar solamente si se usa el mismo actuador –sin ser un pulsador– tanto para PARADA DE EMERGENCIA / APAGADO como para el funcionamiento normal.

BLANCO, GRIS y NEGRO son los colores de preferencia para los actuadores que inician un movimiento cuando están accionados y lo detienen cuando se dejan de pulsar (como los actuadores de desplazamiento lento o a baja velocidad). También se permite el color VERDE. No se debe usar el color ROJO.

#### Actuadores de REARME

Los actuadores de REARME (que se usan, por ejemplo, con relés protectores) deben ser de color AZUL, BLANCO, GRIS o NEGRO, excepto los actuadores de REARME que también actúan como actuadores de PARADA / APAGADO. El color de dichos actuadores de PARADA / APAGADO debe coincidir con los actuadores de PARADA / APAGADO descritos anteriormente.

## Grados de protección

### Datos técnicos generales

En una instalación, el grado de protección requerido para equipos eléctricos depende de las características ambientales.

El grado de protección, garantizado por la envolvente del equipo o por el cubículo que lo contiene, se expresa con el código IP, que otorga el nivel de protección frente al acceso a componentes peligrosos, así como la entrada de cuerpos extraños o de agua, según las normas IEC 60529 e IEC 60947-1. Además del símbolo IP, el código tiene dos cifras seguidas (opcionalmente) por dos letras adicionales. A continuación, se ofrece una breve descripción de los elementos usados en codificación IP.

| Primera cifra | Especificaciones para la protección de la instalación |  | Protección de personas |
|---------------|---|--|------------------------|
|               | Contra la entrada de cuerpos extraños                 | Contra el acceso a componentes peligrosos con: |                        |
| IP 0          | Sin protección  | Sin protección                                 |                        |
| 1             | Diámetro > 50 mm                                      | DORSO DE LA MANO                               |                        |
| 2             | Diámetro > 12.5 mm                                    | DEDO   |                        |
| 3             | Diámetro > 2.5 mm                                     | HERRAMIENTA                                    |                        |
| 4             | Diámetro > 1 mm                                       | CABLE  |                        |
| 5             | PROTECCIÓN LIMITADA CONTRA EL POLVO                   | CABLE  |                        |
| 6             | PROTECCIÓN TOTAL CONTRA EL POLVO                      | CABLE  |                        |
| Segunda cifra | Contra la entrada de agua con efectos perjudiciales   |  | cifra                  |
|               | Contra la entrada de agua con efectos perjudiciales   |  | cifra                  |
| 0             | Sin protección  |  |                        |
| 1             | Goteo vertical  |  |                        |
| 2             | Goteo en un ángulo vertical de <15°                   |  |                        |
| 3             | Precipitación en un ángulo vertical de <60°           |  |                        |
| 4             | Salpicaduras  |  |                        |
| 5             | Chorro de agua a baja presión                         |  |                        |
| 6             | Chorros de agua potentes                              |  |                        |
| 7             | Inmersión temporal                                    |  |                        |
| 8             | Inmersión permanente                                  |  |                        |
| 9K*           | Lavado a alta presión y temperatura                   |  |                        |



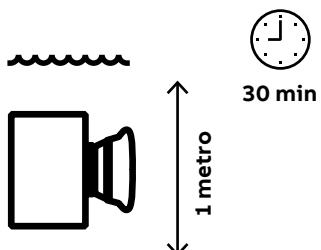
Nota: El tipo de envolvente o cubículo en el que debe instalarse el equipo se antepone respecto al grado de protección.

(\*) Según DIN 400 50-9.

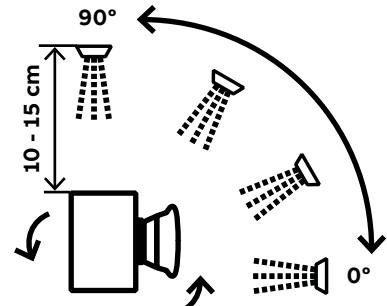
## Ensayos con agua

**IP67**

El producto se sumerge



**IP69K**





## Índice

### Clasificación de referencia de pedido

| Referencia de pedido | Tipo    | Página | Referencia de pedido | Tipo    | Página | Referencia de pedido | Tipo      | Página |
|----------------------|---------|--------|----------------------|---------|--------|----------------------|-----------|--------|
| 1SFA611100R1001      | MP1-10R | 13     | 1SFA611101R3102      | MP2-31G | 15     | 1SFA611103R3101      | MP4-31R   | 16     |
| 1SFA611100R1002      | MP1-10G | 13     | 1SFA611101R3103      | MP2-31Y | 15     | 1SFA611103R3102      | MP4-31G   | 16     |
| 1SFA611100R1003      | MP1-10Y | 13     | 1SFA611101R3104      | MP2-31L | 15     | 1SFA611103R3104      | MP4-31L   | 16     |
| 1SFA611100R1004      | MP1-10L | 13     | 1SFA611101R3105      | MP2-31W | 15     | 1SFA611103R3108      | MP4-31C   | 16     |
| 1SFA611100R1005      | MP1-10W | 13     | 1SFA611101R3108      | MP2-31C | 15     | 1SFA611124R1001      | MPM1-10R  | 20     |
| 1SFA611100R1006      | MP1-10B | 13     | 1SFA611102R1001      | MP3-10R | 14     | 1SFA611124R1002      | MPM1-10G  | 20     |
| 1SFA611100R1008      | MP1-10C | 13     | 1SFA611102R1002      | MP3-10G | 14     | 1SFA611124R1003      | MPM1-10Y  | 20     |
| 1SFA611100R1101      | MP1-11R | 15     | 1SFA611102R1003      | MP3-10Y | 14     | 1SFA611124R1006      | MPM1-10B  | 20     |
| 1SFA611100R1102      | MP1-11G | 15     | 1SFA611102R1004      | MP3-10L | 14     | 1SFA611124R1101      | MPM1-11R  | 20     |
| 1SFA611100R1103      | MP1-11Y | 15     | 1SFA611102R1005      | MP3-10W | 14     | 1SFA611124R1102      | MPM1-11G  | 20     |
| 1SFA611100R1104      | MP1-11L | 15     | 1SFA611102R1006      | MP3-10B | 14     | 1SFA611124R1103      | MPM1-11Y  | 20     |
| 1SFA611100R1105      | MP1-11W | 15     | 1SFA611102R1008      | MP3-10C | 14     | 1SFA611125R1001      | MPM2-10R  | 20     |
| 1SFA611100R1108      | MP1-11C | 15     | 1SFA611102R1101      | MP3-11R | 16     | 1SFA611125R1003      | MPM2-10Y  | 20     |
| 1SFA611100R2001      | MP1-20R | 13     | 1SFA611102R1102      | MP3-11G | 16     | 1SFA611125R1006      | MPM2-10B  | 20     |
| 1SFA611100R2002      | MP1-20G | 13     | 1SFA611102R1103      | MP3-11Y | 16     | 1SFA611125R1101      | MPM2-11R  | 20     |
| 1SFA611100R2003      | MP1-20Y | 13     | 1SFA611102R1104      | MP3-11L | 16     | 1SFA611125R1103      | MPM2-11Y  | 20     |
| 1SFA611100R2004      | MP1-20L | 13     | 1SFA611102R1105      | MP3-11W | 16     | 1SFA611130R1101      | MPD1-11R  | 18     |
| 1SFA611100R2005      | MP1-20W | 13     | 1SFA611102R1108      | MP3-11C | 16     | 1SFA611130R1102      | MPD1-11G  | 18     |
| 1SFA611100R2006      | MP1-20B | 13     | 1SFA611102R2001      | MP3-20R | 14     | 1SFA611130R1103      | MPD1-11Y  | 18     |
| 1SFA611100R2008      | MP1-20C | 13     | 1SFA611102R2002      | MP3-20G | 14     | 1SFA611130R1106      | MPD1-11B  | 17     |
| 1SFA611100R2101      | MP1-21R | 15     | 1SFA611102R2003      | MP3-20Y | 14     | 1SFA611130R1108      | MPD1-11C  | 18     |
| 1SFA611100R2102      | MP1-21G | 15     | 1SFA611102R2004      | MP3-20L | 14     | 1SFA611131R1101      | MPD2-11R  | 18     |
| 1SFA611100R2103      | MP1-21Y | 15     | 1SFA611102R2005      | MP3-20W | 14     | 1SFA611131R1102      | MPD2-11G  | 18     |
| 1SFA611100R2104      | MP1-21L | 15     | 1SFA611102R2006      | MP3-20B | 14     | 1SFA611131R1103      | MPD2-11Y  | 18     |
| 1SFA611100R2105      | MP1-21W | 15     | 1SFA611102R2101      | MP3-21R | 16     | 1SFA611131R1106      | MPD2-11B  | 17     |
| 1SFA611100R2108      | MP1-21C | 15     | 1SFA611102R2102      | MP3-21G | 16     | 1SFA611131R1108      | MPD2-11C  | 18     |
| 1SFA611100R3001      | MP1-30R | 13     | 1SFA611102R2103      | MP3-21Y | 16     | 1SFA611132R1101      | MPD3-11R  | 18     |
| 1SFA611100R3002      | MP1-30G | 13     | 1SFA611102R2104      | MP3-21L | 16     | 1SFA611132R1102      | MPD3-11G  | 18     |
| 1SFA611100R3003      | MP1-30Y | 13     | 1SFA611102R2105      | MP3-21W | 16     | 1SFA611132R1103      | MPD3-11Y  | 18     |
| 1SFA611100R3004      | MP1-30L | 13     | 1SFA611102R2108      | MP3-21C | 16     | 1SFA611132R1106      | MPD3-11B  | 17     |
| 1SFA611100R3005      | MP1-30W | 13     | 1SFA611102R3001      | MP3-30R | 14     | 1SFA611132R1108      | MPD3-11C  | 18     |
| 1SFA611100R3006      | MP1-30B | 13     | 1SFA611102R3002      | MP3-30G | 14     | 1SFA611133R1101      | MPD4-11R  | 18     |
| 1SFA611100R3008      | MP1-30C | 13     | 1SFA611102R3003      | MP3-30Y | 14     | 1SFA611133R1102      | MPD4-11G  | 18     |
| 1SFA611100R3101      | MP1-31R | 15     | 1SFA611102R3004      | MP3-30L | 14     | 1SFA611133R1103      | MPD4-11Y  | 18     |
| 1SFA611100R3102      | MP1-31G | 15     | 1SFA611102R3005      | MP3-30W | 14     | 1SFA611133R1106      | MPD4-11B  | 17     |
| 1SFA611100R3103      | MP1-31Y | 15     | 1SFA611102R3006      | MP3-30B | 14     | 1SFA611133R1108      | MPD4-11C  | 18     |
| 1SFA611100R3104      | MP1-31L | 15     | 1SFA611102R3008      | MP3-30C | 14     | 1SFA611134R1101      | MPD5-11R  | 18     |
| 1SFA611100R3105      | MP1-31W | 15     | 1SFA611102R3101      | MP3-31R | 16     | 1SFA611134R1102      | MPD5-11G  | 18     |
| 1SFA611100R3108      | MP1-31C | 15     | 1SFA611102R3102      | MP3-31G | 16     | 1SFA611134R1103      | MPD5-11Y  | 18     |
| 1SFA611101R1001      | MP2-10R | 13     | 1SFA611102R3103      | MP3-31Y | 16     | 1SFA611134R1106      | MPD5-11B  | 17     |
| 1SFA611101R1002      | MP2-10G | 13     | 1SFA611102R3104      | MP3-31L | 16     | 1SFA611134R1108      | MPD5-11C  | 18     |
| 1SFA611101R1003      | MP2-10Y | 13     | 1SFA611102R3105      | MP3-31W | 16     | 1SFA611135R1102      | MPD6-11G  | 18     |
| 1SFA611101R1004      | MP2-10L | 13     | 1SFA611102R3108      | MP3-31C | 16     | 1SFA611135R1106      | MPD6-11B  | 17     |
| 1SFA611101R1005      | MP2-10W | 13     | 1SFA611103R1001      | MP4-10R | 14     | 1SFA611135R1108      | MPD6-11C  | 18     |
| 1SFA611101R1006      | MP2-10B | 13     | 1SFA611103R1002      | MP4-10G | 14     | 1SFA611136R1102      | MPD7-11G  | 18     |
| 1SFA611101R1008      | MP2-10C | 13     | 1SFA611103R1003      | MP4-10Y | 14     | 1SFA611136R1106      | MPD7-11B  | 17     |
| 1SFA611101R1101      | MP2-11R | 15     | 1SFA611103R1004      | MP4-10L | 14     | 1SFA611137R1102      | MPD8-11G  | 18     |
| 1SFA611101R1102      | MP2-11G | 15     | 1SFA611103R1005      | MP4-10W | 14     | 1SFA611137R1106      | MPD8-11B  | 17     |
| 1SFA611101R1103      | MP2-11Y | 15     | 1SFA611103R1006      | MP4-10B | 14     | 1SFA611137R1108      | MPD8-11C  | 18     |
| 1SFA611101R1104      | MP2-11L | 15     | 1SFA611103R1008      | MP4-10C | 14     | 1SFA611138R1106      | MPD9-11B  | 17     |
| 1SFA611101R1105      | MP2-11W | 15     | 1SFA611103R1101      | MP4-11R | 16     | 1SFA611141R1101      | MPD12-11R | 19     |
| 1SFA611101R1108      | MP2-11C | 15     | 1SFA611103R1102      | MP4-11G | 16     | 1SFA611141R1102      | MPD12-11G | 19     |
| 1SFA611101R2001      | MP2-20R | 13     | 1SFA611103R1103      | MP4-11Y | 16     | 1SFA611141R1103      | MPD12-11Y | 19     |
| 1SFA611101R2002      | MP2-20G | 13     | 1SFA611103R1104      | MP4-11L | 16     | 1SFA611141R1106      | MPD12-11B | 17     |
| 1SFA611101R2004      | MP2-20L | 13     | 1SFA611103R1105      | MP4-11W | 16     | 1SFA611141R1108      | MPD12-11C | 19     |
| 1SFA611101R2005      | MP2-20W | 13     | 1SFA611103R1108      | MP4-11C | 16     | 1SFA611142R1101      | MPD13-11R | 19     |
| 1SFA611101R2006      | MP2-20B | 13     | 1SFA611103R2001      | MP4-20R | 14     | 1SFA611142R1102      | MPD13-11G | 19     |
| 1SFA611101R2101      | MP2-21R | 15     | 1SFA611103R2002      | MP4-20G | 14     | 1SFA611142R1103      | MPD13-11Y | 19     |
| 1SFA611101R2102      | MP2-21G | 15     | 1SFA611103R2003      | MP4-20Y | 14     | 1SFA611142R1106      | MPD13-11B | 17     |
| 1SFA611101R2103      | MP2-21Y | 15     | 1SFA611103R2004      | MP4-20L | 14     | 1SFA611142R1108      | MPD13-11C | 19     |
| 1SFA611101R2104      | MP2-21L | 15     | 1SFA611103R2101      | MP4-21R | 16     | 1SFA611143R1101      | MPD14-11R | 19     |
| 1SFA611101R2105      | MP2-21W | 15     | 1SFA611103R2102      | MP4-21G | 16     | 1SFA611143R1102      | MPD14-11G | 19     |
| 1SFA611101R3001      | MP2-30R | 13     | 1SFA611103R2103      | MP4-21Y | 16     | 1SFA611143R1103      | MPD14-11Y | 19     |
| 1SFA611101R3002      | MP2-30G | 13     | 1SFA611103R2104      | MP4-21L | 16     | 1SFA611143R1106      | MPD14-11B | 17     |
| 1SFA611101R3003      | MP2-30Y | 13     | 1SFA611103R2105      | MP4-21W | 16     | 1SFA611143R1108      | MPD14-11C | 19     |
| 1SFA611101R3004      | MP2-30L | 13     | 1SFA611103R2108      | MP4-21C | 16     | 1SFA611144R1101      | MPD15-11R | 19     |
| 1SFA611101R3006      | MP2-30B | 13     | 1SFA611103R3002      | MP4-30G | 14     | 1SFA611144R1102      | MPD15-11G | 19     |
| 1SFA611101R3101      | MP2-31R | 15     | 1SFA611103R3006      | MP4-30B | 14     | 1SFA611144R1103      | MPD15-11Y | 19     |

## Índice

### Clasificación de referencia de pedido

| Referencia de pedido | Tipo      | Página | Referencia de pedido | Tipo      | Página | Referencia de pedido | Tipo      | Página |
|----------------------|-----------|--------|----------------------|-----------|--------|----------------------|-----------|--------|
| 1SFA611144R1106      | MPD15-11B | 17     | 1SFA611202R1108      | M2SS3-11C | 29     | 1SFA611210R1007      | M3SS1-10U | 26     |
| 1SFA611144R1108      | MPD15-11C | 19     | 1SFA611202R2001      | M2SS3-20R | 24     | 1SFA611210R1101      | M3SS1-11R | 31     |
| 1SFA611145R1101      | MPD16-11R | 19     | 1SFA611202R2006      | M2SS3-20B | 24     | 1SFA611210R1102      | M3SS1-11G | 31     |
| 1SFA611145R1102      | MPD16-11G | 19     | 1SFA611202R2007      | M2SS3-20U | 24     | 1SFA611210R1103      | M3SS1-11Y | 31     |
| 1SFA611145R1103      | MPD16-11Y | 19     | 1SFA611202R2101      | M2SS3-21R | 29     | 1SFA611210R1104      | M3SS1-11L | 31     |
| 1SFA611145R1106      | MPD16-11B | 17     | 1SFA611202R2102      | M2SS3-21G | 29     | 1SFA611210R1108      | M3SS1-11C | 31     |
| 1SFA611145R1108      | MPD16-11C | 19     | 1SFA611202R3001      | M2SS3-30R | 24     | 1SFA611210R2001      | M3SS1-20R | 26     |
| 1SFA611146R1102      | MPD17-11G | 19     | 1SFA611202R3006      | M2SS3-30B | 24     | 1SFA611210R2006      | M3SS1-20B | 26     |
| 1SFA611146R1103      | MPD17-11Y | 19     | 1SFA611202R3101      | M2SS3-31R | 29     | 1SFA611210R2007      | M3SS1-20U | 26     |
| 1SFA611146R1106      | MPD17-11B | 17     | 1SFA611202R3102      | M2SS3-31G | 29     | 1SFA611210R2101      | M3SS1-21R | 31     |
| 1SFA611146R1108      | MPD17-11C | 19     | 1SFA611202R3103      | M2SS3-31Y | 29     | 1SFA611210R2102      | M3SS1-21G | 31     |
| 1SFA611147R1106      | MPD18-11B | 17     | 1SFA611202R3108      | M2SS3-31C | 29     | 1SFA611210R2103      | M3SS1-21Y | 31     |
| 1SFA611148R1102      | MPD19-11G | 19     | 1SFA611203R1001      | M2SS4-10R | 25     | 1SFA611210R2104      | M3SS1-21L | 31     |
| 1SFA611148R1106      | MPD19-11B | 17     | 1SFA611203R1006      | M2SS4-10B | 25     | 1SFA611210R2108      | M3SS1-21C | 31     |
| 1SFA611148R1108      | MPD19-11C | 19     | 1SFA611203R1007      | M2SS4-10U | 25     | 1SFA611210R3001      | M3SS1-30R | 26     |
| 1SFA611200R001       | M2SS1-10R | 24     | 1SFA611203R1101      | M2SS4-11R | 30     | 1SFA611210R3006      | M3SS1-30B | 26     |
| 1SFA611200R006       | M2SS1-10B | 24     | 1SFA611203R1102      | M2SS4-11G | 30     | 1SFA611210R3007      | M3SS1-30U | 26     |
| 1SFA611200R007       | M2SS1-10U | 24     | 1SFA611203R1103      | M2SS4-11Y | 30     | 1SFA611210R3101      | M3SS1-31R | 31     |
| 1SFA611200R1101      | M2SS1-11R | 29     | 1SFA611203R1104      | M2SS4-11L | 30     | 1SFA611210R3102      | M3SS1-31G | 31     |
| 1SFA611200R1102      | M2SS1-11G | 29     | 1SFA611203R1108      | M2SS4-11C | 30     | 1SFA611210R3103      | M3SS1-31Y | 31     |
| 1SFA611200R1103      | M2SS1-11Y | 29     | 1SFA611203R2001      | M2SS4-20R | 25     | 1SFA611210R3104      | M3SS1-31L | 31     |
| 1SFA611200R1104      | M2SS1-11L | 29     | 1SFA611203R2006      | M2SS4-20B | 25     | 1SFA611210R3108      | M3SS1-31C | 31     |
| 1SFA611200R1108      | M2SS1-11C | 29     | 1SFA611203R2007      | M2SS4-20U | 25     | 1SFA611211R1001      | M3SS2-10R | 26     |
| 1SFA611200R2001      | M2SS1-20R | 24     | 1SFA611203R2101      | M2SS4-21R | 30     | 1SFA611211R1006      | M3SS2-10B | 26     |
| 1SFA611200R2006      | M2SS1-20B | 24     | 1SFA611203R2102      | M2SS4-21G | 30     | 1SFA611211R1007      | M3SS2-10U | 26     |
| 1SFA611200R2007      | M2SS1-20U | 24     | 1SFA611203R2103      | M2SS4-21Y | 30     | 1SFA611211R1101      | M3SS2-11R | 31     |
| 1SFA611200R2101      | M2SS1-21R | 29     | 1SFA611203R2104      | M2SS4-21L | 30     | 1SFA611211R1102      | M3SS2-11G | 31     |
| 1SFA611200R2102      | M2SS1-21G | 29     | 1SFA611203R2108      | M2SS4-21C | 30     | 1SFA611211R1103      | M3SS2-11Y | 31     |
| 1SFA611200R2103      | M2SS1-21Y | 29     | 1SFA611203R3006      | M2SS4-30B | 25     | 1SFA611211R1104      | M3SS2-11L | 31     |
| 1SFA611200R2104      | M2SS1-21L | 29     | 1SFA611203R3102      | M2SS4-31G | 30     | 1SFA611211R1108      | M3SS2-11C | 31     |
| 1SFA611200R2108      | M2SS1-21C | 29     | 1SFA611203R3108      | M2SS4-31C | 30     | 1SFA611211R2001      | M3SS2-20R | 26     |
| 1SFA611200R3001      | M2SS1-30R | 24     | 1SFA611204R1001      | M2SS5-10R | 25     | 1SFA611211R2006      | M3SS2-20B | 26     |
| 1SFA611200R3006      | M2SS1-30B | 24     | 1SFA611204R1006      | M2SS5-10B | 25     | 1SFA611211R2007      | M3SS2-20U | 26     |
| 1SFA611200R3101      | M2SS1-31R | 29     | 1SFA611204R1007      | M2SS5-10U | 25     | 1SFA611211R2101      | M3SS2-21R | 31     |
| 1SFA611200R3102      | M2SS1-31G | 29     | 1SFA611204R1101      | M2SS5-11R | 30     | 1SFA611211R2102      | M3SS2-21G | 31     |
| 1SFA611200R3103      | M2SS1-31Y | 29     | 1SFA611204R1102      | M2SS5-11G | 30     | 1SFA611211R2103      | M3SS2-21Y | 31     |
| 1SFA611200R3108      | M2SS1-31C | 29     | 1SFA611204R1103      | M2SS5-11Y | 30     | 1SFA611211R2104      | M3SS2-21L | 31     |
| 1SFA611201R001       | M2SS2-10R | 24     | 1SFA611204R1104      | M2SS5-11L | 30     | 1SFA611211R2108      | M3SS2-21C | 31     |
| 1SFA611201R1006      | M2SS2-10B | 24     | 1SFA611204R1108      | M2SS5-11C | 30     | 1SFA611211R3001      | M3SS2-30R | 26     |
| 1SFA611201R1007      | M2SS2-10U | 24     | 1SFA611204R2001      | M2SS5-20R | 25     | 1SFA611211R3006      | M3SS2-30B | 26     |
| 1SFA611201R1101      | M2SS2-11R | 29     | 1SFA611204R2006      | M2SS5-20B | 25     | 1SFA611211R3101      | M3SS2-31R | 31     |
| 1SFA611201R1102      | M2SS2-11G | 29     | 1SFA611204R2007      | M2SS5-20U | 25     | 1SFA611211R3102      | M3SS2-31G | 31     |
| 1SFA611201R1103      | M2SS2-11Y | 29     | 1SFA611204R2101      | M2SS5-21R | 30     | 1SFA611211R3104      | M3SS2-31L | 31     |
| 1SFA611201R1104      | M2SS2-11L | 29     | 1SFA611204R2102      | M2SS5-21G | 30     | 1SFA611211R3108      | M3SS2-31C | 31     |
| 1SFA611201R1108      | M2SS2-11C | 29     | 1SFA611204R2103      | M2SS5-21Y | 30     | 1SFA611212R1001      | M3SS3-10R | 26     |
| 1SFA611201R2001      | M2SS2-20R | 24     | 1SFA611204R2104      | M2SS5-21L | 30     | 1SFA611212R1006      | M3SS3-10B | 26     |
| 1SFA611201R2006      | M2SS2-20B | 24     | 1SFA611204R2108      | M2SS5-21C | 30     | 1SFA611212R1007      | M3SS3-10U | 26     |
| 1SFA611201R2007      | M2SS2-20U | 24     | 1SFA611204R3001      | M2SS5-30R | 25     | 1SFA611212R1101      | M3SS3-11R | 31     |
| 1SFA611201R2101      | M2SS2-21R | 29     | 1SFA611204R3006      | M2SS5-30B | 25     | 1SFA611212R1102      | M3SS3-11G | 31     |
| 1SFA611201R2102      | M2SS2-21G | 29     | 1SFA611204R3101      | M2SS5-31R | 30     | 1SFA611212R1103      | M3SS3-11Y | 31     |
| 1SFA611201R2103      | M2SS2-21Y | 29     | 1SFA611204R3102      | M2SS5-31G | 30     | 1SFA611212R1104      | M3SS3-11L | 31     |
| 1SFA611201R2104      | M2SS2-21L | 29     | 1SFA611204R3103      | M2SS5-31Y | 30     | 1SFA611212R1108      | M3SS3-11C | 31     |
| 1SFA611201R2108      | M2SS2-21C | 29     | 1SFA611204R3104      | M2SS5-31L | 30     | 1SFA611212R2006      | M3SS3-20B | 26     |
| 1SFA611201R3001      | M2SS2-30R | 24     | 1SFA611204R3108      | M2SS5-31C | 30     | 1SFA611212R2007      | M3SS3-20U | 26     |
| 1SFA611201R3006      | M2SS2-30B | 24     | 1SFA611205R1001      | M2SS6-10R | 25     | 1SFA611212R2101      | M3SS3-21R | 31     |
| 1SFA611201R3007      | M2SS2-30U | 24     | 1SFA611205R1006      | M2SS6-10B | 25     | 1SFA611212R2102      | M3SS3-21G | 31     |
| 1SFA611201R3101      | M2SS2-31R | 29     | 1SFA611205R1007      | M2SS6-10U | 25     | 1SFA611212R2108      | M3SS3-21C | 31     |
| 1SFA611201R3102      | M2SS2-31G | 29     | 1SFA611205R1101      | M2SS6-11R | 30     | 1SFA611212R3006      | M3SS3-30B | 26     |
| 1SFA611201R3103      | M2SS2-31Y | 29     | 1SFA611205R1102      | M2SS6-11G | 30     | 1SFA611212R3108      | M3SS3-31C | 31     |
| 1SFA611201R3104      | M2SS2-31L | 29     | 1SFA611205R1103      | M2SS6-11Y | 30     | 1SFA611213R1001      | M3SS4-10R | 27     |
| 1SFA611201R3108      | M2SS2-31C | 29     | 1SFA611205R1104      | M2SS6-11L | 30     | 1SFA611213R1006      | M3SS4-10B | 27     |
| 1SFA611201R3109      | M2SS3-10R | 24     | 1SFA611205R1108      | M2SS6-11C | 30     | 1SFA611213R1007      | M3SS4-10U | 27     |
| 1SFA611202R006       | M2SS3-10B | 24     | 1SFA611205R2006      | M2SS6-20B | 25     | 1SFA611213R1101      | M3SS4-11R | 32     |
| 1SFA611202R1007      | M2SS3-10U | 24     | 1SFA611205R2007      | M2SS6-20U | 25     | 1SFA611213R1102      | M3SS4-11G | 32     |
| 1SFA611202R1101      | M2SS3-11R | 29     | 1SFA611205R3006      | M2SS6-30B | 25     | 1SFA611213R1103      | M3SS4-11Y | 32     |
| 1SFA611202R1102      | M2SS3-11G | 29     | 1SFA611205R3108      | M2SS6-31C | 30     | 1SFA611213R1104      | M3SS4-11L | 32     |
| 1SFA611202R1103      | M2SS3-11Y | 29     | 1SFA611210R1001      | M3SS1-10R | 26     | 1SFA611213R1108      | M3SS4-11C | 32     |
| 1SFA611202R1104      | M2SS3-11L | 29     | 1SFA611210R1006      | M3SS1-10B | 26     | 1SFA611213R2001      | M3SS4-20R | 27     |

## Índice

### Clasificación de referencia de pedido

| Referencia de pedido | Tipo      | Página | Referencia de pedido | Tipo       | Página | Referencia de pedido | Tipo       | Página |
|----------------------|-----------|--------|----------------------|------------|--------|----------------------|------------|--------|
| 1SFA611213R2006      | M3SS4-20B | 27     | 1SFA611217R2102      | M3SS8-21G  | 32     | 1SFA611286R3001      | M3SSK4-301 | 34     |
| 1SFA611213R2007      | M3SS4-20U | 27     | 1SFA611217R3006      | M3SS8-30B  | 27     | 1SFA611286R3002      | M3SSK4-302 | 34     |
| 1SFA611213R2101      | M3SS4-21R | 32     | 1SFA611217R3101      | M3SS8-31R  | 32     | 1SFA611287R1001      | M3SSK5-101 | 34     |
| 1SFA611213R2102      | M3SS4-21G | 32     | 1SFA611217R3102      | M3SS8-31G  | 32     | 1SFA611287R1003      | M3SSK5-103 | 34     |
| 1SFA611213R2103      | M3SS4-21Y | 32     | 1SFA611220R1006      | M2SSV1-10B | 89     | 1SFA611287R3001      | M3SSK5-301 | 34     |
| 1SFA611213R2104      | M3SS4-21L | 32     | 1SFA611221R1006      | M2SSV2-10B | 89     | 1SFA611288R1001      | M3SSK6-101 | 34     |
| 1SFA611213R2108      | M3SS4-21C | 32     | 1SFA611222R1006      | M2SSV3-10B | 89     | 1SFA611289R1001      | M2SSK4-101 | 33     |
| 1SFA611213R3006      | M3SS4-30B | 27     | 1SFA611230R1006      | M3SSV1-10B | 89     | 1SFA611300R1006      | MTS1-10B   | 39     |
| 1SFA611213R3101      | M3SS4-31R | 32     | 1SFA611231R1006      | M3SSV2-10B | 89     | 1SFA611300R2006      | MTS1-20B   | 39     |
| 1SFA611213R3108      | M3SS4-31C | 32     | 1SFA611232R1006      | M3SSV3-10B | 89     | 1SFA611300R3006      | MTS1-30B   | 39     |
| 1SFA611214R1001      | M3SS5-10R | 27     | 1SFA611250R1006      | M3SSC1-10B | 28     | 1SFA611301R1006      | MTS2-10B   | 39     |
| 1SFA611214R1006      | M3SS5-10B | 27     | 1SFA611250R3006      | M3SSC1-30B | 28     | 1SFA611301R2006      | MTS2-20B   | 39     |
| 1SFA611214R1007      | M3SS5-10U | 27     | 1SFA611251R1006      | M3SSC2-10B | 28     | 1SFA611301R3006      | MTS2-30B   | 39     |
| 1SFA611214R1101      | M3SS5-11R | 32     | 1SFA611251R3006      | M3SSC2-30B | 28     | 1SFA611302R1006      | MTS3-10B   | 39     |
| 1SFA611214R1102      | M3SS5-11G | 32     | 1SFA611252R1006      | M3SSC3-10B | 28     | 1SFA611302R2006      | MTS3-20B   | 39     |
| 1SFA611214R1103      | M3SS5-11Y | 32     | 1SFA611252R3006      | M3SSC3-30B | 28     | 1SFA611400R1001      | ML1-100R   | 23     |
| 1SFA611214R1104      | M3SS5-11L | 32     | 1SFA611256R1006      | M3SSC7-10B | 28     | 1SFA611400R1002      | ML1-100G   | 23     |
| 1SFA611214R1108      | M3SS5-11C | 32     | 1SFA611256R3006      | M3SSC7-30B | 28     | 1SFA611400R1003      | ML1-100Y   | 23     |
| 1SFA611214R2006      | M3SS5-20B | 27     | 1SFA611280R1001      | M2SSK1-101 | 33     | 1SFA611400R1004      | ML1-100L   | 23     |
| 1SFA611214R2007      | M3SS5-20U | 27     | 1SFA611280R1002      | M2SSK1-102 | 33     | 1SFA611400R1005      | ML1-100W   | 23     |
| 1SFA611214R2101      | M3SS5-21R | 32     | 1SFA611280R1003      | M2SSK1-103 | 33     | 1SFA611400R1008      | ML1-100C   | 23     |
| 1SFA611214R2102      | M3SS5-21G | 32     | 1SFA611280R1004      | M2SSK1-104 | 33     | 1SFA611410R1006      | MT-1B      | 35     |
| 1SFA611214R2103      | M3SS5-21Y | 32     | 1SFA611280R2001      | M2SSK1-201 | 33     | 1SFA611410R1056      | MT-105B    | 35     |
| 1SFA611214R2104      | M3SS5-21L | 32     | 1SFA611280R3001      | M2SSK1-301 | 33     | 1SFA611410R1106      | MT-110B    | 35     |
| 1SFA611214R2108      | M3SS5-21C | 32     | 1SFA611280R3002      | M2SSK1-302 | 33     | 1SFA611410R1506      | MT-150B    | 35     |
| 1SFA611214R3001      | M3SS5-30R | 27     | 1SFA611280R3003      | M2SSK1-303 | 33     | 1SFA611410R2006      | MT-2B      | 35     |
| 1SFA611214R3006      | M3SS5-30B | 27     | 1SFA611280R3004      | M2SSK1-304 | 33     | 1SFA611410R2056      | MT-205B    | 35     |
| 1SFA611214R3102      | M3SS5-31G | 32     | 1SFA611281R1001      | M2SSK2-101 | 33     | 1SFA611410R2106      | MT-210B    | 35     |
| 1SFA611214R3108      | M3SS5-31C | 32     | 1SFA611281R1002      | M2SSK2-102 | 33     | 1SFA611410R2506      | MT-250B    | 35     |
| 1SFA611215R1001      | M3SS6-10R | 27     | 1SFA611281R1003      | M2SSK2-103 | 33     | 1SFA611410R3006      | MT-3B      | 35     |
| 1SFA611215R1006      | M3SS6-10B | 27     | 1SFA611281R1004      | M2SSK2-104 | 33     | 1SFA611410R3056      | MT-305B    | 35     |
| 1SFA611215R1007      | M3SS6-10U | 27     | 1SFA611281R2001      | M2SSK2-201 | 33     | 1SFA611410R3106      | MT-310B    | 35     |
| 1SFA611215R1101      | M3SS6-11R | 32     | 1SFA611281R2003      | M2SSK2-203 | 33     | 1SFA611410R3506      | MT-350B    | 35     |
| 1SFA611215R1102      | M3SS6-11G | 32     | 1SFA611281R3001      | M2SSK2-301 | 33     | 1SFA611510R1101      | MPMT3-11R  | 21     |
| 1SFA611215R1103      | M3SS6-11Y | 32     | 1SFA611281R3002      | M2SSK2-302 | 33     | 1SFA611511R1101      | MPMP3-11R  | 21     |
| 1SFA611215R1104      | M3SS6-11L | 32     | 1SFA611281R3003      | M2SSK2-303 | 33     | 1SFA611513R1001      | MPMT4-10R  | 21     |
| 1SFA611215R1108      | M3SS6-11C | 32     | 1SFA611281R3004      | M2SSK2-304 | 33     | 1SFA611513R1101      | MPMT4-11R  | 21     |
| 1SFA611215R2006      | M3SS6-20B | 27     | 1SFA611282R1001      | M2SSK3-101 | 33     | 1SFA611514R1001      | MPMP4-10R  | 21     |
| 1SFA611215R2102      | M3SS6-21G | 32     | 1SFA611282R1002      | M2SSK3-102 | 33     | 1SFA611514R1101      | MPMP4-11R  | 21     |
| 1SFA611215R2103      | M3SS6-21Y | 32     | 1SFA611282R1003      | M2SSK3-103 | 33     | 1SFA611520R1001      | MPET3-10R  | 21     |
| 1SFA611215R3006      | M3SS6-30B | 27     | 1SFA611282R1004      | M2SSK3-104 | 33     | 1SFA611520R1006      | MPET3-10B  | 22     |
| 1SFA611215R3104      | M3SS6-31L | 32     | 1SFA611282R3001      | M2SSK3-301 | 33     | 1SFA611521R1001      | MPEP3-10R  | 21     |
| 1SFA611216R1001      | M3SS7-10R | 26     | 1SFA611282R3002      | M2SSK3-302 | 33     | 1SFA611521R1006      | MPEP3-10B  | 22     |
| 1SFA611216R1006      | M3SS7-10B | 26     | 1SFA611282R3003      | M2SSK3-303 | 33     | 1SFA611522R1101      | MPEK3-11R  | 21     |
| 1SFA611216R1007      | M3SS7-10U | 26     | 1SFA611282R3004      | M2SSK3-304 | 33     | 1SFA611522R1106      | MPEK3-11B  | 22     |
| 1SFA611216R1101      | M3SS7-11R | 31     | 1SFA611283R1001      | M3SSK1-101 | 34     | 1SFA611522R1201      | MPEK3-12R  | 21     |
| 1SFA611216R1102      | M3SS7-11G | 31     | 1SFA611283R1002      | M3SSK1-102 | 34     | 1SFA611522R1301      | MPEK3-13R  | 21     |
| 1SFA611216R1103      | M3SS7-11Y | 31     | 1SFA611283R1003      | M3SSK1-103 | 34     | 1SFA611523R1001      | MPET4-10R  | 21     |
| 1SFA611216R1104      | M3SS7-11L | 31     | 1SFA611283R1004      | M3SSK1-104 | 34     | 1SFA611523R1006      | MPET4-10B  | 22     |
| 1SFA611216R1108      | M3SS7-11C | 31     | 1SFA611283R2001      | M3SSK1-201 | 34     | 1SFA611524R1001      | MPEP4-10R  | 21     |
| 1SFA611216R2001      | M3SS7-20R | 26     | 1SFA611283R3001      | M3SSK1-301 | 34     | 1SFA611524R1006      | MPEP4-10B  | 22     |
| 1SFA611216R2006      | M3SS7-20B | 26     | 1SFA611283R3002      | M3SSK1-302 | 34     | 1SFA611525R1101      | MPEK4-11R  | 21     |
| 1SFA611216R2102      | M3SS7-21G | 31     | 1SFA611283R3003      | M3SSK1-303 | 34     | 1SFA611525R1106      | MPEK4-11B  | 22     |
| 1SFA611216R2104      | M3SS7-21L | 31     | 1SFA611283R3004      | M3SSK1-304 | 34     | 1SFA611525R1201      | MPEK4-12R  | 21     |
| 1SFA611216R2108      | M3SS7-21C | 31     | 1SFA611284R1001      | M3SSK2-101 | 34     | 1SFA611525R1301      | MPEK4-13R  | 21     |
| 1SFA611216R3006      | M3SS7-30B | 26     | 1SFA611284R1002      | M3SSK2-102 | 34     | 1SFA611601R1100      | MCBH5-00   | 41     |
| 1SFA611216R3102      | M3SS7-31G | 31     | 1SFA611284R1003      | M3SSK2-103 | 34     | 1SFA611605R1100      | MCBH-00    | 41     |
| 1SFA611216R3108      | M3SS7-31C | 31     | 1SFA611284R1004      | M3SSK2-104 | 34     | 1SFA611610R1001      | MCB-10     | 41     |
| 1SFA611217R1001      | M3SS8-10R | 27     | 1SFA611284R3001      | M3SSK2-301 | 34     | 1SFA611610R1002      | MCB-20     | 41     |
| 1SFA611217R1006      | M3SS8-10B | 27     | 1SFA611285R1001      | M3SSK3-101 | 34     | 1SFA611610R1010      | MCB-01     | 41     |
| 1SFA611217R1007      | M3SS8-10U | 27     | 1SFA611285R1002      | M3SSK3-102 | 34     | 1SFA611610R1011      | MCB-11     | 41     |
| 1SFA611217R1101      | M3SS8-11R | 32     | 1SFA611285R1003      | M3SSK3-103 | 34     | 1SFA611610R1020      | MCB-02     | 41     |
| 1SFA611217R1102      | M3SS8-11G | 32     | 1SFA611285R1004      | M3SSK3-104 | 34     | 1SFA611610R1101      | MCB-10G    | 41     |
| 1SFA611217R1103      | M3SS8-11Y | 32     | 1SFA611285R3001      | M3SSK3-301 | 34     | 1SFA611610R1110      | MCB-01G    | 41     |
| 1SFA611217R1104      | M3SS8-11L | 32     | 1SFA611285R3002      | M3SSK3-302 | 34     | 1SFA611610R2001      | MCB-10B    | 84     |
| 1SFA611217R1108      | M3SS8-11C | 32     | 1SFA611285R3003      | M3SSK3-303 | 34     | 1SFA611610R2002      | MCB-20B    | 84     |
| 1SFA611217R2006      | M3SS8-20B | 27     | 1SFA611286R1001      | M3SSK4-101 | 34     | 1SFA611610R2010      | MCB-01B    | 84     |
| 1SFA611217R2101      | M3SS8-21R | 32     | 1SFA611286R1002      | M3SSK4-102 | 34     | 1SFA611610R2011      | MCB-11B    | 84     |

## Índice

### Clasificación de referencia de pedido

| Referencia de pedido | Tipo      | Página | Referencia de pedido | Tipo      | Página | Referencia de pedido | Tipo       | Página |
|----------------------|-----------|--------|----------------------|-----------|--------|----------------------|------------|--------|
| 1SFA611610R2020      | MCB-02B   | 84     | 1SFA611621R2014      | MLBL-01BL | 85     | 1SFA611711R6006      | MJS11-60B  | 38     |
| 1SFA611610R2101      | MCB-10BG  | 84     | 1SFA611621R2015      | MLBL-01BW | 85     | 1SFA611712R4006      | MJS12-40B  | 38     |
| 1SFA611610R2110      | MCB-01BG  | 84     | 1SFA611621R2021      | MLBL-02BR | 85     | 1SFA611712R6006      | MJS12-60B  | 38     |
| 1SFA611612R1001      | MCBL-01   | 41     | 1SFA611621R2022      | MLBL-02BG | 85     | 1SFA611811R1000      | MEP1-0     | 83     |
| 1SFA611612R1010      | MCBL-10   | 41     | 1SFA611621R2023      | MLBL-02BY | 85     | 1SFA611812R1000      | MEP2-0     | 83     |
| 1SFA611621R1001      | MLBL-00R  | 42     | 1SFA611621R2024      | MLBL-02BL | 85     | 1SFA611812R1001      | MEP2-1001  | 90     |
| 1SFA611621R1002      | MLBL-00G  | 42     | 1SFA611621R2025      | MLBL-02BW | 85     | 1SFA611813R1000      | MEP3-0     | 83     |
| 1SFA611621R1003      | MLBL-00Y  | 42     | 1SFA611621R2031      | MLBL-03BR | 85     | 1SFA611814R1000      | MEP4-0     | 83     |
| 1SFA611621R1004      | MLBL-00L  | 42     | 1SFA611621R2032      | MLBL-03BG | 85     | 1SFA611816R1000      | MEP6-0     | 83     |
| 1SFA611621R1005      | MLBL-00W  | 42     | 1SFA611621R2033      | MLBL-03BY | 85     | 1SFA611821R1000      | MEPY1-0    | 83     |
| 1SFA611621R1011      | MLBL-01R  | 42     | 1SFA611621R2034      | MLBL-03BL | 85     | 1SFA611821R1035      | MEPY1-1035 | 90     |
| 1SFA611621R1012      | MLBL-01G  | 42     | 1SFA611621R2035      | MLBL-03BW | 85     | 1SFA611821R1040      | MEPY1-1040 | 90     |
| 1SFA611621R1013      | MLBL-01Y  | 42     | 1SFA611621R2041      | MLBL-04BR | 85     | 1SFA611821R1041      | MEPY1-1041 | 90     |
| 1SFA611621R1014      | MLBL-01L  | 42     | 1SFA611621R2042      | MLBL-04BG | 85     | 1SFA611821R1042      | MEPY1-1042 | 90     |
| 1SFA611621R1015      | MLBL-01W  | 42     | 1SFA611621R2043      | MLBL-04BY | 85     | 1SFA611920H8150      | MA1-8150   | 84     |
| 1SFA611621R1021      | MLBL-02R  | 42     | 1SFA611621R2044      | MLBL-04BL | 85     | 1SFA611920R8001      | MA1-8001   | 45     |
| 1SFA611621R1022      | MLBL-02G  | 42     | 1SFA611621R2045      | MLBL-04BW | 85     | 1SFA611920R8002      | MA1-8002   | 44     |
| 1SFA611621R1023      | MLBL-02Y  | 42     | 1SFA611621R2051      | MLBL-05BR | 85     | 1SFA611920R8015      | MA1-8015   | 45     |
| 1SFA611621R1024      | MLBL-02L  | 42     | 1SFA611621R2052      | MLBL-05BG | 85     | 1SFA611920R8019      | MA1-8019   | 45     |
| 1SFA611621R1025      | MLBL-02W  | 42     | 1SFA611621R2053      | MLBL-05BY | 85     | 1SFA611920R8052      | MA1-8052   | 44     |
| 1SFA611621R1031      | MLBL-03R  | 42     | 1SFA611621R2054      | MLBL-05BL | 85     | 1SFA611920R8053      | MA1-8053   | 44     |
| 1SFA611621R1032      | MLBL-03G  | 42     | 1SFA611621R2055      | MLBL-05BW | 85     | 1SFA611920R8074      | MA1-8074   | 44     |
| 1SFA611621R1033      | MLBL-03Y  | 42     | 1SFA611621R2061      | MLBL-06BR | 85     | 1SFA611920R8126      | MA1-8126   | 44     |
| 1SFA611621R1034      | MLBL-03L  | 42     | 1SFA611621R2062      | MLBL-06BG | 85     | 1SFA611920R8128      | MA1-8128   | 44     |
| 1SFA611621R1035      | MLBL-03W  | 42     | 1SFA611621R2063      | MLBL-06BY | 85     | 1SFA611920R8129      | MA1-8129   | 84     |
| 1SFA611621R1041      | MLBL-04R  | 42     | 1SFA611621R2064      | MLBL-06BL | 85     | 1SFA611920R8130      | MA1-8130   | 84     |
| 1SFA611621R1042      | MLBL-04G  | 42     | 1SFA611621R2065      | MLBL-06BW | 85     | 1SFA611920R8131      | MA1-8131   | 45     |
| 1SFA611621R1043      | MLBL-04Y  | 42     | 1SFA611621R2071      | MLBL-07BR | 86     | 1SFA611920R8136      | MA1-8136   | 84     |
| 1SFA611621R1044      | MLBL-04L  | 42     | 1SFA611621R2072      | MLBL-07BG | 86     | 1SFA611920R8137      | MA1-8137   | 38     |
| 1SFA611621R1045      | MLBL-04W  | 42     | 1SFA611621R2073      | MLBL-07BY | 86     | 1SFA611920R8138      | MA1-8138   | 38     |
| 1SFA611621R1051      | MLBL-05R  | 42     | 1SFA611621R2074      | MLBL-07BL | 86     | 1SFA611920R8139      | MA1-8139   | 17     |
| 1SFA611621R1052      | MLBL-05G  | 42     | 1SFA611621R2075      | MLBL-07BW | 86     | 1SFA611920R8149      | MA1-8149   | 45     |
| 1SFA611621R1053      | MLBL-05Y  | 42     | 1SFA611621R2081      | MLBL-08BR | 86     | 1SFA611920R8152      | MA1-8152   | 44     |
| 1SFA611621R1054      | MLBL-05L  | 42     | 1SFA611621R2082      | MLBL-08BG | 86     | 1SFA611920R8153      | MA1-8153   | 44     |
| 1SFA611621R1055      | MLBL-05W  | 42     | 1SFA611621R2083      | MLBL-08BY | 86     | 1SFA611925R3001      | MA5-3001   | 84     |
| 1SFA611621R1061      | MLBL-06R  | 42     | 1SFA611621R2084      | MLBL-08BL | 86     | 1SFA611925R3002      | MA5-3002   | 84     |
| 1SFA611621R1062      | MLBL-06G  | 42     | 1SFA611621R2085      | MLBL-08BW | 86     | 1SFA611925R3003      | MA5-3003   | 84     |
| 1SFA611621R1063      | MLBL-06Y  | 42     | 1SFA611621R2091      | MLBL-09BR | 86     | 1SFA611925R3004      | MA5-3004   | 84     |
| 1SFA611621R1064      | MLBL-06L  | 42     | 1SFA611621R2092      | MLBL-09BG | 86     | 1SFA611925R3005      | MA5-3005   | 84     |
| 1SFA611621R1065      | MLBL-06W  | 42     | 1SFA611621R2093      | MLBL-09BY | 86     | 1SFA611925R3006      | MA5-3006   | 84     |
| 1SFA611621R1071      | MLBL-07R  | 43     | 1SFA611621R2094      | MLBL-09BL | 86     | 1SFA611925R3007      | MA5-3007   | 84     |
| 1SFA611621R1072      | MLBL-07G  | 43     | 1SFA611621R2095      | MLBL-09BW | 86     | 1SFA611925R3008      | MA5-3008   | 84     |
| 1SFA611621R1073      | MLBL-07Y  | 43     | 1SFA611621R3041      | MLBL-04AR | 42     | 1SFA611925R3009      | MA5-3009   | 84     |
| 1SFA611621R1074      | MLBL-07L  | 43     | 1SFA611621R3042      | MLBL-04AG | 42     | 1SFA611925R3010      | MA5-3010   | 84     |
| 1SFA611621R1075      | MLBL-07W  | 43     | 1SFA611621R3043      | MLBL-04AY | 42     | 1SFA611930R1000      | MA6-1000   | 88     |
| 1SFA611621R1081      | MLBL-08R  | 43     | 1SFA611621R3044      | MLBL-04AL | 42     | 1SFA611930R1002      | MA6-1002   | 88     |
| 1SFA611621R1082      | MLBL-08G  | 43     | 1SFA611621R3045      | MLBL-04AW | 42     | 1SFA611930R1003      | MA6-1003   | 88     |
| 1SFA611621R1083      | MLBL-08Y  | 43     | 1SFA611630R1002      | MDB-2     | 45     | 1SFA611930R1004      | MA6-1004   | 88     |
| 1SFA611621R1084      | MLBL-08L  | 43     | 1SFA611701R4006      | MJS1-40B  | 38     | 1SFA611930R1005      | MA6-1005   | 88     |
| 1SFA611621R1085      | MLBL-08W  | 43     | 1SFA611701R6006      | MJS1-60B  | 38     | 1SFA611930R1006      | MA6-1006   | 88     |
| 1SFA611621R1091      | MLBL-09R  | 43     | 1SFA611702R4006      | MJS2-40B  | 38     | 1SFA611930R1007      | MA6-1007   | 88     |
| 1SFA611621R1092      | MLBL-09G  | 43     | 1SFA611702R6006      | MJS2-60B  | 38     | 1SFA611930R1008      | MA6-1008   | 88     |
| 1SFA611621R1093      | MLBL-09Y  | 43     | 1SFA611703R4006      | MJS3-40B  | 38     | 1SFA611930R1009      | MA6-1009   | 88     |
| 1SFA611621R1094      | MLBL-09L  | 43     | 1SFA611703R6006      | MJS3-60B  | 38     | 1SFA611930R1010      | MA6-1010   | 98     |
| 1SFA611621R1095      | MLBL-09W  | 43     | 1SFA611704R4006      | MJS4-40B  | 38     | 1SFA611930R1011      | MA6-1011   | 98     |
| 1SFA611621R1991      | MLBL-99R  | 43     | 1SFA611704R6006      | MJS4-60B  | 38     | 1SFA611930R1012      | MA6-1012   | 88     |
| 1SFA611621R1992      | MLBL-99G  | 43     | 1SFA611705R4006      | MJS5-40B  | 38     | 1SFA611930R1013      | MA6-1013   | 88     |
| 1SFA611621R1993      | MLBL-99Y  | 43     | 1SFA611705R6006      | MJS5-60B  | 38     | 1SFA611930R1014      | MA6-1014   | 88     |
| 1SFA611621R1994      | MLBL-99L  | 43     | 1SFA611706R4006      | MJS6-40B  | 38     | 1SFA611930R1015      | MA6-1015   | 88     |
| 1SFA611621R1995      | MLBL-99W  | 43     | 1SFA611706R6006      | MJS6-60B  | 38     | 1SFA611930R1016      | MA6-1016   | 88     |
| 1SFA611621R2001      | MLBL-00BR | 85     | 1SFA611707R4006      | MJS7-40B  | 38     | 1SFA611930R1017      | MA6-1017   | 98     |
| 1SFA611621R2002      | MLBL-00BG | 85     | 1SFA611707R6006      | MJS7-60B  | 38     | 1SFA611930R1018      | MA6-1018   | 98     |
| 1SFA611621R2003      | MLBL-00BY | 85     | 1SFA611708R4006      | MJS8-40B  | 38     | 1SFA611930R1019      | MA6-1019   | 98     |
| 1SFA611621R2004      | MLBL-00BL | 85     | 1SFA611708R6006      | MJS8-60B  | 38     | 1SFA611930R1020      | MA6-1020   | 98     |
| 1SFA611621R2005      | MLBL-00BW | 85     | 1SFA611709R4006      | MJS9-40B  | 38     | 1SFA611930R1021      | MA6-1021   | 98     |
| 1SFA611621R2011      | MLBL-01BR | 85     | 1SFA611709R6006      | MJS9-60B  | 38     | 1SFA611930R1022      | MA6-1022   | 98     |
| 1SFA611621R2012      | MLBL-01BG | 85     | 1SFA611710R6006      | MJS10-60B | 38     | 1SFA611930R1023      | MA6-1023   | 98     |
| 1SFA611621R2013      | MLBL-01BY | 85     | 1SFA611711R4006      | MJS11-40B | 38     | 1SFA611930R1024      | MA6-1024   | 98     |

## Índice

### Clasificación de referencia de pedido

| Referencia de pedido | Tipo     | Página | Referencia de pedido | Tipo      | Página | Referencia de pedido | Tipo      | Página |
|----------------------|----------|--------|----------------------|-----------|--------|----------------------|-----------|--------|
| 1SFA611930R1025      | MA6-1025 | 88     | 1SFA611930R1174      | MA6-1174  | 87     | 1SFA616077R1033      | KA70-1033 | 105    |
| 1SFA611930R1026      | MA6-1026 | 88     | 1SFA611930R1175      | MA6-1175  | 87     | 1SFA616077R1034      | KA70-1034 | 105    |
| 1SFA611930R1027      | MA6-1027 | 88     | 1SFA611930R1176      | MA6-1176  | 87     | 1SFA616080R1131      | KSB-113R  | 106    |
| 1SFA611930R1028      | MA6-1028 | 88     | 1SFA611930R1177      | MA6-1177  | 87     | 1SFA616080R1132      | KSB-113G  | 106    |
| 1SFA611930R1029      | MA6-1029 | 88     | 1SFA611930R1178      | MA6-1178  | 87     | 1SFA616080R1133      | KSB-113Y  | 106    |
| 1SFA611930R1032      | MA6-1032 | 97     | 1SFA611930R1179      | MA6-1179  | 87     | 1SFA616080R1134      | KSB-113L  | 106    |
| 1SFA611930R1033      | MA6-1033 | 97     | 1SFA611930R1190      | MA6-1190  | 87     | 1SFA616080R1138      | KSB-113C  | 106    |
| 1SFA611930R1034      | MA6-1034 | 97     | 1SFA611930R1191      | MA6-1191  | 87     | 1SFA616080R1151      | KSB-115R  | 106    |
| 1SFA611930R1035      | MA6-1035 | 97     | 1SFA611930R1192      | MA6-1192  | 87     | 1SFA616080R1152      | KSB-115G  | 106    |
| 1SFA611930R1036      | MA6-1036 | 97     | 1SFA611930R1193      | MA6-1193  | 87     | 1SFA616080R1153      | KSB-115Y  | 106    |
| 1SFA611930R1037      | MA6-1037 | 97     | 1SFA611930R1194      | MA6-1194  | 87     | 1SFA616080R1231      | KSB-123R  | 106    |
| 1SFA611930R1038      | MA6-1038 | 97     | 1SFA611930R1210      | MA6-1210  | 97     | 1SFA616080R1232      | KSB-123G  | 106    |
| 1SFA611930R1039      | MA6-1039 | 97     | 1SFA611930R1240      | MA6-1240  | 38     | 1SFA616080R1233      | KSB-123Y  | 106    |
| 1SFA611930R1040      | MA6-1040 | 97     | 1SFA611930R1241      | MA6-1241  | 38     | 1SFA616080R1234      | KSB-123L  | 106    |
| 1SFA611930R1041      | MA6-1041 | 97     | 1SFA611930R1242      | MA6-1242  | 38     | 1SFA616080R1238      | KSB-123C  | 106    |
| 1SFA611930R1042      | MA6-1042 | 97     | 1SFA611930R1252      | MA6-1252  | 35     | 1SFA616080R2031      | KSB-203R  | 106    |
| 1SFA611930R1043      | MA6-1043 | 97     | 1SFA611940R1000      | MA16-1000 | 99     | 1SFA616080R2032      | KSB-203G  | 106    |
| 1SFA611930R1044      | MA6-1044 | 97     | 1SFA611940R1001      | MA16-1001 | 99     | 1SFA616080R2033      | KSB-203Y  | 106    |
| 1SFA611930R1045      | MA6-1045 | 97     | 1SFA616070R3051      | KL70-305R | 103    | 1SFA616080R2034      | KSB-203L  | 106    |
| 1SFA611930R1047      | MA6-1047 | 97     | 1SFA616070R3052      | KL70-305G | 103    | 1SFA616080R2038      | KSB-203C  | 106    |
| 1SFA611930R1054      | MA6-1054 | 97     | 1SFA616070R3053      | KL70-305Y | 103    | 1SFA616080R3051      | KSB-305R  | 106    |
| 1SFA611930R1058      | MA6-1058 | 97     | 1SFA616070R3054      | KL70-305L | 103    | 1SFA616080R3052      | KSB-305G  | 106    |
| 1SFA611930R1060      | MA6-1060 | 87     | 1SFA616070R3058      | KL70-305C | 103    | 1SFA616080R3053      | KSB-305Y  | 106    |
| 1SFA611930R1061      | MA6-1061 | 87     | 1SFA616070R3061      | KL70-306R | 103    | 1SFA616080R3061      | KSB-306R  | 106    |
| 1SFA611930R1062      | MA6-1062 | 87     | 1SFA616070R3062      | KL70-306G | 103    | 1SFA616080R3062      | KSB-306G  | 106    |
| 1SFA611930R1063      | MA6-1063 | 87     | 1SFA616070R3063      | KL70-306Y | 103    | 1SFA616080R3063      | KSB-306Y  | 106    |
| 1SFA611930R1064      | MA6-1064 | 87     | 1SFA616070R3064      | KL70-306L | 103    | 1SFA616080R3071      | KSB-307R  | 106    |
| 1SFA611930R1065      | MA6-1065 | 87     | 1SFA616070R3068      | KL70-306C | 103    | 1SFA616080R3072      | KSB-307G  | 106    |
| 1SFA611930R1070      | MA6-1070 | 97     | 1SFA616070R3071      | KL70-307R | 103    | 1SFA616080R3073      | KSB-307Y  | 106    |
| 1SFA611930R1071      | MA6-1071 | 97     | 1SFA616070R3072      | KL70-307G | 103    | 1SFA616080R4011      | KSB-401R  | 106    |
| 1SFA611930R1073      | MA6-1073 | 97     | 1SFA616070R3073      | KL70-307Y | 103    | 1SFA616080R4012      | KSB-401G  | 106    |
| 1SFA611930R1074      | MA6-1074 | 97     | 1SFA616070R3074      | KL70-307L | 103    | 1SFA616080R4013      | KSB-401Y  | 106    |
| 1SFA611930R1075      | MA6-1075 | 97     | 1SFA616070R3078      | KL70-307C | 103    | 1SFA616080R4014      | KSB-401L  | 106    |
| 1SFA611930R1076      | MA6-1076 | 97     | 1SFA616070R3421      | KL70-342R | 103    | 1SFA616080R4018      | KSB-401C  | 106    |
| 1SFA611930R1077      | MA6-1077 | 97     | 1SFA616070R3422      | KL70-342G | 103    | 1SFA616087R1000      | KASB-1000 | 106    |
| 1SFA611930R1078      | MA6-1078 | 97     | 1SFA616070R3423      | KL70-342Y | 103    | 1SFA616105R4001      | KP6-40R   | 23     |
| 1SFA611930R1079      | MA6-1079 | 97     | 1SFA616070R3424      | KL70-342L | 103    | 1SFA616105R4002      | KP6-40G   | 23     |
| 1SFA611930R1080      | MA6-1080 | 97     | 1SFA616070R3428      | KL70-342C | 103    | 1SFA616105R4006      | KP6-40B   | 23     |
| 1SFA611930R1082      | MA6-1082 | 97     | 1SFA616070R3521      | KL70-352R | 103    | 1SFA616160R1001      | KPR1-100R | 36     |
| 1SFA611930R1083      | MA6-1083 | 97     | 1SFA616070R3522      | KL70-352G | 103    | 1SFA616160R1002      | KPR1-100G | 36     |
| 1SFA611930R1084      | MA6-1084 | 97     | 1SFA616070R3523      | KL70-352Y | 103    | 1SFA616160R1003      | KPR1-100Y | 36     |
| 1SFA611930R1085      | MA6-1085 | 97     | 1SFA616070R3524      | KL70-352L | 103    | 1SFA616160R1004      | KPR1-100L | 36     |
| 1SFA611930R1086      | MA6-1086 | 97     | 1SFA616070R3528      | KL70-352C | 103    | 1SFA616160R1005      | KPR1-100W | 36     |
| 1SFA611930R1087      | MA6-1087 | 97     | 1SFA616070R4011      | KL70-401R | 103    | 1SFA616160R1006      | KPR1-100B | 36     |
| 1SFA611930R1100      | MA6-1100 | 88     | 1SFA616070R4012      | KL70-401G | 103    | 1SFA616160R1014      | KPR1-101L | 36     |
| 1SFA611930R1101      | MA6-1101 | 88     | 1SFA616070R4013      | KL70-401Y | 103    | 1SFA616160R1015      | KPR1-101W | 36     |
| 1SFA611930R1102      | MA6-1102 | 88     | 1SFA616070R4014      | KL70-401L | 103    | 1SFA616160R1022      | KPR1-102G | 36     |
| 1SFA611930R1103      | MA6-1103 | 88     | 1SFA616070R4018      | KL70-401C | 103    | 1SFA616160R1025      | KPR1-102W | 36     |
| 1SFA611930R1104      | MA6-1104 | 88     | 1SFA616071R1201      | KB70-1201 | 104    | 1SFA616160R1032      | KPR1-103G | 36     |
| 1SFA611930R1118      | MA6-1118 | 97     | 1SFA616071R3001      | KB70-3001 | 104    | 1SFA616160R1035      | KPR1-103W | 36     |
| 1SFA611930R1130      | MA6-1130 | 87     | 1SFA616071R3101      | KB70-3101 | 104    | 1SFA616160R1046      | KPR1-104B | 36     |
| 1SFA611930R1131      | MA6-1131 | 87     | 1SFA616073R1104      | KS70-1104 | 104    | 1SFA616161R1001      | KPR2-100R | 36     |
| 1SFA611930R1132      | MA6-1132 | 87     | 1SFA616073R1204      | KS70-1204 | 104    | 1SFA616161R1005      | KPR2-100L | 36     |
| 1SFA611930R1133      | MA6-1133 | 87     | 1SFA616073R2002      | KS70-2002 | 104    | 1SFA616161R1006      | KPR2-100B | 36     |
| 1SFA611930R1134      | MA6-1134 | 87     | 1SFA616073R2004      | KS70-2004 | 104    | 1SFA616161R1051      | KPR2-105R | 36     |
| 1SFA611930R1135      | MA6-1135 | 87     | 1SFA616073R3004      | KS70-3004 | 104    | 1SFA616161R1056      | KPR2-105B | 36     |
| 1SFA611930R1136      | MA6-1136 | 87     | 1SFA616075R1001      | KT70-1001 | 105    | 1SFA616162R1001      | KPR3-100R | 37     |
| 1SFA611930R1137      | MA6-1137 | 87     | 1SFA616075R1002      | KT70-1002 | 105    | 1SFA616162R1002      | KPR3-100G | 37     |
| 1SFA611930R1138      | MA6-1138 | 87     | 1SFA616077R1001      | KA70-1001 | 105    | 1SFA616162R1003      | KPR3-100Y | 37     |
| 1SFA611930R1139      | MA6-1139 | 87     | 1SFA616077R1002      | KA70-1002 | 105    | 1SFA616162R1004      | KPR3-100L | 37     |
| 1SFA611930R1140      | MA6-1140 | 87     | 1SFA616077R1011      | KA70-1011 | 105    | 1SFA616162R1005      | KPR3-100W | 37     |
| 1SFA611930R1141      | MA6-1141 | 87     | 1SFA616077R1012      | KA70-1012 | 105    | 1SFA616162R1006      | KPR3-100B | 37     |
| 1SFA611930R1152      | MA6-1152 | 87     | 1SFA616077R1013      | KA70-1013 | 105    | 1SFA616162R1014      | KPR3-101L | 37     |
| 1SFA611930R1153      | MA6-1153 | 87     | 1SFA616077R1021      | KA70-1021 | 105    | 1SFA616162R1015      | KPR3-101W | 37     |
| 1SFA611930R1170      | MA6-1170 | 87     | 1SFA616077R1022      | KA70-1022 | 105    | 1SFA616162R1025      | KPR3-102W | 37     |
| 1SFA611930R1171      | MA6-1171 | 87     | 1SFA616077R1023      | KA70-1023 | 105    | 1SFA616162R1032      | KPR3-103G | 37     |
| 1SFA611930R1172      | MA6-1172 | 87     | 1SFA616077R1031      | KA70-1031 | 105    | 1SFA616162R1046      | KPR3-104B | 37     |
| 1SFA611930R1173      | MA6-1173 | 87     | 1SFA616077R1032      | KA70-1032 | 105    | 1SFA616162R1062      | KPR3-106G | 37     |

## Índice

### Clasificación de referencia de pedido

| Referencia de pedido | Tipo      | Página | Referencia de pedido | Tipo       | Página | Referencia de pedido | Tipo       | Página |
|----------------------|-----------|--------|----------------------|------------|--------|----------------------|------------|--------|
| 1SFA616163R1001      | KPR4-100R | 37     | 1SFA616920R8029      | KA1-8029   | 44     | 1SFA619100R1013      | CP1-10Y-10 | 53     |
| 1SFA616163R1005      | KPR4-100W | 37     | 1SFA616920R8045      | KA1-8045   | 84     | 1SFA619100R1014      | CP1-10L-10 | 53     |
| 1SFA616163R1006      | KPR4-100B | 37     | 1SFA616920R8046      | KA1-8046   | 36     | 1SFA619100R1015      | CP1-10W-10 | 53     |
| 1SFA616163R1051      | KPR4-105R | 37     | 1SFA616920R8047      | KA1-8047   | 36     | 1SFA619100R1016      | CP1-10B-10 | 53     |
| 1SFA616163R1056      | KPR4-105B | 37     | 1SFA616920R8072      | KA1-8072   | 72     | 1SFA619100R1021      | CP1-10R-20 | 53     |
| 1SFA616901R1019      | KTC1-1019 | 100    | 1SFA616920R8073      | KA1-8073   | 44     | 1SFA619100R1022      | CP1-10G-20 | 53     |
| 1SFA616901R1020      | KTC1-1020 | 100    | 1SFA616920R8080      | KA1-8080   | 44     | 1SFA619100R1023      | CP1-10Y-20 | 53     |
| 1SFA616901R1025      | KTC1-1025 | 100    | 1SFA616920R8120      | KA1-8120   | 97     | 1SFA619100R1024      | CP1-10L-20 | 53     |
| 1SFA616901R1031      | KTC1-1031 | 100    | 1SFA616920R8121      | KA1-8121   | 97     | 1SFA619100R1025      | CP1-10W-20 | 53     |
| 1SFA616901R1039      | KTC1-1039 | 100    | 1SFA616921R2011      | KA2-2011   | 68     | 1SFA619100R1026      | CP1-10B-20 | 53     |
| 1SFA616901R9000      | KTC1-9000 | 100    | 1SFA616921R2012      | KA2-2012   | 68     | 1SFA619100R1041      | CP1-10R-01 | 53     |
| 1SFA616901R9002      | KTC1-9002 | 100    | 1SFA616921R2013      | KA2-2013   | 68     | 1SFA619100R1046      | CP1-10B-01 | 53     |
| 1SFA616901R9003      | KTC1-9003 | 100    | 1SFA616921R2014      | KA2-2014   | 68     | 1SFA619100R1051      | CP1-10R-02 | 53     |
| 1SFA616901R9004      | KTC1-9004 | 100    | 1SFA616921R2015      | KA2-2015   | 68     | 1SFA619100R1056      | CP1-10B-02 | 53     |
| 1SFA616901R9005      | KTC1-9005 | 100    | 1SFA616921R2021      | KA2-2021   | 68     | 1SFA619100R1071      | CP1-10R-11 | 53     |
| 1SFA616901R9006      | KTC1-9006 | 100    | 1SFA616921R2022      | KA2-2022   | 68     | 1SFA619100R1072      | CP1-10G-11 | 53     |
| 1SFA616901R9009      | KTC1-9009 | 100    | 1SFA616921R2023      | KA2-2023   | 68     | 1SFA619100R1073      | CP1-10Y-11 | 53     |
| 1SFA616901R9016      | KTC1-9016 | 100    | 1SFA616921R2024      | KA2-2024   | 68     | 1SFA619100R1074      | CP1-10L-11 | 53     |
| 1SFA616901R9020      | KTC1-9020 | 100    | 1SFA616921R2025      | KA2-2025   | 68     | 1SFA619100R1075      | CP1-10W-11 | 53     |
| 1SFA616901R9026      | KTC1-9026 | 100    | 1SFA616921R2031      | KA2-2031   | 68     | 1SFA619100R1076      | CP1-10B-11 | 53     |
| 1SFA616901R9028      | KTC1-9028 | 100    | 1SFA616921R2032      | KA2-2032   | 68     | 1SFA619100R1111      | CP1-11R-10 | 57     |
| 1SFA616902R1020      | KTC2-1020 | 100    | 1SFA616921R2033      | KA2-2033   | 68     | 1SFA619100R1112      | CP1-11G-10 | 57     |
| 1SFA616902R1025      | KTC2-1025 | 100    | 1SFA616921R2034      | KA2-2034   | 68     | 1SFA619100R1113      | CP1-11Y-10 | 57     |
| 1SFA616902R1031      | KTC2-1031 | 100    | 1SFA616921R2035      | KA2-2035   | 68     | 1SFA619100R1114      | CP1-11L-10 | 57     |
| 1SFA616902R9000      | KTC2-9000 | 100    | 1SFA616921R2041      | KA2-2041   | 68     | 1SFA619100R1118      | CP1-11C-10 | 57     |
| 1SFA616902R9002      | KTC2-9002 | 100    | 1SFA616921R2042      | KA2-2042   | 68     | 1SFA619100R1141      | CP1-11R-01 | 57     |
| 1SFA616902R9003      | KTC2-9003 | 100    | 1SFA616921R2043      | KA2-2043   | 68     | 1SFA619100R1211      | CP1-12R-10 | 57     |
| 1SFA616902R9005      | KTC2-9005 | 100    | 1SFA616921R2044      | KA2-2044   | 68     | 1SFA619100R1212      | CP1-12G-10 | 57     |
| 1SFA616902R9006      | KTC2-9006 | 100    | 1SFA616921R2045      | KA2-2045   | 68     | 1SFA619100R1213      | CP1-12Y-10 | 57     |
| 1SFA616902R9015      | KTC2-9015 | 100    | 1SFA616921R2051      | KA2-2051   | 68     | 1SFA619100R1214      | CP1-12L-10 | 57     |
| 1SFA616902R9016      | KTC2-9016 | 100    | 1SFA616921R2052      | KA2-2052   | 68     | 1SFA619100R1218      | CP1-12C-10 | 57     |
| 1SFA616902R9028      | KTC2-9028 | 100    | 1SFA616921R2053      | KA2-2053   | 68     | 1SFA619100R1241      | CP1-12R-01 | 57     |
| 1SFA616903R1019      | KTC3-1019 | 100    | 1SFA616921R2054      | KA2-2054   | 68     | 1SFA619100R1311      | CP1-13R-10 | 57     |
| 1SFA616903R1020      | KTC3-1020 | 100    | 1SFA616921R2055      | KA2-2055   | 68     | 1SFA619100R1312      | CP1-13G-10 | 57     |
| 1SFA616903R1039      | KTC3-1039 | 100    | 1SFA616921R2131      | KA2-2131   | 68     | 1SFA619100R1313      | CP1-13Y-10 | 57     |
| 1SFA616903R9000      | KTC3-9000 | 100    | 1SFA616921R2132      | KA2-2132   | 68     | 1SFA619100R1314      | CP1-13L-10 | 57     |
| 1SFA616903R9002      | KTC3-9002 | 100    | 1SFA616921R2133      | KA2-2133   | 68     | 1SFA619100R1318      | CP1-13C-10 | 57     |
| 1SFA616904R1047      | KTC4-1047 | 100    | 1SFA616921R2134      | KA2-2134   | 68     | 1SFA619100R1341      | CP1-13R-01 | 57     |
| 1SFA616904R9004      | KTC4-9004 | 100    | 1SFA616921R2135      | KA2-2135   | 68     | 1SFA619100R3011      | CP1-30R-10 | 53     |
| 1SFA616905R1040      | KTC5-1040 | 100    | 1SFA616921R2141      | KA2-2141   | 68     | 1SFA619100R3012      | CP1-30G-10 | 53     |
| 1SFA616905R1047      | KTC5-1047 | 100    | 1SFA616921R2142      | KA2-2142   | 68     | 1SFA619100R3013      | CP1-30Y-10 | 53     |
| 1SFA616905R9004      | KTC5-9004 | 100    | 1SFA616921R2143      | KA2-2143   | 68     | 1SFA619100R3014      | CP1-30L-10 | 53     |
| 1SFA616906R1039      | KTC6-1039 | 100    | 1SFA616921R2144      | KA2-2144   | 68     | 1SFA619100R3015      | CP1-30W-10 | 53     |
| 1SFA616906R1042      | KTC6-1042 | 100    | 1SFA616921R2145      | KA2-2145   | 68     | 1SFA619100R3016      | CP1-30B-10 | 53     |
| 1SFA616906R9002      | KTC6-9002 | 100    | 1SFA616921R2221      | KA2-2221   | 68     | 1SFA619100R3021      | CP1-30R-20 | 53     |
| 1SFA616908R1039      | KTC8-1039 | 100    | 1SFA616921R2222      | KA2-2222   | 68     | 1SFA619100R3022      | CP1-30G-20 | 53     |
| 1SFA616908R9002      | KTC8-9002 | 100    | 1SFA616921R2223      | KA2-2223   | 68     | 1SFA619100R3023      | CP1-30Y-20 | 53     |
| 1SFA616908R9003      | KTC8-9003 | 100    | 1SFA616921R2224      | KA2-2224   | 68     | 1SFA619100R3024      | CP1-30L-20 | 53     |
| 1SFA616908R9004      | KTC8-9004 | 100    | 1SFA616921R2225      | KA2-2225   | 68     | 1SFA619100R3025      | CP1-30W-20 | 53     |
| 1SFA616908R9005      | KTC8-9005 | 100    | 1SFA616921R2231      | KA2-2231   | 68     | 1SFA619100R3026      | CP1-30B-20 | 53     |
| 1SFA616908R9011      | KTC8-9011 | 100    | 1SFA616921R2232      | KA2-2232   | 68     | 1SFA619100R3041      | CP1-30R-01 | 53     |
| 1SFA616908R9012      | KTC8-9012 | 100    | 1SFA616921R2233      | KA2-2233   | 68     | 1SFA619100R3046      | CP1-30B-01 | 53     |
| 1SFA616908R9015      | KTC8-9015 | 100    | 1SFA616921R2234      | KA2-2234   | 68     | 1SFA619100R3051      | CP1-30R-02 | 53     |
| 1SFA616908R9016      | KTC8-9016 | 100    | 1SFA616921R2235      | KA2-2235   | 68     | 1SFA619100R3056      | CP1-30B-02 | 53     |
| 1SFA616908R9018      | KTC8-9018 | 100    | 1SFA616922R1018      | KA3-1018   | 106    | 1SFA619100R3071      | CP1-30R-11 | 53     |
| 1SFA616908R9026      | KTC8-9026 | 100    | 1SFA616922R1028      | KA3-1028   | 106    | 1SFA619100R3072      | CP1-30G-11 | 53     |
| 1SFA616915R1005      | -         | 98     | 1SFA616922R1118      | KA3-1118   | 106    | 1SFA619100R3073      | CP1-30Y-11 | 53     |
| 1SFA616915R1038      | -         | 98     | 1SFA616922R1148      | KA3-1148   | 106    | 1SFA619100R3074      | CP1-30L-11 | 53     |
| 1SFA616915R6005      | -         | 98     | 1SFA616923R1028      | KA4-1028   | 104    | 1SFA619100R3075      | CP1-30W-11 | 53     |
| 1SFA616920R8005      | KA1-8005  | 23     | 1SFA616923R1118      | KA4-1118   | 104    | 1SFA619100R3076      | CP1-30B-11 | 53     |
| 1SFA616920R8010      | KA1-8010  | 44     | 1SFA616923R1148      | KA4-1148   | 104    | 1SFA619100R3111      | CP1-31R-10 | 57     |
| 1SFA616920R8020      | KA1-8020  | 44     | 1SFA616924R1021      | KA4-1021   | 104    | 1SFA619100R3112      | CP1-31G-10 | 57     |
| 1SFA616920R8021      | KA1-8021  | 44     | 1SFA616924R1022      | KA4-1022   | 104    | 1SFA619100R3113      | CP1-31Y-10 | 57     |
| 1SFA616920R8022      | KA1-8022  | 44     | 1SFA616924R1023      | KA4-1023   | 104    | 1SFA619100R3114      | CP1-31L-10 | 57     |
| 1SFA616920R8023      | KA1-8023  | 44     | 1SFA616924R1024      | KA4-1024   | 104    | 1SFA619100R3118      | CP1-31C-10 | 57     |
| 1SFA616920R8024      | KA1-8024  | 44     | 1SFA616924R1025      | KA4-1025   | 104    | 1SFA619100R3141      | CP1-31R-01 | 57     |
| 1SFA616920R8027      | KA1-8027  | 44     | 1SFA619100R1011      | CP1-10R-10 | 53     | 1SFA619100R3144      | CP1-31L-01 | 57     |
| 1SFA616920R8028      | KA1-8028  | 44     | 1SFA619100R1012      | CP1-10G-10 | 53     | 1SFA619101R1011      | CP2-10R-10 | 54     |

## Índice

### Clasificación de referencia de pedido

| Referencia de pedido | Tipo       | Página | Referencia de pedido | Tipo       | Página | Referencia de pedido | Tipo         | Página |
|----------------------|------------|--------|----------------------|------------|--------|----------------------|--------------|--------|
| 1SFA619101R1012      | CP2-10G-10 | 54     | 1SFA619102R1026      | CP3-10B-20 | 55     | 1SFA619103R1211      | CP4-12R-10   | 60     |
| 1SFA619101R1013      | CP2-10Y-10 | 54     | 1SFA619102R1041      | CP3-10R-01 | 55     | 1SFA619103R1212      | CP4-12G-10   | 60     |
| 1SFA619101R1014      | CP2-10L-10 | 54     | 1SFA619102R1046      | CP3-10B-01 | 55     | 1SFA619103R1213      | CP4-12Y-10   | 60     |
| 1SFA619101R1015      | CP2-10W-10 | 54     | 1SFA619102R1051      | CP3-10R-02 | 55     | 1SFA619103R1214      | CP4-12L-10   | 60     |
| 1SFA619101R1016      | CP2-10B-10 | 54     | 1SFA619102R1056      | CP3-10B-02 | 55     | 1SFA619103R1218      | CP4-12C-10   | 60     |
| 1SFA619101R1021      | CP2-10R-20 | 54     | 1SFA619102R1071      | CP3-10R-11 | 55     | 1SFA619103R1241      | CP4-12R-01   | 60     |
| 1SFA619101R1022      | CP2-10G-20 | 54     | 1SFA619102R1072      | CP3-10G-11 | 55     | 1SFA619103R1311      | CP4-13R-10   | 60     |
| 1SFA619101R1023      | CP2-10Y-20 | 54     | 1SFA619102R1073      | CP3-10Y-11 | 55     | 1SFA619103R1312      | CP4-13G-10   | 60     |
| 1SFA619101R1024      | CP2-10L-20 | 54     | 1SFA619102R1074      | CP3-10L-11 | 55     | 1SFA619103R1313      | CP4-13Y-10   | 60     |
| 1SFA619101R1025      | CP2-10W-20 | 54     | 1SFA619102R1075      | CP3-10W-11 | 55     | 1SFA619103R1314      | CP4-13L-10   | 60     |
| 1SFA619101R1026      | CP2-10B-20 | 54     | 1SFA619102R1076      | CP3-10B-11 | 55     | 1SFA619103R1318      | CP4-13C-10   | 60     |
| 1SFA619101R1041      | CP2-10R-01 | 54     | 1SFA619102R1111      | CP3-11R-10 | 59     | 1SFA619103R1341      | CP4-13R-01   | 60     |
| 1SFA619101R1046      | CP2-10B-01 | 54     | 1SFA619102R1112      | CP3-11G-10 | 59     | 1SFA619103R3012      | CP4-30G-10   | 56     |
| 1SFA619101R1051      | CP2-10R-02 | 54     | 1SFA619102R1113      | CP3-11Y-10 | 59     | 1SFA619103R3022      | CP4-30G-20   | 56     |
| 1SFA619101R1056      | CP2-10B-02 | 54     | 1SFA619102R1114      | CP3-11L-10 | 59     | 1SFA619103R3071      | CP4-30R-11   | 56     |
| 1SFA619101R1071      | CP2-10R-11 | 54     | 1SFA619102R1118      | CP3-11C-10 | 59     | 1SFA619105R1021      | CP6-10R-20   | 64     |
| 1SFA619101R1072      | CP2-10G-11 | 54     | 1SFA619102R1141      | CP3-11R-01 | 59     | 1SFA619105R1022      | CP6-10G-20   | 64     |
| 1SFA619101R1073      | CP2-10Y-11 | 54     | 1SFA619102R1211      | CP3-12R-10 | 59     | 1SFA619105R1026      | CP6-10B-20   | 64     |
| 1SFA619101R1074      | CP2-10L-11 | 54     | 1SFA619102R1212      | CP3-12G-10 | 59     | 1SFA619105R1051      | CP6-10R-02   | 64     |
| 1SFA619101R1075      | CP2-10W-11 | 54     | 1SFA619102R1213      | CP3-12Y-10 | 59     | 1SFA619105R1056      | CP6-10B-02   | 64     |
| 1SFA619101R1076      | CP2-10B-11 | 54     | 1SFA619102R1214      | CP3-12L-10 | 59     | 1SFA619105R1071      | CP6-10R-11   | 64     |
| 1SFA619101R1111      | CP2-11R-10 | 58     | 1SFA619102R1218      | CP3-12C-10 | 59     | 1SFA619105R1072      | CP6-10G-11   | 64     |
| 1SFA619101R1112      | CP2-11G-10 | 58     | 1SFA619102R1241      | CP3-12R-01 | 59     | 1SFA619105R1076      | CP6-10B-11   | 64     |
| 1SFA619101R1113      | CP2-11Y-10 | 58     | 1SFA619102R1311      | CP3-13R-10 | 59     | 1SFA619126R1071      | CPM3-10R-11  | 61     |
| 1SFA619101R1114      | CP2-11L-10 | 58     | 1SFA619102R1312      | CP3-13G-10 | 59     | 1SFA619126R1072      | CPM3-10G-11  | 61     |
| 1SFA619101R1118      | CP2-11C-10 | 58     | 1SFA619102R1313      | CP3-13Y-10 | 59     | 1SFA619126R1073      | CPM3-10Y-11  | 61     |
| 1SFA619101R1141      | CP2-11R-01 | 58     | 1SFA619102R1314      | CP3-13L-10 | 59     | 1SFA619126R1074      | CPM3-10L-11  | 61     |
| 1SFA619101R1211      | CP2-12R-10 | 58     | 1SFA619102R1318      | CP3-13C-10 | 59     | 1SFA619126R1076      | CPM3-10B-11  | 61     |
| 1SFA619101R1212      | CP2-12G-10 | 58     | 1SFA619102R1341      | CP3-13R-01 | 59     | 1SFA619200R1016      | C2SS1-10B-10 | 69     |
| 1SFA619101R1213      | CP2-12Y-10 | 58     | 1SFA619102R3012      | CP3-30G-10 | 55     | 1SFA619200R1026      | C2SS1-10B-20 | 69     |
| 1SFA619101R1214      | CP2-12L-10 | 58     | 1SFA619102R3015      | CP3-30W-10 | 55     | 1SFA619200R1046      | C2SS1-10B-01 | 69     |
| 1SFA619101R1218      | CP2-12C-10 | 58     | 1SFA619102R3016      | CP3-30B-10 | 55     | 1SFA619200R1076      | C2SS1-10B-11 | 69     |
| 1SFA619101R1241      | CP2-12R-01 | 58     | 1SFA619102R3021      | CP3-30R-20 | 55     | 1SFA619200R3016      | C2SS1-30B-10 | 69     |
| 1SFA619101R1311      | CP2-13R-10 | 58     | 1SFA619102R3022      | CP3-30G-20 | 55     | 1SFA619200R3026      | C2SS1-30B-20 | 69     |
| 1SFA619101R1312      | CP2-13G-10 | 58     | 1SFA619102R3023      | CP3-30Y-20 | 55     | 1SFA619200R3046      | C2SS1-30B-01 | 69     |
| 1SFA619101R1313      | CP2-13Y-10 | 58     | 1SFA619102R3024      | CP3-30L-20 | 55     | 1SFA619200R3076      | C2SS1-30B-11 | 69     |
| 1SFA619101R1314      | CP2-13L-10 | 58     | 1SFA619102R3025      | CP3-30W-20 | 55     | 1SFA619201R1016      | C2SS2-10B-10 | 69     |
| 1SFA619101R1318      | CP2-13C-10 | 58     | 1SFA619102R3026      | CP3-30B-20 | 55     | 1SFA619201R1026      | C2SS2-10B-20 | 69     |
| 1SFA619101R1341      | CP2-13R-01 | 58     | 1SFA619102R3041      | CP3-30R-01 | 55     | 1SFA619201R1046      | C2SS2-10B-01 | 69     |
| 1SFA619101R3011      | CP2-30R-10 | 54     | 1SFA619102R3046      | CP3-30B-01 | 55     | 1SFA619201R1076      | C2SS2-10B-11 | 69     |
| 1SFA619101R3012      | CP2-30G-10 | 54     | 1SFA619102R3071      | CP3-30R-11 | 55     | 1SFA619201R3016      | C2SS2-30B-10 | 69     |
| 1SFA619101R3014      | CP2-30L-10 | 54     | 1SFA619102R3072      | CP3-30G-11 | 55     | 1SFA619201R3026      | C2SS2-30B-20 | 69     |
| 1SFA619101R3015      | CP2-30W-10 | 54     | 1SFA619102R3075      | CP3-30W-11 | 55     | 1SFA619201R3046      | C2SS2-30B-01 | 69     |
| 1SFA619101R3016      | CP2-30B-10 | 54     | 1SFA619102R3076      | CP3-30B-11 | 55     | 1SFA619201R3076      | C2SS2-30B-11 | 69     |
| 1SFA619101R3021      | CP2-30R-20 | 54     | 1SFA619103R1011      | CP4-10R-10 | 56     | 1SFA619202R1016      | C2SS3-10B-10 | 69     |
| 1SFA619101R3022      | CP2-30G-20 | 54     | 1SFA619103R1012      | CP4-10G-10 | 56     | 1SFA619202R1026      | C2SS3-10B-20 | 69     |
| 1SFA619101R3023      | CP2-30Y-20 | 54     | 1SFA619103R1013      | CP4-10Y-10 | 56     | 1SFA619202R1046      | C2SS3-10B-01 | 69     |
| 1SFA619101R3024      | CP2-30L-20 | 54     | 1SFA619103R1014      | CP4-10L-10 | 56     | 1SFA619202R1076      | C2SS3-10B-11 | 69     |
| 1SFA619101R3025      | CP2-30W-20 | 54     | 1SFA619103R1015      | CP4-10W-10 | 56     | 1SFA619202R3016      | C2SS3-30B-10 | 69     |
| 1SFA619101R3026      | CP2-30B-20 | 54     | 1SFA619103R1016      | CP4-10B-10 | 56     | 1SFA619202R3026      | C2SS3-30B-20 | 69     |
| 1SFA619101R3041      | CP2-30R-01 | 54     | 1SFA619103R1021      | CP4-10R-20 | 56     | 1SFA619202R3076      | C2SS3-30B-11 | 69     |
| 1SFA619101R3046      | CP2-30B-01 | 54     | 1SFA619103R1022      | CP4-10G-20 | 56     | 1SFA619204R3016      | C2SS5-30B-10 | 69     |
| 1SFA619101R3051      | CP2-30R-02 | 54     | 1SFA619103R1026      | CP4-10B-20 | 56     | 1SFA619204R3076      | C2SS5-30B-11 | 69     |
| 1SFA619101R3071      | CP2-30R-11 | 54     | 1SFA619103R1041      | CP4-10R-01 | 56     | 1SFA619210R1026      | C3SS1-10B-20 | 70     |
| 1SFA619101R3072      | CP2-30G-11 | 54     | 1SFA619103R1051      | CP4-10R-02 | 56     | 1SFA619210R1076      | C3SS1-10B-11 | 70     |
| 1SFA619101R3073      | CP2-30Y-11 | 54     | 1SFA619103R1056      | CP4-10B-02 | 56     | 1SFA619210R3026      | C3SS1-30B-20 | 70     |
| 1SFA619101R3076      | CP2-30B-11 | 54     | 1SFA619103R1071      | CP4-10R-11 | 56     | 1SFA619210R3076      | C3SS1-30B-11 | 70     |
| 1SFA619102R1011      | CP3-10R-10 | 55     | 1SFA619103R1072      | CP4-10G-11 | 56     | 1SFA619211R1026      | C3SS2-10B-20 | 70     |
| 1SFA619102R1012      | CP3-10G-10 | 55     | 1SFA619103R1073      | CP4-10Y-11 | 56     | 1SFA619211R1076      | C3SS2-10B-11 | 70     |
| 1SFA619102R1013      | CP3-10Y-10 | 55     | 1SFA619103R1074      | CP4-10L-11 | 56     | 1SFA619211R3026      | C3SS2-30B-20 | 70     |
| 1SFA619102R1014      | CP3-10L-10 | 55     | 1SFA619103R1075      | CP4-10W-11 | 56     | 1SFA619211R3076      | C3SS2-30B-11 | 70     |
| 1SFA619102R1015      | CP3-10W-10 | 55     | 1SFA619103R1076      | CP4-10B-11 | 56     | 1SFA619212R1026      | C3SS3-10B-20 | 70     |
| 1SFA619102R1016      | CP3-10B-10 | 55     | 1SFA619103R1111      | CP4-11R-10 | 60     | 1SFA619212R1076      | C3SS3-10B-11 | 70     |
| 1SFA619102R1021      | CP3-10R-20 | 55     | 1SFA619103R1112      | CP4-11G-10 | 60     | 1SFA619212R3026      | C3SS3-30B-20 | 70     |
| 1SFA619102R1022      | CP3-10G-20 | 55     | 1SFA619103R1113      | CP4-11Y-10 | 60     | 1SFA619212R3076      | C3SS3-30B-11 | 70     |
| 1SFA619102R1023      | CP3-10Y-20 | 55     | 1SFA619103R1114      | CP4-11L-10 | 60     | 1SFA619213R1026      | C3SS4-10B-20 | 70     |
| 1SFA619102R1024      | CP3-10L-20 | 55     | 1SFA619103R1118      | CP4-11C-10 | 60     | 1SFA619213R1076      | C3SS4-10B-11 | 70     |
| 1SFA619102R1025      | CP3-10W-20 | 55     | 1SFA619103R1141      | CP4-11R-01 | 60     | 1SFA619214R1026      | C3SS5-10B-20 | 70     |

## Índice

### Clasificación de referencia de pedido

| Referencia de pedido | Tipo         | Página | Referencia de pedido | Tipo         | Página | Referencia de pedido | Tipo   | Página |
|----------------------|--------------|--------|----------------------|--------------|--------|----------------------|--------|--------|
| 1SFA619214R1076      | C3SS5-10B-11 | 70     | 1SFA619500R1076      | CE3T-10B-11  | 63     | SK615546-13          | -      | 98     |
| 1SFA619214R3026      | C3SS5-30B-20 | 70     | 1SFA619501R1041      | CE3P-10R-01  | 62     | SK615546-15          | -      | 98     |
| 1SFA619214R3076      | C3SS5-30B-11 | 70     | 1SFA619501R1051      | CE3P-10R-02  | 62     | SK615546-2           | -      | 98     |
| 1SFA619215R1026      | C3SS6-10B-20 | 70     | 1SFA619501R1071      | CE3P-10R-11  | 62     | SK615546-3           | -      | 98     |
| 1SFA619216R1026      | C3SS7-10B-20 | 70     | 1SFA619501R1076      | CE3P-10B-11  | 63     | SK615546-4           | -      | 98     |
| 1SFA619216R1076      | C3SS7-10B-11 | 70     | 1SFA619502R1041      | CE3K1-10R-01 | 62     | SK615546-5           | -      | 98     |
| 1SFA619216R3026      | C3SS7-30B-20 | 70     | 1SFA619502R1051      | CE3K1-10R-02 | 62     | SK615546-6           | -      | 98     |
| 1SFA619217R1026      | C3SS8-10B-20 | 70     | 1SFA619502R1071      | CE3K1-10R-11 | 62     | SK615546-7           | -      | 98     |
| 1SFA619402R1001      | CL-100R      | 67     | 1SFA619502R1076      | CE3K1-10B-11 | 63     | SK615546-8           | -      | 98     |
| 1SFA619402R1002      | CL-100G      | 67     | 1SFA619550R1016      | CE4T-10B-10  | 63     | SK615550-29          | -      | 99     |
| 1SFA619402R1003      | CL-100Y      | 67     | 1SFA619550R1026      | CE4T-10B-20  | 63     | SK615550-44          | -      | 99     |
| 1SFA619402R1004      | CL-100L      | 67     | 1SFA619550R1041      | CE4T-10R-01  | 62     | SK615550-61          | -      | 99     |
| 1SFA619402R1005      | CL-100W      | 67     | 1SFA619550R1046      | CE4T-10B-01  | 63     | SK615550-62          | -      | 99     |
| 1SFA619402R1008      | CL-100C      | 67     | 1SFA619550R1051      | CE4T-10R-02  | 62     | SK615550-80          | -      | 99     |
| 1SFA619403R5011      | CL2-501R     | 65     | 1SFA619550R1056      | CE4T-10B-02  | 63     | SK615550-81          | -      | 99     |
| 1SFA619403R5012      | CL2-501G     | 65     | 1SFA619550R1071      | CE4T-10R-11  | 62     | SK615552-13          | -      | 99     |
| 1SFA619403R5013      | CL2-501Y     | 65     | 1SFA619550R1076      | CE4T-10B-11  | 63     | SK615552-14          | -      | 99     |
| 1SFA619403R5014      | CL2-501L     | 65     | 1SFA619551R1041      | CE4P-10R-01  | 62     | SK615552-15          | -      | 99     |
| 1SFA619403R5018      | CL2-501C     | 65     | 1SFA619551R1051      | CE4P-10R-02  | 62     | SK615552-16          | -      | 99     |
| 1SFA619403R5021      | CL2-502R     | 65     | 1SFA619551R1071      | CE4P-10R-11  | 62     | SK615552-17          | -      | 99     |
| 1SFA619403R5022      | CL2-502G     | 65     | 1SFA619551R1076      | CE4P-10B-11  | 63     | SK615552-20          | -      | 99     |
| 1SFA619403R5023      | CL2-502Y     | 65     | 1SFA619552R1041      | CE4K1-10R-01 | 62     | SK615552-21          | -      | 99     |
| 1SFA619403R5024      | CL2-502L     | 65     | 1SFA619552R1051      | CE4K1-10R-02 | 62     | SK615552-22          | -      | 99     |
| 1SFA619403R5028      | CL2-502C     | 65     | 1SFA619552R1071      | CE4K1-10R-11 | 62     | SK615552-23          | -      | 99     |
| 1SFA619403R5061      | CL2-506R     | 65     | 1SFA619552R1076      | CE4K1-10B-11 | 63     | SK615552-25          | -      | 99     |
| 1SFA619403R5062      | CL2-506G     | 65     | 1SFA619600R6002      | CB1-600G     | 71     | SK615552-27          | -      | 99     |
| 1SFA619403R5063      | CL2-506Y     | 65     | 1SFA619600R6012      | CB1-601G     | 71     | SK615552-28          | -      | 99     |
| 1SFA619403R5064      | CL2-506L     | 65     | 1SFA619600R6022      | CB1-602G     | 71     | SK615552-29          | -      | 99     |
| 1SFA619403R5068      | CL2-506C     | 65     | 1SFA619600R6032      | CB1-603G     | 71     | SK615552-30          | -      | 99     |
| 1SFA619403R5071      | CL2-507R     | 65     | 1SFA619600R6101      | CB1-610R     | 71     | SK615552-31          | -      | 99     |
| 1SFA619403R5072      | CL2-507G     | 65     | 1SFA619600R6103      | CB1-610Y     | 71     | SK615552-32          | -      | 99     |
| 1SFA619403R5073      | CL2-507Y     | 65     | 1SFA619600R6111      | CB1-611R     | 71     | SK615552-40          | -      | 99     |
| 1SFA619403R5074      | CL2-507L     | 65     | 1SFA619600R6113      | CB1-611Y     | 71     | SK615562-12          | -      | 99     |
| 1SFA619403R5078      | CL2-507C     | 65     | 1SFA619600R6121      | CB1-612R     | 71     | SK615562-27          | -      | 99     |
| 1SFA619403R5131      | CL2-513R     | 65     | 1SFA619600R6123      | CB1-612Y     | 71     | SK615562-82          | -      | 99     |
| 1SFA619403R5132      | CL2-513G     | 65     | 1SFA619600R6131      | CB1-613R     | 71     | SK615562-83          | -      | 99     |
| 1SFA619403R5133      | CL2-513Y     | 65     | 1SFA619600R6133      | CB1-613Y     | 71     | SK615562-87          | -      | 35     |
| 1SFA619403R5134      | CL2-513L     | 65     | 1SFA619600R6206      | CB1-620B     | 71     | SK615562-88          | -      | 35     |
| 1SFA619403R5138      | CL2-513C     | 65     | 1SFA619600R6216      | CB1-621B     | 71     | SK616016-2           | -      | 44     |
| 1SFA619403R5151      | CL2-515R     | 65     | 1SFA619600R6226      | CB1-622B     | 71     | SK616701-AA          | KEM1-0 | 92     |
| 1SFA619403R5152      | CL2-515G     | 65     | 1SFA619600R6236      | CB1-623B     | 71     | SK616702-AA          | KEM2-0 | 92     |
| 1SFA619403R5153      | CL2-515Y     | 65     | 1SFA619600R6306      | CB1-630B     | 71     | SK616703-AA          | KEM3-0 | 92     |
| 1SFA619403R5154      | CL2-515L     | 65     | 1SFA619600R6316      | CB1-631B     | 71     | SK616704-AA          | KEM4-0 | 92     |
| 1SFA619403R5158      | CL2-515C     | 65     | 1SFA619600R6326      | CB1-632B     | 71     | SK616706-AA          | KEM6-0 | 92     |
| 1SFA619403R5201      | CL2-520R     | 66     | 1SFA619600R6336      | CB1-633B     | 71     |                      |        |        |
| 1SFA619403R5202      | CL2-520G     | 66     | 1SFA619811R1000      | CEP1-0       | 83     |                      |        |        |
| 1SFA619403R5203      | CL2-520Y     | 66     | 1SFA619811R1001      | CEP1-1001    | 90     |                      |        |        |
| 1SFA619403R5204      | CL2-520L     | 66     | 1SFA619811R1002      | CEP1-1002    | 90     |                      |        |        |
| 1SFA619403R5208      | CL2-520C     | 66     | 1SFA619811R2001      | CEP1-2001    | 90     |                      |        |        |
| 1SFA619403R5231      | CL2-523R     | 66     | 1SFA619811R2002      | CEP1-2002    | 90     |                      |        |        |
| 1SFA619403R5232      | CL2-523G     | 66     | 1SFA619821R1000      | CEPY1-0      | 83     |                      |        |        |
| 1SFA619403R5233      | CL2-523Y     | 66     | 1SFA619821R1001      | CEPY1-1001   | 90     |                      |        |        |
| 1SFA619403R5234      | CL2-523L     | 66     | 1SFA619821R1002      | CEPY1-1002   | 90     |                      |        |        |
| 1SFA619403R5238      | CL2-523C     | 66     | 1SFA619821R1006      | CEPY1-1006   | 90     |                      |        |        |
| 1SFA619403R5421      | CL2-542R     | 66     | 1SFA619821R2001      | CEPY1-2001   | 90     |                      |        |        |
| 1SFA619403R5422      | CL2-542G     | 66     | 1SFA619821R2002      | CEPY1-2002   | 90     |                      |        |        |
| 1SFA619403R5423      | CL2-542Y     | 66     | 1SFA619920R8053      | CA1-8053     | 72     |                      |        |        |
| 1SFA619403R5424      | CL2-542L     | 66     | 1SFA619920R8054      | CA1-8054     | 72     |                      |        |        |
| 1SFA619403R5428      | CL2-542C     | 66     | 1SFA619920R8077      | CA1-8077     | 72     |                      |        |        |
| 1SFA619403R6231      | CL2-623R     | 66     | 1SFA619920R8078      | CA1-8078     | 72     |                      |        |        |
| 1SFA619403R6232      | CL2-623G     | 66     | 1SFA619920R8080      | CA1-8080     | 73     |                      |        |        |
| 1SFA619403R6233      | CL2-623Y     | 66     | 1SFA619930R1024      | CA6-1024     | 88     |                      |        |        |
| 1SFA619403R6234      | CL2-623L     | 66     | 1SFA619930R1026      | CA6-1026     | 88     |                      |        |        |
| 1SFA619403R6238      | CL2-623C     | 66     | 1SFA619930R1027      | CA6-1027     | 88     |                      |        |        |
| 1SFA619500R1041      | CE3T-10R-01  | 62     | SK615502-D           | -            | 44     |                      |        |        |
| 1SFA619500R1046      | CE3T-10B-01  | 63     | SK615512-1           | -            | 44     |                      |        |        |
| 1SFA619500R1051      | CE3T-10R-02  | 62     | SK615516-1           | -            | 84     |                      |        |        |
| 1SFA619500R1071      | CE3T-10R-11  | 62     | SK615546-1           | -            | 98     |                      |        |        |

## Índice

### Clasificación de tipo

| Tipo         | Referencia de pedido | Página | Tipo         | Referencia de pedido | Página | Tipo       | Referencia de pedido | Página |
|--------------|----------------------|--------|--------------|----------------------|--------|------------|----------------------|--------|
| -            | SK615502-D           | 44     | CB1-612R     | ISFA619600R6121      | 71     | CL2-506C   | 1SFA619403R5068      | 65     |
|              | SK615512-1           | 44     | CB1-612Y     | ISFA619600R6123      | 71     | CL2-506G   | 1SFA619403R5062      | 65     |
|              | SK615516-1           | 84     | CB1-613R     | ISFA619600R6131      | 71     | CL2-506L   | 1SFA619403R5064      | 65     |
|              | SK616016-2           | 44     | CB1-613Y     | ISFA619600R6133      | 71     | CL2-506R   | 1SFA619403R5061      | 65     |
| C2SS1-10B-01 | 1SFA619200R1046      | 69     | CB1-620B     | ISFA619600R6206      | 71     | CL2-506Y   | 1SFA619403R5063      | 65     |
| C2SS1-10B-10 | 1SFA619200R1016      | 69     | CB1-621B     | ISFA619600R6216      | 71     | CL2-507C   | 1SFA619403R5078      | 65     |
| C2SS1-10B-11 | 1SFA619200R1076      | 69     | CB1-622B     | ISFA619600R6226      | 71     | CL2-507G   | 1SFA619403R5072      | 65     |
| C2SS1-10B-20 | 1SFA619200R1026      | 69     | CB1-623B     | ISFA619600R6236      | 71     | CL2-507L   | 1SFA619403R5074      | 65     |
| C2SS1-30B-01 | 1SFA619200R3046      | 69     | CB1-630B     | ISFA619600R6306      | 71     | CL2-507R   | 1SFA619403R5071      | 65     |
| C2SS1-30B-10 | 1SFA619200R3016      | 69     | CB1-631B     | ISFA619600R6316      | 71     | CL2-507Y   | 1SFA619403R5073      | 65     |
| C2SS1-30B-11 | 1SFA619200R3076      | 69     | CB1-632B     | ISFA619600R6326      | 71     | CL2-513C   | 1SFA619403R5138      | 65     |
| C2SS1-30B-20 | 1SFA619200R3026      | 69     | CB1-633B     | ISFA619600R6336      | 71     | CL2-513G   | 1SFA619403R5132      | 65     |
| C2SS2-10B-01 | 1SFA619201R1046      | 69     | CE3K1-10B-11 | ISFA619502R1076      | 63     | CL2-513L   | 1SFA619403R5134      | 65     |
| C2SS2-10B-10 | 1SFA619201R1016      | 69     | CE3K1-10R-01 | ISFA619502R1041      | 62     | CL2-513R   | 1SFA619403R5131      | 65     |
| C2SS2-10B-11 | 1SFA619201R1076      | 69     | CE3K1-10R-02 | ISFA619502R1051      | 62     | CL2-513Y   | 1SFA619403R5133      | 65     |
| C2SS2-10B-20 | 1SFA619201R1026      | 69     | CE3K1-10R-11 | ISFA619502R1071      | 62     | CL2-515C   | 1SFA619403R5158      | 65     |
| C2SS2-30B-01 | 1SFA619201R3046      | 69     | CE3P-10B-11  | ISFA619501R1076      | 63     | CL2-515G   | 1SFA619403R5152      | 65     |
| C2SS2-30B-10 | 1SFA619201R3016      | 69     | CE3P-10R-01  | ISFA619501R1041      | 62     | CL2-515L   | 1SFA619403R5154      | 65     |
| C2SS2-30B-11 | 1SFA619201R3076      | 69     | CE3P-10R-02  | ISFA619501R1051      | 62     | CL2-515R   | 1SFA619403R5151      | 65     |
| C2SS2-30B-20 | 1SFA619201R3026      | 69     | CE3P-10R-11  | ISFA619501R1071      | 62     | CL2-515Y   | 1SFA619403R5153      | 65     |
| C2SS3-10B-01 | 1SFA619202R1046      | 69     | CE3T-10B-01  | ISFA619500R1046      | 63     | CL2-520C   | 1SFA619403R5208      | 66     |
| C2SS3-10B-10 | 1SFA619202R1016      | 69     | CE3T-10B-11  | ISFA619500R1076      | 63     | CL2-520G   | 1SFA619403R5202      | 66     |
| C2SS3-10B-11 | 1SFA619202R1076      | 69     | CE3T-10R-01  | ISFA619500R1041      | 62     | CL2-520L   | 1SFA619403R5204      | 66     |
| C2SS3-10B-20 | 1SFA619202R1026      | 69     | CE3T-10R-02  | ISFA619500R1051      | 62     | CL2-520R   | 1SFA619403R5201      | 66     |
| C2SS3-30B-10 | 1SFA619202R3016      | 69     | CE3T-10R-11  | ISFA619500R1071      | 62     | CL2-520Y   | 1SFA619403R5203      | 66     |
| C2SS3-30B-11 | 1SFA619202R3076      | 69     | CE4K1-10B-11 | ISFA619552R1076      | 63     | CL2-523C   | 1SFA619403R5238      | 66     |
| C2SS3-30B-20 | 1SFA619202R3026      | 69     | CE4K1-10R-01 | ISFA619552R1041      | 62     | CL2-523G   | 1SFA619403R5232      | 66     |
| C2SS5-30B-10 | 1SFA619204R3016      | 69     | CE4K1-10R-02 | ISFA619552R1051      | 62     | CL2-523L   | 1SFA619403R5234      | 66     |
| C2SS5-30B-11 | 1SFA619204R3076      | 69     | CE4K1-10R-11 | ISFA619552R1071      | 62     | CL2-523R   | 1SFA619403R5231      | 66     |
| C3SS1-10B-11 | 1SFA619210R1076      | 70     | CE4P-10B-11  | ISFA619551R1076      | 63     | CL2-523Y   | 1SFA619403R5233      | 66     |
| C3SS1-10B-20 | 1SFA619210R1026      | 70     | CE4P-10R-01  | ISFA619551R1041      | 62     | CL2-542C   | 1SFA619403R5428      | 66     |
| C3SS1-30B-11 | 1SFA619210R3076      | 70     | CE4P-10R-02  | ISFA619551R1051      | 62     | CL2-542G   | 1SFA619403R5422      | 66     |
| C3SS1-30B-20 | 1SFA619210R3026      | 70     | CE4P-10R-11  | ISFA619551R1071      | 62     | CL2-542L   | 1SFA619403R5424      | 66     |
| C3SS2-10B-11 | 1SFA619211R1076      | 70     | CE4T-10B-01  | ISFA619550R1046      | 63     | CL2-542R   | 1SFA619403R5421      | 66     |
| C3SS2-10B-20 | 1SFA619211R1026      | 70     | CE4T-10B-02  | ISFA619550R1056      | 63     | CL2-542Y   | 1SFA619403R5423      | 66     |
| C3SS2-30B-11 | 1SFA619211R3076      | 70     | CE4T-10B-10  | ISFA619550R1016      | 63     | CL2-623C   | 1SFA619403R6238      | 66     |
| C3SS2-30B-20 | 1SFA619211R3026      | 70     | CE4T-10B-11  | ISFA619550R1076      | 63     | CL2-623G   | 1SFA619403R6232      | 66     |
| C3SS3-10B-11 | 1SFA619212R1076      | 70     | CE4T-10B-20  | ISFA619550R1026      | 63     | CL2-623L   | 1SFA619403R6234      | 66     |
| C3SS3-10B-20 | 1SFA619212R1026      | 70     | CE4T-10R-01  | ISFA619550R1041      | 62     | CL2-623R   | 1SFA619403R6231      | 66     |
| C3SS3-30B-11 | 1SFA619212R3076      | 70     | CE4T-10R-02  | ISFA619550R1051      | 62     | CL2-623Y   | 1SFA619403R6233      | 66     |
| C3SS3-30B-20 | 1SFA619212R3026      | 70     | CE4T-10R-11  | ISFA619550R1071      | 62     | CP1-10B-01 | 1SFA619100R1046      | 53     |
| C3SS4-10B-11 | 1SFA619213R1076      | 70     | CEP1-0       | ISFA619811R1000      | 83     | CP1-10B-02 | 1SFA619100R1056      | 53     |
| C3SS4-10B-20 | 1SFA619213R1026      | 70     | CEP1-1001    | ISFA619811R1001      | 90     | CP1-10B-10 | 1SFA619100R1016      | 53     |
| C3SS5-10B-11 | 1SFA619214R1076      | 70     | CEP1-1002    | ISFA619811R1002      | 90     | CP1-10B-11 | 1SFA619100R1076      | 53     |
| C3SS5-10B-20 | 1SFA619214R1026      | 70     | CEP1-2001    | ISFA619811R2001      | 90     | CP1-10B-20 | 1SFA619100R1026      | 53     |
| C3SS5-30B-11 | 1SFA619214R3076      | 70     | CEP1-2002    | ISFA619811R2002      | 90     | CP1-10G-10 | 1SFA619100R1012      | 53     |
| C3SS5-30B-20 | 1SFA619214R3026      | 70     | CEPY1-0      | ISFA619821R1000      | 83     | CP1-10G-11 | 1SFA619100R1072      | 53     |
| C3SS6-10B-20 | 1SFA619215R1026      | 70     | CEPY1-1001   | ISFA619821R1001      | 90     | CP1-10G-20 | 1SFA619100R1022      | 53     |
| C3SS7-10B-11 | 1SFA619216R1076      | 70     | CEPY1-1002   | ISFA619821R1002      | 90     | CP1-10L-10 | 1SFA619100R1014      | 53     |
| C3SS7-10B-20 | 1SFA619216R1026      | 70     | CEPY1-1006   | ISFA619821R1006      | 90     | CP1-10L-11 | 1SFA619100R1074      | 53     |
| C3SS7-30B-20 | 1SFA619216R3026      | 70     | CEPY1-2001   | ISFA619821R2001      | 90     | CP1-10L-20 | 1SFA619100R1024      | 53     |
| C3SS8-10B-20 | 1SFA619217R1026      | 70     | CEPY1-2002   | ISFA619821R2002      | 90     | CP1-10R-01 | 1SFA619100R1041      | 53     |
| CA1-8053     | 1SFA619920R8053      | 72     | CL-100C      | ISFA619402R1008      | 67     | CP1-10R-02 | 1SFA619100R1051      | 53     |
| CA1-8054     | 1SFA619920R8054      | 72     | CL-100G      | ISFA619402R1002      | 67     | CP1-10R-10 | 1SFA619100R1011      | 53     |
| CA1-8077     | 1SFA619920R8077      | 72     | CL-100L      | ISFA619402R1004      | 67     | CP1-10R-11 | 1SFA619100R1071      | 53     |
| CA1-8078     | 1SFA619920R8078      | 72     | CL-100R      | ISFA619402R1001      | 67     | CP1-10R-20 | 1SFA619100R1021      | 53     |
| CA1-8080     | 1SFA619920R8080      | 73     | CL-100W      | ISFA619402R1005      | 67     | CP1-10W-10 | 1SFA619100R1015      | 53     |
| CA6-1024     | 1SFA619930R1024      | 88     | CL-100Y      | ISFA619402R1003      | 67     | CP1-10W-11 | 1SFA619100R1075      | 53     |
| CA6-1026     | 1SFA619930R1026      | 88     | CL2-501C     | ISFA619403R5018      | 65     | CP1-10W-20 | 1SFA619100R1025      | 53     |
| CA6-1027     | 1SFA619930R1027      | 88     | CL2-501G     | ISFA619403R5012      | 65     | CP1-10Y-10 | 1SFA619100R1013      | 53     |
| CB1-600G     | 1SFA619600R6002      | 71     | CL2-501L     | ISFA619403R5014      | 65     | CP1-10Y-11 | 1SFA619100R1073      | 53     |
| CB1-601G     | 1SFA619600R6012      | 71     | CL2-501R     | ISFA619403R5011      | 65     | CP1-10Y-20 | 1SFA619100R1023      | 53     |
| CB1-602G     | 1SFA619600R6022      | 71     | CL2-501Y     | ISFA619403R5013      | 65     | CP1-11C-10 | 1SFA619100R1118      | 57     |
| CB1-603G     | 1SFA619600R6032      | 71     | CL2-502C     | ISFA619403R5028      | 65     | CP1-11G-10 | 1SFA619100R1112      | 57     |
| CB1-610R     | 1SFA619600R6101      | 71     | CL2-502G     | ISFA619403R5022      | 65     | CP1-11L-10 | 1SFA619100R1114      | 57     |
| CB1-610Y     | 1SFA619600R6103      | 71     | CL2-502L     | ISFA619403R5024      | 65     | CP1-11R-01 | 1SFA619100R1141      | 57     |
| CB1-611R     | 1SFA619600R6111      | 71     | CL2-502R     | ISFA619403R5021      | 65     | CP1-11R-10 | 1SFA619100R1111      | 57     |
| CB1-611Y     | 1SFA619600R6113      | 71     | CL2-502Y     | ISFA619403R5023      | 65     | CP1-11Y-10 | 1SFA619100R1113      | 57     |

## Índice

### Clasificación de tipo

| Tipo       | Referencia de pedido | Página | Tipo       | Referencia de pedido | Página | Tipo        | Referencia de pedido | Página |
|------------|----------------------|--------|------------|----------------------|--------|-------------|----------------------|--------|
| CP1-12C-10 | 1SFA619100R1218      | 57     | CP2-11Y-10 | 1SFA619101R1113      | 58     | CP3-13R-01  | 1SFA619102R1341      | 59     |
| CP1-12G-10 | 1SFA619100R1212      | 57     | CP2-12C-10 | 1SFA619101R1218      | 58     | CP3-13R-10  | 1SFA619102R1311      | 59     |
| CP1-12L-10 | 1SFA619100R1214      | 57     | CP2-12G-10 | 1SFA619101R1212      | 58     | CP3-13Y-10  | 1SFA619102R1313      | 59     |
| CP1-12R-01 | 1SFA619100R1241      | 57     | CP2-12L-10 | 1SFA619101R1214      | 58     | CP3-30B-01  | 1SFA619102R3046      | 55     |
| CP1-12R-10 | 1SFA619100R1211      | 57     | CP2-12R-01 | 1SFA619101R1241      | 58     | CP3-30B-10  | 1SFA619102R3016      | 55     |
| CP1-12Y-10 | 1SFA619100R1213      | 57     | CP2-12R-10 | 1SFA619101R1211      | 58     | CP3-30B-11  | 1SFA619102R3076      | 55     |
| CP1-13C-10 | 1SFA619100R1318      | 57     | CP2-12Y-10 | 1SFA619101R1213      | 58     | CP3-30B-20  | 1SFA619102R3026      | 55     |
| CP1-13G-10 | 1SFA619100R1312      | 57     | CP2-13C-10 | 1SFA619101R1318      | 58     | CP3-30G-10  | 1SFA619102R3012      | 55     |
| CP1-13L-10 | 1SFA619100R1314      | 57     | CP2-13G-10 | 1SFA619101R1312      | 58     | CP3-30G-11  | 1SFA619102R3072      | 55     |
| CP1-13R-01 | 1SFA619100R1341      | 57     | CP2-13L-10 | 1SFA619101R1314      | 58     | CP3-30G-20  | 1SFA619102R3022      | 55     |
| CP1-13R-10 | 1SFA619100R1311      | 57     | CP2-13R-01 | 1SFA619101R1341      | 58     | CP3-30L-20  | 1SFA619102R3024      | 55     |
| CP1-13Y-10 | 1SFA619100R1313      | 57     | CP2-13R-10 | 1SFA619101R1311      | 58     | CP3-30R-01  | 1SFA619102R3041      | 55     |
| CP1-30B-01 | 1SFA619100R3046      | 53     | CP2-13Y-10 | 1SFA619101R1313      | 58     | CP3-30R-11  | 1SFA619102R3071      | 55     |
| CP1-30B-02 | 1SFA619100R3056      | 53     | CP2-30B-01 | 1SFA619101R3046      | 54     | CP3-30R-20  | 1SFA619102R3021      | 55     |
| CP1-30B-10 | 1SFA619100R3016      | 53     | CP2-30B-10 | 1SFA619101R3016      | 54     | CP3-30W-10  | 1SFA619102R3015      | 55     |
| CP1-30B-11 | 1SFA619100R3076      | 53     | CP2-30B-11 | 1SFA619101R3076      | 54     | CP3-30W-11  | 1SFA619102R3075      | 55     |
| CP1-30B-20 | 1SFA619100R3026      | 53     | CP2-30B-20 | 1SFA619101R3026      | 54     | CP3-30W-20  | 1SFA619102R3025      | 55     |
| CP1-30G-10 | 1SFA619100R3012      | 53     | CP2-30G-10 | 1SFA619101R3012      | 54     | CP3-30Y-20  | 1SFA619102R3023      | 55     |
| CP1-30G-11 | 1SFA619100R3072      | 53     | CP2-30G-11 | 1SFA619101R3072      | 54     | CP4-10B-02  | 1SFA619103R1056      | 56     |
| CP1-30G-20 | 1SFA619100R3022      | 53     | CP2-30G-20 | 1SFA619101R3022      | 54     | CP4-10B-10  | 1SFA619103R1016      | 56     |
| CP1-30L-10 | 1SFA619100R3014      | 53     | CP2-30L-10 | 1SFA619101R3014      | 54     | CP4-10B-11  | 1SFA619103R1076      | 56     |
| CP1-30L-11 | 1SFA619100R3074      | 53     | CP2-30L-20 | 1SFA619101R3024      | 54     | CP4-10B-20  | 1SFA619103R1026      | 56     |
| CP1-30L-20 | 1SFA619100R3024      | 53     | CP2-30R-01 | 1SFA619101R3041      | 54     | CP4-10G-10  | 1SFA619103R1012      | 56     |
| CP1-30R-01 | 1SFA619100R3041      | 53     | CP2-30R-02 | 1SFA619101R3051      | 54     | CP4-10G-11  | 1SFA619103R1072      | 56     |
| CP1-30R-02 | 1SFA619100R3051      | 53     | CP2-30R-10 | 1SFA619101R3011      | 54     | CP4-10G-20  | 1SFA619103R1022      | 56     |
| CP1-30R-10 | 1SFA619100R3011      | 53     | CP2-30R-11 | 1SFA619101R3071      | 54     | CP4-10L-10  | 1SFA619103R1014      | 56     |
| CP1-30R-11 | 1SFA619100R3071      | 53     | CP2-30R-20 | 1SFA619101R3021      | 54     | CP4-10L-11  | 1SFA619103R1074      | 56     |
| CP1-30R-20 | 1SFA619100R3021      | 53     | CP2-30W-10 | 1SFA619101R3015      | 54     | CP4-10R-01  | 1SFA619103R1041      | 56     |
| CP1-30W-10 | 1SFA619100R3015      | 53     | CP2-30W-20 | 1SFA619101R3025      | 54     | CP4-10R-02  | 1SFA619103R1051      | 56     |
| CP1-30W-11 | 1SFA619100R3075      | 53     | CP2-30Y-11 | 1SFA619101R3073      | 54     | CP4-10R-10  | 1SFA619103R1011      | 56     |
| CP1-30W-20 | 1SFA619100R3025      | 53     | CP2-30Y-20 | 1SFA619101R3023      | 54     | CP4-10R-11  | 1SFA619103R1071      | 56     |
| CP1-30Y-10 | 1SFA619100R3013      | 53     | CP3-10B-01 | 1SFA619102R1046      | 55     | CP4-10R-20  | 1SFA619103R1021      | 56     |
| CP1-30Y-11 | 1SFA619100R3073      | 53     | CP3-10B-02 | 1SFA619102R1056      | 55     | CP4-10W-10  | 1SFA619103R1015      | 56     |
| CP1-30Y-20 | 1SFA619100R3023      | 53     | CP3-10B-10 | 1SFA619102R1016      | 55     | CP4-10W-11  | 1SFA619103R1075      | 56     |
| CP1-31C-10 | 1SFA619100R3118      | 57     | CP3-10B-11 | 1SFA619102R1076      | 55     | CP4-10Y-10  | 1SFA619103R1013      | 56     |
| CP1-31G-10 | 1SFA619100R3112      | 57     | CP3-10B-20 | 1SFA619102R1026      | 55     | CP4-10Y-11  | 1SFA619103R1073      | 56     |
| CP1-31L-01 | 1SFA619100R3144      | 57     | CP3-10G-10 | 1SFA619102R1012      | 55     | CP4-11C-10  | 1SFA619103R1118      | 60     |
| CP1-31L-10 | 1SFA619100R3114      | 57     | CP3-10G-11 | 1SFA619102R1072      | 55     | CP4-11G-10  | 1SFA619103R1112      | 60     |
| CP1-31R-01 | 1SFA619100R3141      | 57     | CP3-10G-20 | 1SFA619102R1022      | 55     | CP4-11L-10  | 1SFA619103R1114      | 60     |
| CP1-31R-10 | 1SFA619100R3111      | 57     | CP3-10L-10 | 1SFA619102R1014      | 55     | CP4-11R-01  | 1SFA619103R1141      | 60     |
| CP1-31Y-10 | 1SFA619100R3113      | 57     | CP3-10L-11 | 1SFA619102R1074      | 55     | CP4-11R-10  | 1SFA619103R1111      | 60     |
| CP2-10B-01 | 1SFA619101R1046      | 54     | CP3-10L-20 | 1SFA619102R1024      | 55     | CP4-11Y-10  | 1SFA619103R1113      | 60     |
| CP2-10B-02 | 1SFA619101R1056      | 54     | CP3-10R-01 | 1SFA619102R1041      | 55     | CP4-12C-10  | 1SFA619103R1218      | 60     |
| CP2-10B-10 | 1SFA619101R1016      | 54     | CP3-10R-02 | 1SFA619102R1051      | 55     | CP4-12G-10  | 1SFA619103R1212      | 60     |
| CP2-10B-11 | 1SFA619101R1076      | 54     | CP3-10R-10 | 1SFA619102R1011      | 55     | CP4-12L-10  | 1SFA619103R1214      | 60     |
| CP2-10B-20 | 1SFA619101R1026      | 54     | CP3-10R-11 | 1SFA619102R1071      | 55     | CP4-12R-01  | 1SFA619103R1241      | 60     |
| CP2-10G-10 | 1SFA619101R1012      | 54     | CP3-10R-20 | 1SFA619102R1021      | 55     | CP4-12R-10  | 1SFA619103R1211      | 60     |
| CP2-10G-11 | 1SFA619101R1072      | 54     | CP3-10W-10 | 1SFA619102R1015      | 55     | CP4-12Y-10  | 1SFA619103R1213      | 60     |
| CP2-10G-20 | 1SFA619101R1022      | 54     | CP3-10W-11 | 1SFA619102R1075      | 55     | CP4-13C-10  | 1SFA619103R1318      | 60     |
| CP2-10L-10 | 1SFA619101R1014      | 54     | CP3-10W-20 | 1SFA619102R1025      | 55     | CP4-13G-10  | 1SFA619103R1312      | 60     |
| CP2-10L-11 | 1SFA619101R1074      | 54     | CP3-10Y-10 | 1SFA619102R1013      | 55     | CP4-13L-10  | 1SFA619103R1314      | 60     |
| CP2-10L-20 | 1SFA619101R1024      | 54     | CP3-10Y-11 | 1SFA619102R1073      | 55     | CP4-13R-01  | 1SFA619103R1341      | 60     |
| CP2-10R-01 | 1SFA619101R1041      | 54     | CP3-10Y-20 | 1SFA619102R1023      | 55     | CP4-13R-10  | 1SFA619103R1311      | 60     |
| CP2-10R-02 | 1SFA619101R1051      | 54     | CP3-11C-10 | 1SFA619102R1118      | 59     | CP4-13Y-10  | 1SFA619103R1313      | 60     |
| CP2-10R-10 | 1SFA619101R1011      | 54     | CP3-11G-10 | 1SFA619102R1112      | 59     | CP4-30G-10  | 1SFA619103R3012      | 56     |
| CP2-10R-11 | 1SFA619101R1071      | 54     | CP3-11L-10 | 1SFA619102R1114      | 59     | CP4-30G-20  | 1SFA619103R3022      | 56     |
| CP2-10R-20 | 1SFA619101R1021      | 54     | CP3-11R-01 | 1SFA619102R1141      | 59     | CP4-30R-11  | 1SFA619103R3071      | 56     |
| CP2-10W-10 | 1SFA619101R1015      | 54     | CP3-11R-10 | 1SFA619102R1111      | 59     | CP6-10B-02  | 1SFA619105R1056      | 64     |
| CP2-10W-11 | 1SFA619101R1075      | 54     | CP3-11Y-10 | 1SFA619102R1113      | 59     | CP6-10B-11  | 1SFA619105R1076      | 64     |
| CP2-10W-20 | 1SFA619101R1025      | 54     | CP3-12C-10 | 1SFA619102R1218      | 59     | CP6-10B-20  | 1SFA619105R1026      | 64     |
| CP2-10Y-10 | 1SFA619101R1013      | 54     | CP3-12G-10 | 1SFA619102R1212      | 59     | CP6-10G-11  | 1SFA619105R1072      | 64     |
| CP2-10Y-11 | 1SFA619101R1073      | 54     | CP3-12L-10 | 1SFA619102R1214      | 59     | CP6-10G-20  | 1SFA619105R1022      | 64     |
| CP2-10Y-20 | 1SFA619101R1023      | 54     | CP3-12R-01 | 1SFA619102R1241      | 59     | CP6-10R-02  | 1SFA619105R1051      | 64     |
| CP2-11C-10 | 1SFA619101R1118      | 58     | CP3-12R-10 | 1SFA619102R1211      | 59     | CP6-10R-11  | 1SFA619105R1071      | 64     |
| CP2-11G-10 | 1SFA619101R1112      | 58     | CP3-12Y-10 | 1SFA619102R1213      | 59     | CP6-10R-20  | 1SFA619105R1021      | 64     |
| CP2-11L-10 | 1SFA619101R1114      | 58     | CP3-13C-10 | 1SFA619102R1318      | 59     | CPM3-10B-11 | 1SFA619126R1076      | 61     |
| CP2-11R-01 | 1SFA619101R1141      | 58     | CP3-13G-10 | 1SFA619102R1312      | 59     | CPM3-10G-11 | 1SFA619126R1072      | 61     |
| CP2-11R-10 | 1SFA619101R1111      | 58     | CP3-13L-10 | 1SFA619102R1314      | 59     | CPM3-10L-11 | 1SFA619126R1074      | 61     |

## Índice

### Clasificación de tipo

| Tipo        | Referencia de pedido | Página | Tipo      | Referencia de pedido | Página | Tipo      | Referencia de pedido | Página |
|-------------|----------------------|--------|-----------|----------------------|--------|-----------|----------------------|--------|
| CPM3-10R-11 | 1SFA619126R1071      | 61     | KA2-2022  | 1SFA616921R2022      | 68     | KEM2-0    | SK616702-AA          | 92     |
| CPM3-10Y-11 | 1SFA619126R1073      | 61     | KA2-2023  | 1SFA616921R2023      | 68     | KEM3-0    | SK616703-AA          | 92     |
| -           | 1SFA616915R1005      | 98     | KA2-2024  | 1SFA616921R2024      | 68     | KEM4-0    | SK616704-AA          | 92     |
| -           | 1SFA616915R1038      | 98     | KA2-2025  | 1SFA616921R2025      | 68     | KEM6-0    | SK616706-AA          | 92     |
| -           | 1SFA616915R6005      | 98     | KA2-2031  | 1SFA616921R2031      | 68     | KL70-305C | 1SFA616070R3058      | 103    |
| -           | SK615546-1           | 98     | KA2-2032  | 1SFA616921R2032      | 68     | KL70-305G | 1SFA616070R3052      | 103    |
| -           | SK615546-13          | 98     | KA2-2033  | 1SFA616921R2033      | 68     | KL70-305L | 1SFA616070R3054      | 103    |
| -           | SK615546-15          | 98     | KA2-2034  | 1SFA616921R2034      | 68     | KL70-305R | 1SFA616070R3051      | 103    |
| -           | SK615546-2           | 98     | KA2-2035  | 1SFA616921R2035      | 68     | KL70-305Y | 1SFA616070R3053      | 103    |
| -           | SK615546-3           | 98     | KA2-2041  | 1SFA616921R2041      | 68     | KL70-306C | 1SFA616070R3068      | 103    |
| -           | SK615546-4           | 98     | KA2-2042  | 1SFA616921R2042      | 68     | KL70-306G | 1SFA616070R3062      | 103    |
| -           | SK615546-5           | 98     | KA2-2043  | 1SFA616921R2043      | 68     | KL70-306L | 1SFA616070R3064      | 103    |
| -           | SK615546-6           | 98     | KA2-2044  | 1SFA616921R2044      | 68     | KL70-306R | 1SFA616070R3061      | 103    |
| -           | SK615546-7           | 98     | KA2-2045  | 1SFA616921R2045      | 68     | KL70-306Y | 1SFA616070R3063      | 103    |
| -           | SK615546-8           | 98     | KA2-2051  | 1SFA616921R2051      | 68     | KL70-307C | 1SFA616070R3078      | 103    |
| -           | SK615550-29          | 99     | KA2-2052  | 1SFA616921R2052      | 68     | KL70-307G | 1SFA616070R3072      | 103    |
| -           | SK615550-44          | 99     | KA2-2053  | 1SFA616921R2053      | 68     | KL70-307L | 1SFA616070R3074      | 103    |
| -           | SK615550-61          | 99     | KA2-2054  | 1SFA616921R2054      | 68     | KL70-307R | 1SFA616070R3071      | 103    |
| -           | SK615550-62          | 99     | KA2-2055  | 1SFA616921R2055      | 68     | KL70-307Y | 1SFA616070R3073      | 103    |
| -           | SK615550-80          | 99     | KA2-2131  | 1SFA616921R2131      | 68     | KL70-342C | 1SFA616070R3428      | 103    |
| -           | SK615550-81          | 99     | KA2-2132  | 1SFA616921R2132      | 68     | KL70-342G | 1SFA616070R3422      | 103    |
| -           | SK615552-13          | 99     | KA2-2133  | 1SFA616921R2133      | 68     | KL70-342L | 1SFA616070R3424      | 103    |
| -           | SK615552-14          | 99     | KA2-2134  | 1SFA616921R2134      | 68     | KL70-342R | 1SFA616070R3421      | 103    |
| -           | SK615552-15          | 99     | KA2-2135  | 1SFA616921R2135      | 68     | KL70-342Y | 1SFA616070R3423      | 103    |
| -           | SK615552-16          | 99     | KA2-2141  | 1SFA616921R2141      | 68     | KL70-352C | 1SFA616070R3528      | 103    |
| -           | SK615552-17          | 99     | KA2-2142  | 1SFA616921R2142      | 68     | KL70-352G | 1SFA616070R3522      | 103    |
| -           | SK615552-20          | 99     | KA2-2143  | 1SFA616921R2143      | 68     | KL70-352L | 1SFA616070R3524      | 103    |
| -           | SK615552-21          | 99     | KA2-2144  | 1SFA616921R2144      | 68     | KL70-352R | 1SFA616070R3521      | 103    |
| -           | SK615552-22          | 99     | KA2-2145  | 1SFA616921R2145      | 68     | KL70-352Y | 1SFA616070R3523      | 103    |
| -           | SK615552-23          | 99     | KA2-2221  | 1SFA616921R2221      | 68     | KL70-401C | 1SFA616070R4018      | 103    |
| -           | SK615552-25          | 99     | KA2-2222  | 1SFA616921R2222      | 68     | KL70-401G | 1SFA616070R4012      | 103    |
| -           | SK615552-27          | 99     | KA2-2223  | 1SFA616921R2223      | 68     | KL70-401L | 1SFA616070R4014      | 103    |
| -           | SK615552-28          | 99     | KA2-2224  | 1SFA616921R2224      | 68     | KL70-401R | 1SFA616070R4011      | 103    |
| -           | SK615552-29          | 99     | KA2-2225  | 1SFA616921R2225      | 68     | KL70-401Y | 1SFA616070R4013      | 103    |
| -           | SK615552-30          | 99     | KA2-2231  | 1SFA616921R2231      | 68     | KP6-40B   | 1SFA616105R4006      | 23     |
| -           | SK615552-31          | 99     | KA2-2232  | 1SFA616921R2232      | 68     | KP6-40G   | 1SFA616105R4002      | 23     |
| -           | SK615552-32          | 99     | KA2-2233  | 1SFA616921R2233      | 68     | KP6-40R   | 1SFA616105R4001      | 23     |
| -           | SK615552-40          | 99     | KA2-2234  | 1SFA616921R2234      | 68     | KPR1-100B | 1SFA616160R1006      | 36     |
| -           | SK615562-12          | 99     | KA2-2235  | 1SFA616921R2235      | 68     | KPR1-100G | 1SFA616160R1002      | 36     |
| -           | SK615562-27          | 99     | KA3-1018  | 1SFA616922R1018      | 106    | KPR1-100L | 1SFA616160R1004      | 36     |
| -           | SK615562-82          | 99     | KA3-1028  | 1SFA616922R1028      | 106    | KPR1-100R | 1SFA616160R1001      | 36     |
| -           | SK615562-83          | 99     | KA3-1118  | 1SFA616922R1118      | 106    | KPR1-100W | 1SFA616160R1005      | 36     |
| -           | SK615562-87          | 35     | KA3-1148  | 1SFA616922R1148      | 106    | KPR1-100Y | 1SFA616160R1003      | 36     |
| -           | SK615562-88          | 35     | KA4-1021  | 1SFA616924R1021      | 104    | KPR1-101L | 1SFA616160R1014      | 36     |
| KA1-8005    | 1SFA616920R8005      | 23     | KA4-1022  | 1SFA616924R1022      | 104    | KPR1-101W | 1SFA616160R1015      | 36     |
| KA1-8010    | 1SFA616920R8010      | 44     | KA4-1023  | 1SFA616924R1023      | 104    | KPR1-102G | 1SFA616160R1022      | 36     |
| KA1-8020    | 1SFA616920R8020      | 44,    | KA4-1024  | 1SFA616924R1024      | 104    | KPR1-102W | 1SFA616160R1025      | 36     |
| KA1-8021    | 1SFA616920R8021      | 44     | KA4-1025  | 1SFA616924R1025      | 104    | KPR1-103G | 1SFA616160R1032      | 36     |
| KA1-8022    | 1SFA616920R8022      | 44     | KA4-1028  | 1SFA616923R1028      | 104    | KPR1-103W | 1SFA616160R1035      | 36     |
| KA1-8023    | 1SFA616920R8023      | 44     | KA4-1118  | 1SFA616923R1118      | 104    | KPR1-104B | 1SFA616160R1046      | 36     |
| KA1-8024    | 1SFA616920R8024      | 44     | KA4-1148  | 1SFA616923R1148      | 104    | KPR2-100B | 1SFA616161R1006      | 36     |
| KA1-8027    | 1SFA616920R8027      | 44     | KA70-1001 | 1SFA616077R1001      | 105    | KPR2-100L | 1SFA616161R1005      | 36     |
| KA1-8028    | 1SFA616920R8028      | 44     | KA70-1002 | 1SFA616077R1002      | 105    | KPR2-100R | 1SFA616161R1001      | 36     |
| KA1-8029    | 1SFA616920R8029      | 44     | KA70-1011 | 1SFA616077R1011      | 105    | KPR2-105B | 1SFA616161R1056      | 36     |
| KA1-8045    | 1SFA616920R8045      | 84     | KA70-1012 | 1SFA616077R1012      | 105    | KPR2-105R | 1SFA616161R1051      | 36     |
| KA1-8046    | 1SFA616920R8046      | 36     | KA70-1013 | 1SFA616077R1013      | 105    | KPR3-100B | 1SFA616162R1006      | 37     |
| KA1-8047    | 1SFA616920R8047      | 36     | KA70-1021 | 1SFA616077R1021      | 105    | KPR3-100G | 1SFA616162R1002      | 37     |
| KA1-8072    | 1SFA616920R8072      | 72     | KA70-1022 | 1SFA616077R1022      | 105    | KPR3-100L | 1SFA616162R1004      | 37     |
| KA1-8073    | 1SFA616920R8073      | 44     | KA70-1023 | 1SFA616077R1023      | 105    | KPR3-100R | 1SFA616162R1001      | 37     |
| KA1-8080    | 1SFA616920R8080      | 44     | KA70-1031 | 1SFA616077R1031      | 105    | KPR3-100W | 1SFA616162R1005      | 37     |
| KA1-8120    | 1SFA616920R8120      | 97     | KA70-1032 | 1SFA616077R1032      | 105    | KPR3-100Y | 1SFA616162R1003      | 37     |
| KA1-8121    | 1SFA616920R8121      | 97     | KA70-1033 | 1SFA616077R1033      | 105    | KPR3-101L | 1SFA616162R1014      | 37     |
| KA2-2011    | 1SFA616921R2011      | 68     | KA70-1034 | 1SFA616077R1034      | 105    | KPR3-101W | 1SFA616162R1015      | 37     |
| KA2-2012    | 1SFA616921R2012      | 68     | KASB-1000 | 1SFA616087R1000      | 106    | KPR3-102W | 1SFA616162R1025      | 37     |
| KA2-2013    | 1SFA616921R2013      | 68     | KB70-1201 | 1SFA616071R1201      | 104    | KPR3-103G | 1SFA616162R1032      | 37     |
| KA2-2014    | 1SFA616921R2014      | 68     | KB70-3001 | 1SFA616071R3001      | 104    | KPR3-104B | 1SFA616162R1046      | 37     |
| KA2-2015    | 1SFA616921R2015      | 68     | KB70-3101 | 1SFA616071R3101      | 104    | KPR3-106G | 1SFA616162R1062      | 37     |
| KA2-2021    | 1SFA616921R2021      | 68     | KEM1-0    | SK616701-AA          | 92     | KPR4-100B | 1SFA616163R1006      | 37     |

## Índice

### Clasificación de tipo

| Tipo      | Referencia de pedido | Página | Tipo      | Referencia de pedido | Página | Tipo      | Referencia de pedido | Página |
|-----------|----------------------|--------|-----------|----------------------|--------|-----------|----------------------|--------|
| KPR4-100R | 1SFA616163R1001      | 37     | KTC2-9016 | 1SFA616902R9016      | 100    | M2SS2-31G | 1SFA611201R3102      | 29     |
| KPR4-100W | 1SFA616163R1005      | 37     | KTC2-9028 | 1SFA616902R9028      | 100    | M2SS2-31L | 1SFA611201R3104      | 29     |
| KPR4-105B | 1SFA616163R1056      | 37     | KTC3-1019 | 1SFA616903R1019      | 100    | M2SS2-31R | 1SFA611201R3101      | 29     |
| KPR4-105R | 1SFA616163R1051      | 37     | KTC3-1020 | 1SFA616903R1020      | 100    | M2SS2-31Y | 1SFA611201R3103      | 29     |
| KS70-1104 | 1SFA616073R1104      | 104    | KTC3-1039 | 1SFA616903R1039      | 100    | M2SS3-10B | 1SFA611202R1006      | 24     |
| KS70-1204 | 1SFA616073R1204      | 104    | KTC3-9000 | 1SFA616903R9000      | 100    | M2SS3-10R | 1SFA611202R1001      | 24     |
| KS70-2002 | 1SFA616073R2002      | 104    | KTC3-9002 | 1SFA616903R9002      | 100    | M2SS3-10U | 1SFA611202R1007      | 24     |
| KS70-2004 | 1SFA616073R2004      | 104    | KTC4-1047 | 1SFA616904R1047      | 100    | M2SS3-11C | 1SFA611202R1108      | 29     |
| KS70-3004 | 1SFA616073R3004      | 104    | KTC4-9004 | 1SFA616904R9004      | 100    | M2SS3-11G | 1SFA611202R1102      | 29     |
| KS8-113C  | 1SFA616080R1138      | 106    | KTC5-1040 | 1SFA616905R1040      | 100    | M2SS3-11L | 1SFA611202R1104      | 29     |
| KS8-113G  | 1SFA616080R1132      | 106    | KTC5-1047 | 1SFA616905R1047      | 100    | M2SS3-11R | 1SFA611202R1101      | 29     |
| KS8-113L  | 1SFA616080R1134      | 106    | KTC5-9004 | 1SFA616905R9004      | 100    | M2SS3-11Y | 1SFA611202R1103      | 29     |
| KS8-113R  | 1SFA616080R1131      | 106    | KTC6-1039 | 1SFA616906R1039      | 100    | M2SS3-20B | 1SFA611202R2006      | 24     |
| KS8-113Y  | 1SFA616080R1133      | 106    | KTC6-1042 | 1SFA616906R1042      | 100    | M2SS3-20R | 1SFA611202R2001      | 24     |
| KS8-115G  | 1SFA616080R1152      | 106    | KTC6-9002 | 1SFA616906R9002      | 100    | M2SS3-20U | 1SFA611202R2007      | 24     |
| KS8-115R  | 1SFA616080R1151      | 106    | KTC8-1039 | 1SFA616908R1039      | 100    | M2SS3-21G | 1SFA611202R2102      | 29     |
| KS8-115Y  | 1SFA616080R1153      | 106    | KTC8-9002 | 1SFA616908R9002      | 100    | M2SS3-21R | 1SFA611202R2101      | 29     |
| KS8-123C  | 1SFA616080R1238      | 106    | KTC8-9003 | 1SFA616908R9003      | 100    | M2SS3-30B | 1SFA611202R3006      | 24     |
| KS8-123G  | 1SFA616080R1232      | 106    | KTC8-9004 | 1SFA616908R9004      | 100    | M2SS3-30R | 1SFA611202R3001      | 24     |
| KS8-123L  | 1SFA616080R1234      | 106    | KTC8-9005 | 1SFA616908R9005      | 100    | M2SS3-31C | 1SFA611202R3108      | 29     |
| KS8-123R  | 1SFA616080R1231      | 106    | KTC8-9011 | 1SFA616908R9011      | 100    | M2SS3-31G | 1SFA611202R3102      | 29     |
| KS8-123Y  | 1SFA616080R1233      | 106    | KTC8-9012 | 1SFA616908R9012      | 100    | M2SS3-31R | 1SFA611202R3101      | 29     |
| KS8-203C  | 1SFA616080R2038      | 106    | KTC8-9015 | 1SFA616908R9015      | 100    | M2SS3-31Y | 1SFA611202R3103      | 29     |
| KS8-203G  | 1SFA616080R2032      | 106    | KTC8-9016 | 1SFA616908R9016      | 100    | M2SS4-10B | 1SFA611203R1006      | 25     |
| KS8-203L  | 1SFA616080R2034      | 106    | KTC8-9018 | 1SFA616908R9018      | 100    | M2SS4-10R | 1SFA611203R1001      | 25     |
| KS8-203R  | 1SFA616080R2031      | 106    | KTC8-9026 | 1SFA616908R9026      | 100    | M2SS4-10U | 1SFA611203R1007      | 25     |
| KS8-203Y  | 1SFA616080R2033      | 106    | M2SS1-10B | 1SFA611200R1006      | 24     | M2SS4-11C | 1SFA611203R1108      | 30     |
| KS8-305G  | 1SFA616080R3052      | 106    | M2SS1-10R | 1SFA611200R1001      | 24     | M2SS4-11G | 1SFA611203R1102      | 30     |
| KS8-305R  | 1SFA616080R3051      | 106    | M2SS1-10U | 1SFA611200R1007      | 24     | M2SS4-11L | 1SFA611203R1104      | 30     |
| KS8-305Y  | 1SFA616080R3053      | 106    | M2SS1-11C | 1SFA611200R1108      | 29     | M2SS4-11R | 1SFA611203R1101      | 30     |
| KS8-306G  | 1SFA616080R3062      | 106    | M2SS1-11G | 1SFA611200R1102      | 29     | M2SS4-11Y | 1SFA611203R1103      | 30     |
| KS8-306R  | 1SFA616080R3061      | 106    | M2SS1-11L | 1SFA611200R1104      | 29     | M2SS4-20B | 1SFA611203R2006      | 25     |
| KS8-306Y  | 1SFA616080R3063      | 106    | M2SS1-11R | 1SFA611200R1101      | 29     | M2SS4-20R | 1SFA611203R2001      | 25     |
| KS8-307G  | 1SFA616080R3072      | 106    | M2SS1-11Y | 1SFA611200R1103      | 29     | M2SS4-20U | 1SFA611203R2007      | 25     |
| KS8-307R  | 1SFA616080R3071      | 106    | M2SS1-20B | 1SFA611200R2006      | 24     | M2SS4-21C | 1SFA611203R2108      | 30     |
| KS8-307Y  | 1SFA616080R3073      | 106    | M2SS1-20R | 1SFA611200R2001      | 24     | M2SS4-21G | 1SFA611203R2102      | 30     |
| KS8-401C  | 1SFA616080R4018      | 106    | M2SS1-20U | 1SFA611200R2007      | 24     | M2SS4-21L | 1SFA611203R2104      | 30     |
| KS8-401G  | 1SFA616080R4012      | 106    | M2SS1-21C | 1SFA611200R2108      | 29     | M2SS4-21R | 1SFA611203R2101      | 30     |
| KS8-401L  | 1SFA616080R4014      | 106    | M2SS1-21G | 1SFA611200R2102      | 29     | M2SS4-21Y | 1SFA611203R2103      | 30     |
| KS8-401R  | 1SFA616080R4011      | 106    | M2SS1-21L | 1SFA611200R2104      | 29     | M2SS4-30B | 1SFA611203R3006      | 25     |
| KS8-401Y  | 1SFA616080R4013      | 106    | M2SS1-21R | 1SFA611200R2101      | 29     | M2SS4-31C | 1SFA611203R3108      | 30     |
| KT70-1001 | 1SFA616075R1001      | 105    | M2SS1-21Y | 1SFA611200R2103      | 29     | M2SS4-31G | 1SFA611203R3102      | 30     |
| KT70-1002 | 1SFA616075R1002      | 105    | M2SS1-30B | 1SFA611200R3006      | 24     | M2SS5-10B | 1SFA611204R1006      | 25     |
| KTC1-1019 | 1SFA616901R1019      | 100    | M2SS1-30R | 1SFA611200R3001      | 24     | M2SS5-10R | 1SFA611204R1001      | 25     |
| KTC1-1020 | 1SFA616901R1020      | 100    | M2SS1-31C | 1SFA611200R3108      | 29     | M2SS5-10U | 1SFA611204R1007      | 25     |
| KTC1-1025 | 1SFA616901R1025      | 100    | M2SS1-31G | 1SFA611200R3102      | 29     | M2SS5-11C | 1SFA611204R1108      | 30     |
| KTC1-1031 | 1SFA616901R1031      | 100    | M2SS1-31R | 1SFA611200R3101      | 29     | M2SS5-11G | 1SFA611204R1102      | 30     |
| KTC1-1039 | 1SFA616901R1039      | 100    | M2SS1-31Y | 1SFA611200R3103      | 29     | M2SS5-11L | 1SFA611204R1104      | 30     |
| KTC1-9000 | 1SFA616901R9000      | 100    | M2SS2-10B | 1SFA611201R1006      | 24     | M2SS5-11R | 1SFA611204R1101      | 30     |
| KTC1-9002 | 1SFA616901R9002      | 100    | M2SS2-10R | 1SFA611201R1001      | 24     | M2SS5-11Y | 1SFA611204R1103      | 30     |
| KTC1-9003 | 1SFA616901R9003      | 100    | M2SS2-10U | 1SFA611201R1007      | 24     | M2SS5-20B | 1SFA611204R2006      | 25     |
| KTC1-9004 | 1SFA616901R9004      | 100    | M2SS2-11C | 1SFA611201R1108      | 29     | M2SS5-20R | 1SFA611204R2001      | 25     |
| KTC1-9005 | 1SFA616901R9005      | 100    | M2SS2-11G | 1SFA611201R1102      | 29     | M2SS5-20U | 1SFA611204R2007      | 25     |
| KTC1-9006 | 1SFA616901R9006      | 100    | M2SS2-11L | 1SFA611201R1104      | 29     | M2SS5-21C | 1SFA611204R2108      | 30     |
| KTC1-9009 | 1SFA616901R9009      | 100    | M2SS2-11R | 1SFA611201R1101      | 29     | M2SS5-21G | 1SFA611204R2102      | 30     |
| KTC1-9016 | 1SFA616901R9016      | 100    | M2SS2-11Y | 1SFA611201R1103      | 29     | M2SS5-21L | 1SFA611204R2104      | 30     |
| KTC1-9020 | 1SFA616901R9020      | 100    | M2SS2-20B | 1SFA611201R2006      | 24     | M2SS5-21R | 1SFA611204R2101      | 30     |
| KTC1-9026 | 1SFA616901R9026      | 100    | M2SS2-20R | 1SFA611201R2001      | 24     | M2SS5-21Y | 1SFA611204R2103      | 30     |
| KTC1-9028 | 1SFA616901R9028      | 100    | M2SS2-20U | 1SFA611201R2007      | 24     | M2SS5-30B | 1SFA611204R3006      | 25     |
| KTC2-1020 | 1SFA616902R1020      | 100    | M2SS2-21C | 1SFA611201R2108      | 29     | M2SS5-30R | 1SFA611204R3001      | 25     |
| KTC2-1025 | 1SFA616902R1025      | 100    | M2SS2-21G | 1SFA611201R2102      | 29     | M2SS5-31C | 1SFA611204R3108      | 30     |
| KTC2-1031 | 1SFA616902R1031      | 100    | M2SS2-21L | 1SFA611201R2104      | 29     | M2SS5-31G | 1SFA611204R3102      | 30     |
| KTC2-9000 | 1SFA616902R9000      | 100    | M2SS2-21R | 1SFA611201R2101      | 29     | M2SS5-31L | 1SFA611204R3104      | 30     |
| KTC2-9002 | 1SFA616902R9002      | 100    | M2SS2-21Y | 1SFA611201R2103      | 29     | M2SS5-31R | 1SFA611204R3101      | 30     |
| KTC2-9003 | 1SFA616902R9003      | 100    | M2SS2-30B | 1SFA611201R3006      | 24     | M2SS5-31Y | 1SFA611204R3103      | 30     |
| KTC2-9005 | 1SFA616902R9005      | 100    | M2SS2-30R | 1SFA611201R3001      | 24     | M2SS6-10B | 1SFA611205R1006      | 25     |
| KTC2-9006 | 1SFA616902R9006      | 100    | M2SS2-30U | 1SFA611201R3007      | 24     | M2SS6-10R | 1SFA611205R1001      | 25     |
| KTC2-9015 | 1SFA616902R9015      | 100    | M2SS2-31C | 1SFA611201R3108      | 29     | M2SS6-10U | 1SFA611205R1007      | 25     |

## Índice

### Clasificación de tipo

| Tipo       | Referencia de pedido | Página | Tipo      | Referencia de pedido | Página | Tipo       | Referencia de pedido | Página |
|------------|----------------------|--------|-----------|----------------------|--------|------------|----------------------|--------|
| M2SS6-11C  | 1SFA611205R1108      | 30     | M3SS2-11G | 1SFA611211R1102      | 31     | M3SS5-30R  | 1SFA611214R3001      | 27     |
| M2SS6-11G  | 1SFA611205R1102      | 30     | M3SS2-11L | 1SFA611211R1104      | 31     | M3SS5-31C  | 1SFA611214R3108      | 32     |
| M2SS6-11L  | 1SFA611205R1104      | 30     | M3SS2-11R | 1SFA611211R1101      | 31     | M3SS5-31G  | 1SFA611214R3102      | 32     |
| M2SS6-11R  | 1SFA611205R1101      | 30     | M3SS2-11Y | 1SFA611211R1103      | 31     | M3SS6-10B  | 1SFA611215R1006      | 27     |
| M2SS6-11Y  | 1SFA611205R1103      | 30     | M3SS2-20B | 1SFA611211R2006      | 26     | M3SS6-10R  | 1SFA611215R1001      | 27     |
| M2SS6-20B  | 1SFA611205R2006      | 25     | M3SS2-20R | 1SFA611211R2001      | 26     | M3SS6-10U  | 1SFA611215R1007      | 27     |
| M2SS6-20U  | 1SFA611205R2007      | 25     | M3SS2-20U | 1SFA611211R2007      | 26     | M3SS6-11C  | 1SFA611215R1108      | 32     |
| M2SS6-30B  | 1SFA611205R3006      | 25     | M3SS2-21C | 1SFA611211R2108      | 31     | M3SS6-11G  | 1SFA611215R1102      | 32     |
| M2SS6-31C  | 1SFA611205R3108      | 30     | M3SS2-21G | 1SFA611211R2102      | 31     | M3SS6-11L  | 1SFA611215R1104      | 32     |
| M2SSK1-101 | 1SFA611280R1001      | 33     | M3SS2-21L | 1SFA611211R2104      | 31     | M3SS6-11R  | 1SFA611215R1101      | 32     |
| M2SSK1-102 | 1SFA611280R1002      | 33     | M3SS2-21R | 1SFA611211R2101      | 31     | M3SS6-11Y  | 1SFA611215R1103      | 32     |
| M2SSK1-103 | 1SFA611280R1003      | 33     | M3SS2-21Y | 1SFA611211R2103      | 31     | M3SS6-20B  | 1SFA611215R2006      | 27     |
| M2SSK1-104 | 1SFA611280R1004      | 33     | M3SS2-30B | 1SFA611211R3006      | 26     | M3SS6-21G  | 1SFA611215R2102      | 32     |
| M2SSK1-201 | 1SFA611280R2001      | 33     | M3SS2-30R | 1SFA611211R3001      | 26     | M3SS6-21Y  | 1SFA611215R2103      | 32     |
| M2SSK1-301 | 1SFA611280R3001      | 33     | M3SS2-31C | 1SFA611211R3108      | 31     | M3SS6-30B  | 1SFA611215R3006      | 27     |
| M2SSK1-302 | 1SFA611280R3002      | 33     | M3SS2-31G | 1SFA611211R3102      | 31     | M3SS6-31L  | 1SFA611215R3104      | 32     |
| M2SSK1-303 | 1SFA611280R3003      | 33     | M3SS2-31L | 1SFA611211R3104      | 31     | M3SS7-10B  | 1SFA611216R1006      | 26     |
| M2SSK1-304 | 1SFA611280R3004      | 33     | M3SS2-31R | 1SFA611211R3101      | 31     | M3SS7-10R  | 1SFA611216R1001      | 26     |
| M2SSK2-101 | 1SFA611281R1001      | 33     | M3SS3-10B | 1SFA611212R1006      | 26     | M3SS7-10U  | 1SFA611216R1007      | 26     |
| M2SSK2-102 | 1SFA611281R1002      | 33     | M3SS3-10R | 1SFA611212R1001      | 26     | M3SS7-11C  | 1SFA611216R1108      | 31     |
| M2SSK2-103 | 1SFA611281R1003      | 33     | M3SS3-10U | 1SFA611212R1007      | 26     | M3SS7-11G  | 1SFA611216R1102      | 31     |
| M2SSK2-104 | 1SFA611281R1004      | 33     | M3SS3-11C | 1SFA611212R1108      | 31     | M3SS7-11L  | 1SFA611216R1104      | 31     |
| M2SSK2-201 | 1SFA611281R2001      | 33     | M3SS3-11G | 1SFA611212R1102      | 31     | M3SS7-11R  | 1SFA611216R1101      | 31     |
| M2SSK2-203 | 1SFA611281R2003      | 33     | M3SS3-11L | 1SFA611212R1104      | 31     | M3SS7-11Y  | 1SFA611216R1103      | 31     |
| M2SSK2-301 | 1SFA611281R3001      | 33     | M3SS3-11R | 1SFA611212R1101      | 31     | M3SS7-20B  | 1SFA611216R2006      | 26     |
| M2SSK2-302 | 1SFA611281R3002      | 33     | M3SS3-11Y | 1SFA611212R1103      | 31     | M3SS7-20R  | 1SFA611216R2001      | 26     |
| M2SSK2-303 | 1SFA611281R3003      | 33     | M3SS3-20B | 1SFA611212R2006      | 26     | M3SS7-21C  | 1SFA611216R2108      | 31     |
| M2SSK2-304 | 1SFA611281R3004      | 33     | M3SS3-20U | 1SFA611212R2007      | 26     | M3SS7-21G  | 1SFA611216R2102      | 31     |
| M2SSK3-101 | 1SFA611282R1001      | 33     | M3SS3-21C | 1SFA611212R2108      | 31     | M3SS7-21L  | 1SFA611216R2104      | 31     |
| M2SSK3-102 | 1SFA611282R1002      | 33     | M3SS3-21G | 1SFA611212R2102      | 31     | M3SS7-30B  | 1SFA611216R3006      | 26     |
| M2SSK3-103 | 1SFA611282R1003      | 33     | M3SS3-21R | 1SFA611212R2101      | 31     | M3SS7-31C  | 1SFA611216R3108      | 31     |
| M2SSK3-104 | 1SFA611282R1004      | 33     | M3SS3-30B | 1SFA611212R3006      | 26     | M3SS7-31G  | 1SFA611216R3102      | 31     |
| M2SSK3-301 | 1SFA611282R3001      | 33     | M3SS3-31C | 1SFA611212R3108      | 31     | M3SS8-10B  | 1SFA611217R1006      | 27     |
| M2SSK3-302 | 1SFA611282R3002      | 33     | M3SS4-10B | 1SFA611213R1006      | 27     | M3SS8-10R  | 1SFA611217R1001      | 27     |
| M2SSK3-303 | 1SFA611282R3003      | 33     | M3SS4-10R | 1SFA611213R1001      | 27     | M3SS8-10U  | 1SFA611217R1007      | 27     |
| M2SSK3-304 | 1SFA611282R3004      | 33     | M3SS4-10U | 1SFA611213R1007      | 27     | M3SS8-11C  | 1SFA611217R1108      | 32     |
| M2SSK4-101 | 1SFA611289R1001      | 33     | M3SS4-11C | 1SFA611213R1108      | 32     | M3SS8-11G  | 1SFA611217R1102      | 32     |
| M2SSV1-10B | 1SFA611220R1006      | 89     | M3SS4-11G | 1SFA611213R1102      | 32     | M3SS8-11L  | 1SFA611217R1104      | 32     |
| M2SSV2-10B | 1SFA611221R1006      | 89     | M3SS4-11L | 1SFA611213R1104      | 32     | M3SS8-11R  | 1SFA611217R1101      | 32     |
| M2SSV3-10B | 1SFA611222R1006      | 89     | M3SS4-11R | 1SFA611213R1101      | 32     | M3SS8-11Y  | 1SFA611217R1103      | 32     |
| M3SS1-10B  | 1SFA611210R1006      | 26     | M3SS4-11Y | 1SFA611213R1103      | 32     | M3SS8-20B  | 1SFA611217R2006      | 27     |
| M3SS1-10R  | 1SFA611210R1001      | 26     | M3SS4-20B | 1SFA611213R2006      | 27     | M3SS8-21G  | 1SFA611217R2102      | 32     |
| M3SS1-10U  | 1SFA611210R1007      | 26     | M3SS4-20R | 1SFA611213R2001      | 27     | M3SS8-21R  | 1SFA611217R2101      | 32     |
| M3SS1-11C  | 1SFA611210R1008      | 31     | M3SS4-20U | 1SFA611213R2007      | 27     | M3SS8-30B  | 1SFA611217R3006      | 27     |
| M3SS1-11G  | 1SFA611210R1002      | 31     | M3SS4-21C | 1SFA611213R2108      | 32     | M3SS8-31G  | 1SFA611217R3102      | 32     |
| M3SS1-11L  | 1SFA611210R1004      | 31     | M3SS4-21G | 1SFA611213R2102      | 32     | M3SS8-31R  | 1SFA611217R3101      | 32     |
| M3SS1-11R  | 1SFA611210R1001      | 31     | M3SS4-21L | 1SFA611213R2104      | 32     | M3SSC1-10B | 1SFA611250R1006      | 28     |
| M3SS1-11Y  | 1SFA611210R1003      | 31     | M3SS4-21R | 1SFA611213R2101      | 32     | M3SSC1-30B | 1SFA611250R3006      | 28     |
| M3SS1-20B  | 1SFA611210R2006      | 26     | M3SS4-21Y | 1SFA611213R2103      | 32     | M3SSC2-10B | 1SFA611251R1006      | 28     |
| M3SS1-20R  | 1SFA611210R2001      | 26     | M3SS4-30B | 1SFA611213R3006      | 27     | M3SSC2-30B | 1SFA611251R3006      | 28     |
| M3SS1-20U  | 1SFA611210R2007      | 26     | M3SS4-31C | 1SFA611213R3108      | 32     | M3SSC3-10B | 1SFA611252R1006      | 28     |
| M3SS1-21C  | 1SFA611210R2108      | 31     | M3SS4-31R | 1SFA611213R3101      | 32     | M3SSC3-30B | 1SFA611252R3006      | 28     |
| M3SS1-21G  | 1SFA611210R2102      | 31     | M3SS5-10B | 1SFA611214R1006      | 27     | M3SSC7-10B | 1SFA611256R1006      | 28     |
| M3SS1-21L  | 1SFA611210R2104      | 31     | M3SS5-10R | 1SFA611214R1001      | 27     | M3SSC7-30B | 1SFA611256R3006      | 28     |
| M3SS1-21R  | 1SFA611210R2101      | 31     | M3SS5-10U | 1SFA611214R1007      | 27     | M3SSK1-101 | 1SFA611283R1001      | 34     |
| M3SS1-21Y  | 1SFA611210R2103      | 31     | M3SS5-11C | 1SFA611214R1108      | 32     | M3SSK1-102 | 1SFA611283R1002      | 34     |
| M3SS1-30B  | 1SFA611210R3006      | 26     | M3SS5-11G | 1SFA611214R1102      | 32     | M3SSK1-103 | 1SFA611283R1003      | 34     |
| M3SS1-30R  | 1SFA611210R3001      | 26     | M3SS5-11L | 1SFA611214R1104      | 32     | M3SSK1-104 | 1SFA611283R1004      | 34     |
| M3SS1-30U  | 1SFA611210R3007      | 26     | M3SS5-11R | 1SFA611214R1101      | 32     | M3SSK1-201 | 1SFA611283R2001      | 34     |
| M3SS1-31C  | 1SFA611210R3108      | 31     | M3SS5-11Y | 1SFA611214R1103      | 32     | M3SSK1-301 | 1SFA611283R3001      | 34     |
| M3SS1-31G  | 1SFA611210R3102      | 31     | M3SS5-20B | 1SFA611214R2006      | 27     | M3SSK1-302 | 1SFA611283R3002      | 34     |
| M3SS1-31L  | 1SFA611210R3104      | 31     | M3SS5-20U | 1SFA611214R2007      | 27     | M3SSK1-303 | 1SFA611283R3003      | 34     |
| M3SS1-31R  | 1SFA611210R3101      | 31     | M3SS5-21C | 1SFA611214R2108      | 32     | M3SSK1-304 | 1SFA611284R3004      | 34     |
| M3SS1-31Y  | 1SFA611210R3103      | 31     | M3SS5-21G | 1SFA611214R2102      | 32     | M3SSK2-101 | 1SFA611284R1001      | 34     |
| M3SS2-10B  | 1SFA611211R1006      | 26     | M3SS5-21L | 1SFA611214R2104      | 32     | M3SSK2-102 | 1SFA611284R1002      | 34     |
| M3SS2-10R  | 1SFA611211R1001      | 26     | M3SS5-21R | 1SFA611214R2101      | 32     | M3SSK2-103 | 1SFA611284R1003      | 34     |
| M3SS2-10U  | 1SFA611211R1007      | 26     | M3SS5-21Y | 1SFA611214R2103      | 32     | M3SSK2-104 | 1SFA611284R1004      | 34     |
| M3SS2-11C  | 1SFA611211R1108      | 31     | M3SS5-30B | 1SFA611214R3006      | 27     | M3SSK2-301 | 1SFA611284R3001      | 34     |

## Índice

### Clasificación de tipo

| Tipo       | Referencia de pedido | Página | Tipo     | Referencia de pedido | Página | Tipo       | Referencia de pedido | Página |
|------------|----------------------|--------|----------|----------------------|--------|------------|----------------------|--------|
| M3SSK3-101 | 1SFA611285R1001      | 34     | MA6-1019 | 1SFA611930R1019      | 98     | MA6-1152   | 1SFA611930R1152      | 87     |
| M3SSK3-102 | 1SFA611285R1002      | 34     | MA6-1020 | 1SFA611930R1020      | 98     | MA6-1153   | 1SFA611930R1153      | 87     |
| M3SSK3-103 | 1SFA611285R1003      | 34     | MA6-1021 | 1SFA611930R1021      | 98     | MA6-1170   | 1SFA611930R1170      | 87     |
| M3SSK3-104 | 1SFA611285R1004      | 34     | MA6-1022 | 1SFA611930R1022      | 98     | MA6-1171   | 1SFA611930R1171      | 87     |
| M3SSK3-301 | 1SFA611285R3001      | 34     | MA6-1023 | 1SFA611930R1023      | 98     | MA6-1172   | 1SFA611930R1172      | 87     |
| M3SSK3-302 | 1SFA611285R3002      | 34     | MA6-1024 | 1SFA611930R1024      | 88     | MA6-1173   | 1SFA611930R1173      | 87     |
| M3SSK3-303 | 1SFA611285R3003      | 34     | MA6-1025 | 1SFA611930R1025      | 88     | MA6-1174   | 1SFA611930R1174      | 87     |
| M3SSK4-101 | 1SFA611286R1001      | 34     | MA6-1026 | 1SFA611930R1026      | 88     | MA6-1175   | 1SFA611930R1175      | 87     |
| M3SSK4-102 | 1SFA611286R1002      | 34     | MA6-1027 | 1SFA611930R1027      | 88     | MA6-1176   | 1SFA611930R1176      | 87     |
| M3SSK4-301 | 1SFA611286R3001      | 34     | MA6-1028 | 1SFA611930R1028      | 88     | MA6-1177   | 1SFA611930R1177      | 87     |
| M3SSK4-302 | 1SFA611286R3002      | 34     | MA6-1029 | 1SFA611930R1029      | 88     | MA6-1178   | 1SFA611930R1178      | 87     |
| M3SSK5-101 | 1SFA611287R1001      | 34     | MA6-1032 | 1SFA611930R1032      | 97     | MA6-1179   | 1SFA611930R1179      | 87     |
| M3SSK5-103 | 1SFA611287R1003      | 34     | MA6-1033 | 1SFA611930R1033      | 97     | MA6-1190   | 1SFA611930R1190      | 87     |
| M3SSK5-301 | 1SFA611287R3001      | 34     | MA6-1034 | 1SFA611930R1034      | 97     | MA6-1191   | 1SFA611930R1191      | 87     |
| M3SSK6-101 | 1SFA611288R1001      | 34     | MA6-1035 | 1SFA611930R1035      | 97     | MA6-1192   | 1SFA611930R1192      | 87     |
| M3SSV1-10B | 1SFA611230R1006      | 89     | MA6-1036 | 1SFA611930R1036      | 97     | MA6-1193   | 1SFA611930R1193      | 87     |
| M3SSV2-10B | 1SFA611231R1006      | 89     | MA6-1037 | 1SFA611930R1037      | 97     | MA6-1194   | 1SFA611930R1194      | 87     |
| M3SSV3-10B | 1SFA611232R1006      | 89     | MA6-1038 | 1SFA611930R1038      | 97     | MA6-1210   | 1SFA611930R1210      | 97     |
| MA16-1000  | 1SFA611940R1000      | 99     | MA6-1039 | 1SFA611930R1039      | 97     | MA6-1240   | 1SFA611930R1240      | 38     |
| MA16-1001  | 1SFA611940R1001      | 99     | MA6-1040 | 1SFA611930R1040      | 97     | MA6-1241   | 1SFA611930R1241      | 38     |
| MA1-8001   | 1SFA611920R8001      | 45     | MA6-1041 | 1SFA611930R1041      | 97     | MA6-1242   | 1SFA611930R1242      | 38     |
| MA1-8002   | 1SFA611920R8002      | 44     | MA6-1042 | 1SFA611930R1042      | 97     | MA6-1252   | 1SFA611930R1252      | 35     |
| MA1-8015   | 1SFA611920R8015      | 45     | MA6-1043 | 1SFA611930R1043      | 97     | MCB-01     | 1SFA611610R1010      | 41     |
| MA1-8019   | 1SFA611920R8019      | 45     | MA6-1044 | 1SFA611930R1044      | 97     | MCB-01B    | 1SFA611610R2010      | 84     |
| MA1-8052   | 1SFA611920R8052      | 44     | MA6-1045 | 1SFA611930R1045      | 97     | MCB-01BG   | 1SFA611610R2110      | 84     |
| MA1-8053   | 1SFA611920R8053      | 44     | MA6-1047 | 1SFA611930R1047      | 97     | MCB-01G    | 1SFA611610R1110      | 41     |
| MA1-8074   | 1SFA611920R8074      | 44     | MA6-1054 | 1SFA611930R1054      | 97     | MCB-02     | 1SFA611610R1020      | 41     |
| MA1-8126   | 1SFA611920R8126      | 44     | MA6-1058 | 1SFA611930R1058      | 97     | MCB-02B    | 1SFA611610R2020      | 84     |
| MA1-8128   | 1SFA611920R8128      | 44     | MA6-1060 | 1SFA611930R1060      | 87     | MCB-10     | 1SFA611610R1001      | 41     |
| MA1-8129   | 1SFA611920R8129      | 84     | MA6-1061 | 1SFA611930R1061      | 87     | MCB-10B    | 1SFA611610R2001      | 84     |
| MA1-8130   | 1SFA611920R8130      | 84     | MA6-1062 | 1SFA611930R1062      | 87     | MCB-10BG   | 1SFA611610R2101      | 84     |
| MA1-8131   | 1SFA611920R8131      | 45     | MA6-1063 | 1SFA611930R1063      | 87     | MCB-10G    | 1SFA611610R1101      | 41     |
| MA1-8136   | 1SFA611920R8136      | 84     | MA6-1064 | 1SFA611930R1064      | 87     | MCB-11     | 1SFA611610R1011      | 41     |
| MA1-8137   | 1SFA611920R8137      | 38     | MA6-1065 | 1SFA611930R1065      | 87     | MCB-11B    | 1SFA611610R2011      | 84     |
| MA1-8138   | 1SFA611920R8138      | 38     | MA6-1070 | 1SFA611930R1070      | 97     | MCB-20     | 1SFA611610R1002      | 41     |
| MA1-8139   | 1SFA611920R8139      | 17     | MA6-1071 | 1SFA611930R1071      | 97     | MCB-20B    | 1SFA611610R2002      | 84     |
| MA1-8149   | 1SFA611920R8149      | 45     | MA6-1073 | 1SFA611930R1073      | 97     | MCBH-00    | 1SFA611605R1100      | 41     |
| MA1-8150   | 1SFA611920H8150      | 84     | MA6-1074 | 1SFA611930R1074      | 97     | MCBH5-00   | 1SFA611601R1100      | 41     |
| MA1-8152   | 1SFA611920R8152      | 44     | MA6-1075 | 1SFA611930R1075      | 97     | MCBL-01    | 1SFA611612R1001      | 41     |
| MA1-8153   | 1SFA611920R8153      | 44     | MA6-1076 | 1SFA611930R1076      | 97     | MCBL-10    | 1SFA611612R1010      | 41     |
| MA5-3001   | 1SFA611925R3001      | 84     | MA6-1077 | 1SFA611930R1077      | 97     | MDB-2      | 1SFA611630R1002      | 45     |
| MA5-3002   | 1SFA611925R3002      | 84     | MA6-1078 | 1SFA611930R1078      | 97     | MEP1-0     | 1SFA611811R1000      | 83     |
| MA5-3003   | 1SFA611925R3003      | 84     | MA6-1079 | 1SFA611930R1079      | 97     | MEP2-0     | 1SFA611812R1000      | 83     |
| MA5-3004   | 1SFA611925R3004      | 84     | MA6-1080 | 1SFA611930R1080      | 97     | MEP2-1001  | 1SFA611812R1001      | 90     |
| MA5-3005   | 1SFA611925R3005      | 84     | MA6-1082 | 1SFA611930R1082      | 97     | MEP3-0     | 1SFA611813R1000      | 83     |
| MA5-3006   | 1SFA611925R3006      | 84     | MA6-1083 | 1SFA611930R1083      | 97     | MEP4-0     | 1SFA611814R1000      | 83     |
| MA5-3007   | 1SFA611925R3007      | 84     | MA6-1084 | 1SFA611930R1084      | 97     | MEP6-0     | 1SFA611816R1000      | 83     |
| MA5-3008   | 1SFA611925R3008      | 84     | MA6-1085 | 1SFA611930R1085      | 97     | MEPY1-0    | 1SFA611821R1000      | 83     |
| MA5-3009   | 1SFA611925R3009      | 84     | MA6-1086 | 1SFA611930R1086      | 97     | MEPY1-1035 | 1SFA611821R1035      | 90     |
| MA5-3010   | 1SFA611925R3010      | 84     | MA6-1087 | 1SFA611930R1087      | 97     | MEPY1-1040 | 1SFA611821R1040      | 90     |
| MA6-1000   | 1SFA611930R1000      | 88     | MA6-1100 | 1SFA611930R1100      | 88     | MEPY1-1041 | 1SFA611821R1041      | 90     |
| MA6-1002   | 1SFA611930R1002      | 88     | MA6-1101 | 1SFA611930R1101      | 88     | MEPY1-1042 | 1SFA611821R1042      | 90     |
| MA6-1003   | 1SFA611930R1003      | 88     | MA6-1102 | 1SFA611930R1102      | 88     | MJS10-60B  | 1SFA611710R6006      | 38     |
| MA6-1004   | 1SFA611930R1004      | 88     | MA6-1103 | 1SFA611930R1103      | 88     | MJS11-40B  | 1SFA611711R4006      | 38     |
| MA6-1005   | 1SFA611930R1005      | 88     | MA6-1104 | 1SFA611930R1104      | 88     | MJS11-60B  | 1SFA611711R6006      | 38     |
| MA6-1006   | 1SFA611930R1006      | 88     | MA6-1118 | 1SFA611930R1118      | 97     | MJS12-40B  | 1SFA611712R4006      | 38     |
| MA6-1007   | 1SFA611930R1007      | 88     | MA6-1130 | 1SFA611930R1130      | 87     | MJS12-60B  | 1SFA611712R6006      | 38     |
| MA6-1008   | 1SFA611930R1008      | 88     | MA6-1131 | 1SFA611930R1131      | 87     | MJS1-40B   | 1SFA611701R4006      | 38     |
| MA6-1009   | 1SFA611930R1009      | 88     | MA6-1132 | 1SFA611930R1132      | 87     | MJS1-60B   | 1SFA611701R6006      | 38     |
| MA6-1010   | 1SFA611930R1010      | 98     | MA6-1133 | 1SFA611930R1133      | 87     | MJS2-40B   | 1SFA611702R4006      | 38     |
| MA6-1011   | 1SFA611930R1011      | 98     | MA6-1134 | 1SFA611930R1134      | 87     | MJS2-60B   | 1SFA611702R6006      | 38     |
| MA6-1012   | 1SFA611930R1012      | 88     | MA6-1135 | 1SFA611930R1135      | 87     | MJS3-40B   | 1SFA611703R4006      | 38     |
| MA6-1013   | 1SFA611930R1013      | 88     | MA6-1136 | 1SFA611930R1136      | 87     | MJS3-60B   | 1SFA611703R6006      | 38     |
| MA6-1014   | 1SFA611930R1014      | 88     | MA6-1137 | 1SFA611930R1137      | 87     | MJS4-40B   | 1SFA611704R4006      | 38     |
| MA6-1015   | 1SFA611930R1015      | 88     | MA6-1138 | 1SFA611930R1138      | 87     | MJS4-60B   | 1SFA611704R6006      | 38     |
| MA6-1016   | 1SFA611930R1016      | 88     | MA6-1139 | 1SFA611930R1139      | 87     | MJS5-40B   | 1SFA611705R4006      | 38     |
| MA6-1017   | 1SFA611930R1017      | 98     | MA6-1140 | 1SFA611930R1140      | 87     | MJS5-60B   | 1SFA611705R6006      | 38     |
| MA6-1018   | 1SFA611930R1018      | 98     | MA6-1141 | 1SFA611930R1141      | 87     | MJS6-40B   | 1SFA611706R4006      | 38     |

## Índice

### Clasificación de referencia de pedido

| Referencia de pedido | Tipo            | Página |
|----------------------|-----------------|--------|
| MJS6-60B             | 1SFA611706R6006 | 38     |
| MJS7-40B             | 1SFA611707R4006 | 38     |
| MJS7-60B             | 1SFA611707R6006 | 38     |
| MJS8-40B             | 1SFA611708R4006 | 38     |
| MJS8-60B             | 1SFA611708R6006 | 38     |
| MJS9-40B             | 1SFA611709R4006 | 38     |
| MJS9-60B             | 1SFA611709R6006 | 38     |
| ML1-100C             | 1SFA611400R1008 | 23     |
| ML1-100G             | 1SFA611400R1002 | 23     |
| ML1-100L             | 1SFA611400R1004 | 23     |
| ML1-100R             | 1SFA611400R1001 | 23     |
| ML1-100W             | 1SFA611400R1005 | 23     |
| ML1-100Y             | 1SFA611400R1003 | 23     |
| MLBL-00BG            | 1SFA611621R2002 | 85     |
| MLBL-00BL            | 1SFA611621R2004 | 85     |
| MLBL-00BR            | 1SFA611621R2001 | 85     |
| MLBL-00BW            | 1SFA611621R2005 | 85     |
| MLBL-00BY            | 1SFA611621R2003 | 85     |
| MLBL-00G             | 1SFA611621R1002 | 42     |
| MLBL-00L             | 1SFA611621R1004 | 42     |
| MLBL-00R             | 1SFA611621R1001 | 42     |
| MLBL-00W             | 1SFA611621R1005 | 42     |
| MLBL-00Y             | 1SFA611621R1003 | 42     |
| MLBL-01BG            | 1SFA611621R2012 | 85     |
| MLBL-01BL            | 1SFA611621R2014 | 85     |
| MLBL-01BR            | 1SFA611621R2011 | 85     |
| MLBL-01BW            | 1SFA611621R2015 | 85     |
| MLBL-01BY            | 1SFA611621R2013 | 85     |
| MLBL-01G             | 1SFA611621R1012 | 42     |
| MLBL-01L             | 1SFA611621R1014 | 42     |
| MLBL-01R             | 1SFA611621R1011 | 42     |
| MLBL-01W             | 1SFA611621R1015 | 42     |
| MLBL-01Y             | 1SFA611621R1013 | 42     |
| MLBL-02BG            | 1SFA611621R2022 | 85     |
| MLBL-02BL            | 1SFA611621R2024 | 85     |
| MLBL-02BR            | 1SFA611621R2021 | 85     |
| MLBL-02BW            | 1SFA611621R2025 | 85     |
| MLBL-02BY            | 1SFA611621R2023 | 85     |
| MLBL-02G             | 1SFA611621R1022 | 42     |
| MLBL-02L             | 1SFA611621R1024 | 42     |
| MLBL-02R             | 1SFA611621R1021 | 42     |
| MLBL-02W             | 1SFA611621R1025 | 42     |
| MLBL-02Y             | 1SFA611621R1023 | 42     |
| MLBL-03BG            | 1SFA611621R2032 | 85     |
| MLBL-03BL            | 1SFA611621R2034 | 85     |
| MLBL-03BR            | 1SFA611621R2031 | 85     |
| MLBL-03BW            | 1SFA611621R2035 | 85     |
| MLBL-03BY            | 1SFA611621R2033 | 85     |
| MLBL-03G             | 1SFA611621R1032 | 42     |
| MLBL-03L             | 1SFA611621R1034 | 42     |
| MLBL-03R             | 1SFA611621R1031 | 42     |
| MLBL-03W             | 1SFA611621R1035 | 42     |
| MLBL-03Y             | 1SFA611621R1033 | 42     |
| MLBL-04AG            | 1SFA611621R3042 | 42     |
| MLBL-04AL            | 1SFA611621R3044 | 42     |
| MLBL-04AR            | 1SFA611621R3041 | 42     |
| MLBL-04AW            | 1SFA611621R3045 | 42     |
| MLBL-04AY            | 1SFA611621R3043 | 42     |
| MLBL-04BG            | 1SFA611621R2042 | 85     |
| MLBL-04BL            | 1SFA611621R2044 | 85     |
| MLBL-04BR            | 1SFA611621R2041 | 85     |
| MLBL-04BW            | 1SFA611621R2045 | 85     |
| MLBL-04BY            | 1SFA611621R2043 | 85     |
| MLBL-04G             | 1SFA611621R1042 | 42     |
| MLBL-04L             | 1SFA611621R1044 | 42     |
| MLBL-04R             | 1SFA611621R1041 | 42     |
| MLBL-04W             | 1SFA611621R1045 | 42     |
| MLBL-04Y             | 1SFA611621R1043 | 42     |

| Referencia de pedido | Tipo            | Página |
|----------------------|-----------------|--------|
| MLBL-05BG            | 1SFA611621R2052 | 85     |
| MLBL-05BL            | 1SFA611621R2054 | 85     |
| MLBL-05BR            | 1SFA611621R2051 | 85     |
| MLBL-05BW            | 1SFA611621R2055 | 85     |
| MLBL-05BY            | 1SFA611621R2053 | 85     |
| MLBL-05G             | 1SFA611621R1052 | 42     |
| MLBL-05L             | 1SFA611621R1054 | 42     |
| MLBL-05R             | 1SFA611621R1051 | 42     |
| MLBL-05W             | 1SFA611621R1055 | 42     |
| MLBL-05Y             | 1SFA611621R1053 | 42     |
| MLBL-06BG            | 1SFA611621R2062 | 85     |
| MLBL-06BL            | 1SFA611621R2064 | 85     |
| MLBL-06BR            | 1SFA611621R2061 | 85     |
| MLBL-06BW            | 1SFA611621R2065 | 85     |
| MLBL-06BY            | 1SFA611621R2063 | 85     |
| MLBL-06G             | 1SFA611621R1062 | 42     |
| MLBL-06L             | 1SFA611621R1064 | 42     |
| MLBL-06R             | 1SFA611621R1061 | 42     |
| MLBL-06W             | 1SFA611621R1065 | 42     |
| MLBL-06Y             | 1SFA611621R1063 | 42     |
| MLBL-07BG            | 1SFA611621R2072 | 86     |
| MLBL-07BL            | 1SFA611621R2074 | 86     |
| MLBL-07BR            | 1SFA611621R2071 | 86     |
| MLBL-07BW            | 1SFA611621R2075 | 86     |
| MLBL-07BY            | 1SFA611621R2073 | 86     |
| MLBL-07G             | 1SFA611621R1072 | 43     |
| MLBL-07L             | 1SFA611621R1074 | 43     |
| MLBL-07R             | 1SFA611621R1071 | 43     |
| MLBL-07W             | 1SFA611621R1075 | 43     |
| MLBL-07Y             | 1SFA611621R1073 | 43     |
| MLBL-08BG            | 1SFA611621R2082 | 86     |
| MLBL-08BL            | 1SFA611621R2084 | 86     |
| MLBL-08BR            | 1SFA611621R2081 | 86     |
| MLBL-08BW            | 1SFA611621R2085 | 86     |
| MLBL-08BY            | 1SFA611621R2083 | 86     |
| MLBL-08G             | 1SFA611621R1082 | 43     |
| MLBL-08L             | 1SFA611621R1084 | 43     |
| MLBL-08R             | 1SFA611621R1081 | 43     |
| MLBL-08W             | 1SFA611621R1085 | 43     |
| MLBL-08Y             | 1SFA611621R1083 | 43     |
| MLBL-09BG            | 1SFA611621R2092 | 86     |
| MLBL-09BL            | 1SFA611621R2094 | 86     |
| MLBL-09BR            | 1SFA611621R2091 | 86     |
| MLBL-09BW            | 1SFA611621R2095 | 86     |
| MLBL-09BY            | 1SFA611621R2093 | 86     |
| MLBL-09G             | 1SFA611621R1092 | 43     |
| MLBL-09L             | 1SFA611621R1094 | 43     |
| MLBL-09R             | 1SFA611621R1091 | 43     |
| MLBL-09W             | 1SFA611621R1095 | 43     |
| MLBL-09Y             | 1SFA611621R1093 | 43     |
| MLBL-99G             | 1SFA611621R1992 | 43     |
| MLBL-99L             | 1SFA611621R1994 | 43     |
| MLBL-99R             | 1SFA611621R1991 | 43     |
| MLBL-99W             | 1SFA611621R1995 | 43     |
| MLBL-99Y             | 1SFA611621R1993 | 43     |
| MP1-10B              | 1SFA611100R1006 | 13     |
| MP1-10C              | 1SFA611100R1008 | 13     |
| MP1-10G              | 1SFA611100R1002 | 13     |
| MP1-10L              | 1SFA611100R1004 | 13     |
| MP1-10R              | 1SFA611100R1001 | 13     |
| MP1-10W              | 1SFA611100R1005 | 13     |
| MP1-10Y              | 1SFA611100R1003 | 13     |
| MP1-11C              | 1SFA611100R1108 | 15     |
| MP1-11G              | 1SFA611100R1102 | 15     |
| MP1-11L              | 1SFA611100R1104 | 15     |
| MP1-11R              | 1SFA611100R1101 | 15     |
| MP1-11W              | 1SFA611100R1105 | 15     |
| MP1-11Y              | 1SFA611100R1103 | 15     |

| Referencia de pedido | Tipo            | Página |
|----------------------|-----------------|--------|
| MP1-20B              | 1SFA611100R2006 | 13     |
| MP1-20C              | 1SFA611100R2008 | 13     |
| MP1-20G              | 1SFA611100R2002 | 13     |
| MP1-20L              | 1SFA611100R2004 | 13     |
| MP1-20R              | 1SFA611100R2001 | 13     |
| MP1-20W              | 1SFA611100R2005 | 13     |
| MP1-20Y              | 1SFA611100R2003 | 13     |
| MP1-21C              | 1SFA611100R2108 | 15     |
| MP1-21G              | 1SFA611100R2102 | 15     |
| MP1-21L              | 1SFA611100R2104 | 15     |
| MP1-21R              | 1SFA611100R2101 | 15     |
| MP1-21W              | 1SFA611100R2105 | 15     |
| MP1-21Y              | 1SFA611100R2103 | 15     |
| MP1-30B              | 1SFA611100R3006 | 13     |
| MP1-30C              | 1SFA611100R3008 | 13     |
| MP1-30G              | 1SFA611100R3002 | 13     |
| MP1-30L              | 1SFA611100R3004 | 13     |
| MP1-30R              | 1SFA611100R3001 | 13     |
| MP1-30W              | 1SFA611100R3005 | 13     |
| MP1-30Y              | 1SFA611100R3003 | 13     |
| MP1-31C              | 1SFA611100R3108 | 15     |
| MP1-31G              | 1SFA611100R3102 | 15     |
| MP1-31L              | 1SFA611100R3104 | 15     |
| MP1-31R              | 1SFA611100R3101 | 15     |
| MP1-31W              | 1SFA611100R3105 | 15     |
| MP1-31Y              | 1SFA611100R3103 | 15     |
| MP2-10B              | 1SFA611101R1006 | 13     |
| MP2-10C              | 1SFA611101R1008 | 13     |
| MP2-10G              | 1SFA611101R1002 | 13     |
| MP2-10L              | 1SFA611101R1004 | 13     |
| MP2-10R              | 1SFA611101R1001 | 13     |
| MP2-10W              | 1SFA611101R1005 | 13     |
| MP2-10Y              | 1SFA611101R1003 | 13     |
| MP2-11C              | 1SFA611101R1108 | 15     |
| MP2-11G              | 1SFA611101R1102 | 15     |
| MP2-11L              | 1SFA611101R1104 | 15     |
| MP2-11R              | 1SFA611101R1101 | 15     |
| MP2-11W              | 1SFA611101R1105 | 15     |
| MP2-11Y              | 1SFA611101R1103 | 15     |
| MP2-20B              | 1SFA611101R2006 | 13     |
| MP2-20G              | 1SFA611101R2002 | 13     |
| MP2-20L              | 1SFA611101R2004 | 13     |
| MP2-20R              | 1SFA611101R2001 | 13     |
| MP2-20W              | 1SFA611101R2005 | 13     |
| MP2-21G              | 1SFA611101R2102 | 15     |
| MP2-21L              | 1SFA611101R2104 | 15     |
| MP2-21R              | 1SFA611101R2101 | 15     |
| MP2-21W              | 1SFA611101R2105 | 15     |
| MP2-21Y              | 1SFA611101R2103 | 15     |
| MP2-30B              | 1SFA611101R3006 | 13     |
| MP2-30G              | 1SFA611101R3002 | 13     |
| MP2-30L              | 1SFA611101R3004 | 13     |
| MP2-30R              | 1SFA611101R3001 | 13     |
| MP2-30Y              | 1SFA611101R3003 | 13     |
| MP2-31C              | 1SFA611101R3108 | 15     |
| MP2-31G              | 1SFA611101R3102 | 15     |
| MP2-31L              | 1SFA611101R3104 | 15     |
| MP2-31R              | 1SFA611101R3101 | 15     |
| MP2-31W              | 1SFA611101R3105 | 15     |
| MP2-31Y              | 1SFA611101R3103 | 15     |
| MP3-10B              | 1SFA611102R1006 | 14     |
| MP3-10C              | 1SFA611102R1008 | 14     |
| MP3-10G              | 1SFA611102R1002 | 14     |
| MP3-10L              | 1SFA611102R1004 | 14     |
| MP3-10R              | 1SFA611102R1001 | 14     |
| MP3-10W              | 1SFA611102R1005 | 14     |
| MP3-10Y              | 1SFA611102R1003 | 14     |
| MP3-11C              | 1SFA611102R1108 | 16     |

## Índice

### Clasificación de referencia de pedido

| Referencia de pedido | Tipo            | Página |
|----------------------|-----------------|--------|
| MP3-11G              | 1SFA611102R1102 | 16     |
| MP3-11L              | 1SFA611102R1104 | 16     |
| MP3-11R              | 1SFA611102R1101 | 16     |
| MP3-11W              | 1SFA611102R1105 | 16     |
| MP3-11Y              | 1SFA611102R1103 | 16     |
| MP3-20B              | 1SFA611102R2006 | 14     |
| MP3-20G              | 1SFA611102R2002 | 14     |
| MP3-20L              | 1SFA611102R2004 | 14     |
| MP3-20R              | 1SFA611102R2001 | 14     |
| MP3-20W              | 1SFA611102R2005 | 14     |
| MP3-20Y              | 1SFA611102R2003 | 14     |
| MP3-21C              | 1SFA611102R2108 | 16     |
| MP3-21G              | 1SFA611102R2102 | 16     |
| MP3-21L              | 1SFA611102R2104 | 16     |
| MP3-21R              | 1SFA611102R2101 | 16     |
| MP3-21W              | 1SFA611102R2105 | 16     |
| MP3-21Y              | 1SFA611102R2103 | 16     |
| MP3-30B              | 1SFA611102R3006 | 14     |
| MP3-30C              | 1SFA611102R3008 | 14     |
| MP3-30G              | 1SFA611102R3002 | 14     |
| MP3-30L              | 1SFA611102R3004 | 14     |
| MP3-30R              | 1SFA611102R3001 | 14     |
| MP3-30W              | 1SFA611102R3005 | 14     |
| MP3-30Y              | 1SFA611102R3003 | 14     |
| MP3-31C              | 1SFA611102R3108 | 16     |
| MP3-31G              | 1SFA611102R3102 | 16     |
| MP3-31L              | 1SFA611102R3104 | 16     |
| MP3-31R              | 1SFA611102R3101 | 16     |
| MP3-31W              | 1SFA611102R3105 | 16     |
| MP3-31Y              | 1SFA611102R3103 | 16     |
| MP4-10B              | 1SFA611103R1006 | 14     |
| MP4-10C              | 1SFA611103R1008 | 14     |
| MP4-10G              | 1SFA611103R1002 | 14     |
| MP4-10L              | 1SFA611103R1004 | 14     |
| MP4-10R              | 1SFA611103R1001 | 14     |
| MP4-10W              | 1SFA611103R1005 | 14     |
| MP4-10Y              | 1SFA611103R1003 | 14     |
| MP4-11C              | 1SFA611103R1108 | 16     |
| MP4-11G              | 1SFA611103R1102 | 16     |
| MP4-11L              | 1SFA611103R1104 | 16     |
| MP4-11R              | 1SFA611103R1101 | 16     |
| MP4-11W              | 1SFA611103R1105 | 16     |
| MP4-11Y              | 1SFA611103R1103 | 16     |
| MP4-20G              | 1SFA611103R2002 | 14     |
| MP4-20L              | 1SFA611103R2004 | 14     |
| MP4-20R              | 1SFA611103R2001 | 14     |
| MP4-20Y              | 1SFA611103R2003 | 14     |
| MP4-21C              | 1SFA611103R2108 | 16     |
| MP4-21G              | 1SFA611103R2102 | 16     |
| MP4-21L              | 1SFA611103R2104 | 16     |
| MP4-21R              | 1SFA611103R2101 | 16     |
| MP4-21W              | 1SFA611103R2105 | 16     |
| MP4-21Y              | 1SFA611103R2103 | 16     |
| MP4-30B              | 1SFA611103R3006 | 14     |
| MP4-30G              | 1SFA611103R3002 | 14     |
| MP4-31C              | 1SFA611103R3108 | 16     |
| MP4-31G              | 1SFA611103R3102 | 16     |
| MP4-31L              | 1SFA611103R3104 | 16     |
| MP4-31R              | 1SFA611103R3101 | 16     |
| MPD1-11B             | 1SFA611130R1106 | 17     |
| MPD1-11C             | 1SFA611130R1108 | 18     |
| MPD1-11G             | 1SFA611130R1102 | 18     |
| MPD1-11R             | 1SFA611130R1101 | 18     |
| MPD1-11Y             | 1SFA611130R1103 | 18     |
| MPD12-11B            | 1SFA611141R1106 | 17     |
| MPD12-11C            | 1SFA611141R1108 | 19     |
| MPD12-11G            | 1SFA611141R1102 | 19     |
| MPD12-11R            | 1SFA611141R1101 | 19     |

| Referencia de pedido | Tipo            | Página |
|----------------------|-----------------|--------|
| MPD12-11Y            | 1SFA611141R1103 | 19     |
| MPD13-11B            | 1SFA611142R1106 | 17     |
| MPD13-11C            | 1SFA611142R1108 | 19     |
| MPD13-11G            | 1SFA611142R1102 | 19     |
| MPD13-11R            | 1SFA611142R1101 | 19     |
| MPD13-11Y            | 1SFA611142R1103 | 19     |
| MPD14-11B            | 1SFA611143R1106 | 17     |
| MPD14-11C            | 1SFA611143R1108 | 19     |
| MPD14-11G            | 1SFA611143R1102 | 19     |
| MPD14-11R            | 1SFA611143R1101 | 19     |
| MPD14-11Y            | 1SFA611143R1103 | 19     |
| MPD15-11B            | 1SFA611144R1106 | 17     |
| MPD15-11C            | 1SFA611144R1108 | 19     |
| MPD15-11G            | 1SFA611144R1102 | 19     |
| MPD15-11R            | 1SFA611144R1101 | 19     |
| MPD15-11Y            | 1SFA611144R1103 | 19     |
| MPD16-11B            | 1SFA611145R1106 | 17     |
| MPD16-11C            | 1SFA611145R1108 | 19     |
| MPD16-11G            | 1SFA611145R1102 | 19     |
| MPD16-11R            | 1SFA611145R1101 | 19     |
| MPD16-11Y            | 1SFA611145R1103 | 19     |
| MPD17-11B            | 1SFA611146R1106 | 17     |
| MPD17-11C            | 1SFA611146R1108 | 19     |
| MPD17-11G            | 1SFA611146R1102 | 19     |
| MPD17-11Y            | 1SFA611146R1103 | 19     |
| MPD18-11B            | 1SFA611147R1106 | 17     |
| MPD19-11B            | 1SFA611148R1106 | 17     |
| MPD19-11C            | 1SFA611148R1108 | 19     |
| MPD19-11G            | 1SFA611148R1102 | 19     |
| MPD2-11B             | 1SFA611131R1106 | 17     |
| MPD2-11C             | 1SFA611131R1108 | 18     |
| MPD2-11G             | 1SFA611131R1102 | 18     |
| MPD2-11R             | 1SFA611131R1101 | 18     |
| MPD2-11Y             | 1SFA611131R1103 | 18     |
| MPD3-11B             | 1SFA611132R1106 | 17     |
| MPD3-11C             | 1SFA611132R1108 | 18     |
| MPD3-11G             | 1SFA611132R1102 | 18     |
| MPD3-11R             | 1SFA611132R1101 | 18     |
| MPD3-11Y             | 1SFA611132R1103 | 18     |
| MPD4-11B             | 1SFA611133R1106 | 17     |
| MPD4-11C             | 1SFA611133R1108 | 18     |
| MPD4-11G             | 1SFA611133R1102 | 18     |
| MPD4-11R             | 1SFA611133R1101 | 18     |
| MPD4-11Y             | 1SFA611133R1103 | 18     |
| MPD5-11B             | 1SFA611134R1106 | 17     |
| MPD5-11C             | 1SFA611134R1108 | 18     |
| MPD5-11G             | 1SFA611134R1102 | 18     |
| MPD5-11R             | 1SFA611134R1101 | 18     |
| MPD5-11Y             | 1SFA611134R1103 | 18     |
| MPD6-11B             | 1SFA611135R1106 | 17     |
| MPD6-11C             | 1SFA611135R1108 | 18     |
| MPD6-11G             | 1SFA611135R1102 | 18     |
| MPD7-11B             | 1SFA611136R1106 | 17     |
| MPD7-11G             | 1SFA611136R1102 | 18     |
| MPD8-11B             | 1SFA611137R1106 | 17     |
| MPD8-11C             | 1SFA611137R1108 | 18     |
| MPD8-11G             | 1SFA611137R1102 | 18     |
| MPD9-11B             | 1SFA611138R1106 | 17     |
| MPEK3-11B            | 1SFA611522R1106 | 22     |
| MPEK3-11R            | 1SFA611522R1101 | 21     |
| MPEK3-12R            | 1SFA611522R1201 | 21     |
| MPEK3-13R            | 1SFA611522R1301 | 21     |
| MPEK4-11B            | 1SFA611525R1106 | 22     |
| MPEK4-11R            | 1SFA611525R1101 | 21     |
| MPEK4-12R            | 1SFA611525R1201 | 21     |
| MPEK4-13R            | 1SFA611525R1301 | 21     |
| MPEP3-10B            | 1SFA611521R1006 | 22     |
| MPEP3-10R            | 1SFA611521R1001 | 21     |

| Referencia de pedido | Tipo            | Página |
|----------------------|-----------------|--------|
| MPEP4-10B            | 1SFA611524R1006 | 22     |
| MPEP4-10R            | 1SFA611524R1001 | 21     |
| MPET3-10B            | 1SFA611520R1006 | 22     |
| MPET3-10R            | 1SFA611520R1001 | 21     |
| MPET4-10B            | 1SFA611523R1006 | 22     |
| MPET4-10R            | 1SFA611523R1001 | 21     |
| MPM1-10B             | 1SFA611124R1006 | 20     |
| MPM1-10G             | 1SFA611124R1002 | 20     |
| MPM1-10R             | 1SFA611124R1001 | 20     |
| MPM1-10Y             | 1SFA611124R1003 | 20     |
| MPM1-11G             | 1SFA611124R1102 | 20     |
| MPM1-11R             | 1SFA611124R1101 | 20     |
| MPM1-11Y             | 1SFA611124R1103 | 20     |
| MPM2-10B             | 1SFA611125R1006 | 20     |
| MPM2-10R             | 1SFA611125R1001 | 20     |
| MPM2-10Y             | 1SFA611125R1003 | 20     |
| MPM2-11R             | 1SFA611125R1101 | 20     |
| MPM2-11Y             | 1SFA611125R1103 | 20     |
| MPMP3-11R            | 1SFA611511R1101 | 21     |
| MPMP4-10R            | 1SFA611514R1001 | 21     |
| MPMP4-11R            | 1SFA611514R1101 | 21     |
| MPMT3-11R            | 1SFA611510R1101 | 21     |
| MPMT4-10R            | 1SFA611513R1001 | 21     |
| MPMT4-11R            | 1SFA611513R1101 | 21     |
| MT-10B               | 1SFA611410R1056 | 35     |
| MT-11B               | 1SFA611410R1106 | 35     |
| MT-15B               | 1SFA611410R1506 | 35     |
| MT-1B                | 1SFA611410R1006 | 35     |
| MT-20B               | 1SFA611410R2056 | 35     |
| MT-21B               | 1SFA611410R2106 | 35     |
| MT-25B               | 1SFA611410R2506 | 35     |
| MT-2B                | 1SFA611410R2006 | 35     |
| MT-30B               | 1SFA611410R3056 | 35     |
| MT-31B               | 1SFA611410R3106 | 35     |
| MT-35B               | 1SFA611410R3506 | 35     |
| MT-3B                | 1SFA611410R3006 | 35     |
| MTS1-10B             | 1SFA611300R1006 | 39     |
| MTS1-20B             | 1SFA611300R2006 | 39     |
| MTS1-30B             | 1SFA611300R3006 | 39     |
| MTS2-10B             | 1SFA611301R1006 | 39     |
| MTS2-20B             | 1SFA611301R2006 | 39     |
| MTS2-30B             | 1SFA611301R3006 | 39     |
| MTS3-10B             | 1SFA611302R1006 | 39     |
| MTS3-20B             | 1SFA611302R2006 | 39     |
| MTS3-30B             | 1SFA611302R3006 | 39     |



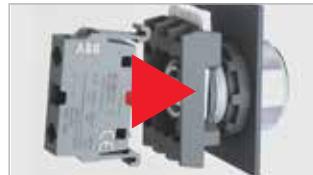
# Materiales de marketing

## Vídeos

Vea nuestros videos para obtener más información sobre nuestra gama de productos



ABB Pulsantería – La gama completa



Montaje de la gama modular



Ensayo con chorros de agua IPX6



Ensayo de inmersión IPX7



## Web

<http://new.abb.com/low-voltage/products/pilot-devices>

### Casos de clientes



EA Elautomation  
Europa



Duztech  
Suecia



LED Controls  
Gran Bretaña



## Catálogos

Encuentre nuestros catálogos en la web



Gama completa  
Número de catálogo:  
1SFC151007C0701



Oferta principal  
Número de catálogo:  
1SFC151006C0201



## Ficha de datos

Para obtener información directa sobre los detalles del producto, haga uso del tipo de producto o código de pedido

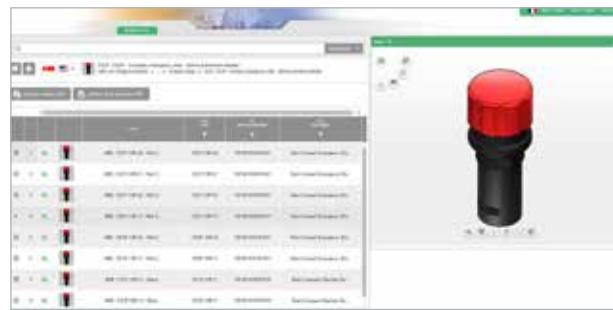


<http://new.abb.com/products/tipo de producto o código de pedido>

Ej.: <http://new.abb.com/products/ML1-100R>  
<http://new.abb.com/products/1SFA611400R1001>

## Modelos 3D

Descargue y vea nuestros productos en 2D o 3D (STEP, IGES, etc.) con modelos de Cadenas 3D



<http://abb-control-products.partcommunity.com/3d-cad-models/>



**ABB AB**  
**Electrification Products Division**  
**Low Voltage Products and Systems**  
**Protection & Connection**

Motorgränd 20  
SE-721 61 Västerås / Suecia

Puede encontrar la dirección de su  
organización de ventas local en la  
página inicial de ABB.



<http://new.abb.com/low-voltage/products/pilot-devices>



<http://www.abb.com/lowvoltage>

Nos reservamos el derecho de realizar cambios técnicos o  
modificar el contenido de este documento sin previo aviso.  
ABB no acepta ninguna responsabilidad por cualquier error  
potencial o posible falta de información de este documento.

Nos reservamos los derechos de este documento, los temas  
que incluye y las ilustraciones que contiene. Se prohíbe  
cualquier reproducción, revelación a terceros o utilización  
del contenido (ya sea total o parcial) sin previo  
consentimiento por escrito de ABB.

Copyright© 2019 ABB - Todos los derechos reservados