

# CATÁLOGO

## CATALOGUE

Distribución de componentes eléctricos para automoción  
Distribution of electrical components for the automotive industry



2023



# EMPRESA LÍDER

## LEADING COMPANY

MAI Autoparts, S.L. es una de las empresas líderes en la venta y distribución de piezas eléctricas de automoción. Una experiencia de más de 60 años en el sector nos ha permitido desarrollar una marca de referencia dentro del mercado del recambio eléctrico para vehículos.

Nuestra filosofía de empresa se basa en el servicio a nuestros clientes, la calidad de nuestros productos y una constante innovación y adaptación al mercado y a los clientes. Esto hace que nuestros horizontes se expandan en un mundo con cada vez menos fronteras. Nuestro mercado principal continúa siendo el español pero cada vez contamos con presencia en más países.

Le invitamos a visitar nuestra web [www.mai.es](http://www.mai.es) donde podrá realizar cualquier consulta sobre nuestros productos, realizar búsquedas y comparar referencias del mercado. También podrá descargar el catálogo general en formato PDF.

MAI Autoparts, S.L. specializes in sales and distribution of automotive electrical and electro-mechanical products. Our 60 years of experience have given us a well-known name in the vehicle electrical components market.

Our mission and goal is to serve our customer, with quality products and constant innovation. We focus on a specialized product program, which enables us to offer a competitive pricing and flexible solutions, adapting to an evolving market and customers.

Our horizons have spread out through a borderless world. Our main market continues to be Spain, but we are increasingly present in more countries. We invite you to visit our website [www.mai.es](http://www.mai.es) where you will be able to consult any of our products, make a search, compare any of the market benchmarks or download our catalog in PDF file.





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**PRODUCTOS RECOMENDADOS**  
RECOMMENDED PRODUCTS



**PRODUCTOS NUEVOS**  
NEW PRODUCTS



**PRODUCTOS PROFESIONALES**  
PROFESSIONAL PRODUCTS



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CABLES ELÉCTRICOS  
ELECTRICAL WIRES



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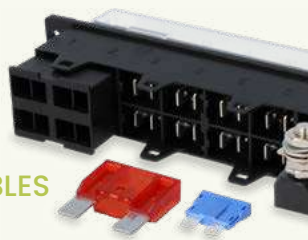
TERMINALES DE BATERÍA  
BATTERY TERMINALS



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FUSES & FUSE HOLDERS



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TERMINALES Y CONECTORES  
TERMINALS & CONNECTORS



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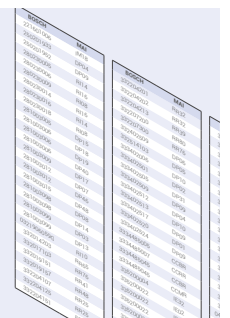
LÁMPARAS Y PILAS  
LAMPS & BATTERIES



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CROSS REFERENCE LIST



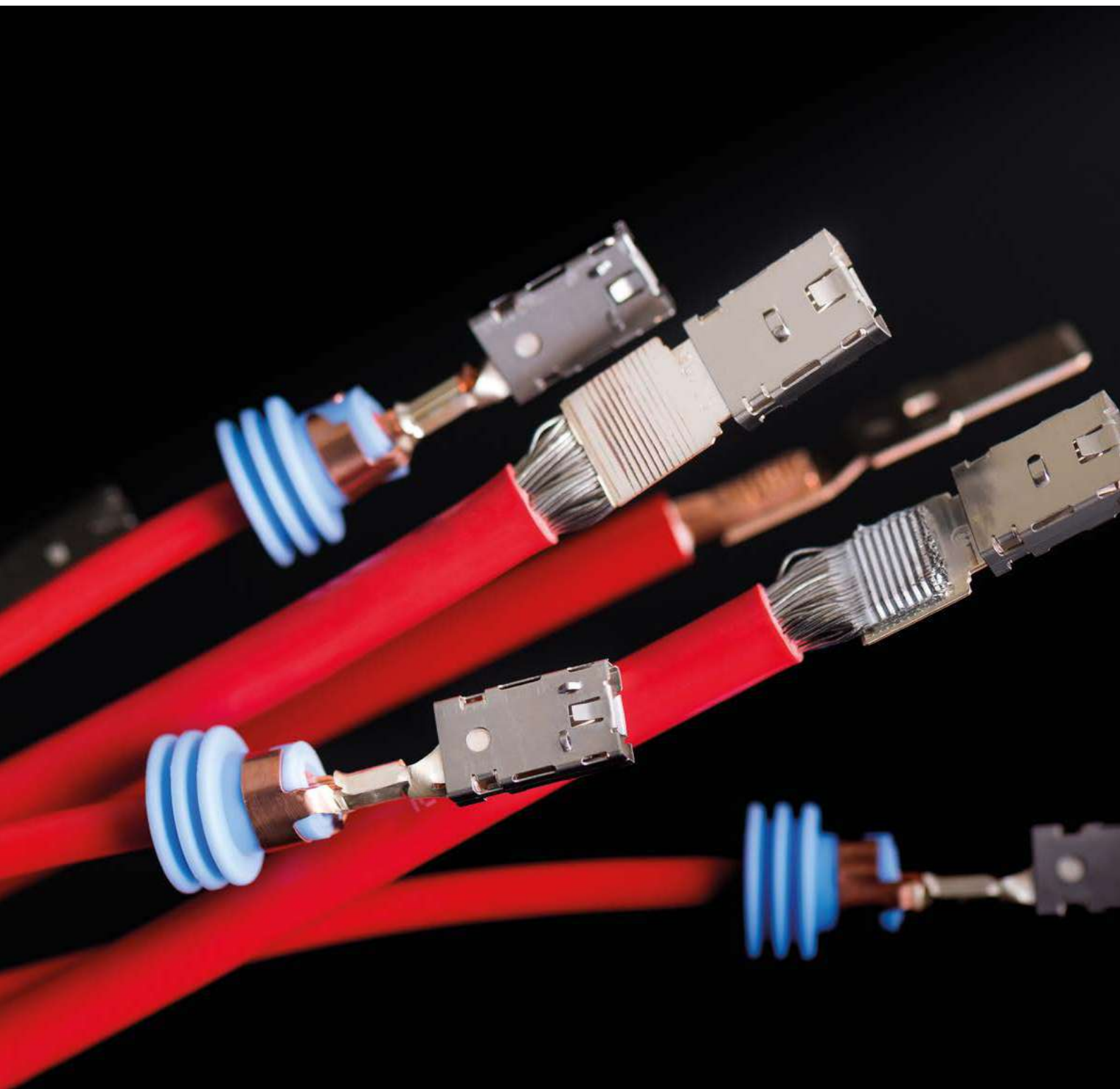
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**Mai Autoparts S.L., distribuidor de terminales y conectores de LEAR Corporation.**  
Mai Autoparts S.L. . distributor of LEAR Corporation's terminals and connectors.

Lear Corporation es una de las empresas líderes mundiales en el suministro de componentes eléctricos a la industria automotivística. Es conocida desde hace décadas por su calidad, innovación y experiencia. Sus ingenieros son especialistas en terminales, conectores, cajas de distribución y cajas de fusibles entre muchos otros productos que son altamente testeados para actuar en las condiciones más extremas. Además, éstos cumplen la normativa ISO/TS 16949 y las normas medioambientales DIN ISO 14001.

LEAR Corporation is one of the leading suppliers of the automotive industry for electric wiring systems, vehicle electronics and connector technology. Decades of experience, consequent quality management and steady growth ensure a leading edge in technology in future. The skilled engineers of Lear are specialists in terminals, connectors, power distribution boxes, fuse boxes and many other products that are highly tested in the most extreme conditions. Furthermore, product quality is confirmed by a certificate according to ISO/TS 16949 and the environmental protection is certified according to DIN ISO 14001.



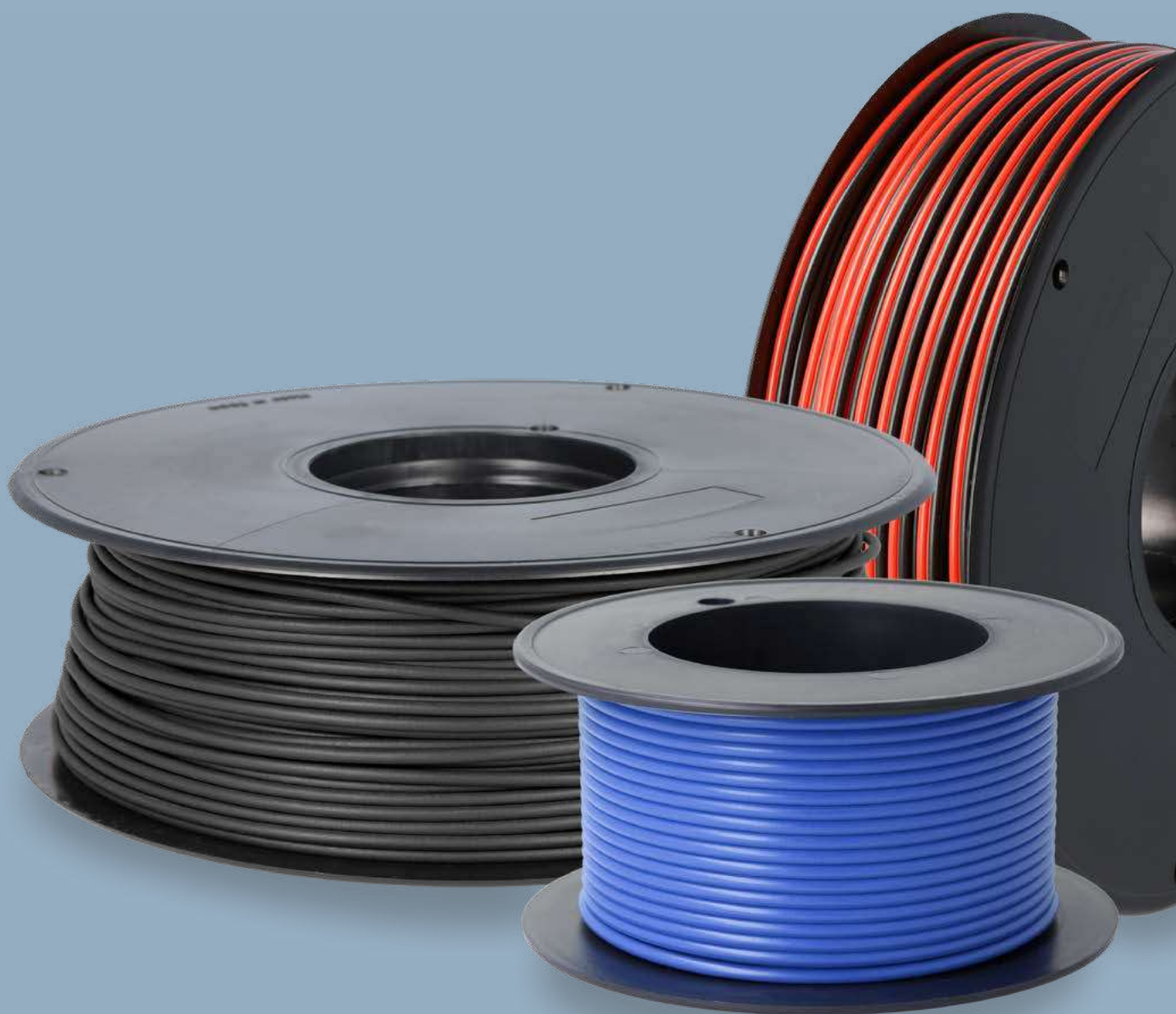
# CABLES ELÉCTRICOS

## ELECTRICAL CABLES

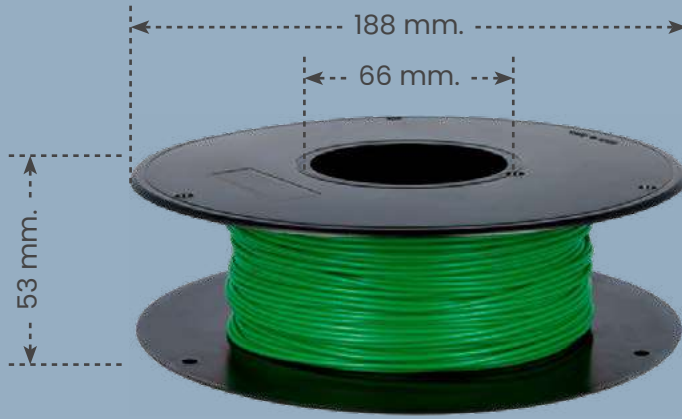


Cable unipolar, cable unipolar de aislamiento optimizado, cable paralelo bicolor, cable de arranque y cable manguera.

Single core cable, single core optimized isolation cable, twin core cable, starter cable and multicore cable.







TEMPERATURA DE -15°C A 70°C  
 TEMPERATURE FROM -15°C TO 70°C  
 NORMA UNE-EN 50525-2-31  
 STANDARD UNE-EN 50525-2-31

# CABLE UNIPOLAR

## SINGLE CORE CABLE

03 P3

SECCIÓN SECTION 0,50 mm<sup>2</sup>

EXTERIOR EXTERIOR 2,00 mm<sup>2</sup>

DESIGNACIÓN DESIGNATION H05V-K

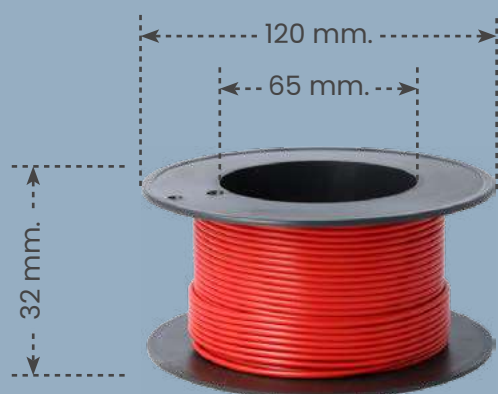
04 P4

SECCIÓN SECTION 0,75 mm<sup>2</sup>

DIÁMETRO EXTERIOR EXTERIOR DIAMETER 2,30 mm<sup>2</sup>

DESIGNACIÓN DESIGNATION H05V-K

COLOR COLOR	COMPOSICIÓN SPECIFICATION	REF. REF. 100 m.	REF. REF. 25 m.	Ω/km	A	g/m	m
	16 x 0,20	<b>03AM</b>	<b>P3AM</b>	39,00	8,00	9,00	500/250
	16 x 0,20	<b>03AZ</b>	<b>P3AZ</b>	39,00	8,00	9,00	500/250
	16 x 0,20	<b>03BC</b>	<b>P3BC</b>	39,00	8,00	9,00	500/250
	16 x 0,20	<b>03MR</b>	<b>P3MR</b>	39,00	8,00	9,00	500/250
	16 x 0,20	<b>03NG</b>	<b>P3NG</b>	39,00	8,00	9,00	500/250
	16 x 0,20	<b>03RJ</b>	<b>P3RJ</b>	39,00	8,00	9,00	500/250
	16 x 0,20	<b>03VD</b>	<b>P3VD</b>	39,00	8,00	9,00	500/250
	24 x 0,20	<b>04AM</b>	<b>P4AM</b>	24,70	10,00	11,00	500/250
	24 x 0,20	<b>04AZ</b>	<b>P4AZ</b>	24,70	10,00	11,00	500/250
	24 x 0,20	<b>04BC</b>	<b>P4BC</b>	24,70	10,00	11,00	500/250
	24 x 0,20	<b>04GR</b>	<b>P4GR</b>	24,70	10,00	11,00	500/250
	24 x 0,20	<b>04MD</b>	<b>P4MD</b>	24,70	10,00	11,00	500/250
	24 x 0,20	<b>04MR</b>	<b>P4MR</b>	24,70	10,00	11,00	500/250
	24 x 0,20	<b>04NG</b>	<b>P4NG</b>	24,70	10,00	11,00	500/250
	24 x 0,20	<b>04NJ</b>	<b>P4NJ</b>	24,70	10,00	11,00	500/250
	24 x 0,20	<b>04RJ</b>	<b>P4RJ</b>	24,70	10,00	11,00	500/250
	24 x 0,20	<b>04RS</b>	<b>P4RS</b>	24,70	10,00	11,00	500/250
	24 x 0,20	<b>04VD</b>	<b>P4VD</b>	24,70	10,00	11,00	500/250



TEMPERATURA DE -15°C A 70°C  
TEMPERATURE FROM -15°C TO 70°C

NORMA UNE-EN 50525-2-31  
STANDARD UNE-EN 50525-2-31

05 P5

SECCIÓN SECTION 1,00 mm<sup>2</sup>

DIÁMETRO EXTERIOR EXTERIOR DIAMETER 2,50 mm<sup>2</sup>

DESIGNACIÓN DESIGNATION H05V-K

06 P6

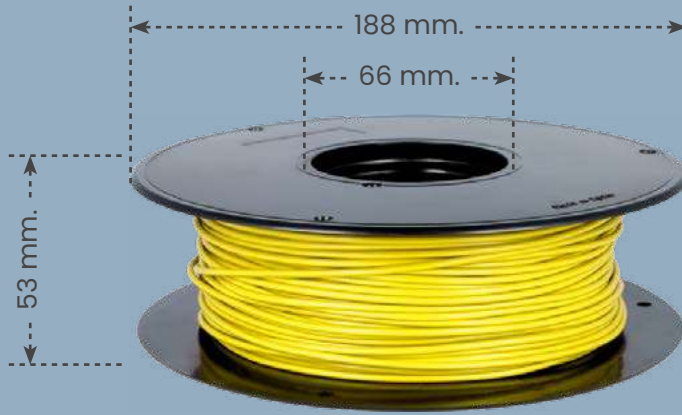
SECCIÓN SECTION 1,50 mm<sup>2</sup>

DIÁMETRO EXTERIOR EXTERIOR DIAMETER 2,90 mm<sup>2</sup>

DESIGNACIÓN DESIGNATION H07V-K

COLOR COLOR	COMPOSICIÓN SPECIFICATION	REF. REF. 100 m.	REF. REF. 25 m.	Ω/km	A	g/m	m
	32 x 0,20	05AM	P5AM	19,50	12,00	14,00	500/250
	32 x 0,20	05AZ	P5AZ	19,50	12,00	14,00	500/250
	32 x 0,20	05BC	P5BC	19,50	12,00	14,00	500/250
	32 x 0,20	05GR	P5GR	19,50	12,00	14,00	500/250
	32 x 0,20	05MD	P5MD	19,50	12,00	14,00	500/250
	32 x 0,20	05MR	P5MR	19,50	12,00	14,00	500/250
	32 x 0,20	05NG	P5NG	19,50	12,00	14,00	500/250
	32 x 0,20	05NJ	P5NJ	19,50	12,00	14,00	500/250
	32 x 0,20	05RJ	P5RJ	19,50	12,00	14,00	500/250
	32 x 0,20	05RS	P5RS	19,50	12,00	14,00	500/250
	32 x 0,20	05VD	P5VD	19,50	12,00	14,00	500/250
	32 x 0,20	05AV	P5AV	19,50	12,00	14,00	500/250
	24 x 0,26	06AM	P6AM	13,30	19,00	20,00	500/250
	24 x 0,26	06AZ	P6AZ	13,30	19,00	20,00	500/250
	24 x 0,26	06BC	P6BC	13,30	19,00	20,00	500/250
	24 x 0,26	06GR	P6GR	13,30	19,00	20,00	500/250
	24 x 0,26	06MD	P6MD	13,30	19,00	20,00	500/250
	24 x 0,26	06MR	P6MR	13,30	19,00	20,00	500/250
	24 x 0,26	06NG	P6NG	13,30	19,00	20,00	500/250
	24 x 0,26	06NJ	P6NJ	13,30	19,00	20,00	500/250
	24 x 0,26	06RJ	P6RJ	13,30	19,00	20,00	500/250
	24 x 0,26	06RS	P6RS	13,30	19,00	20,00	500/250
	24 x 0,26	06VD	P6VD	13,30	19,00	20,00	500/250
	24 x 0,26	06AV	P6AV	13,30	19,00	20,00	500/250

Intensidad máxima a 40°C (A) - Maximum intensity at 40°C (A)



TEMPERATURA DE -15°C A 70°C  
 TEMPERATURE FROM -15°C TO 70°C  
 NORMA UNE-EN 50525-2-31  
 STANDARD UNE-EN 50525-2-31

# CABLE UNIPOLAR

## SINGLE CORE CABLE

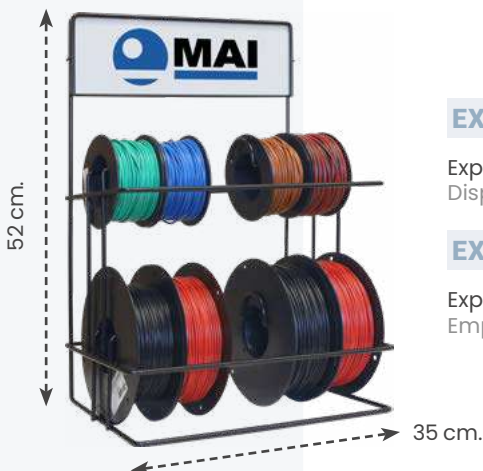


COLOR COLOR	COMPOSICIÓN SPECIFICATION	REF. 50 m.	REF. 25 m.	Ω/km	A	g/m	m
	32 x 0,26	<b>07AM</b>	<b>P7AM</b>	9,30	23	28	250
	32 x 0,26	<b>07AZ</b>	<b>P7AZ</b>	9,30	23	28	250
	32 x 0,26	<b>07BC</b>	<b>P7BC</b>	9,30	23	28	250
	32 x 0,26	<b>07GR</b>	<b>P7GR</b>	9,30	23	28	250
	32 x 0,26	<b>07MD</b>	<b>P7MD</b>	9,30	23	28	250
	32 x 0,26	<b>07MR</b>	<b>P7MR</b>	9,30	23	28	250
	32 x 0,26	<b>07NG</b>	<b>P7NG</b>	9,30	23	28	250
	32 x 0,26	<b>07NJ</b>	<b>P7NJ</b>	9,30	23	28	250
	32 x 0,26	<b>07RJ</b>	<b>P7RJ</b>	9,30	23	28	250
	32 x 0,26	<b>07RS</b>	<b>P7RS</b>	9,30	23	28	250
	32 x 0,26	<b>07VD</b>	<b>P7VD</b>	9,30	23	28	250

SECCIÓN  
SECTION 2,00  
mm<sup>2</sup>

DIÁMETRO  
EXTERIOR  
EXTERIOR  
DIAMETER 3,30  
mm<sup>2</sup>

DESIGNACIÓN  
DESIGNATION  
H07V-K



### EX10

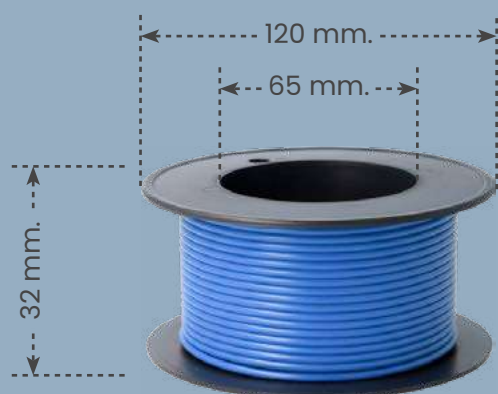
Expositor con 8 carretes: P6VD, P6AZ, P6MR, P22RN, 05NG, 05RJ, 06NG, 06RJ  
 Display with 8 reels

### EX50

Expositor vacío para 8 carretes  
 Empty display for 8 reels

Resistencia máxima a 20°C (Ω/km) - Maximum resistance at 20°C (Ω/km)





TEMPERATURA DE -15°C A 70°C  
TEMPERATURE FROM -15°C TO 70°C

NORMA UNE-EN 50525-2-31  
STANDARD UNE-EN 50525-2-31

08 P8

SECCIÓN  
SECTION 2,50  
mm<sup>2</sup>

DIÁMETRO  
EXTERIOR  
EXTERIOR  
DIAMETER 3,60  
mm<sup>2</sup>

DESIGNACIÓN  
DESIGNATION  
H07V-K

COLOR COLOR	COMPOSICIÓN SPECIFICATION	REF. 50 m.	REF. 25 m.	Ω/km	A	g/m	m
	40 x 0,26	08AM	P8AM	7,90	26	32	250
	40 x 0,26	08AZ	P8AZ	7,90	26	32	250
	40 x 0,26	08BC	P8BC	7,90	26	32	250
	40 x 0,26	08GR	P8GR	7,90	26	32	250
	40 x 0,26	08MD	P8MD	7,90	26	32	250
	40 x 0,26	08MR	P8MR	7,90	26	32	250
	40 x 0,26	08NG	P8NG	7,90	26	32	250
	40 x 0,26	08NJ	P8NJ	7,90	26	32	250
	40 x 0,26	08RJ	P8RJ	7,90	26	32	250
	40 x 0,26	08VD	P8VD	7,90	26	32	250

09 P9

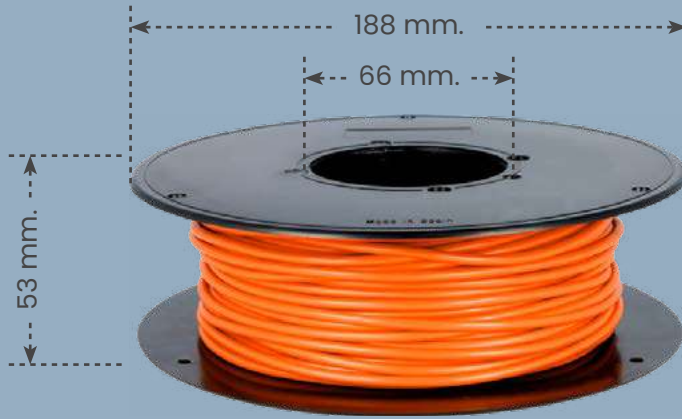
SECCIÓN  
SECTION 3,00  
mm<sup>2</sup>

DIÁMETRO  
EXTERIOR  
EXTERIOR  
DIAMETER 3,90  
mm<sup>2</sup>

DESIGNACIÓN  
DESIGNATION  
H07V-K

	52 x 0,26	09AM	P9AM	6,00	30	40	250 / 125
	52 x 0,26	09AZ	P9AZ	6,00	30	40	250 / 125
	52 x 0,26	09BC	P9BC	6,00	30	40	250 / 125
	52 x 0,26	09MR	P9MR	6,00	30	40	250 / 125
	52 x 0,26	09NG	P9NG	6,00	30	40	250 / 125
	52 x 0,26	09RJ	P9RJ	6,00	30	40	250 / 125
	52 x 0,26	09VD	P9VD	6,00	30	40	250 / 125

Intensidad máxima a 40°C (A) - Maximum intensity at 40°C (A)



TEMPERATURA DE -15°C A 70°C  
 TEMPERATURE FROM -15°C TO 70°C  
 NORMA UNE-EN 50525-2-31  
 STANDARD UNE-EN 50525-2-31

# CABLE UNIPOLAR

## SINGLE CORE CABLE

10

**SECCIÓN** 4,00  
**SECTION** mm<sup>2</sup>

**DIÁMETRO EXTERIOR** 4,10  
**EXTERIOR DIAMETER** mm<sup>2</sup>

**DESIGNACIÓN**  
**DESIGNATION**  
H07V-K

12

**SECCIÓN** 6,00  
**SECTION** mm<sup>2</sup>

**DIÁMETRO EXTERIOR** 4,70  
**EXTERIOR DIAMETER** mm<sup>2</sup>

**DESIGNACIÓN**  
**DESIGNATION**  
H07V-K

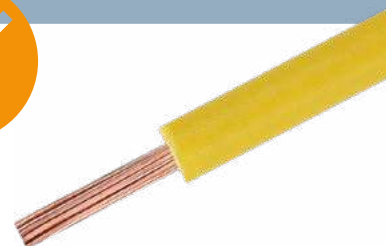
COLOR COLOR	COMPOSICIÓN SPECIFICATION	REF.  25 m.	 Ω/km	 A	 g/m	 m
	48 x 0,31	<b>10AM</b>	4,75	35	47	125
	48 x 0,31	<b>10AZ</b>	4,75	35	47	125
	48 x 0,31	<b>10MR</b>	4,75	35	47	125
	48 x 0,31	<b>10NG</b>	4,75	35	47	125
	48 x 0,31	<b>10RJ</b>	4,75	35	47	125
	48 x 0,31	<b>10VD</b>	4,75	35	47	125
	72 x 0,31	<b>12AM</b>	3,30	44	64	125
	72 x 0,31	<b>12AZ</b>	3,30	44	64	125
	72 x 0,31	<b>12BC</b>	3,30	44	64	125
	72 x 0,31	<b>12MR</b>	3,30	44	64	125
	72 x 0,31	<b>12NG</b>	3,30	44	64	125
	72 x 0,31	<b>12RJ</b>	3,30	44	64	125

Resistencia máxima a 20°C (Ω/km) - Maximum resistance at 20°C (Ω/km)



TEMPERATURA DE -40°C A 105°C  
TEMPERATURE FROM -40°C TO 105°C

NORMA ISO 6722-3  
STANDARD ISO 6722-3



# CABLE FLRY-B 105°

ESPECIAL PARA AUTOMOCIÓN

## FLRY-B 105° CABLE

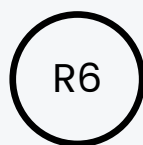
SPECIAL FOR AUTOMOTIVE



SECCIÓN  
SECTION 1,00  
mm<sup>2</sup>

DIÁMETRO  
EXTERIOR  
EXTERIOR  
DIAMETER 2,00  
mm<sup>2</sup>

DESIGNACIÓN  
DESIGNATION  
FLRY-B 105°



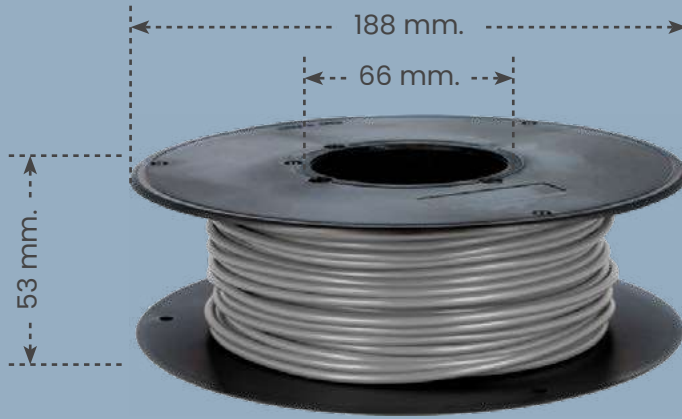
SECCIÓN  
SECTION 1,50  
mm<sup>2</sup>

DIÁMETRO  
EXTERIOR  
EXTERIOR  
DIAMETER 2,30  
mm<sup>2</sup>

DESIGNACIÓN  
DESIGNATION  
FLRY-B 105°

	COLOR COLOR	COMPOSICIÓN SPECIFICATION	REF. 100 m.	REF. 25 m.	Ω/km	A	g/m	m
R5		32 x 0,20	R5AM	R5AM25	19,50	12	13,50	500/250
		32 x 0,20	R5AZ	R5AZ25	19,50	12	13,50	500/250
		32 x 0,20	R5BC	R5BC25	19,50	12	13,50	500/250
		32 x 0,20	R5GR	R5GR25	19,50	12	13,50	500/250
		32 x 0,20	R5MR	R5MR25	19,50	12	13,50	500/250
		32 x 0,20	R5NG	R5NG25	19,50	12	13,50	500/250
		32 x 0,20	R5RJ	R5RJ25	19,50	12	13,50	500/250
		32 x 0,20	R5VD	R5VD25	19,50	12	13,50	500/250
R6		24 x 0,26	R6AM	R6AM25	13,30	19	19,50	500/250
		24 x 0,26	R6AZ	R6AZ25	13,30	19	19,50	500/250
		24 x 0,26	R6BC	R6BC25	13,30	19	19,50	500/250
		24 x 0,26	R6GR	R6GR25	13,30	19	19,50	500/250
		24 x 0,26	R6MR	R6MR25	13,30	19	19,50	500/250
		24 x 0,26	R6NG	R6NG25	13,30	19	19,50	500/250
		24 x 0,26	R6RJ	R6RJ25	13,30	19	19,50	500/250
		24 x 0,26	R6VD	R6VD25	13,30	19	19,50	500/250





TEMPERATURA DE -40°C A 105°C  
 TEMPERATURE FROM -40°C TO 105°C  
 NORMA ISO 6722-3  
 STANDARD ISO 6722-3



# CABLE FLRY-B 105°

ESPECIAL PARA AUTOMOCIÓN

## FLRY-B 105° CABLE

SPECIAL FOR AUTOMOTIVE



**SECCIÓN** 2,50  
**SECTION** mm<sup>2</sup>

**DIÁMETRO EXTERIOR** 2,90  
**EXTERIOR DIAMETER** mm<sup>2</sup>

**DESIGNACIÓN**  
**DESIGNATION**  
FLRY-B 105°

COLOR COLOR	COMPOSICIÓN SPECIFICATION	REF.  50 m.	REF.  25 m.	 Ω/km	 A	 g/m	 m
	40 x 0,26	<b>R8AM</b>	<b>R8AM25</b>	7,90	26	31	250
	40 x 0,26	<b>R8AZ</b>	<b>R8AZ25</b>	7,90	26	31	250
	40 x 0,26	<b>R8BC</b>	<b>R8BC25</b>	7,90	26	31	250
	40 x 0,26	<b>R8GR</b>	<b>R8GR25</b>	7,90	26	31	250
	40 x 0,26	<b>R8MR</b>	<b>R8MR25</b>	7,90	26	31	250
	40 x 0,26	<b>R8NG</b>	<b>R8NG25</b>	7,90	26	31	250
	40 x 0,26	<b>R8RJ</b>	<b>R8RJ25</b>	7,90	26	31	250
	40 x 0,26	<b>R8VD</b>	<b>R8VD25</b>	7,90	26	31	250



**SECCIÓN** 4,00  
**SECTION** mm<sup>2</sup>

**DIÁMETRO EXTERIOR** 3,60  
**EXTERIOR DIAMETER** mm<sup>2</sup>

**DESIGNACIÓN**  
**DESIGNATION**  
FLRY-B 105°

COLOR COLOR	COMPOSICIÓN SPECIFICATION	REF.  50 m.	 Ω/km	 A	 g/m	 m
	41 x 0,31	<b>R10NG</b>	4,75	35	39,00	250
	41 x 0,31	<b>R10RJ</b>	4,75	35	39,00	250

Resistencia máxima a 20°C (Ω/km) - Maximum resistance at 20°C (Ω/km)



Suministro en carretes y bobinas según mínimos.  
Supply in reels and coils according to MOQ.

TEMPERATURA DE -40°C A 105°C  
TEMPERATURE FROM -40°C TO 105°C  
NORMA ISO 6722-3  
STANDARD ISO 6722-3

Cable de cobre multifilar y flexible aislado con fina pared de policloruro de vinilo (PVC tipo B) resistente a altas temperaturas y efectos abrasivos. Especial para instalaciones eléctricas en el sector de la automoción.

Flexible, multiwire copper cable insulated with a thin wall of polyvinyl chloride (PVC type B) resistant to high temperatures and to abrasive effects. Specially designed for electrical installations in the automotive industry.

R12

SECCIÓN SECTION 6,00 mm<sup>2</sup>

DIÁMETRO EXTERIOR EXTERIOR DIAMETER 4,20 mm<sup>2</sup>

DESIGNACIÓN DESIGNATION FLRY-B 105°

R

DESIGNACIÓN DESIGNATION FLRY-B 105°

COLOR COLOR	COMPOSICIÓN SPECIFICATION	REF. REF. 50 m.	Ω/km	A	g/m	m
	74 x 0,31	R12NG	3,30	61	60,00	250
	74 x 0,31	R12RJ	3,30	61	60,00	250

SECCIÓN SECTION mm <sup>2</sup>	COMPOSICIÓN SPECIFICATION	Ø EXTERIOR mm <sup>2</sup>	Ω/km	A	g/m	BOBINA SPOOL m	NPS CONIPACK m
0,35	11 x 0,20	1,30	55,00	6	4,40	1.000	10.000
0,50	16 x 0,20	1,50	39,00	8	9,00	1.000	8.000
0,75	24 x 0,20	1,80	26,50	10	9,00	1.000	7.000
1,00	32 x 0,20	2,00	19,50	12	13,00	1.000	5.000
1,50	24 x 0,26	2,30	13,30	19	18,00	1.000	4.000
2,00	24 x 0,31	2,60	10,00	23	21,00	500	3.500
2,50	40 x 0,26	2,90	7,90	26	30,00	500	3.000
3,00	52 x 0,26	3,10	6,00	30	38,00	500	2.000
4,00	41 x 0,31	3,55	4,75	35	40,00	250	1.500
6,00	74 x 0,31	4,20	3,30	44	61,00	250	1.000

Intensidad máxima a 40°C (A) - Maximum intensity at 40°C (A)



TEMPERATURA DE -15°C A 70°C  
 TEMPERATURE FROM -15°C TO 70°C  
 NORMA UNE-211030  
 STANDARD UNE-211030

# CABLE PARALELO BICOLOR TWIN CORE CABLE



Cables flexibles planos aislados con policloruro de vinilo (PVC tipo TI-1). Utilizados para la interconexión de altavoces en equipos de sonido, imagen y electrónicos análogos. No aconsejables para conexiones eléctricas.

Flexible flat cables insulated with polyvinyl chloride (PVC type TI-1). Used for the interconnection of sound, image and electronic equipment. Not suitable for electrical connections.



COLORES  
 COLORS



AUDIO

SECCIÓN SECTION	COMPOSICIÓN SPECIFICATION	REF.	Ø EXTERIOR mm <sup>2</sup>	Ω/km	A	g/m	m	m
2 x 0,40	2 x 8 x 0,25	<b>20RN</b>	2,2 x 4,5	49,50	7	16	100	500
2 x 0,50	2 x 16 x 0,20	<b>21RN</b>	2,2 x 4,5	37,10	8	18	100	500
2 x 0,75	2 x 24 x 0,20	<b>22RN</b>	2,3 x 4,7	24,70	10	24	50	250
2 x 0,75	2 x 24 x 0,20	<b>P22RN</b>	2,3 x 4,7	24,70	10	24	25	250
2 x 1	2 x 32 x 0,20	<b>23RN</b>	2,5 x 5,0	19,50	12	32	50	250
2 x 1	2 x 32 x 0,20	<b>P23RN</b>	2,5 x 5,0	19,50	12	32	25	250
2 x 1,50	2 x 24 x 0,26	<b>24RN</b>	2,8 x 5,7	13,30	19	36	50	250
2 x 2,50	2 x 40 x 0,26	<b>26RN</b>	3,6 x 7,2	7,90	26	60	25	125

Ω/km Resistencia máxima a 20°C (Ω/km) - Maximum resistance at 20°C (Ω/km)



TEMPERATURA DE -15°C A 70°C  
 TEMPERATURE FROM -15°C TO 70°C  
 NORMA UNE-EN 50525-2-31  
 STANDARD UNE-EN 50525-2-31



# CABLE DE ARRANQUE

## STARTERCABLE



COLOR  
 COLOR



DESIGNACIÓN  
 DESIGNATION  
 H07V-K

COLOR  
 COLOR



DESIGNACIÓN  
 DESIGNATION  
 H07V-K

SECCIÓN SECTION mm <sup>2</sup>	COMPOSICIÓN SPECIFICATION	REF.	Ø EXTERIOR mm <sup>2</sup>	Ω/km	(A) A	g/m	ROLLO ROLL m
10	72 x 0,41	<b>F610</b>	6,50	1,91	61	100	50
16	108 x 0,41	<b>F616</b>	8,10	1,21	82	160	25
25	168 x 0,41	<b>F625</b>	10,20	0,78	114	240	25
35	238 x 0,41	<b>F635</b>	11,50	0,55	141	360	25
35	238 x 0,41	<b>F63505</b>	11,50	0,55	141	360	5
50	336 x 0,41	<b>F650</b>	13,20	0,38	170	480	25
70	504 x 0,41	<b>F670</b>	14,90	0,27	218	680	25
95	646 x 0,41	<b>F695</b>	17,20	0,21	264	930	25
10	72 x 0,41	<b>F710</b>	6,50	1,91	61	100	50
16	108 x 0,41	<b>F716</b>	8,10	1,21	82	160	25
25	168 x 0,41	<b>F725</b>	10,20	0,78	114	240	25
35	238 x 0,41	<b>F735</b>	11,50	0,55	141	360	25
35	238 x 0,41	<b>F73505</b>	11,50	0,55	141	360	5
50	336 x 0,41	<b>F750</b>	13,20	0,38	170	480	25
70	504 x 0,41	<b>F770</b>	14,90	0,27	218	680	25
95	646 x 0,41	<b>F795</b>	17,20	0,21	264	930	25

(A) Intensidad máxima a 40°C (A) - Maximum intensity at 40°C (A)



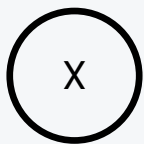
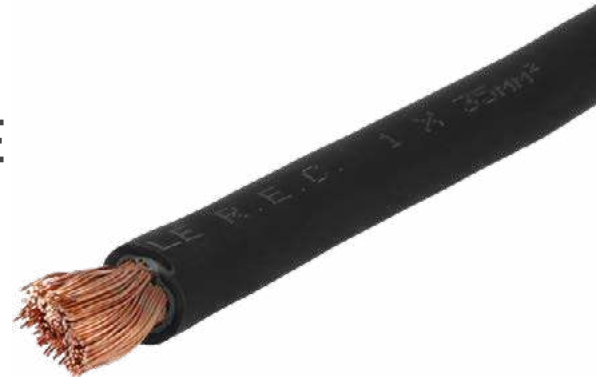


TEMPERATURA DE -40°C A 70°C  
 TEMPERATURE FROM -40°C TO 70°C  
 NORMA UNE-EN 50525-2-31  
 STANDARD UNE-EN 50525-2-31

# CABLE DE ARRANQUE EXTRAFLEXIBLE EXTRAFLEXIBLE STARTER CABLE

Cable de transporte de energía constituido por un conductor unipolar flexible extruido con aislamiento de PVC tipo TI-1 modificado con NBR.

Energy transport cable made up of a single-pole flexible extruded conductor with PVC type TI-1 modified with NBR.



**COLOR**  
 COLOR



**DESIGNACIÓN**  
 DESIGNATION  
 H07V-K

**COLOR**  
 COLOR



**DESIGNACIÓN**  
 DESIGNATION  
 H07V-K

SECCIÓN SECTION mm <sup>2</sup>	COMPOSICIÓN SPECIFICATION	REF.	Ø EXTERIOR mm <sup>2</sup>	Ω/km	(A)	g/m	ROLLO ROLL m
10	188 x 0,25	<b>X610</b>	7,90	1,91	61	128	50
16	192 x 0,31	<b>X616</b>	8,30	1,21	82	174	25
25	300 x 0,31	<b>X625</b>	10,10	0,78	114	266	25
35	432 x 0,31	<b>X635</b>	11,80	0,55	141	375	25
50	616 x 0,31	<b>X650</b>	13,50	0,38	170	518	25
70	864 x 0,31	<b>X670</b>	15,40	0,27	218	707	25
10	188 x 0,25	<b>X710</b>	7,90	1,91	61	128	50
16	192 x 0,31	<b>X716</b>	8,30	1,21	82	174	25
25	300 x 0,31	<b>X725</b>	10,10	0,78	114	266	25
35	432 x 0,31	<b>X735</b>	11,80	0,55	141	375	25
50	616 x 0,31	<b>X750</b>	13,50	0,38	170	518	25
70	864 x 0,31	<b>X770</b>	15,40	0,27	218	707	25

Ω/km Resistencia máxima a 20°C (Ω/km) - Maximum resistance at 20°C (Ω/km)



TEMPERATURA DE -40°C A 70°C  
TEMPERATURE FROM -40°C TO 70°C

NORMA UNE-EN 50525-2-31  
STANDARD UNE-EN 50525-2-31

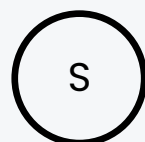
# CABLE DE ARRANQUE ESTAÑADO

## TINNED STARTER CABLE



Cable unipolar flexible con aislamiento de PVC tipo TI-1 modificado con NBR. El cable de arranque estañado ofrece la más alta calidad por su resistencia a la humedad, abrasión, ácidos, combustible y al aceite y por sus propiedades ignífugas. Cada hilo de cobre está recubierto en estaño para una excelente resistencia a la corrosión.

Flexible single-pole cable with PVC insulation type TI-1 modified with NBR. The tinned starter cable offers the highest quality for its resistance to moisture, abrasion, acids, fuel and oil and for its flame retardant properties. Each copper wire is tin coated for excellent corrosion resistance.



COLOR ●  
COLOR

SECCIÓN SECTION mm <sup>2</sup>	COMPOSICIÓN SPECIFICATION	REF.	Ø EXTERIOR mm <sup>2</sup>	Ω/km	(A) A	g/m	ROLLO ROLL m
10	132 x 0,31	<b>S610</b>	7,90	1,95	61	138	50
16	216 x 0,31	<b>S616</b>	8,30	1,24	82	186	25
25	336 x 0,31	<b>S625</b>	10,10	0,80	114	287	25
35	468 x 0,31	<b>S635</b>	11,80	0,57	141	396	25
50	648 x 0,31	<b>S650</b>	13,50	0,39	170	532	25
70	912 x 0,31	<b>S670</b>	15,40	0,28	218	735	25
10	132 x 0,31	<b>S710</b>	7,90	1,95	61	138	50
16	216 x 0,31	<b>S716</b>	8,30	1,24	82	186	25
25	336 x 0,31	<b>S725</b>	10,10	0,80	114	287	25
35	468 x 0,31	<b>S735</b>	11,80	0,57	141	396	25
50	648 x 0,31	<b>S750</b>	13,50	0,39	170	532	25
70	912 x 0,31	<b>S770</b>	15,40	0,28	218	735	25

COLOR ●  
COLOR

(A) Intensidad máxima a 40°C (A) - Maximum intensity at 40°C (A)



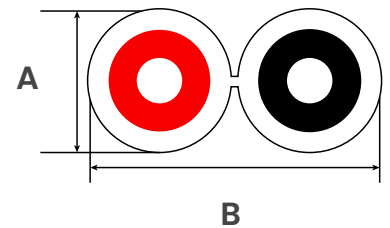
TEMPERATURA DE -25°C A 70°C  
 TEMPERATURE FROM -25°C TO 70°C  
 NORMA UNE-EN 50525-2-31  
 STANDARD UNE-EN 50525-2-31

# CABLE DE ARRANQUE PARALELO

## TWIN CORE STARTER CABLE

Cable plano divisible con aislamiento y cubierta exterior de PVC tipo TII. Resistente a grasas, aceites y a la absorción del agua. Aplicación en cables para cargar batería de automoción y arrancar motores.

Divisible flat cable, insulation and PVC compound type TII, outer sheath. Resistant to greases, oils and water absorption. Application on cables to charge automotive battery and to start engines.



F67

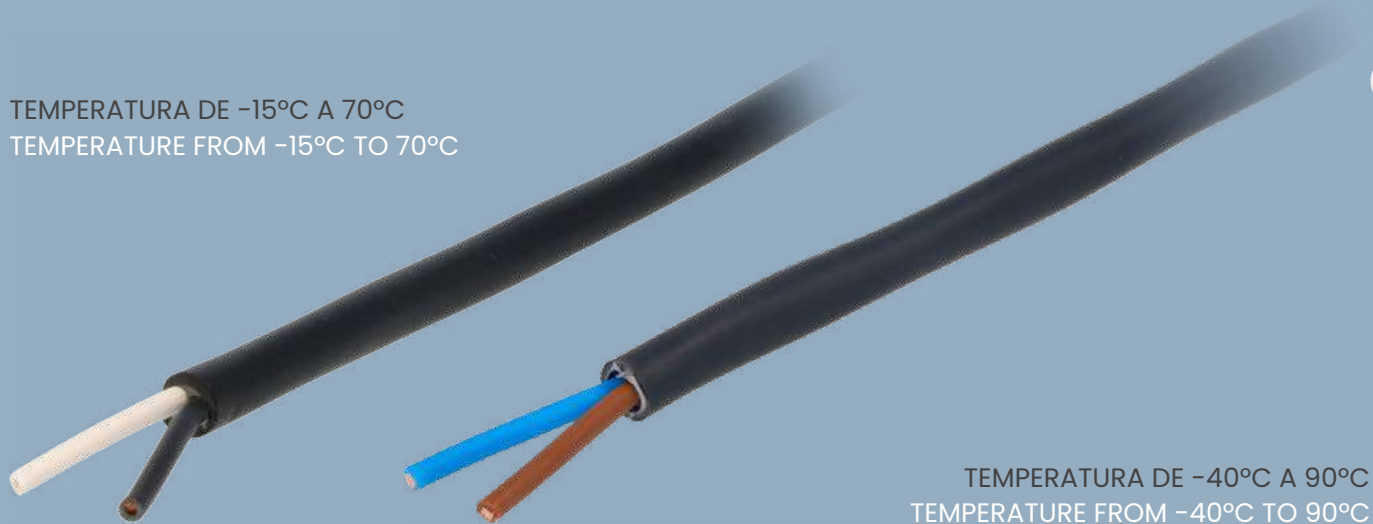
COLORES  
 COLORS



SECCIÓN SECTION mm <sup>2</sup>	COMPOSICIÓN SPECIFICATION	REF.	Ø EXTERIOR mm <sup>2</sup>	Ω/km	A	g/m	ROLLO ROLL m
			A x B				
2 x 10	2 x 168 x 0,21	F6710	8,7 x 18,4	1,91	50	285	25
2 x 16	2 x 263 x 0,21	F6716	10 x 21	1,21	70	460	25
2 x 25	2 x 399 x 0,21	F6725	12 x 25	0,78	90	680	25
2 x 35	2 x 557 x 0,21	F6735	13,2 x 27,4	0,55	125	900	25
2 x 50	2 x 808 x 0,21	F6750	16,3 x 34,6	0,39	140	1.200	25

Ω/km Resistencia máxima a 20°C (Ω/km) - Maximum resistance at 20°C (Ω/km)

TEMPERATURA DE -15°C A 70°C  
TEMPERATURE FROM -15°C TO 70°C



TEMPERATURA DE -40°C A 90°C  
TEMPERATURE FROM -40°C TO 90°C

# CABLE MANGUERA DE 2 CONDUCTORES

## 2 WIRE MULTICORE CABLE



**COLORES**  
**COLORS**



**DESIGNACIÓN**  
**DESIGNATION**

05VV-F

**NORMA**  
**STANDARD**

UNE-EN 50525-2-11

**COLORES**  
**COLORS**



**DESIGNACIÓN**  
**DESIGNATION**

SH-PC-U

**NORMA**  
**STANDARD**

UNE 60228

SECCIÓN SECTION mm <sup>2</sup>	COMPOSICIÓN SPECIFICATION	REF.	Ø EXTERIOR mm <sup>2</sup>	Ω/km	(A) A	g/m	ROLLO ROLL m
2 x 0,50	2 x 16 x 0,20	<b>2050CM</b>	5,10	37,10	8	45	100
2 x 1	2 x 32 x 0,20	<b>21CM</b>	6,60	19,50	12	60	100
2 x 1	2 x 32 x 0,20	<b>21CM50</b>	6,60	19,50	12	60	50
2 x 1	2 x 32 x 0,20	<b>21CM25</b>	6,60	19,50	12	60	25
2 x 1,5	2 x 24 x 0,26	<b>25CM</b>	7,40	13,30	19	80	100
2 x 1,5	2 x 24 x 0,26	<b>25CM25</b>	7,40	13,30	19	80	25
2 x 2,5	2 x 40 x 0,26	<b>225CM25</b>	9,10	7,90	26	128	25
2 x 1,5	-	<b>25CNM25</b>	8,20	13,30	19	80	25

Cable marino flexible, de tensión de servicio de 0,6/1 kV para energía y control. Para instalación en buques, según IEC60092-353. Aislamiento en XPLE (Polietileno reticulado según IEC60092-353-1). Cubierta exterior tipo SHFI según IEC60092-359. Diámetro exterior según IEC60092-350.

Flexible marine cable with a service voltage of 0.6 / 1 kV for power and control. For installation in ships, according to IEC60092-353. Insulation in XPLE (Cross-linked polyethylene according to IEC60092-353-1). SHFI type outer sheath according to IEC60092-359. Outside diameter according to IEC60092-350.

(A) Intensidad máxima a 40°C (A) - Maximum intensity at 40°C (A)







Plana - Flat

# CABLE MANGUERA DE 2 CONDUCTORES

## 2 WIRE MULTICORE CABLE



**COLORES**  
COLORS



**DESIGNACIÓN**  
DESIGNATION  
H05VVH2-F

**NORMA**  
STANDARD  
UNE-EN 50525-2-11

**COLORES**  
COLORS



**DESIGNACIÓN**  
DESIGNATION  
ADR-FLFYY 85

**NORMA**  
STANDARD  
ISO 6722, ISO 14572  
y acuerdo ADR.

SECCIÓN SECTION mm <sup>2</sup>	COMPOSICIÓN SPECIFICATION	REF.	Ø EXTERIOR mm <sup>2</sup>	Ω/km	A	g/m	ROLLO ROLL m
2 x 1	2 x 32 x 0,20	<b>21CP</b>	6,40 x 3,80	19,50	12	60	100
2 x 1	2 x 32 x 0,20	<b>21CP50</b>	6,40 x 3,80	19,50	12	60	50
2 x 1	2 x 32 x 0,20	<b>21CP25</b>	6,40 x 3,80	19,50	12	60	25
2 x 1,5	2 x 24 x 0,26	<b>25CP</b>	7,20 x 4,40	13,30	19	80	100
2 x 1,5	2 x 24 x 0,26	<b>25CP25</b>	7,20 x 4,40	13,30	19	80	25

2 x 1	2 x 32 x 0,20	<b>21ADR</b>	3,70 x 5,80	19,50	12	60	100
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Cable especialmente indicado para instalaciones eléctricas en vehículos comerciales, tráiler y semi-trailers, que tengan que transportar mercancías peligrosas, de acuerdo con la normativa ADR.

Cable especially suitable for electrical installations in commercial vehicles, trailers and semi-trailers, which have to transport dangerous goods, in accordance with ADR regulations.



Resistencia máxima a 20°C (Ω/km) - Maximum resistance at 20°C (Ω/km)

TEMPERATURA DE -15°C A 70°C  
TEMPERATURE FROM -15°C TO 70°C



TEMPERATURA DE -40°C A 90°C  
TEMPERATURE FROM -40°C TO 90°C

# CABLE MANGUERA DE 3 CONDUCTORES

## 3 WIRE MULTICORE CABLE



**COLORES**  
COLORS



**DESIGNACIÓN**  
DESIGNATION  
05VV-F

**NORMA**  
STANDARD  
UNE-EN 50525-2-11

**COLORES**  
COLORS



**DESIGNACIÓN**  
DESIGNATION  
H07BQ-F

**NORMA**  
STANDARD  
UNE 60228

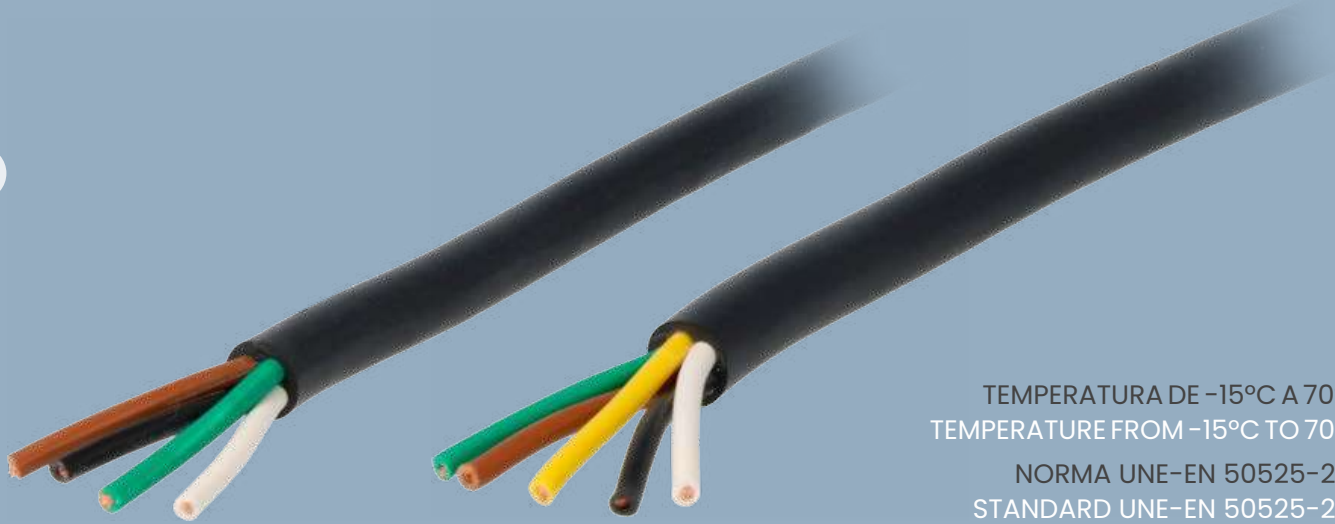
SECCIÓN SECTION mm <sup>2</sup>	COMPOSICIÓN SPECIFICATION	REF.	Ø EXTERIOR mm <sup>2</sup>	Ω/km	A	g/m	ROLLO ROLL m
3 x 0,75	3 x 24 x 0,20	<b>3075CM</b>	5,70	24,70	12	65	100
3 x 1	3 x 32 x 0,20	<b>31CM</b>	7,00	19,50	12	70	100
3 x 1	3 x 32 x 0,20	<b>31CM50</b>	7,00	19,50	12	70	50
3 x 1	3 x 32 x 0,20	<b>31CM25</b>	7,00	19,50	12	70	25
3 x 1,5	3 x 24 x 0,26	<b>35CM</b>	8,10	13,30	19	100	100
3 x 1,5	3 x 24 x 0,26	<b>35CM25</b>	8,10	13,30	19	100	25
3 x 2,5	3 x 40 x 0,26	<b>325CM25</b>	9,50	7,90	26	136	25
3G 2,5	-	<b>325CNC</b>	10,60	7,90	26	130	100

Cable universal de alta flexibilidad, con aislamiento de goma y cubierta de poliuretano (PUR). Alta resistencia a esfuerzos mecánicos, a la abrasión y bajas temperaturas. Altamente flexible incluso con temperaturas muy bajas. Con aprobación HAR (Armonizado).

High flexibility universal cable, with rubber insulation and polyurethane (PUR) sheath. High resistance to mechanical stress, abrasion and low temperatures. Highly flexible even at very low temperatures. With HAR (Harmonized) approval.

\*-50°C a 90°C en instalación fija / -50°C to 90°C in fixed installations.





TEMPERATURA DE -15°C A 70°C  
 TEMPERATURE FROM -15°C TO 70°C  
 NORMA UNE-EN 50525-2-II  
 STANDARD UNE-EN 50525-2-II

# CABLE MANGUERA DE 4 Y 5 CONDUCTORES

## 4 & 5 WIRE MULTICORE CABLE



**COLORES**  
**COLORS**

**DESIGNACIÓN**  
**DESIGNATION**  
 05VV-F



**COLORES**  
**COLORS**

**DESIGNACIÓN**  
**DESIGNATION**  
 05VV-F

SECCIÓN SECTION mm <sup>2</sup>	COMPOSICIÓN SPECIFICATION	REF.	Ø EXTERIOR mm <sup>2</sup>	Ω/km	(A) A	g/m	ROLLO ROLL m
4 x 0,75	4 x 24 x 0,20	<b>4075CM</b>	6,30	24,70	10	82	100
4 x 1	4 x 32 x 0,20	<b>41CM</b>	7,80	19,50	12	90	100
4 x 1	4 x 32 x 0,20	<b>41CM50</b>	7,80	19,50	12	90	50
4 x 1	4 x 32 x 0,20	<b>41CM25</b>	7,80	19,50	12	90	25
4 x 1,5	4 x 24 x 0,26	<b>45CM</b>	9,10	13,30	19	120	100
4 x 1,5	4 x 24 x 0,26	<b>45CM25</b>	9,10	13,30	19	120	25
4 x 2,5	4 x 40 x 0,26	<b>425CM25</b>	10,80	7,9	26	192	25
5 x 1	5 x 32 x 0,20	<b>51CM</b>	8,90	19,50	12	110	100
5 x 1	5 x 32 x 0,20	<b>51CM50</b>	8,90	19,50	12	110	50
5 x 1	5 x 32 x 0,20	<b>51CM25</b>	8,90	19,50	12	110	25
5 x 1,5	5 x 24 x 0,26	<b>55CM</b>	10,30	13,30	19	150	100
5 x 1,5	5 x 24 x 0,26	<b>55CM25</b>	10,30	13,30	19	150	25

(A) Intensidad máxima a 40°C (A) - Maximum intensity at 40°C (A)



TEMPERATURA DE -15°C A 70°C  
 TEMPERATURE FROM -15°C TO 70°C  
 NORMA UNE 21031  
 STANDARD UNE 21031

# CABLE MANGUERA DE 6 Y 7 CONDUCTORES

## 6 & 7 WIRE MULTICORE CABLE



COLORES  
 COLORS

DESIGNACIÓN  
 DESIGNATION  
 05VV-F



COLORES  
 COLORS

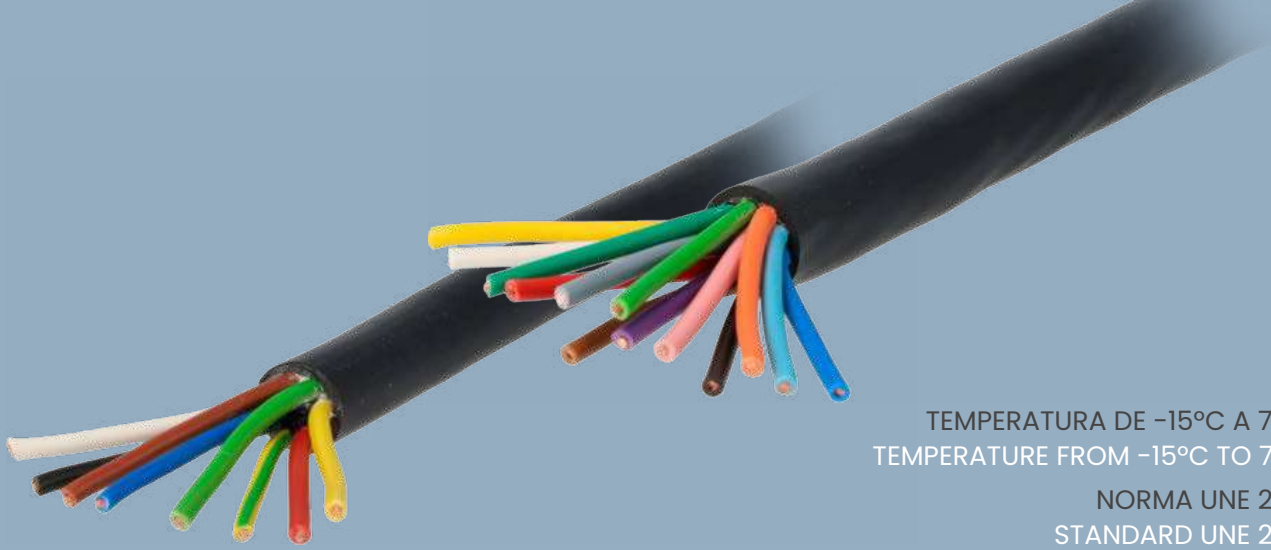
DESIGNACIÓN  
 DESIGNATION  
 05VV-F

SECCIÓN SECTION mm <sup>2</sup>	COMPOSICIÓN SPECIFICATION	REF.	Ø EXTERIOR mm <sup>2</sup>	Ω/km	A	g/m	ROLLO ROLL m
6 x 1	6 x 32 x 0,20	<b>61CM</b>	9,60	19,50	12	130	100
6 x 1	6 x 32 x 0,20	<b>61CM25</b>	9,60	19,50	12	130	25

SECCIÓN SECTION mm <sup>2</sup>	COMPOSICIÓN SPECIFICATION	REF.	Ø EXTERIOR mm <sup>2</sup>	Ω/km	A	g/m	ROLLO ROLL m
7 x 1	7 x 32 x 0,20	<b>71CM</b>	9,60	19,50	12	140	100
7 x 1	7 x 32 x 0,20	<b>71CM50</b>	9,60	19,50	12	140	50
7 x 1	7 x 32 x 0,20	<b>71CM25</b>	9,60	19,50	12	140	25
7 x 1,5	7 x 24 x 0,26	<b>75CM</b>	11,0	13,30	19	180	50
7 x 1,5	7 x 24 x 0,26	<b>75CM25</b>	11,0	13,30	19	180	25

Resistencia máxima a 20°C (Ω/km) - Maximum resistance at 20°C (Ω/km)





TEMPERATURA DE -15°C A 70°C  
 TEMPERATURE FROM -15°C TO 70°C  
 NORMA UNE 21031  
 STANDARD UNE 21031

# CABLE MANGUERA DE 8 Y 13 CONDUCTORES

## 8 & 13 WIRE MULTICORE CABLE

8

COLORES  
 COLORS



DESIGNACIÓN  
 DESIGNATION  
 05VV-F

8 x 1	8 x 32 x 0,20	<b>81CM50</b>	10,00	19,50	12	160	50
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13

COLORES  
 COLORS



DESIGNACIÓN  
 DESIGNATION  
 05VV-F

13 x 1	13 x 32 x 0,20	<b>13CM</b>	13,00	19,50	12	260	50
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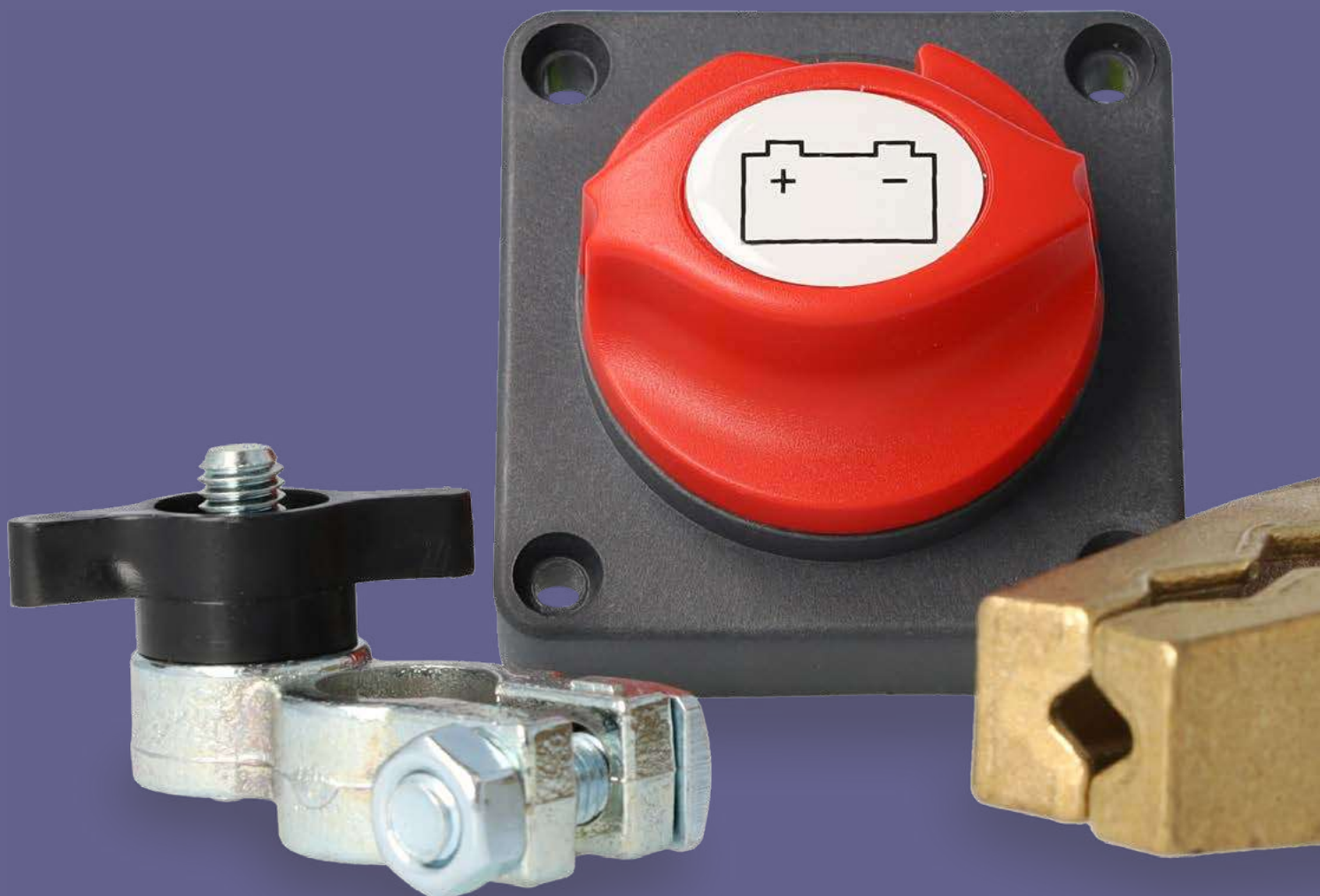
Intensidad máxima a 40°C (A) - Maximum intensity at 40°C (A)

# TERMINALES DE BATERÍA

## BATTERY TERMINALS

Terminales de batería, tipo francés, capuchones, desconectores de batería, cables de tenza, puentes de batería, pinzas de batería, cables de emergencia, etc.

Battery terminals, french type battery terminals, covers, battery disconnectors, braided ground straps, battery bridge leads, battery clamps, jumping leads, etc.





TB14

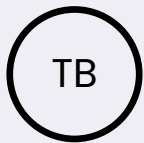


TB07



# TERMINALES DE BATERÍA TURISMO Y REFORZADO

## CAR & REINFORCED BATTERY TERMINALS



TURISMO  
CAR

REFORZADOS  
REINFORCED

CAPUCHONES  
CAPS

	POLARIDAD POLARITY	SECCIÓN SECTION mm <sup>2</sup>	REF.	g	mm	pcs	ACABADO PLATED
TURISMO CAR	+	16-35	<b>TB14A</b>	48	50	250	
	-	16-35	<b>TB17A</b>	49	50	250	
	+	16-35	<b>TB14</b>	60	50	250	
	-	16-35	<b>TB17</b>	63	50	250	
	+	25-50	<b>TBAA</b>	80	25	250	
	-	25-50	<b>TBBA</b>	82	25	250	
	+	25-50	<b>TBCA</b>	80	25	250	
	-	25-50	<b>TBDA</b>	82	25	250	
	+	25-50	<b>TBAE</b>	80	25	250	
	-	25-50	<b>TBBE</b>	82	25	250	
	+	25-50	<b>TBCE</b>	80	25	250	
	-	25-50	<b>TBDE</b>	82	25	250	
REFORZADOS REINFORCED	+	35-70	<b>TB07</b>	103	25	250	
	-	35-70	<b>TB08</b>	102	25	250	
	+	35-70	<b>TB07E</b>	103	25	250	
	-	35-70	<b>TB08E</b>	102	25	250	
CAPUCHONES CAPS	+	-	<b>CAP01</b>	20	10	200	PP
	-	-	<b>CAP02</b>	20	10	200	PP



### CAP01

Capuchón para TB07 - TB14  
Cover for TB07 - TB14



### CAP02

Capuchón para TB08 - TB17  
Cover for TB08 - TB17



TB14A



TB17A



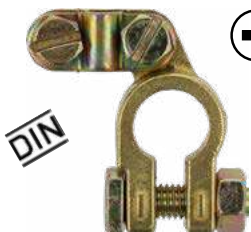
TB14



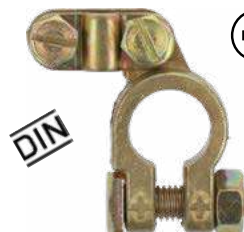
TB17



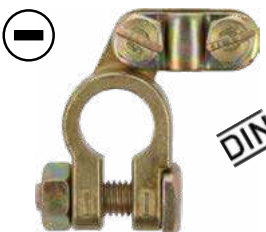
TBAA



TBBA



TBCA



TBDA



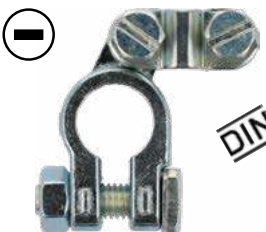
TBAE



TBBE



TBCE



TBDE



TB07



TB08



TB07E



TB08E

**DIN** Norma DIN - DIN Standard

Latón - Brass

Galvanizado - Galvanized

**PP** Polipropileno - Polypropylene





### CAP17

Capuchón para BS17  
Cover for BS17

### CAP18

Capuchón para BS18  
Cover for BS18



### CAP34

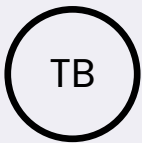
Capuchón para BS34  
Cover for BS34

### CAP35

Capuchón para BS35  
Cover for BS35

# TERMINALES DE BATERÍA DE CIERRE

## LOCK BATTERY TERMINALS



SIMPLE CIERRE  
SIMPLE LOCK



DOBLE CIERRE  
DOUBLE LOCK



CAPUCHONES  
CAPS

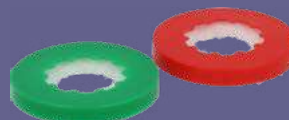
POLARIDAD POLARITY	SECCIÓN SECTION mm <sup>2</sup>	REF.	g			ACABADO PLATED
	25-35	<b>TB11</b>	58	25	250	
	25-35	<b>TB12</b>	58	25	250	
	35-50	<b>TB19</b>	76	25	250	
	35-50	<b>TB20</b>	73	25	250	
	16-25	<b>BS13</b>	64	50	250	
	16-25	<b>BS14</b>	63	50	250	
	35-50	<b>BS17</b>	76	50	250	
	35-50	<b>BS18</b>	75	50	250	
	70-95	<b>BS34</b>	142	25	150	
	70-95	<b>BS35</b>	137	25	150	
	-	<b>CAP17</b>	26	10	300	PVC
	-	<b>CAP18</b>	26	10	300	PVC
	-	<b>CAP34</b>	28	10	300	PVC
	-	<b>CAP35</b>	28	10	300	PVC

Latón - Brass Acero - Steel



### TB99

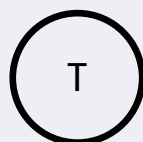
Limpiador de contactos y bornes de batería  
Battery terminal and contact cleaner



### TA50

Arandela antióxido  
Antioxidant washer

<b>BS11</b>	<b>BS12</b>	<b>BS19</b>	<b>BS20</b>
<b>BS13</b>	<b>BS14</b>	<b>BS17</b>	<b>BS18</b>
<b>BS34</b>	<b>BS35</b>	<b>TB99</b>	<b>TA50</b>



LIMPIADOR  
CLEANER

ARANDELA  
ANTICORROSIÓN  
ANTI-CORROSION  
WASHER

COLORES  
COLORS

REF.



g



MATERIAL  
MATERIAL

	<b>TB99</b>	152	1	1	
	<b>TA50</b>	4	50	500	PVC*

\*PVC y fibra de poliéster - PVC and polyester fiber



TR02



TR10

# TERMINALES DE BATERÍA TIPO FRANCÉS

## FRENCH TYPE BATTERY TERMINALS



TIPO FRANCÉS  
FRENCH TYPE

CASQUILLOS  
CAPS

POLARIDAD POLARITY	REF.	 g			ACABADO PLATED
	<b>TR02</b>	38	25	250	
	<b>TR03</b>	38	25	250	
	<b>TR04</b>	33	25	250	
	<b>TR05</b>	33	25	250	
	<b>TR06</b>	33	25	250	
	<b>TR09</b>	70	10	250	
	<b>TR10</b>	70	10	250	
	<b>TR11</b>	63	25	250	
	<b>TR12</b>	63	25	250	
	<b>TR13</b>	40	25	250	
	<b>TR14</b>	40	25	250	
	<b>TR09R</b>	16	10	1.000	
	<b>TR10R</b>	16	10	1.000	



TR13-TR14





**TR09R**

Casquillo para TR09  
Cap for TR09

**TR10R**

Casquillo para TR10  
Cap for TR10

 <p>TR02</p>	 <p>TR03</p>	 <p>TR04</p>	 <p>TR05</p>
 <p>TR06</p>	 <p>TR09</p>	 <p>TR10</p>	 <p>TR11</p>
 <p>TR12</p>	 <p>TR13</p>	 <p>TR14</p>	 <p>TR09R / TR10R</p>

■ Latón - Brass   
 ■ Galvanizado - Galvanized   
 ■ Estañado - Tinned



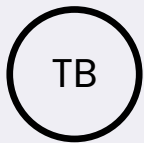
TB09



TB30

# TERMINALES DE BATERÍA RECTOS Y TUBULARES

## IN-LINE & TUBULAR BATTERY TERMINALS



RECTOS  
IN-LINE

TUBULARES  
TUBULAR

POLARIDAD POLARITY	SECCIÓN SECTION mm <sup>2</sup>	REF.	g			ACABADO PLATED
+	25-50	<b>TB09</b>	72	50	250	
-	25-50	<b>TB10</b>	72	50	250	
+	70-120	<b>TB29</b>	149	25	250	
-	70-120	<b>TB30</b>	149	25	250	
+	16-35	<b>TB61</b>	80	25	250	
-	16-35	<b>TB62</b>	86	25	250	
+	50-95	<b>TB63</b>	103	25	250	
-	50-95	<b>TB64</b>	106	25	250	
+	50	<b>TB65</b>	65	25	250	
-	50	<b>TB66</b>	70	25	250	





**TB63**



**TB66**



**TB09**



**TB10**



**TB29**



**TB30**



**TB61**



**TB62**



**TB63**



**TB64**



**TB65**



**TB66**

Latón - Brass
  Estañado - Tinned



MAI NUEVO here  
TB70R



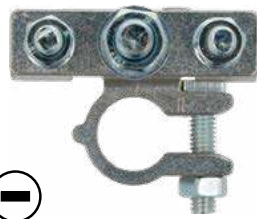
MAI NUEVO here  
TB71N

# TERMINALES DE BATERÍA ESPECÍFICOS

## SPECIFIC BATTERY TERMINALS



TB70



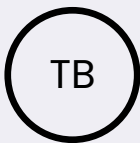
TB71



TB73



TB74



3 CONEXIONES  
3 CONNECTIONS

DOBLE PLETINA  
DOUBLE BASE

POLARIDAD POLARITY	TUERCA SCREW	REF.	g			ACABADO PLATED
	M6-M8-M6	<b>TB70</b>	70	10	250	
	M6-M8-M6	<b>TB71</b>	70	10	250	
	M5-M8-M5	<b>TB70R</b>	75	10	250	
	M5-M8-M5	<b>TB71N</b>	74	10	250	
SECCIÓN SECTION						
	25-70	<b>TB73</b>	129	10	250	
	25-70	<b>TB74</b>	129	10	250	

Latón - Brass Estañado - Tinned



### TB15R - TB16R

Adaptador de japonés a estándar  
Japanese to standard adapter

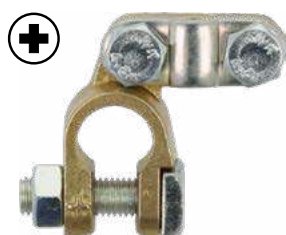


### TB13 - TB18

Adaptador estándar a japonés  
Standard to japanese adapter

# TERMINALES DE BATERÍA TIPO JAPONÉS

## JAPANESE TYPE BATTERY TERMINALS



TB15



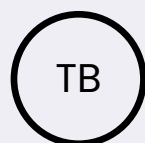
TB16



TB15E



TB16E



### TIPO JAPONÉS JAPANESE TYPE

### ADAPTADORES ADAPTERS

	POLARIDAD POLARITY	SECCIÓN SECTION mm <sup>2</sup>	REF.	g			ACABADO PLATED
	+	25-50	<b>TB15</b>	57	25	250	
	-	25-50	<b>TB16</b>	58	25	250	
	+	25-50	<b>TB15E</b>	57	25	250	
	-	25-50	<b>TB16E</b>	58	25	250	
	+	-	<b>TB15R</b>	11	25	25	
	-	-	<b>TB16R</b>	9	25	25	
	+	-	<b>TB13</b>	91	10	10	
	-	-	<b>TB18</b>	86	10	10	



TB25



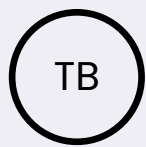
TB38



TB45

# TERMINALES DE BATERÍA TIPO MAN Y CON ESPÁRRAGO

## BATTERY TERMINALS MAN TYPE & WITH STUD BOLT



TIPO MAN  
MAN TYPE

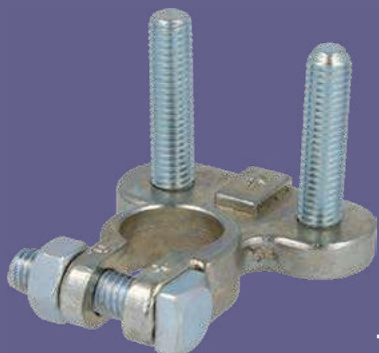
SIN PALOMILLA  
WITHOUT WING

PARA FUSIBLE FB  
FOR FB FUSE

CON PALOMILLA  
WITH WING

	POLARIDAD POLARITY	TUERCA SCREW	REF.	g			ACABADO PLATED
TIPO MAN MAN TYPE	+	M12	<b>TB25</b>	106	25	250	
	-	M10	<b>TB26</b>	98	25	250	
SIN PALOMILLA WITHOUT WING	+	M6	<b>TB38</b>	103	25	250	
	-	M6	<b>TB39</b>	103	25	250	
	+	M8	<b>TB41</b>	105	25	250	
	-	M8	<b>TB42</b>	105	25	250	
	+	M10	<b>TB43</b>	107	25	250	
	-	M10	<b>TB44</b>	107	25	250	
PARA FUSIBLE FB FOR FB FUSE	+	M8	<b>TB40</b>	99	10	250	
	+	2 x M8	<b>TB50</b>	125	10	250	
CON PALOMILLA WITH WING		M6	<b>TB21</b>	47	25	150	
		M6	<b>TB22</b>	52	25	150	
		M8	<b>TB45</b>	98	25	250	
		M8	<b>TB46</b>	97	25	250	
		M8	<b>TB47</b>	97	25	250	

MONTAJE SUGERIDO  
SUGGESTED MOUNTING



TB50

TU01  
Tuerca aislada  
Isolated nut



Terminal tubular  
Tubular terminal

FB200

TB40



<p>TB25</p>	<p>TB26</p>	<p>TB38</p>	<p>TB39</p>
<p>TB41</p>	<p>TB42</p>	<p>TB43</p>	<p>TB44</p>
<p>TB21</p>	<p>TB22</p>	<p>TB45</p>	<p>TB46</p>
<p>TB47</p>	<p>M8</p> <p>TU01</p>		

Galvanizado - Galvanized





TF01



**TF03**

Adaptador para TF01, TF01E  
Adapter for TF01, TF01E

**TF04**

Adaptador para TF02, TF02E  
Adapter for TF02, TF02E

# TERMINALES DE BATERÍA TIPO FORD

## FORD TYPE BATTERY TERMINALS



TF01



TF02



TF01E



TF02E



TIPO FORD  
FORD TYPE

ADAPTADORES  
ADAPTERS

POLARIDAD POLARITY	REF.	g			ACABADO PLATED
+	<b>TF01</b>	50	10	250	
-	<b>TF02</b>	47	10	250	
+	<b>TF01E</b>	50	25	250	
-	<b>TF02E</b>	47	25	250	
+	<b>TF03</b>	27	50	50	
-	<b>TF04</b>	20	50	50	

Latón - Brass Galvanizado - Galvanized Emplomado - Leaded Estañado - Tin

Adaptadores para bornes de batería AGM o GEL. Para baterías que tienen conexión de tornillo y sin tornillo.

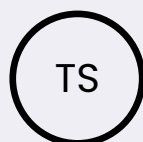
Adapters for AGM or GEL battery terminals. For batteries that have screw connection and without screw.



TS04

# ADAPTADORES DE BATERÍA SOLAR

## SOLAR BATTERY ADAPTERS



ADAPTADORES  
ADAPTERS

POLARIDAD POLARITY	TUERCA SCREW	REF.					ACABADO PLATED
				g			
+	M6	<b>TS01E</b>		57	10	200	■
-	M6	<b>TS02E</b>		52	10	200	■
+	M8	<b>TS03</b>		63	10	200	■
-	M8	<b>TS04</b>		58	10	200	■
+	M8	<b>TS03E</b>		60	10	200	■
-	M8	<b>TS04E</b>		55	10	200	■



TB85



TB88



# INTERRUPTORES DE BATERÍA

## BATTERY DISCONNECT SWITCHES

TB

INTERRUPTORES  
ON-OFF  
ON-OFF SWITCHES

INTENSIDAD INTENSITY A	TUERCA SCREW	TAPA COVER	REF.				ACABADO PLATED
200 (max. 1000)	M10 x 2	✓	<b>TB83</b>	x 1	207	1	
200 (max. 1000)	M10 x 2	-	<b>TB84</b>	x 1	165	1	
200 (max. 1000)	M8 x 3	✓	<b>TB85</b>	x 2	203	1	
600 (max. 2500)	M12 x 2	-	<b>TB87</b>	x 1	420	1	



INTERRUPTORES  
SWITCHES

100 (max. 500)	M8 x 2	-	<b>TB75</b>	1	144	50	
100 (max. 500)	M10 x 2	-	<b>TB76</b>	1	166	50	
200 (max. 500)	M8 x 2	-	<b>TB79</b>	1	278	200	
200 (max. 500)	M10 x 2	-	<b>TB80</b>	1	240	200	
250 (max. 2500)	M10 x 2	-	<b>TB86</b>	1	503	50	
200	M10	-	<b>TB88</b>	1	192	100	

TC

INTERRUPTORES  
SWITCHES

150	M10 x 2	-	<b>TC04</b>	1	22	50	
250	M10 x 2	-	<b>TC06</b>	1	56	20	
350	M10 x 2	-	<b>TC07</b>	1	71	20	
350	M10 x 2 + M6 x 1	-	<b>TC08</b>	1	78	20	
250	M10 x 2	-	<b>TC09</b>	1	535	100	

Bateria - Battery



TC04



TC09



TB83



TB84



TB85



TB87



TB75



TB76



TB79



TB80



TB86



TB88



TC04



TC06



TC07



TC08



TC09

Latón - Brass
  Galvanizado - Galvanized
  Estañado - Tinned



TB03



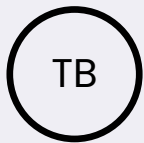
TB05



TB06

# DESCONECTADORES DE BATERÍA

## BATTERY DISCONNECTORS



ENGANCHERÁPIDO  
EASY CLICK

CON ROSCA  
WITH THREAD

POLARIDAD POLARITY	REF.	g			ACABADO PLATED
	TB03	156	5	100	
	TB04	161	5	100	
	TB05	133	10	50	
	TB06	132	10	50	
	TB72	119	10	100	
	TB72N	119	10	100	
-	TB77	155	5	50	
-	TB78	37	5	50	
	TB81	115	5	125	
	TB82	116	5	125	





TB72



TB72N



TB78



TB03



TB04



TB05



TB06



TB72



TB72N



TB77



TB78



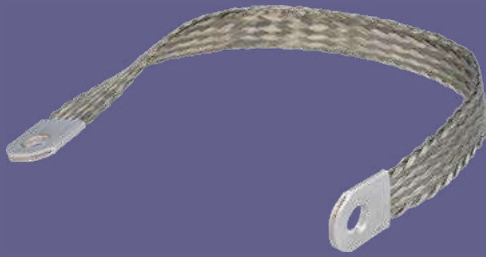
TB81



TB82



Latón - Brass
  Galvanizado - Galvanized
  Estañado - Tin



MF20



MN25

# CABLES DE TRENZA

## BRAIDED GROUND STRAPS



Cable trenzado plano con terminal, de cobre y cobre estañado, de muy alta calidad y cumplen con todas las normativas exigidas por el mercado. Las terminaciones son variables en función de las necesidades de nuestro cliente igual que el ancho y largo del cable.

Flat braided cable with terminal, made of copper and tinned copper, of very high quality and complying with all the regulations required by the market. The terminations are variable depending on the needs of our customer as well as the width and length of the cable.

**CT01**

Rollo de trenza  
Braided ground strap roll



**COMPOSICIÓN**  
**SPECIFICATION**  
376 x 0,25 mm.



**ROLLO**  
**ROLL**

SECCIÓN SECTION mm <sup>2</sup>	LONGITUD LENGTH cm	REF. 	REF. 	Ø TALADRO Ø DRILL mm	
20	20	<b>MF20</b>	<b>MN20</b>	11	10
20	25	<b>MF25</b>	<b>MN25</b>	11	10
20	30	<b>MF30</b>	<b>MN30</b>	11	10
20	35	<b>MF35</b>	<b>MN35</b>	11	10
20	40	<b>MF40</b>	<b>MN40</b>	11	10
20	45	<b>MF45</b>	<b>MN45</b>	11	10
20	50	<b>MF50</b>	<b>MN50</b>	11	10
20	55	<b>MF55</b>	<b>MN55</b>	11	10
20	60	<b>MF60</b>	<b>MN60</b>	11	10
mm <sup>2</sup>	m	REF.			 m
20	50	<b>CT01</b>		-	50



Conexión simple positiva  
Positive simple connection



Conexión en serie  
Serial connection



Conexión simple negativa  
Negative simple connection



Conexión mixta  
Mixed connection

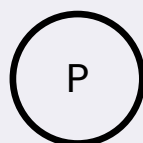
# PUENTES DE BATERÍA

## BATTERY BRIDGE LEADS



PK35

Kit de puentes de batería  
Battery bridge leads kit



CONEXIÓN SIMPLE  
SIMPLE  
CONNECTION

POLARIDAD POLARITY	SECCIÓN SECTION mm <sup>2</sup>	REF.	LONGITUD LENGTH cm	
+	50	PP04	25	2
+	50	PP05	30	2
+	50	PP06	35	2
-	50	PN04	25	2
-	50	PN05	30	2
-	50	PN06	35	2

CONEXIÓN SERIE  
SERIAL  
CONNECTION

+ -	50	PS04	25	2
+ -	50	PS05	30	2
+ -	50	PS06	35	2
+ -	50	PS10	40	2

CONEXIÓN MIXTA  
MIX  
CONNECTION

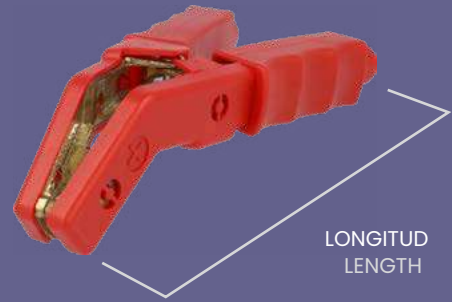
+ -	50	PM04	25	2
+ -	50	PM05	30	2
+ -	50	PM06	35	2

KITS

+ -	35	PK35	30	5
+ -	50	PK50	30	5

Pinzas de batería de alta calidad y versatilidad, revestidas tanto en acero como latón, con o sin trenza. Cuerpo de alta resistencia que garantiza la protección contra la electrocución. Diseñadas para un excelente acoplamiento tanto alrededor de los polos de la batería como en cualquier tipo de terminal.

High quality and versatile battery clamps, coated in both steel and brass, with or without braid. Highly resistant body that guarantees protection against electrocution. Designed for excellent coupling around the battery poles in any type of terminal.



# PINZAS DE BATERÍA

## BATTERY CLAMPS



DE LATÓN  
BRASS



AISLADA DE LATÓN  
ISULATED BRASS



AISLADA DE LATÓN  
CON TRENZA  
ISULATED BRASS  
WITH BRAID

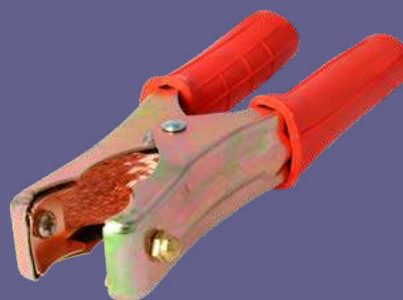


SECCIÓN SECTION mm <sup>2</sup>	POLARIDAD POLARITY	INTENSIDAD INTENSITY A	REF.	LONGITUD LENGTH cm	g	ACABADO PLATED
16-25		500	<b>PB200R</b>	14,5	160	
16-25		500	<b>PB200N</b>	14,5	160	
35-50		700	<b>PB400R</b>	17	315	
35-50		700	<b>PB400N</b>	17	315	
50-95		1.000	<b>PB500R</b>	20	557	
50-95		1.000	<b>PB500N</b>	20	557	
16-25		650	<b>PB270R</b>	17,5	275	
16-25		650	<b>PB270N</b>	17,5	275	
35-50		850	<b>PB470R</b>	20	521	
35-50		850	<b>PB470N</b>	20	521	
25-50		850	<b>PB402R</b>	18,5	224	
25-50		850	<b>PB402N</b>	18,5	224	

6 u.

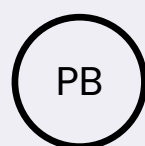
Las pinzas de latón con trenza existen en ambos colores individualmente, en rojo, ref. PB402R y en negro, ref. PB402N. Ambas requieren de montaje ya que se sirve la trenza por separado.

The insulated brass battery clamps with braid exist in both colors individually, in red, ref. PB402R and in black, ref. PB402N. Both require assembling as the braid is provided separately.



Las pinzas de batería de acero con trenza ofrecen un mejor conductividad.

The steel battery clamps with braid offer better conductivity.



**COCODRILO  
CROCODILE**



**DE ACERO  
STEEL**

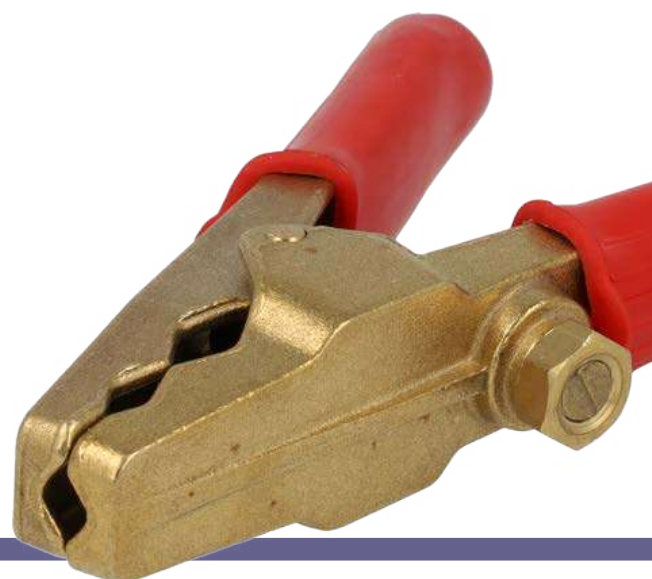


**ACERO CON  
TRENZA  
STEEL WITH  
BRAID**



SECCIÓN SECTION mm <sup>2</sup>	POLARIDAD POLARITY	INTENSIDAD INTENSITY A	REF.	LONGITUD LENGTH cm	g	ACABADO PLATED
16-25		600	<b>PB290R</b>	16,5	360	
16-25		600	<b>PB290N</b>	16,5	360	
35-50		800	<b>PB490R</b>	17	475	
35-50		800	<b>PB490N</b>	17	475	
10-16		80	<b>PB150R</b>	12,0	52	
10-16		80	<b>PB150N</b>	12,0	52	
35-50		400	<b>PB250R</b>	20,5	280	
35-50		400	<b>PB250N</b>	20,5	280	

6 u. Latón - Brass Acero - Steel







PC325



PC535



# CABLES DE EMERGENCIA

## JUMPING LEADS

Cables de emergencia para arranque de baterías con cables de cobre y aluminio flexible de 25, 35 y 50 mm<sup>2</sup>. Apto para baterías de 12V y 24V.

Jumping leads with flexible copper and aluminium cables of 25, 35 and 50 mm<sup>2</sup>. Suitable for 12V and 24V batteries.



PC325		PC335		PC350 / PC550	
GASOLINA	DIESEL	GASOLINA	DIESEL	GASOLINA	DIESEL
	-				



CABLES DE EMERGENCIA  
JUMPING LEADS

SECCIÓN SECTION mm <sup>2</sup>	INTENSIDAD INTENSITY A	REF.	LONGITUD LENGTH m	kg		INTERIOR INTERIOR
25	220	PC325	3	1,36	1	
35	400	PC335	3	2,10	1	
50	600	PC350	3	2,31	1	
50	600	PC550	5	3,00	1	
35	800	PC535	5	7,00	1	

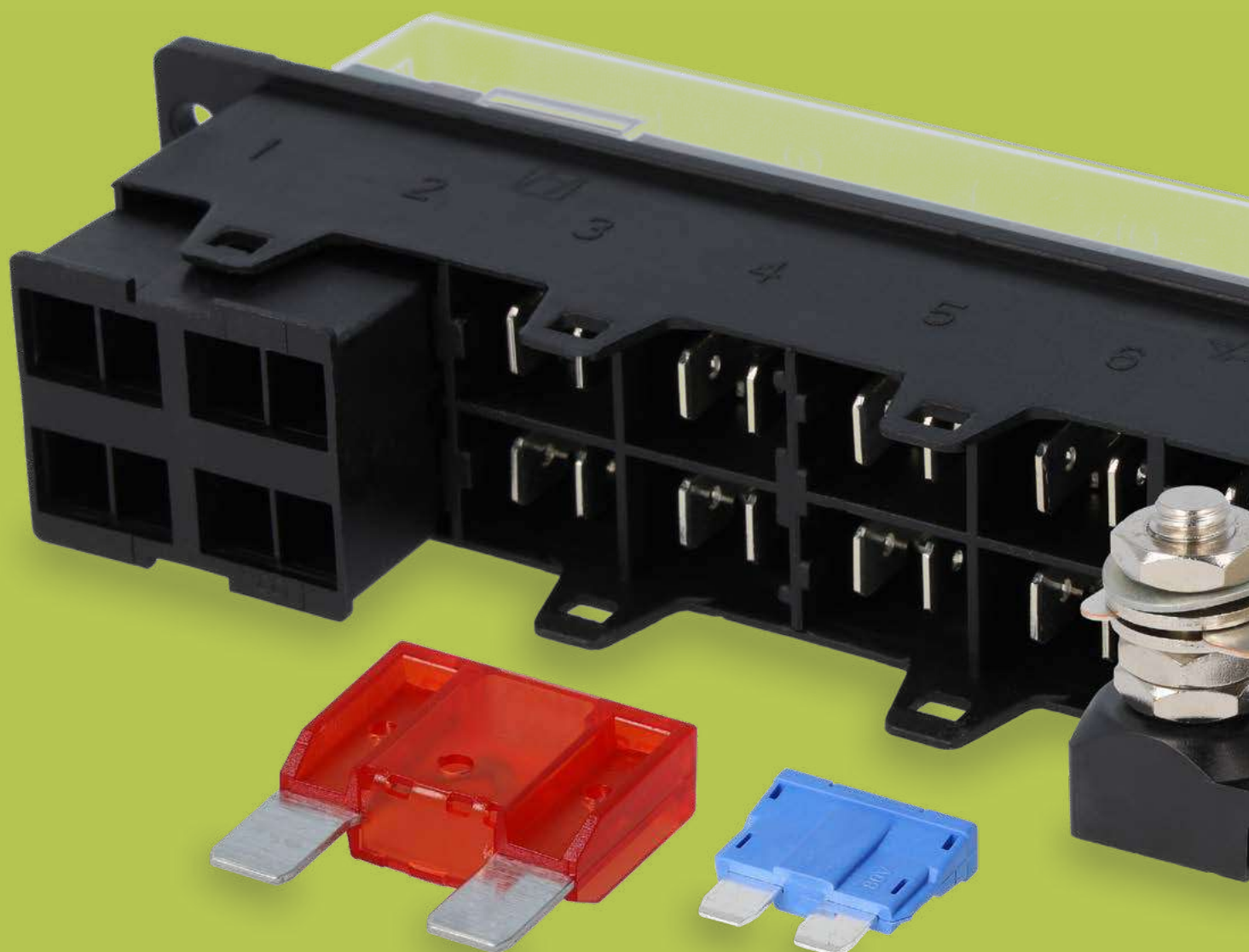
Aluminio - Aluminium Cobre - Copper

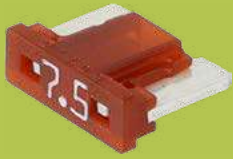
# FUSIBLES Y PORTAFUSIBLES

## FUSES & FUSE HOLDERS

Fusibles, disyuntores térmicos, portafusibles, kits y complementos, etc.

Fuses, circuit breakers, fuse holders, kits and accessories, etc.





**FC** Fusible Micro 1  
Micro 1 blade fuse



**FC2** Fusible Micro 2  
Micro 2 blade fuse



**FC3** Fusible Micro 3  
Micro 3 blade fuse

# FUSIBLES MICRO

## MICRO BLADE FUSES



V 58V

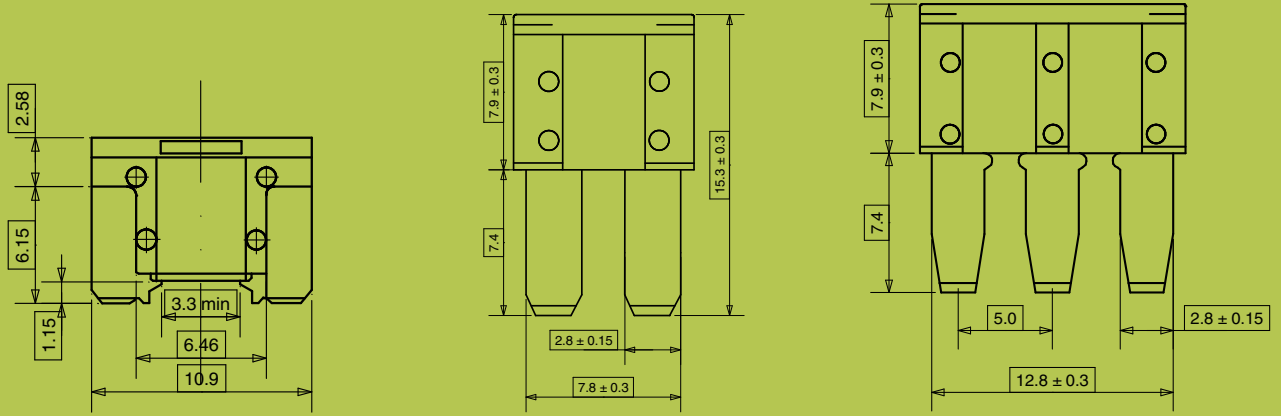
NORMA  
STANDARD  
JASO



V 32V

NORMA  
STANDARD  
ISO 8820

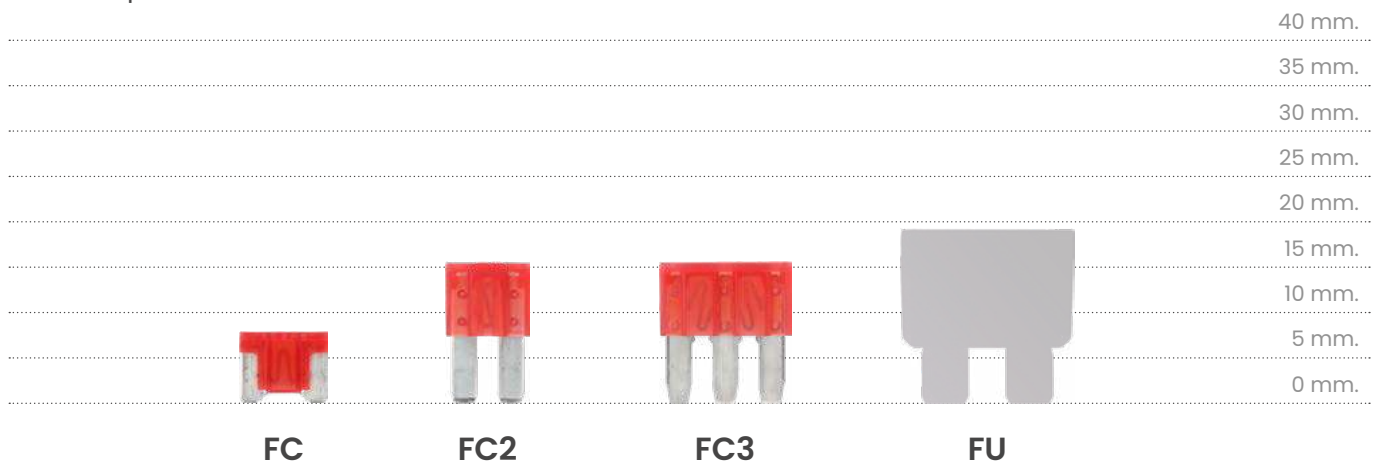
COLOR COLOR	A	REF.		
	2	<b>FC02</b>	10	1.000
	3	<b>FC03</b>	10	1.000
	4	<b>FC04</b>	10	1.000
	5	<b>FC05</b>	10	1.000
	7,5	<b>FC75</b>	10	1.000
	10	<b>FC10</b>	10	1.000
	15	<b>FC15</b>	10	1.000
	20	<b>FC20</b>	10	1.000
	25	<b>FC25</b>	10	1.000
	30	<b>FC30</b>	10	1.000
	5	<b>FC205</b>	10	1.000
	7,5	<b>FC275</b>	10	1.000
	10	<b>FC210</b>	10	1.000
	15	<b>FC215</b>	10	1.000
	20	<b>FC220</b>	10	1.000
	25	<b>FC225</b>	10	1.000
	30	<b>FC230</b>	10	1.000



Medidas Micro 1 - Micro 1 measures		Medidas Micro 2 - Micro 2 measures		Medidas Micro 3 - Micro 3 measures	
Altura - Height	8,7 mm.	Altura - Height	15,3 mm.	Altura - Height	15,3 mm.
Ancho - Width	10,9 mm.	Ancho - Width	9,1 mm.	Ancho - Width	12,8 mm.

## COMPARATIVA TAMAÑO - FUSIBLES MICRO Y FUSIBLE ESTÁNDAR

Size comparison - Micro blade fuse & Standard blade fuse

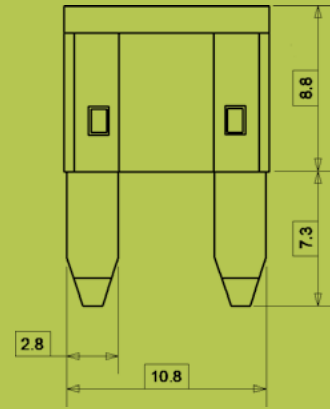


FC3		COLOR COLOR	A	REF.		
V	32V		5	<b>FC305</b>	10	1.000
			7,5	<b>FC375</b>	10	1.000
			10	<b>FC310</b>	10	1.000
			15	<b>FC315</b>	10	1.000

**NORMA  
STANDARD**  
ISO 8820



FM Fusible Mini  
Mini blade fuse



# FUSIBLES MINI Y FUSIBLES ESTÁNDAR

## MINI & STANDARD BLADE FUSES

Fusibles Mini y Estándar de cuerpo transparente, contruidos de una sola pieza y con materiales auto extingüibles codificados por colores.

Mini and Standard fuses with transparent body, built in one piece and with color-extinguishing materials coded by color.

### Medidas Mini - Mini measures

Altura - Height	16,1 mm.
Ancho - Width	10,8 mm.

### Medidas Estándar - Standard measures

Altura - Height	19,2 mm.
Ancho - Width	19,2 mm.



V 32V

### NORMAS STANDARDS

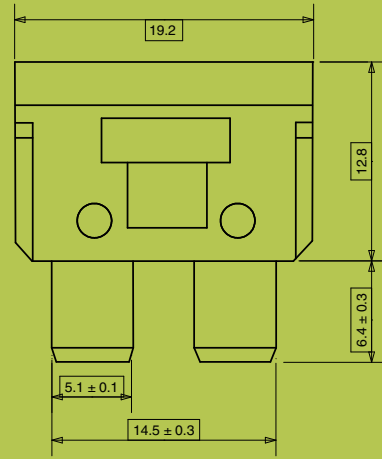
DIN ISO 8820-3,  
JASO D612, SAE  
J2077

COLOR COLOR	A	REF.		
	1	<b>FM01</b>	10	200
	2	<b>FM02</b>	100	2.000
	3	<b>FM03</b>	100	2.000
	4	<b>FM04</b>	100	2.000
	5	<b>FM05</b>	100	2.000
	7,5	<b>FM75</b>	100	2.000
	10	<b>FM10</b>	100	2.000
	15	<b>FM15</b>	100	2.000
	20	<b>FM20</b>	100	2.000
	25	<b>FM25</b>	100	2.000
	30	<b>FM30</b>	100	2.000



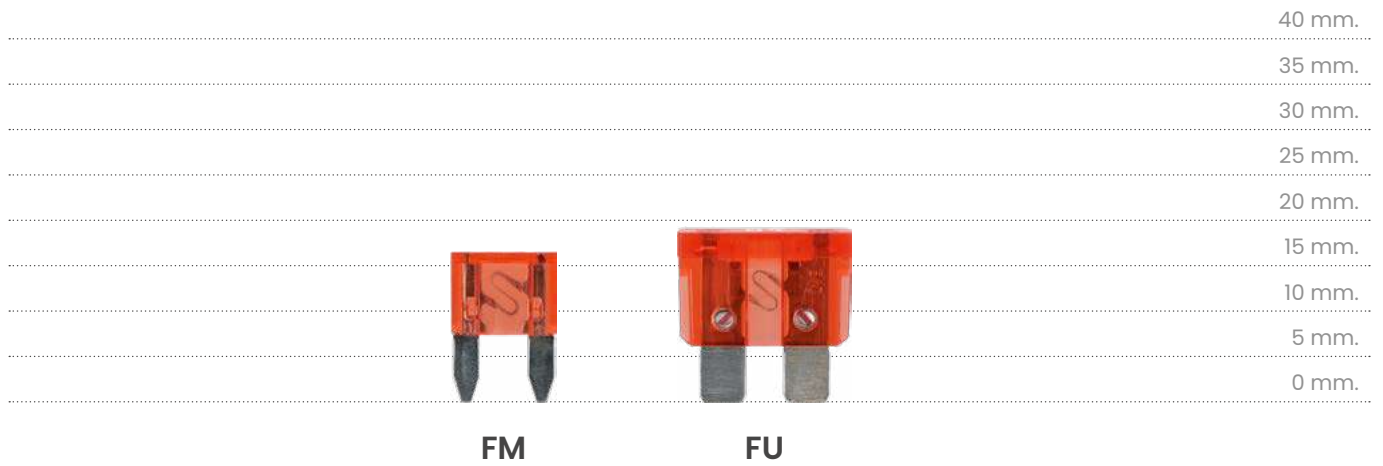


**FU** Fusible Estándar  
Standard blade fuse



## COMPARATIVA TAMAÑO - FUSIBLES MINI Y FUSIBLE ESTÁNDAR

Size comparison - Mini blade fuse & Standard blade fuse

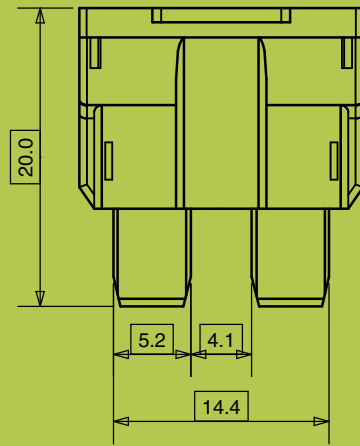


		COLOR COLOR	A	REF.	
<div style="border: 1px solid black; border-radius: 50%; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin: 0 auto;"> <span style="font-size: 24px; font-weight: bold;">FU</span> </div> V 32V		<span style="color: black;">●</span>	1	<b>FU01</b>	100 2.000
		<span style="color: gray;">●</span>	2	<b>FU02</b>	100 2.000
		<span style="color: purple;">●</span>	3	<b>FU03</b>	100 2.000
		<span style="color: pink;">●</span>	4	<b>FU04</b>	100 2.000
		<span style="color: orange;">●</span>	5	<b>FU05</b>	100 2.000
		<span style="color: brown;">●</span>	7,5	<b>FU75</b>	100 2.000
		<span style="color: red;">●</span>	10	<b>FU10</b>	100 2.000
		<span style="color: blue;">●</span>	15	<b>FU15</b>	100 2.000
		<span style="color: yellow;">●</span>	20	<b>FU20</b>	100 2.000
		<span style="color: white;">○</span>	25	<b>FU25</b>	100 2.000
		<span style="color: green;">●</span>	30	<b>FU30</b>	100 2.000
		<span style="color: darkblue;">●</span>	35	<b>FU35</b>	100 2.000
		<span style="color: orange;">●</span>	40	<b>FU40</b>	100 2.000

**NORMAS  
STANDARDS**  
DIN ISO 8820-3,  
JASO D612, SAE  
J1284



**FU80** Fusible Estándar 80V  
Standard 80V blade fuse



# FUSIBLES ESTÁNDAR 80V Y FUSIBLES MAXI

## STANDARD 80V & MAXI BLADE FUSES

Fusibles para aplicaciones específicas, contruidos de una sola pieza y con materiales auto extingüibles codificados por colores.

Fuses for specific applications, built in one piece and and with color-extinguishing materials coded by color.

Medidas Estándar 80V - Standard 80V measures

Altura - Height 20 mm.

Ancho - Width 19 mm.

Medidas Maxi - Maxi measures

Altura - Height 34,1 mm.

Ancho - Width 29,5 mm.



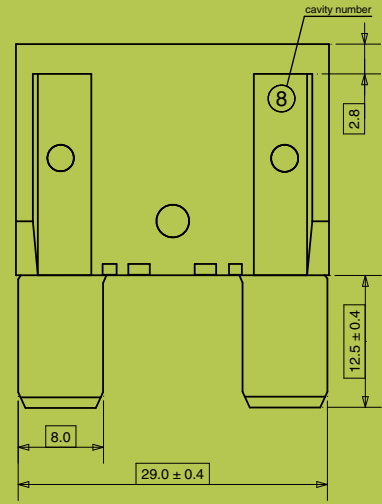
V 80V

NORMA  
STANDARD  
ISO 8820

COLOR COLOR	A	REF.		
●	1	<b>FU8001</b>	10	100
●	2	<b>FU8002</b>	10	100
●	3	<b>FU8003</b>	10	100
●	4	<b>FU8004</b>	10	100
●	5	<b>FU8005</b>	10	100
●	7,5	<b>FU8075</b>	10	100
●	10	<b>FU8010</b>	10	100
●	15	<b>FU8015</b>	10	100
●	20	<b>FU8020</b>	10	100
○	25	<b>FU8025</b>	10	100
●	30	<b>FU8030</b>	10	100
●	40	<b>FU8040</b>	10	100

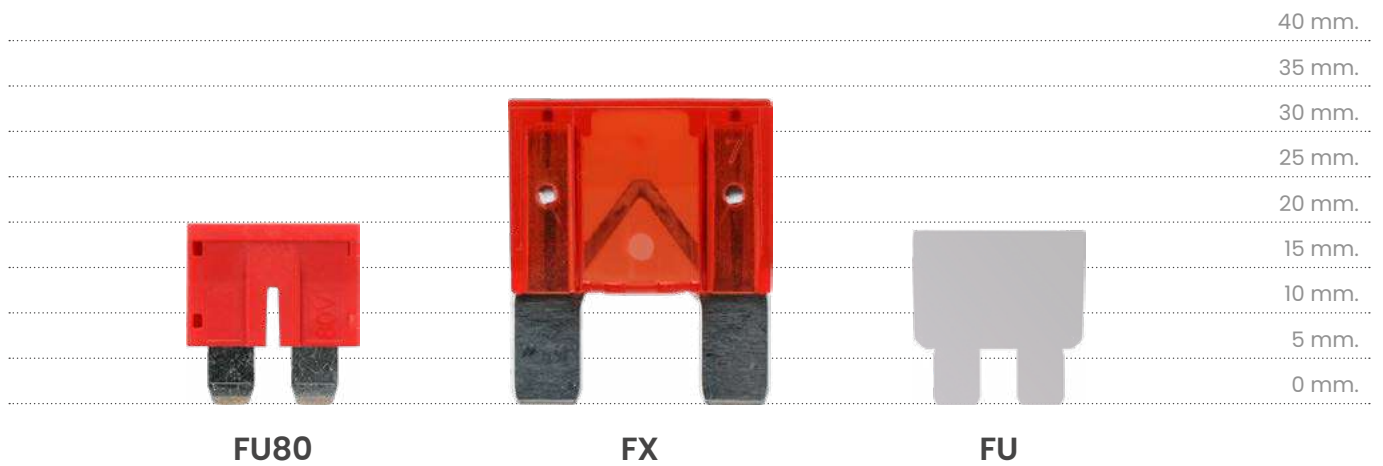


**FX** Fusible Maxi  
Maxi blade fuse



### COMPARATIVA TAMAÑO - FUSIBLE ESTÁNDAR 80V, FUSIBLES MAXI Y FUSIBLE ESTÁNDAR

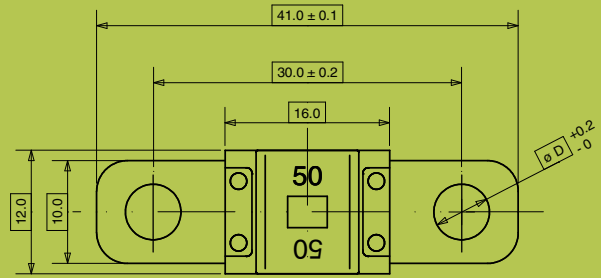
Size comparison - Standard 80V blade fuse, Maxi blade fuse & Standard blade fuse



		COLOR	A	REF.		
		COLOR				
<b>V</b> 32V  <b>NORMAS STANDARDS</b> DIN ISO 8820-3, SAE J1888		20	<b>FX20</b>	25	800	
		25	<b>FX25</b>	25	800	
		30	<b>FX30</b>	25	800	
		40	<b>FX40</b>	25	800	
		50	<b>FX50</b>	25	800	
		60	<b>FX60</b>	25	800	
		70	<b>FX70</b>	25	800	
		80	<b>FX80</b>	25	800	
		100	<b>FX100</b>	25	800	



**MD** Fusible Midi  
Midi bolt-down fuse



# FUSIBLES MIDI Y FUSIBLES MEGA

## MIDI & MEGA BOLT-DOWN FUSES

Fusibles fabricados con carcasa PA6T, resistente al calor y a los productos químicos. Hojas rígidas de aleación de cobre enchapadas en SN-Plata. Agujeros de conexión Midi: M5, M6 y Mega: M8.

Fuses manufactured with PA6T housing, heat and chemical resistant. Rigid SN-Plated copper alloy blades. Connection holes, Midi: M5, M6 and Mega: M8.

Medidas Midi - Midi bolt-down fuse measures

Altura - Height	12 mm.
Ancho - Width	41 mm.

Medidas Mega - Mega bolt-down fuse measures

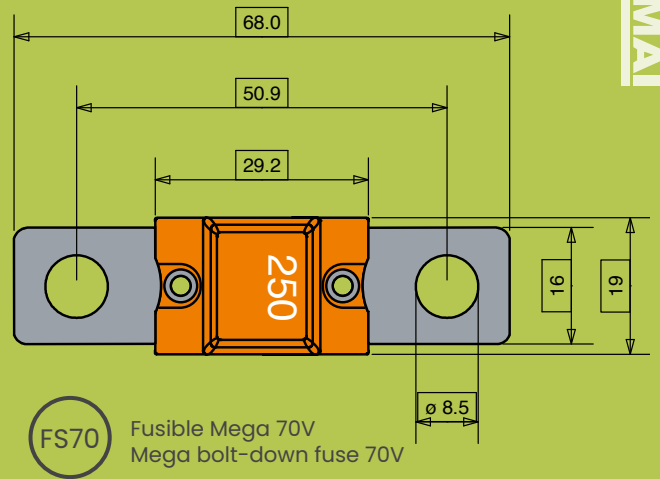
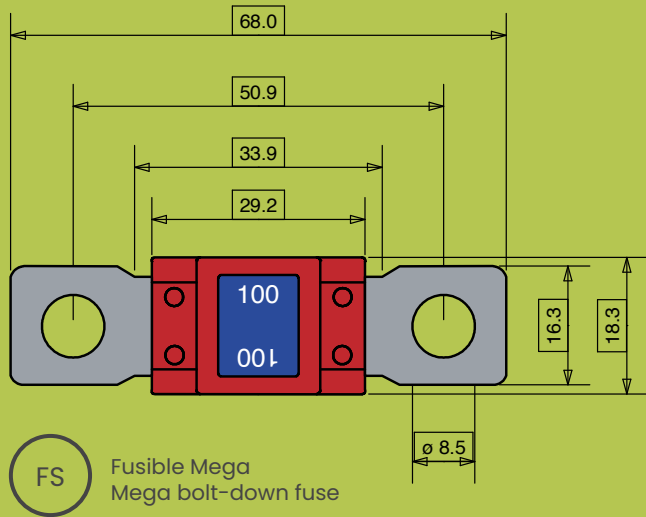
Altura - Height	18,3 mm.
Ancho - Width	68 mm.



V 58V

**NORMAS STANDARDS**  
ISO 8820-5  
JASO D612

COLOR COLOR	A	M5	M6		
	30	<b>MD30</b>	<b>MD30M6</b>	5	1.000
	40	<b>MD40</b>	<b>MD40M6</b>	5	1.000
	50	<b>MD50</b>	<b>MD50M6</b>	5	1.000
	60	<b>MD60</b>	<b>MD60M6</b>	5	1.000
	70	<b>MD70</b>	<b>MD70M6</b>	5	1.000
	80	<b>MD80</b>	<b>MD80M6</b>	5	1.000
	100	<b>MD100</b>	<b>MD100M6</b>	5	1.000
	125	<b>MD125</b>	<b>MD125M6</b>	5	1.000
	150	-	<b>MD150</b>	5	1.000
	175	-	<b>MD175</b>	5	1.000
	200	-	<b>MD200</b>	5	1.000

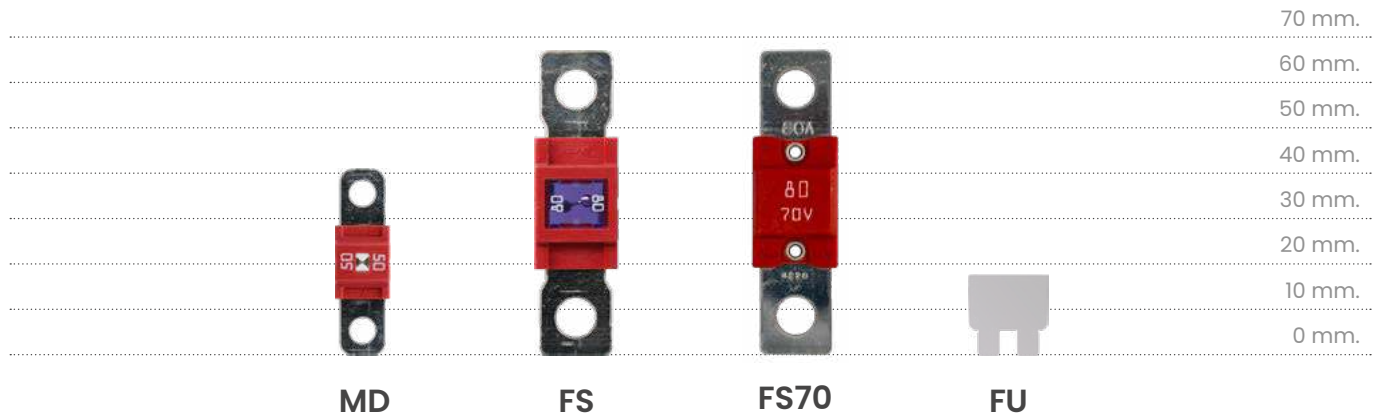


**FS** Fusible Mega  
Mega bolt-down fuse

**FS70** Fusible Mega 70V  
Mega bolt-down fuse 70V

### COMPARATIVA TAMAÑO - FUSIBLES MADI, FUSIBLES MEGA Y FUSIBLE ESTÁNDAR

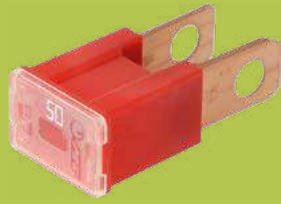
Size comparison - Midi bolt-down fuse, Mega bolt-down fuse & Standard blade fuse



FS	COLOR COLOR	A	V 32V		V 70V		📦
			📦	📦	📦	📦	
<b>NORMA STANDARD</b> ISO 8820-5, JASO D612 ISO 20934	●	60	<b>FS60</b>	5	-	-	-
	●	80	<b>FS80</b>	5	<b>FS7080</b>	2	200
	●	100	<b>FS100</b>	5	<b>FS70100</b>	2	200
	●	125	<b>FS125</b>	5	<b>FS70125</b>	2	200
	●	150	<b>FS150</b>	5	<b>FS70150</b>	2	200
	○	175	<b>FS175</b>	5	<b>FS70175</b>	2	200
	●	200	<b>FS200</b>	5	<b>FS70200</b>	2	200
	●	225	<b>FS225</b>	5	<b>FS70225</b>	2	200
	●	250	<b>FS250</b>	5	<b>FS70250</b>	2	200
	●	300	<b>FS300</b>	5	<b>FS70300</b>	2	200
	●	350	<b>FS350</b>	5	<b>FS70350</b>	2	200
	●	400	<b>FS400</b>	5	<b>FS70400</b>	2	200
	●	450	<b>FS450</b>	5	<b>FS70450</b>	2	200
	●	500	<b>FS500</b>	5	<b>FS70500</b>	2	200

FS350=Cal. 1 / FS400=Cal. 2 / FS450=Cal. 3 / FS500=Cal. 4





PL Fusible PAL hembra  
PAL female Fuse

PL Fusible PAL macho  
PAL male fuse

PL Fusible PAL clip hembra  
PAL locking female fuse

PL Fusible PAL clip macho  
PAL locking male fuse

# FUSIBLES PAL Y PAL CLIP

## PAL AUTO LINK FUSES



HEMBRA  
FEMALE



V 32V

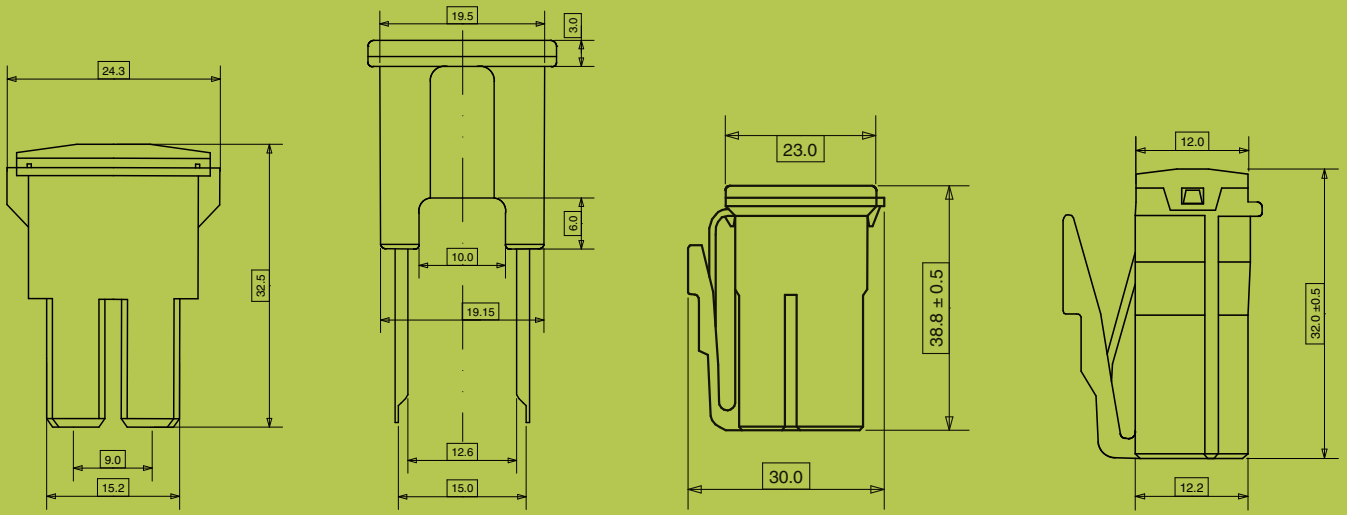
NORMAS  
STANDARDS

ISO 8820-4,  
JASO D612

MACHO  
MALE

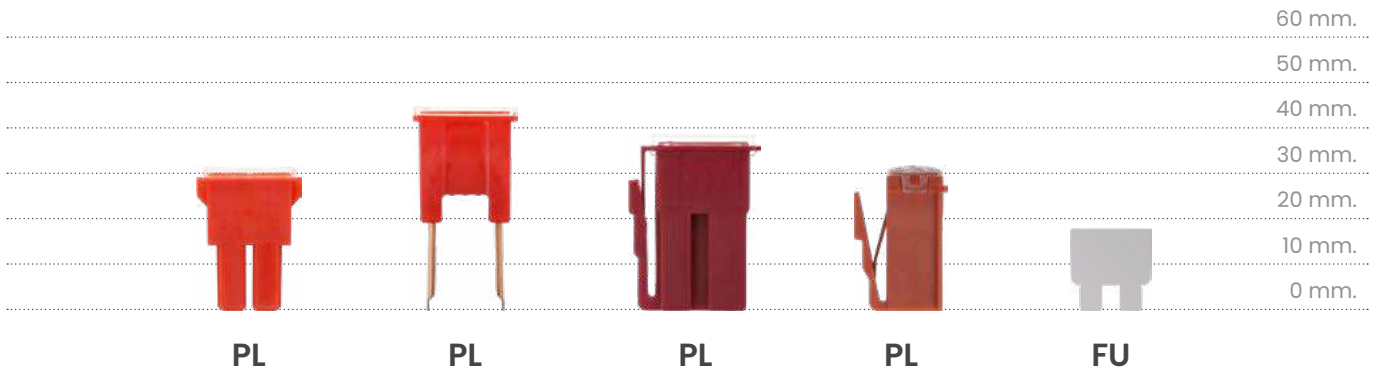












COLOR COLOR	A	REF.		
	20	PL00	5	100
	30	PL01	5	100
	40	PL02	5	100
	50	PL03	5	100
	60	PL04	5	100
	80	PL40	5	100
	100	PL41	5	100
	30	PL05	5	100
	40	PL06	5	100
	50	PL07	5	100
	60	PL08	5	100
	70	PL34	5	100
	80	PL09	5	100
	100	PL10	5	100
	120	PL35	5	100
	140	PL42	5	100



## COMPARATIVA TAMAÑO - FUSIBLES PAL, FUSIBLES PAL CLIP Y FUSIBLE ESTÁNDAR

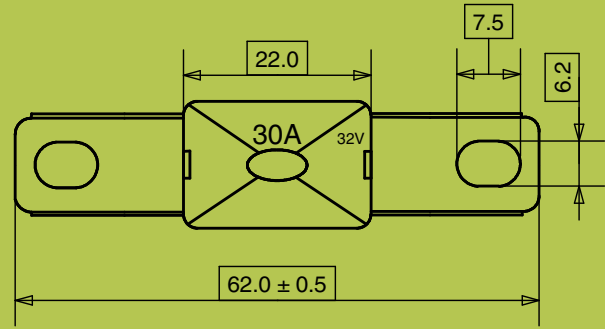
Size comparison - PAL, PAL locking & Standard blade fuse



 <b>PL</b>	COLOR	A	REF.		
	COLOR				
<b>HEMBA CLIP FEMALE LOCKING</b>  <b>V 32V</b>		45	<b>PL11</b>	5	100
		65	<b>PL12</b>	5	100
		75	<b>PL13</b>	5	100
<b>NORMAS STANDARDS</b> ISO 8820-4, JASO D612					
<b>MACHO CLIP MALE LOCKING</b> 		25	<b>PL14</b>	5	100
		30	<b>PL15</b>	5	100



PL Fusible PAL 62  
PAL 62 Fuse



# FUSIBLES PAL 62 Y FUSIBLES PAL 48

## PAL 62 & PAL 48 FUSES

Fusibles específicos para vehículos de diseño Japonés, Europeo, Americano y Coreano. Fabricado con plásticos resistentes a altas temperaturas, auto extinguidos y codificados por colores y hojas de aleación de cobre. Funcionamiento seguro y controlado con retardo de tiempo.

Specific fuses for Japanese, European, American and Korean design vehicles. Manufactured with high temperature resistant, self-extinguishing, color-coded plastics and copper alloy sheets. Safe and controlled functioning with time delay.

### Medidas PAL 62 - PAL 62 measures

Altura - Height	21,5 mm.
Ancho - Width	62 mm.

### Medidas PAL 48 - PAL 48 measures

Altura - Height	21,5 mm.
Ancho - Width	48 mm.



V 32V

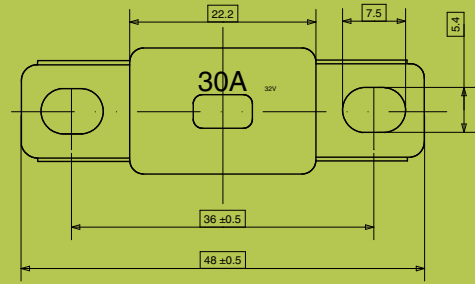
### NORMAS STANDARDS

ISO 8820-4,  
JASO D612

COLOR COLOR	A	REF.	LONGITUD LENGTH mm		
	30	<b>PL16</b>	62	5	100
	40	<b>PL17</b>	62	5	100
	50	<b>PL18</b>	62	5	100
	60	<b>PL19</b>	62	5	100
	70	<b>PL20</b>	62	5	100
	80	<b>PL21</b>	62	5	100
	100	<b>PL22</b>	62	5	100
	120	<b>PL23</b>	62	5	100

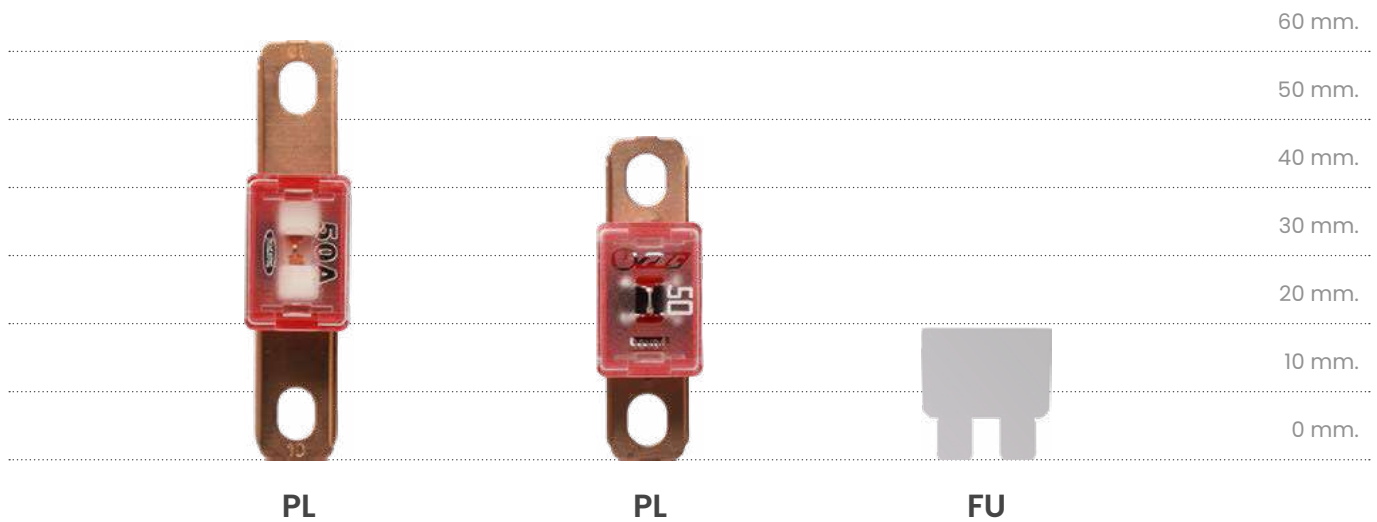


PL Fusible PAL 48  
PAL 48 Fuse



## COMPARATIVA TAMAÑO - FUSIBLES PAL 62, FUSIBLES PAL 48 Y FUSIBLE ESTÁNDAR

Size comparison - PAL 62 fuse, PAL 48 fuse & Standard blade fuse



PL		COLOR COLOR	A	REF.	LONGITUD LENGTH mm		
V	32V		30	PL24	48	5	100
			40	PL25	48	5	100
			50	PL26	48	5	100
			60	PL27	48	5	100
			70	PL28	48	5	100
			80	PL29	48	5	100
			100	PL30	48	5	100
			120	PL31	48	5	100
			140	PL43	48	5	100

**NORMAS  
STANDARDS**  
ISO 8820-4,  
JASO D612



**JC** Fusible PAL Jcase  
PAL Jcase Fuse



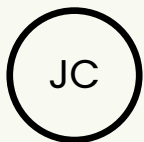
**JCM** Fusible PAL Jcase Mini  
PAL Jcase Mini Fuse



**JCC** Fusible PAL Jcase Micro  
PAL Jcase Micro Fuse

# FUSIBLES PAL JCASE

## PAL JCASE FUSES



V 32V

**NORMAS  
STANDARDS**  
ISO 8820-4,  
JASO D612

COLOR COLOR	A	REF.		
	20	<b>JC20</b>	10	100
	25	<b>JC25</b>	10	100
	30	<b>JC30</b>	10	100
	40	<b>JC40</b>	10	100
	50	<b>JC50</b>	10	100
	60	<b>JC60</b>	10	100

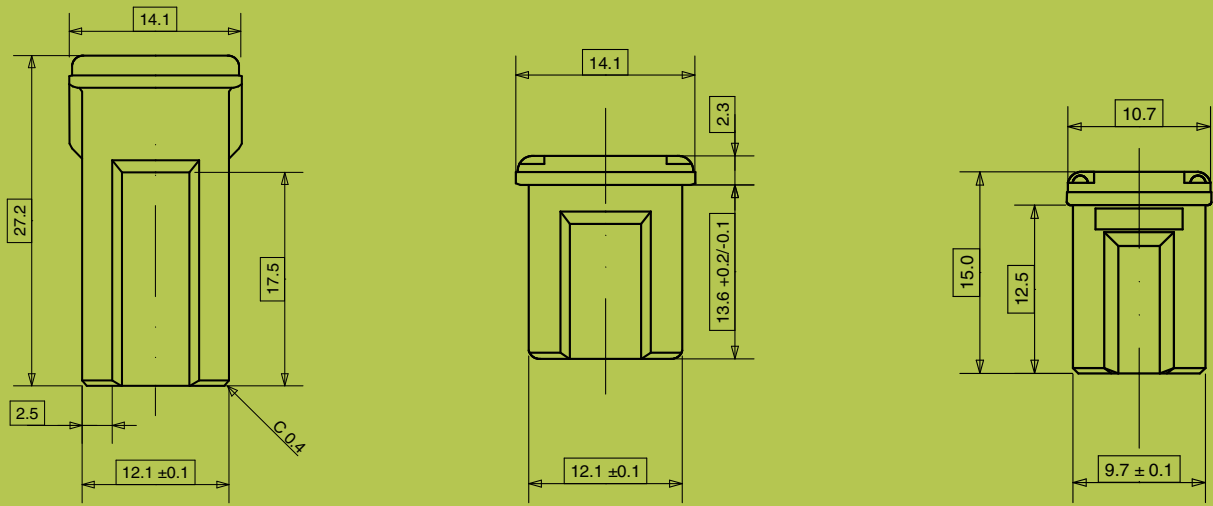


V 58V

**NORMAS  
STANDARDS**  
ISO 8820-4,  
JASO D612

	20	<b>JCM20</b>	10	100
	25	<b>JCM25</b>	10	100
	30	<b>JCM30</b>	10	100
	40	<b>JCM40</b>	10	100
	50	<b>JCM50</b>	10	100
	60	<b>JCM60</b>	10	100





Medidas Jcase - Jcase measures		Medidas Jcase Mini - Jcase Mini measures		Medidas Jcase Micro - Jcase Micro measures	
Altura - Height	27,2 mm.	Altura - Height	15,9 mm.	Altura - Height	15,0 mm.
Ancho - Width	14,1 mm.	Ancho - Width	14,1 mm.	Ancho - Width	10,7 mm.

## COMPARATIVA TAMAÑO - FUSIBLES PAL JCASE Y FUSIBLE ESTÁNDAR

Size comparison - PAL Jcase fuses & Standard blade fuse

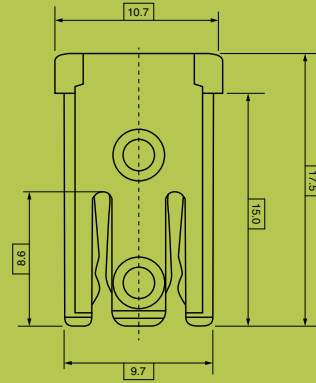


		COLOR COLOR	A	REF.		
V	32V		15	<b>JCC15</b>	10	100
			20	<b>JCC20</b>	10	100
			25	<b>JCC25</b>	10	100
			30	<b>JCC30</b>	10	100
			40	<b>JCC40</b>	10	100

**NORMAS  
STANDARDS**  
ISO 8820-4,  
JASO D612



Fusible con ranura  
Fuse Mcase



# FUSIBLES CON RANURA

## FUSES MCASE

Fusibles específicos para vehículos de diseño Japonés, Europeo, Americano y Coreano. Fabricado con plásticos resistentes a altas temperaturas, auto extingüibles y codificados por colores y hojas de aleación de cobre. Funcionamiento seguro y controlado con retardo de tiempo.

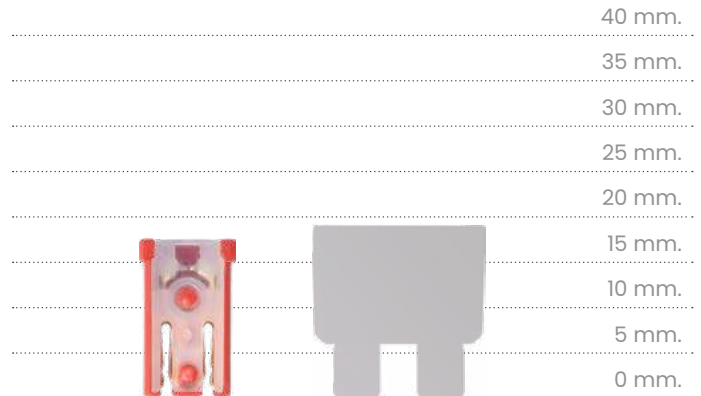
Specific fuses for Japanese, European, American and Korean design vehicles. Manufactured with high temperature resistant, self-extinguishing, color-coded plastics and copper alloy sheets. Safe and controlled operation with time delay.

Medidas Fusible con ranura - Fuse Mcase measures

Altura - Height	17,5 mm.
Ancho - Width	10,7 mm.

### COMPARATIVA TAMAÑO - FUSIBLES CON RANURA Y FUSIBLE ESTÁNDAR

Size comparison - Fuses Mcase & Standard blade fuse



V 32V

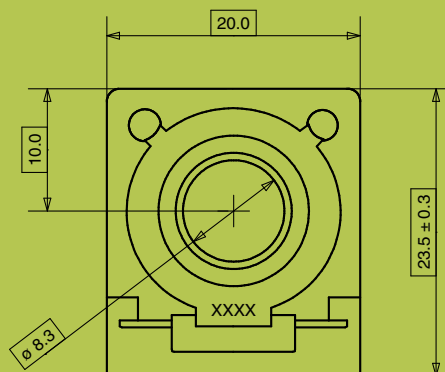
#### NORMAS STANDARDS

ISO 8820-4,  
JASO D612

	COLOR COLOR	A	REF.		
		15	<b>MC15</b>	5	2.000
		20	<b>MC20</b>	5	2.000
		25	<b>MC25</b>	5	2.000
		30	<b>MC30</b>	5	2.000
		40	<b>MC40</b>	5	2.000
		50	<b>MC50</b>	5	2.000
		60	<b>MC60</b>	5	2.000



**FB** Fusible Borne  
Borne Fuse



# FUSIBLES BORNE

## BORNE FUSES

Nueva serie de fusibles de mayor duración y ahorro de espacio. Cuerpo fabricado con cerámica. Compatibles con conexión de perno M8. Importante utilizar tuerca aislante o alternativa equivalente.

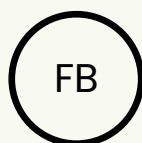
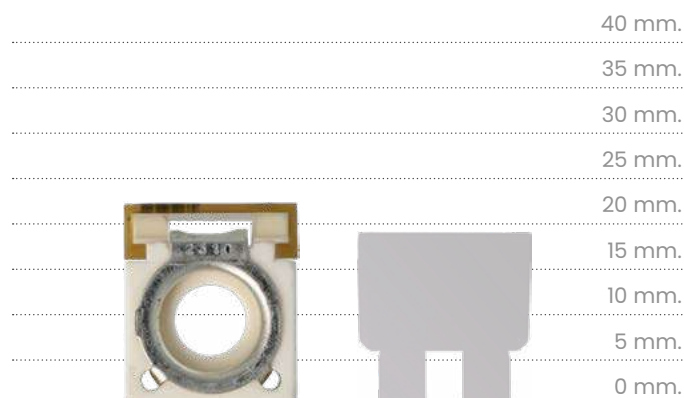
New innovative, space saving blow fuse series. Ceramic body material. Single bolt fuse type technology, M8 connection. Important to use insulating nut or equivalent alternative.

### Medidas Fusible Borne - Borne Fuse measures

Altura - Height	23,5 mm.
Ancho - Width	20,0 mm.

### COMPARATIVA TAMAÑO - FUSIBLES BORNE Y FUSIBLE ESTÁNDAR

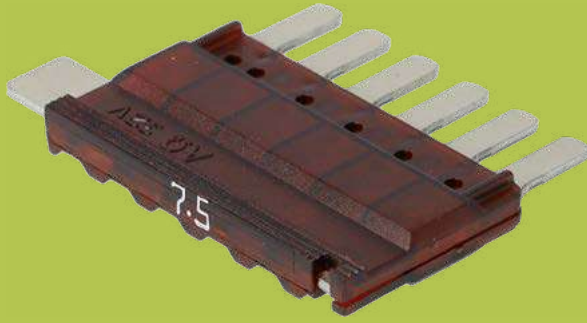
Size comparison - Borne fuse & Standard blade fuse



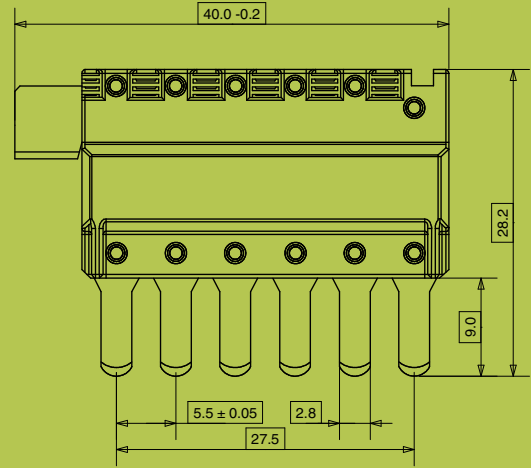
V 58V

NORMA  
STANDARD  
ISO 8820-6

A	REF.		
50	<b>FB50</b>	5	200
75	<b>FB75</b>	5	200
100	<b>FB100</b>	5	200
125	<b>FB125</b>	5	200
150	<b>FB150</b>	5	200
175	<b>FB175</b>	5	200
200	<b>FB200</b>	5	200
250	<b>FB250</b>	5	200
300	<b>FB300</b>	5	200



**FMB** Fusible Multi  
Multi blade fuse



# FUSIBLES MULTI

## MULTI BLADE FUSES

Fusible multielemento innovador y económico. Fabricado de un solo componente con 1 entrada y 6 terminales de salida para ahorro de espacio. Cuerpo fabricado con plástico transparentes auto extingüible y codificado por colores. Resistente a altas temperaturas.

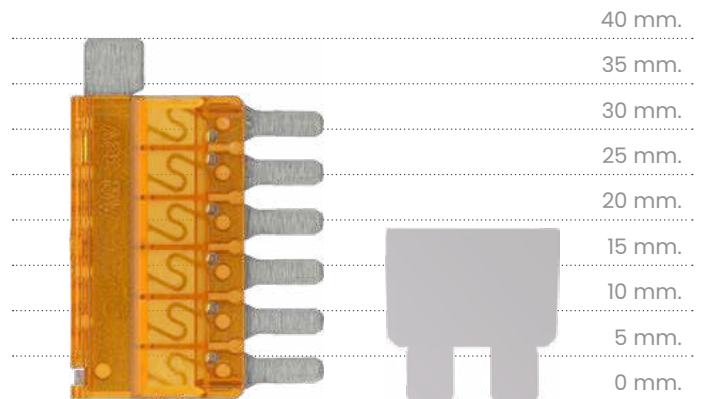
Innovative, cost saving multi blade fuse. Single component with 1 input and 6 output terminals to improve space saving. Body manufactured with self-extinguishing color-coded transparent materials. Resistant to high temperatures.

Medidas fusible Multi - Multi blade fuse measures

Altura - Height	28,2 mm.
Ancho - Width	40,0 mm.

### COMPARATIVA TAMAÑO - FUSIBLE MULTI Y FUSIBLE ESTÁNDAR

Size comparison - Multi blade fuse & Standard blade fuse

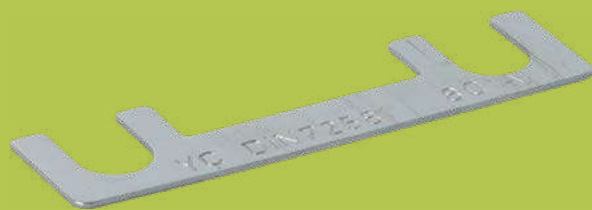


V 32V

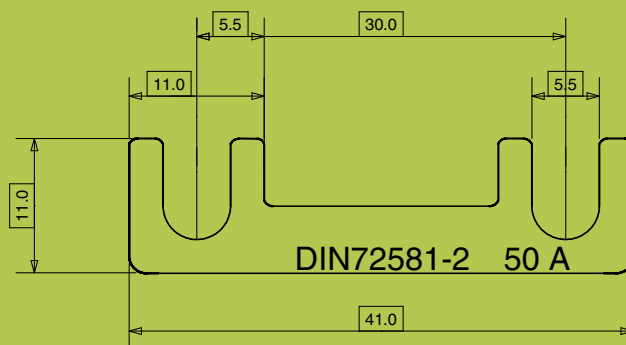
PINS 6

NORMA STANDARD  
MB 10430-1

COLOR COLOR	A	REF.		NORMATIVA NORMATIVE
	5	<b>FMB05</b>	5	N 000 000 006 465
	7,5	<b>FMB75</b>	5	N 000 000 006 466



Fusible de lámina  
Blade Strip fuse



# FUSIBLES DE LÁMINA

## BLADE STRIP FUSES

Fusibles de lámina con agujeros de conexión M5, espaciados 30mm. Fácil instalación a través de la conexión en forma de U.

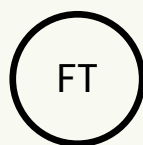
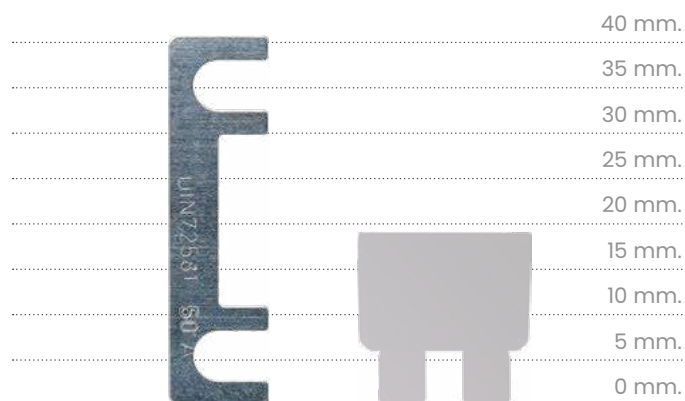
Blade fuses with M5 connection holes, spaced 30mm. Easy installation trough U-form connection.

### Medidas Fusible lámina - Blade Strip fuse measures

Altura - Height	11,0 mm.
Ancho - Width	41,0 mm.

### COMPARATIVA TAMAÑO - FUSIBLES DE LÁMINA Y FUSIBLE ESTÁNDAR

Size comparison - Blade Strip fuse & Standard blade fuse

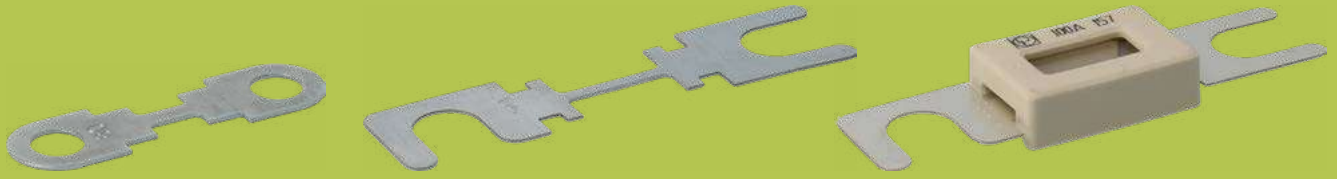


V 32V

NORMA  
STANDARD  
DIN 72581-2

A	REF.		
30	<b>FT30</b>	25	1.000
40	<b>FT40</b>	25	1.000
50	<b>FT50</b>	25	1.000
60	<b>FT60</b>	25	1.000
80	<b>FT80</b>	25	1.000
100	<b>FT100</b>	25	1.000
150	<b>FT150</b>	25	1.000





**MDL** Fusible de lámina Midi  
Midi Strip fuse

**FSL** Fusible Strip lámina  
Strip fuse

**FST** Fusible Strip  
Strip fuse

# FUSIBLES DE LÁMINA MIDI Y STRIP

## MIDI STRIP & STRIP FUSES

### MDL

V 32V

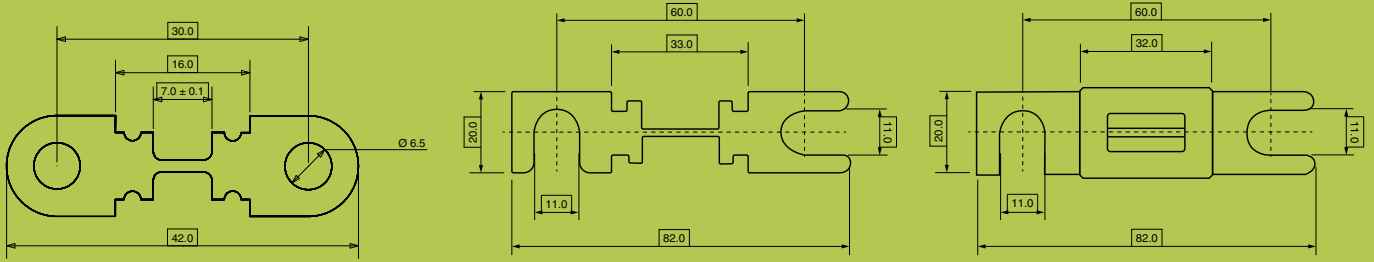
NORMA STANDARD  
VAG Standard

### FSL

V 48V

NORMA STANDARD  
DIN 43560-1

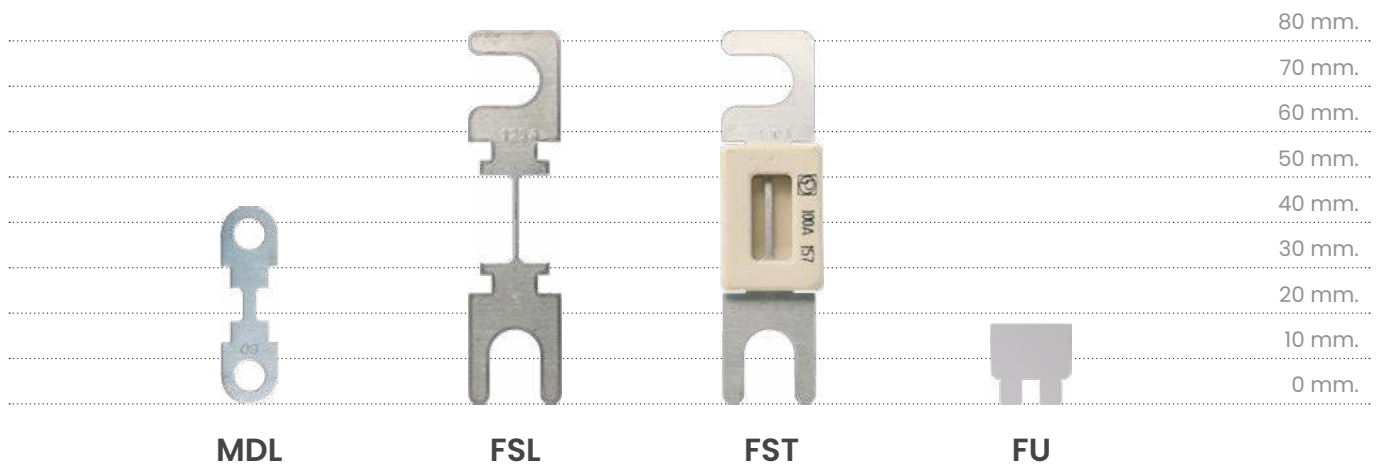
A	REF.		
30	<b>MDL30</b>	5	1.000
40	<b>MDL40</b>	5	1.000
50	<b>MDL50</b>	5	1.000
60	<b>MDL60</b>	5	1.000
70	<b>MDL70</b>	5	1.000
80	<b>MDL80</b>	5	1.000
110	<b>MDL110</b>	5	1.000
125	<b>MDL125</b>	5	1.000
150	<b>MDL150</b>	5	1.000
175	<b>MDL175</b>	5	1.000
50	<b>FSL50</b>	5	50
80	<b>FSL80</b>	5	50
100	<b>FSL100</b>	5	50
125	<b>FSL125</b>	5	50
160	<b>FSL160</b>	5	50
250	<b>FSL250</b>	5	50
355	<b>FSL355</b>	5	50



Medidas lámina Midi - Midi Strip measures		Medidas Strip lámina - Strip fuse measures		Medidas fusible Strip - Strip fuse measures	
Altura - Height	12,0 mm.	Altura - Height	20,0 mm.	Altura - Height	20,0 mm.
Ancho - Width	42,0 mm.	Ancho - Width	82,0 mm.	Ancho - Width	82,0 mm.

## COMPARATIVA TAMAÑO - FUSIBLES LÁMINA MIDI, FUSIBLES STRIP Y FUSIBLE ESTÁNDAR

Size comparison - Midi Strip fuse, Strip fuse & Standard blade fuse



<div style="border: 1px solid black; border-radius: 50%; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center;"> <span style="font-size: 24px; font-weight: bold;">FST</span> </div>		A	REF.		
		V	48V	35	<b>FST35</b>
		50	<b>FST50</b>	5	50
		80	<b>FST80</b>	5	50
		100	<b>FST100</b>	5	50
		125	<b>FST125</b>	5	50
		160	<b>FST160</b>	5	50
		250	<b>FST250</b>	5	50
		355	<b>FST355</b>	5	50

**NORMA STANDARD**  
UL 248 Special Purpose



**FTA** Enchufable Mini de rearme automático  
Mini automatic resettable circuit breaker



**FTE** Enchufable Estándar de rearme manual  
Manual resettable Standard circuit breaker

# DISYUNTORES TÉRMICOS

## CIRCUIT BREAKERS

### FTA

V 14V

NORMA  
STANDARD  
TIPO 1

COLOR COLOR	A	REF.		
	5	<b>FTA05</b>	1	500
	10	<b>FTA10</b>	1	500
	15	<b>FTA15</b>	1	500
	20	<b>FTA20</b>	1	500
	30	<b>FTA30</b>	1	500

### FTE

V 28V

NORMA  
STANDARD  
TIPO 3

	5	<b>FTE05</b>	1	500
	6	<b>FTE06</b>	1	500
	7,5	<b>FTE75</b>	1	500
	10	<b>FTE10</b>	1	500
	15	<b>FTE15</b>	1	500
	20	<b>FTE20</b>	1	500
	25	<b>FTE25</b>	1	500
	30	<b>FTE30</b>	1	500



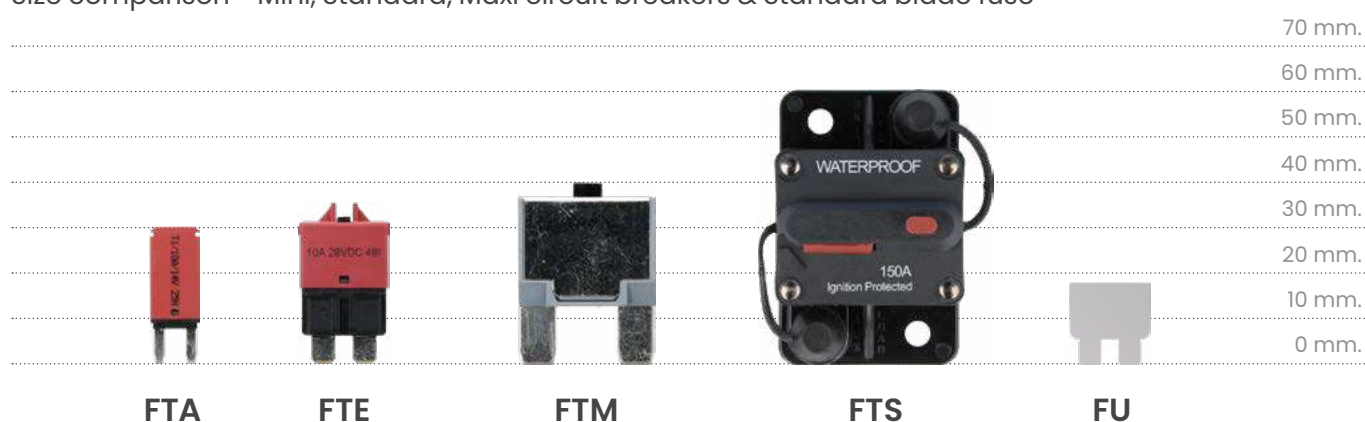
**FTM** Fusible térmico Maxi de rearme manual  
Thermic resettable Maxi fuse



**FTS** Disyuntor manual con interruptor  
Manual circuit breaker with switch

## COMPARATIVA TAMAÑO - DISYUNTORES MINI, ESTÁNDAR, MAXI Y FUSIBLE ESTÁNDAR

Size comparison - Mini, Standard, Maxi circuit breakers & Standard blade fuse



	FTA	FTE	FTM	FTS	FU
<b>FTM</b>			A	REF.	📦
V 28V			30	<b>FTM30</b>	1
<b>FTS</b>					
V 48V			100	<b>FTS100</b>	1
			150	<b>FTS150</b>	1
			200	<b>FTS200</b>	1

**NORMA STANDARD TIPO 3**

**FC**  Fusible Micro  
Micro blade fuse

**FC2**  Fusible Micro 2  
Micro 2 blade fuse

**FM**  Fusible Mini  
Mini blade fuse



**PF32**

# PORTAFUSIBLES AÉREOS

## IN-LINE BLADE FUSE HOLDERS



PARA FC  
FOR FC

PARA FC2  
FOR FC2

PARA FM  
FOR FM

A	SECCIÓN SECTION mm <sup>2</sup>	REF.	LONGITUD LENGTH mm			
10	0,75	<b>PF27</b>	100 x 2	✓	✓	5
30	3	<b>PF28</b>	100 x 2	✓	✓	5
20	2	<b>PF37</b>	135	✓	✓	5
30	3,3	<b>PF38</b>	135	✓	✓	5
10	-	<b>PF21</b>	-	-	-	5
10	1,5	<b>PF31</b>	130 x 2	-	✓	5
30	2,5	<b>PF32</b> 	130 x 2	-	✓	5

**FU**  Fusible Estándar  
Standard blade fuse

**FX**  Fusible Maxi  
Maxi blade fuse



**PF22**



**PF04**



**PF04M**



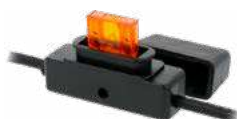
**PF09**



**PF09M**



**PF24**






**PF22**



**PF40**



**PARA FU**  
**FOR FU**

A	SECCIÓN SECTION mm <sup>2</sup>	REF.	LONGITUD LENGTH mm			
20	1,5	<b>PF04</b>	90 x 2	✓	✓	25
20	1,5	<b>PF04M</b>	235 x 2	✓	✓	25
30	3	<b>PF09</b>	90 x 2	✓	✓	25
30	2,5	<b>PF09M</b>	235 x 2	✓	✓	25
15	-	<b>PF24</b>	-	-	-	5

**PARA FX**  
**FOR FX**

60	4	<b>PF22</b>	130 x 2	-	-	2
----	---	-------------	---------	---	---	---

**PARA PF04M /**  
**PF09M**  
**FOR PF04M /**  
**PF09M**

-	-	<b>PF40</b> 	-	✓	✓	25
---	---	-------------------------------------------------------------------------------------------------	---	---	---	----

 Ensamblable - Modular  Resistencia a salpicaduras - Splash-proof



**FC3**  Fusible Micro 3  
Micro 3 blade fuse

**FM**  Fusible Mini  
Mini blade fuse

**FX**  Fusible Maxi  
Maxi blade fuse



PF07

# BASES PORTAFUSIBLES

## IN-LINE BLADE FUSE BASES



PF39



PF33



PF05



PF10



PF12M



PF25



PF07



PF23



PARA FC3  
FOR FC3

PARA FM  
FOR FM

PARA FU  
FOR FU

PARA FX  
FOR FX

A	SECCIÓN SECTION mm <sup>2</sup>	REF.	LONGITUD LENGTH mm			
15	-	<b>PF39</b>	-	-	-	5
30	2,5	<b>PF33</b>	130 x 2	✓	✓	5
30	5,3	<b>PF05</b>	180	✓	-	5
20	2,1	<b>PF10</b>	180	✓	-	5
10	-	<b>PF12M</b>	-	✓	-	5
15	-	<b>PF25</b>	-	✓	-	5
60	-	<b>PF07</b> 	-	✓	-	10
20	-	<b>PF23</b>	-	✓	✓	2



**FU**



Fusible Estándar  
Standard blade fuse



**CDF12**

# CAJAS DE DISTRIBUCIÓN DE FUSIBLES

## POWER DISTRIBUTION MODULES



**CDF06**



**CDF08**



**CDF12**



PARA FU  
FOR FU

A	FUSIBLES FUSES /u	REF.	CONEXIÓN CONNECTION		
100	6	<b>CDF06</b>	Lateral / Side	-	1
100	8	<b>CDF08</b>	Lateral / Side	-	1
100	12	<b>CDF12</b>	Lateral / Side	-	1



Ensamblable - Modular



Resistencia a salpicaduras - Splash-proof



CF85

**FM**  Fusible Mini  
Mini blade fuse

**FU**  Fusible Estándar  
Standard blade fuse

# CAJAS PORTAFUSIBLES

## HARD-WIRED BOXES



CF60



CF69



CF70



CF71



CF86



CF81



CF82



CF83



CF84






CF85



PARA FM  
FOR FM

PARA FU  
FOR FU

A	FUSIBLES FUSES /u	REF.	CONEXIÓN CONNECTION			
-	4	<b>CF60</b>	Base / Base	✓	-	5
15	5	<b>CF69</b>	Lateral / Side	-	-	1
15	5	<b>CF70</b>	Base / Base	-	-	1
15	6	<b>CF71</b>	Base / Base	-	-	1
40	8	<b>CF86</b>	Base / Base	-	-	1
40	4	<b>CF81</b>	Lateral / Side	-	-	1
40	6	<b>CF82</b>	Lateral / Side	-	-	1
40	8	<b>CF83</b>	Lateral / Side	-	-	1
40	10	<b>CF84</b>	Lateral / Side	-	-	1
40	12	<b>CF85</b>	Lateral / Side	-	-	1

**MD**



Fusible Midi  
Midi bolt-down fuse

**FS**



Fusible Mega  
Mega bolt-down fuse

**FSL**



Fusible Strip lámina  
Strip fuse

**FST**



Fusible Strip  
Strip fuse



**CF79**



**CF73**



**CF74**



**CF75**



**CF76**



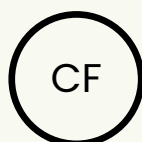
**CF79**



**CF77**



**CF78**



**PARA MD  
FOR MD**

**PARA FS  
FOR FS**

**PARA FS + MD  
FOR FS + MD**

**PARA FST  
FOR FST**

A	FUSIBLES FUSES /u	REF.	CONEXIÓN CONNECTION			
200	1	<b>CF73</b>	Base / Base	✓	-	1
500	1	<b>CF74</b>	Base / Base	✓	-	1
250	1	<b>CF75</b>	Base / Base	✓	✓	1
250	1	<b>CF76</b>	Base / Base	-	✓	1
250	1 FS + 4 MD	<b>CF79</b>	Base / Base	-	✓	1
425	1	<b>CF77</b>	Base / Base	✓	-	1
425	1	<b>CF78</b>	Base / Base	✓	-	1



Ensamblable - Modular



Resistencia a salpicaduras - Splash-proof

**FM**  Fusible Mini  
Mini blade fuse

**FU**  Fusible Estándar  
Standard blade fuse

**FX**  Fusible Maxi  
Maxi blade fuse



PF34

# PORTAFUSIBLES PCB CIRCUITO IMPRESO PCB CIRCUIT BOARD



PF19



PF35



PF34



PF36



PARA FM  
FOR FM

PARA FU  
FOR FU

PARA FX  
FOR FX

PINS	A	REF.	ALEACIÓN ALLOY			
2 x 1	10	<b>PF19</b>	CuSn	√	-	5
2 x 4	30	<b>PF35</b>	CuFe Ag3	-	-	5
2 x 1	30	<b>PF34</b>	CuFe	-	-	5
2 x 10	60	<b>PF36</b>	CuZn	-	-	5

**FC**  Fusible Micro  
Micro blade fuse

**FC2**  Fusible Micro 2  
Micro 2 blade fuse

**FC3**  Fusible Micro 3  
Micro 3 blade fuse



Ladrón de corriente  
Current thief

PF16

# PORTAFUSIBLES PARA CIRCUITO ADICIONAL

## ADD-A-CIRCUIT FUSE HOLDER



PF29



PF30



PF20



PF16






PARA FC  
FOR FC

PARA FC2/3  
FOR FC2/3

PARA FM  
FOR FM

PARA FU  
FOR FU

A	SECCIÓN SECTION mm <sup>2</sup>	REF.	LONGITUD LENGTH mm			
10	1,5	<b>PF29</b>	100	√	-	5
10	1,5	<b>PF30</b>	100	-	-	5
10	1,5	<b>PF20</b>	100	-	-	5
10	1,5	<b>PF16</b>	100	-	-	5

 Ensamblable - Modular  Resistencia a salpicaduras - Splash-proof



**FC**

 Fusible Micro  
Micro blade fuse

**FC2**

 Fusible Micro 2  
Micro 2 blade fuse

**FC3**

 Fusible Micro 3  
Micro 3 blade fuse

**FM**

 Fusible Mini  
Mini blade fuse

**FU**

 Fusible Estándar  
Standard blade fuse

**FX**

 Fusible Maxi  
Maxi blade fuse

# KITS Y ACCESORIOS

## KITS & ACCESSORIES


**PT04**

**PT05**

**PT06**
**SC20**

**COMPOSICIÓN**  
COMPOSITION

REF.


**KIT**

 FU10 - FU15 - FM10 - FM15 x 100 u./ref  
 FC10 - FC15 x 10 u./ref  
 FX40 x 25 u./ref  
 PS100 - MD50 - MDL40 x 5 u./ref  
 PT04 - PT05 - PT06 x 1 u./ref

**SC20**

1


**PARA**  
FOR

REF.


**PINZAS**  
PULLERS

FC/FC2/FC3/FM/FU

**PT04**

10

FX

**PT05**

10

**COMPROBADOR**  
TESTER

FC/FC2/FC3/FM/FU

**PT06**

5

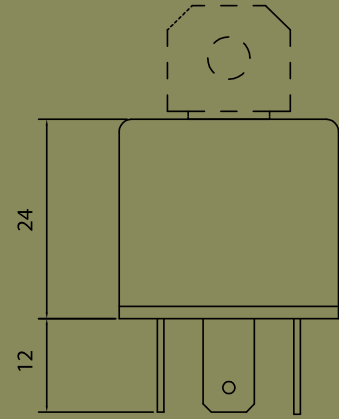
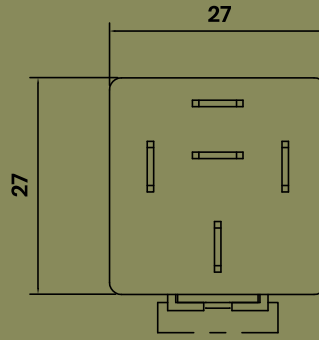
# RELÉS E INTERMITENTES

## RELAYS & FLASHERS

Relés, intermitentes, relés de bomba de combustible, centrales de precalentamiento, zumbadores, módulos de encendido, temporizadores, etc.

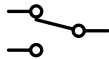
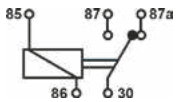
Relays, flashers, fuel pump relays, preheating centrals for diesel engines, buzzers, ignition modules, timers, etc.



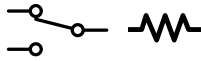
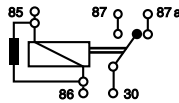


# RELÉS INVERSORES

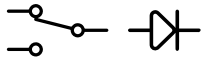
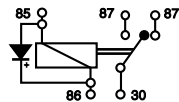
## CHANGE OVER RELAYS



Relé inversor  
Change over relay



Relé inversor con resistencia  
Change over relay with resistance



Relé inversor con diodo  
Change over relay with diode

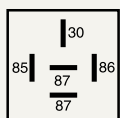


Relé homologado para aplicaciones de automoción, disponible en voltaje nominal de 12V y 24V DC, con interrupción de corriente nominal de hasta 40A.

Homologated relay for automotive applications, available at the rated voltage of 12V and 24V DC, with a rated current interruption of up to 40A.

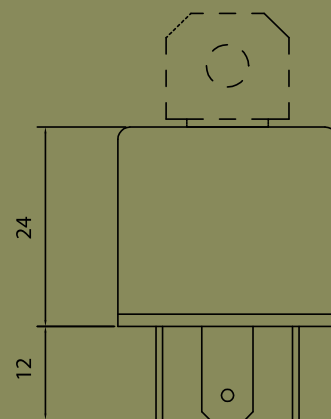
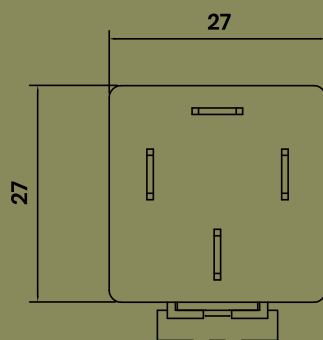


PINS 5 x 6,35 mm.



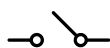
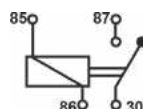
V	A	ESQUEMA DRAWING	REF.	SOPORTE SUPPORT	
12	20/30		RR25		10
12	20/30		RR36		10
12	30/40		RR46		10
12	20/30		RR63		10
12	20/30		RR91		10
24	10/20		RR32		10
24	10/20		RR37		10
24	10/20		RR64		10
24	20/30		RR92		10

Metal extraíble - Removable metal Plástico fijo - Fixed plastic

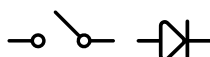
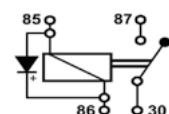


# RELÉS INTERRUPTORES

## NORMALLY OPEN RELAYS



Relé interruptor  
Normally open relay



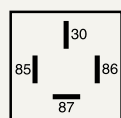
Relé interruptor con diodo  
Normally open relay with diode

Relé homologado para aplicaciones de automoción, disponible en voltaje nominal de 12V y 24V DC, con interrupción de corriente nominal de hasta 40A.

Homologated relay for automotive applications, available at the rated voltage of 12V and 24V DC, with a rated current interruption of up to 40A.

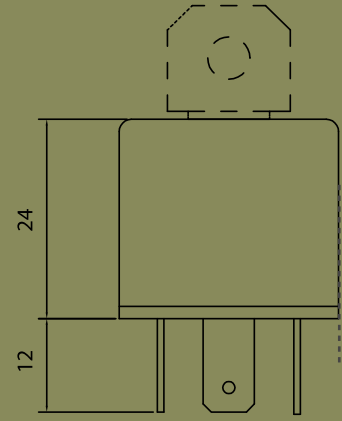
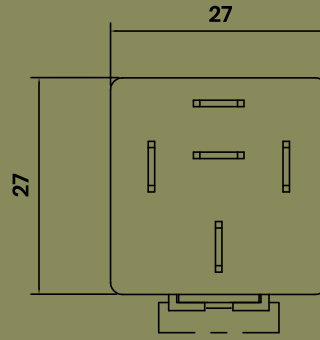


PINS 4 x 6,35 mm.



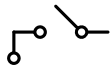
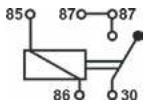
V	A	ESQUEMA DRAWING	REF.	SOPORTE SUPPORT	
12	30		<b>RR38</b>		10
12	40		<b>RR48</b>		10
12	30		<b>RR87</b>		10
24	20		<b>RR39</b>		10
24	30		<b>RR88</b>		10

Metal extraíble - Removable metal Plástico fijo - Fixed plastic

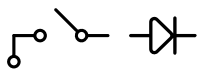
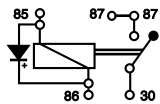


# RELÉS INTERRUPTORES DE DOBLE SALIDA

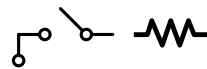
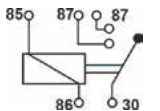
## DOUBLE OUTPUT RELAYS



Relé interruptor doble salida  
Double output normally open relay



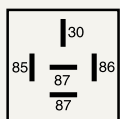
Relé interruptor doble salida con diodo  
Double output normally open relay with diode



Relé interruptor doble salida con resistencia  
Normally open relay with resistance

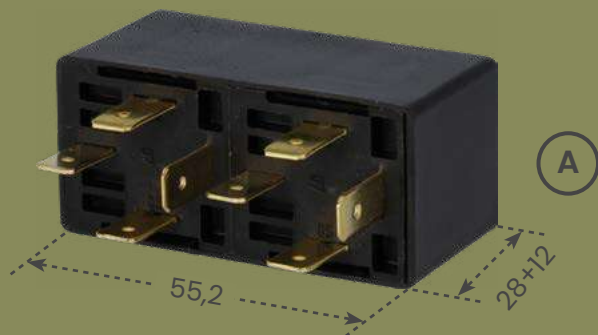


PINS 5 x 6,35 mm.

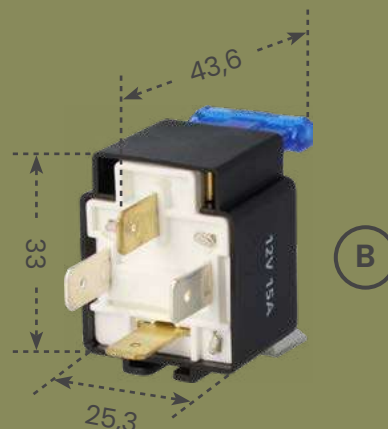


V	A	ESQUEMA DRAWING	REF.	SOPORTE SUPPORT	
12	30		<b>RR41</b>		10
12	40		<b>RR42</b>		10
12	30		<b>RR89</b>		10
12	40		<b>RR43</b>		10
12	40		<b>RR68</b>		10
24	20		<b>RR65</b>		10
24	20		<b>RR90</b>		10

Metal extraíble - Removable metal Plástico fijo - Fixed plastic



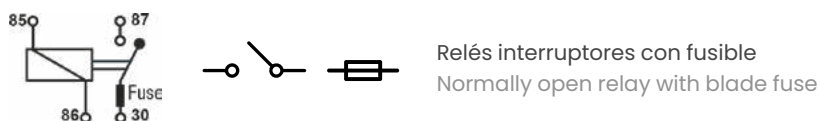
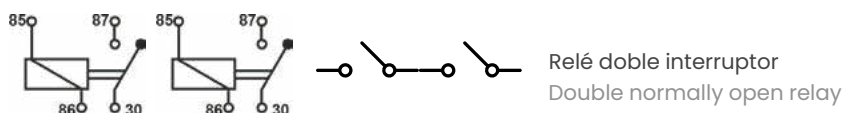
**RR** Relé doble interruptor  
Double normally open relay



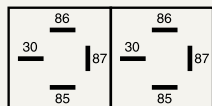
**RR** Relé interruptor con fusible  
Normally open relay with blade fuse

# RELÉS ESPECIALES

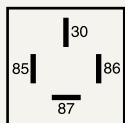
## SPECIAL RELAYS



**PINS** 8 x 6,35 mm.



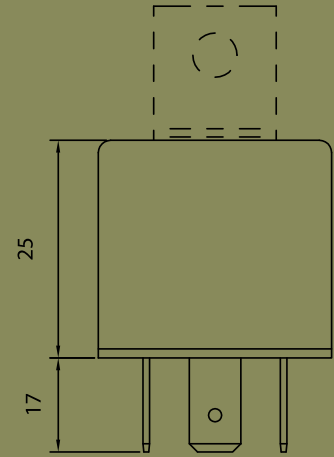
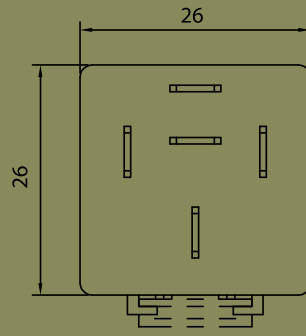
**PINS** 4 x 6,35 mm.



V	A	ESQUEMA DRAWING	REF.	SOPORTE SUPPORT	MEDIDAS MEASURES	
12	2 x 30		<b>RR82</b>		A	1
12	15		<b>RR69</b>		B	10
12	30		<b>RR70</b>		B	10
24	20		<b>RR71</b>		B	10

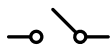
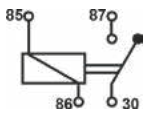
Metal extraíble - Removable metal Plástico fijo - Fixed plastic



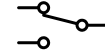
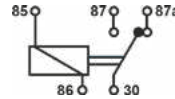


# RELÉS DE POTENCIA

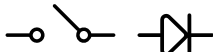
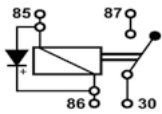
## POWER RELAYS



Relé de potencia interruptor  
Normally open power relay



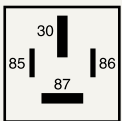
Relé de potencia inversor  
Change over power relay



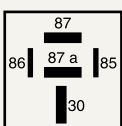
Relé de potencia interruptor con diodo  
Normally open power relay with diode



**PINS** 2 x 6,35 mm.  
2 x 9,50 mm.



**PINS** 2 x 6,35 mm.  
3 x 9,50 mm.

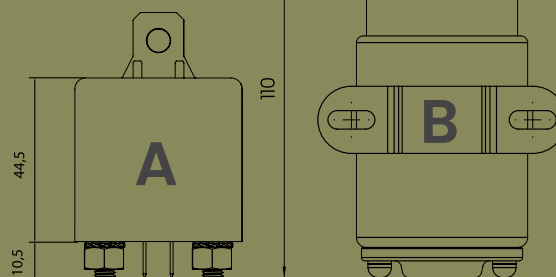


V	A	ESQUEMA DRAWING	REF.	SOPORTE SUPPORT	
12	50		<b>RR73</b>		10
12	70		<b>RR72</b>		10
12	50		<b>RR93</b>		10
12	70		<b>RR95</b>		10
24	50		<b>RR74</b>		10
24	70		<b>RR75</b>		10
24	50		<b>RR94</b>		10
12	60/70		<b>RR26</b>		10
24	40/50		<b>RR27</b>		10

Metal extraíble - Removable metal Plástico fijo - Fixed plastic

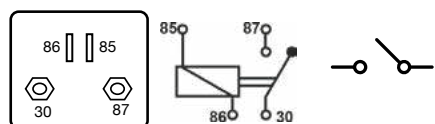


RR85/86

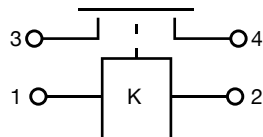


# RELÉS ALTA POTENCIA

## HEAVY DUTY RELAYS



Relé interruptor de alta potencia  
Normally open relay heavy dutty



Relé de arranque trabajo continuo  
Contactor continuous working load

Medidas - Measures	A	B
Altura - Height	46,0 mm.	54,0 mm.
Ancho - Width	46,0 mm.	54,0 mm.
Profundidad - Depth	44,5 mm.	110,0 mm.
Altura pins - Pin's height	10,5 mm.	11,5 mm.

Relé de alta potencia disponible en voltaje nominal de 12V y 24V DC, con una capacidad de conmutación de hasta 200A.

Heavy Duty relay available at the rated voltage of 12V and 24V DC, with a switching capability of up to 200A.

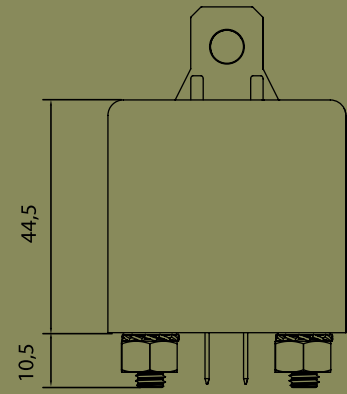
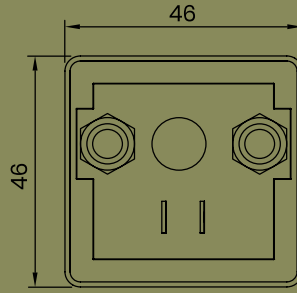


**PINS** 2 x 6,35 mm.  
**TORNILLOS** 2 x M6  
**SCREWS**

**PINS** 2 x 6,35 mm.  
**TORNILLOS** 2 x M8  
**SCREWS**

V	A	ESQUEMA DRAWING	REF.	SOPORTE SUPPORT	MEDIDAS MEASURES	
12	200		<b>RR83</b>		A	1
24	100		<b>RR84</b>		A	1
12	140		<b>RR85</b>		B	1
24	140		<b>RR86</b>		B	1

Metal extraíble - Removable metal Plástico fijo - Fixed plastic

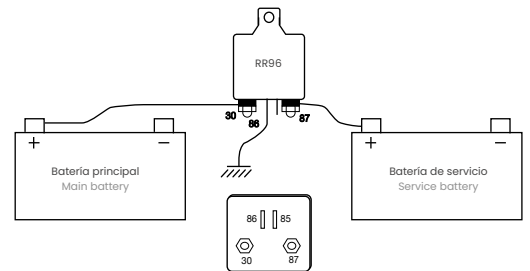


# RELÉS SEPARADORES

## SEPARATOR RELAYS

Relé de carga micro-controlado, hace de puente entre la batería principal y las baterías auxiliares. Disponible en voltaje nominal de 12V y 24V DC, con una capacidad de conmutación de hasta 200A. Alternativa al tradicional "repartidor de carga" con diodos. El Relé Automático es compatible con todo tipo de alternadores incluyendo los más potentes, y altamente fiable. Funcionamiento del RR96: Cuando el alternador genera una tensión igual o superior a 13,4V, el Relé Automático conecta la "Batería auxiliar" al alternador y mientras la tensión este por encima de 12,6V se mantiene. Por debajo los 12,6V el relé se desconecta para evitar la descarga de la batería principal. Es aconsejable realizar el montaje con cable de mínimo 10mm<sup>2</sup> de sección y lo más corto posible (máximo 2 metros).

Micro-controlled charging relay which acts as a bridge between the main battery and the auxiliary batteries. Available in the nominal voltage of 12V and 24V DC, with a switching capacity of up to 200A. An alternative to the traditional "load splitter" with diodes. The Automatic Relay is compatible with all types of alternators including the most powerful, and highly reliable. Operation of the RR96: When the alternator generates a voltage equal to or greater than 13.4V, the Automatic Relay connects the "Auxiliary Battery" to the alternator and while the voltage is above 12.6V is maintained. Below 12.6V the relay disconnects to avoid discharge of the main battery. It is advisable to mount with a cable of minimum 10mm<sup>2</sup> in section and as short as possible (maximum 2 meters).



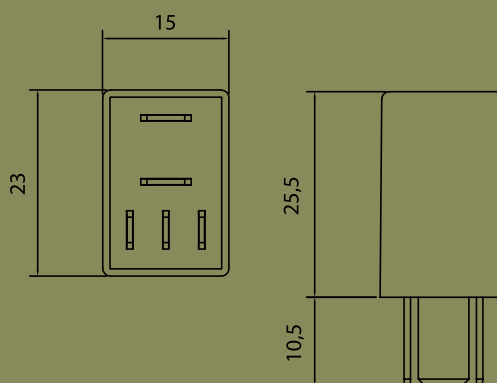
- Borne 30: Positivo batería motor / Positive motor battery
- Borne 87: Positivo batería auxiliar / Negative motor battery
- Borne 86: Negativo o masa batería / Negative or battery mass
- Borne 85: NO USAR / Do not use



**PINS** 2 x 6,35 mm.  
**TORNILLOS** 2 x M6  
**SCREWS**

V	A	ESQUEMA DRAWING	REF.	SOPORTE SUPPORT	
12	200	-	RR96		1
24	100	-	RR97		1

Metal extraíble - Removable metal Plástico fijo - Fixed plastic

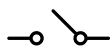
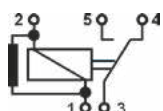


# MICRORELÉS

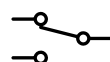
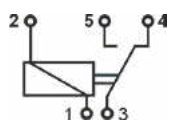
## MICRORELAYS

### Medidas - Measures

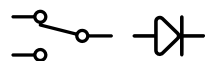
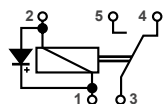
Altura - Height	23,0 mm.
Ancho - Width	15,0 mm.
Profundidad - Depth	25,5 mm.
Altura pins - Pin's height	10,5 mm.



Microrelé interruptor  
Normally open microrelay



Microrelé inversor  
Change over microrelay



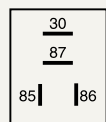
Microrelé inversor con diodo  
Change over microrelay with diode

Relé de pequeño tamaño para aplicaciones de automoción disponible en el voltaje nominal de 12V y 24V DC, con una corriente nominal de hasta 20A.

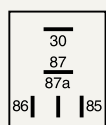
Small size relay for automotive applications available at the rated voltage of 12V and 24V DC, with a rated current of up to 20A.



**PINS** 2 x 6,35 mm.  
2 x 4,8 mm.



**PINS** 2 x 6,35 mm.  
3 x 4,8 mm.



V	A	ESQUEMA DRAWING	REF.	SOPORTE SUPPORT	
12	20		<b>RR76</b>	-	10
24	10		<b>RR79</b>	-	10
12	10/20		<b>RR78</b>	-	10
12	15/25		<b>RR99</b>	-	10
24	5/10		<b>RR80</b>	-	10

Metal extraíble - Removable metal Plástico fijo - Fixed plastic



IE01



IE02



IE32

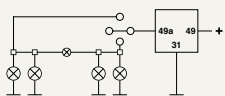
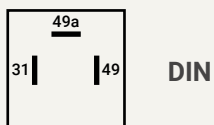
# INTERMITENTES DE 3 PINS

## 3 PIN FLASHERS

APLICACIÓN APPLICATION	0 FALLOS 0 FAILURES	1 FALLO 1 FAILURE



PINS 3 x 6,35 mm.



V	FALLOS FAILURES	APLICACIÓN APPLICATION	REF.	SOPORTE SUPPORT	MEDIDAS MEASURES	
12	1		IE01		C	10
12	1		IE02		B	10
12	1		IE32	-	A	10
24	0		IE05		D	10
24	1		IE67		B	1



Detección de fallo - Failure detection



Metal extraíble - Removable metal



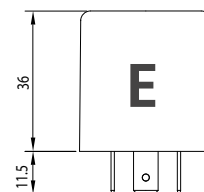
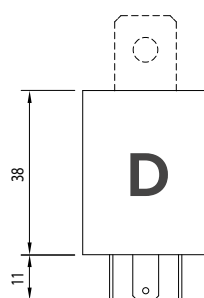
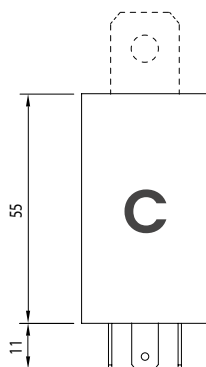
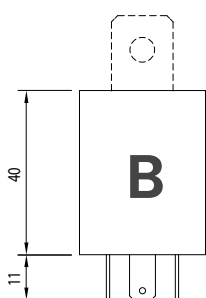
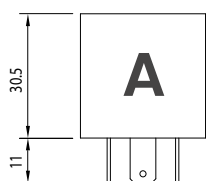
IE65



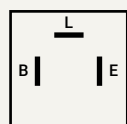
IE58



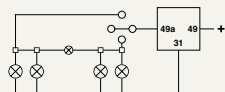
IE06



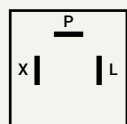
**PINS** 3 x 6,35 mm.



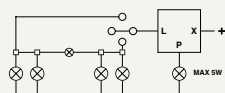
**JAPAN**



**PINS** 3 x 6,35 mm.



**SAE**



V	FALLOS FAILURES	APLICACIÓN APPLICATION	REF.	SOPORTE SUPPORT	MEDIDAS MEASURES	
12	1		<b>IE65</b>	-	E	1
12	1		<b>IE58</b>	-	A	1
12	0		<b>IE06</b>	-	B	10
24	0		<b>IE69</b>		D	1



Sin detección de fallo - Without failure detection



Intermitentes - Blinkers

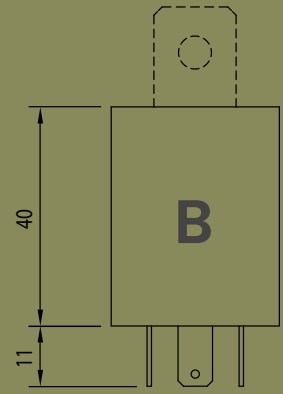




IE07



IE03



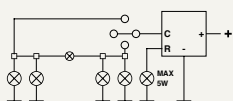
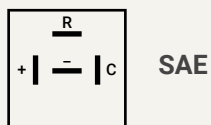
# INTERMITENTES DE 4 Y 5 PINS

## 4 Y 5 PIN FLASHERS

APLICACIÓN APPLICATION	1 FALLO 1 FAILURE	2 FALLOS 2 FAILURES



PINS 4 x 6,35 mm.



V	FALLOS FAILURES	APLICACIÓN APPLICATION	REF.	SOPORTE SUPPORT	MEDIDAS MEASURES	
12	1		IE07		B	10
12	1		IE30		A	10
24	1		IE66		C	1
24	1		IE68		D	1

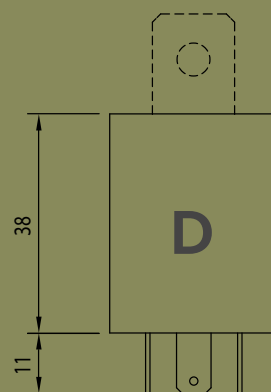
Detección de fallo - Failure detection Intermitentes - Blinkers



IE64



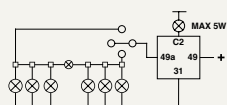
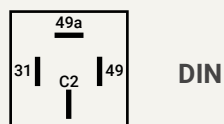
IE04



V	FALLOS FAILURES	APLICACIÓN APPLICATION	REF.	SOPORTE SUPPORT	MEDIDAS MEASURES	
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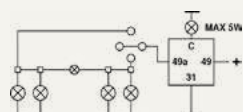
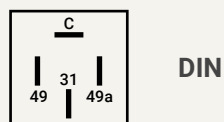
PINS 4 x 6,35 mm.

12	2		IE03		B	10
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PINS 4 x 6,35 mm.

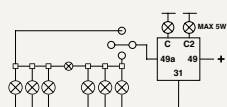
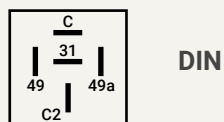
12	1		IE52		B	10
----	---	--	------	--	---	----



24	1		IE64		D	1
----	---	--	------	--	---	---

PINS 5 x 6,35 mm.

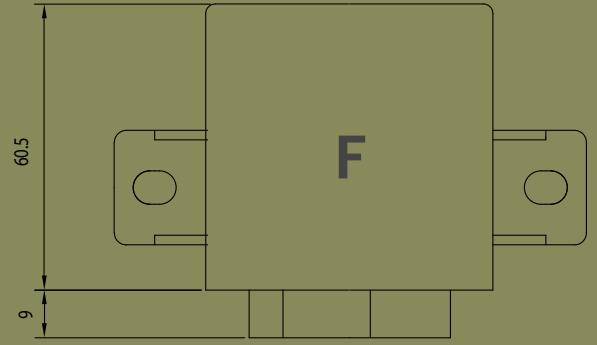
12	2		IE04		B	10
----	---	--	------	--	---	----



Metal extraíble - Removable metal

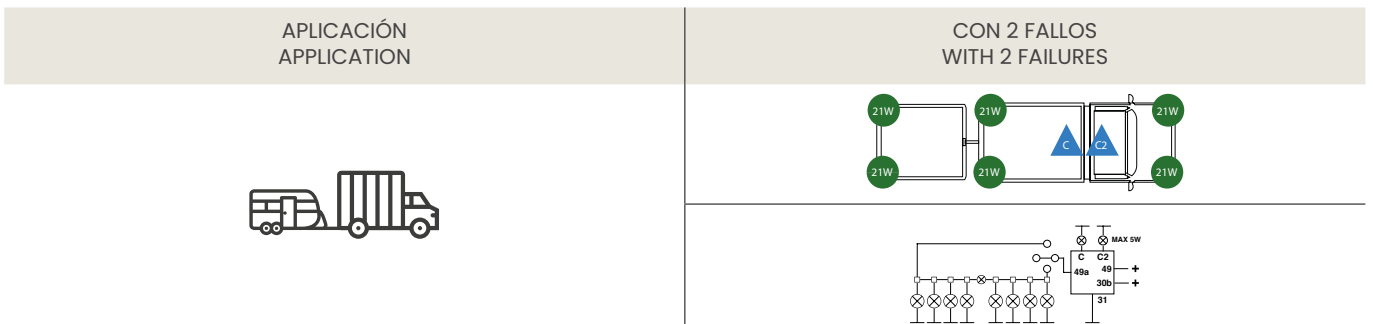


IE14



# INTERMITENTES DE 6 PINS

## 6 PIN FLASHERS



IE

**PINS** 6 x 6,35 mm.

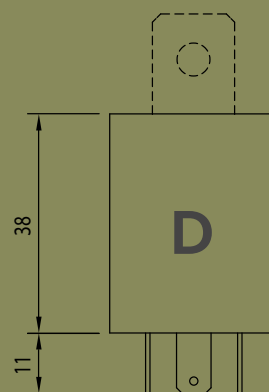
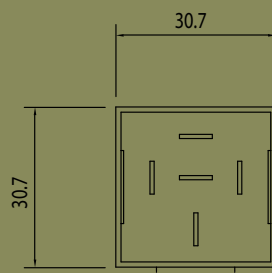
30b	49a	49
31	C2	C

V	FALLOS FAILURES	APLICACIÓN APPLICATION	REF.	SOPORTE SUPPORT	MEDIDAS MEASURES	
24	2		<b>IE14</b>		F	1

● 21W Detección de fallo - Failure detection
 ▲ Intermittentes - Blinkers



IL15



# INTERMITENTES LED

## LED FLASHERS

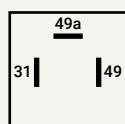
Diseñados para vehículos con indicadores LED. El uso de luces LED en lugar de las bombillas tradicionales se ha extendido en el mercado automovilístico debido a una mayor vida útil y a la alta eficiencia energética.

Designed for vehicles with directional indicator LED lights. The use of LED lights instead of traditional bulbs has spread in the automotive market due to a longer lifespan and high power efficiency.

APLICACIÓN APPLICATION	0 FALLOS 0 FAILURES	1 FALLO 1 FAILURE

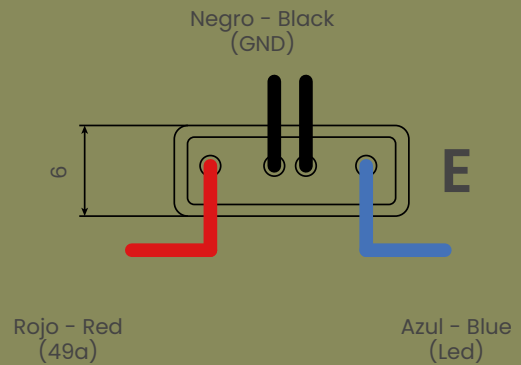
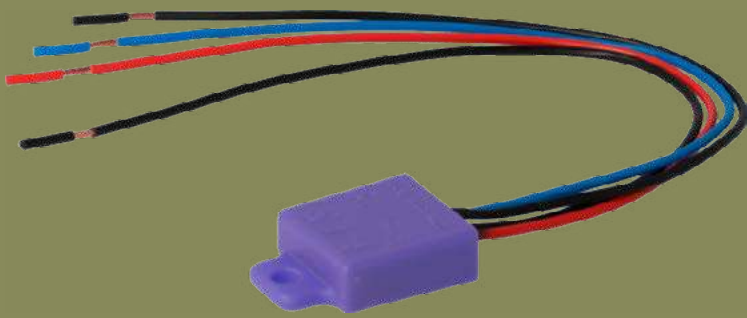


PINS 3 x 6,35 mm.



V	FALLOS FAILURES	APLICACIÓN APPLICATION	REF.	SOPORTE SUPPORT	MEDIDAS MEASURES	
12	0		<b>IL15</b>		D	1
12	1		<b>IL16</b>		D	1

Con fallo LED - With LED failure Sin fallo LED - Without LED failure

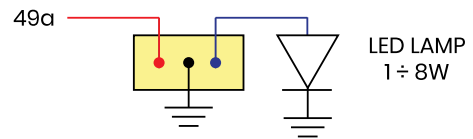


# ILS – INTERMITENTES LED

## INTELIGENTES

### ILS – SMART LED FLASHERS

El ILS es la solución inteligente y universal al problema de la detección de fallos de una lámpara indicadora de dirección LED. La normativa internacional exige la detección de fallos de una lámpara para los vehículos que circulan por la vía pública. El intermitente advierte al conductor aumentando la velocidad de destello de las luces indicadoras de dirección o apagando una luz indicadora en el salpicadero.



Esta solución universal permite detectar el fallo tanto de la bombilla como del grupo de LEDs entre 1W y 8W. Combinado con nuestra unidad de intermitencia específica, ILS permite una detección fiable del fallo del grupo de LED y evita las señales irregulares o espurias. El ILS no produce calor, por lo que puede instalarse en cualquier lugar, su consumo de energía es irrelevante.

La tecnología ILS es:

- 1) Patentada dentro de los estados miembros de la UE: Patente europea n. 2 540 570
- 2) Homologación EMC según ECE E24 10R-030926
- 3) Probado para el cumplimiento de la norma ISO "13207-1:2012 - Vehículos de carretera - características de la lámpara LED para la detección de fallos compatibles con la bombilla.

ILS is the intelligent and universal solution to the problem of the failure detection of a LED direction indicator lamp. International regulations requires the Failure Detection of a lamp for vehicles driven on public roads. The flasher warns the driver by increasing the flash rate of the direction indicators lights or by switching off an indicator light on the dashboard.

This universal solution allows to detect the failure of both bulb and cluster LED between 1W and 8W. Combined with our specific flasher unit, ILS allows a reliable detection of LED cluster failure and prevents irregular or spurious signals. ILS does not produce heat so it can be fitted anywhere, its power consumption is irrelevant.

The ILS technology is:

- 1) Patented inside the member states of EU: European Patent n. 2 540 570
- 2) EMC Homologation according to ECE E24 10R-030926
- 3) Tested for compliance with the Standard ISO "13207-1:2012- Road Vehicles - LED lamp characteristics for bulb compatible failure detection.

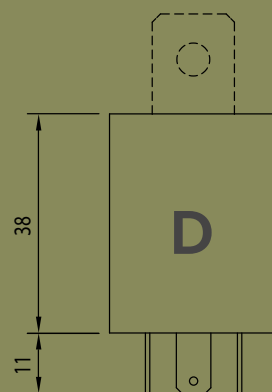
● Con detección de fallo - With failure detection ▲ Intermitentes - Blinkers



ILS04



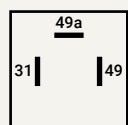
ILS05



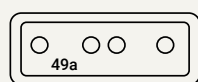
APLICACIÓN APPLICATION	1 FALLO 1 FAILURE	2 FALLOS 2 FAILURES	3 FALLOS 3 FAILURES



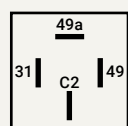
PINS 3 x 6,35 mm.



PINS 4



PINS 4 x 6,35 mm.



DIN

V	W	FALLOS FAILURES	APLICACIÓN APPLICATION	REF.	SOPORTE SUPPORT	MEDIDAS MEASURES	
12	90	1		ILS04		D	1
24	90	1		ILS07		D	1
12	-	2	-	ILS01	-	E	1
24	-	2	-	ILS02	-	E	1
12-24	-	2	-	ILS03	-	E	1
12	140	2		ILS05		D	1
12	170	3		ILS06		D	1
24	140	3		ILS08		D	1
24	170	3		ILS09		D	1

Metal extraíble - Removable metal



RT01



RT02

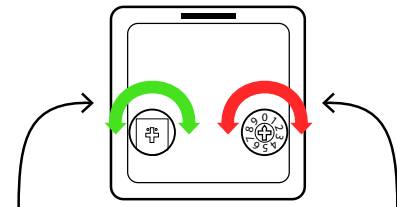


# RELÉS TEMPORIZADORES

## TIMER RELAYS

Se utilizan para encender o apagar un accesorio tras el tiempo de retardo programado. La referencia RT01 tiene un tiempo de programado de 5 segundos (fijos) y las siguientes dos referencias se pueden programar manualmente con los dos selectores ubicados en la parte superior. Permite de 0,5 segundos a 6 horas.

They are used to turn an accessory on or off after the programmed delay time. The RT01 reference has a programming time of 5 seconds (fixed) and the following two references can be manually programmed with the two selectors located on the upper part. Allow 0.5 seconds to 6 hours.

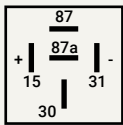


Aumentar el tiempo  
Increase time

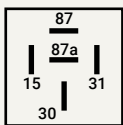
Ajustar temporizador  
Set delay type and time range



PINS 5 x 6,35 mm.



PINS 5 x 6,35 mm.



V	A	TIEMPO TIME seg.	REF.	SOPORTE SUPPORT	
12	20	5	RT01		1
12	10	a programar	RT02		1
24	10	a programar	RT03		1

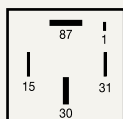


# RELÉS DE BOMBA DE COMBUSTIBLE

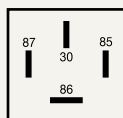
## FUEL PUMP RELAYS



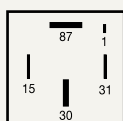
**PINS** 5



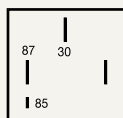
**PINS** 4



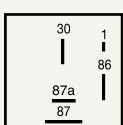
**PINS** 5



**PINS** 4



**PINS** 5



REF.	MARCA BRAND	REFERENCIA ORIGINAL ORIGINAL REFERENCE
<b>RI03</b>	AUDI/VW	321906059 - 443906059 443907385
<b>RI07</b>	AUDI/VW	357906381
<b>RI10</b>	AUDI/VW	321906059G - 443907385B
<b>RI17</b>	AUDI/VW	357906381A - 1J0906381A
<b>RI19</b>	AUDI/VW	443951253AA

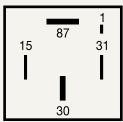


# RELÉS DE BOMBA DE COMBUSTIBLE

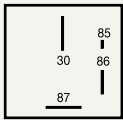
## FUEL PUMP RELAYS



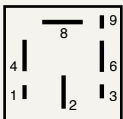
**PINS** 5



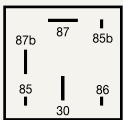
**PINS** 4



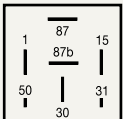
**PINS** 7



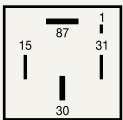
**PINS** 6



**PINS** 7



**PINS** 5



REF.	MARCA BRAND	REFERENCIA ORIGINAL ORIGINAL REFERENCE
<b>RI20</b>	AUDI/VW	321906059H - 443907385C 443907385G - 443907385H
<b>RI21</b>	AUDI/VW	191906383C - 191906363
<b>RI26</b>	AUDI/VW SEAT/SKODA	1J0906383
<b>RI01</b>	OPEL	1238540 - 1238549 1238966 - 1238960 1238539
<b>RI04</b>	OPEL	1238563 - 1238566
<b>RI05</b>	AUDI/VW	321906059D - 321906059E 443906059A - 443907385 321906059F

1 u.





RI17



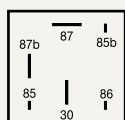
RI19



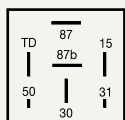
RI21



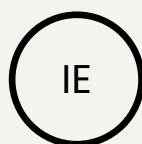
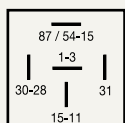
PINS 6



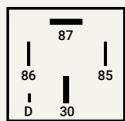
PINS 7



PINS 5



PINS 5



REF. MARCA BRAND REFERENCIA ORIGINAL ORIGINAL REFERENCE

<b>RI06</b>		OPEL	1238539 - 1238540
			1238549 - 1238966
			1238960



<b>RI08</b>	ALFA ROMEO	195051104300 - 605343160	
		AUDI/VW	X03952671
		CITROËN	95496621
		FIAT	60534316 - 7576067
			7628059 - 7750754
	PEUGEOT	655522 - 95496621	



<b>RI13</b>	FORD	6161570 - 85AG9P704AA
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## RELÉ MULTIFUNCIÓN MULTIFUNCTION RELAY

<b>IE70</b>		AUDI/VW	3D0 951 253A
		SEAT	3D0 951 253A
		SKODA	3D0 951 253A



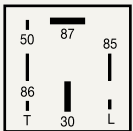
1 u.

# CENTRALES DE PRECALENTAMIENTO DIESEL

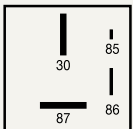
## PREHEATING CENTRALS FOR DIESEL ENGINES



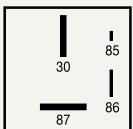
PINS 7



PINS 4



PINS 4



REF.	MARCA BRAND	REFERENCIA ORIGINAL ORIGINAL REFERENCE
<b>DP04</b>	AUDI/VW	171911261 - 443911261
	NAGARES	TPSS712
<b>DP25</b>	AUDI/VW	357911253A - 104
<b>DP26</b>	AUDI/VW	357911253 - 103
	MERCEDES	0015452705



1 u.



DP04



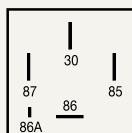
DP26



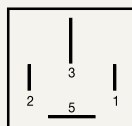
DP58



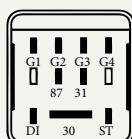
PINS 5



PINS 4



PINS 9



REF.	MARCA BRAND	REFERENCIA ORIGINAL ORIGINAL REFERENCE
<b>DP28</b>	AUDI/VW	165906381
<b>DP30</b>	AUDI/VW	7M0951253A
<b>DP58</b>	VW	038907281B
	NAGARES	TPDV2912



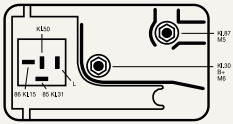
1 u.

# CENTRALES DE PRECALENTAMIENTO DIESEL

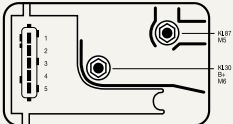
## PREHEATING CENTRALS FOR DIESEL ENGINES



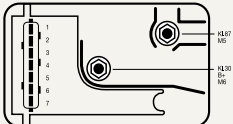
PINS 6



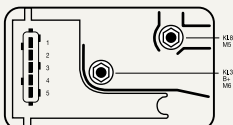
PINS 7



PINS 9



PINS 7



REF.	MARCA BRAND	REFERENCIA ORIGINAL ORIGINAL REFERENCE
<b>DP09</b>	CITROËN	598115
	FIAT	4792112-5946920-5990986
	PEUGEOT	598110
	ROVER	PRC5020
	SEAT	0581CR1 - 0581CR01
	NAGARES	TDP512
<b>DP15</b>	CITROËN	598119
	FIAT	961416778
	PEUGEOT	598119
	NAGARES	PPC512
<b>DP17</b>	CITROËN	598121 - 598126 - 96165823
	FIAT	46423043 - 9615938380
	PEUGEOT	598121 - 598126
		9616280080
	ROVER	NCJ100110
	NAGARES	PPC712
<b>DP18</b>	CITROËN	598124 - 96165824
	FIAT	961595948
	PEUGEOT	598124 - 96165824
	NAGARES	PPC512



1 u.



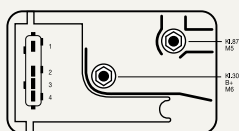
DP09



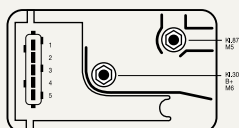
DP18



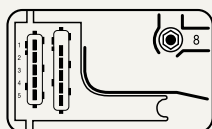
PINS 6



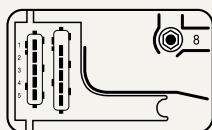
PINS 7



PINS 11



PINS 11



REF.	MARCA BRAND	REFERENCIA ORIGINAL ORIGINAL REFERENCE
<b>DP41</b>	CITROËN	598131 - 598138 - 598143
	FIAT	9619039780 - 9639912580
		1348881080
	PEUGEOT	598125 - 598131 - 598138
<b>DP43</b>	CITROËN	598143 - 598119
		9625203680
	PEUGEOT	598119 - 9625203680
		598125
	NAGARES	CEP612
<b>DP47</b>	FIAT	55193073
	ALFA ROMEO	55193073
<b>DP48</b>	FIAT	60653990
	ALFA ROMEO	60653990



1 u.

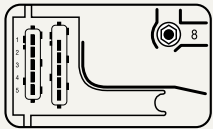


# CENTRALES DE PRECALENTAMIENTO DIESEL

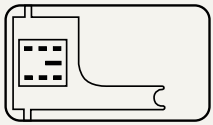
## PREHEATING CENTRALS FOR DIESEL ENGINES



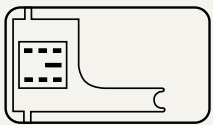
PINS 11



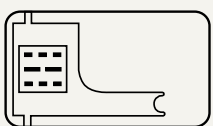
PINS 7



PINS 7



PINS 8



REF.	MARCA BRAND	REFERENCIA ORIGINAL ORIGINAL REFERENCE
<b>DP49</b>	FIAT	46807091
<b>DP45</b>	RENAULT	7700115078
	NISSAN	11067BN700
	OPEL	4409990 - 4506156
	NAGARES	BED712
<b>DP51</b>	OPEL	4409990 - 4506156
		4416764
	RENAULT	9640469680 - 7700115078
	CITROËN	9640469680
	PEUGEOT	55353011
	NISSAN	11067GD50A
	NAGARES	BDL712
<b>DP54</b>	RENAULT	8200859243
	OPEL	4419200 - 93862497
		598140
	NISSAN	11067JD50C - 2523080A0A
	NAGARES	FGRP812



1 u.



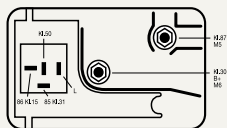
DP51



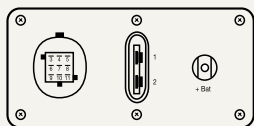
DP05



PINS 6



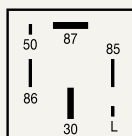
PINS 12



PINS 9



PINS 6



REF.	MARCA BRAND	REFERENCIA ORIGINAL ORIGINAL REFERENCE
<b>DP10</b>	ALFA ROMEO	116619601600
	RENAULT	7700757776 - 7700751089
		7700702747 - 7702089784
	ROVER	PRC5020
<b>DP11</b>	RENAULT	7700790579 - 7700851443
		7700867374 - 7700870715
		7700863454
	VW	893911261
<b>DP44</b>	GM	09108385
	RENAULT	7700109860
	OPEL	4400385
	NAGARES	BRE512
<b>DP05</b>	BMW	13631273139 - 61311358269
	CITROËN	5472928
	FORD	6143688 - 83BB6M092AA
		88BG8B658AA
	OPEL	090276101 - 1238532
		1238537-1238565-1238627
	VOLVO	35601160 - 3650116
	VW	022906059
	NAGARES	TPF612 - TPPF612

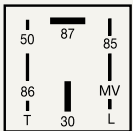


# CENTRALES DE PRECALENTAMIENTO DIESEL

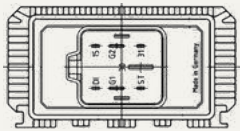
## PREHEATING CENTRALS FOR DIESEL ENGINES



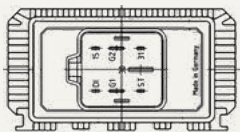
PINS 8



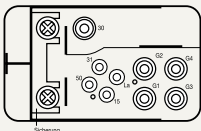
PINS 7



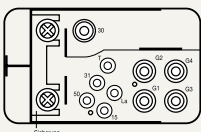
PINS 7



PINS 9



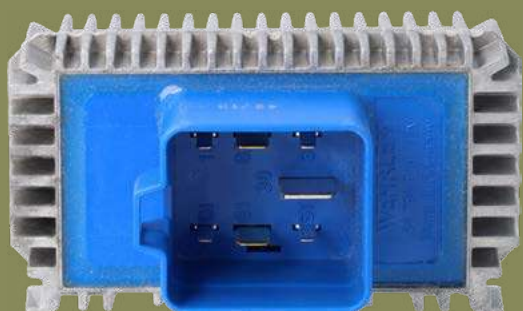
PINS 10



REF.	MARCA BRAND	REFERENCIA ORIGINAL ORIGINAL REFERENCE
<b>DP50</b>	FORD	96VB6M092B
<b>DP55</b>	OPEL	6235303
<b>DP56</b>	OPEL NAGARES / MALHE	6235240 MH66
<b>DP31</b>	MERCEDES	0015459732 - 0025450532 0025450832 - 0055454132
<b>DP36</b>	MERCEDES	0085450032 - 0065458832 A0065458832-A0085450032



1 u.



DP56



DP31

DP

PINS 8

REF.	MARCA BRAND	REFERENCIA ORIGINAL ORIGINAL REFERENCE
<b>DP52</b>	MERCEDES	51799030 - A0255452832 A0005453516 - A6461536579
	NAGARES	TPMS412



PINS 10

<b>DP53</b>	MERCEDES	51799029 - A0005453616 A0255452932 - A6461536579
	NAGARES	TPMS612



IM

PINS 3

**MÓDULOS DE ENCENDIDO**  
IGNITION MODULES

<b>IM18</b>	VW	6N0905104 - 004028149 047905115 - 357905104 867905104A - 867905352
-------------	----	--------------------------------------------------------------------------



PINS 6

<b>IM19</b>	VW	701905104 - 701905104A 867905105A
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1 u.



MZ13

ZZ12

SUZUKI PS610413 / NISSAN 26350G9801

ZZ24

SUZUKI PS610313 / NISSAN 26350G9802

# MINI ZUMBADORES ELECTRÓNICOS

## ELECTRONIC MINI BUZZERS



MZ13



MZ15



ZZ12



ZZ24



10 u.



10 u.

V	CONSUMO CURRENT mA	REF.	FRECUENCIA FREQUENCY	NIVEL SONIDO SOUND LEVEL
12	25	<b>MZ13</b>	400 Hz ± 100 Hz	75 dB - 30 cm
24	30	<b>MZ15</b>	400 Hz ± 100 Hz	80 dB - 30 cm
12	10	<b>ZZ12</b>	4100 Hz ± 500 Hz	85 db - 30 cm
24	10	<b>ZZ24</b>	4100 Hz ± 500 Hz	85 db - 30 cm



ZA14



RA01

# ZUMBADORES DE MARCHA ATRÁS

## REVERSE BUZZERS



ZA12



ZA14



ZA24



ZA25



RA01



1 u.

V

CONSUMO  
CURRENT  
mA

REF.

NIVEL SONIDO  
SOUND LEVEL

12	70	ZA12	>102 dB - 20 cm / 85 dB - 1m
12	70	ZA14	>102 dB - 20 cm / 85 dB - 1m
24	70	ZA24	>105 dB - 20 cm / 85 dB - 1m
12 / 24	30	ZA25	>108 dB - 20 cm / 96 dB - 1m



1 u.

### RELÉ ZUMBADOR BUZZER RELAY

12	-	RA01	>85 dB - 30 cm
----	---	------	----------------

El relé de 3 x 6,35 pines emite un aviso sonoro cuando se abre la puerta del vehículo y las luces de cruce están encendidas.

The 3 x 6.35 pin relay emits an audible warning when the vehicle door is opened and the low beams are on.



DI Diodo  
Diode



TL Temporizador  
Timer



UC Unidad de elevación  
Window-lift unit

# PRODUCTOS GUILERA

## GUILERA'S PRODUCTS



PINS 2

V

A

REF.

MARCA  
BRAND

REF. ORIGINAL  
ORIGINAL REF.



12 / 24

3

**DI01**

GUILERA

070253

5



PINS 4

-

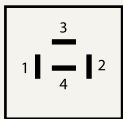
-

**TL01**

GUILERA

174505

1



PINS 18

**24**

-

**UC01**

NISSAN

28455-9X601

1

GUILERA

11F010





# CONMUTADORES Y CONTACTOS

## SWITCHES & LOCKS

Conmutadores de volante, interruptores, antirrobos, cerraduras de dirección, contactos y bombines de encendido.

Steering column switches, switches, steering locks, ignition switches and lock cylinders.



# CONMUTADORES DE VOLANTE

## STEERING COLUMN SWITCHES

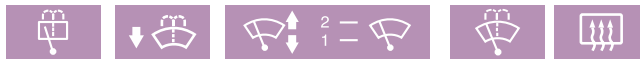


PINS 10



REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR
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<b>CV26</b>	FIAT	TIPO	88 -> 96
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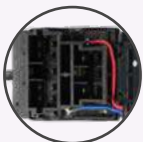
PINS 14



<b>CVT3</b>	LANCIA	ZETA	95 -> 02
	FIAT	ULYSSE	95 -> 02



PINS 13



<b>CVX4</b>	FIAT	SCUDO	98 -> 06
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1 u.

# FIAT, LANCIA, ALFA ROMEO

CV26	182319180
CVT3	9625193169 - 96251931ZL
CVX4	9623641569 - 96236415ZL
CVH5	183160560 - 714733060
CVN5	735246440 - 7352643560 - 735264356
CVN8	60575648



PINS 27



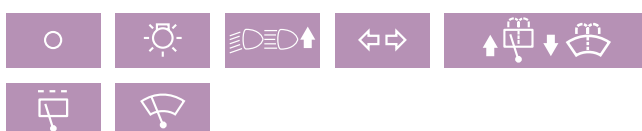
REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR
<b>CVH5</b>	FIAT	PUNTO	93 -> 00
		PUNTO VAN	93 -> 00



PINS 14



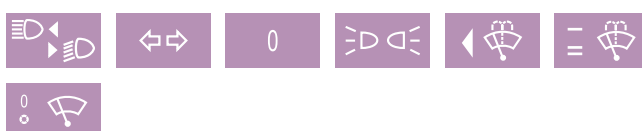
<b>CVN5</b>	FIAT	BRAVO	95 -> 02
		BRAVA	95 -> 02



PINS 27



<b>CVN8</b>	ALFA ROMEO	ALFA 33 FL	91 -> 94
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1 u.

# CONMUTADORES DE VOLANTE

## STEERING COLUMN SWITCHES



PINS 8



REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR
<b>CV91</b>	SEAT	TOLEDO	91 -> 99
	VW	GOLF II	83 -> 91
		PASSAT	88 -> 97
		PASSAT VARIANT	88 -> 97
		POLO	90 -> 98
		POLO CLASSIC	90 -> 98
		POLO COUPE	90 -> 98



PINS 10



<b>CV102</b>	VW	LUP0	99 -> 05
		POLO	95 -> 02



PINS 8



<b>CV180</b>	AUDI	A3	03 -> 12
	VW	GOLF V / PLUS	03 -> 13
		TOURAN	03 -> 10
	SEAT	ALTEA	03 -> 13
	SKODA	OCTAVIA	-



1 u.

## VOLKSWAGEN, AUDI, SEAT, SKODA

CV91	35795351901C - 357953519
CV102	6N0953519B - 6N0953503AD - 6N0953519B01C
CV180	1K0953519 - 1K0953519H
CV181	4E0953503B - 4E0953503B4PK
CV184	1K0953519A01C - 1K0953519A9B9 - 1K0953519C9B9
CVM4	535953519A01C - 535953519A



PINS 5



REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR
<b>CV181</b>	AUDI	A4 / A6 / A8	-



PINS 8



<b>CV184</b>	AUDI	A3	03 -> 12
	VW	GOLF	03 -> 12
		SCIROCCO	03 -> 12
		TIGUAN	03 -> 12
		TOURAN	03 -> 12
	SEAT	ALTEA / LEÓN	03 -> 12
		TOLEDO	03 -> 12
	SKODA	OCTAVIA	03 -> 12
		SUPERB	03 -> 12



PINS 12



<b>CVM4</b>	SEAT	TOLEDO	91 -> 98
	VW	GOLF II	83 -> 92
		JETTA II	83 -> 92
		PASSAT	83 -> 92



# CONMUTADORES DE VOLANTE

## STEERING COLUMN SWITCHES



PINS 8



REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR
CVW9	VW	CORRADO	91 -> 02
		PASSAT	91 -> 02
		VENTO	91 -> 02
		POLO	91 -> 02
		GOLF III	91 -> 02
		GOLF IV	91 -> 02



PINS 13



CV90	SEAT	TOLEDO	91 -> 99
	VW	GOLF	86 -> 92
		JETTA	89 -> 92
		VETO	89 -> 92
		PASSAT	88 -> 93
		POLO	82 -> 94
		POLO CLASSIC	82 -> 94



PINS 13



CV101	VW	TRANSPORTER	91 -> 96
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1 u.

## VOLKSWAGEN, SEAT, AUDI, SKODA

CVW9	6K5953519 - 1H0953519
CV90	357953513 - 357953513F - 357953513F01C
CV101	701953513 - 4B095303F
CV183	1K0953513A - 1K0953513F - 1K0953513G
CV187	4E0953513A - 4E0953513E - 4E0953513K



PINS 4



REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR
<b>CV183</b>	VW	GOLF	04 ->11
		SCIROCCO	04 ->11
		TIGUAN	04 ->11
SEAT	ALTEA	04 ->11	
	LEÓN	04 ->11	
	TOLEDO	04 ->11	
	SKODA	OCTAVIA	04 ->11
		SUPERB	04 ->11
		YETI	04 ->11



PINS 13



<b>CV187</b>	AUDI	A4/ A6/ A8 / Q7	03 -> 08
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1 u.



# CONMUTADORES DE VOLANTE

## STEERING COLUMN SWITCHES



PINS 10



REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR
<b>CVM1</b>	AUDI	80 / 90 / 100 200 / V8	88 -> 00 88 -> 00



PINS 13



<b>CVS1</b>	VW	GOLF III	88 -> 99
		GOLF IV	88 -> 99
		PASSAT	88 -> 99
		VENTO	88 -> 99



PINS 14



<b>CVW5</b>	AUDI	A4 / A6	94 -> 97
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1 u.

## AUDI, VOLKSWAGEN, SEAT, SKODA

<b>CVM1</b>	443953513L - 443953513L01C - 443953513H
<b>CVS1</b>	1H0953513C01C - 1H0953513 - 1H0953513C
<b>CVW5</b>	4D0953513 - 8D0953513
<b>CVW8</b>	6K5953513AB41
<b>CVY1</b>	6N0953503AD - 6N0953513 - 6N095351301C
<b>CVY7</b>	8L0953513 - 7M0953504



**PINS** 13



REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR
<b>CVW8</b>	SEAT	CÓRDOBA	91 -> 99
		IBIZA	91 -> 99
		TOLEDO	91 -> 99



**PINS** 12



<b>CVY1</b>	VW	POLO	95 -> 05
		POLO CLASSIC	95 -> 05
		POLO VARIANT	95 -> 05
		LUPO	98 -> 05
		CADDY II	95 -> 04
	SEAT	AROSA	97 -> 04



**PINS** 11



<b>CVY7</b>	AUDI	A2 / A3 / A6	96 -> 06
	VW	GOLF IV	97 -> 06
		PASSAT	96 -> 05
	SEAT	ALHAMBRA	96 -> 10
		LEÓN	96 -> 10
		TOLEDO II	96 -> 10
	SKODA	FABIA	96 -> 10
		OCTAVIA	96 -> 10



1 u.

# CONMUTADORES DE VOLANTE

## STEERING COLUMN SWITCHES



PINS 11



REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR
<b>CVY8</b>	AUDI	A2 / A3 / A6 / TT	94 -> 12
	VW	GOLF IV	97 -> 06
		PASSAT / BORA	97 -> 06
		SHARAN	96 -> 05
		NEW BEETLE	98 -> 13
	SEAT	ALHAMBRA	96 -> 10
		IBIZA / LEÓN	96 -> 10
		TOLEDO II	96 -> 10
	SKODA	FABIA / OCTAVIA	99 -> 10
	FORD	GALAXY	95 -> 06



PINS 21



<b>CV116</b>	SEAT	CÓRDOBA	99 -> 02
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PINS 21



<b>CV119</b>	SEAT	IBIZA	99 -> 02
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1 u.

# AUDI, VOLKSWAGEN, SEAT, SKODA, FORD

CVY8	8L0953513S
CV116	6K5953503AD20H
CV119	6K6953503AF20H
CV121	6Q0953503AM01C - 6Q0953513D01C - 6Q0953503AC01C
CV194	5Q0953502Q
CVJ9	3963524



PINS 20



REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR
<b>CV121</b>	SEAT	IBIZA IV	02 -> 09
		CÓRDOBA 1.2/2.0	02 -> 09
	VW	POLO 1.2 - 1.9	02 -> 09



PINS 10



<b>CV194</b>	VW	EOS / GOLF	01 ->12
		JETTA	01 ->12
		SCIROCCO	01 ->12
		TIGUAN	01 ->12
		TOURAN	01 ->12
	SEAT	ALTEA / ALTEA XL	01 ->12
		LEÓN	01 ->12
	SKODA	OCTAVIA	01 ->12
		SUPERB / YETI	01 ->12



PINS 6/8



<b>CVJ9</b>	SEAT	MARBELLA	86 -> 93
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1 u.

# CONMUTADORES DE VOLANTE

## STEERING COLUMN SWITCHES



PINS 9



REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR
<b>CV176</b>	PEUGEOT	106 306	91 -> 96 94 -> 02



PINS 12



<b>CV124</b>	PEUGEOT	206	98 -> 13
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PINS 12



<b>CV125</b>	PEUGEOT	206	98 -> 13
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PINS 10



<b>CV15</b>	CITROËN	AX	87 -> 92
		BX	89 -> 94
		C15	86 -> 90
		VISA	84 -> 88
	PEUGEOT	104 / 205	86 -> 89
		309 / 505	86 -> 89
		J9	87 -> 90



# PEUGEOT, CITROËN

CVI76	623983 - 96171690ZL
CVI24	625376 - 96307459ZL
CVI25	625377 - 96307460ZL
CVI5	625342 - 97518149
CVI12	625375 - 96274722ZL
CVT3	625368 - 96251931ZL
CVX4	9623641569 - 96236415ZL



PINS 12



REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR
<b>CV112</b>	CITROËN	XANTIA	97 -> 03
	PEUGEOT	406	99 -> 04



PINS 14



<b>CVT3</b>	CITROËN	EVASION	96 -> 02
		XANTIA	93 -> 98
		XSARA	97 -> 05
	PEUGEOT	406	95 -> 04
		605	94 -> 99
		806	94 -> 02



PINS 13



<b>CVX4</b>	CITROËN	BRLINGO	95 -> 04
		JUMPY / SAXO	95 -> 04
	PEUGEOT	106 / 106 II	95 -> 02
		206 / 306	95 -> 02
		PANTER	95 -> 02
		EXPERT	95 -> 02



1 u.

# CONMUTADORES DE VOLANTE

## STEERING COLUMN SWITCHES



PINS 10



PINS 12



PINS 12



PINS 11



REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR
<b>CV114</b>	FORD	FOCUS 1.4/2.0	98 -> 11
<b>CV130</b>	FORD	TRANSIT	91 -> 00
<b>CV168</b>	FORD	FOCUS FOCUS C-MAX	04 -> 12 04 -> 12
<b>CV132</b>	FORD	TRANSIT	91 -> 00



1 u.



# FORD

CV114	1097541 - 98AG17A553CB - 98AG17A553CC + 964368662L
CV130	6993548 - 95VB11K665AA - 11K665AA
CV168	1318148 - 4M5T17A553BB
CV132	1070574 - 91VB13B302AH
CV162	1062193 - 1C1T13335AB
CV164	1365258 - 3M5T13335BE
CV172	1383686 - 6C1T13335AA
CV179	1064341 - 98AG1313335BB



PINS 10



REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR
<b>CV162</b>	FORD	FOCUS	91 -> 04
		FIESTA V	91 -> 04
		MONDEO III	91 -> 04
		TRANSIT	91 -> 04
		TOURNEO	91 -> 04



PINS 7



<b>CV164</b>	FORD	FOCUS	04 -> 12
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PINS 5



<b>CV172</b>	FORD	TRANSIT	06 -> 12
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PINS 9



<b>CV179</b>	FORD	FOCUS	98 -> 07
		MONDEO III	00 -> 07



1 u.

# CONMUTADORES DE VOLANTE

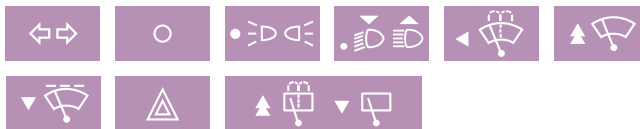
## STEERING COLUMN SWITCHES



PINS 21



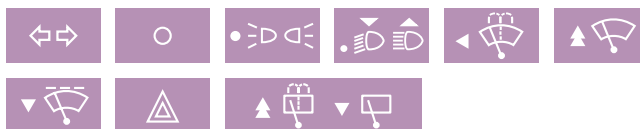
REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR
<b>CVR8</b>	FORD	ESCORT V/VI/VII ORION III	95 -> 01 95 -> 01



PINS 22



<b>CVR9</b>	FORD	ESCORT FIESTA IV ORION	96 -> 01 96 -> 01 96 -> 01
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PINS 14



<b>CV51</b>	MERCEDES	190 (W201)	82 -> 93
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1 u.

# FORD, MERCEDES

<b>CVR8</b>	1027166 - 95AG11K665CA
<b>CVR9</b>	94AG11K665DA - 7107013
<b>CV51</b>	A201540624 - 2015450624
<b>CV185</b>	A9065450310
<b>CV193</b>	16854501107D88 - A1685450110
<b>CV158</b>	0005407445 - 0015404645 - A0015404645
<b>CV182</b>	0005407545 - 0015404945 - A0005407545



**PINS** 8



REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR
<b>CV185</b>	MERCEDES	VANEO A-CLASS	97 -> 04 97 -> 04



**PINS** 22



<b>CV193</b>	MERCEDES	SPRINTER 3.5-T (W906) 313 CDI	-> 03 -> 03
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(906.631, 906.633, 906.635, 906.637)



**PINS** 22



<b>CV158</b>	MERCEDES	SPRINTER / VITO V-CLASS	-> 03 -> 03
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**PINS** 22



<b>CV182</b>	MERCEDES	SPRINTER / VITO V-CLASS / VIANO	96 -> 03 96 -> 03
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1 u.

# CONMUTADORES DE VOLANTE

## STEERING COLUMN SWITCHES



PINS 8



PINS 4



PINS 9



PINS 6



REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR
<b>CV64</b>	OPEL	KADETT	84 -> 88
<b>CV136</b>	OPEL	COMBO	00 -> 06
		CORSA C	00 -> 06
		MERIVA / TIGRA	00 -> 06
<b>CVL8</b>	OPEL	ASTRA	91 -> 05
		CORSA	86 -> 02
		KADETT	84 -> 93
		VECTRA A / B	88 -> 03
<b>CV115</b>	OPEL	ASTRA G / H	98 -> 05
		ZAFIRA A	98 -> 05
	SUZUKI	IGNIS II	00 -> 08
		WAGON R+	00 -> 08



# OPEL, SUZUKI, RENAULT

CV64	1241106 - 90221175
CV136	09185417 - 1241028
CVL8	1241132 - 90243395
CV115	1241349 - 6240241 - 90560991
CV135	09185413 - 1241210
CVM2	90228194 - 124250
CV178	7701048913
CV189	93160239



PINS 4



REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR
<b>CV135</b>	OPEL	COMBO	00 -> 06
		MERIVA	00 -> 06
		TIGRA	00 -> 06



PINS 10



<b>CVM2</b>	OPEL	ASTRA F / G	93 -> 00
		CORSA B	93 -> 00
		VECTRA A	93 -> 00



PINS 13



<b>CV178</b>	OPEL	VIVARO	01 -> 09
	RENAULT	LAGUNA II	01->05
		ESPACE IV	02->06
		TRAFIC II	02->08



PINS 13



<b>CV189</b>	RENAULT	VIVARO	01 -> 14
	OPEL	ESPACE	01 -> 14
		LAGUNA	01 -> 14
		TRAFIC II	01 -> 14



1 u.

# CONMUTADORES DE VOLANTE

## STEERING COLUMN SWITCHES



PINS 9



REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR
<b>CV74</b>	RENAULT	R9 / R11	82 -> 85
		SPACE	87 -> 90
		EXPRESS	85 -> 90
		SUPERCINCO	85 -> 88



PINS 13 + 2



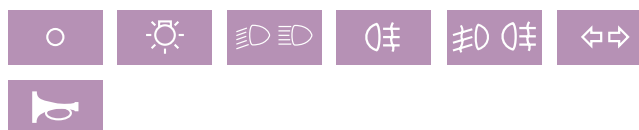
<b>CV122</b>	RENAULT	MEGANE I	96-> 02
		KANGOO	98-> 08



PINS 13 + 2



<b>CV123</b>	RENAULT	MEGANE I	96-> 02
		KANGOO	98-> 08



PINS 15 + 2



<b>CV188</b>	RENAULT	CLIO	12 ->
	DACIA	LOGAN	12 ->



# RENAULT, DACIA

CV74	7700760825
CV122	7701044278 - 7701045864
CV123	7701044279 - 7701053058
CV188	8201167981
CV192	7701057089 - 8201590638 - 255405605R
CVH1	7700803537 - 7700842114
CV195	8201137975
CV197	8201167988 - 255400337R - 3276422516826



PINS 10



REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR
<b>CV192</b>	RENAULT	CLIO III HBACK	05-> 08
		MODUS	05-> 08
		GRAND MODUS	05-> 08



PINS 10



<b>CVH1</b>	RENAULT	CLIO I	90 -> 98
		R19 II	92 -> 95
		SPACE II	87 -> 96



PINS 17



<b>CV195</b>	DACIA	LODGY	04-> 12
		LOGAN II	01-> 13
		SANDERO II	06-> 13



PINS 15 + 2



<b>CV197</b>	RENAULT	CLIO	12 ->
	DACIA	LOGAN	12 ->



1 u.



# INTERRUPTORES

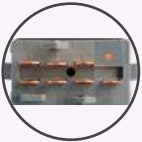
## SWITCHES



PINS 8



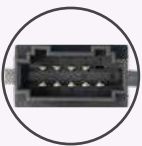
PINS 7



PINS 7



PINS 9



REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR
<b>IW01</b>	VW	GOLF II / JETTA II	86 -> 92
<b>IW04</b>	VW	GOLF IV	98 -> 06
		PASSAT	98 -> 06
		BORA	98 -> 06
		CADDY	98 -> 06
<b>IW11</b>	AUDI	A3	98 -> 03
<b>IW13</b>	AUDI	A4	97 -> 02

1 u.



# VOLKSWAGEN, AUDI, SEAT

IW01	WO191941531H - 191941531H
IW04	1J0953235 - 1J0959621E - 6N0959621B
IW11	8L0941509G01C - 8L0941509M01C - 8L0941509C01C
IW13	8D0941509H
IW14	3B0953235B - 3B0953235D
IW15	1U0953235B - 1U0953235B300
IW19	191959855
IW28	1C0941531A - 1C0941531A20H - 1C0941531AC1A



PINS 7

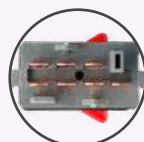


REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR
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<b>IW14</b>	VW	PASSAT	96 -> 05
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PINS 7



<b>IW15</b>	VW	PASSAT	05 -> 12
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PINS 6



<b>IW19</b>	SEAT	IBIZA / CÓRDOBA	96 -> 99
	VW	GOLF	83 -> 91



PINS 17



<b>IW28</b>	SEAT	ALHAMBRA	96 -> 12
	VW	BORA / LUPO	98 -> 05
		NEW BEETLE	98 -> 12
		PASSAT	96 -> 05
		POLO	95 -> 01
		GOLF IV	98 -> 06



# INTERRUPTORES

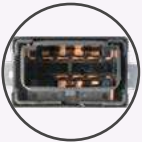
## SWITCHES



PINS 7



PINS 7



PINS 4



PINS 4



REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR
IW30	VW	LUPO	96 -> 05
		POLO	96 -> 05
		TRANSPORTER	96 -> 05



IW31	SEAT	CÓRDOBA	99 -> 09
		IBIZA	99 -> 09



IW33	VW	PASSAT	05 -> 12
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IW34	SEAT	GOLF IV / BORA	98 -> 05
		PASSAT	98 -> 05



1 u.



# VOLKSWAGEN, SEAT, SKODA, AUDI

IW30	6N0953235C
IW31	6K0953235 - 6K095323581H - 6K0953235B
IW33	3C0953509A
IW34	3B0959855B
IW35	1J4959857D
IW37	6Y0953235 - 6Y0953235300
IW38	4B0941509D - 4B0941509K



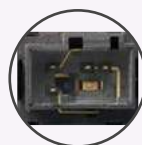
PINS 9



REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR
<b>IW35</b>	SEAT	LEÓN	00 -> 13
		TOLEDO II/III	99 -> 09
	VW	PASSAT	00 -> 05
		BORA	98 -> 05
		GOLF IV/V	97 -> 08



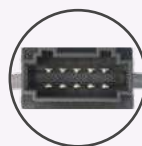
PINS 4



<b>IW37</b>	VW	TRANSPORTER	
		MULTIVAN T5	
	SKODA	FABIA	



PINS 10



<b>IW38</b>	AUDI	A6	97 -> 05
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1 u.

# INTERRUPTORES

## SWITCHES



PINS 10



REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR
<b>IW39</b>	VW	GOLF V	03 -> 08
		TOURAN	03 -> 08
		PASSAT	03 -> 08
		TIGUAN	03 -> 08



PINS 10



<b>IW40</b>	VW	GOLF V / VI	05 -> 12
		PASSAT / T5	05 -> 12
		SHARAN	05 -> 12
		TOURAN	05 -> 12
		TIGUAN	05 -> 12
	SEAT	ALHAMBRA	10 ->



PINS 10



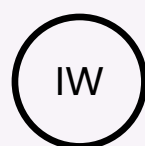
<b>IW41</b>	VW	GOLF V / VI	08 -> 13
		PASSAT / T5	08 -> 13



1 u.

# VOLKSWAGEN, SEAT, AUDI

IW39	1K0941431AS - 1K0941431N
IW40	3C8941431A
IW41	3C8941431C - 5ND941431A
IW42	1K4959857B - 5K4959857
IW43	8L0959851A - 4B0959851B - 4B0959851
IW44	4F0959851
IW45	5K0959855XSH - 5ND959855



PINS 10



PINS 16



PINS 10



PINS 3



REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR
<b>IW42</b>	VW	GOLF	08 -> 13
		PASSAT	08 -> 13



<b>IW43</b>	AUDI	A3 / A6	96 -> 05
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<b>IW44</b>	AUDI	A3 / A6 / Q7	04 -> 11
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<b>IW45</b>	VW	GOLF	05 -> 13
		PASSAT	05 -> 13
		TIGUAN	04 -> 13
		JETTA	04 -> 13
	SEAT	ALHAMBRA	10 ->



# INTERRUPTORES

## SWITCHES



PINS 4



PINS 3



PINS 7



PINS 8



REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR
<b>IW46</b>	VW	POLO	01 -> 10
	SEAT	CÓRDOBA	01 -> 10
		IBIZA	01 -> 10
<b>IW47</b>	VW	POLO	04 -> 12
		GOLF	04 -> 12
<b>IF40</b>	FORD	ESCORT	89 -> 02
		FIESTA	89 -> 02
		SCORPION	89 -> 02
		SIERRA	89 -> 02
<b>IF41</b>	FORD	FIESTA / FUSION	96 -> 08
		KA / TOURNEO	96 -> 08
		TRANSIT / PUMA	96 -> 08

1 u.





# VOLKSWAGEN, SEAT, FORD

IW46	6Q0959858A - 6Q0959858A01C - 6Q0959858A9B9
IW47	7L6959855BREH - 7L6959855B
IF40	91AG14529AC - 6193161
IF41	1007910 - 96FG14529BC
IF42	1006292 - 1107243 - 96FG14529AC
IF43	1379197 - 6M2T14529DA
IF44	1383293 - 5C1T14529AA
IF45	1379195 - 1403360 - 1428969



PINS 6



REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR
------	-------------	--------------	----------

<b>IF42</b>	FORD	FIESTA	96 -> 08
		FUSION / KA	96 -> 08
		TOURNEO	96 -> 08
		TRANSIT / PUMA	96 -> 08



PINS 6



<b>IF43</b>	FORD	FOCUS II	04 -> 10
		C-MAX / S-MAX	04 -> 10



PINS 6



<b>IF44</b>	FORD	TRANSIT	06 -> 12
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PINS 4



<b>IF45</b>	FORD	FOCUS II	06 -> 13
		GALAXY	06 -> 13
		MONDEO	06 -> 13
		FOCUS S-MAX	06 -> 13



# INTERRUPTORES

## SWITCHES



PINS 4



PINS 7



PINS 6



PINS 11



REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR
<b>IF47</b>	FORD	MONDEO IV	07 -> 13
<b>I003</b>	OPEL	CORSA / KADETT ASCONA	82 -> 93 82 -> 93
<b>I011</b>	OPEL	ASTRA / ZAFIRA	98 -> 05
<b>I012</b>	OPEL	ASTRA G ZAFIRA A	98 -> 09 98 -> 09



1 u.

# FORD, OPEL, IVECO

IF47	1116735 - 1123793 - 1S7T14529AA - 1S7T14529AB
IO03	1240107 - 1240501
IO11	09100301 - 6240107 - 90561088
IO12	6240106 - 90561086
K411	682241
K414	682244



PINS 4



PINS 7



REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR
<b>K411</b>	IVECO	7150	-
<b>K414</b>	IVECO	7150	-



1 u.

# ANTIRROBOS

## ANTI THEFT



PINS 4



PINS 6



PINS 5



PINS 6



PINS 6



REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR
<b>CA01</b>	CITROËN	C-15	84 -> 05
Llave tipo Neiman / Neiman's type of key			
<b>CA06</b>	PEUGEOT	206	98 -> 02
<b>CA07</b>	PEUGEOT	206	02 -> 11
<b>CA08</b>	PEUGEOT	306	93 -> 02
<b>CA09</b>	PEUGEOT	205	85 -> 98
		309	89 -> 93
		J9	80 -> 87



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# CITROËN, PEUGEOT, FIAT

CA01	4162V1
CA06	4162P0
CA07	4162Z1
CA08	416299
CA09	416229
CA10	416292
CA11	4162W8 / VALEO 252007
CA12	4162W4
CA13	4162W3



PINS 6



PINS 4



PINS 4



PINS 6



REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR
<b>CA10</b>	PEUGEOT	106	92 -> 04
		405	92 -> 96
<b>CA11</b>	CITROËN	C-15	84 -> 01
		VISA	84 -> 88
Llave tipo cruz / Cross' type of key			
<b>CA12</b>	CITROËN	BERLINGO	96 -> 98
		EVASION	94 -> 02
		JUMPY	95 -> 02
		XANTIA	93 -> 98
	PEUGEOT	EXPERT	96 -> 06
		806	95 -> 02
	FIAT	SCUDO	96 -> 06
	ULYSSE	96 -> 02	
<b>CA13</b>	CITROËN	XSARA	97 -> 00



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# ANTIRROBOS

## ANTI THEFT



PINS 6



PINS 4



PINS 6



PINS 6



PINS 7



REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR
<b>CA14</b>	CITROËN	XSARA	00 -> 03
<b>CA15</b>	PEUGEOT CITROËN	PARTNER II BERLINGO	98 -> 04 98 -> 04
<b>CA16</b>	CITROËN	SAXO (SIN CHIP) AX ZX	96 -> 98 91 -> 98 91 -> 98
<b>CA17</b>	CITROËN	SAXO (CON CHIP)	96 -> 03
<b>CA19</b>	CITROËN PEUGEOT FIAT	JUMPER II BOXER II DUCATO II	02-> 06 02-> 06 02-> 06



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CA14	4162W5
CA15	4162AN
CA16	4162W1
CA17	4162W2
CA19	1611377680
CA20	46421642 - 7550632 - 7627414 - 4162H1
CA21	4836356 - 4836359
CA24	A1650
CA25	4162H9 - 4162Q4



PINS 7



REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR
<b>CA20</b>	CITROËN	JUMPER I	94 -> 02
	PEUGEOT	BOXER I	94 -> 02
	FIAT	DUCATO I	94 -> 02
		PANDA	86 -> 99



PINS 4



<b>CA21</b>	IVECO	DAILY II	91 -> 99
		EUROCARGO	91 -> 99



PINS 4



<b>CA24</b>	FIAT	DUCATO	92 -> 96
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PINS 5



<b>CA25</b>	CITROËN	BERLINGO III	96 -> 11
	PEUGEOT	PARTNER III	96 -> 12



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# ANTIRROBOS

## ANTI THEFT



PINS 4



PINS 4



PINS 5



PINS 4



REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR	
CA26	IVECO	EUROCARGO I / II	91 -> 99	
		EUROCARGO III	91 -> 99	
CA27	IVECO	DAILY MK4		
CA28	CITROËN PEUGEOT FIAT	JUMPER II		
		BOXER II		
		DUCATO	06 ->	
CA29	RENAULT	CLIO 3 / TWINGO		
		MASTER III		
		KANGOO 2 / TRAFIC		
		FLUENCE / MODUS	10 -> 16	
		DACIA	DUSTER	
			SANDERO II	
			LOGAN II	10 -> 16
		NISSAN	NV300 / NV400	10 -> 16
OPEL	MOVANO B			
	VIVARO II	10 -> 16		



CA26	500326598
CA27	2996075 - 2996076
CA28	4162.HN
CA29	8200214168 - N0502064 - 4421502
CA30	4161-84 - 012500 - 012502
CA18	4875000QAE - 4875000QAC - 4414255
CA02	7701471220
CA03	7700805669



PINS 4



PINS 4



PINS 4



PINS 4



REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR
<b>CA30</b>	PEUGEOT	505 BERLINA	79 -> 93
		505 FAMILIAR	82 -> 93
<b>CA18</b>	NISSAN	PRIMASTAR	02 -> 13
		OPEL	VIVARO
	RENAULT	MOVANO	02 -> 13
		TRAFIC	02 -> 13
		MASTER	02 -> 13
<b>CA02</b>	RENAULT	CLIO II	99 -> 05
<b>CA03</b>	RENAULT	R19	92 -> 01
		CLIO I	90 -> 98
		ESPACE II	91 -> 97
		LUTECIA	90 -> 98



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# ANTIRROBOS

## ANTI THEFT

### RENAULT, DACIA

CA04	7701469419
CA05	7701035520
CA22	7701367881
CA23	7701470736 - 8200176885



PINS 4



PINS 4



PINS 4



PINS 4



REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR
CA04	RENUALT	MEGANE	96 -> 03
		SCENIC	96 -> 03
CA05	RENAULT	R9	83 -> 89
		R11	83 -> 88
		SUPER S	84 -> 96
		EXPRESS	85 -> 98
		TRAFIC	80 -> 01
CA22	DACIA	LOGAN	04 ->
		SANDERO	04 ->
CA23	RENAULT	KANGOO	97 -> 06
		KANGOO EXPRESS	97 -> 06



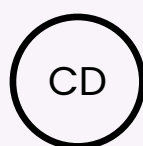
1 u.

# CERRADURAS DE DIRECCIÓN

## STEERING LOCKS

### AUDI, VW – PSA

<b>CD01</b>	155905851 – 321905851D
<b>CD07</b>	4B0905851B
<b>CD08</b>	1K0905851B
<b>CD09</b>	4162SJ – 4162HN – 1348421080
<b>CD10</b>	4162AL – 1329316080



**PINS** 0

REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR
<b>CD01</b>	AUDI	80 / 90	78 -> 88
	VW	GOLF / PASSAT	78 -> 94
		POLO	78 -> 94
		TRANSPORTER T1	92 -> 02



**PINS** 8



<b>CD07</b>	AUDI	A4 / 46 / A8	94 -> 06
		TT	94 -> 06
	VW	GOLF IV	98 -> 05



**PINS** 6



<b>CD08</b>	AUDI	A3 / TT	04 -> 11
	SEAT	LEÓN / ALTEA	06 -> 16
	SKODA	OCTAVIA	04 -> 12
	VW	GOLF V / CADDY	04 -> 11
		JETA III	04 -> 11
	TOURAN	04 -> 11	

No probar funcionamiento fuera del vehículo

Don't test functioning outside the vehicle



**PINS** 5



<b>CD09</b>	CITROËN	JUMPER III	06 -> 11
	PEUGEOT	BOXER III	06 -> 11
	FIAT	DUCATO III	06 -> 11



**PINS** 7



<b>CD10</b>	CITROËN	JUMPER II	02 -> 06
	PEUGEOT	BOXER II	02 -> 06
	FIAT	DUCATO II	02 -> 06



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# CONTACTOS DE ENCENDIDO

## IGNITION SWITCHES



PINS 8



PINS 8



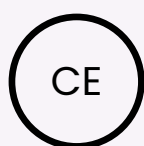
REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR	
<b>CE01</b>	AUDI	A3	97 -> 03	
		A4 QUATRO	94 -> 08	
		A6 QUATRO	97 -> 05	
		A8 QUATRO	95 -> 02	
		TT	98 -> 06	
SEAT	CÓRDOBA / IBIZA IV	LEÓN	99 -> 06	
		TOLEDO II	98 -> 06	
		ALHAMBRA	96 -> 10	
		VW	NEW BEETLE	98 -> 10
VW	NEW BEETLE	GOLF III / IV	93 -> 06	
		PASSAT	96 -> 05	
		POLO	01 -> 09	
		BORA	01 -> 05	
		SKODA	OCTAVIA	99 -> 10
<b>CE02</b>	AUDI	80	86 -> 96	
		90	88 -> 91	
		100	85 -> 94	
		A3	87 -> 94	
		A4	96 -> 03	
		A6	95 -> 01	
		A8	94 -> 05	
		200	85 -> 91	
		SKODA	OCTAVIA	97 -> 10
		VW	PASSAT	96 -> 00



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## AUDI, VOLKSWAGEN, SEAT, SKODA

CE01	4B0905849
CE02	4A0905849 - 4A0905849B
CE03	6N0905865 - 357905865
CE04	111905865L



PINS 6



PINS 7



REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR	
<b>CE03</b>	SEAT	AROSA	97 -> 04	
		TOLEDO	91 -> 99	
		CÓRDOBA	94 -> 02	
		IBIZA III	93 -> 02	
		INCA	95 -> 03	
VW	VW	GOLF II / III / IV	83 -> 02	
		GOLF CABRIOLET	83 -> 02	
		LUPU	98 -> 05	
		PASSAT 3	88 -> 97	
		POLO	85 -> 01	
		TRANSPORTER IV	90 -> 03	
		CADDY II	95 -> 04	
		<b>CE04</b>	AUDI	80
90	84 -> 91			
VW	VW		GOLF I / GOLF II	79 -> 93
			JETTA I / JETTA II	78 -> 92
			POLO II	81 -> 99
			PASSAT	79 -> 89
TRANSPORTER III	79 -> 92			



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# CONTACTOS DE ENCENDIDO

## IGNITION SWITCHES



PINS 6



PINS 3



PINS 7



PINS 5



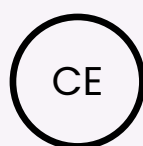
REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR
<b>CE20</b>	AUDI	A3	06 -> 13
	SEAT	ALTEA	06 -> 13
		LEÓN	05 -> 13
	SKODA	OCTAVIA	04 -> 13
	VW	GOLF V	04 -> 08
<b>CE21</b>	BMW	316 / 318 / 320	99 -> 05
		325 / M3	99 -> 05
		X3	04 -> 10
		X4	04 -> 08
	<b>CE22</b>	FORD	MONDEO
GALAXY			05 ->
		FOCUS	06 ->
<b>CE05</b>	OPEL	ASTRA F	91 -> 98
		CALIBRA	90 -> 97
		CORSA A/B	93 -> 02
		KADETT D / E	79 -> 81
		TIGRA	94 -> 07
		OMEGA A	86 -> 94
		VECTRA A	88 -> 95



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CE20	1K0905865A - 1K0905865
CE21	61326901961 - 61328352011 - 61328363706
CE22	9AB11572BG/BE - AA6T11572AA
CE05	0914811 - 0914850 - 90052497
CE06	0914852 - 90389377 - 914852
CE07	0914856 - 914856 - 90052497
CE08	0914863 - 90589314
CE09	0914861 - 09115863



PINS 6



PINS 6



PINS 6



PINS 5



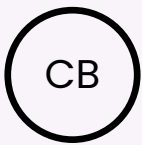
REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR
<b>CE06</b>	OPEL	ASTRA F	91 -> 98
		CALIBRA A	89 -> 98
		CORSA A / B / C	93 -> 00
		VECTRA A	88 -> 95
<b>CE07</b>	OPEL	CALIBRA A	89 -> 98
		CORSA A / B	87 -> 00
		OMEGA B	94 -> 99
		VECTRA B	88 -> 95
		SINTRA	97 -> 99
<b>CE08</b>	OPEL	ASTRA G	98 -> 04
		AGILA	00 -> 07
		ZAFIRA A	99 -> 05
<b>CE09</b>	OPEL	CORSA C	01 -> 06
		MERIVA	03 -> 10
		TIGRA B	04 -> 07
		COMBO	94 -> 13



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# BOMBINES DE ENCENDIDO

## IGNITION LOCK CYLINDERS



**REFERENCIA ORIGINAL**  
**ORIGINAL REFERENCE**  
191905855

REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR
<b>CB01</b>	AUDI	50	74 -> 78
		80	72 -> 96
	VW	CADDY	82 -> 92
		GOLF I / GOLF II	74 -> 93
		JETTA I / JETTA II	79 -> 91
		POLO I / POLO II	75 -> 94
		SANTANA	81 -> 84
		SCIROCCO	74 -> 92



**REFERENCIA ORIGINAL**  
**ORIGINAL REFERENCE**  
1H0905855A -  
535905855

<b>CB02</b>	VW	CADDY	82 -> 92
		GOLF I / II / III / IV	79 -> 98
		JETTA II	84 -> 91
		PASSAT	73 -> 88
		POLO	82 -> 94
		SCIROCCO	80 -> 92
		VENTO	91 -> 98



**REFERENCIA ORIGINAL**  
**ORIGINAL REFERENCE**  
3B0955855G -  
8E0998855

<b>CB09</b>	VW	GOLF IV	01 -> 10
		PASSAT	01 -> 10
		BEETLE	01 -> 10
	SKODA	OCTAVIA	01 -> 10
		ROOMSTER	01 -> 10
		FABIA	01 -> 10



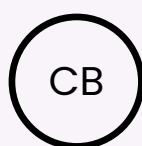
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CB01



CB09



**REFERENCIA ORIGINAL**  
**ORIGINAL REFERENCE**  
107905805CH -  
3B0955855H

REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR	
<b>CB10</b>	AUDI	A2	00 -> 05	
		A4	01 -> 05	
		A6	02 -> 05	
			A4 CABRIOLET	03 -> 06
			RS6 C5	03 -> 05
	SEAT	IBIZA	06 -> 10	
	SKODA	FABIA	02 -> 13	
OCTAVIA		02 -> 13		
VW	PASSAT	02 -> 13		
	POLO	02 -> 13		
	TRANSPORTER T5	02 -> 13		



**REFERENCIA ORIGINAL**  
**ORIGINAL REFERENCE**  
3B0905855C -  
4D0905855B

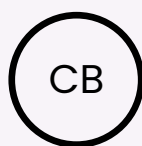
<b>CB11</b>	AUDI	A4	96 -> 01
		A6	96 -> 01
		A8	96 -> 01
	VW	GOLF IV	98 -> 07
		JETTA	-



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# BOMBINES DE ENCENDIDO

## IGNITION LOCK CYLINDERS



**REFERENCIA ORIGINAL**  
**ORIGINAL REFERENCE**  
1022184

REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR
<b>CB08</b>	FORD	KA	93 -> 08
		ESCORT V, VI, VII	90 -> 01
		FIESTA III, IV	89 -> 01
		TRANSIT	00 -> 06
		PUMA	97 -> 01



**REFERENCIA ORIGINAL**  
**ORIGINAL REFERENCE**  
1264600304 /  
VALEO 256625

<b>CB03</b>	MERCEDES	190	82 -> 93
		200 / 220 / 230	82 -> 93
		250 / 260 / 280	82 -> 93
		300 / 320 / 350	82 -> 93
		400 / 420	82 -> 93
		500 / 560	82 -> 93



**REFERENCIA ORIGINAL**  
**ORIGINAL REFERENCE**  
1234620479 /  
VALEO 256616

<b>CB04</b>	MERCEDES	200 / 220 / 230	75 -> 83
		250 / 260 / 280	75 -> 83
		300 / 350 / 380	76 -> 91
		400 / 420	79 -> 91
		500	79 -> 85
		560	86 -> 91



**REFERENCIA ORIGINAL**  
**ORIGINAL REFERENCE**  
9014620179

<b>CB12</b>	MERCEDES	SPRINTER	95 -> 06
		VITO	95 -> 06



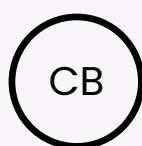
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**CB08**



**CB12**



**REFERENCIA ORIGINAL ORIGINAL REFERENCE**

0913694S1 -  
0913652S1 -  
93172805S1

REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR
<b>CB05</b>	OPEL	ASTRA F	91 -> 01
		ASTRA G	98 -> 02
		COMBO	94 -> 01
		CORSA A	87 -> 93
		CORSA B	93 -> 00
		CORSA C / D	00 -> 13
		MERIVA A	03 -> 10
		TIGRA A / B	94 -> 09
ZAFIRA A	99 -> 05		



**REFERENCIA ORIGINAL ORIGINAL REFERENCE**

0913684 - 0913619

<b>CB06</b>	OPEL	ASTRA F	91 -> 01
		COMBO	94 -> 01
		CORSA A / B	82 -> 00
		KADETT D / E	79 -> 93
TIGRA	94 -> 00		



**REFERENCIA ORIGINAL ORIGINAL REFERENCE**

0913614 - 90140760 - 3009000

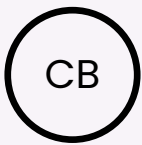
<b>CB07</b>	OPEL	ASCONA C	81 -> 88
		CALIBRA A	90 -> 97
		OMEGA A / B	86 -> 94
		SENATOR B	88 -> 03
		VECTRA A	88 -> 95
		ASTRA F	91 -> 98



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# BOMBINES DE ENCENDIDO

## IGNITION LOCK CYLINDERS



PINS 4



REF.

MARCA  
BRAND

**CB13**

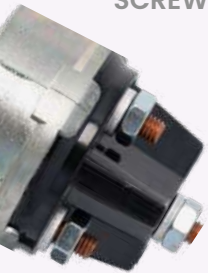
UNIVERSAL

Bombín de encendido universal con 4 posiciones: accesorio, apagado, contacto de arranque y arranque.

Universal ignition lock cylinder with 4 positions: accessory, turn off, starter contact and starter.



TORNILLOS 4  
SCREWS



**CB14**

UNIVERSAL

Bombín de encendido universal con 4 posiciones: accesorio, apagado, contacto de arranque y arranque.

Universal ignition lock cylinder with 4 positions: accessory, turn off, starter contact and starter.



TORNILLOS 3  
SCREWS



**CB15**



UNIVERSAL

Bombín de encendido universal con 3 posiciones: apagado, contacto de arranque y arranque.

Universal ignition lock cylinder with 4 positions: turn off, starter contact and starter.



1 u.



# ENCHUFES Y CABLES ESPIRAL

## PLUGS & SPIRAL CABLES

Enchufes de remolque, cables en espiral, adaptadores, reductores de tensión y salvapicos.  
Trailer connectors, spiral cables, adapters, voltage reducers and volt guard.



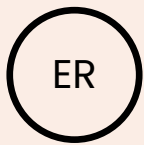


# CLAVIJAS

## PLUGS



ER01



PINS 3



PINS 7



PINS 7



REF.	V	NORMA STANDARD	CONEXIÓN CONNECTION	CLAVIJAS PLUGS	
<b>ER23</b>	12	DIN 9680			5
				ER24	
<b>ER01</b>	12	ISO 1724			10
				ER03	
<b>ER02</b>	12	ISO 1724			10
				ER04	

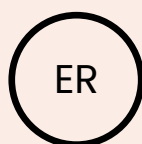
Terminal - Terminal    Tornillo - Screw    A presión - Press fitting



ER02



ER10



PINS 13



REF.	V	NORMA STANDARD	CONEXIÓN CONNECTION	CLAVIJAS PLUGS	
------	---	----------------	---------------------	----------------	--

<b>ER05</b>	12	ISO 11446			1
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ER06



PINS 7



<b>ER09</b>	24	ISO 1185			5
-------------	----	----------	--	--	---

Tipo-N / N-Type



ER11



PINS 7



<b>ER10</b>	24	ISO 3731			5
-------------	----	----------	--	--	---

Tipo-S / S-Type



ER12



Aluminio - Aluminium Plástico - Plastic

# CLAVIJAS

## PLUGS



ER17



PINS 15



REF.	V	NORMA STANDARD	CONEXIÓN CONNECTION	CLAVIJAS PLUGS	
<b>ER13</b>	<b>24</b>	ISO 12098			1



PINS 5



<b>ER15</b>	<b>24</b>	ISO 7638			1
-------------	-----------	----------	--	--	---

ABS con bloqueo de seguridad / ABS with security lock (ADR - /GGVS)



PINS 7



<b>ER17</b>	<b>24</b>	ISO 7638			1
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EBS con bloqueo de seguridad / EBS with security lock (ADR - /GGVS)



Terminal - Terminal    Tornillo - Screw    A presión - Press fitting

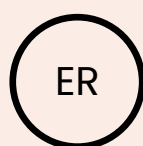
# BASES SOCKETS



ER21



ER04



PINS 3



PINS 7



PINS 7



REF.	V	NORMA STANDARD	CONEXIÓN CONNECTION	CLAVIJAS PLUGS	
<b>ER24</b>	12	DIN 9680			5
<b>ER03</b>	12	ISO 1724			10
<b>ER21</b>	Junta de caucho - Rubber seal			-	10
<b>ER04</b>	12	ISO 1724			10
<b>ER21</b>	Junta de caucho - Rubber seal			-	10
<b>ER04J</b>	Kit ER04 + ER21			-	5



ER23



ER01



ER02

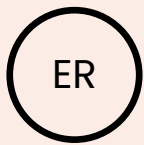


Aluminio - Aluminium Plástico - Plastic

# BASES SOCKETS



ER06



PINS 13



PINS 7



PINS 7



REF.	V	NORMA STANDARD	CONEXIÓN CONNECTION	CLAVIJAS PLUGS	
<b>ER06</b>	12	ISO 11446			1
<b>ER21</b>	Junta de caucho - Rubber seal				10



ER05



<b>ER11</b>	24	ISO 1185			5
Tipo-N / N-Type					



ER09



<b>ER12</b>	24	ISO 3731			5
Tipo-S / S-Type					



ER10



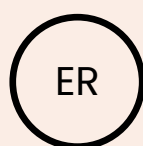
Terminal - Terminal    Tornillo - Screw    A presión - Press fitting



ER12



ER16



REF.	V	NORMA STANDARD	CONEXIÓN CONNECTION	CLAVIJAS PLUGS	
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PINS 15

<b>ER14</b>	<b>24</b>	ISO 12098			1
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PINS 5

<b>ER16</b>	<b>24</b>	ISO 7638			1
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ABS (ADR - /GGVS)



PINS 7

<b>ER18</b>	<b>24</b>	ISO 7638			1
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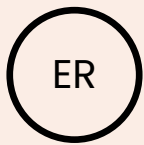
EBS (ADR - /GGVS)



Aluminio - Aluminium Plástico - Plastic

# CABLES ESPIRAL

## SPIRAL CABLES



PINS 7



PINS 7



PINS 7



PINS 7



PINS 7



REF.	V	NORMA STANDARD	L Ø	CLAVIJAS PLUGS	COMPOSICIÓN SPECIFICATION mm <sup>2</sup>
<b>SP01</b>	12	DIN 9680	4 m.		6 x 1 mm <sup>2</sup>
			45 mm.		1 x 1,5 mm <sup>2</sup>
<b>SP07</b>	24	ISO 7638	4 m.		2 x 4 mm <sup>2</sup>
		ABS	40 mm.		3 x 1,5 mm <sup>2</sup>
<b>SP03</b>	24	ISO 1185	4 m.		6 x 1 mm <sup>2</sup>
		Tipo-N / N-Type	40 mm.		1 x 1,5 mm <sup>2</sup>
<b>SP04</b>	24	ISO 3731	4 m.		6 x 1 mm <sup>2</sup>
		Tipo-S / S-Type	40 mm.		1 x 1,5 mm <sup>2</sup>
<b>SP08</b>	24	ISO 7638	4 m.		2 x 4 mm <sup>2</sup>
		EBS	40 mm.		5 x 1,5 mm <sup>2</sup>



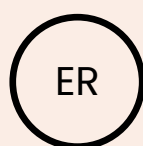
1 u. Aluminio - Aluminium Plástico - Plastic



Exterior: poliuretano  
Exterior: polyurethane



SP01



PINS 7



PINS 7



PINS 7



PINS 15



PINS 0

REF.	V	NORMA STANDARD	$\frac{L}{\varnothing}$	CLAVIJAS PLUGS	COMPOSICIÓN SPECIFICATION mm <sup>2</sup>
<b>SP09</b>	<b>24</b>	ISO 1185 Tipo-N / N-Type	4 m. 40 mm.		6 x 1 mm <sup>2</sup> 1 x 1,5 mm <sup>2</sup>
<b>SP10</b>	<b>24</b>	ISO 3731 Tipo-S / S-Type	4 m. 40 mm.		6 x 1 mm <sup>2</sup> 1 x 1,5 mm <sup>2</sup>
<b>SP11</b>	<b>24</b>	EURO6 125° ABS / EBS / ADR	4,5 m. 40 mm.		5 x 1,5 mm <sup>2</sup> 2 x 4 mm <sup>2</sup>
<b>SP06</b>	<b>24</b>	ISO 12098	4 m. 75 mm.		12 x 1,5 mm <sup>2</sup> 3 x 2,5 mm <sup>2</sup>
<b>SP02</b>	-	-	4 m. 30 mm.	-	6 x 1 mm <sup>2</sup> 1 x 1,5 mm <sup>2</sup>



1 u. Aluminio - Aluminium Plástico - Plastic

# ADAPTADORES

## ADAPTERS



ER08A

ER

PINS	13 -> 7
PINS	7 -> 13
PINS	13 -> 7
PINS	7 -> 13

REF.	V	NORMA STANDARD	LONGITUD LENGHT cm
ER07A	12	ISO 11446	5
ER08A	12	ISO 1724 ISO 11446	5
ER25	12	ISO 11446 ISO 1724	80
ER26	12	ISO 1724 ISO 11446	80



SP

PINS	15 -> 7
PINS	15 -> 7
PINS	15 -> 7

SP05A	24	12098 1185 / 3731	-
SP05	24	12098 1185 / 3731	400
SP12	24	EURO6 125° ISO12098-1185-3731 Tipo N - Tipo S N-Type - S-Type	450



1u.

Construido con cable calidad ADR.  
Made with ADR quality cable.

# REDUCTORES DE TENSIÓN

## VOLTAGE REDUCERS

**SecoRöt®**

Reductores de voltaje adecuados para conectar un remolque de 12V a un vehículo de remolque de 24V de forma simple. Conexión directa a la pïña. Son adecuados para todos los vehïculos.

Voltage reducers suitable for connecting a 12V trailer to a 24V towing vehicle in a simple way. Suitable for all vehicles

	REF.	V	CLAVIJAS PLUGS	
PINS 7 -> 7	<b>60195</b>	24 a 12		1



12V <- 24V



PINS 7 -> 7 Tipo N	<b>60180</b>	24 a 12		1
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12V <- 24V



Plástico - Plastic Tipo N

# SALVAPICOS 12V/24V

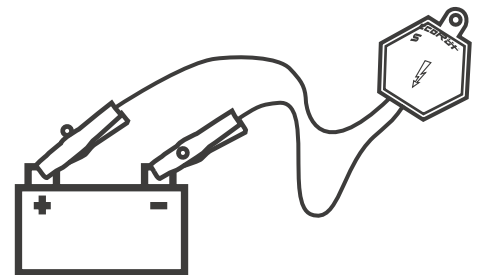
## VOLT GUARD 12V/24V

**SECORÖT®**

Protege toda la electrónica del automóvil de daños por picos de tensión, durante la realización de trabajos en el vehículo. Por ejemplo, la soldadura en la carrocería. Tensión de funcionamiento 12V y 24 V.

Protects all automotive electronics from damage due to voltage peaks during work on the vehicle. For example, welding on the car body. Operating voltage 12 and 24 V.

REF.	V	📦
80300	12/24	1



# BOCINAS

HORNS

**stebel**

Bocinas, trompetas y accesorios.

Horns, trumpets and accessories.





HF80



TM80



TM80/2L



TX20/2CR

# BOCINAS

## HORNS



V	A	REF.	dB	FRECUENCIA FREQUENCY Hz	MEDIDAS MEASURES mm
12	4,5	<b>HF80/1</b>	109	430	Ø 80
24	2,5	<b>HF80/1 24V</b>	109	430	Ø 80

Bocina de disco electromagnética, disponible en una sola unidad (tonos altos o bajos) o como un conjunto doble. Pueden utilizarse como sirenas en sistemas de alarma.

Electromagnetic disc horn, available as a single unit (high or low tones) or as a twin set. Also used as sirens in alarm systems.

12	5,5	<b>TM80/1</b>	109	500	Ø 82
12	11	<b>TM80/2</b>	112	410 (L) 500 (H)	2 x Ø 82
12	11	<b>TM80/2L</b>	112	410 (L) 500 (H)	2 x Ø 82
24	5,6	<b>TM80/2 24V</b>	112	410 (L) 500 (H)	2 x Ø 82

Bocina electromagnética, disponible en una sola unidad (tonos altos o bajos) o como un conjunto doble. Apropriadadas para uso en motocicletas.

Electromagnetic signal horn, available as a single unit (high or low tones) or as a twin set. Also appropriate for motorcycle use.

12	10	<b>TX20/2 CR</b>	112	400 (L) 500 (H)	2 x Ø 82
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Nivel sonoro a 2 metros de distancia (dB) - Sound level at 2 meters of distance (dB)





NAUTILUS NG



COMPACT NG



COMPACT CR



TRUCK CPT NG



BRIO BP3



V	A	REF.	dB	FRECUENCIA FREQUENCY Hz	MEDIDAS MEASURES mm
12	18	<b>NAUTILUS NG</b>	115	530 (L) 680 (H)	150 x 112 x 95
24	9	<b>NAUTILUS NG 24V</b>	115	530 (L) 680 (H)	150 x 112 x 95

Bocinas para automoción. Ofrecen una gran facilidad y velocidad de instalación ya que requieren un único punto de fijación y una única conexión eléctrica.

Signal horns for automotive use. They are very fast and easy to install because they require only one fixing point and a single electrical connection.



12	18	<b>COMPACT NG</b>	115	530 (L) 680 (H)	125 x 112 x 78
12	18	<b>COMPACT CR</b>	115	530 (L) 680 (H)	125 x 112 x 78
24	9	<b>COMPACT NG 24V</b>	115	530 (L) 680 (H)	125 x 112 x 78

Bocinas para automoción. Ofrecen una gran facilidad y velocidad de instalación ya que requieren un único punto de fijación y una única conexión eléctrica. Se caracterizan por un diseño compacto mejorado.

Signal horns for automotive use. They are very fast and easy to install because they require only one fixing point and a single electrical connection. They are characterized by an improved compact design.



12	18	<b>TRUCK CPT NG</b>	110	300	140 x 110 x 112
24	9	<b>TRUCK CPT 24V</b>	110	300	140 x 110 x 112

Bocinas para vehículos medios y pesados (autocaravanas, furgonetas, autobuses). Se caracterizan por un diseño compacto mejorado.

Signal horns for medium and heavy-duty vehicles (campers, vans, buses). They are characterized by an improved compact design.



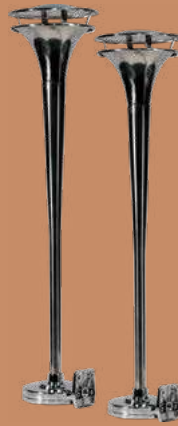
12	18	<b>BRIO BP3</b>	115	530 (L) 700 (H)	166 x 175 x 93
----	----	-----------------	-----	-----------------	----------------

Corriente absorbida a 24V (A) - Absorbed current at 24V (A)





GP2



JUM2



TM2

# BOCINAS

## HORNS



V	A	REF.	dB	FRECUENCIA FREQUENCY Hz	MEDIDAS MEASURES mm
12	16	<b>GP2</b>	115	630 (L) 795 (H)	Ø 76 x 217
24	8	<b>GP2 24V</b>	115	630 (L) 795 (H)	Ø 76 x 217



Bocinas de automoción. Incluye un compresor de aire estándar y un sistema de dos trompetas. Emite dos notas alternadas.

Air-horns for automotive use. Includes a standard supplier air-compressor and a two-horn system. Plays two alternating notes.



-	-	<b>TM2</b>	118	392 (L) 435 (H)	Ø 90 x 346
---	---	------------	-----	-----------------	------------

Bocinas para vehículos medios y pesados (autocaravanas, furgonetas, autobuses). Funciona usando la cámara de aire comprimido del vehículo. Estas potentes bocinas se pueden instalar en el exterior del vehículo, sin embargo, el compresor queda en el interior.

Air-horns for medium and heavy-duty vehicles (campers, vans, buses). Functions by the usage of the vehicle's compressed air chamber. These powerful units can be fitted externally on the vehicle however, the compressor is fitted inside.



24	-	<b>JUM2</b>	117	185 (L) 200 (H)	Ø 170 x 640
----	---	-------------	-----	-----------------	-------------

Nivel sonoro a 2 metros de distancia (dB) - Sound level at 2 meters of distance (dB)



PRMV2



BP3



MP5/CC



V	A	REF.	dB	FRECUENCIA FREQUENCY Hz	MEDIDAS MEASURES mm
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12	15	<b>PRMV2</b>	115	435 (L) 488 (H)	Ø 90 x 319
----	----	--------------	-----	-----------------	------------

Bocinas para vehículos de emergencia y prioritarios (policía, ambulancias hospitalarias, bomberos, militares). Incluye un compresor de aire estándar y un sistema de tres trompetas. Emite dos tonos alternos ininterrumpidos.

Air-horns for emergency and priority vehicles (police, hospital ambulances, fire-fighters, military). Includes a standard supplied air compressor and two-horn system. Plays two non-stop alternating tones.



12	18	<b>BP3</b>	115	630 (L) 795 (M) 840 (H)	Ø 76 x 217
----	----	------------	-----	----------------------------	------------

Bocinas de automoción. Incluye un compresor de aire estándar y un sistema de tres trompetas. Emite tres notas alternadas.

Air-horns for automotive use. Includes a standard supplier air-compressor and three-horn system. Plays three alternating notes.



12	18	<b>MP5/CC</b>	115	530 (L) 700 (H)	Ø 85 x 270
----	----	---------------	-----	-----------------	------------

Bocinas de automoción. Incluye un compresor de aire estándar y un sistema de cinco trompetas.

Air-horns for automotive use. Includes a standard supplier air-compressor and five-horn system.



La cucaracha

Medidas compresor  
Compressor measurements  
Ø 83 x 170



Corriente absorbida a 24V (A) - Absorbed current at 24V (A)



KP1



ECO POWER



VÁLVULA M

# BOCINAS Y ACCESORIOS

## HORNS AND ACCESSORIES



REF.



dB

FRECUENCIA  
FREQUENCY

Hz

MEDIDAS  
MEASURES

mm



**KP1**

111

520

Ø 76 x 217

Bocina manual que funciona con gas 124A ecológico no inflamable. Emite un fuerte sonido. Apropriada para embarcaciones en caso de señal SOS o niebla, también para situaciones de emergencia en montaña.

Hand-operated air horn, powered by ecological and non-flammable 124A gas. Emits a deep powerful tone. Appropriate for sea vessels in case of SOS signals, fog or in case of emergency during outdoor excursions.



**ECO POWER**

112

-

239 x 110 x 76,5

Bocina manual ecológica sin gas. Trabaja con la presión de aire para una máxima eficiencia y un rendimiento acústico. Usada para deportes, eventos y seguridad.

Ecological hand-held airhorn without gas. It works with the air's pressure for a best efficiency and acoustic performance. Used for sports, events and security.



ACCESORIOS  
ACCESSORIES

**VÁLVULA M**

-

-

-

Nivel sonoro a 2 metros de distancia (dB) - Sound level at 2 meters of distance (dB)

# TERMINALES Y CONECTORES

## TERMINALS&CONNECTORS

Terminales, conectores, regletas, cinta aislante, bridas, empalmes y fundas, tubos expandibles, tubos retráctiles, etc.

Terminals, connectors, power strips, insulating tape, cable ties, joints and sleeves, monofilament expandible tube, heat-shrinkable tubes, etc.





TI Terminal hembra  
Female terminal



TI Terminal hembra con retén  
Female with locking flag terminal



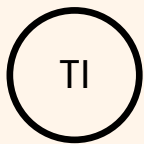
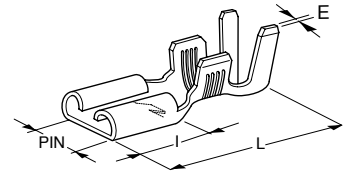
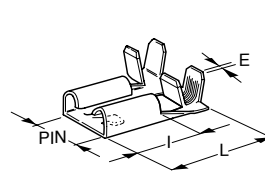
TI Terminal mixto  
Mixed terminal



TI Terminal tipo bandera  
Flag type terminal

# TERMINALES

## TERMINALS



HEMBRA  
FEMALE

SECCIÓN SECTION mm <sup>2</sup>	REF.	PIN mm	E mm	I mm	L mm	g
0,75 - 1,00	<b>TI60</b>	2,80 x 0,60	0,25	6,30	14,40	0,29
0,75 - 1,00	<b>TI62</b>	2,80 x 0,80	0,35	6,30	15,50	0,43
0,75 - 1,00	<b>TI18</b>	6,35 x 0,80	0,40	7,70	19,20	0,71
1,50 - 2,50	<b>TI39</b>	4,80 x 0,80	0,35	6,30	15,50	0,41
1,50 - 2,50	<b>TI20</b>	6,35 x 0,80	0,40	7,70	19,20	0,78
3,00 - 6,00	<b>TI21</b>	6,35 x 0,80	0,40	7,70	19,20	0,93
3,00 - 6,00	<b>TI23</b>	9,50 x 1,20	0,50	12,00	27,00	1,95

HEMBRA CON  
RETÉN  
FEMALE WITH  
LOCKING FLAG

0,50 - 1,00	<b>TI92</b>	2,80 x 0,80	0,25	6,30	14,40	0,65
0,50 - 1,00	<b>TI93</b>	6,35 x 0,80	0,35	7,70	19,30	0,68
1,50 - 2,50	<b>TI101</b>	4,80 x 0,80	0,30	6,30	15,60	0,65
1,00 - 2,50	<b>TI19</b>	6,35 x 0,80	0,35	7,70	19,20	0,71
3,00 - 6,00	<b>TI83</b>	6,35 x 0,80	0,50	7,70	19,20	0,73
3,00 - 6,00	<b>TI111</b>	9,50 x 1,20	0,50	12,00	27,00	1,95

MIXTO  
MIXED

1,50 - 3,00	<b>TI29</b>	6,35 x 0,80	0,40	8,00	19,20	1,03
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TIPO BANDERA  
FLAG TYPE

0,75 - 2,50	<b>TI26</b>	6,35 x 0,80	0,40	7,70	16,00	0,71
0,75 - 2,50	<b>TI27</b>	8,00 x 0,80	0,40	8,80	17,00	0,94

100 u. Acabados en latón - Brass finished



TI Terminal macho  
Male terminal



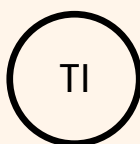
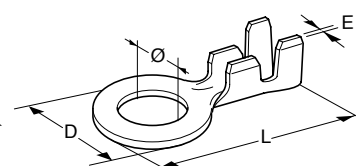
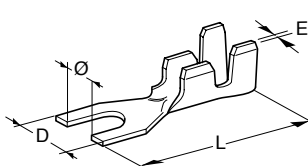
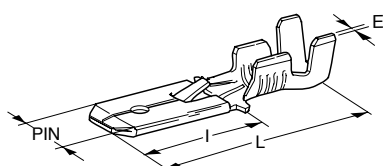
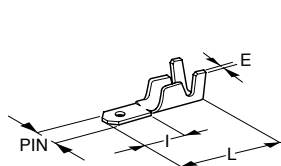
TI Terminal macho con retén  
Male with locking flag terminal



TI Terminal tipo horquilla  
Fork type terminal



TI Terminal tipo anillo  
Ring type terminal



**MACHO  
MALE**

SECCIÓN SECTION mm <sup>2</sup>	REF.	PIN mm	E mm	I mm	L mm	 g
0,50 - 1,00	<b>TI66</b>	2,80 x 0,50	0,25	5,90	13,20	0,29
0,50 - 1,00	<b>TI67</b>	4,80 x 0,80	0,25	6,60	18,20	0,41
1,00 - 3,00	<b>TI22</b>	6,35 x 0,80	0,40	8,00	20,00	0,58

**MACHO CON  
RETÉN  
MALE WITH  
LOCKING FLAG**

0,50 - 1,00	<b>TI94</b>	2,80 x 0,50	0,25	12,00	20,70	0,69
0,50 - 1,50	<b>TI95</b>	4,80 x 0,80	0,25	13,80	24,00	0,75
0,75 - 3,00	<b>TI25</b>	6,35 x 0,80	0,35	15,70	28,10	0,88

**TIPO HORQUILLA  
FORK TYPE**

SECCIÓN SECTION mm <sup>2</sup>	REF.	Ø mm	E mm	D mm	L mm	 g
0,50 - 1,00	<b>TI68</b>	4,20	0,50	9,30	17,70	0,29
1,50 - 3,00	<b>TI69</b>	5,20	0,50	9,30	17,70	0,31

**TIPO ANILLO  
RING TYPE**

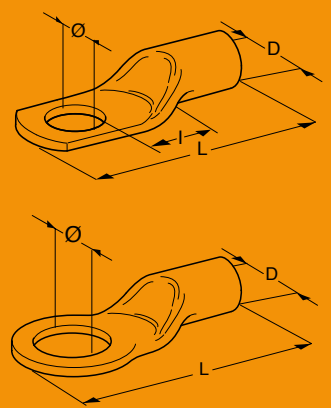
0,75 - 1,00	<b>TI08</b>	3,50	0,50	18,00	17,00	0,30
0,75 - 1,00	<b>TI03</b>	4,20	0,50	8,80	20,00	0,67
0,75 - 1,00	<b>TI04</b>	5,20	0,50	8,80	20,00	0,55
1,50 - 2,50	<b>TI06</b>	6,20	0,50	8,70	20,00	1,03
1,50 - 2,50	<b>TI07</b>	8,30	0,60	12,60	26,50	0,94
3,00 - 6,00	<b>TI09</b>	10,50	1,00	18,00	37,00	3,00



**TNP** Terminal tubular de presión  
Tubular pressure terminal

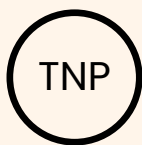


**TN** Terminal para soldadura  
Welding terminal



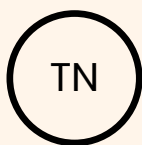
# TERMINALES TUBULARES

## TUBULAR TERMINALS



TERMINALES  
TUBULARES DE  
PRESIÓN  
TUBULAR  
PRESSURE  
TERMINALS

SECCIÓN SECTION mm <sup>2</sup>	REF.	Ø mm	D mm	L mm	g	
6	<b>TNP06</b>	6,50	11,00	21,50	1,67	100
10	<b>TNP10</b>	6,50	11,00	22,50	2,36	100
16	<b>TNP16</b>	6,50	11,00	25,50	3,81	100
25	<b>TNP25</b>	8,40	16,00	33,00	5,10	100
35	<b>TNP35</b>	8,40	16,00	34,00	8,40	100
50	<b>TNP50</b>	10,50	18,00	43,00	13,80	50
70	<b>TNP70</b>	13,00	22,00	49,00	24,90	25



TERMINALES  
PARA SOLDADURA  
WELDING  
TERMINALS

3	<b>TN03</b>	4,70	10,00	22,00	0,60	100
4	<b>TN04</b>	6,50	12,00	23,00	0,95	100
6	<b>TN06</b>	6,00	14,00	27,00	1,83	100
10	<b>TN10</b>	6,40	14,00	29,00	2,06	100
16	<b>TN16</b>	6,40	14,00	31,00	5,90	100
25	<b>TN25</b>	8,40	18,00	35,00	6,50	100
35	<b>TN35</b>	8,40	21,00	43,00	9,65	100
50	<b>TN50</b>	10,00	25,00	48,00	10,00	25
70	<b>TN70</b>	10,40	26,00	57,00	13,00	25

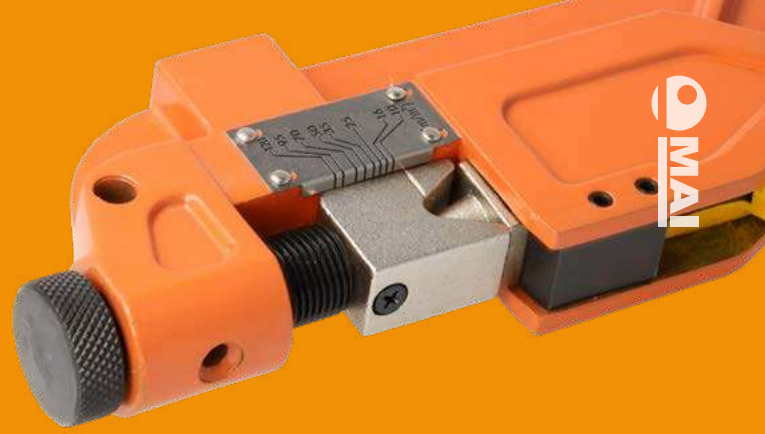
■ Acabados en estaño - Tin finished

NORMA DIN 46234  
STANDARD DIN 46234





**TT** Terminal tubular de presión reforzado  
Reinforced tubular pressure terminal



**HR** Crimpadora  
Crimping machine

**TT**

**TERMINALES  
TUBULARES DE  
PRESIÓN  
REFORZADOS  
REINFORCED  
TUBULAR  
PRESSURE  
TERMINALS**

SECCIÓN SECTION mm <sup>2</sup>	REF.	Ø mm	D mm	I mm	L mm	g	📦
10	<b>TT1006</b>	6,20	6,80	4,80	25,50	3,10	50
10	<b>TT1008</b>	8,20	6,80	4,80	25,50	3,00	50
16	<b>TT1606</b>	6,20	7,50	5,50	30,50	4,21	50
16	<b>TT1608</b>	8,20	7,50	5,50	30,50	4,11	50
16	<b>TT1610</b>	10,50	7,50	5,50	30,50	3,50	50
25	<b>TT2506</b>	6,20	9,00	7,00	34,00	6,00	50
25	<b>TT2508</b>	8,20	9,00	7,00	34,00	5,58	50
25	<b>TT2510</b>	10,50	9,00	7,00	34,00	5,52	50
35	<b>TT3506</b>	6,20	10,50	8,20	38,00	10,50	50
35	<b>TT3508</b>	8,20	10,50	8,20	38,00	10,00	50
35	<b>TT3510</b>	10,50	10,50	8,20	38,00	9,95	50
50	<b>TT5008</b>	8,20	12,50	9,80	45,00	14,88	25
50	<b>TT5010</b>	10,50	12,50	9,80	45,00	14,50	25
50	<b>TT5012</b>	12,50	12,50	9,80	45,00	14,35	25
70	<b>TT7010</b>	10,50	14,50	11,50	50,00	26,30	25
70	<b>TT7012</b>	12,50	14,50	11,50	50,00	25,80	25

**TTR**

**TERMINALES  
TUBULARES DE  
PRESIÓN DOBLE  
REFORZADOS  
DOUBLE REINFORCED  
TUBULAR PRESSURE  
TERMINALS**

70	<b>TTR7008</b>	8,30	11,00	11,00	54,00	40,00	5
70	<b>TTR7010</b>	10,30	11,00	14,00	59,00	39,00	5
70	<b>TTR7012</b>	12,80	11,00	18,00	67,00	37,00	5
95	<b>TTR9510</b>	10,30	13,10	14,00	65,00	54,00	5
95	<b>TTR9512</b>	12,80	13,10	18,00	73,00	49,00	5
95	<b>TTR9514</b>	14,50	13,10	18,00	73,00	47,00	5

**HR**

**CRIMPADORA  
CRIMPING MACHINE**

SECCIÓN SECTION mm <sup>2</sup>	REF.	L mm	g
10-95	<b>HR02</b>	570	3100



TI Terminal hembra  
Female terminal



TI Terminal macho  
Male terminal



TI Terminal hembra aislado  
Insulated female terminal

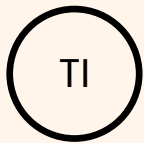
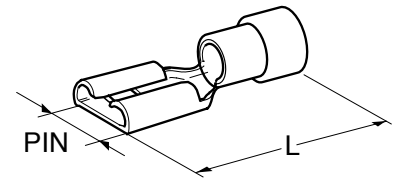


TI Terminal macho aislado  
Insulated male terminal

# TERMINALES PREAISLADOS

VINILO

## PRE-INSULATED TERMINALS



**HEMBRA CON  
CASQUILLO  
ANTIVIBRATORIO**  
FEMALE WITH  
ANTI-VIBRATION  
COVER

COLOR COLOR	SECCIÓN SECTION mm <sup>2</sup>	REF.	PIN mm	L mm	g
●	0,25 - 1,50	<b>TI79</b>	2,80 x 0,80	17,90	0,56
●	1,00 - 2,50	<b>TI80</b>	4,80 x 0,80	18,70	0,58
●	1,00 - 2,50	<b>TI81</b>	6,35 x 0,80	21,00	0,73
●	2,50 - 6,00	<b>TI82</b>	6,35 x 0,80	25,00	1,25

**MACHO CON  
CASQUILLO  
ANTIVIBRATORIO**  
MALE WITH  
ANTI-VIBRATION  
COVER

●	0,25 - 1,65	<b>TI84</b>	2,80 x 0,80	19,20	0,29
●	1,04 - 2,63	<b>TI85</b>	4,80 x 0,80	20,50	0,41
●	1,04 - 2,63	<b>TI86</b>	6,35 x 0,80	24,50	0,41
●	2,63 - 6,64	<b>TI87</b>	6,35 x 0,80	24,50	0,58

**HEMBRA AISLADA**  
INSULATED  
FEMALE

●	0,25 - 1,65	<b>TI102</b>	6,35 x 0,80	21,00	1,20
●	1,04 - 2,63	<b>TI103</b>	6,35 x 0,80	21,00	1,20
●	2,63 - 6,64	<b>TI104</b>	6,35 x 0,80	24,00	2,00

100 u.



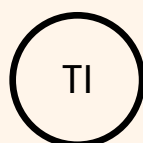
TI Terminal mixto  
Mixed terminal



TI Terminal hembra cilíndrico  
Cylindrical female terminal



TI Terminal macho cilíndrico  
Cylindrical male terminal



**MACHO AISLADO**  
**INSULATED MALE**

COLOR COLOR	SECCIÓN SECTION mm <sup>2</sup>	REF.	PIN mm	L mm	g
	0,25 - 1,50	<b>TI98</b>	6,35 x 0,80	24,50	0,90
	1,04 - 2,63	<b>TI99</b>	6,35 x 0,80	24,50	1,00
	2,63 - 6,64	<b>TI100</b>	6,35 x 0,80	25,00	1,10

**MIXTO CON CASQUILLO ANTIVIBRATORIO**  
**MIXED WITH ANTI-VIBRATION COVER**

	1,00 - 2,50	<b>TI96</b>	6,35 x 0,80	24,00	1,10
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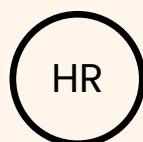
COLOR COLOR	SECCIÓN SECTION mm <sup>2</sup>	REF.	PARA HEMBRA FOR FEMALE mm	L mm	g
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**HEMBRA CILÍNDRICA**  
**CYLINDRICAL FEMALE**

	0,25 - 1,65	<b>TI105</b>	4,00	23,00	1,00
	1,04 - 2,63	<b>TI107</b>	4,00	23,00	1,00
	2,63 - 6,64	<b>TI109</b>	5,00	24,00	1,80

**MACHO CILÍNDRICO**  
**CYLINDRICAL MALE**

	0,25 - 1,65	<b>TI106</b>	4,00	21,00	1,00
	1,04 - 2,63	<b>TI108</b>	4,00	21,00	1,00
	2,63 - 6,64	<b>TI110</b>	5,00	24,00	1,80



**CRIMPADORA**  
**CRIMPING MACHINE**

SECCIÓN SECTION mm <sup>2</sup>	REF.	L mm	g
0,50 - 6,70	<b>HR01</b>	225	510





TI Terminal tipo anillo rojo  
Red ring type terminal



TI Terminal tipo anillo azul  
Blue ring type terminal

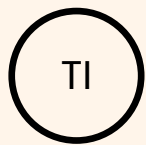
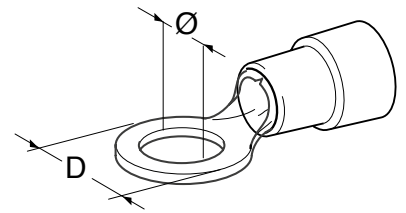


TI Terminal tipo anillo amarillo  
Yellow ring type terminal

# TERMINALES PREAISLADOS

VINILO

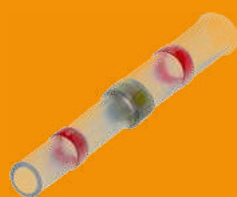
## PRE-INSULATED TERMINALS



TIPO ANILLO  
RING TYPE

COLOR COLOR	SECCIÓN SECTION mm <sup>2</sup>	REF.	Ø mm	D mm	g
●	0,50 - 1,65	TI70	4,30	6,60	0,61
●	0,50 - 1,65	TI71	5,30	8,00	0,67
●	0,50 - 1,65	TI72	6,40	11,60	1,05
●	0,50 - 1,65	TI73	8,40	11,60	0,90
●	1,00 - 2,63	TI75	4,30	6,60	1,08
●	1,00 - 2,63	TI76	5,30	8,00	1,10
●	1,00 - 2,63	TI77	6,40	12,00	1,18
●	1,00 - 2,63	TI78	8,40	12,00	1,15
●	2,63 - 6,64	TI88	6,40	12,00	2,30
●	2,63 - 6,64	TI89	8,40	15,00	2,34
●	2,63 - 6,64	TI90	10,50	15,00	3,10
●	2,63 - 6,64	TI91	13,00	19,20	3,85

100 u.



**EM** Empalme estanco estaño  
Tin sealed joint



**EM** Empalme aislado  
Insulated joint



**EM** Empalme retráctil  
Retractable joint



**CR** Conector rápido  
Quick connector

# EMPALMES Y CONECTORES RÁPIDOS

## JOINTS AND QUICK CONNECTORS

<b>EM</b>	<b>COLOR</b> COLOR	<b>SECCIÓN</b> SECTION mm <sup>2</sup>	<b>REF.</b>	<b>g</b>		<b>COMPOSICIÓN</b> MATERIAL
<b>EMPALMES ESTANCOS ESTAÑO</b> TIN SEALED JOINTS		0,80 - 2,00	<b>EM01</b>	0,43	25	POE
		2,00 - 4,00	<b>EM02</b>	0,45	25	POE
		4,00 - 6,00	<b>EM03</b>	0,55	25	POE
<b>EMPALMES AISLADOS</b> INSULATED JOINTS		0,50 - 1,65	<b>EM04</b>	2,10	100	Vinilo / Vinyl
		1,04 - 2,63	<b>EM05</b>	2,10	100	Vinilo / Vinyl
		2,63 - 6,64	<b>EM06</b>	2,26	100	Vinilo / Vinyl
<b>EMPALME RETRÁCTIL</b> RETRACTABLE JOINTS		0,50 - 1,50	<b>EM07</b>	1,10	25	Vinilo / Vinyl
		1,00 - 2,50	<b>EM08</b>	1,30	25	Vinilo / Vinyl
		4,00 - 6,00	<b>EM09</b>	2,20	25	Vinilo / Vinyl
<b>CONECTORES RÁPIDOS</b> QUICK CONNECTORS		0,50 - 1,00	<b>CR22</b>	1,40	50	PP
		1,00 - 2,50	<b>CR23</b>	2,50	50	PP
		2,50 - 4,00	<b>CR24</b>	3,03	50	PP

**POE** Poliolefina - Polyolefin **PP** Polipropileno - Polypropylene

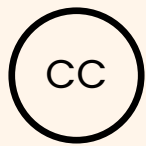
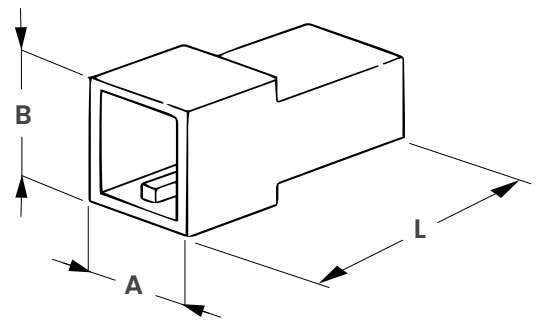


**CC** Conector universal hembra de 4 vías  
Universal female 4 ways housing



**CC** Conector universal macho de 8 vías  
Universal male 8 ways housing

# CONECTORES UNIVERSALES UNIVERSAL HOUSING



**HEMBRA  
FEMALE**

COLOR COLOR	VÍAS WAYS u.	REF.	A mm	B mm	L mm	g
○	1	<b>CCH1</b>	6,50	10,00	24,10	0,78
○	2	<b>CCH2</b>	13,00	10,00	23,00	1,55
○	3	<b>CCH3</b>	13,00	17,20	22,90	1,15
○	4	<b>CCH4</b>	23,00	14,00	24,00	3,94
○	6	<b>CCH6</b>	28,50	13,80	24,20	2,35
○	8	<b>CCH8</b>	37,00	13,80	24,00	6,10

**MACHO  
MALE**

○	1	<b>CCM1</b>	12,50	9,00	32,00	1,34
○	2	<b>CCM2</b>	15,20	10,00	31,80	2,10
○	3	<b>CCM3</b>	15,20	18,20	32,00	2,86
○	4	<b>CCM4</b>	21,00	17,30	33,00	3,96
○	6	<b>CCM6</b>	28,40	16,40	32,40	3,02
○	8	<b>CCM8</b>	41,00	16,40	32,40	8,00

50 u.  Compuestos de Nylon - Made of Nylon



CCRR



CCMR



CCBR



CCMIC

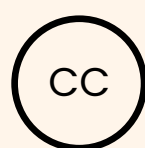


CCRP

# CONECTORES PORTARELÉS Y PORTAFUSIBLES

## RELAY SOCKETS FOR RECEPTACLES

- A** Relés inversores  
Change over relays
- B** Relés interruptores  
Normally open relays
- C** RR82 - Doble relé interruptor  
RR82 - Double normally open relay
- D** Relés de doble salida  
Double output relays
- E** Relés con fusible  
Relays with fuse
- F** Relés de potencia  
Power relays
- G** Microrelés  
Microrelays
- H** CF60 CCMIC

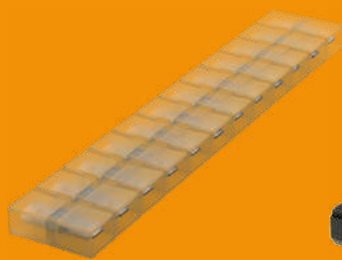


CONECTORES  
PORTARELÉS  
RELAY SOCKETS  
FOR RECEPTACLES

COMPATIBLE COMPATIBLE	REF.	PARA DIN FOR DIN	g	
A / B / C / D / E	<b>CCRR</b>	5 x 6,3 mm.	8,10	50
G	<b>CCMR</b>	2 x 6,3 mm. - 3 x 4,8 mm.	9,00	5
A / B / C / E	<b>CCBR</b>	5 x 6,3 mm. - 4 x 2,8 mm.	9,50	5
G / H	<b>CCMIC</b>	3 x 4,8 mm. - 2 x 6,3 mm.	9,00	5
F	<b>CCRP</b>	4 x 2,8 mm. - 3 x 6,3 mm. 2 x 9,5 mm.	24,00	5

ABS Compuestos de plástico automoción - Made of automotive plastic





RG Regleta blanca  
White power strip



RG Regleta  
Power strip



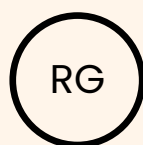
CS Cinta aislante  
Insulating tape



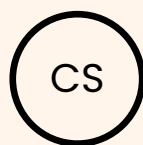
BI Brida  
Cable ties

# REGLETAS, CINTAS Y BRIDAS

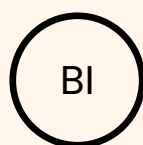
## POWER STRIPS, TAPES AND CABLES TIES



### REGLETAS POWERSTRIPS



### CINTAAISLANTE INSULATINGTAPE



### BRIDAS CABLE TIES

LONGITUD LENGTH mm	DIAMETRO DIAMETER mm	REF.	g		COMPOSICIÓN MATERIAL
150,20	-	<b>RG01</b>	25,50	10	PE
93,60	2,50	<b>RG02</b>	17,40	10	PVC
116,40	4,00 - 6,00	<b>RG03</b>	26,40	10	PVC
133,50	10,00	<b>RG04</b>	34,50	10	PVC
175,00	16,00	<b>RG05</b>	71,90	10	PVC
10,00	19,00	<b>CS10</b>	36,70	10	PVC
20,00	19,00	<b>CS20</b>	71,90	5	PVC
LONGITUD LENGTH mm	DIAMETRO DIAMETER mm	REF.	g		COMPOSICIÓN MATERIAL
98,00 x 2,5	21,00	<b>BI100</b>	8,16	100	Nylon
135,00 x 2,5	32,00	<b>BI130</b>	8,16	100	Nylon
140,00 x 3,6	35,00	<b>BI140</b>	13,26	100	Nylon
200,00 x 2,6	52,00	<b>BI200</b>	8,16	100	Nylon
200,00 x 3,6	50,00	<b>BI201</b>	13,26	100	Nylon
200,00 x 4,8	50,00	<b>BI202</b>	22,44	100	Nylon
250,00 x 4,8	68,00	<b>BI250</b>	22,40	100	Nylon
290,00 x 3,6	80,00	<b>BI290</b>	13,26	100	Nylon
360,00 x 4,8	103,00	<b>BI360</b>	22,44	100	Nylon



Conector estanco porta-hembra  
Female superseal connector



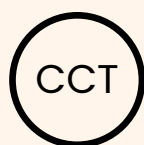
Conector estanco porta-macho  
Male superseal connector



Accesorios  
Accessories

# CONECTORES ESTANCOS

## SUPERSEAL CONNECTORS

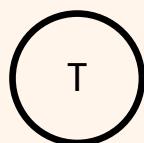


### PORTA-HEMBRA FEMALE

VÍAS WAYS	REF.	ANCHO WIDTH mm A	ALTURA HEIGHT mm B		COMPOSICIÓN PLATED
1	<b>CCT601</b>	-	26,00	25	Nylon 6,6
2	<b>CCT602</b>	-	26,00	25	Nylon 6,6
3	<b>CCT603</b>	-	26,00	25	Nylon 6,6
4	<b>CCT604</b>	-	26,00	25	Nylon 6,6
5	<b>CCT605</b>	-	26,00	25	Nylon 6,6

### PORTA-MACHO MALE

1	<b>CCT701</b>	13,80	45,5	25	Nylon 6,6
2	<b>CCT702</b>	19,90	45,5	25	Nylon 6,6
3	<b>CCT703</b>	19,90	45,5	25	Nylon 6,6
4	<b>CCT704</b>	31,90	45,5	25	Nylon 6,6
5	<b>CCT705</b>	38,20	45,5	25	Nylon 6,6



### ACCESORIOS ACCESSORIES

DESCRIPCIÓN DESCRIPTION	SECCIÓN SECTION mm <sup>2</sup>	REF.	 g	
Terminal hembra - Female terminal	1,00 - 1,50	<b>T174</b>	0,34	100
Terminal macho - Male terminal	1,00 - 1,50	<b>T197</b>	0,34	100
Tapón amarillo - Yellow cap	0,50 - 1,50	<b>TA15N</b>	0,15	50
Tapón rojo - Red cap	0,50 - 1,50	<b>TA15C</b>	0,15	50

PE Polietileno - Polyethylene



HC02



HC06

# CONECTORES HERMAFRODITAS Y ASAS

## HERMAPHRODITE CONNECTORS AND HANDLES



HC01



HC02



HC03



HC04



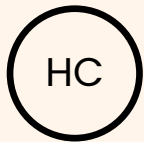
HC05



HC06



HC07



CONECTORES  
HERMAFRODITAS  
HERMAPHRODITE  
CONNECTORS

COLOR COLOR	SECCIÓN SECTION mm <sup>2</sup>	REF.	INTENSIDAD INTENSITY A		COMPOSICIÓN MATERIAL
●	10	HC01	50	1	PC + AC
●	50	HC02	175	1	PC + AC
●	70 - 90	HC03	350	1	PC + AC
●	-	HC04	175-350	1	PC + AC
●	10	HC05	50	1	PC + AC
●	50	HC06	175	1	PC + AC
●	70-90	HC07	350	1	PC + AC

PC Polycarbonato - Polycarbonate AC Acero - Steel



HC08



SC30

# CONECTORES BIPOLARES SERIE BC Y KITS

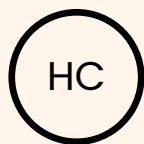
## BC SERIES BIPOLAR CONNECTORS & KITS



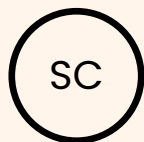
HC08



HC09



**CONECTORES  
BIPOLARES  
BIPOLAR  
CONNECTORS**



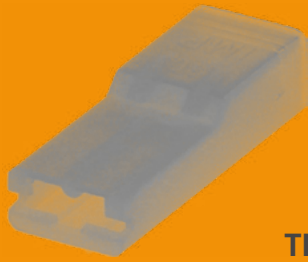
**KIT**

TIPO TYPE	SECCIÓN SECTION mm <sup>2</sup>	REF.	A	V		COMPOSICIÓN MATERIAL
Male	50	<b>HC08</b>	250	48,00	1	+ PVC
Female	50	<b>HC09</b>	250	48,00	1	+ PVC

COMPOSICIÓN COMPOSITION	REF.	
T181 - T186 - T119 - T125 - T172 - T177 - EM05 x 100 u./ref CR23 x 50 u./ref EM01 x 25 u./ref	<b>SC30</b>	1

Latón - Brass



TI36



TI45

# PROTECCIONES

## PROTECTIONS

Blanda



TI30

Rígida



TI36

Rígida



TI40

Rígida



TI43

Rígida



TI44

Rígida

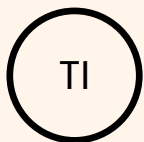


TI45

Rígida



TI46



### PROTECCIONES

Para hembra  
6,35 mm<sup>2</sup>

### PROTECTIONS

For female  
6,35 mm<sup>2</sup>

COLOR COLOR	SECCIÓN SECTION mm <sup>2</sup>	REF.	g		COMPOSICIÓN MATERIAL
	5,00	<b>TI30</b>	0,83	100	PVC
	3,00	<b>TI36</b>	0,46	100	Nylon
	4,00	<b>TI40</b>	0,42	100	Nylon
	4,00	<b>TI43</b>	0,42	100	Nylon
	4,00	<b>TI44</b>	0,42	100	Nylon
	4,00	<b>TI45</b>	0,42	100	Nylon
	4,00	<b>TI46</b>	0,42	100	Nylon

Terminales indicadores hembra TI18, TI20, TI64 y TI21



BE02



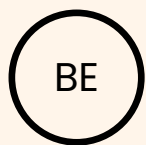
BE03

# TUBOS EXPANDIBLES DE MONOFILAMENTO

## MONOFILAMENT EXPANDABLE TUBE

Especialmente destinado para aplicaciones de aislamiento térmico y protección mecánica. Su especial trenzado le permite aumentar su diámetro de forma considerable a la vez que reduce su longitud. Libre de halógenos. Temperatura de trabajo continua: -55°C a 150°C.

Specially designed for thermal insulation and mechanical protection applications. Its special braiding allows it to increase its diameter considerably while reducing its length. Halogen free. Continuous working temperature: -55°C to 150°C.



 1 u.

REF.	Ø NOMINAL Ø NOMINAL mm	Ø MÍNIMO Ø MINIMUM mm	Ø MÁXIMO Ø MAXIMUM mm	m / 	COMPOSICIÓN MATERIAL
BE01	6	5	10	100	PET
BE02	10	8	16	50	PET
BE03	20	15	27	25	PET

PET Poliéster - Polyester





BR01



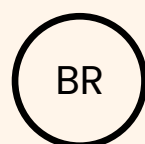
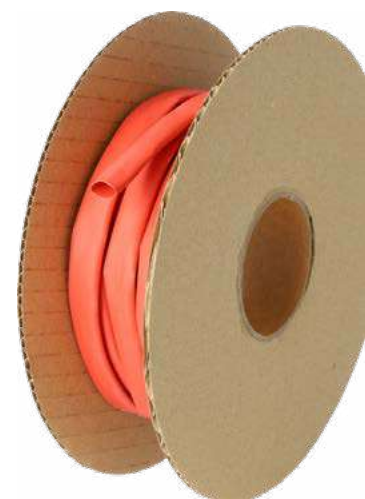
BR03

# TUBOS TERMORETRÁCTILES

## HEAT-SHRINKABLE TUBES

Son flexibles y tienen un radio de contracción alto que permite proteger y aislar puntos de conexión. Resistentes a fluidos y disolventes comunes. Temperatura de trabajo continua -55°C a 135°C.

They are flexible and have a high shrinkage radius to protect and isolate connection points. Resistant to common fluids and solvents. Continuous working temperature -55°C to 135°C.



1 u.

COLOR COLOR	REF.	Ø ANTES Ø BEFORE mm	Ø DESPUÉS Ø AFTER mm	m /	COMPOSICIÓN MATERIAL
●	<b>BR01</b>	4,80	2,40	12	POE
●	<b>BR01RJ</b>	4,80	2,40	12	POE
●	<b>BR02</b>	6,40	3,20	12	POE
●	<b>BR02RJ</b>	6,40	3,20	12	POE
●	<b>BR03</b>	9,50	4,80	10	POE
●	<b>BR03RJ</b>	9,50	4,80	10	POE
●	<b>BR04</b>	12,70	6,40	9	POE
●	<b>BR04RJ</b>	12,70	6,40	9	POE
●	<b>BR05</b>	16,00	8,00	5	POE
●	<b>BR05RJ</b>	16,00	8,00	5	POE

POE Poliolefina - Polyolefin





LX01



LX02



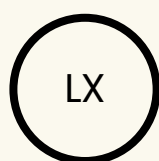
LX03

# BOMBILLAS DE XENÓN

## XENON BULBS

Estas bombillas de Xenón sirven para reemplazar a las que suelen traer los coches de serie, ya sean Philips, Osram, etc. La calidad y el funcionamiento es el mismo además de ser totalmente válidas para todas las marcas de coche. Sin embargo, antes de su instalación se debe comprobar que el modelo de la bombilla sea el mismo. Dicha información aparece en el manual del coche o en la propia bombilla. No se requiere ningún tipo de instalación, simplemente hay que sustituirlas por las originales.

These Xenon bulbs are used to replace the default ones, such as Philips, Osram, etc. The quality and performance are the same, moreover they are fully compatible with all the car brands. Before its installation, it must be checked that the bulb's model is the same. This information can be checked in the car's manual or on the bulb itself. No installation is needed, it only requires to substitute one for another.

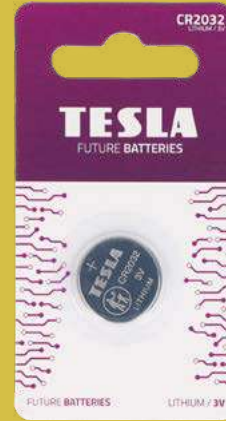


U 85 V

4 u.

TIPO TYPE	CASQUILLO SOCKET	REF.	TEMP. DE COLOR COLOR TEMP. K	POTENCIA WATTS W	REF. ORIGINAL ORIGINAL REF.
D1S	PK32d-2	LX01	6.000	35	OSRAM66140
D2S	P32d-2	LX02	6.000	35	OSRAM66240
D32	PK32d-5	LX03	6.000	35	OSRAM66340

**TESLA**

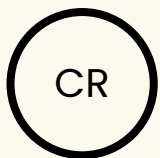


**CR2032**

# PILAS BATTERIES



PILAS  
BATTERIES



PILAS  
BATTERIES

TIPO TYPE	REF.	V	COMP. QUÍMICA CHEMICAL COMP.	
AA	<b>LR06S</b>	1,50	Alkaline	12
AAA	<b>LR03S</b>	1,50	Alkaline	12
9V	<b>6LR61S</b>	9,00	Alkaline	12
C	<b>LR14S</b>	1,50	Alkaline	12
D	<b>LR20S</b>	1,50	Alkaline	12
23A	<b>8LR932</b>	12,00	Alkaline	12
27A	<b>8LR732</b>	12,00	Alkaline	12
CR123A	<b>CR17345</b>	3,00	LiFes2	12
CR2016	<b>CR2016</b>	3,00	Lithium	20
CR2032	<b>CR2032</b>	3,00	Lithium	20
CR1620	<b>CR1620</b>	3,00	Lithium	20
CR1632	<b>CR1632</b>	3,00	Lithium	20
CR2025	<b>CR2025</b>	3,00	Lithium	20
CR2430	<b>CR2430</b>	3,00	Lithium	20
CR2450	<b>CR2450</b>	3,00	Lithium	20
CR1616	<b>CR1616</b>	3,00	Lithium	20

# TESLA



LR06S



LR03S



6LR61S



LR14S



LR20S



8LR932



8LR732



CR17345



CR2016



CR2032



CR1620



CR1632



CR2025



CR2430



CR2450



CR1616

# TABLA DE EQUIVALENCIAS

## CROSS REFERENCE LIST

BOSCH	MAI
221601006	IM18
250201933	DP04
250201952	DP09
280230005	RI14
280230006	RI16
280230009	RI08
280230014	RI16
280230016	RI14
280230018	RI08
281003005	DP15
281003006	DP18
281003006	DP19
281003006	DP40
281003009	DP17
281003012	DP07
281003012	DP46
281003015	DP48
281003098	DP08
281003098	DP14
281003099	DP03
281003099	DP13
0321906059G	RI10
332014203	RR65
332017103	RR76
332019151	RR41
332019157	RR48
332204107	RR25
332204125	RR25
332204151	RR25

BOSCH	MAI
332204201	RR32
332204202	RR32
332204213	RR39
332207200	RR80
332207300	RR76
332402509	DP06
332514103	DP05
333402006	DP10
333402501	DP02
333402505	DP31
333402509	DP09
333402512	DP04
333402513	DP10
333402517	DP09
333402520	DP01
333402524	DP09
3334485005	CCBR
3334485007	CCRR
3334485045	CCBR
3334485045	CCMR
335200004	IE32
335200022	IE02
335200022	IE32
335200022	IE06
335200023	IE32
335200028	IE06
335200028	IE02
335200029	IE03
335200031	IE03

BOSCH	MAI
335200038	IE02
335200038	IE32
335200041	IE03
335200049	IE07
335200049	IE30
335200067	IE52
335200078	IE52
335200079	IE02
335200079	IE06
335200080	IE03
335200801	IE32
335215143	IE14
335215150	IE61
335215154	IE61
335322003	IE05
335323003	IE05
336251004	IE32
336850004	IE69
336850004	IE05
0443907385B	RI10
986221000	IM18
986221002	IM19

HELLA	MAI
4AZ001879021	IE05
4AZ001879051	IE05
4DB001887002	IE52
4DB001887002	IE06
4DB001887022	IE52

HELLA	MAI
4DB003425041	IE52
4DB003675001	IE05
4DB003675001	IE69
4DB003675011	IE69
4DB003675011	IE05
4DB003750017	IE06
4DB003750137	IE02
4DB003750151	IE32
4DB003750311	IE02
4DB003750311	IE32
4DB003750391	IE32
4DB003750651	IE02
4DB003750654	IE32
4DB003750661	IE02
4DB003750661	IE32
4DB003750711	IE32
4DB003750717	IE32
4DB003750721	IE32
4DB004124002	IE06
4DB007218001	IE07
4DB007218001	IE30
4DB009123031	IE64
4DM003360001	IE03
4DM003360002	IE03
4DM003360005	IE03
4DM003360021	IE03
4DM003390011	IE03
4DM003460021	IE04
4DM003944041	IE14

HELLA	MAI
4DM003944091	IE14
4DM004420027	IE03
4DM004420028	IE03
4DM004420101	IE03
4DM004420107	IE03
4DW003944051	IE61
4RA003437041	RR72
4RA003437047	RR72
4RA003437081	RR72
4RA003437087	RR72
4RA003437121	RR75
4RA003437127	RR75
4RA00343791	RR75
4RA00343797	RR75
4RA003510081	RR48
4RA003510091	RR39
4RA003510134	RR41
4RA003510137	RR41
4RA003510154	RR39
4RA003510157	RR39
4RA003510361	RR69
4RA003510641	RR70
4RA003510642	RR70
4RA003510651	RR71
4RA003530001	RR69
4RA003530007	RR69
4RA003530041	RR70
4RA003530042	RR70
4RA003530051	RR71

HELLA	MAI
4RA007507021	DP26
4RA007507071	DP28
4RA007782001	RR76
4RA933332117	RR39
4RA933332157	RR41
4RA933332531	DP30
4RA965400001	RR38
4RA965400001	RR48
4RC011152011	RR83
4RD003520074	RR32
4RD003520081	RR46
4RD003520088	RR46
4RD003520134	RR25
4RD003520137	RR25
4RD003520157	RR32
4RD003520557	RR25
4RD00703011	RR64
4RD007794031	RR63
4RD007814011	RR78
4RD007903021	RR92
4RD008566007	RR80
4RD907754004	RR82
4RD933332027	RR91
4RD933332041	RR36
4RD933332057	RR25
4RD933332077	RR32
4RD933332091	RR92
4RD933332097	RR32
4RD940020094	RR37

# TABLA DE EQUIVALENCIAS

## CROSS REFERENCE LIST

HELLA	MAI
4RP008189001	RI13
4RP008189001	RI09
4RP008189041	RI04
4RP008189041	RI14
4RP008189041	RI16
4RP008189051	RI01
4RP008189051	RI06
4RP008189061	RI20
4RP008189071	RI03
4RP008189071	RI05
4RP008189081	RI03
4RP008189081	RI05
4RP008189091	RI10
4RP008189111	RI08
4RP008189151	RI21
4RV008188001	DP31
4RV008188051	DP36
4RV008188061	DP37
4RV008188081	DP02
4RV008188091	DP01
4RV008188091	DP09
4RV008188101	DP10
4RV008188161	DP05
4RV008188161	DP42
4RV008188171	DP03
4RV008188171	DP04
4RV008188181	DP04
4RV008188181	DP13
4RV008188191	DP13

HELLA	MAI
4RV008188221	DP08
4RV008188221	DP14
4RV008188271	DP07
4RV008188281	DP15
4RV008188291	DP19
4RV008188301	DP18
4RV008188301	DP40
4RV008188301	DP41
4RV008188321	DP17
4ZL961553131	IE06
5DA006623621	IM18
5DA006623701	IM19
6HH004175081	IW33
6JK007232021	CE03
6JK007232031	CE01
8JA001918002	ER02
8JA001930003	ER01
8JA003526001	CCBR
8JA003526002	CCBR
8JA003831001	ER09
8JA003832001	ER10
8JA005951001	ER05
8JA007241021	ER13
8JA007644051	ER17
8JA008969001	ER07A
8JA008969011	ER08A
8JA715606001	CCRR
8JA717291007	CCRR
8JB001941002	ER04

HELLA	MAI
8JB001943003	ER03
8JB003833001	ER11
8JB003834001	ER12
8JB005949001	ER06
8JB007242021	ER14
8JB007645031	ER18
8JD733767001	CCMR
8KA004797021	SP01
8KA004797071	SP03
8KA004797081	SP04
8KA007648001	SP07
8KA007648021	SP08
9GD735641001	ER21

MAHLE/NAGARES	MAI
68082	CCRP
68086	CCMR
AVE212	ZZ12
AVE224	ZZ24
AVES212	ZZ12
AVES224	ZZ24
BDL712	DP51
BED712	DP45
BRE512	DP44
FGRP812	DP54
IT18012	IE06
IT18012S	IE06
IT8424	IE69
ITA412	IE30

MAHLE/NAGARES	MAI
ITA412	IE07
ITA424	IE68
ITA512	IE04
ITAS412	IE07
ITAS412	IE30
ITG312	IE02
ITG312	IE32
ITG412	IE03
ITGES312	IE01
ITGS312	IE32
ITH3	IE06
ITJ312	IE65
ITJS312	IE65
ITRC6	IE14
MH66	DP56
MR109	RI01
MR109	RI06
MR110	RI03
MR110	RI05
MR111	RI04
MR112	RI07
MR113	RI08
MR115	RI10
MRIS1220	RR78
PPC512	DP07
PPC512	DP18
PPC512	DP19
PPC512	DP40
PPC512	DP46

MAHLE/NAGARES	MAI
PPC712	DP17
PPC512	DP15
RDT312	RR96
RDT324	RR97
RL18012	RR83
RL8024	RR84
RLAC412	RR72
RLAC412D	RR95
RLAC424	RR74
RLAC424D	RR94
RLACS412	RR72
RLACS424	RR74
RLDP12	RR82
RLE412D	RR93
RLE424D	RR88
RLE424D	RR94
RLES412	RR73
RLES424D	RR88
RLP412	RR38
RLP412	RR48
RLP412D	RR87
RLP424	RR39
RLP512	RR41
RLPS512	RR42
RLPS512D	RR43
RLP512D	RR89
RLP5212	RR36
RLP5212	RR46
RLP5212D	RR91

MAHLE/NAGARES	MAI
RLP512R	RR68
RLP5224	RR37
RLP5224D	RR92
RLP524	RR65
RLP524D	RR90
RLP5212	RR46
RLPS412	RR48
RLPS412D	RR87
RLPS424	RR39
RLPS512	RR41
RLPS512D	RR89
RLPS514	RR65
RLPS5212	RR25
RLAC5212	RR26
RLAC5224	RR27
RLPS5224	RR32
TPD512	DP09
TPD612	DP10
TPD712	DP10
TPDM3512	DP36
TPDM3612	DP37
TPDV2812	DP57
TPDV2912	DP58
TPF612	DP05
TPMS412	DP52
TPMS612	DP53
TPPF612	DP05
TPPSS712	DP04
TRM1212	DP11



# TABLA DE EQUIVALENCIAS

## CROSS REFERENCIALIST

MAHLE/NAGARES	MAI
TRMK1212	DP11
ZA1	CCMR
ZC1	CCRP

VALEO	MAI
1403	IE07
245092	IM18
24509	IM19
245093	IM18
245600	DP02
245600	DP10
245604	DP09
245604	DP10
245607	DP04
245607	DP11
245609	DP07
245609	DP46
245612	DP07
245615	DP13
245618	DP15
245618	DP41
245618	DP43
245622	DP41
245623	DP09
245624	DP06
245624	DP10
251102	CVH1
251102	CVX6
251104	CV74

VALEO	MAI
251154	CV15
251214	CVS4
251219	CVS4
251222	CV176
251260	CVT3
251268	CVX4
251271	CVX4
251274	CVH1
251274	CVX6
251279	CVA1
251280	CVX4
251304	CV112
251307	CV111
251309	CV110
251310	CV124
251311	CV125
251314	CV175
251322	CVH1
251322	CVX6
251325	CV74
251328	CV157
251334	CV155
251387	CV26
251390	CVM2
251393	CVH5
251438	CV122
251439	CV123
251440	CV122
251441	CV123

VALEO	MAI
251444	CV178
251471	CVH5
251562	CV186
251563	CV189
251565	CV159
251659	CV121
251682	CV197
251685	CV195
251687	CV188
252007	CA11
252020	CA09
252034	CA03
252039	CA05
252113	CA08
252121	CA10
252402	CA12
252573	CA04
256568	CE01
256569	CE02
256616	CB04
256625	CB03
256962	CA22
598121	DP17
641426	IE07
252016	CA30
642501	RR25
643397	RR73
643512	RR91
643523	RR32

<b>VALEO</b>	<b>MAI</b>
643658	RR73
643822	RR37
643836	RR73
643838	RR93
643839	RR93
643845	RR68
643856	RR72
649100	CCBR
73104822	DP09
73104822	DP10
73104902	DP07
73105002	DP06
73506302	DP07

<b>CORMAR</b>	<b>MAI</b>
500000	TB76
530100	TB80
500010	TB86
500006	TC04
500013	TC06
500015	TC07
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