

CATÁLOGO

CATALOGUE



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



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 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 marketing and sales 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 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.



RED COMERCIAL NACIONAL

NATIONAL SALES NETWORK

Andalucía Occidental

Pilar Barrera
660 282 905
barrerapiluca@gmail.com

Cataluña y Baleares

Miquel Caldentey
607 636 883
miquel.caldentey@gmail.com

Zona Norte

Iñigo Jiménez
669 470 807
repjimenez@hotmail.com

Canarias

Iván Morales
600 527 123
maiver@msn.com

Galicia

Juan Blanco
657 937 285
blancoporto@cga.es

Extremadura

Félix Mera
657 859 166
felixmeragallardo@gmail.com

Levante - Zona Centro - Andalucía Oriental

Javier Solera
650 427 619
javiersolera@hotmail.com

Melilla y Ceuta

Fernando L. Caro
607 580 993
fernandoluis caro@hotmail.com

RED COMERCIAL INTERNACIONAL

INTERNATIONAL SALES NETWORK

África

Africa
Jorge Díaz
+34 629 764 653
jdiaz@cerabitat.com

Francia

France
Michel Rogan
+33 (0)661 182 787
roganmichel@gmail.com

Alemania

Germany
Karl Jürgen Pieper
+49 212 995 9250
kjp@mkp-pieper.de

Grecia

Greece
Dionissis Papayannis
+30 231 022 5816
ndpapa@otenet.gr

Portugal

Portugal
Filomena Pires
+351 218 452 594
filomena.pires@anapi.com.pt

Resto del mundo

Rest of the world
Jean-Marc Philippot
+34 977 614 033
mai@mai.es



PRODUCTOS RECOMENDADOS
RECOMMENDED PRODUCTS



PRODUCTOS NUEVOS
NEW PRODUCTS



PRODUCTOS PROFESIONALES
PROFESSIONAL PRODUCTS

PÁGINA - PAGE

05

CABLES ELÉCTRICOS
ELECTRICAL WIRES



PÁGINA - PAGE

25

TERMINALES DE BATERÍA
BATTERY TERMINALS



PÁGINA - PAGE

49

FUSIBLES Y PORTAFUSIBLES
FUSES & FUSE HOLDERS



PÁGINA - PAGE

81

RELÉS E INTERMITENTES
RELAYS & FLASHERS



PÁGINA - PAGE

113

CONMUTADORES Y CONTACTOS
SWITCHES & LOCKS



PÁGINA - PAGE

161

ENCHUFES Y CABLES ESPIRAL
PLUGS & SPIRAL CABLES



PÁGINA - PAGE

171

BOCINAS
HORNS



PÁGINA - PAGE

177

TERMINALES Y CONECTORES
TERMINALS & CONNECTORS



PÁGINA - PAGE

195

LÁMPARAS Y PILAS
LAMPS & BATTERIES



PÁGINA - PAGE

198

TABLA DE EQUIVALENCIAS
CROSSREFERENCE LIST

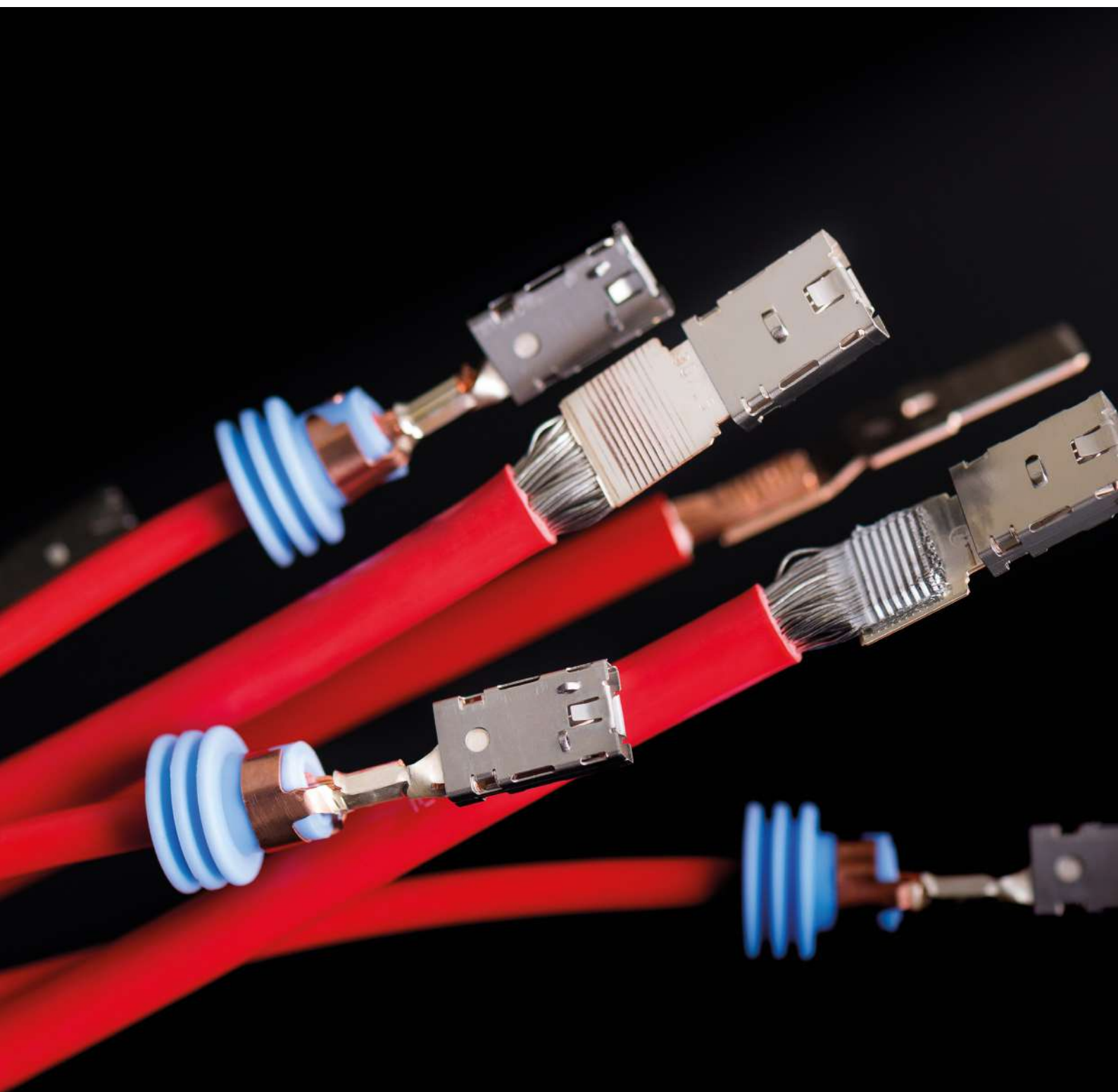
MAI	MAI	MAI
12-00000000	12-00000001	12-00000002
12-00000003	12-00000004	12-00000005
12-00000006	12-00000007	12-00000008
12-00000009	12-00000010	12-00000011
12-00000012	12-00000013	12-00000014
12-00000015	12-00000016	12-00000017
12-00000018	12-00000019	12-00000020
12-00000021	12-00000022	12-00000023
12-00000024	12-00000025	12-00000026
12-00000027	12-00000028	12-00000029
12-00000030	12-00000031	12-00000032
12-00000033	12-00000034	12-00000035
12-00000036	12-00000037	12-00000038
12-00000039	12-00000040	12-00000041
12-00000042	12-00000043	12-00000044
12-00000045	12-00000046	12-00000047
12-00000048	12-00000049	12-00000050
12-00000051	12-00000052	12-00000053
12-00000054	12-00000055	12-00000056
12-00000057	12-00000058	12-00000059
12-00000060	12-00000061	12-00000062
12-00000063	12-00000064	12-00000065
12-00000066	12-00000067	12-00000068
12-00000069	12-00000070	12-00000071
12-00000072	12-00000073	12-00000074
12-00000075	12-00000076	12-00000077
12-00000078	12-00000079	12-00000080
12-00000081	12-00000082	12-00000083
12-00000084	12-00000085	12-00000086
12-00000087	12-00000088	12-00000089
12-00000090	12-00000091	12-00000092
12-00000093	12-00000094	12-00000095
12-00000096	12-00000097	12-00000098
12-00000099	12-00000100	12-00000101



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 automotriz. 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 testados 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.



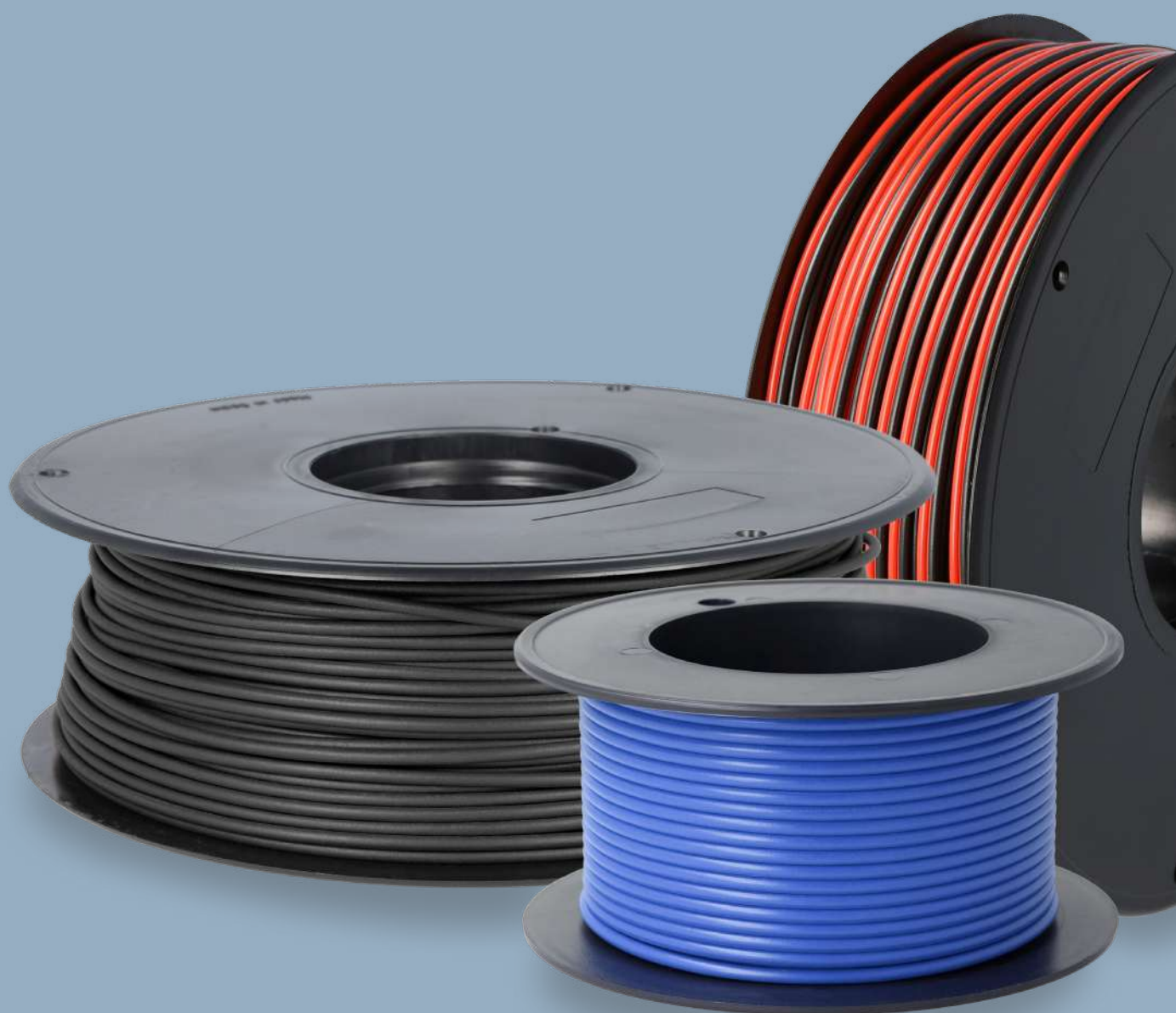
CABLES ELÉCTRICOS

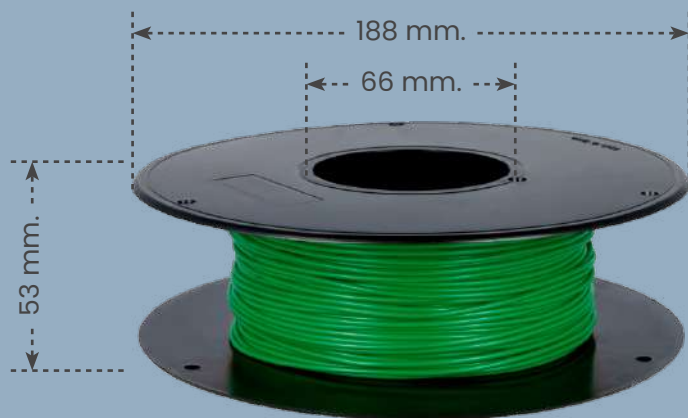
ELECTRICAL CABLES



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



SECCIÓN 0,50
SECTION mm²

EXTERIOR 2,00
EXTERIOR mm²

DESIGNACIÓN
DESIGNATION
H05V-K



SECCIÓN 0,75
SECTION mm²

DIÁMETRO 2,30
EXTERIOR mm²
EXTERIOR
DIAMETER

DESIGNACIÓN
DESIGNATION
H05V-K

COLOR
COLOR

COMPOSICIÓN
SPECIFICATION

REF.

100 m.

REF.

25 m.

Ω/km

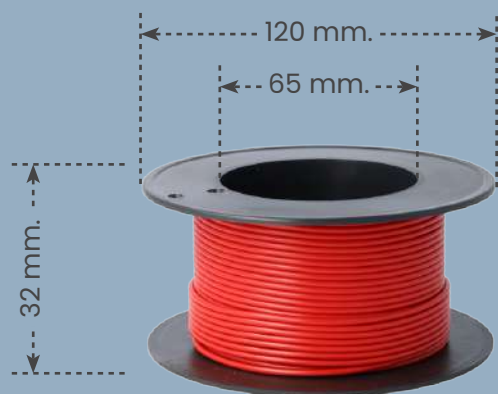
A

g/m

m

	16 x 0,20	03AM	P3AM	39,00	8,00	9,00	500/250
	16 x 0,20	03AZ	P3AZ	39,00	8,00	9,00	500/250
	16 x 0,20	03BC	P3BC	39,00	8,00	9,00	500/250
	16 x 0,20	03MR	P3MR	39,00	8,00	9,00	500/250
	16 x 0,20	03NG	P3NG	39,00	8,00	9,00	500/250
	16 x 0,20	03RJ	P3RJ	39,00	8,00	9,00	500/250
	16 x 0,20	03VD	P3VD	39,00	8,00	9,00	500/250

	24 x 0,20	04AM	P4AM	24,70	10,00	11,00	500/250
	24 x 0,20	04AZ	P4AZ	24,70	10,00	11,00	500/250
	24 x 0,20	04BC	P4BC	24,70	10,00	11,00	500/250
	24 x 0,20	04GR	P4GR	24,70	10,00	11,00	500/250
	24 x 0,20	04MD	P4MD	24,70	10,00	11,00	500/250
	24 x 0,20	04MR	P4MR	24,70	10,00	11,00	500/250
	24 x 0,20	04NG	P4NG	24,70	10,00	11,00	500/250
	24 x 0,20	04NJ	P4NJ	24,70	10,00	11,00	500/250
	24 x 0,20	04RJ	P4RJ	24,70	10,00	11,00	500/250
	24 x 0,20	04RS	P4RS	24,70	10,00	11,00	500/250
	24 x 0,20	04VD	P4VD	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



SECCIÓN 1,00
SECTION mm²

DIÁMETRO 2,50
EXTERIOR mm²
EXTERIOR
DIAMETER

DESIGNACIÓN
DESIGNATION
H05V-K



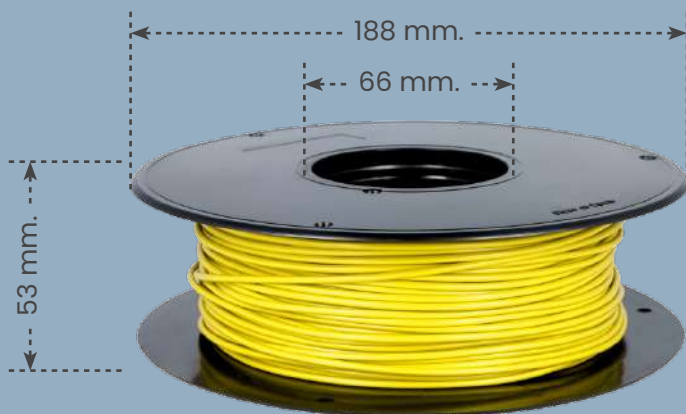
SECCIÓN 1,50
SECTION mm²

DIÁMETRO 2,90
EXTERIOR mm²
EXTERIOR
DIAMETER

DESIGNACIÓN
DESIGNATION
H07V-K

COLOR COLOR	COMPOSICIÓN SPECIFICATION	REF. 100 m.	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

SECCIÓN
SECTION

2,00
mm²

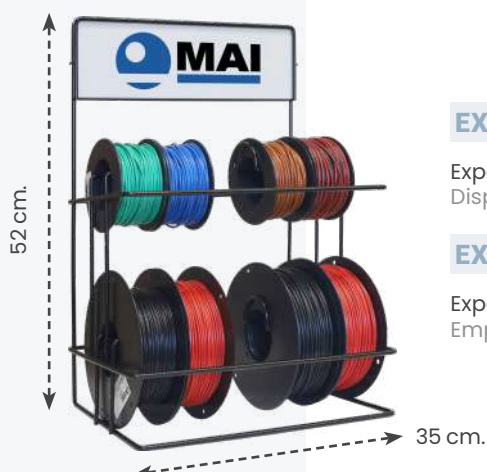
DIÁMETRO
EXTERIOR
EXTERIOR
DIAMETER

3,30
mm²

DESIGNACIÓN
DESIGNATION

H07V-K

	32 x 0,26	07AM	P7AM	9,30	23	28	250
	32 x 0,26	07AZ	P7AZ	9,30	23	28	250
	32 x 0,26	07BC	P7BC	9,30	23	28	250
	32 x 0,26	07GR	P7GR	9,30	23	28	250
	32 x 0,26	07MD	P7MD	9,30	23	28	250
	32 x 0,26	07MR	P7MR	9,30	23	28	250
	32 x 0,26	07NG	P7NG	9,30	23	28	250
	32 x 0,26	07NJ	P7NJ	9,30	23	28	250
	32 x 0,26	07RJ	P7RJ	9,30	23	28	250
	32 x 0,26	07RS	P7RS	9,30	23	28	250
	32 x 0,26	07VD	P7VD	9,30	23	28	250



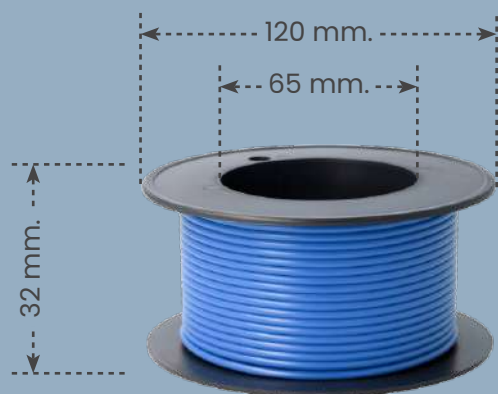
EX10

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
mm²

DIÁMETRO
EXTERIOR
EXTERIOR
DIAMETER 3,60
mm²

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

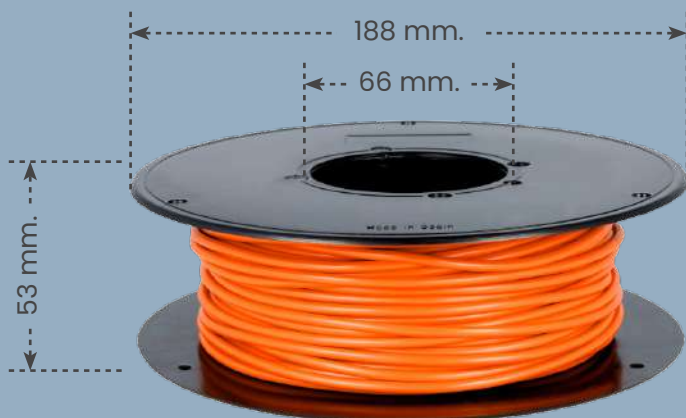
SECCIÓN
SECTION 3,00
mm²

DIÁMETRO
EXTERIOR
EXTERIOR
DIAMETER 3,90
mm²

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

(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-EN 50525-2-31
STANDARD UNE-EN 50525-2-31

CABLE UNIPOLAR

SINGLE CORE CABLE

10

SECCIÓN 4,00
SECTION mm²

DIÁMETRO EXTERIOR 4,10
EXTERIOR DIAMETER mm²

DESIGNACIÓN
DESIGNATION
H07V-K

12

SECCIÓN 6,00
SECTION mm²

DIÁMETRO EXTERIOR 4,70
EXTERIOR DIAMETER mm²

DESIGNACIÓN
DESIGNATION
H07V-K

COLOR
COLOR

COMPOSICIÓN
SPECIFICATION

REF.

25 m.

Ω/km

A

g/m

m

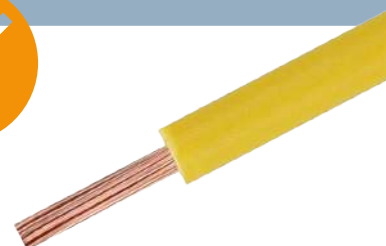
	48 x 0,31	10AM	4,75	35	47	125
	48 x 0,31	10AZ	4,75	35	47	125
	48 x 0,31	10MR	4,75	35	47	125
	48 x 0,31	10NG	4,75	35	47	125
	48 x 0,31	10RJ	4,75	35	47	125
	48 x 0,31	10VD	4,75	35	47	125

	72 x 0,31	12AM	3,30	44	64	125
	72 x 0,31	12AZ	3,30	44	64	125
	72 x 0,31	12BC	3,30	44	64	125
	72 x 0,31	12MR	3,30	44	64	125
	72 x 0,31	12NG	3,30	44	64	125
	72 x 0,31	12RJ	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

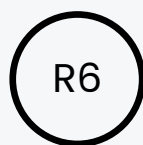
SPECIAL FOR AUTOMOTIVE



SECCIÓN 1,00
SECTION mm²

DIÁMETRO 2,00
EXTERIOR mm²
EXTERIOR
DIAMETER

DESIGNACIÓN
DESIGNATION
FLRY-B 105°



SECCIÓN 1,50
SECTION mm²

DIÁMETRO 2,30
EXTERIOR mm²
EXTERIOR
DIAMETER

DESIGNACIÓN
DESIGNATION
FLRY-B 105°

COLOR
COLOR

COMPOSICIÓN
SPECIFICATION

REF.

100 m.

REF.

25 m.

Ω/km

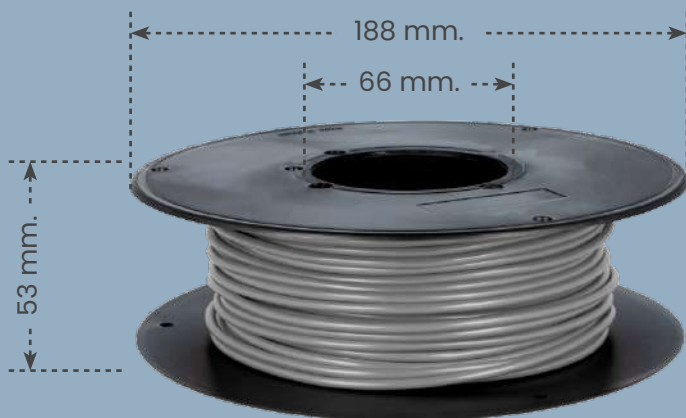
A

g/m

m

	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

	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 mm²

DIÁMETRO 2,90
EXTERIOR mm²
EXTERIOR
DIAMETER

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	R8AM	R8AM25	7,90	26	31	250
	40 x 0,26	R8AZ	R8AZ25	7,90	26	31	250
	40 x 0,26	R8BC	R8BC25	7,90	26	31	250
	40 x 0,26	R8GR	R8GR25	7,90	26	31	250
	40 x 0,26	R8MR	R8MR25	7,90	26	31	250
	40 x 0,26	R8NG	R8NG25	7,90	26	31	250
	40 x 0,26	R8RJ	R8RJ25	7,90	26	31	250
	40 x 0,26	R8VD	R8VD25	7,90	26	31	250



SECCIÓN 4,00
SECTION mm²

DIÁMETRO 3,60
EXTERIOR mm²
EXTERIOR
DIAMETER

DESIGNACIÓN
DESIGNATION
FLRY-B 105°

COLOR
COLOR
COMPOSICIÓN
SPECIFICATION

REF.

50 m.

Ω/km

A

g/m

m

	41 x 0,31	R10NG	4,75	35	39,00	250
	41 x 0,31	R10RJ	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.

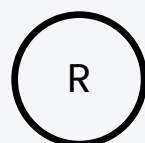
Flexible, multiwire copper cable insulated with a thin wall of polyvinyl chloride (PVC type B) resistant to high temperatures and to abrasive effects. Specially designed for electrical installations in the automotive industry.



SECCIÓN 6,00
SECTION mm²

DIÁMETRO 4,20
EXTERIOR mm²
EXTERIOR
DIAMETER

DESIGNACIÓN
DESIGNATION
FLRY-B 105°

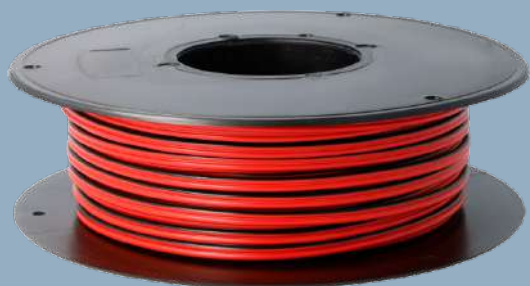


DESIGNACIÓN
DESIGNATION
FLRY-B 105°

COLOR COLOR	COMPOSICIÓN SPECIFICATION	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 ²	COMPOSICIÓN SPECIFICATION	Ø EXTERIOR mm ²	 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 mm ²	COMPOSICIÓN SPECIFICATION	REF.	Ø EXTERIOR mm ²	Ω/km	A	g/m	m	m
2 x 0,40	2 x 8 x 0,25	20RN	2,2 x 4,5	49,50	7	16	100	500
2 x 0,50	2 x 16 x 0,20	21RN	2,2 x 4,5	37,10	8	18	100	500
2 x 0,75	2 x 24 x 0,20	22RN	2,3 x 4,7	24,70	10	24	50	250
2 x 0,75	2 x 24 x 0,20	P22RN	2,3 x 4,7	24,70	10	24	25	250
2 x 1	2 x 32 x 0,20	23RN	2,5 x 5,0	19,50	12	32	50	250
2 x 1	2 x 32 x 0,20	P23RN	2,5 x 5,0	19,50	12	32	25	250
2 x 1,50	2 x 24 x 0,26	24RN	2,8 x 5,7	13,30	19	36	50	250
2 x 2,50	2 x 40 x 0,26	26RN	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 ²	COMPOSICIÓN SPECIFICATION	REF.	Ø EXTERIOR mm ²	Ω/km	Ⓐ A	g/m	ROLLO ROLL m
10	72 x 0,41	F610	6,50	1,91	61	100	50
16	108 x 0,41	F616	8,10	1,21	82	160	25
25	168 x 0,41	F625	10,20	0,78	114	240	25
35	238 x 0,41	F635	11,50	0,55	141	360	25
35	238 x 0,41	F63505	11,50	0,55	141	360	5
50	336 x 0,41	F650	13,20	0,38	170	480	25
70	504 x 0,41	F670	14,90	0,27	218	680	25
95	646 x 0,41	F695	17,20	0,21	264	930	25
10	72 x 0,41	F710	6,50	1,91	61	100	50
16	108 x 0,41	F716	8,10	1,21	82	160	25
25	168 x 0,41	F725	10,20	0,78	114	240	25
35	238 x 0,41	F735	11,50	0,55	141	360	25
35	238 x 0,41	F73505	11,50	0,55	141	360	5
50	336 x 0,41	F750	13,20	0,38	170	480	25
70	504 x 0,41	F770	14,90	0,27	218	680	25
95	646 x 0,41	F795	17,20	0,21	264	930	25

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

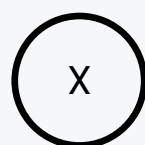
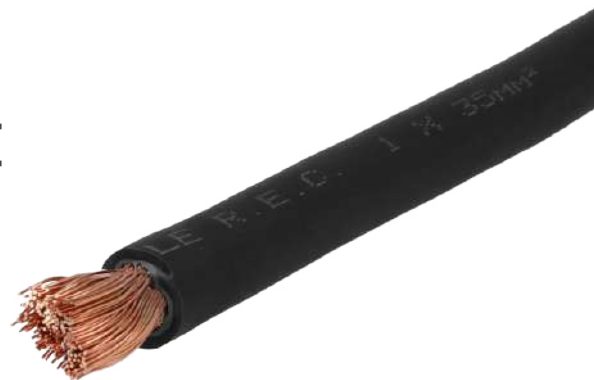


TEMPERATURA DE -40°C A 70°C
TEMPERATURE FROM -40°C TO 70°C
NORMA UNE-EN 50525-2-31
STANDARD UNE-EN 50525-2-31

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

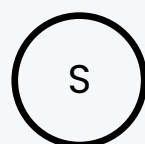
CABLE DE ARRANQUE ESTAÑADO

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



COLOR
COLOR



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

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



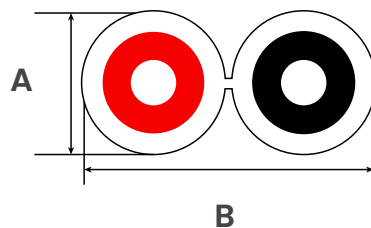
TEMPERATURA DE -25°C A 70°C
 TEMPERATURE FROM -25°C TO 70°C
 NORMA UNE-EN 50525-2-31
 STANDARD UNE-EN 50525-2-31

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.



COLORES
 COLORS



SECCIÓN SECTION mm ²	COMPOSICIÓN SPECIFICATION	REF.	Ø EXTERIOR mm ²	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

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

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



Plana - Flat

TEMPERATURA DE -40°C A 85°C
TEMPERATURE FROM -40°C TO 85°C

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

2 x 1	2 x 32 x 0,20	21ADR	3,70 x 5,80	19,50	12	60	100
-------	---------------	--------------	-------------	-------	----	----	-----

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

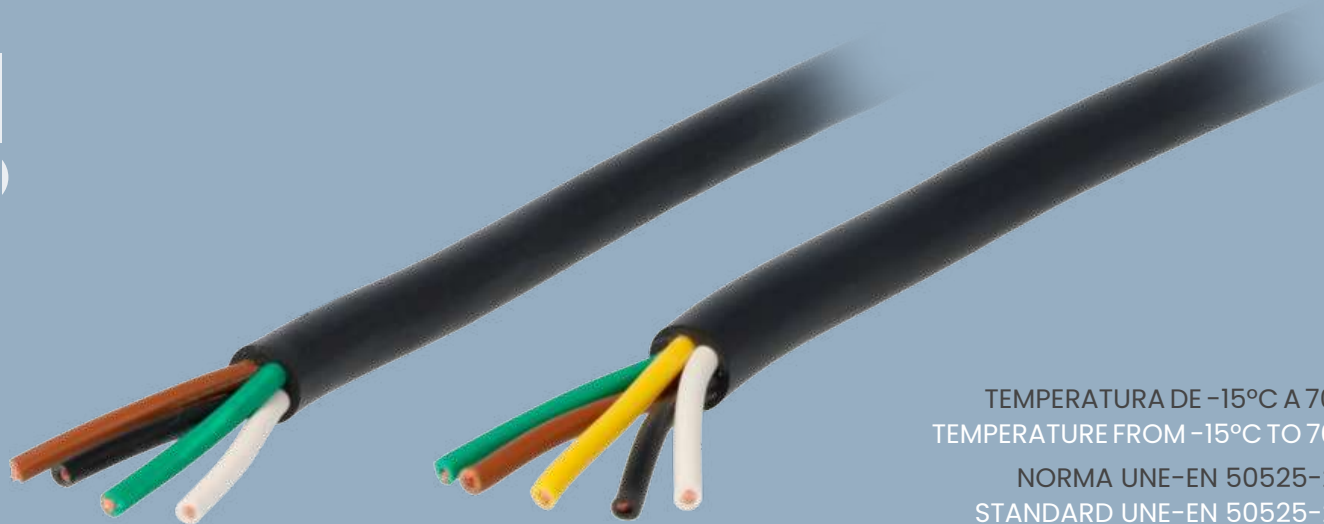
UNE 60228

SECCIÓN SECTION mm ²	COMPOSICIÓN SPECIFICATION	REF.	Ø EXTERIOR mm ²	 Ω/km	 A	 g/m	ROLLO ROLL m
3 x 0,75	3 x 24 x 0,20	3075CM	5,70	24,70	12	65	100
3 x 1	3 x 32 x 0,20	31CM	7,00	19,50	12	70	100
3 x 1	3 x 32 x 0,20	31CM50	7,00	19,50	12	70	50
3 x 1	3 x 32 x 0,20	31CM25	7,00	19,50	12	70	25
3 x 1,5	3 x 24 x 0,26	35CM	8,10	13,30	19	100	100
3 x 1,5	3 x 24 x 0,26	35CM25	8,10	13,30	19	100	25
3 x 2,5	3 x 40 x 0,26	325CM25	9,50	7,90	26	136	25
3G 2,5	-	325CNC 	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 50525-2-11
STANDARD UNE-EN 50525-2-11

CABLE MANGUERA DE 4 Y 5 CONDUCTORES

4 & 5 WIRE MULTICORE CABLE

4

COLORES
COLORS



DESIGNACIÓN
DESIGNATION

05VV-F

5

COLORES
COLORS



DESIGNACIÓN
DESIGNATION

05VV-F

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

Ⓐ 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



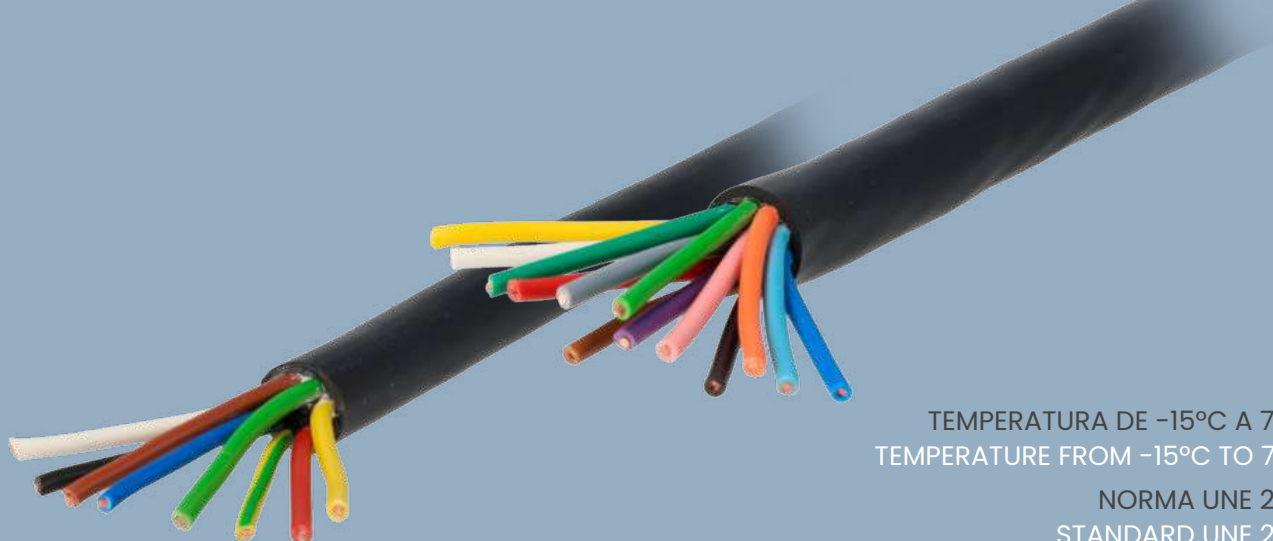
COLORES
COLORS

DESIGNACIÓN
DESIGNATION
05VV-F

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

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

13

COLORES
COLORS



DESIGNACIÓN
DESIGNATION
05VV-F

8 x 1	8 x 32 x 0,20	81CM50 	10,00	19,50	12	160	50
-------	---------------	---	-------	-------	----	-----	----

13 x 1	13 x 32 x 0,20	13CM	13,00	19,50	12	260	50
--------	----------------	-------------	-------	-------	----	-----	----

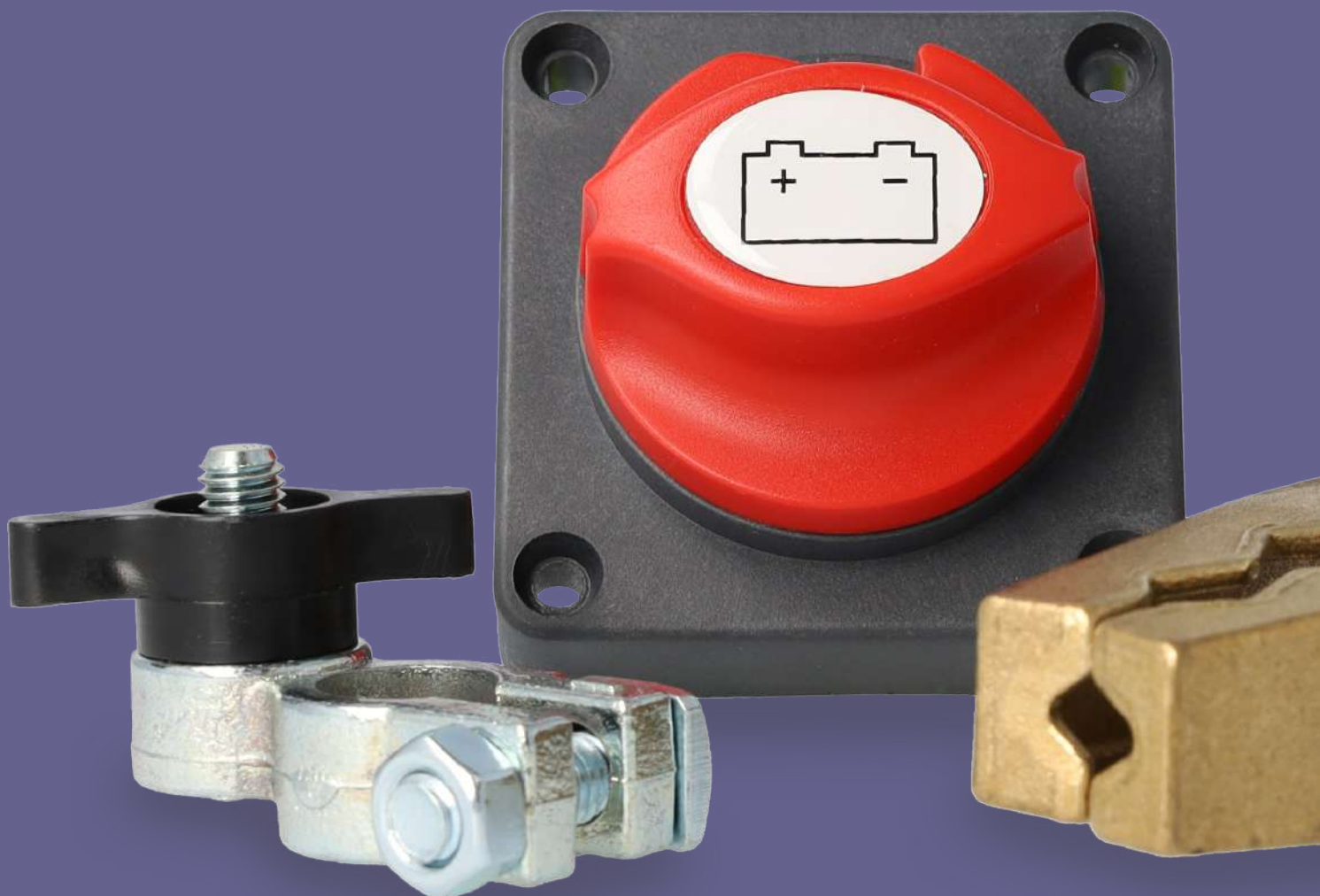
 Intensidad máxima a 40°C (A) - Maximum intensity at 40°C (A)

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, batttery bridge leads, battery clamps, jumping leads, etc.





TB14

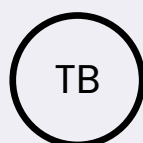


TB07



TERMINALES DE BATERÍA TURISMO Y REFORZADO

CAR & REINFORCED BATTERY TERMINALS



TURISMO CAR

REFORZADOS REINFORCED

CAPUCHONES CAPS

POLARIDAD POLARITY	SECCIÓN SECTION mm ²	REF.	g			ACABADO PLATED
	16-35	TB14A	48	50	250	
	16-35	TB17A	49	50	250	
	16-35	TB14	60	50	250	
	16-35	TB17	63	50	250	
	25-50	TBAA	80	25	250	
	25-50	TBBA	82	25	250	
	25-50	TBCA	80	25	250	
	25-50	TBDA	82	25	250	
	25-50	TBAE	80	25	250	
	25-50	TBBE	82	25	250	
	25-50	TBCE	80	25	250	
	25-50	TBDE	82	25	250	
	35-70	TB07	103	25	250	
	35-70	TB08	102	25	250	
	35-70	TB07E	103	25	250	
	35-70	TB08E	102	25	250	
	-	CAP01	20	10	200	PP
	-	CAP02	20	10	200	PP



CAP01

Capuchón para TB07 - TB14
Cover for TB07 - TB14



CAP02

Capuchón para TB08 - TB17
Cover for TB08 - TB17



TB14A



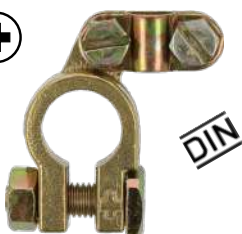
TB17A



TB14



TB17



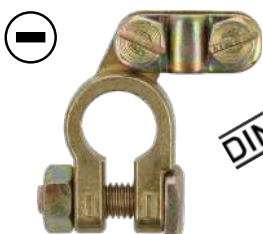
TBAA



TBBA



TBCA



TBDA



TBAE



TBBE



TBCE



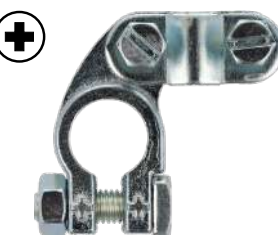
TBDE



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

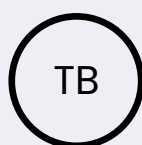
Capuchón para BS34
Cover for BS34

CAP35

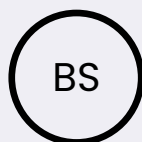
Capuchón para BS35
Cover for BS35

TERMINALES DE BATERÍA DE CIERRE

LOCK BATTERY TERMINALS



SIMPLE CIERRE
SIMPLE LOCK



DOBLE CIERRE
DOUBLE LOCK



CAPUCHONES
CAPS

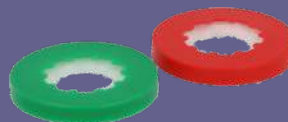
POLARIDAD POLARITY	SECCIÓN SECTION mm ²	REF.	 g			ACABADO PLATED
	25-35	TB11	58	25	250	
	25-35	TB12	58	25	250	
	35-50	TB19	76	25	250	
	35-50	TB20	73	25	250	
	16-25	BS13	64	50	250	
	16-25	BS14	63	50	250	
	35-50	BS17	76	50	250	
	35-50	BS18	75	50	250	
	70-95	BS34	142	25	150	
	70-95	BS35	137	25	150	
	-	CAP17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

Latón - Brass Acero - Steel



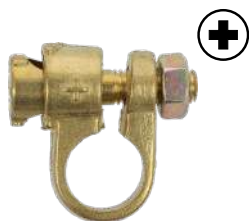
TB99

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

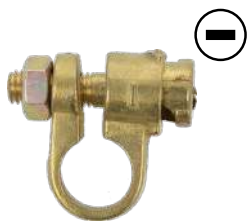


TA50

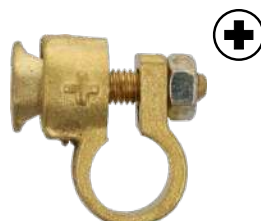
Arandela antióxido
Antioxidant washer



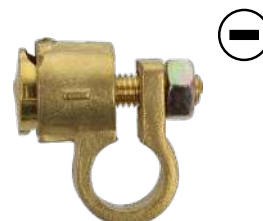
TB11



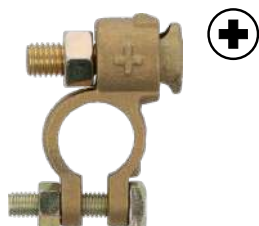
TB12



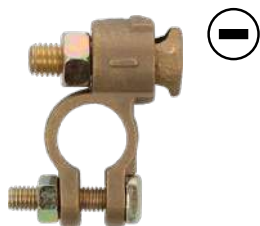
TB19



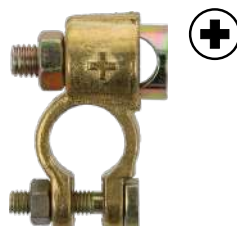
TB20



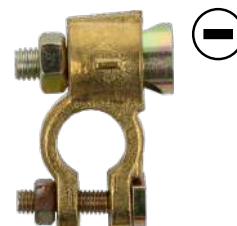
BS13



BS14



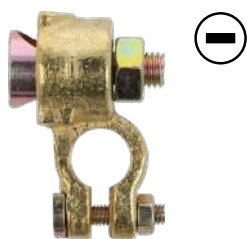
BS17



BS18



BS34



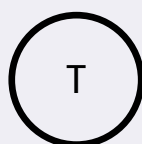
BS35



TB99



TA50



LIMPIADOR
CLEANER

ARANDELA
ANTICORROSIÓN
ANTI-CORROSION
WASHER

COLORES
COLORS

REF.



g



MATERIAL
MATERIAL

●	TB99	152	1	1	■
● ●	TA50	4	50	500	PVC*

*PVC y fibra de poliéster - PVC and polyester fiber



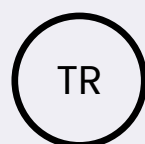
TR02



TR10

TERMINALES DE BATERÍA TIPO FRANCÉS

FRENCH TYPE BATTERY TERMINALS



TIPO FRANCÉS
FRENCH TYPE

CASQUILLOS
CAPS

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



TR13-TR14



TR09R

Casquillo para TR09
Cap for TR09

TR10R

Casquillo para TR10
Cap for TR10

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

Latón - Brass
 Galvanizado - Galvanized
 Estañado - Tinned



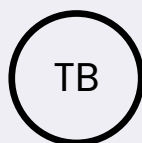
TB09



TB30

TERMINALES DE BATERÍA RECTOS Y TUBULARES

IN-LINE & TUBULAR BATTERY TERMINALS



RECTOS IN-LINE

POLARIDAD POLARITY	SECCIÓN SECTION mm ²	REF.	g			ACABADO PLATED
+	25-50	TB09	72	50	250	
-	25-50	TB10	72	50	250	
+	70-120	TB29	149	25	250	
-	70-120	TB30	149	25	250	

TUBULARES TUBULAR

+	16-35	TB61	80	25	250	
-	16-35	TB62	86	25	250	
+	50-95	TB63	103	25	250	
-	50-95	TB64	106	25	250	
+	50	TB65	65	25	250	
-	50	TB66	70	25	250	



TB63



TB66



TB09



TB10



TB29



TB30



TB61



TB62



TB63



TB64



TB65



TB66

Latón - Brass
 Estañado - Tinned



TB70R



TB71N

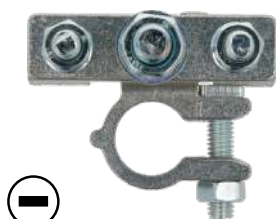


TERMINALES DE BATERÍA ESPECÍFICOS

SPECIFIC BATTERY TERMINALS



TB70



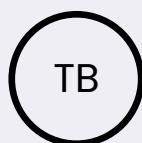
TB71



TB73



TB74



3 CONEXIONES
3 CONNECTIONS

DOBLE PLETINA
DOUBLE BASE

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

Latón - Brass Estañado - Tinned



TB15R - TB16R

Adaptador de japonés a estándar
Japanese to standard adapter

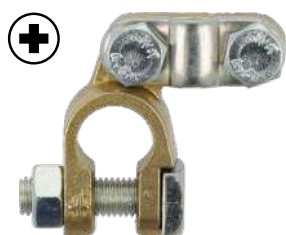


TB13 - TB18

Adaptador estándar a japonés
Standard to japanese adapter

TERMINALES DE BATERÍA TIPO JAPONÉS

JAPANESE TYPE BATTERY TERMINALS



TB15



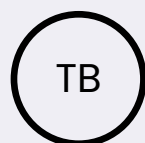
TB16



TB15E



TB16E



TIPO JAPONÉS JAPANESE TYPE

ADAPTADORES ADAPTERS

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



TB25



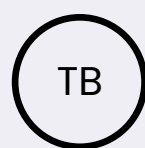
TB38



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

+	M12	TB25	106	25	250	
-	M10	TB26	98	25	250	
+	M6	TB38	103	25	250	
-	M6	TB39	103	25	250	
+	M8	TB41	105	25	250	
-	M8	TB42	105	25	250	
+	M10	TB43	107	25	250	
-	M10	TB44	107	25	250	
+	M8	TB40	99	10	250	
+	2 x M8	TB50	125	10	250	
+	M6	TB21	47	25	150	
-	M6	TB22	52	25	150	
+	M8	TB45	98	25	250	
-	M8	TB46	97	25	250	
-	M8	TB47	97	25	250	



TB50

TU01
Tuerca aislada
Isolated nut

FB200



Terminal tubular
Tubular terminal



TB40



TB25



TB26



TB38



TB39



TB41



TB42



TB43



TB44



TB21



TB22



TB45



TB46



TB47

M8



TU01

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



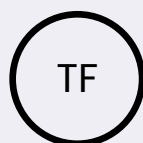
TF02



TF01E



TF02E



TIPO FORD
FORD TYPE

ADAPTADORES
ADAPTERS

POLARIDAD
POLARITY

REF.



g



ACABADO
PLATED

+	TF01	50	10	250	Latón - Brass
-	TF02	47	10	250	Latón - Brass
+	TF01E	50	25	250	Galvanizado - Galvanized
-	TF02E	47	25	250	Galvanizado - Galvanized
+	TF03	27	50	50	Emplomado - Lead
-	TF04	20	50	50	Emplomado - Lead

Latón - Brass Galvanizado - Galvanized Emplomado - Lead 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.

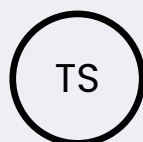


TS04

ADAPTADORES DE BATERÍA

SOLAR BATTERY ADAPTERS

+		TS01E	-		TS02E	+		TS03	-		TS04
+		TS03E	-		TS04E						



ADAPTADORES
ADAPTERS

POLARIDAD
POLARITY

TUERCA
SCREW

REF.



g



ACABADO
PLATED

+	M6	TS01E		57	10	200	
-	M6	TS02E		52	10	200	
+	M8	TS03		63	10	200	
-	M8	TS04		58	10	200	
+	M8	TS03E		60	10	200	
-	M8	TS04E		55	10	200	



TB85

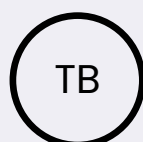


TB88



INTERRUPTORES DE BATERÍA

BATTERY DISCONNECT SWITCHES

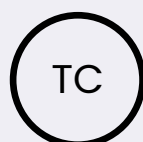


INTERRUPTORES
ON-OFF
ON-OFF SWITCHES

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



INTERRUPTORES
SWITCHES



INTERRUPTORES
SWITCHES

100 (max. 500)	M8 x 2	-	TB75	1	144	50	
100 (max. 500)	M10 x 2	-	TB76	1	166	50	
200 (max. 500)	M8 x 2	-	TB79	1	278	200	
200 (max. 500)	M10 x 2	-	TB80	1	240	200	
250 (max. 2500)	M10 x 2	-	TB86	1	503	50	
200	M10	-	TB88	1	192	100	
150	M10 x 2	-	TC04	1	22	50	
250	M10 x 2	-	TC06	1	56	20	
350	M10 x 2	-	TC07	1	71	20	
350	M10 x 2 + M6 x 1	-	TC08	1	78	20	
250	M10 x 2	-	TC09	1	535	100	

Batería - 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



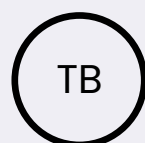
TB05



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

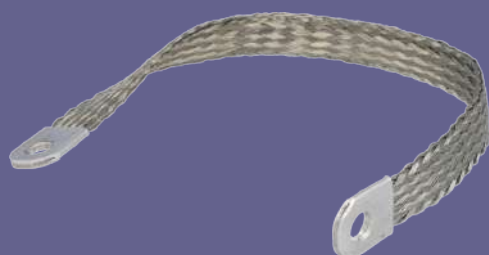


TB81



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 ²	LONGITUD LENGTH cm	REF. 	REF. 	Ø TALADRO Ø DRILL mm	
20	20	MF20	MN20	11	10
20	25	MF25	MN25	11	10
20	30	MF30	MN30	11	10
20	35	MF35	MN35	11	10
20	40	MF40	MN40	11	10
20	45	MF45	MN45	11	10
20	50	MF50	MN50	11	10
20	55	MF55	MN55	11	10
20	60	MF60	MN60	11	10

mm ²	m	REF.	
20	50	CT01	50



Conexión simple positiva
Positive simple connection



Conexión en serie
Serial connection



Conexión simple negativa
Negative simple connection



Conexión mixta
Mixed connection

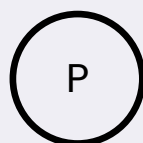
PUENTES DE BATERÍA

BATTERY BRIDGE LEADS



PK35

Kit de puentes de batería
Battery bridge leads kit



CONEXIÓN SIMPLE SIMPLE CONNECTION

POLARIDAD POLARITY	SECCIÓN SECTION mm ²	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

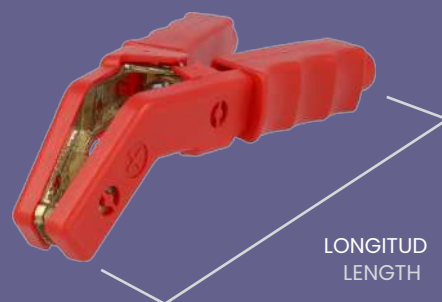
+	-	50	PM04	25	2
+	-	50	PM05	30	2
+	-	50	PM06	35	2

KITS

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

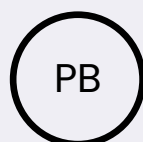
Pinzas de batería de alta calidad y versatilidad, revestidas tanto en acero como latón, con o sin trenza. Cuerpo de alta resistencia que garantiza la protección contra la electrocución. Diseñadas para un excelente acoplamiento tanto alrededor de los polos de la batería como en cualquier tipo de terminal.

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



AI SLADA DE LATÓN
ISULATED BRASS



AI SLADA DE LATÓN
CON TRENZA
ISULATED BRASS
WITH BRAID

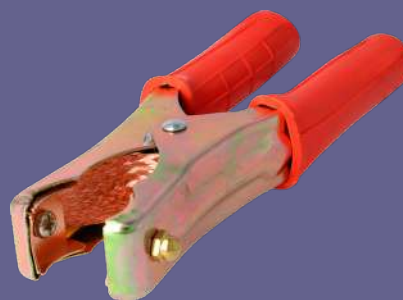


SECCIÓN SECTION mm ²	POLARIDAD POLARITY	INTENSIDAD INTENSITY A	REF.	LONGITUD LENGTH cm	g	ACABADO PLATED
16-25		500	PB200R	14,5	160	
16-25		500	PB200N	14,5	160	
35-50		700	PB400R	17	315	
35-50		700	PB400N	17	315	
50-95		1.000	PB500R	20	557	
50-95		1.000	PB500N	20	557	
16-25		650	PB270R	17,5	275	
16-25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

6 u.

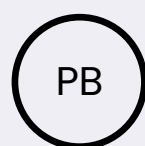
Las pinzas de latón con trenza existen en ambos colores individualmente, en rojo, ref. PB402R y en negro, ref. PB402N. Ambas requieren de montaje ya que se sirve la trenza por separado.

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 ²	POLARIDAD POLARITY	INTENSIDAD INTENSITY A	REF.	LONGITUD LENGTH cm	g	ACABADO PLATED
16-25		600	PB290R	16,5	360	
16-25		600	PB290N	16,5	360	
35-50		800	PB490R	17	475	
35-50		800	PB490N	17	475	
10-16		80	PB150R	12,0	52	
10-16		80	PB150N	12,0	52	
35-50		400	PB250R	20,5	280	
35-50		400	PB250N	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 mm². Apto para baterías de 12V y 24V.

Jumping leads with flexible copper and aluminium cables of 25, 35 and 50 mm². Suitable for 12V and 24V batteries.



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



CABLES DE EMERGENCIA
JUMPING LEADS

SECCIÓN SECTION mm ²	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	

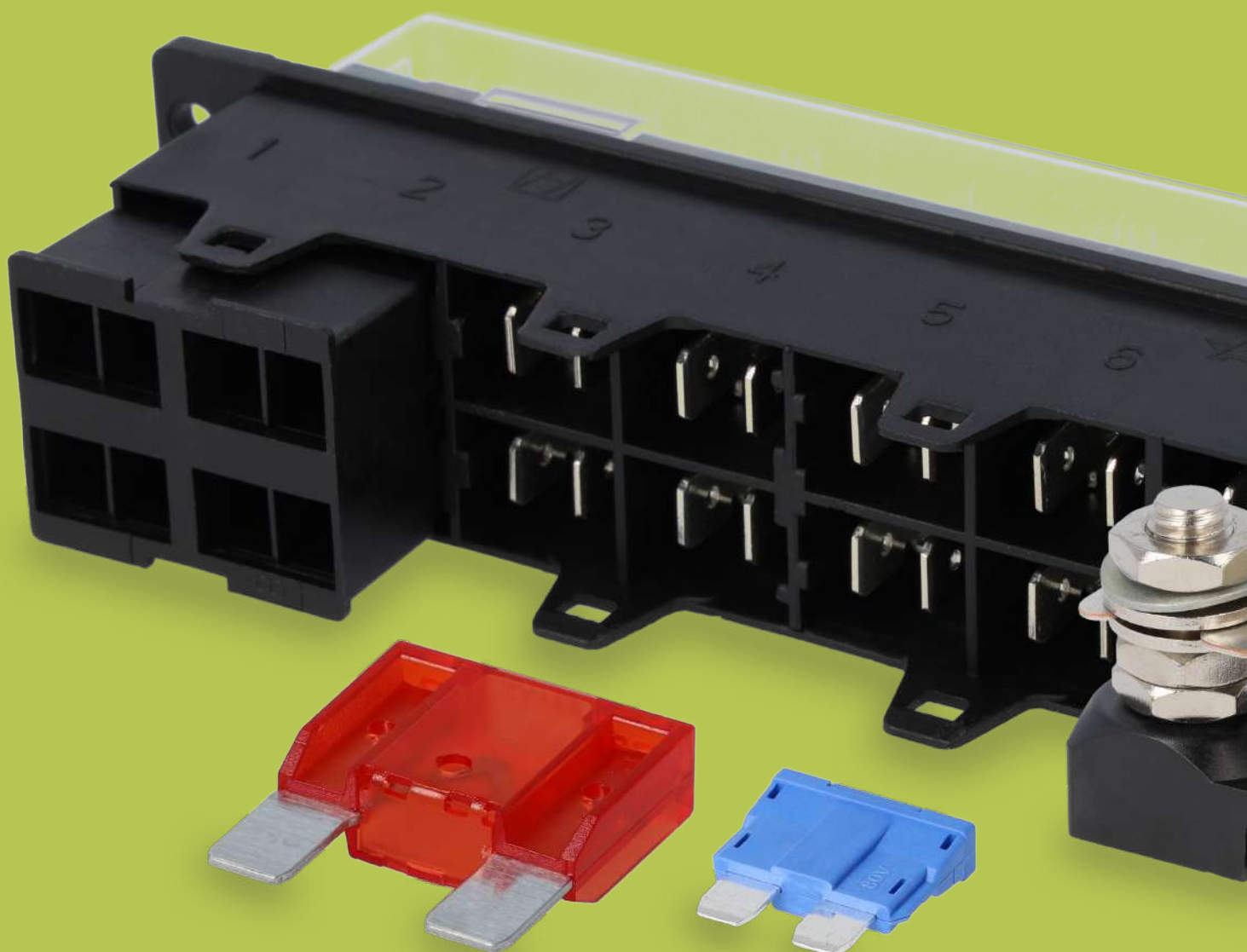
Aluminio - Aluminium Cobre - Copper 6 u.

FUSIBLES Y PORTAFUSIBLES

FUSES & FUSE HOLDERS

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

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





Fusible Micro 1
Micro 1 blade fuse



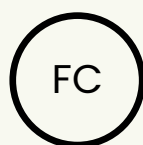
Fusible Micro 2
Micro 2 blade fuse



Fusible Micro 3
Micro 3 blade fuse

FUSIBLES MICRO

MICRO BLADE FUSES



V 58V

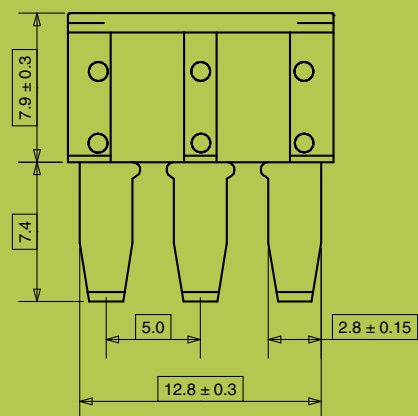
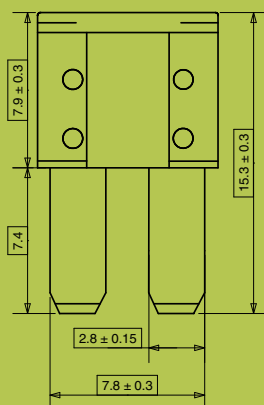
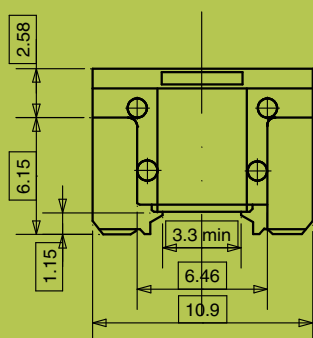
NORMA
STANDARD
JASO



V 32V

NORMA
STANDARD
ISO 8820

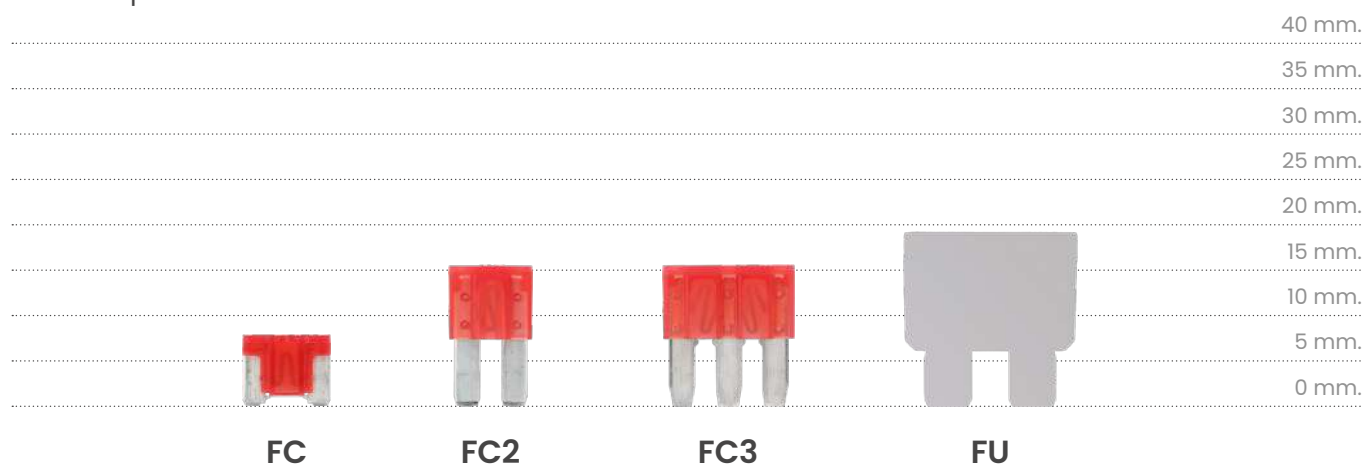
COLOR COLOR	A	REF.		
	2	FC02	10	1.000
	3	FC03	10	1.000
	4	FC04	10	1.000
	5	FC05	10	1.000
	7,5	FC75	10	1.000
	10	FC10	10	1.000
	15	FC15	10	1.000
	20	FC20	10	1.000
	25	FC25	10	1.000
	30	FC30	10	1.000
	5	FC205	10	1.000
	7,5	FC275	10	1.000
	10	FC210	10	1.000
	15	FC215	10	1.000
	20	FC220	10	1.000
	25	FC225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

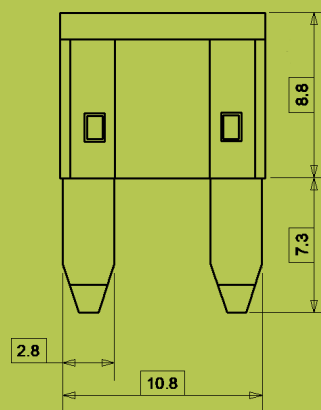


FC3		COLOR COLOR	A	REF.		
V	32V		5	FC305	10	1.000
			7,5	FC375	10	1.000
			10	FC310	10	1.000
			15	FC315	10	1.000

**NORMA
STANDARD**
ISO 8820



Fusible Mini
Mini blade fuse



FUSIBLES MINI Y FUSIBLES ESTÁNDAR

MINI & STANDARD BLADE FUSES

Fusibles Mini y Standard 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

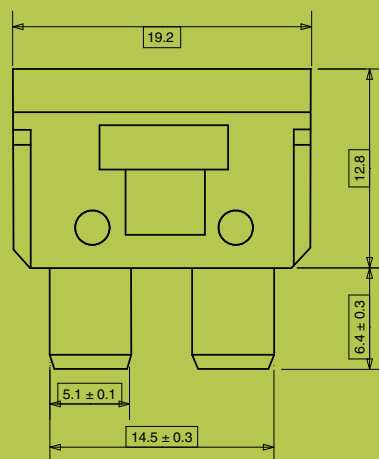
NORMAS STANDARDS

DIN ISO 8820-3,
JASO D612, SAE
J2077

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



Fusible Estándar
Standard blade fuse



COMPARATIVA TAMAÑO - FUSIBLES MINI Y FUSIBLE ESTÁNDAR

Size comparison - Mini blade fuse & Standard blade fuse



V 32V

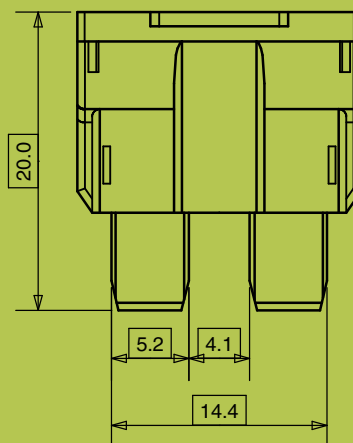
NORMAS STANDARDS

DIN ISO 8820-3,
JASO D612, SAE
J1284

	COLOR COLOR	A	REF.		
		1	FU01	100	2.000
		2	FU02	100	2.000
		3	FU03	100	2.000
		4	FU04	100	2.000
		5	FU05	100	2.000
		7,5	FU75	100	2.000
		10	FU10	100	2.000
		15	FU15	100	2.000
		20	FU20	100	2.000
		25	FU25	100	2.000
		30	FU30	100	2.000
		35	FU35	100	2.000
		40	FU40	100	2.000



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.



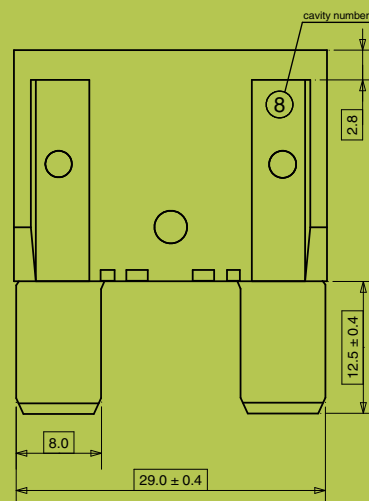
V 80V

NORMA
STANDARD
ISO 8820

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

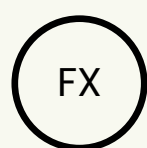
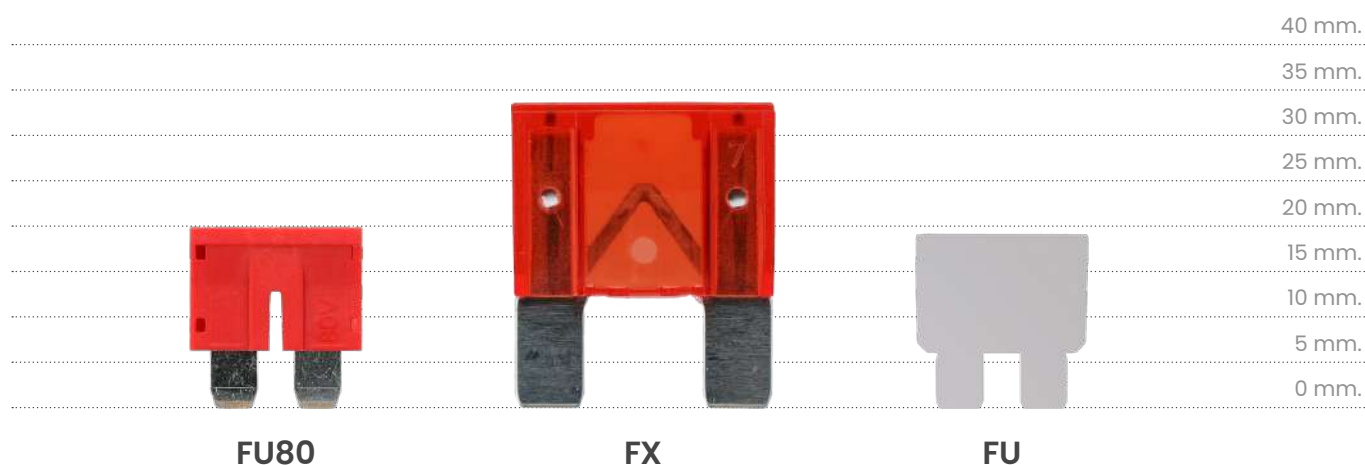


FX Fusible Maxi
Maxi blade fuse



COMPARATIVA TAMAÑO – FUSIBLE ESTÁNDAR 80V, FUSIBLES MAXI Y FUSIBLE ESTÁNDAR

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



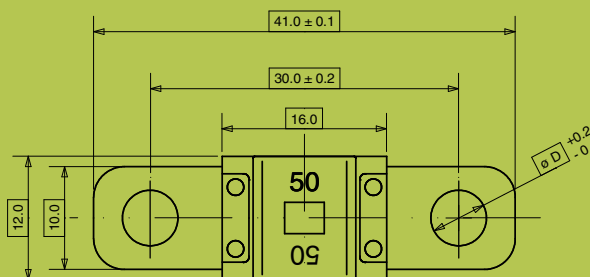
V 32V

**NORMAS
STANDARDS**
DIN ISO 8820-3,
SAE J1888

	COLOR COLOR	A	REF.		
		20	FX20	25	800
		25	FX25	25	800
		30	FX30	25	800
		40	FX40	25	800
		50	FX50	25	800
		60	FX60	25	800
		70	FX70	25	800
		80	FX80	25	800
		100	FX100	25	800



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

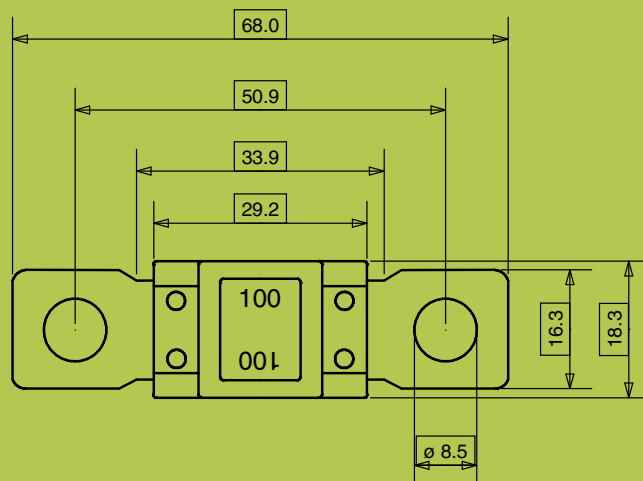
A



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

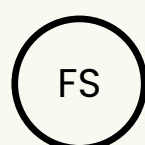
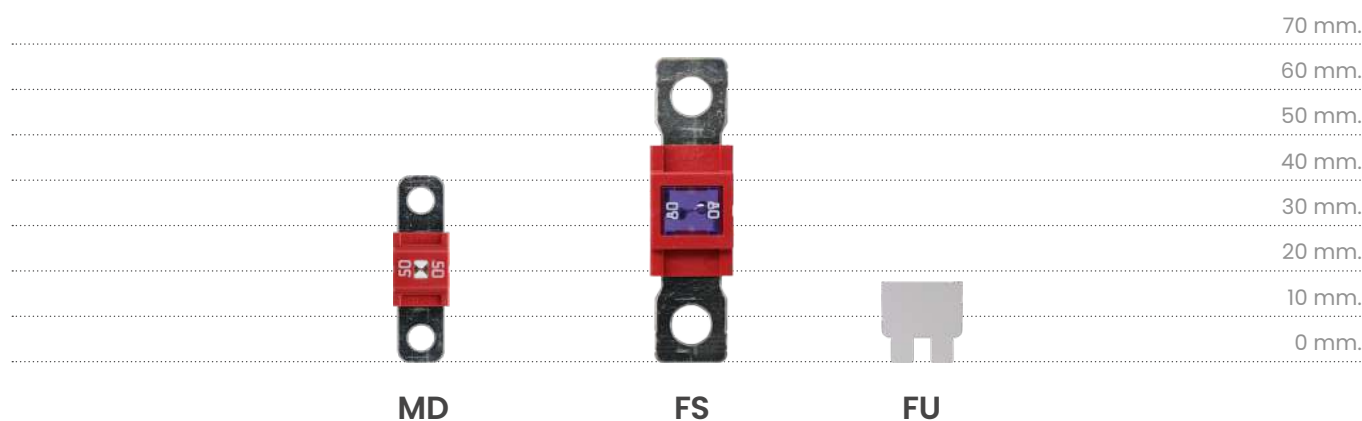


FS Fusible Mega
Mega bolt-down fuse



COMPARATIVA TAMAÑO - FUSIBLES MIDI, FUSIBLES MEGA Y FUSIBLE ESTÁNDAR

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



V 32V

**NORMA
STANDARD**
ISO 8820-5, JASO
D612

COLOR COLOR	A	M8		
	60	FS60	5	200
	80	FS80	5	200
	100	FS100	5	200
	125	FS125	5	200
	150	FS150	5	200
	175	FS175	5	200
	200	FS200	5	200
	225	FS225	5	200
	250	FS250	5	200
	300	FS300	5	200
	350	FS350	5	200
	400	FS400	5	200
	450	FS450	5	200
	500	FS500	5	200



PL

Fusible PAL hembra
PAL female Fuse



PL

Fusible PAL macho
PAL male fuse



PL

Fusible PAL clip hembra
PAL locking female fuse

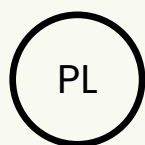


PL

Fusible PAL clip macho
PAL locking male fuse

FUSIBLES PAL Y PAL CLIP

PAL AUTO LINK FUSES



HEMBRA
FEMALE



V 32V

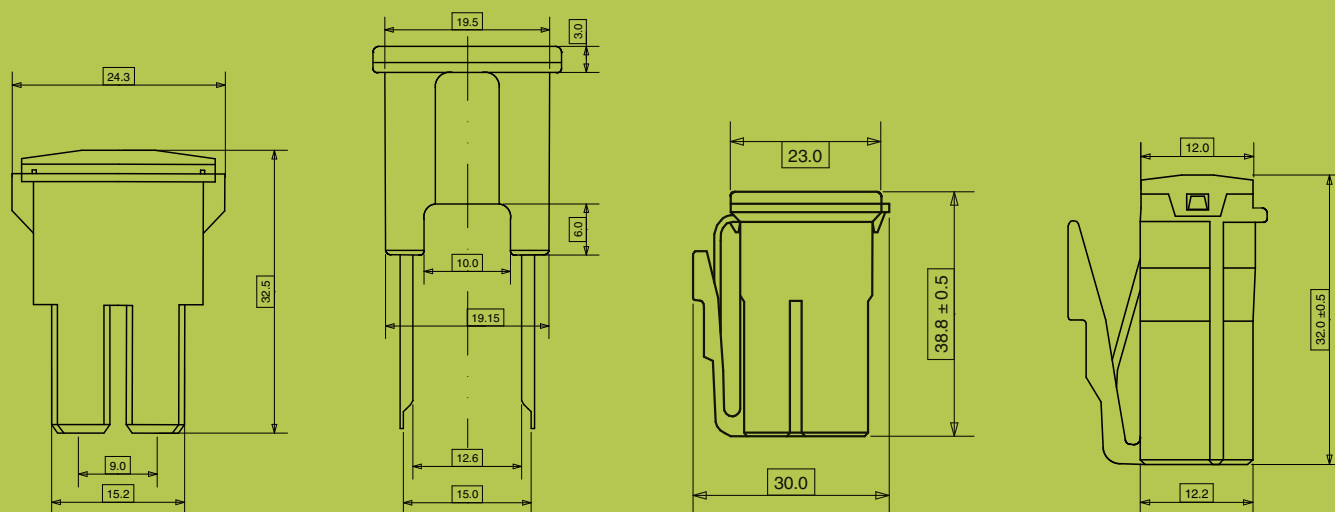
NORMAS
STANDARDS

ISO 8820-4,
JASO D612

MACHO
MALE

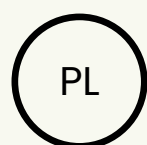
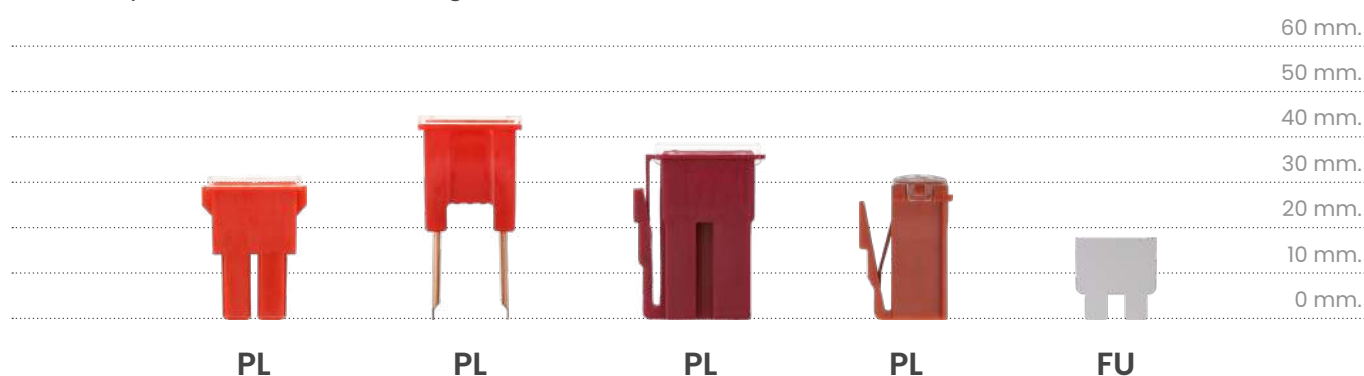


COLOR COLOR	A	REF.		
	20	PL00	5	100
	30	PL01	5	100
	40	PL02	5	100
	50	PL03	5	100
	60	PL04	5	100
	80	PL40	5	100
	100	PL41	5	100
	30	PL05	5	100
	40	PL06	5	100
	50	PL07	5	100
	60	PL08	5	100
	70	PL34	5	100
	80	PL09	5	100
	100	PL10	5	100
	120	PL35	5	100
	140	PL42	5	100



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

Size comparison - PAL, PAL locking & Standard blade fuse



HEMBRA
FEMALE



V 32V

NORMAS
STANDARDS

ISO 8820-4,
JASO D612

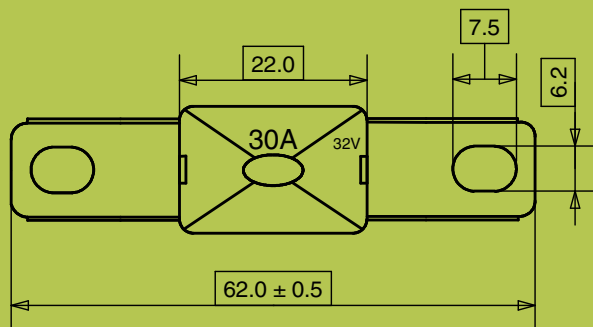
MACHO
MALE



COLOR COLOR	A	REF.		
	45	PL11	5	100
	65	PL12	5	100
	75	PL13	5	100
	25	PL14	5	100
	30	PL15	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.

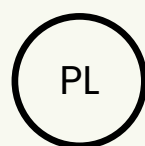
Specific fuses for Japanese, European, American and Korean design vehicles. Manufactured with high temperature resistant, self-extinguishing, color-coded plastics and copper alloy sheets. Safe and controlled functioning with time delay.

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.

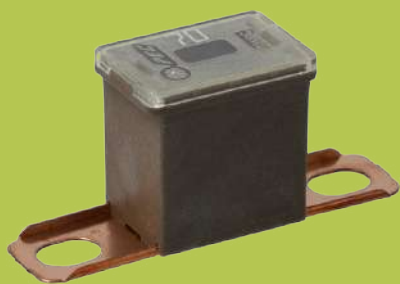


V 32V

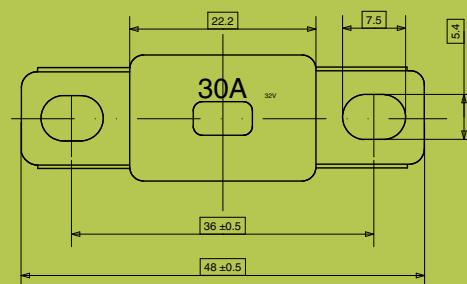
NORMAS STANDARDS

ISO 8820-4,
JASO D612

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

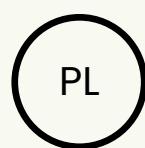
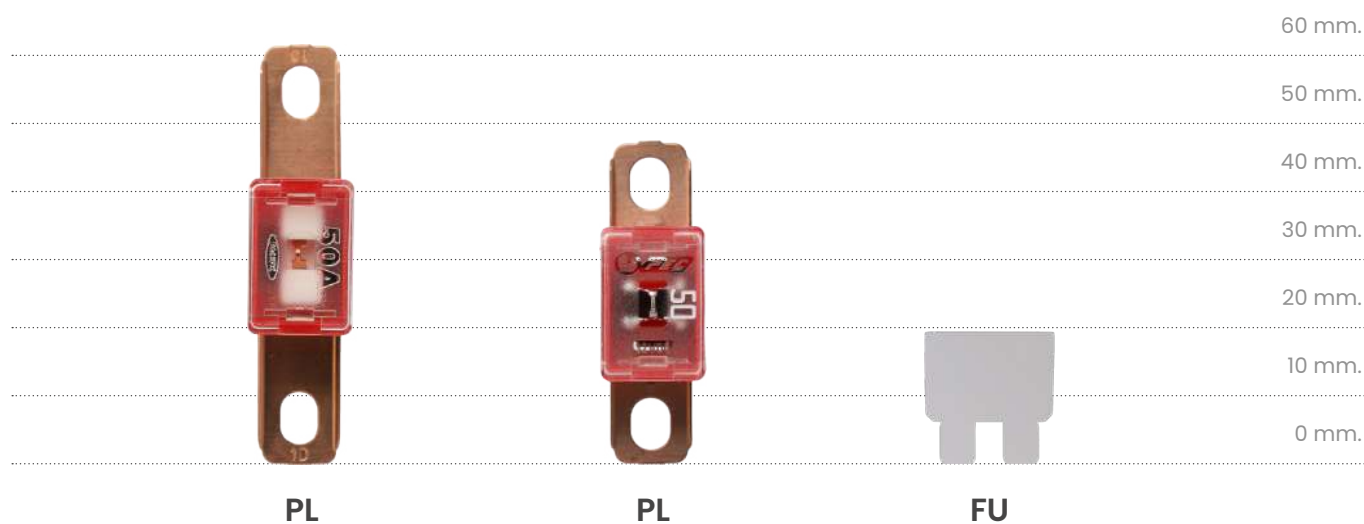


PL Fusible PAL 48
PAL 48 Fuse



COMPARATIVA TAMAÑO – FUSIBLES PAL 62, FUSIBLES PAL 48 Y FUSIBLE ESTÁNDAR

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



V 32V

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

COLOR COLOR	A	REF.	LONGITUD LENGTH mm		
	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



JC Fusible PAL Jcase
PAL Jcase Fuse



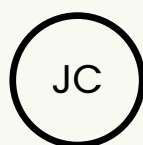
JCM Fusible PAL Jcase Mini
PAL Jcase Mini Fuse



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	JC20	10	100
	25	JC25	10	100
	30	JC30	10	100
	40	JC40	10	100
	50	JC50	10	100
	60	JC60	10	100

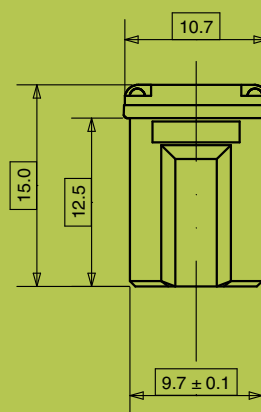
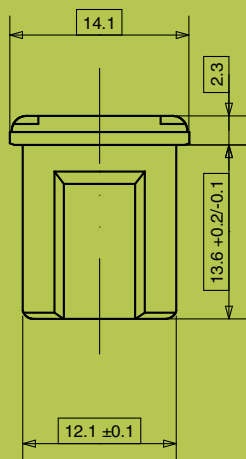
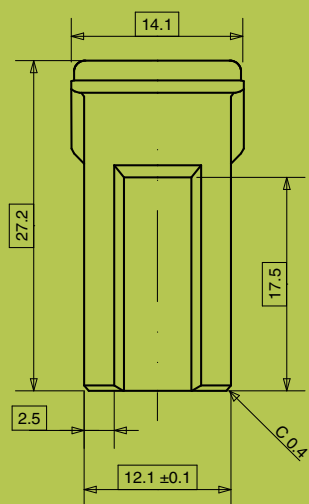


V 58V

NORMAS STANDARDS

ISO 8820-4,
JASO D612

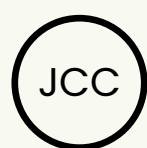
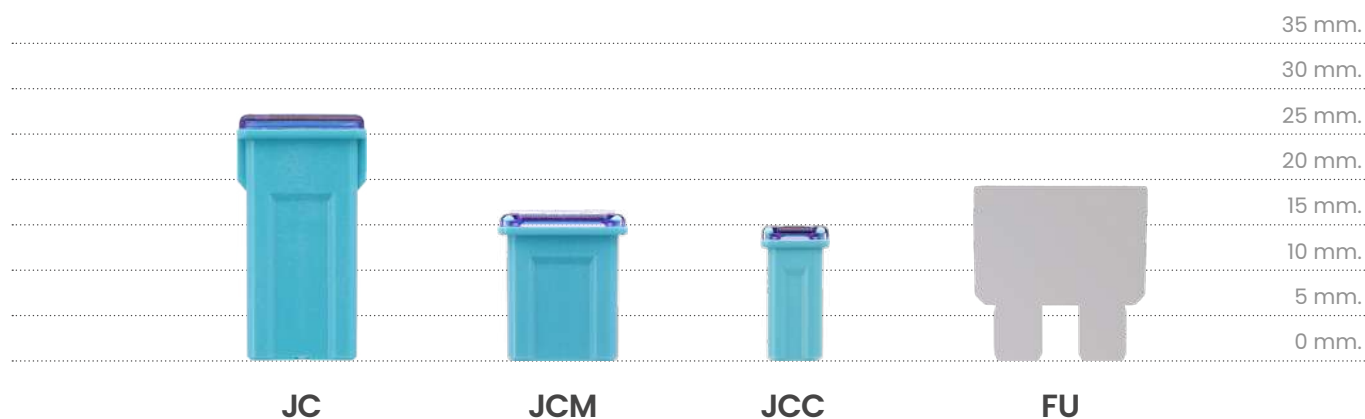
	20	JCM20	10	100
	25	JCM25	10	100
	30	JCM30	10	100
	40	JCM40	10	100
	50	JCM50	10	100
	60	JCM60	10	100



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

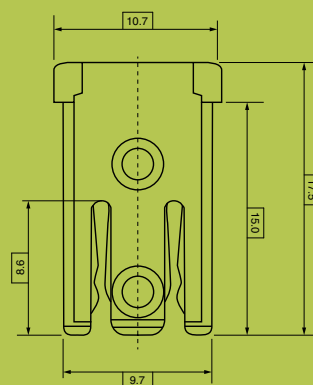


V 32V

NORMAS STANDARDS

ISO 8820-4,
JASO D612

COLOR COLOR	A	REF.		
	15	JCC15	10	100
	20	JCC20	10	100
	25	JCC25	10	100
	30	JCC30	10	100
	40	JCC40	10	100



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.

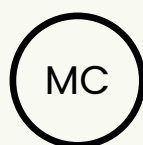
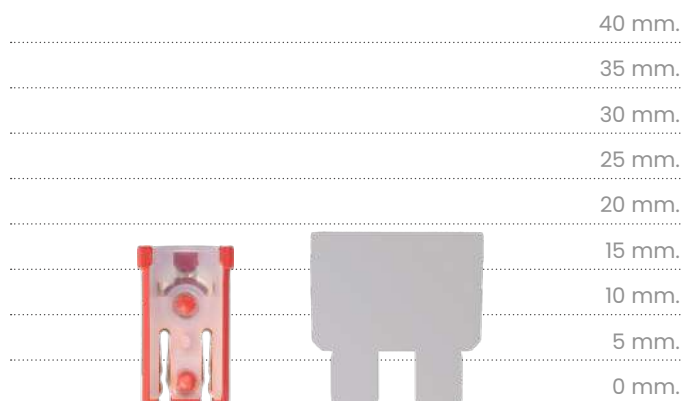
Specific fuses for Japanese, European, American and Korean design vehicles. Manufactured with high temperature resistant, self-extinguishing, color-coded plastics and copper alloy sheets. Safe and controlled operation with time delay.

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

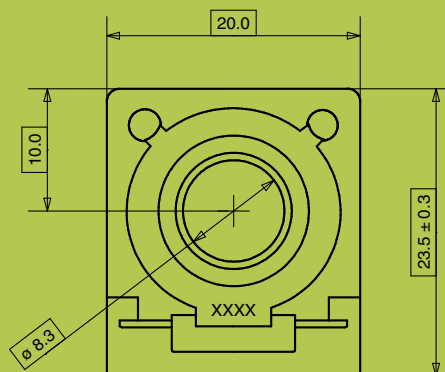
NORMAS STANDARDS

ISO 8820-4,
JASO D612

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

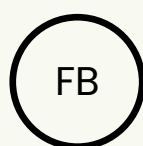
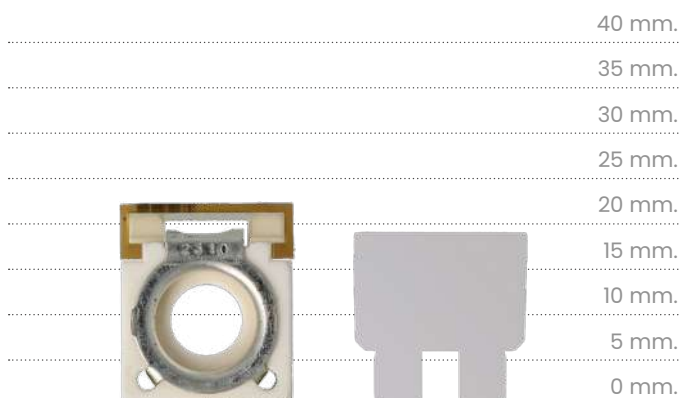
New innovative, space saving blow fuse series. Ceramic body material. Single bolt fuse type technology, M8 connection. Important to use insulating nut or equivalent alternative.

Medidas Fusible Borne - Borne Fuse measures

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

COMPARATIVA TAMAÑO - FUSIBLES BORNE Y FUSIBLE ESTÁNDAR

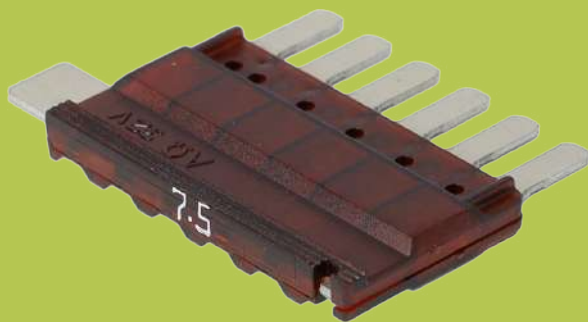
Size comparison - Borne fuse & Standard blade fuse



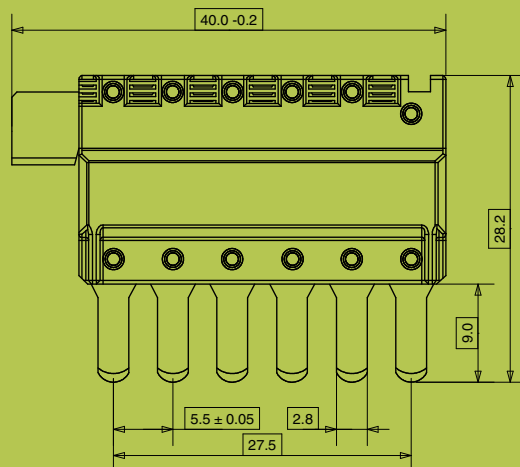
V 58V

**NORMA
STANDARD**
ISO 8820-6

A	REF.		
50	FB50	5	200
75	FB75	5	200
100	FB100	5	200
125	FB125	5	200
150	FB150	5	200
175	FB175	5	200
200	FB200	5	200
250	FB250	5	200
300	FB300	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 extingui- ble y codificado por colores. Resistente a altas tem- peraturas.

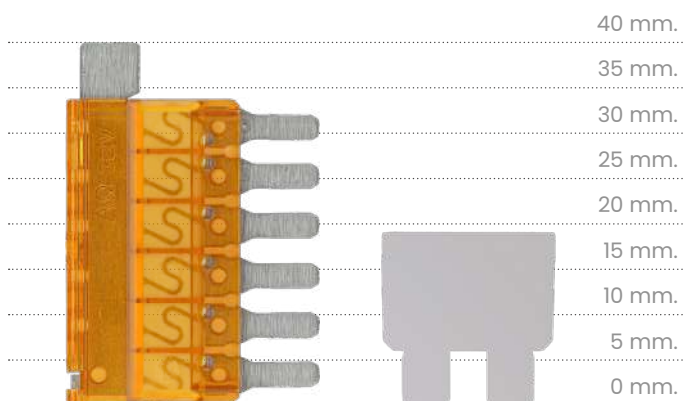
Innovative, cost saving multi blade fuse. Single com- ponent with 1 input and 6 output terminals to improve space saving. Body manufactured with self-extingui- shing color-coded transparent materials. Resistant to high temperatures.

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**

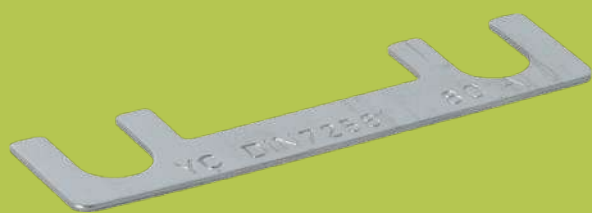
A

REF.

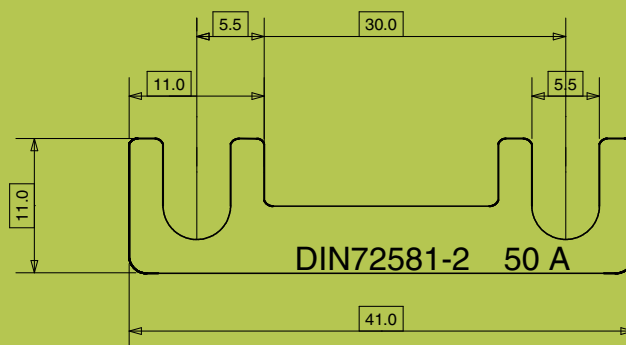


**NORMATIVA
NORMATIVE**

	5	FMB05	5	N 000 000 006 465
	7,5	FMB75	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.

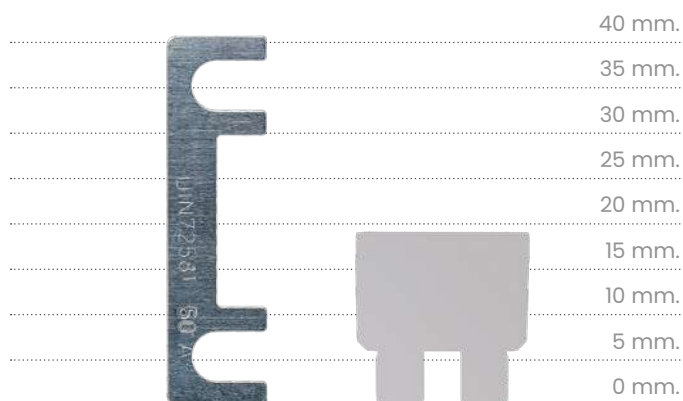
Blade fuses with M5 connection holes, spaced 30mm. Easy installation trough U-form connection.

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

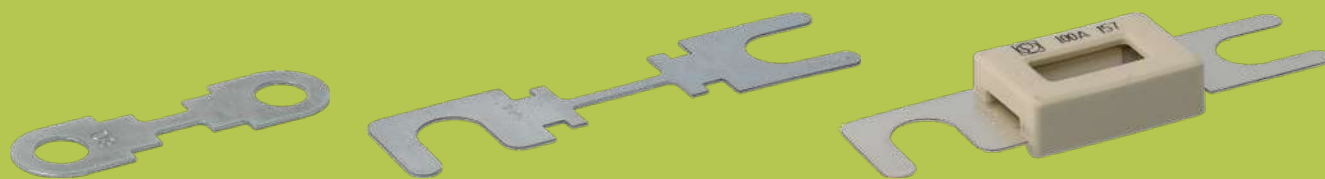
Size comparison – Blade Strip fuse & Standard blade fuse



V 32V

NORMA
STANDARD
DIN 72581-2

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



V 32V

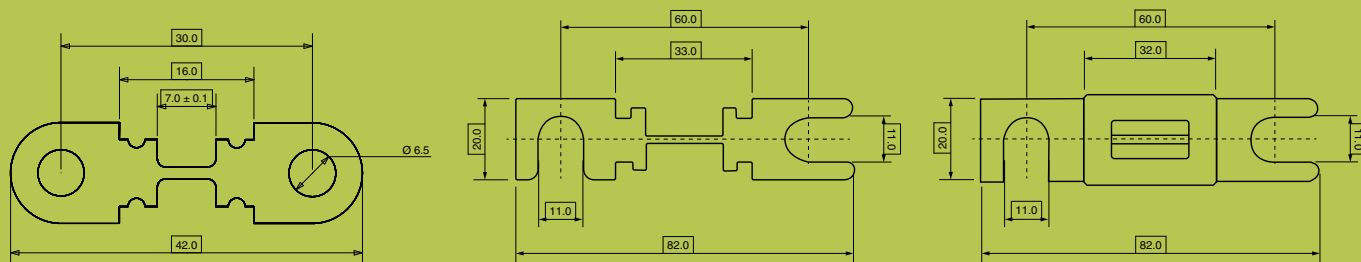
**NORMA
STANDARD**
VAG Standard



V 48V

**NORMA
STANDARD**
DIN 43560-1

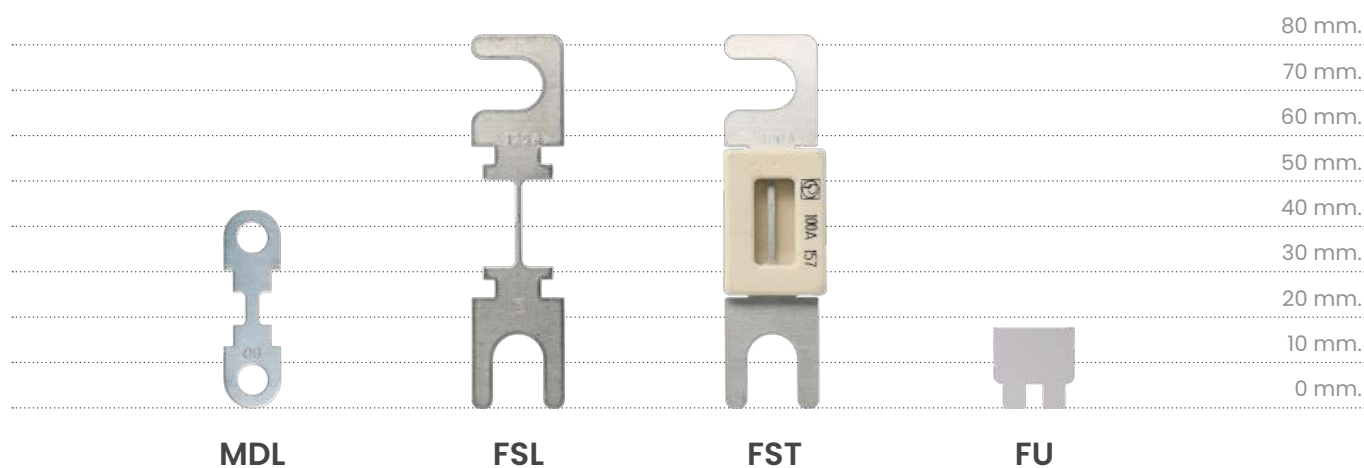
A	REF.		
30	MDL30	5	1.000
40	MDL40	5	1.000
50	MDL50	5	1.000
60	MDL60	5	1.000
70	MDL70	5	1.000
80	MDL80	5	1.000
110	MDL110	5	1.000
125	MDL125	5	1.000
150	MDL150	5	1.000
175	MDL175	5	1.000
50	FSL50	5	50
80	FSL80	5	50
100	FSL100	5	50
125	FSL125	5	50
160	FSL160	5	50
250	FSL250	5	50
355	FSL355	5	50



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



FST		A	REF.		
V48V NORMA STANDARD UL 248 Special Purpose	35	FST35	5	50	
	50	FST50	5	50	
	80	FST80	5	50	
	100	FST100	5	50	
	125	FST125	5	50	
	160	FST160	5	50	
	250	FST250	5	50	
	355	FST355	5	50	



FTA

Enchufable Mini de rearme automático
Mini automatic resettable circuit breaker

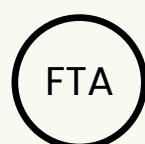


FTE

Enchufable Estándar de rearme manual
Manual resettable Standard circuit breaker

DISYUNTORES TÉRMICOS

CIRCUIT BREAKERS



V 14V

NORMA
STANDARD
TIPO 1

COLOR
COLOR

A

REF.



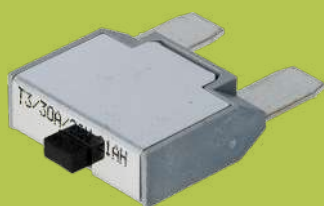
	5	FTA05	1	500
	10	FTA10	1	500
	15	FTA15	1	500
	20	FTA20	1	500
	30	FTA30	1	500



V 28V

NORMA
STANDARD
TIPO 3

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



		A	REF.	
FTM	V	28V	30	FTM30
				1
FTS	V	48V	100	FTS100
			150	FTS150
			200	FTS200
				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



PF27



PF28



PF37



PF38



PF21



PF31



PF32



**PARA FC
FOR FC**

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

**PARA FM
FOR FM**

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 ²	REF.	LONGITUD LENGTH mm			
20	1,5	PF04	90 x 2	✓	✓	25
20	1,5	PF04M	235 x 2	✓	✓	25
30	3	PF09	90 x 2	✓	✓	25
30	2,5	PF09M	235 x 2	✓	✓	25
15	-	PF24	-	-	-	5

**PARA FX
FOR FX**

60	4	PF22	130 x 2	-	-	2
----	---	-------------	---------	---	---	---

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

-	-	PF40	-	✓	✓	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 ²	REF.	LONGITUD LENGTH mm			
15	-	PF39	-	-	-	5
30	2,5	PF33	130 x 2	✓	✓	5
30	5,3	PF05	180	✓	-	5
20	2,1	PF10	180	✓	-	5
10	-	PF12M	-	✓	-	5
15	-	PF25	-	✓	-	5
60	-	PF07 	-	✓	-	10
20	-	PF23	-	✓	✓	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	CDF06	Lateral / Side	-	1
100	8	CDF08	Lateral / Side	-	1
100	12	CDF12	Lateral / Side	-	1



Ensamblable - Modular



Resistencia a salpicaduras - Splash-proof

FM

 Fusible Mini
Mini blade fuse

FU

 Fusible Estándar
Standard blade fuse

CF85

CAJAS PORTAFUSIBLES

HARD-WIRED BOXES


CF60

CF69

CF70

CF71

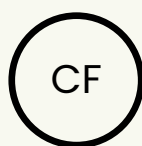
CF86

CF81

CF82

CF83

CF84

CF85

 PARA FM
FOR FM

 PARA FU
FOR FU

A
**FUSIBLES
FUSES**
/u

REF.
**CONEXIÓN
CONNECTION**


-	4	CF60	Base / Base	✓	-	5
15	5	CF69	Lateral / Side	-	-	1
15	5	CF70	Base / Base	-	-	1
15	6	CF71	Base / Base	-	-	1
40	8	CF86	Base / Base	-	-	1
40	4	CF81	Lateral / Side	-	-	1
40	6	CF82	Lateral / Side	-	-	1
40	8	CF83	Lateral / Side	-	-	1
40	10	CF84	Lateral / Side	-	-	1
40	12	CF85	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



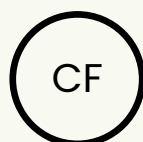
CF79



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	CF73	Base / Base	✓	-	1
500	1	CF74	Base / Base	✓	-	1
250	1	CF75	Base / Base	✓	✓	1
250	1	CF76	Base / Base	-	✓	1
250	1 FS + 4 MD	CF79	Base / Base	-	✓	1
425	1	CF77	Base / Base	✓	-	1
425	1	CF78	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	PF19	CuSn	√	-	5
2 x 4	30	PF35	CuFe Ag3	-	-	5
2 x 1	30	PF34	CuFe	-	-	5
2 x 10	60	PF36	CuZn	-	-	5

- FC**  Fusible Micro
Micro blade fuse
- FC2**  Fusible Micro 2
Micro 2 blade fuse
- FC3**  Fusible Micro 3
Micro 3 blade fuse



PF16

PORTAFUSIBLES PARA CIRCUITO ADICIONAL

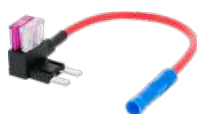
ADD-A-CIRCUIT FUSE HOLDER



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 ²	REF.	LONGITUD LENGTH mm			
10	1,5	PF29	100	✓	-	5
10	1,5	PF30	100	-	-	5
10	1,5	PF20	100	-	-	5
10	1,5	PF16	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



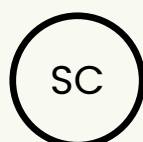
PT05



PT06



SC20



COMPOSICIÓN COMPOSITION

REF.

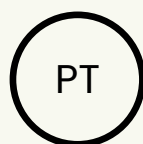


KIT

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

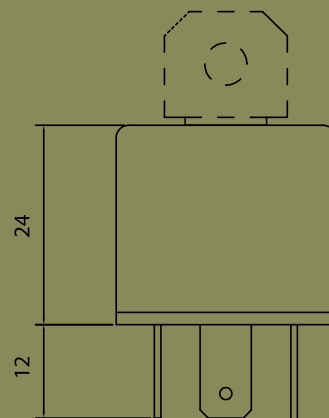
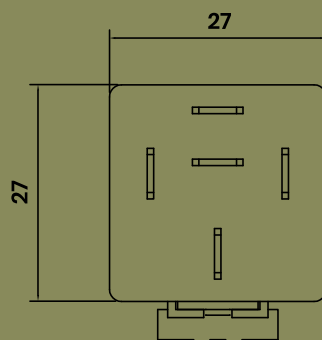
RELÉS E INTERMITENTES

RELAYS & FLASHERS

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

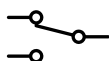
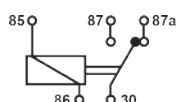
Relays, flashers, fuel pump relays, preheating centrals for diesel engines, buzzers, ignition modules, timers, etc.



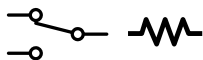
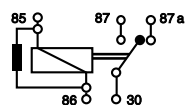


RELÉS INVERSORES

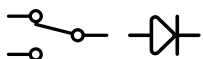
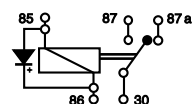
CHANGE OVER RELAYS



Relé inversor
Change over relay



Relé inversor con resistencia
Change over relay with resistance



Relé inversor con diodo
Change over relay with diode

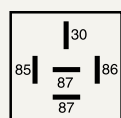


Relé homologado para aplicaciones de automoción, disponible en voltaje nominal de 12V y 24V DC, con interrupción de corriente nominal de hasta 40A.

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

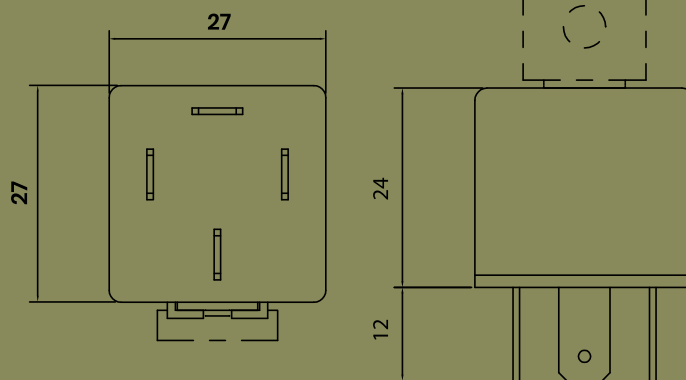


PINS 5 x 6,35 mm.



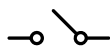
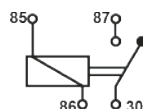
V	A	ESQUEMA DRAWING	REF.	SOPORTE SUPPORT	
12	20/30		RR25		10
12	20/30		RR36		10
12	30/40		RR46		10
12	20/30		RR63		10
12	20/30		RR91		10
24	10/20		RR32		10
24	10/20		RR37		10
24	10/20		RR64		10
24	20/30		RR92		10

Metal extraíble - Removable metal Plástico fijo - Fixed plastic

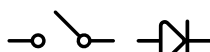
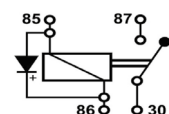


RELÉS INTERRUPTORES

NORMALLY OPEN RELAYS



Relé interruptor
Normally open relay



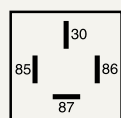
Relé interruptor con diodo
Normally open relay with diode

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.

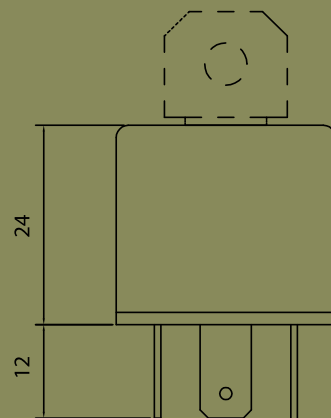
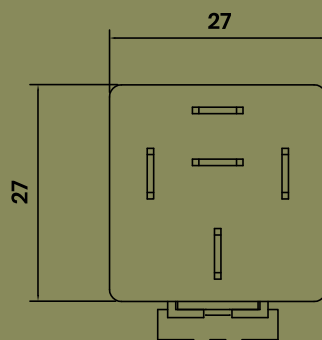


PINS 4 x 6,35 mm.



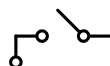
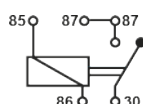
V	A	ESQUEMA DRAWING	REF.	SOPORTE SUPPORT	
12	30		RR38		10
12	40		RR48		10
12	30		RR87		10
24	20		RR39		10
24	30		RR88		10

Metal extraíble - Removable metal Plástico fijo - Fixed plastic

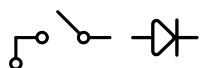
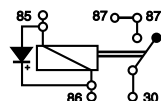


RELÉS INTERRUPTORES DE DOBLE SALIDA

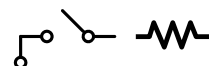
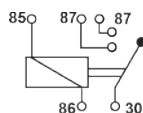
DOUBLE OUTPUT RELAYS



Relé interruptor doble salida
Double output normally open relay



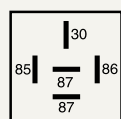
Relé interruptor doble salida con diodo
Double output normally open relay with diode



Relé interruptor doble salida con resistencia
Normally open relay with resistance

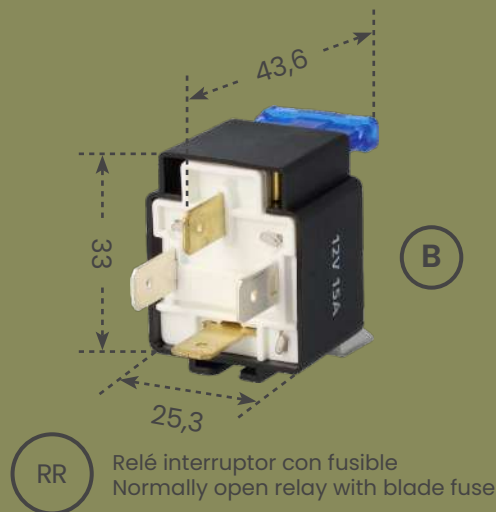
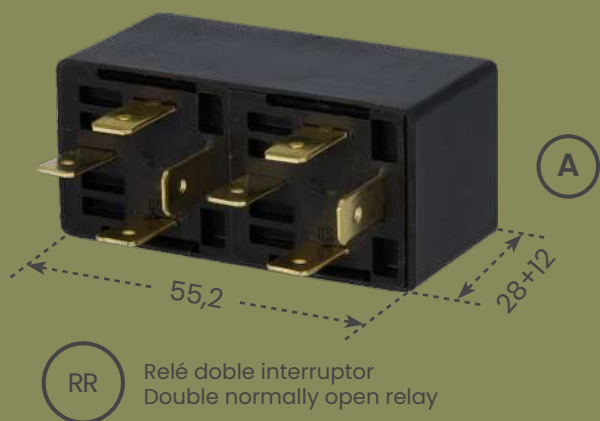


PINS 5 x 6,35 mm.



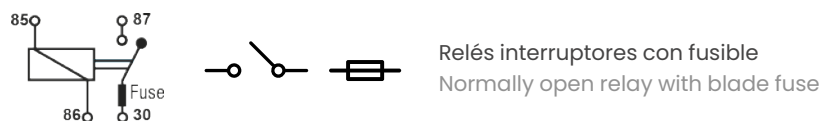
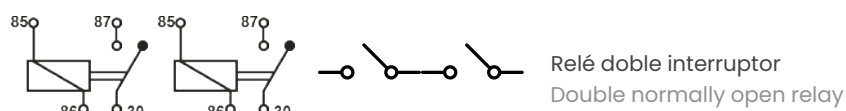
V	A	ESQUEMA DRAWING	REF.	SOPORTE SUPPORT	
12	30		RR41		10
12	40		RR42		10
12	30		RR89		10
12	40		RR43		10
12	40		RR68		10
24	20		RR65		10
24	20		RR90		10

Metal extraíble - Removable metal Plástico fijo - Fixed plastic

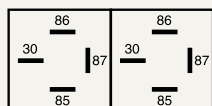


RELÉS ESPECIALES

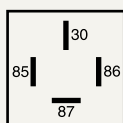
SPECIAL RELAYS



PINS 8 x 6,35 mm.

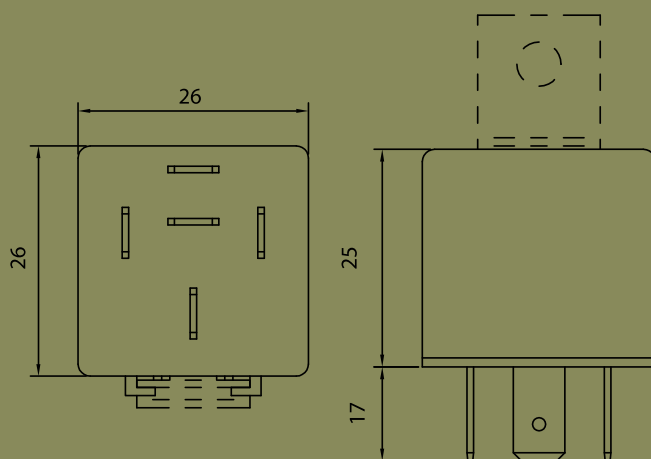


PINS 4 x 6,35 mm.



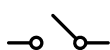
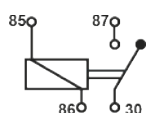
V	A	ESQUEMA DRAWING	REF.	SOPORTE SUPPORT	MEDIDAS MEASURES	
12	2 x 30		RR82		A	1
12	15		RR69		B	10
12	30		RR70		B	10
24	20		RR71		B	10

Metal extraíble - Removable metal Plástico fijo - Fixed plastic

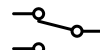
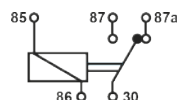


RELÉS DE POTENCIA

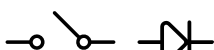
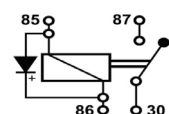
POWER RELAYS



Relé de potencia interruptor
Normally open power relay



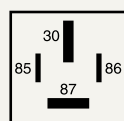
Relé de potencia inversor
Change over power relay



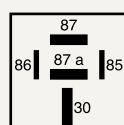
Relé de potencia interruptor con diodo
Normally open power relay with diode



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



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



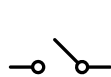
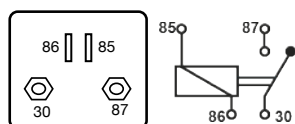
V	A	ESQUEMA DRAWING	REF.	SOPORTE SUPPORT	
12	50		RR73		10
12	70		RR72		10
12	50		RR93		10
12	70		RR95		10
24	50		RR74		10
24	70		RR75		10
24	50		RR94		10
12	60/70		RR26		10
24	40/50		RR27		10

Metal extraíble - Removable metal Plástico fijo - Fixed plastic

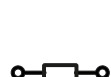
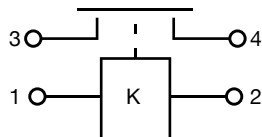


RELÉS ALTA POTENCIA

HEAVY DUTY RELAYS



Relé interruptor de alta potencia
Normally open relay heavy duty



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.

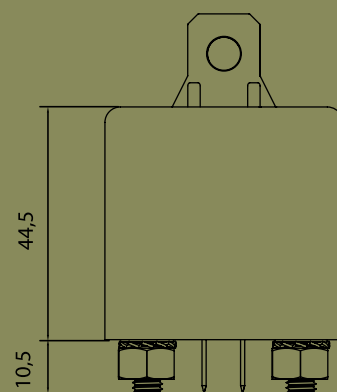
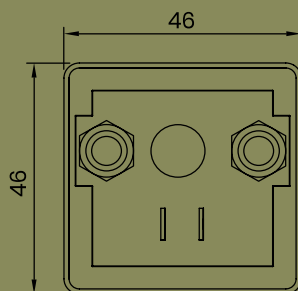


PINS 2 x 6,35 mm.
TORNILLOS 2 x M6
SCREWS

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

V	A	ESQUEMA DRAWING	REF.	SOPORTE SUPPORT	MEDIDAS MEASURES	
12	200		RR83		A	1
24	100		RR84		A	1
12	140		RR85		B	1
24	120		RR86		B	1

Metal extraíble - Removable metal Plástico fijo - Fixed plastic

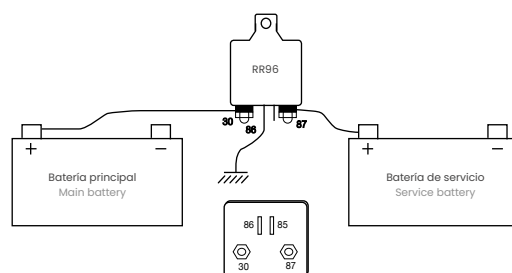


RELÉS SEPARADORES

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 10mm² 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 10mm² in section and as short as possible (maximum 2 meters).



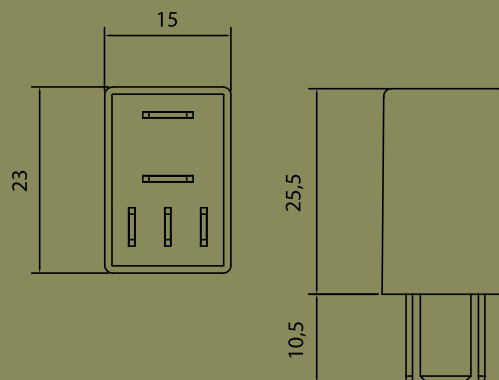
- Borne 30: Positivo batería motor / Positive motor battery
- Borne 87: Positivo batería auxiliar / Negative motor battery
- Borne 86: Negativo o masa batería / Negative or battery mass
- Borne 85: NO USAR / Do not use



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

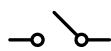
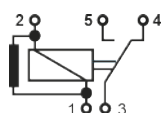
V	A	ESQUEMA DRAWING	REF.	SOPORTE SUPPORT	
12	200	-	RR96	■	1
24	100	-	RR97	■	1

■ Metal extraíble - Removable metal ■ Plástico fijo - Fixed plastic

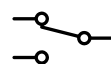
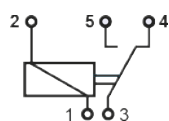


MICRORELÉS

MICRORELAYS



Microrelé interruptor
Normally open microrelay



Microrelé inversor
Change over microrelay

Medidas - Measures

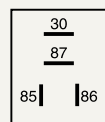
Altura - Height	23,0 mm.
Ancho - Width	15,0 mm.
Profundidad - Depth	25,5 mm.
Altura pins - Pin's height	10,5 mm.

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.

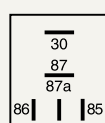
Small size relay for automotive applications available at the rated voltage of 12V and 24V DC, with a rated current of up to 20A.



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		RR76	-	10
24	10		RR79	-	10
12	10/20		RR78	-	10
24	5/10		RR80	-	10

Metal extraíble - Removable metal Plástico fijo - Fixed plastic



IE01



IE02

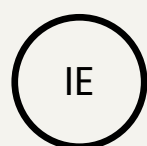


IE32

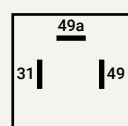
INTERMITENTES DE 3 PINS

3 PIN FLASHERS

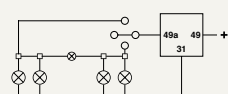
APLICACIÓN APPLICATION	0 FALLOS 0 FAILURES	1 FALLO 1 FAILURE



PINS 3 x 6,35 mm.



DIN



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



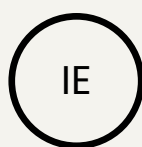
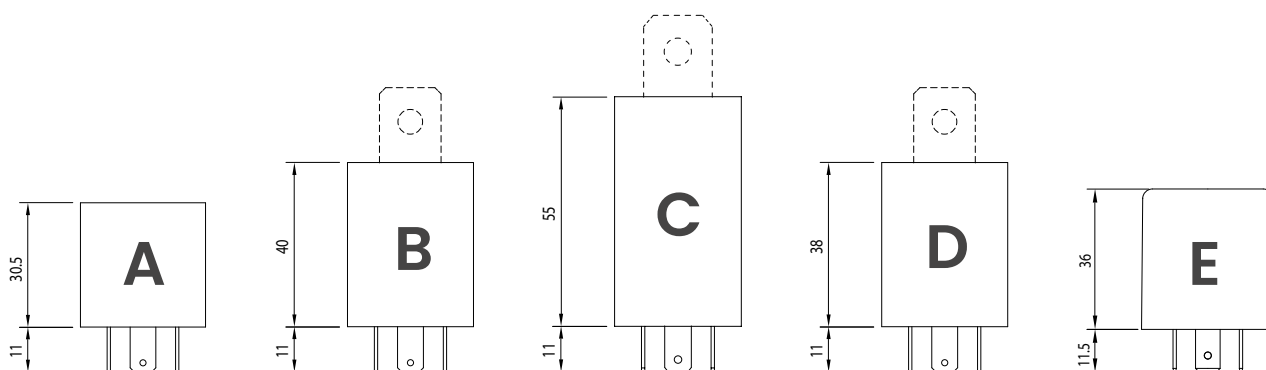
IE65



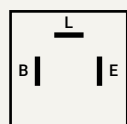
IE58



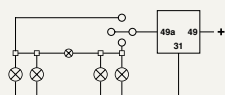
IE06



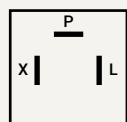
PINS 3 x 6,35 mm.



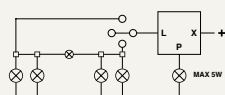
JAPAN



PINS 3 x 6,35 mm.



SAE



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



Sin detección de fallo - Without failure detection



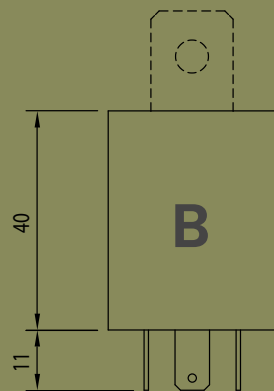
Intermitentes - Blinkers



IE07



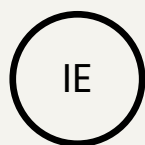
IE03



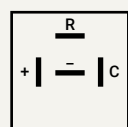
INTERMITENTES DE 4 Y 5 PINS

4 Y 5 PIN FLASHERS

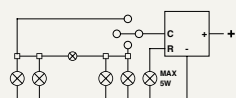
APLICACIÓN APPLICATION	1 FALLO 1 FAILURE	2 FALLOS 2 FAILURES



PINS 4 x 6,35 mm.



SAE



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



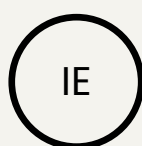
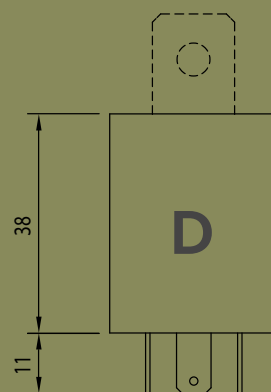
Intermitentes - Blinkers



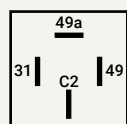
IE64



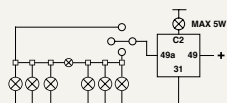
IE04



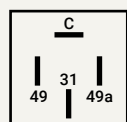
PINS 4 x 6,35 mm.



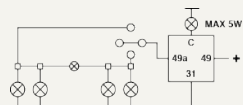
DIN



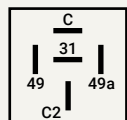
PINS 4 x 6,35 mm.



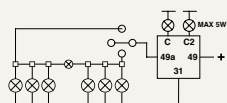
DIN



PINS 5 x 6,35 mm.



DIN



V	FALLOS FAILURES	APLICACIÓN APPLICATION	REF.	SOPORTE SUPPORT	MEDIDAS MEASURES	
---	--------------------	---------------------------	------	--------------------	---------------------	--

12	2		IE03		B	10
----	---	--	------	--	---	----

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

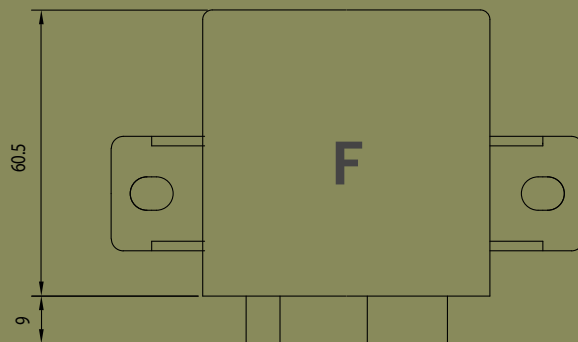
24	1		IE64		D	1
----	---	--	------	--	---	---

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

Metal extraíble - Removable metal



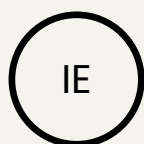
IE14



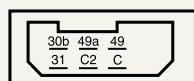
INTERMITENTES DE 6 PINS

6 PIN FLASHERS

APLICACIÓN APPLICATION	CON 2 FALLOS WITH 2 FAILURES



PINS 6 x 6,35 mm.

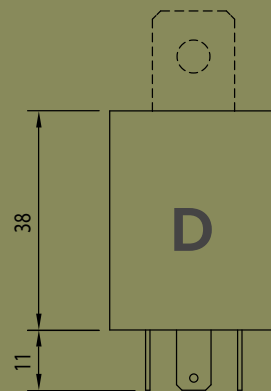
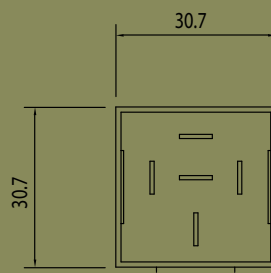


V	FALLOS FAILURES	APLICACIÓN APPLICATION	REF.	SOPORTE SUPPORT	MEDIDAS MEASURES	
24	2		IE14		F	1

Detección de fallo - Failure detection Intermitentes - Blinkers



IL15



INTERMITENTES LED

LED FLASHERS

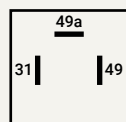
Diseñados para vehículos con indicadores LED. El uso de luces LED en lugar de las bombillas tradicionales se ha extendido en el mercado automovilístico debido a una mayor vida útil y a la alta eficiencia energética.

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

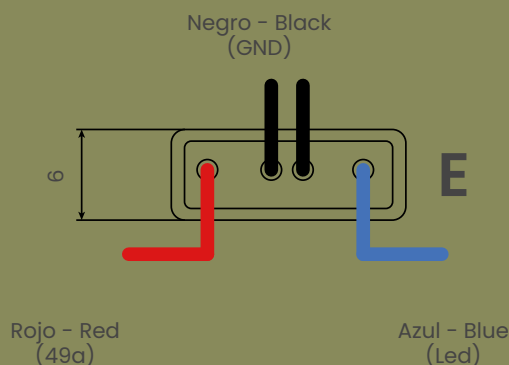
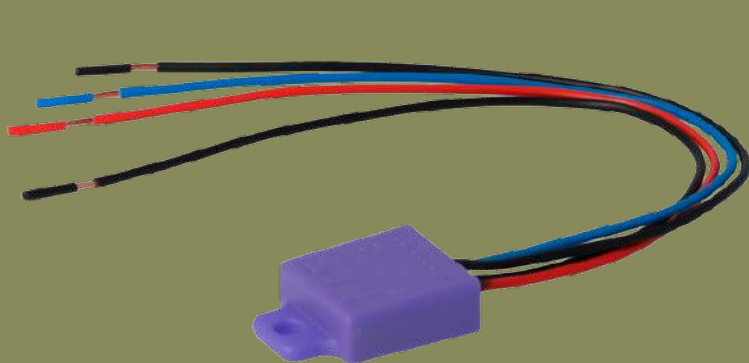


PINS 3 x 6,35 mm.



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

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



ILS – INTERMITENTES LED INTELIGENTES

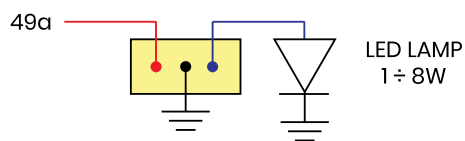
ILS – SMART LED FLASHERS

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.

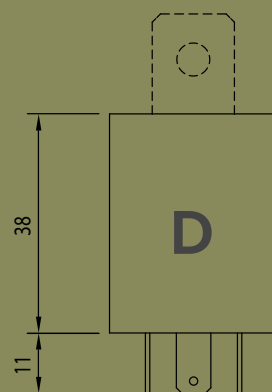
● Con detección de fallo - With failure detection ▲ Intermitentes - Blinkers



ILS04



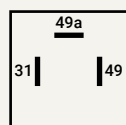
ILS05



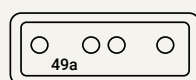
APLICACIÓN APPLICATION	1 FALLO 1 FAILURE	2 FALLOS 2 FAILURES	3 FALLOS 3 FAILURES



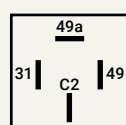
PINS 3 x 6,35 mm.



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

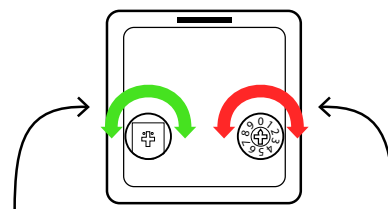


RELÉS TEMPORIZADORES

TIMER RELAYS

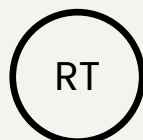
Se utilizan para encender o apagar un accesorio tras el tiempo de retardo programado. La referencia RT01 tiene un tiempo de programado de 5 segundos (fijos) y las siguientes dos referencias se pueden programar manualmente con los dos selectores ubicados en la parte superior. Permite de 0,5 segundos a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

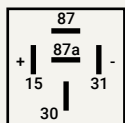


Aumentar el tiempo
Increase time

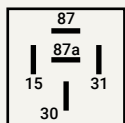
Ajustar temporizador
Set delay type and time range



PINS 5 x 6,35 mm.



PINS 5 x 6,35 mm.



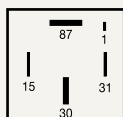
V	A	TIEMPO TIME seg.	REF.	SOPORTE SUPPORT	
12	20	5	RT01		1
12	10	a programar	RT02		1
24	10	a programar	RT03		1

RELÉS DE BOMBA DE COMBUSTIBLE

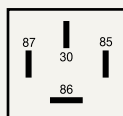
FUEL PUMP RELAYS



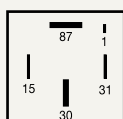
PINS 5



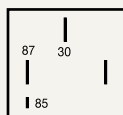
PINS 4



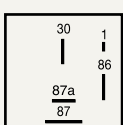
PINS 5



PINS 4



PINS 5



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

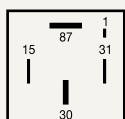


RELÉS DE BOMBA DE COMBUSTIBLE

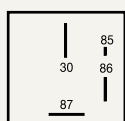
FUEL PUMP RELAYS



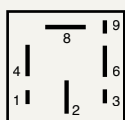
PINS 5



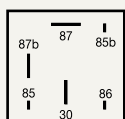
PINS 4



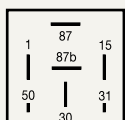
PINS 7



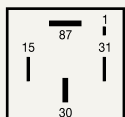
PINS 6



PINS 7



PINS 5



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

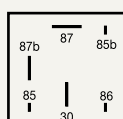
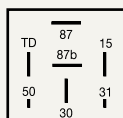
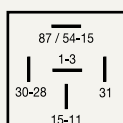
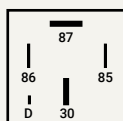
1 u.




RI17

RI19

RI21

PINS 6

PINS 7

PINS 5

PINS 5


REF.	MARCA BRAND	REFERENCIA ORIGINAL ORIGINAL REFERENCE
------	----------------	---

RI06	OPEL	1238539 - 1238540
		1238549 - 1238966
		1238960

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

RI13	FORD	6161570 - 85AG9P704AA
-------------	------	-----------------------



RELÉ MULTIFUNCIÓN MULTIFUNCTION RELAY

IE70	AUDI/VW	3D0 951 253A
	SEAT	3D0 951 253A
	SKODA	3D0 951 253A



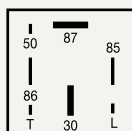
1 u.

CENTRALES DE PRECALENTAMIENTO DIESEL

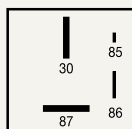
PREHEATING CENTRALS FOR DIESEL ENGINES



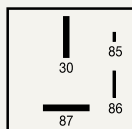
PINS 7



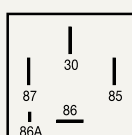
PINS 4



PINS 4



PINS 5



REF.	MARCA BRAND	REFERENCIA ORIGINAL ORIGINAL REFERENCE
DP04	AUDI/VW NAGARES	171911261 - 443911261 TPPSS712
DP25	AUDI/VW	357911253A - 104
DP26 	AUDI/VW MERCEDES	357911253 - 103 0015452705
DP28	AUDI/VW	165906381



 1 u.



DP04



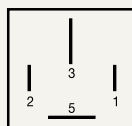
DP26



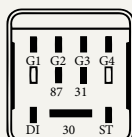
DP58



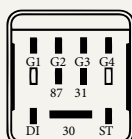
PINS 4



PINS 9



PINS 9



REF.	MARCA BRAND	REFERENCIA ORIGINAL ORIGINAL REFERENCE
DP30	AUDI/VW	7M0951253A
DP57	VW	038907281D
	CHRYSLER	5033351AA
	OPEL	4805510 -96440043
	NAGARES	TPDV2812
DP58	VW	038907281B
	NAGARES	TPDV2912



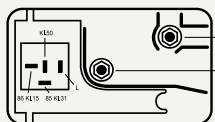
1 u.

CENTRALES DE PRECALENTAMIENTO DIESEL

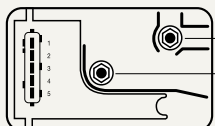
PREHEATING CENTRALS FOR DIESEL ENGINES



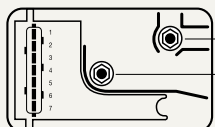
PINS 6



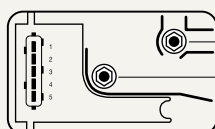
PINS 7



PINS 9



PINS 7



REF.	MARCA BRAND	REFERENCIA ORIGINAL ORIGINAL REFERENCE
------	----------------	---

DP09	CITROËN	598115
	FIAT	4792112-5946920-5990986
	PEUGEOT	598110
	ROVER	PRC5020
	SEAT	0581CR1 - 0581CR01
	NAGARES	TDP512

DP15	CITROËN	598119
	FIAT	961416778
	PEUGEOT	598119
	NAGARES	PPC512

DP17	CITROËN	598121 - 598126 - 96165823
	FIAT	46423043 - 9615938380
	PEUGEOT	598121 - 598126
		9616280080
	ROVER	NCJ100110
	NAGARES	PPC712

DP18	CITROËN	598124 - 96165824
	FIAT	961595948
	PEUGEOT	598124 - 96165824
	NAGARES	PPC512

1 u.





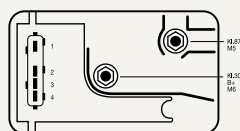
DP09



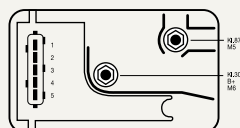
DP18



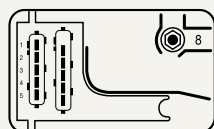
PINS 6



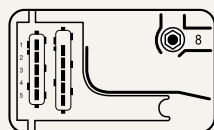
PINS 7



PINS 11



PINS 11



REF.	MARCA BRAND	REFERENCIA ORIGINAL ORIGINAL REFERENCE
------	----------------	---

DP41	CITROËN	598131 - 598138 - 598143
	FIAT	9619039780 - 9639912580
		1348881080
	PEUGEOT	598125 - 598131 - 598138

DP43	CITROËN	598143 - 598119
		9625203680
	PEUGEOT	598119 - 9625203680
		598125
	NAGARES	CEP612

DP47	FIAT	55193073
	ALFA ROMEO	55193073

DP48	FIAT	60653990
	ALFA ROMEO	60653990



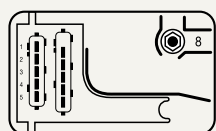
1 u.

CENTRALES DE PRECALENTAMIENTO DIESEL

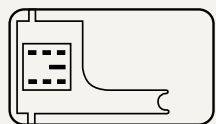
PREHEATING CENTRALS FOR DIESEL ENGINES



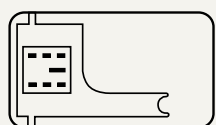
PINS 11



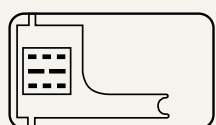
PINS 7



PINS 7



PINS 8



REF.	MARCA BRAND	REFERENCIA ORIGINAL ORIGINAL REFERENCE
------	----------------	---

DP49	FIAT	46807091
-------------	------	----------

DP45	RENAULT	7700115078
-------------	---------	------------

	NISSAN	11067BN700
--	--------	------------

	OPEL	4409990 - 4506156
--	------	-------------------

	NAGARES	BED712
--	---------	--------

DP51	OPEL	4409990 - 4506156
-------------	------	-------------------

		4416764
--	--	---------

	RENAULT	9640469680 - 7700115078
--	---------	-------------------------

	CITROËN	9640469680
--	---------	------------

	PEUGEOT	55353011
--	---------	----------

	NISSAN	11067GD50A
--	--------	------------

	NAGARES	BDL712
--	---------	--------

DP54	RENAULT	8200859243
-------------	---------	------------

	OPEL	4419200 - 93862497
--	------	--------------------

		598140
--	--	--------

	NISSAN	11067JD50C - 2523080A0A
--	--------	-------------------------

	NAGARES	FGRP812
--	---------	---------



1 u.



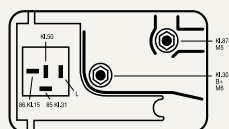
DP51



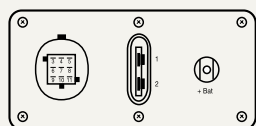
DP05



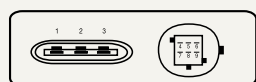
PINS 6



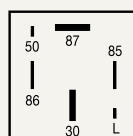
PINS 12



PINS 9



PINS 6



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

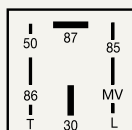


CENTRALES DE PRECALENTAMIENTO DIESEL

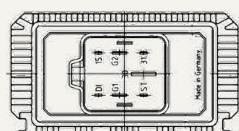
PREHEATING CENTRALS FOR DIESEL ENGINES



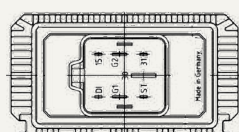
PINS 8



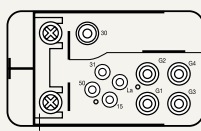
PINS 7



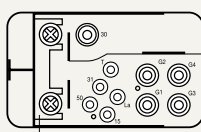
PINS 7



PINS 9



PINS 10



REF.	MARCA BRAND	REFERENCIA ORIGINAL ORIGINAL REFERENCE
------	----------------	---

DP50	FORD	96VB6M092B
-------------	------	------------

DP55	OPEL	6235303
-------------	------	---------

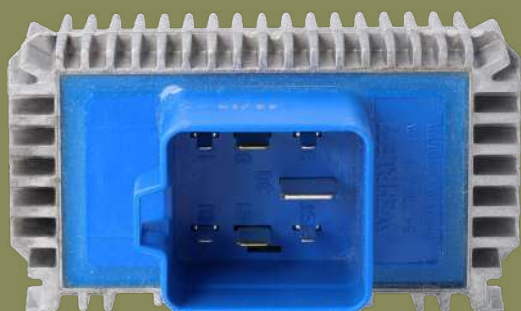
DP56	OPEL	6235240
	NAGARES / MALHE	MH66

DP31	MERCEDES	0015459732 - 0025450532 0025450832 - 0055454132
-------------	----------	--

DP36	MERCEDES	0085450032 - 0065458832 A0065458832-A0085450032
-------------	----------	--

1 u.





DP56



DP31



PINS 8

REF.	MARCA BRAND	REFERENCIA ORIGINAL ORIGINAL REFERENCE
------	----------------	---

DP52	MERCEDES	51799030 - A0255452832
		A0005453516 - A6461536579
	NAGARES	TPMS412



PINS 10

DP53	MERCEDES	51799029 - A0005453616
		A0255452932 - A6461536579
	NAGARES	TPMS612



PINS 3

MÓDULOS DE ENCENDIDO IGNITION MODULES

IM18	VW	6N0905104 - 004028149
		047905115 - 357905104
		867905104A - 867905352



PINS 6

IM19	VW	701905104 - 701905104A
		867905105A



1 u.



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	MZ13	400 Hz ± 100 Hz	75 dB - 30 cm
24	30	MZ15	400 Hz ± 100 Hz	80 dB - 30 cm
12	10	ZZ12	4100 Hz ± 500 Hz	85 db - 30 cm
24	10	ZZ24	4100 Hz ± 500 Hz	85 db - 30 cm


ZA14

RA01


ZUMBADORES DE MARCHA ATRÁS

REVERSE BUZZERS


ZA12

ZA14

ZA24

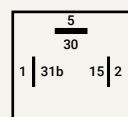
ZA25

RA01


1 u.



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

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

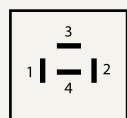
GUILERA'S PRODUCTS



PINS 2



PINS 4



PINS 18



V	A	REF.	MARCA BRAND	REF. ORIGINAL ORIGINAL REF.	
12 / 24	3	DI01	GUILERA	070253	5
-	-	TL01	GUILERA	174505	1
24	-	UC01	NISSAN	28455-9X601	1
			GUILERA	11F010	

CONMUTADORES Y CONTACTOS

SWITCHES & LOCKS



Conmutadores de volante, interruptores, antirrobo, 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
------	----------------	-----------------	-------------

CV26	FIAT	TIPO	88 -> 96
-------------	------	------	----------



PINS 14



CVT3	LANCIA	ZETA	95 -> 02
-------------	--------	------	----------

	FIAT	ULYSSE	95 -> 02
--	------	--------	----------



PINS 13



CVX4	FIAT	SCUDO	98 -> 06
-------------	------	-------	----------



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
------	----------------	-----------------	-------------

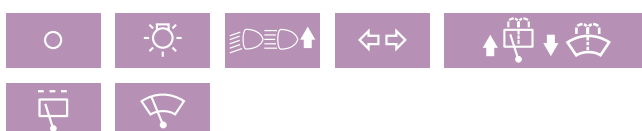
CVH5	FIAT	PUNTO	93 -> 00
		PUNTO VAN	93 -> 00



PINS 14



CVN5	FIAT	BRAVO	95 -> 02
		BRAVA	95 -> 02



PINS 27



CVN8	ALFA ROMEO	ALFA 33 FL	91 -> 94
-------------	------------	------------	----------



1 u.

CONMUTADORES DE VOLANTE

STEERING COLUMN SWITCHES



PINS 8



REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR
CV91	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



CV102	VW	LUP0	99 -> 05
		POLO	95 -> 02



PINS 8



CV180	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



PINS 8



PINS 12



REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR
CV181	AUDI	A4 / A6 / A8	-
CV184	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
CVM4	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
-------	----	-------------	----------



1 u.

VOLKSWAGEN, SEAT, AUDI, SKODA

CVW9	6K5953519 - 1H0953519
CV90	357953513 - 357953513F - 357953513F01C
CV101	701953513 - 4B095303F
CV105	1K0953513 - 1K095351301C - 1K0953513E
CV183	1K0953513A - 1K0953513F - 1K0953513G



PINS 4



REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR
CV105	AUDI	A3	03 -> 12
	VW	CADDY / GOLF	03 -> 10
		EOS / TOURAN	03 -> 10
		JETTA	03 -> 10
		SCIROCCO	03 -> 10
		TIGUAN	03 -> 10
	SEAT	ALTEA / LEÓN	04 -> 13
		TOLEDO	04 -> 13
	SKODA	OCTAVIA	04 -> 13
		SUPERB	04 -> 13
		YETI	04 -> 13



PINS 4



CV183	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



1 u.

CONMUTADORES DE VOLANTE

STEERING COLUMN SWITCHES



PINS 13



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

CV187	AUDI	A4/ A6/ A8 / Q7	03 -> 08
--------------	------	-----------------	----------



PINS 10



CVM1	AUDI	80 / 90 / 100	88 -> 00
		200 / V8	88 -> 00



PINS 13



CVS1	VW	GOLF III	88 -> 99
		GOLF IV	88 -> 99
		PASSAT	88 -> 99
		VENTO	88 -> 99



PINS 14



CVW5	AUDI	A4 / A6	94 -> 97
-------------	------	---------	----------



1 u.

AUDI, VOLKSWAGEN, SEAT, SKODA

CVI87	4E0953513A - 4E0953513E - 4E0953513K
CVM1	443953513L - 443953513L01C - 443953513H
CVS1	1H0953513C01C - 1H0953513 - 1H0953513C
CVW5	4D0953513 - 8D0953513
CVW8	6K5953513AB41
CVY1	6N0953503AD - 6N0953513 - 6N095351301C
CVY7	8L0953513 - 7M0953504



PINS 13



PINS 12



PINS 11



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

CVW8	SEAT	CÓRDOBA	91 -> 99
		IBIZA	91 -> 99
		TOLEDO	91 -> 99



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



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



1 u.

CONMUTADORES DE VOLANTE

STEERING COLUMN SWITCHES



PINS 11



PINS 21



PINS 21



REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR
CVY8	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



CV116	SEAT	CÓRDOBA	99 -> 02
--------------	------	---------	----------



CV119	SEAT	IBIZA	99 -> 02
--------------	------	-------	----------



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
------	----------------	-----------------	-------------

CV121	SEAT	IBIZA IV	02 -> 09
		CÓRDOBA 1.2/2.0	02 -> 09
	VW	POLO 1.2 - 1.9	02 -> 09



PINS 10



CV194	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



CVJ9	SEAT	MARBELLA	86 -> 93
------	------	----------	----------



1 u.

CONMUTADORES DE VOLANTE

STEERING COLUMN SWITCHES



PINS 9



PINS 12



PINS 12



PINS 10



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

CV176	PEUGEOT	106	91 -> 96
		306	94 -> 02



CV124	PEUGEOT	206	98 -> 13
-------	---------	-----	----------



CV125	PEUGEOT	206	98 -> 13
-------	---------	-----	----------



CV15	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

CV176	623983 - 96171690ZL
CV124	625376 - 96307459ZL
CV125	625377 - 96307460ZL
CV15	625342 - 97518149
CV112	625375 - 96274722ZL
CVT3	625368 - 96251931ZL
CVX4	9623641569 - 96236415ZL



PINS 12



PINS 14



PINS 13



REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR
CV112	CITROËN	XANTIA	97 -> 03
	PEUGEOT	406	99 -> 04
CVT3	CITROËN	EVASION	96 -> 02
		XANTIA	93 -> 98
		XSARA	97 -> 05
	PEUGEOT	406	95 -> 04
		605	94 -> 99
		806	94 -> 02
CVX4	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
CV114	FORD	FOCUS 1.4/2.0	98 -> 11
CV130	FORD	TRANSIT	91 -> 00
CV168	FORD	FOCUS	04 -> 12
		FOCUS C-MAX	04 -> 12
CV132	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
CV162	FORD	FOCUS	91 -> 04
		FIESTA V	91 -> 04
		MONDEO III	91 -> 04
		TRANSIT	91 -> 04
		TOURNEO	91 -> 04



PINS 7



CV164	FORD	FOCUS	04 -> 12
-------	------	-------	----------



PINS 5



CV172	FORD	TRANSIT	06 -> 12
-------	------	---------	----------



PINS 9



CV179	FORD	FOCUS	98 -> 07
		MONDEO III	00 -> 07



1 u.

CONMUTADORES DE VOLANTE

STEERING COLUMN SWITCHES



PINS 21



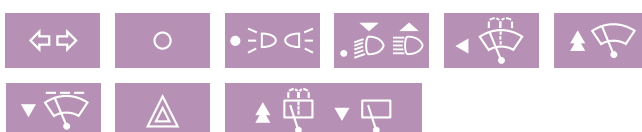
PINS 22



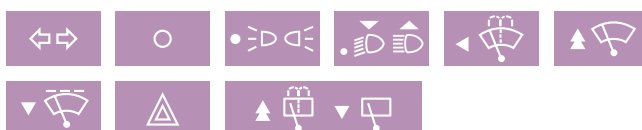
PINS 14



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



CVR9	FORD	ESCORT	96 -> 01
		FIESTA IV	96 -> 01
		ORION	96 -> 01



CV51	MERCEDES	190 (W201)	82 -> 93
-------------	----------	------------	----------



1 u.

FORD, MERCEDES

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



PINS 8



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



PINS 22



CV193	MERCEDES	SPRINTER 3.5-T	-> 03
		(W906) 313 CDI	-> 03

(906.631, 906.633, 906.635, 906.637)



PINS 22



CV158	MERCEDES	SPRINTER / VITO	-> 03
		V-CLASS	-> 03



PINS 22



CV182	MERCEDES	SPRINTER / VITO	96 -> 03
		V-CLASS / VIANO	96 -> 03



1 u.

CONMUTADORES DE VOLANTE

STEERING COLUMN SWITCHES



PINS 8



PINS 4



PINS 9



PINS 6



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

CV64	OPEL	KADETT	84 -> 88
-------------	------	--------	----------



CV136	OPEL	COMBO	00 -> 06
		CORSA C	00 -> 06
		MERIVA / TIGRA	00 -> 06



CVL8	OPEL	ASTRA	91 -> 05
		CORSA	86 -> 02
		KADETT	84 -> 93
		VECTRA A / B	88 -> 03



CV115	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
CV135	OPEL	COMBO	00 -> 06
		MERIVA	00 -> 06
		TIGRA	00 -> 06



PINS 10



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



PINS 13



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



PINS 13



CV189	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
------	----------------	-----------------	-------------

CV74	RENAULT	R9 / R11	82 -> 85
		SPACE	87 -> 90
		EXPRESS	85 -> 90
		SUPERCINCO	85 -> 88



PINS 13 + 2



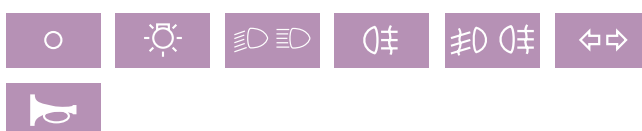
CV122	RENAULT	MEGANE I	96-> 02
		KANGOO	98-> 08



PINS 13 + 2



CV123	RENAULT	MEGANE I	96-> 02
		KANGOO	98-> 08



PINS 15 + 2



CV188	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
CV192	RENAULT	CLIO III HBACK	05-> 08
		MODUS	05-> 08
		GRAND MODUS	05-> 08



PINS 10



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



PINS 17



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



PINS 15 + 2



CV197	RENAULT	CLIO	12 ->
	DACIA	LOGAN	12 ->



1 u.

INTERRUPTORES

SWITCHES



PINS 8



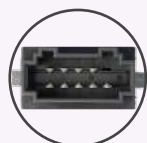
PINS 7



PINS 7



PINS 9



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

IW01	VW	GOLF II / JETTA II	86 -> 92
------	----	--------------------	----------



IW04	VW	GOLF IV	98 -> 06
		PASSAT	98 -> 06
		BORA	98 -> 06
		CADDY	98 -> 06



IW11	AUDI	A3	98 -> 03
------	------	----	----------



IW13	AUDI	A4	97 -> 02
------	------	----	----------



1 u.



VOLKSWAGEN, AUDI, SEAT

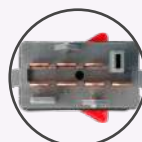
IW01	WO191941531H - 191941531H
IW04	1J0953235 - 1J0959621E - 6N0959621B
IW11	8L0941509G01C - 8L0941509M01C - 8L0941509C01C
IW13	8D0941509H
IW14	3B0953235B - 3B0953235D
IW15	1U0953235B - 1U0953235B300
IW19	191959855
IW28	1C0941531A - 1C0941531A20H - 1C0941531AC1A



PINS 7



PINS 7



PINS 6



PINS 17



REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR
IW14	VW	PASSAT	96 -> 05
IW15	VW	PASSAT	05 -> 12
IW19	SEAT	IBIZA / CÓRDOBA	96 -> 99
	VW	GOLF	83 -> 91
IW28	SEAT	ALHAMBRA	96 -> 12
	VW	BORA / LUPO	98 -> 05
		NEW BEETLE	98 -> 12
		PASSAT	96 -> 05
		POLO	95 -> 01
		GOLF IV	98 -> 06

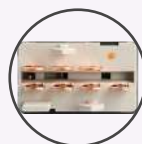


INTERRUPTORES

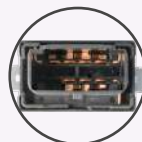
SWITCHES



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
------	----	--------	----------



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



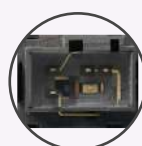
PINS 9



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



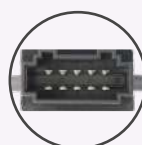
PINS 4



IW37	VW	TRANSPORTER
		MULTIVAN T5
	SKODA	FABIA



PINS 10



IW38	AUDI	A6	97 -> 05
------	------	----	----------



1 u.

INTERRUPTORES

SWITCHES



PINS 10



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

IW39	VW	GOLF V	03 -> 08
		TOURAN	03 -> 08
		PASSAT	03 -> 08
		TIGUAN	03 -> 08



PINS 10



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



PINS 10



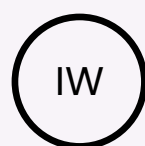
IW41	VW	GOLF V / VI	08 -> 13
		PASSAT / T5	08 -> 13



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
IW42	VW	GOLF	08 -> 13
		PASSAT	08 -> 13



IW43	AUDI	A3 / A6	96 -> 05
-------------	------	---------	----------



IW44	AUDI	A3 / A6 / Q7	04 -> 11
-------------	------	--------------	----------



IW45	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
IW46	VW	POLO	01 -> 10
	SEAT	CÓRDOBA	01 -> 10
		IBIZA	01 -> 10



IW47	VW	POLO	04 -> 12
		GOLF	04 -> 12



IF40	FORD	ESCORT	89 -> 02
		FIESTA	89 -> 02
		SCORPION	89 -> 02
		SIERRA	89 -> 02



IF41	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
------	----------------	-----------------	-------------

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



PINS 6



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



PINS 6



IF44	FORD	TRANSIT	06 -> 12
------	------	---------	----------



PINS 4



IF45	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
------	----------------	-----------------	-------------

IF47	FORD	MONDEO IV	07 -> 13
-------------	------	-----------	----------



I003	OPEL	CORSA / KADETT	82 -> 93
		ASCONA	82 -> 93



I011	OPEL	ASTRA / ZAFIRA	98 -> 05
-------------	------	----------------	----------



I012	OPEL	ASTRA G	98 -> 09
		ZAFIRA A	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
K411	IVECO	7150	-
			
K414	IVECO	7150	-
			



 1 u.

ANTIRROBOS

ANTI THEFT



PINS 4



PINS 6



PINS 5



PINS 6



PINS 6



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

CA01	CITROËN	C-15	84 -> 05
------	---------	------	----------

Llave tipo Neiman / Neiman's type of key

CA06	PEUGEOT	206	98 -> 02
------	---------	-----	----------

CA07	PEUGEOT	206	02 -> 11
------	---------	-----	----------

CA08	PEUGEOT	306	93 -> 02
------	---------	-----	----------

CA09	PEUGEOT	205	85 -> 98
------	---------	-----	----------

		309	89 -> 93
--	--	-----	----------

		J9	80 -> 87
--	--	----	----------

 1 u.



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
CA10	PEUGEOT	106	92 -> 04
		405	92 -> 96
CA11	CITROËN	C-15	84 -> 01
		VISA	84 -> 88
Llave tipo cruz / Cross' type of key			
CA12	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
CA13	CITROËN	XSARA	97 -> 00

1 u.



ANTIRROBOS

ANTI THEFT



PINS 6



PINS 4



PINS 6



PINS 6



PINS 7



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

CA14	CITROËN	XSARA	00 -> 03
------	---------	-------	----------



CA15	PEUGEOT	PARTNER II	98 -> 04
	CITROËN	BERLINGO	98 -> 04



CA16	CITROËN	SAXO (SIN CHIP)	96 -> 98
		AX	91 -> 98
		ZX	91 -> 98



CA17	CITROËN	SAXO (CON CHIP)	96 -> 03
------	---------	-----------------	----------



CA19	CITROËN	JUMPER II	02-> 06
	PEUGEOT	BOXER II	02-> 06
	FIAT	DUCATO II	02-> 06



 1 u.

CITROËN, PEUGEOT, FIAT, IVECO

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
CA20	CITROËN	JUMPER I	94 -> 02
	PEUGEOT	BOXER I	94 -> 02
	FIAT	DUCATO I	94 -> 02
		PANDA	86 -> 99



PINS 4



CA21	IVECO	DAILY II	91 -> 99
		EUROCARGO	91 -> 99



PINS 4



CA24	FIAT	DUCATO	92 -> 96
------	------	--------	----------



PINS 5



CA25	CITROËN	BERLINGO III	96 -> 11
	PEUGEOT	PARTNER III	96 -> 12



1 u.

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

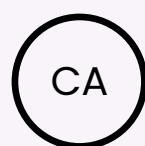
CA27	IVECO	DAILY MK4	
------	-------	-----------	--

CA28	CITROËN	JUMPER II	
	PEUGEOT	BOXER II	
	FIAT	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
------	----------------	-----------------	-------------

CA30 	PEUGEOT	505 BERLINA	79 -> 93
		505 FAMILIAR	82 -> 93



CA18	NISSAN	PRIMASTAR	02 -> 13
	OPEL	VIVARO	02 -> 13
		MOVANO	02 -> 13
	RENAULT	TRAFIC	02 -> 13
		MASTER	02 -> 13



CA02	RENAULT	CLIO II	99 -> 05
-------------	---------	---------	----------



CA03	RENAULT	R19	92 -> 01
		CLIO I	90 -> 98
		ESPACE II	91 -> 97
		LUTECIA	90 -> 98


 1 u.

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

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



PINS 0

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



PINS 8



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



PINS 6



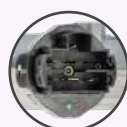
CD08	AUDI	A3 / TT	04 -> 11
	SEAT	LEÓN / ALTEA	06 -> 16
	SKODA	OCTAVIA	04 -> 12
	VW	GOLF V / CADDY	04 -> 11
		JETA III	04 -> 11
		TOURAN	04 -> 11

No probar
funcionamiento
fuera del
vehículo

Don't test
functioning
outside the
vehicle



PINS 5



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



PINS 7



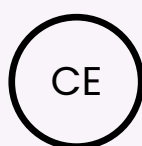
CD10	CITROËN	JUMPER II	02 -> 06
	PEUGEOT	BOXER II	02 -> 06
	FIAT	DUCATO II	02 -> 06



1 u.

CONTACTOS DE ENCENDIDO

IGNITION SWITCHES



PINS 8



PINS 8



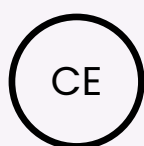
REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR
CE01	AUDI	A3	97 -> 03
		A4 QUATRO	94 -> 08
		A6 QUATRO	97 -> 05
		A8 QUATRO	95 -> 02
		TT	98 -> 06
	SEAT	CÓRDOBA / IBIZA IV	02 -> 09
		LEÓN	99 -> 06
		TOLEDO II	98 -> 06
		ALHAMBRA	96 -> 10
	VW	NEW BEETLE	98 -> 10
		GOLF III / IV	93 -> 06
		PASSAT	96 -> 05
		POLO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



1 u.

AUDI, VOLKSWAGEN, SEAT, SKODA

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



PINS 6



PINS 7



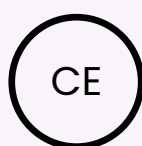
REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR
CE03	SEAT	AROSA	97 -> 04
		TOLEDO	91 -> 99
		CÓRDOBA	94 -> 02
		IBIZA III	93 -> 02
		INCA	95 -> 03
	VW	GOLF II / III / IV	83 -> 02
		GOLF CABRIOLET	83 -> 02
		LUPO	98 -> 05
		PASSAT 3	88 -> 97
		POLO	85 -> 01
		TRANSPORTER IV	90 -> 03
		CADDY II	95 -> 04
CE04	AUDI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



 1 u.

CONTACTOS DE ENCENDIDO

IGNITION SWITCHES



PINS 6



PINS 3



PINS 7



PINS 5

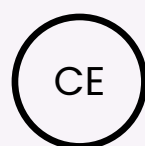


REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR
CE20	AUDI	A3	06 -> 13
	SEAT	ALTEA	06 -> 13
		LEÓN	05 -> 13
	SKODA	OCTAVIA	04 -> 13
	VW	GOLF V	04 -> 08
CE21	BMW	316 / 318 / 320	99 -> 05
		325 / M3	99 -> 05
		X3	04 -> 10
		X4	04 -> 08
CE22	FORD	MONDEO	08 ->
		GALAXY	05 ->
		FOCUS	06 ->
CE05	OPEL	ASTRA F	91 -> 98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

 1 u.



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



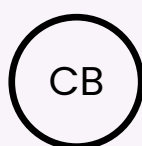
REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR
CE06	OPEL	ASTRA F	91 -> 98
		CALIBRA A	89 -> 98
		CORSA A / B / C	93 -> 00
		VECTRA A	88 -> 95
CE07	OPEL	CALIBRA A	89 -> 98
		CORSA A / B	87 -> 00
		OMEGA B	94 -> 99
		VECTRA B	88 -> 95
		SINTRA	97 -> 99
CE08	OPEL	ASTRA G	98 -> 04
		AGILA	00 -> 07
		ZAFIRA A	99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

1 u.



BOMBINES DE ENCENDIDO

IGNITION LOCK CYLINDERS



REFERENCIA ORIGINAL
ORIGINAL REFERENCE
191905855

REFERENCIA ORIGINAL
ORIGINAL REFERENCE
1H0905855A -
535905855

REFERENCIA ORIGINAL
ORIGINAL REFERENCE
3B0955855G -
8E0998855

REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR
CB01	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
CB02	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
CB09	VW	GOLF IV	01 -> 10
		PASSAT	01 -> 10
		BEETLE	01 -> 10
	SKODA	OCTAVIA	01 -> 10
		ROOMSTER	01 -> 10
		FABIA	01 -> 10



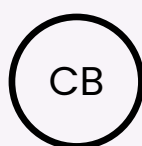
 1 u.



CB01



CB09



REFERENCIA ORIGINAL
ORIGINAL REFERENCE
107905805CH -
3B0955855H

REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR
CB10	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

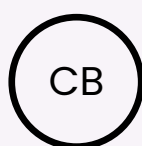
CB11	AUDI	A4	96 -> 01
		A6	96 -> 01
		A8	96 -> 01
	VW	GOLF IV	98 -> 07
		JETTA	-



 1 u.

BOMBINES DE ENCENDIDO

IGNITION LOCK CYLINDERS



REFERENCIA ORIGINAL
ORIGINAL REFERENCE
1022184

REFERENCIA ORIGINAL
ORIGINAL REFERENCE
1264600304 /
VALEO 256625

REFERENCIA ORIGINAL
ORIGINAL REFERENCE
1234620479 /
VALEO 256616

REFERENCIA ORIGINAL
ORIGINAL REFERENCE
9014620179

REF.	MARCA BRAND	MODELO MODEL	AÑO YEAR
CB08	FORD	KA	93 -> 08
		ESCORT V, VI, VII	90 -> 01
		FIESTA III, IV	89 -> 01
		TRANSIT	00 -> 06
		PUMA	97 -> 01
CB03	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
CB04	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
CB12	MERCEDES	SPRINTER	95 -> 06
		VITO	95 -> 06



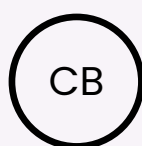
 1 u.



CB08



CB12



**REFERENCIA
ORIGINAL
ORIGINAL
REFERENCE**

0913694S1-
0913652S1 -
93172805S1

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

CB05	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

CB06	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

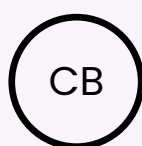
CB07	OPEL	ASCONA C	81 -> 88
		CALIBRA A	90 -> 97
		OMEGA A / B	86 -> 94
		SENATOR B	88 -> 03
		VECTRA A	88 -> 95
		ASTRA F	91 -> 98



 1 u.

BOMBINES DE ENCENDIDO

IGNITION LOCK CYLINDERS



PINS 4



TORNILLOS 4
SCREWS



TORNILLOS 3
SCREWS



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.



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.



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 y adaptadores.
Trailer connectors, spiral cables and adapters.

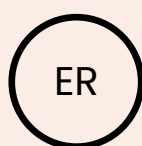


CLAVIJAS

PLUGS



ER01



PINS 3



PINS 7



PINS 7



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

ER23	12	DIN 9680			5
------	----	----------	--	--	---



ER24



ER01	12	ISO 1724			10
------	----	----------	--	--	----



ER03



ER02	12	ISO 1724			10
------	----	----------	--	--	----



ER04



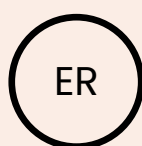
Terminal - Terminal Tornillo - Screw A presión - Press fitting



ER02



ER10



PINS 13



PINS 7



PINS 7



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

ER05	12	ISO 11446			1
------	----	-----------	--	--	---



ER06



ER09	24	ISO 1185			5
------	----	----------	--	--	---

Tipo-N / N-Type



ER11



ER10	24	ISO 3731			5
------	----	----------	--	--	---

Tipo-S / S-Type



ER12



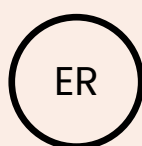
Aluminio - Aluminium Plástico - Plastic

CLAVIJAS

PLUGS



ER17



PINS 15



PINS 5



PINS 7



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

ER13	24	ISO 12098			1
------	----	-----------	--	--	---



ER14



ER15	24	ISO 7638			1
------	----	----------	--	--	---

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



ER16



ER17	24	ISO 7638			1
------	----	----------	--	--	---

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



ER18



Terminal - Terminal Tornillo - Screw A presión - Press fitting

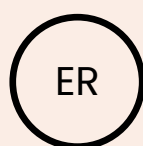
BASES SOCKETS



ER21



ER04



PINS 3



PINS 7



PINS 7



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

ER24	12	DIN 9680			5
-------------	----	----------	--	--	---



ER23



ER03	12	ISO 1724			10
ER21	Junta de caucho - Rubber seal			-	10



ER01



ER04	12	ISO 1724			10
ER21	Junta de caucho - Rubber seal			-	10
ER04J	Kit ER04 + ER21			-	5



ER02



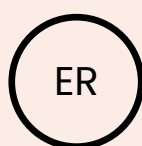
Aluminio - Aluminium Plástico - Plastic

BASES

SOCKETS



ER06



PINS 13



PINS 7



PINS 7



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

ER06	12	ISO 11446			1
ER21	Junta de caucho - Rubber seal				10



ER05



ER09



ER10



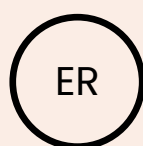
Terminal - Terminal Tornillo - Screw A presión - Press fitting



ER12



ER16



PINS 15



PINS 5



PINS 7



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

ER14	24	ISO 12098			1
------	----	-----------	--	--	---



ER13



ER16	24	ISO 7638			1
------	----	----------	--	--	---

ABS (ADR - /GGVS)



ER15



ER18	24	ISO 7638			1
------	----	----------	--	--	---

EBS (ADR - /GGVS)



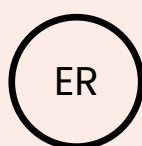
ER17



Aluminio - Aluminium Plástico - Plastic

CABLES ESPIRAL

SPIRAL CABLES



PINS 7



PINS 7



PINS 7



PINS 7



PINS 7



REF.	V	NORMA STANDARD	$\frac{L}{\varnothing}$	CLAVIJAS PLUGS	COMPOSICIÓN SPECIFICATION mm ²
SP01	12	DIN 9680	4 m.		6 x 1 mm ²
			45 mm.		1 x 1,5 mm ²
SP07	24	ISO 7638	4 m.		2 x 4 mm ²
		ABS	40 mm.		3 x 1,5 mm ²
SP03	24	ISO 1185	4 m.		6 x 1 mm ²
		Tipo-N / N-Type	40 mm.		1 x 1,5 mm ²
SP04	24	ISO 3731	4 m.		6 x 1 mm ²
		Tipo-S / S-Type	40 mm.		1 x 1,5 mm ²
SP08	24	ISO 7638	4 m.		2 x 4 mm ²
		EBS	40 mm.		5 x 1,5 mm ²

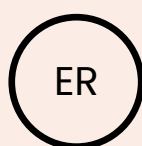


1 u. Aluminio - Aluminium Plástico - Plastic

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 ²
SP09	24	ISO 1185	4 m. 40 mm.		6 x 1 mm ² 1 x 1,5 mm ²
SP10	24	ISO 3731	4 m. 40 mm.		6 x 1 mm ² 1 x 1,5 mm ²
SP11	24	EURO6 125° ABS / EBS / ADR	4,5 m. 40 mm.		5 x 1,5 mm ² 2 x 4 mm ²
SP06	24	ISO 12098	4 m. 75 mm.		12 x 1,5 mm ² 3 x 2,5 mm ²
SP02	-	-	4 m. 30 mm.	-	6 x 1 mm ² 1 x 1,5 mm ²



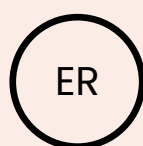
1 u. Aluminio - Aluminium Plástico - Plastic

ADAPTADORES

ADAPTERS



ER08A

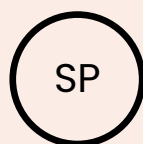


PINS 13 -> 7

PINS 7 -> 13

PINS 13 -> 7

PINS 7 -> 13



PINS 15 -> 7

PINS 15 -> 7

PINS 15 -> 7

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
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.



BOCINAS

HORNS

stebel



Bocinas, trompetas y accesorios.

Horns, trumpets and accessories.





HF80



TM80



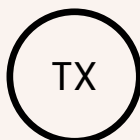
TM80/2L



TX20/2CR

BOCINAS

HORNS



V	A	REF.	dB	FRECUENCIA FREQUENCY Hz	MEDIDAS MEASURES mm
12	4,5	HF80/1	109	430	Ø 80
24	2,5	HF80/1 24V	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	TM80/1	109	500	Ø 82
12	11	TM80/2	112	410 (L) 500 (H)	2 x Ø 82
12	11	TM80/2L	112	410 (L) 500 (H)	2 x Ø 82
24	5,6	TM80/2 24V	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. Apropriadas 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	TX20/2 CR	112	400 (L) 500 (H)	2 x Ø 82
----	----	-----------	-----	-----------------	----------

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	NAUTILUS NG	115	530 (L) 680 (H)	150 x 112 x 95
24	9	NAUTILUS NG 24V	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	COMPACT NG	115	530 (L) 680 (H)	125 x 112 x 78
12	18	COMPACT CR	115	530 (L) 680 (H)	125 x 112 x 78
24	9	COMPACT NG 24V	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	TRUCK CPT NG	110	300	140 x 110 x 112
24	9	TRUCK CPT 24V	110	300	140 x 110 x 112

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

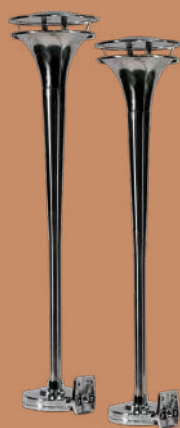
Signal horns for medium and heavy-duty vehicles (campers, vans, buses). They are characterized by an improved compact design.

12	18	BRIO BP3	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	GP2	115	630 (L) 795 (H)	Ø 76 x 217
24	8	GP2 24V	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.

-	-	TM2	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	-	JUM2	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



La cucaracha

V		REF.		FRECUENCIA FREQUENCY	MEDIDAS MEASURES
	A		dB	Hz	mm
12	15	PRMV2	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	BP3	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	MP5/CC	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.

Medidas compresor
Compressor measurements
Ø 83 x 170



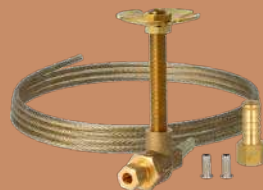
Corriente absorbida a 24V (A) - Absorbed current at 24V (A)



KP1



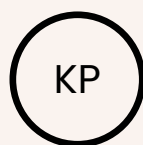
ECO POWER



VÁLVULA M

BOCINAS Y ACCESORIOS

HORNS AND ACCESSORIES



ACCESORIOS
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.			
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



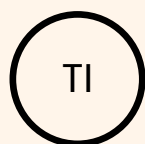
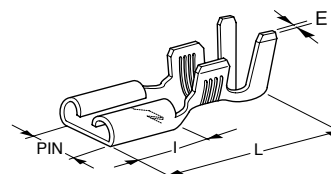
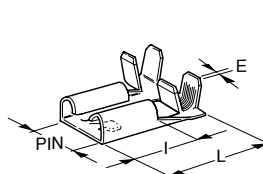
TI Terminal mixto
Mixed terminal



TI Terminal tipo bandera
Flag type terminal

TERMINALES

TERMINALS



HEMBRA FEMALE

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

HEMBRA CON RETÉN FEMALE WITH LOCKING FLAG

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

MIXTO MIXED

1,50 - 3,00	TI29	6,35 x 0,80	0,40	8,00	19,20	1,03
-------------	-------------	-------------	------	------	-------	------

TIPO BANDERA FLAG TYPE

0,75 - 2,50	TI26	6,35 x 0,80	0,40	7,70	16,00	0,71
0,75 - 2,50	TI27	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



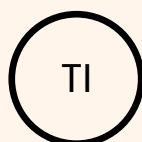
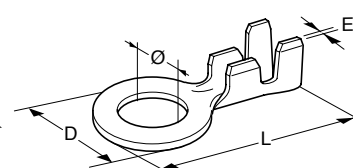
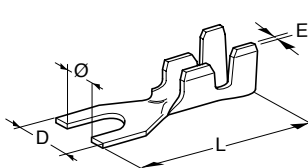
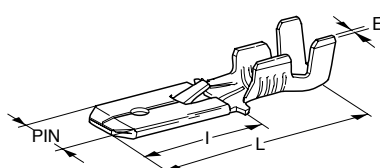
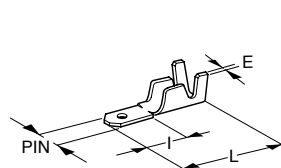
TI Terminal macho con retén
Male with locking flag terminal



TI Terminal tipo horquilla
Fork type terminal



TI Terminal tipo anillo
Ring type terminal



MACHO MALE

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

MACHO CON RETÉN MALE WITH LOCKING FLAG

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

TIPO HORQUILLA FORK TYPE

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

TIPO ANILLO RING TYPE

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



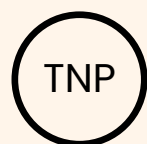
TNP Terminal tubular de presión
Tubular pressure terminal



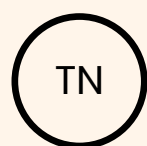
TN Terminal para soldadura
Welding terminal

TERMINALES TUBULARES

TUBULAR TERMINALS



**TERMINALES
TUBULARES DE
PRESIÓN
TUBULAR
PRESSURE
TERMINALS**



**TERMINALES
PARA SOLDADURA
WELDING
TERMINALS**

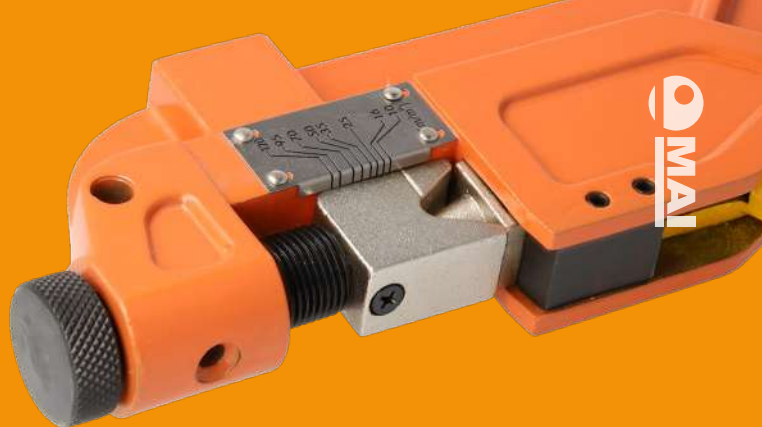
SECCIÓN SECTION mm ²	REF.	Ø mm	D mm	L mm	g	
6	TNP06	6,50	11,00	21,50	1,67	100
10	TNP10	6,50	11,00	22,50	2,36	100
16	TNP16	6,50	11,00	25,50	3,81	100
25	TNP25	8,40	16,00	33,00	5,10	100
35	TNP35	8,40	16,00	34,00	8,40	100
50	TNP50	10,50	18,00	43,00	13,80	50
70	TNP70	13,00	22,00	49,00	24,90	25
3	TN03	4,70	10,00	22,00	0,60	100
4	TN04	6,50	12,00	23,00	0,95	100
6	TN06	6,00	14,00	27,00	1,83	100
10	TN10	6,40	14,00	29,00	2,06	100
16	TN16	6,40	14,00	31,00	5,90	100
25	TN25	8,40	18,00	35,00	6,50	100
35	TN35	8,40	21,00	43,00	9,65	100
50	TN50	10,00	25,00	48,00	10,00	25
70	TN70	10,40	26,00	57,00	13,00	25

■ Acabados en estaño - Tin finished

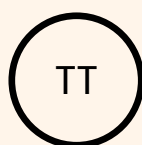
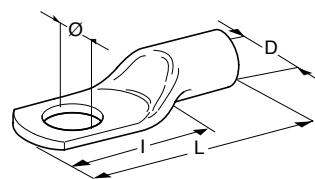
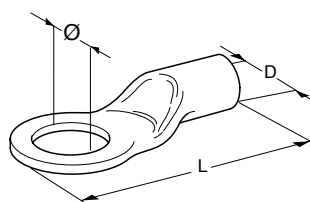
NORMA DIN 46234
STANDARD DIN 46234



Terminal tubular de presión reforzado
Reinforced tubular pressure terminal

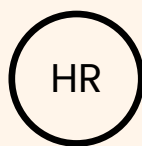


Crimpadora
Crimping machine



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

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



**CRIMPADORA
CRIMPING
MACHINE**

SECCIÓN SECTION mm ²	REF.	L mm	 g
10-95	HR02	570	3100



TI Terminal hembra
Female terminal



TI Terminal macho
Male terminal



TI Terminal hembra aislado
Insulated female terminal

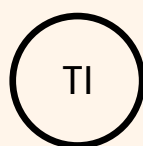
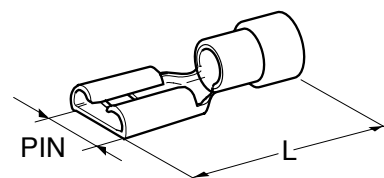


TI Terminal macho aislado
Insulated male terminal

TERMINALES PREAISLADOS

VINILO

PRE-INSULATED TERMINALS



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

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

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

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

HEMBRA AISLADA
INSULATED
FEMALE

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

100 u.



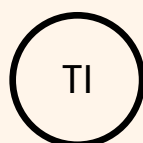
TI Terminal mixto
Mixed terminal



TI Terminal hembra cilíndrico
Cylindrical female terminal



TI Terminal macho cilíndrico
Cylindrical male terminal



MACHO AISLADO INSULATED MALE

	0,25 - 1,50	TI98	6,35 x 0,80	24,50	0,90
	1,04 - 2,63	TI99	6,35 x 0,80	24,50	1,00
	2,63 - 6,64	TI100	6,35 x 0,80	25,00	1,10

MIXTO CON CASQUILLO ANTIVIBRATORIO MIXED WITH ANTI-VIBRATION COVER

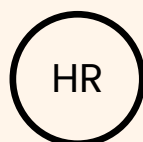
	1,00 - 2,50	TI96	6,35 x 0,80	24,00	1,10
--	-------------	-------------	-------------	-------	------

HEMBRA CILÍNDRICA CYLINDRICAL FEMALE

COLOR COLOR	SECCIÓN SECTION mm ²	REF.	PARA HEMBRA FOR FEMALE mm	L mm	g
	0,25 - 1,65	TI105	4,00	23,00	1,00
	1,04 - 2,63	TI107	4,00	23,00	1,00
	2,63 - 6,64	TI109	5,00	24,00	1,80

MACHO CILÍNDRICO CYLINDRICAL MALE

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



CRIMPADORA CRIMPING MACHINE

SECCIÓN SECTION mm ²	REF.	L mm	g
0,50 - 6,70	HR01	225	510





TI Terminal tipo anillo rojo
Red ring type terminal



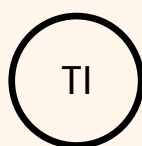
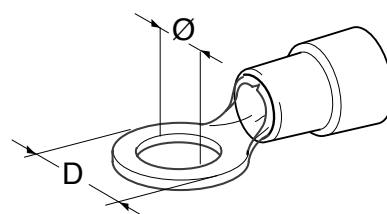
TI Terminal tipo anillo azul
Blue ring type terminal



TI Terminal tipo anillo amarillo
Yellow ring type terminal

TERMINALES PREAISLADOS

PRE-INSULATED TERMINALS



TIPO ANILLO
RING TYPE

COLOR COLOR	SECCIÓN SECTION mm ²	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



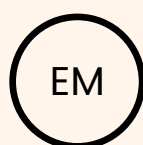
EM Empalme retráctil
Retractable joint



CR Conector rápido
Quick connector

EMPALMES Y CONECTORES RÁPIDOS

JOINTS AND QUICK CONNECTORS



EMPALMES ESTANCOS ESTAÑO TIN SEALED JOINTS

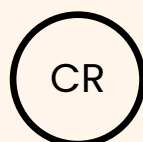
COLOR COLOR	SECCIÓN SECTION mm ²	REF.	g		COMPOSICIÓN MATERIAL
	0,80 - 2,00	EM01	0,43	25	POE
	2,00 - 4,00	EM02	0,45	25	POE
	4,00 - 6,00	EM03	0,55	25	POE

EMPALMES AISLADOS INSULATED JOINTS

	0,50 - 1,65	EM04	2,10	100	Vinilo / Vinyl
	1,04 - 2,63	EM05	2,10	100	Vinilo / Vinyl
	2,63 - 6,64	EM06	2,26	100	Vinilo / Vinyl

EMPALME RETRÁCTIL RETRACTABLE JOINTS

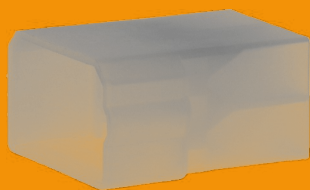
	0,50 - 1,50	EM07	1,10	25	Vinilo / Vinyl
	1,00 - 2,50	EM08	1,30	25	Vinilo / Vinyl
	4,00 - 6,00	EM09	2,20	25	Vinilo / Vinyl



CONECTORES RÁPIDOS QUICK CONNECTORS

	0,50 - 1,00	CR22	1,40	50	PP
	1,00 - 2,50	CR23	2,50	50	PP
	2,50 - 4,00	CR24	3,03	50	PP

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

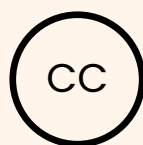
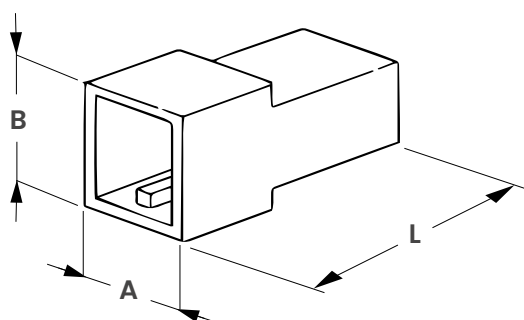


Conector universal hembra de 4 vías
Universal female 4 ways housing



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	CCH1	6,50	10,00	24,10	0,78
	2	CCH2	13,00	10,00	23,00	1,55
	3	CCH3	13,00	17,20	22,90	1,15
	4	CCH4	23,00	14,00	24,00	3,94
	6	CCH6	28,50	13,80	24,20	2,35
	8	CCH8	37,00	13,80	24,00	6,10

MACHO
MALE

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



50 u.



Compuestos de Nylon - Made of Nylon



CCRR



CCMR



CCBR



CCMIC

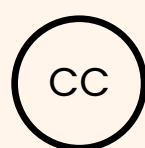


CCRP

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
Micorelays
- H** CF60 CCMIC



**CONECTORES
PORTARELÉS
RELAY SOCKETS
FOR RECEPTACLES**

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

RG

REGLETAS
POWERSTRIPS

CS

CINTA AISLANTE
INSULATING TAPE

BI

BRIDAS
CABLE TIES

LONGITUD
LENGTH
mm

DIAMETRO
DIAMETER
mm

REF.



g


COMPOSICIÓN
MATERIAL

150,20

-

RG01

25,50

10

PE

93,60

2,50

RG02

17,40

10

PVC

116,40

4,00 - 6,00

RG03

26,40

10

PVC

133,50

10,00

RG04

34,50

10

PVC

175,00

16,00

RG05

71,90

10

PVC

10,00

19,00

CS10

36,70

10

PVC

20,00

19,00

CS20

71,90

5

PVC

LONGITUD
LENGTH
mm

DIAMETRO
DIAMETER
mm

REF.



g


COMPOSICIÓN
MATERIAL

98,00 x 2,5

21,00

BI100

8,16

100

Nylon

135,00 x 2,5

32,00

BI130

8,16

100

Nylon

140,00 x 3,6

35,00

BI140

13,26

100

Nylon

200,00 x 2,6

52,00

BI200

8,16

100

Nylon

200,00 x 3,6

50,00

BI201

13,26

100

Nylon

200,00 x 4,8

50,00

BI202

22,44

100

Nylon

250,00 x 4,8

68,00

BI250

22,40

100

Nylon

290,00 x 3,6

80,00

BI290

13,26

100

Nylon

360,00 x 4,8

103,00

BI360

22,44

100

Nylon



Conector estanco porta-hembra
Female superseal connector



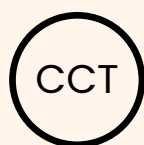
Conector estanco porta-macho
Male superseal connector



Accesorios
Accessories

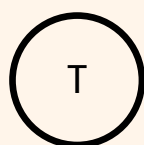
CONECTORES ESTANCOS

SUPERSEAL CONNECTORS



PORTA-HEMBRA FEMALE

VÍAS WAYS	REF.	ANCHO WIDTH mm A	ALTURA HEIGHT mm B		COMPOSICIÓN PLATED
1	CCT601	-	26,00	25	Nylon 6,6
2	CCT602	-	26,00	25	Nylon 6,6
3	CCT603	-	26,00	25	Nylon 6,6
4	CCT604	-	26,00	25	Nylon 6,6
5	CCT605	-	26,00	25	Nylon 6,6
1	CCT701	13,80	45,5	25	Nylon 6,6
2	CCT702	19,90	45,5	25	Nylon 6,6
3	CCT703	19,90	45,5	25	Nylon 6,6
4	CCT704	31,90	45,5	25	Nylon 6,6
5	CCT705	38,20	45,5	25	Nylon 6,6



ACCESORIOS ACCESSORIES

DESCRIPCIÓN DESCRIPTION	SECCIÓN SECTION mm ²	REF.	 g	
Terminal hembra - Female terminal	1,00 - 1,50	TI74	0,34	100
Terminal macho - Male terminal	1,00 - 1,50	TI97	0,34	100
Tapón amarillo - Yellow cap	0,50 - 1,50	TA15N	0,15	50
Tapón rojo - Red cap	0,50 - 1,50	TA15C	0,15	50

PE Polietileno - Polyethylene



HC02



HC06

CONECTORES HERMAFRODITAS Y ASAS

HERMAPHRODITE CONNECTORS AND HANDLES



HC01



HC02



HC03



HC04



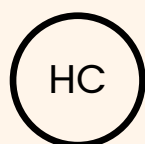
HC05



HC06



HC07



CONECTORES
HERMAFRODITAS
HERMAPHRODITE
CONNECTORS

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

PC Polycarbonato - Polycarbonate AC Acero - Steel



HC08



SC30

CONECTORES BIPOLARES SERIE BC Y KITS

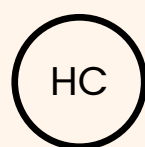
BC SERIES BIPOLAR CONNECTORS & KITS



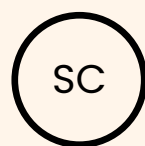
HC08



HC09



**CONECTORES
BIPOLARES
BIPOLAR
CONNECTORS**

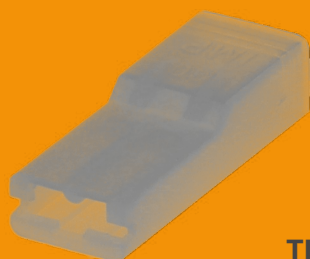


KIT

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

COMPOSICIÓN COMPOSITION	REF.	
TI81 - TI86 - TI19 - TI25 - TI72 - TI77 - EM05 x 100 u./ref CR23 x 50 u./ref EM01 x 25 u./ref	SC30	1

Latón - Brass



TI36



TI45

PROTECCIONES

PROTECTIONS



TI30



TI36



TI40



TI43



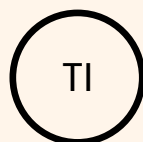
TI44



TI45



TI46



PROTECCIONES
PROTECTIONS

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



BE02



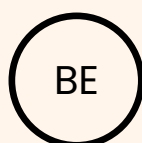
BE03

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

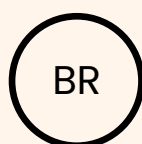
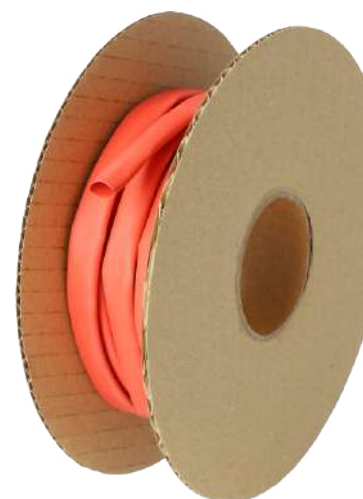
BR03

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.

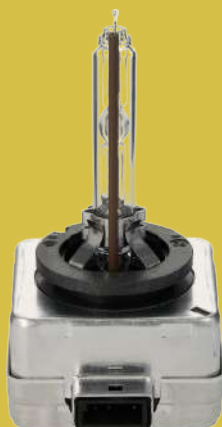
They are flexible and have a high shrinkage radius to protect and isolate connection points. Resistant to common fluids and solvents. Continuous working temperature -55°C to 135°C.



1 u.

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

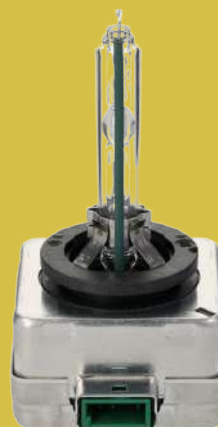
POE Poliolefina – Polyolefin



LX01



LX02



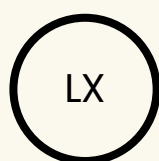
LX03

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 sustituir las 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

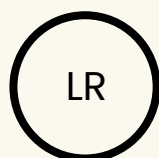
4 u.

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

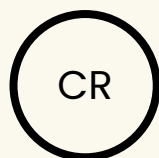


CR2032

PILAS BATTERIES



PILAS
BATTERIES



PILAS
BATTERIES

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

TESLA



LR06S



LR03S



6LR61S



LR14S



LR20S



8LR932



CR17345



CR2016



CR2032



CR1620



CR1632



CR2025



CR2430



CR2450

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

CROSSREFERENCE 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

CROSSREFERENCE LIST

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

VALEO	MAI
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

CORMAR	MAI
500000	TB76
530100	TB80
500010	TB86
500006	TC04
500013	TC06
500015	TC07
500016	TC08
500018	TC09

NOTAS

NOTES

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

MAI AUTOPARTS, S.L.
Ctra. Pla de Sta. Maria, 184
P. O. Box 106
43800 VALLS (Tarragona) - SPAIN

Tel. +34 977 614 033

mai@mai.es



www.mai.es

